

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. 3453]

[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 I in one week, I 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).	
LDA	Lead Development Association. 34, Berkeley Square, W.1.	Elstree 1341/1797
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Grosvenor 8422
MAFF	Ministry of Agriculture, Fisheries and Food. Whitehall Place, S.W.1.	Museum 3891
MOE	Ministry of Education. Curzon Street House, W.1.	Trafalgar 7711
MOH	Ministry of Health. 23, Savile Row, W.1.	Hyde Park 7070
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Regent 8411
MOLNS	Ministry of Labour and National Service, 8, St. James's Square, S.W.1.	Whitehall 4300
MOS	Ministry of Supply. Shell-Mex House, W.C.2.	Whitehall 6200
MOT	Ministry of Transport, Berkeley Square House, W.1.	Gerrard 6933
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Mayfair 9494
NAMMC	Natural Asphalte Mine Owners and Manufacturers Council.	Reliance 7611
NAS	National Association of Shopfitters. 2, Caxton Street, S.W.1.	Victoria 1600 & 6477
NBR	National Buildings Record. Fielden House, 10, Great College Street, Westminster, S.W.1.	Abbey 4813
NCBMP	National Council of Building Material Producers. 10, Storey's Gate, S.W.1.	Whitehall 6554
NEFMAI	National Employers Federation of the Mastic Asphalt Industry.	Abbey 5111
NFBTE	National Federation of Building Trades Employers.	21, John Adam Street, Adelphi, W.C.2. Trafalgar 3927
NFBTO	National Federation of Building Trades Operatives.	82, New Cavendish Street, W.1. Langham 4041/4054
NFHS	National Federation of Housing Societies. 12, Suffolk St., S.W.1.	Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4459
NHBRC	National House Builders Registration Council. 58, Portland Place, W.1.	Whitehall 1631
NJCBI	National Joint Council for the Building Industry.	Langham 0064/5
NPL	National Physical Laboratory. Head Office, Teddington.	11, Weymouth Street, W.1. Langham 2785
NRDB	Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3.	Teddington Lock 3222
NSAS	National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1.	Mansion House 9383
NT	National Trust. 42, Queen Anne's Gate, S.W.1.	Trafalgar 6838
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 0211
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 7245
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Abbey 4504
RIB	Rural Industries Bureau. 35, Camp Road, S.W.19.	Fountainbridge 7631
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Wimbledon 5101
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Langham 5533
RFAC	Royal Fine Art Commission. 5, Old Palace Yard, S.W.1.	Whitehall 5322/9245
RS	Royal Society. Burlington House, Piccadilly, W.1.	Whitehall 3935
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Regent 3335
RSH	Royal Society of Health. 90, Buckingham Palace Road, S.W.1.	Trafalgar 2366
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Sloane 5134
SE	Society of Engineers. Abbey House, Victoria Street, S.W.1.	Victoria 2186
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, E.C.3.	Abbey 7244
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Mansion House 3921
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 1984/5
SNHTPC	Scottish National Housing. Town Planning Council.	Langham 7616
SPAB	Society for the Protection of Ancient Buildings.	Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.
TCPA	Town and Country Planning Association.	55, Great Ormond Street, W.C.1. Holborn 2646
TDA	Timber Development Association. 21, College Hill, E.C.4.	28, King Street, Covent Garden, W.C.2. Temple Bar 5006
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	City 4771
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	Victoria 8815
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1.	City 5040
ZDA	Zinc Development Association. 34, Berkeley Square, W.1.	Whitehall 4341
		Grosvenor 6636



—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

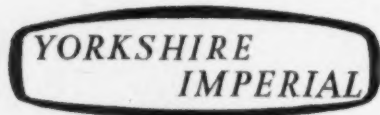
ACME FLOOR RENOVATION SERVICE

Technical Brochures gladly sent on request.



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

YORKSHIRE IMPERIAL METALS LIMITED



*the complete range for every require-
ment in TUBES and FITTINGS to
ensure quality and economy*

... with a nation-wide distribution service to meet all emergencies

- 'Kite' Marked Copper Building Service Tubes
- 'Kuterlex' Plastic Covered Copper Tubes
- 'Yorkshire' Capillary and 'Instantor' 'Kuterlite', 'Coneor' and 'Polystantor' Compression Fittings
- 'Polyorc-Alkathene' Polythene Tubes
- 'Plastronga (high strength) Polythene Tubing
- 'Polyorc B' Unplasticised P.V.C. Tubing
- 'Plastronga' Polythene Fittings

HEAD OFFICE: P.O. BOX 166, LEEDS.

Telephone: Leeds 7-2222



Problem: **HEAT**

Solution: **COLT** Ventilation

Place: **LEYLAND MOTORS LIMITED
LEYLAND LANCASHIRE**



The Architects, Messrs. Harry S. Fairhurst & Son, F.A.R.I.B.A., who designed this factory for Leyland Motors Ltd. installed Colt Ventilators throughout for three reasons:

1. They had confidence in Colt Ventilation, from past experience.
2. They liked the low silhouette which would not impair the appearance of the building.
3. The installation weighed 72 tons less than any other ventilation equipment available, thereby showing considerable saving in structural costs.

In providing a permanent solution to this ventilation problem Colt have added yet another chapter to their record of success—success which has brought repeat orders from many world-famous concerns. Send for a free Data Manual to Dept. 36

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.)

YORKSHIRE IMPERIAL METALS LIMITED

**YORKSHIRE
IMPERIAL**

*the complete range for every require-
ment in TUBES and FITTINGS to
ensure quality and economy*

... with a nation-wide distribution service to meet all emergencies

- 'Kite' Marked Copper Building Service Tubes
- 'Kuterlex' Plastic Covered Copper Tubes
- 'Yorkshire' Capillary and 'Instantor' 'Kuterlite', 'Coneor' and 'Polystantor' Compression Fittings
- 'Polyorc-Alkathene' Polythene Tubes
- 'Plastronga' (high strength) Polythene Tubing
- 'Polyorc B' Unplasticised P.V.C. Tubing
- 'Plastronga' Polythene Fittings

HEAD OFFICE: P.O. BOX 166, LEEDS.

Telephone: Leeds 7-2222



Problem: **HEAT**

Solution: **COLT** Ventilation

Place: **LEYLAND MOTORS LIMITED
LEYLAND LANCASHIRE**



The Architects, Messrs. Harry S. Fairhurst & Son, F/A.R.I.B.A., who designed this factory for Leyland Motors Ltd. installed Colt Ventilators throughout for three reasons:

1. They had confidence in Colt Ventilation, from past experience.
2. They liked the low silhouette which would not impair the appearance of the building.
3. The installation weighed 72 tons less than any other ventilation equipment available, thereby showing considerable saving in structural costs.

In providing a permanent solution to this ventilation problem Colt have added yet another chapter to their record of success—success which has brought repeat orders from many world-famous concerns. Send for a free Data Manual to Dept. 36

COLT VENTILATION LIMITED SURBITON SURREY TELEPHONE: ELMBRIDGE 0161



For YOUR offices in the 60's



SKYLINE

by

BENZAMIN
REGD.



ONE OF THE WORLD'S LARGEST PRODUCERS OF INDUSTRIAL & COMMERCIAL LIGHTING FITTINGS
BENZAMIN ELECTRIC LIMITED · TOTTENHAM · LONDON · N.17 · TOTTENHAM 5252

EVODE

PRODUCTS FOR BUILDING



**There
is no
better
way of
WATERPROOFING
CONCRETE**

foundations, basements,
floors or tanks
than by adding

EVODE

MELLITOL

ONLY 1% per 100-lb.
of cement.
NO PRE-MIXING



EVODE

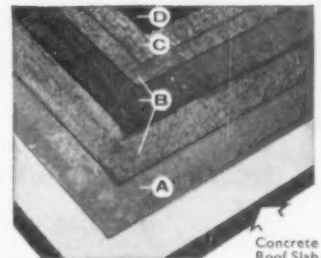
**Cold Applied
Bitumen
Membranes**

For the horizontal damp proofing and vapour proofing of
concrete rafts, sub-floors, basements etc. * Adheres to
moist surfaces * Can be applied to green concrete * Stable
to temperature changes.

THE EVODE

SYSTEM OF ROOF WATERPROOFING

Any roof can be treated
* Permanent water-
proofing for large or
small roofs * Applied
cold without prelimin-
ary treatment * Used
and proved for over 25
years * Foreman
demonstrators are avail-
able to assist your
contractors labour, or,
if you prefer, our con-
tracts department can
undertake the work
for you.



A Priming B Membrane Sandwich
C Covering D Black or Coloured Finish

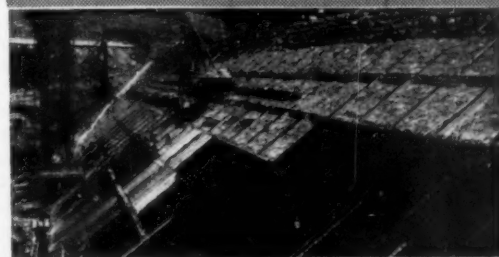


How fat is fatty?

Fatter than fat—from the Evode
laboratories comes New Formula
Mortar plasticiser—the most ad-
vanced plasticiser in the world,
designed to give you the cheapest
and best mortar without lime.
Supplied in 40, 10 and 5 gallon
free and non-returnable drums
and 1 gallon tins.

EVODE

MORTAR PLASTICISER



EVODE

BITUMINOUS SEALANTS & COATINGS

Evode research laboratories have developed a wide range of pure asphaltic
sealants and coatings for cold and hot application to concrete, brickwork
and steel. Special quick drying and damp surface application coatings are
available.

A PRODUCT OF EVODE LIMITED OF STAFFORD, THE **EVO-STIK** 'IMPACT' ADHESIVES SPECIALISTS

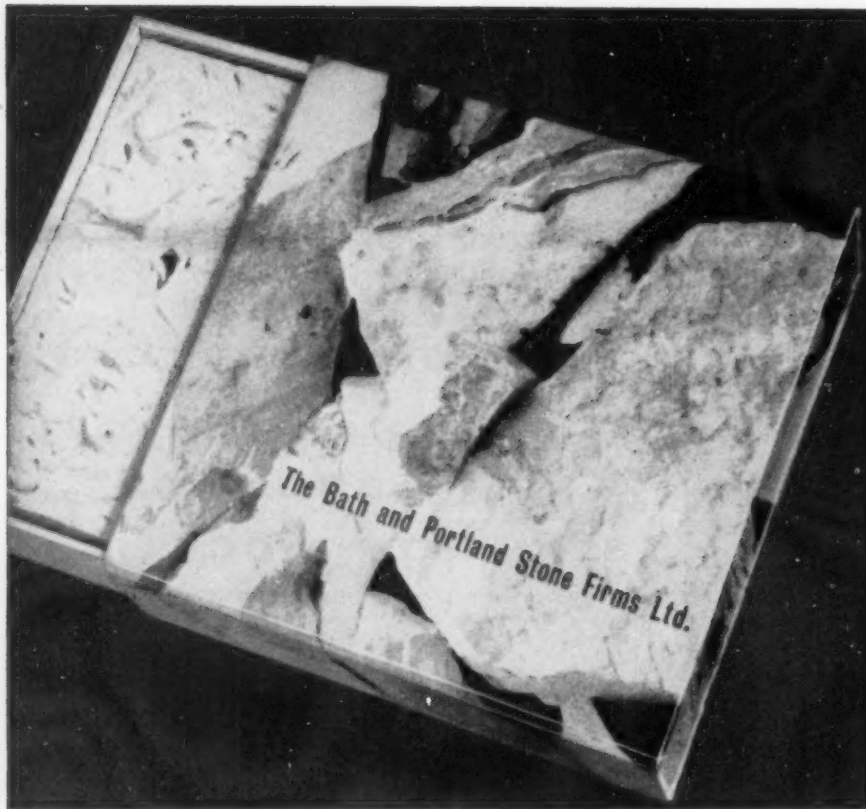
***SEND FOR LITERATURE** EVODE LTD., (BUILDING CHEMICALS DIVISION) STAFFORD. Phone: 2241 (8 lines)

London Office: 450, 2 EDGWARE ROAD, LONDON, W.2. Telephone: AMBassador 2425 (5 Lines)

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

1-W.199

STONE AND THE ARCHITECT



The choice of the most suitable type of stone for a given purpose does not depend solely upon the stone itself; there are, of course, the architectural and aesthetic considerations involved.

But in so far as the selection of the stone is confined to its suitability as stone, and the technical aspects of masonry or fixing, then the Company is qualified to advise.

In all probability the ideal arrangement is for the architect, after a preliminary discussion with a Company representative, to visit a particular quarry, works, or yard. Alternatively, samples of stone can be sent together with a list of representative contracts in which a particular stone has been used. The architect can then see for himself what the stone will look like and how it will behave under actual conditions.

PORTLAND
BATH
DOULTING
BEER
CLIPSHAM

THE BATH AND PORTLAND STONE FIRMS, LIMITED

BATH, SOMERSET. Bath 3248 London VIC 9182 Manchester Central 6602 Portland 2276 Leeds 25972



All over the WORLD

In all parts of the world under arctic, tropical and temperate climatic conditions, FEBMIX ADMIX Mortar Plasticiser is saving money and improving the quality of bricklaying and plastering work.

The superiority of FEBMIX ADMIX Mortar Plasticiser is illustrated by the fact that it is the largest selling mortar plasticiser in the world. Such recognition is no chance happening—it must be earned and evidence of this can be found on the thousands of contracts where FEBMIX ADMIX Mortar Plasticiser has improved the quality of work, increased the rate of erection and reduced building cost.



FEBMIX ADMIX

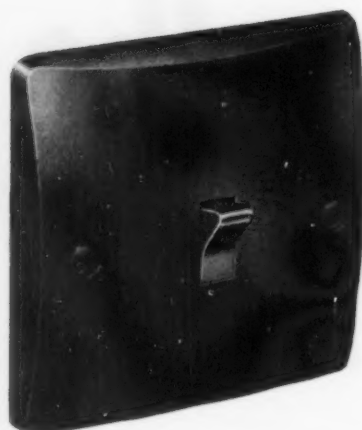
MORTAR PLASTICISER

FEB

(Gt. Britain) LTD

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

Albany Road, Chorlton-cum-Hardy, Manchester, 21.
Telephone: CHO 1063.



PLATESWITCHES AND GRIDSWITCHES

**A dual range of switches
for every building project**

PLATESWITCHES

—competitive range of 5 amp. Flush Switches for Plaster Depth Boxes—one to four gang—with attractively 'styled' moulded plates. *The Switch range for Domestic Buildings—houses, flats, etc.*

GRIDSWITCHES

—comprehensive range of 5 and 15 amp. Switches and Push Buttons for assembly in any combination—one to twelve gang. Surface or Flush with moulded or metal plates. *The Switch range for Commercial and Industrial Buildings—offices, warehouses, factories, schools, hospitals, etc.*

Watch for further announcements relating to the M.K. ranges of Plateswitches and Gridswitches.



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

THE PINT THAT WORKS WONDERS



When mixed with the gauging water at the rate of only one pint per cwt. of cement used, Febproof does this—makes concrete 100% waterproof—makes cement mortars 100% waterproof—allows a reduction

in the water-cement ratio — increases strength—greatly improves workability and plasticity of concrete and cement mortars—all at a cost of only 1/9½d. per cwt. of cement used.

FEBPROOF

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



(GT. BRITAIN) LTD.

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

Albany Road, Chorlton-cum-Hardy, Manchester, 21
Phone: CHO 1063

*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

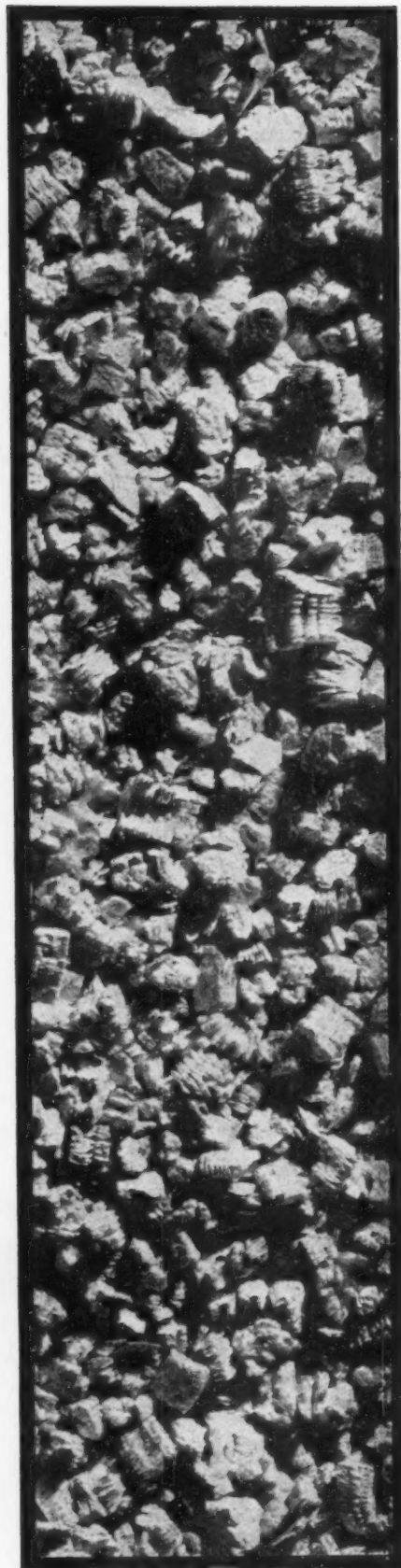
specify

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





Steelwork

by Boulton and Paul

Projects develop according to plan when you call in Boulton and Paul. You have the skill and experience of specialists at your disposal, enthusiastic co-operation from start to finish and the employment of the most advanced techniques. Top quality materials are matched by fine craftsmanship. Maximum speed and economy are ensured by up-to-date mechanised fabrication.

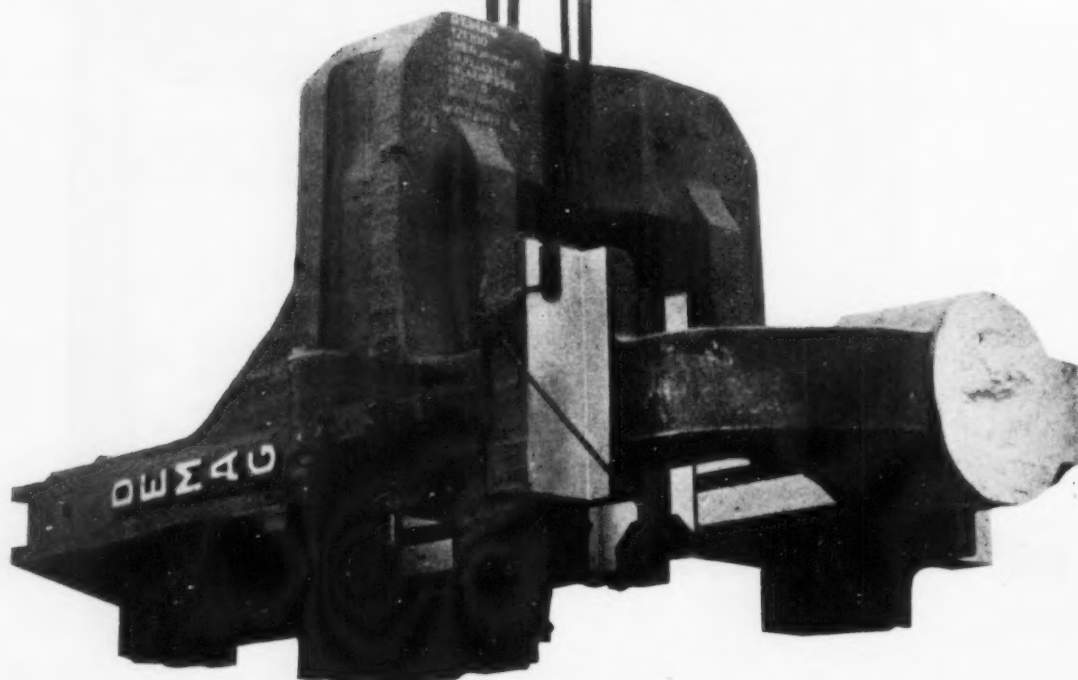
PREFLEX

Beams, recently introduced to Gt. Britain by Boulton and Paul, combine high tensile steel and high grade factory concrete to provide a high load bearing capacity on greater span to depth ratios than those obtainable economically by conventional structural methods. A complete technical service is available embracing design, manufacture and erection. Write for illustrated literature to:

Boulton and Paul Limited • NORWICH • LONDON • BIRMINGHAM

CE43

THE LANARKSHIRE UNIVERSAL BEAM MILL



At Motherwell, the steel centre of Scotland, the Universal Beam Mill is at an advanced stage of construction.

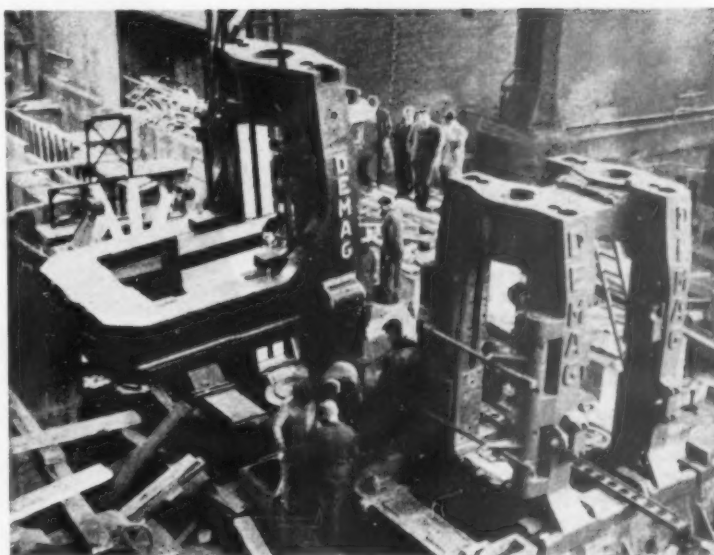
When the new mill comes into operation the Lanarkshire Steel Company will be producing a wide range of Universal beams and columns for various structural uses in Britain and overseas.

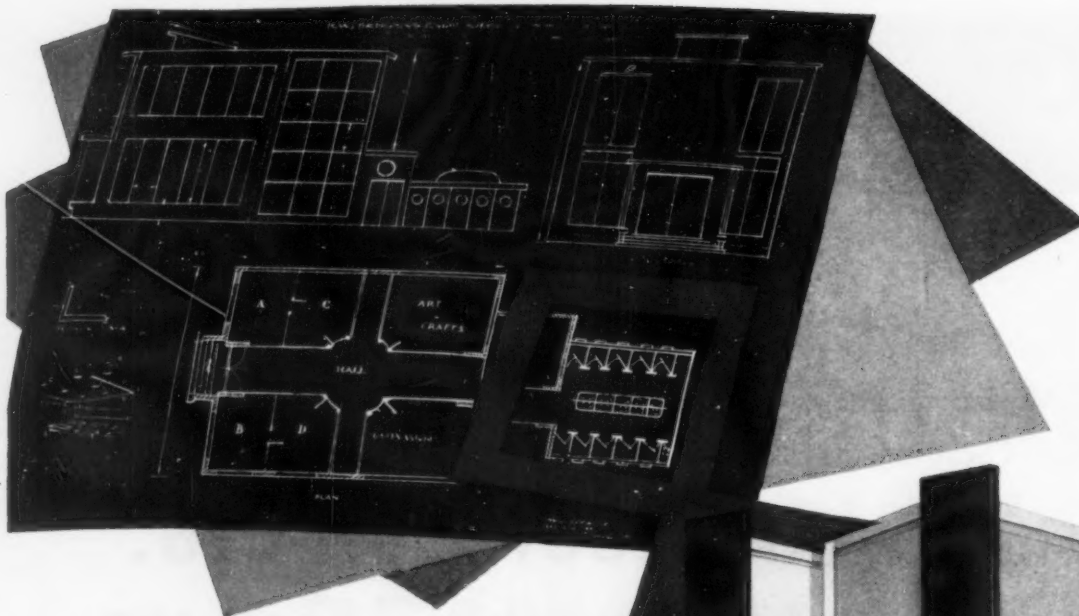


The Lanarkshire Steel Co. Ltd.

MOTHERWELL SCOTLAND

One of the Colville Group of Companies

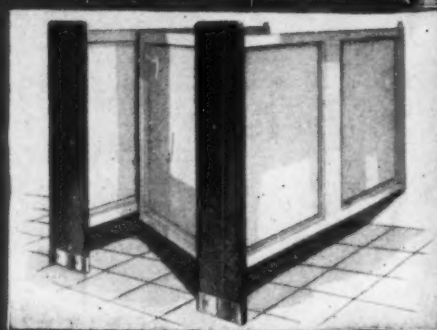




Toilet cubicles take on a new look

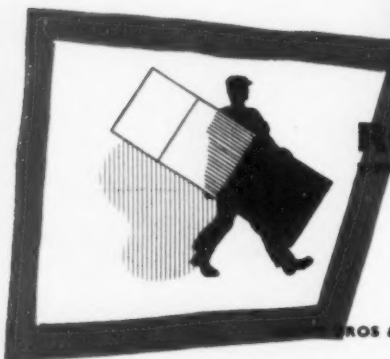
In no part of the building is the provision of maximum accommodation within minimum limits of greater importance than in the 'usual offices.' The new ultra-flexible Rowe system of Pressed Metal Toilet Cubicles completely satisfies all considerations, practical and aesthetic. Ceiling or floor fixed, flush or semi-flush, Rowe Toilet Cubicles are in four standard types, covering between them the needs of civic, hospital or commercial buildings, factories and junior or senior schools. Construction is robust and ingenious, a special feature being that rails over doors can be dispensed with. Styling and finish are unusually handsome and the partitions are available in a choice of twelve colours. Before you get down to the detailed planning of the smallest room, let us send you a brochure containing detailed specifications of Rowe Pressed Metal Toilet Cubicles.

Illustrated are Types FMC (Floor Mounted Semi-Flush) a robust design, suitable for Factories, Junior and Senior Schools—and FMN (Floor Mounted Nursery) similar in design but to dimensions laid down for Nursery Schools.



TYPE FMC

TYPE FMN



ROWE INDUSTRIES (KIRKBY) LTD.

KIRKBY INDUSTRIAL ESTATE, LIVERPOOL, ENGLAND. TELEPHONE: SIMONSWOOD 3481

Samples also available for inspection in the Showrooms of our Associates
MESSRS. ROWE BROS. & CO. LTD., in:


**LONDON
LIVERPOOL
BIRMINGHAM
BRISTOL
EXETER
GLASGOW**

10 DOVER STREET, PICCADILLY, W. 1. Tel. Hyde Park 5761
FALL MALL, LIVERPOOL, 3. Tel. Central 5401
BERKLEY STREET, BIRMINGHAM, 1. Tel. Midland 2791
CANONS MARSH, BRISTOL, 1. Tel. Bristol 23171
QUEEN STREET, EXETER. Tel. Exeter 74134
22/30 SHAMROCK ST., GLASGOW, C.4. Tel. Douglas 8211


ROWE BROS. & CO. (CANADA) LTD. FIRST AVENUE, AJAX, ONTARIO. 1396. RICHARDS STREET VANCOUVER, 2, B.C.



NEW CEMENTONE No 9



now goes 25% further...



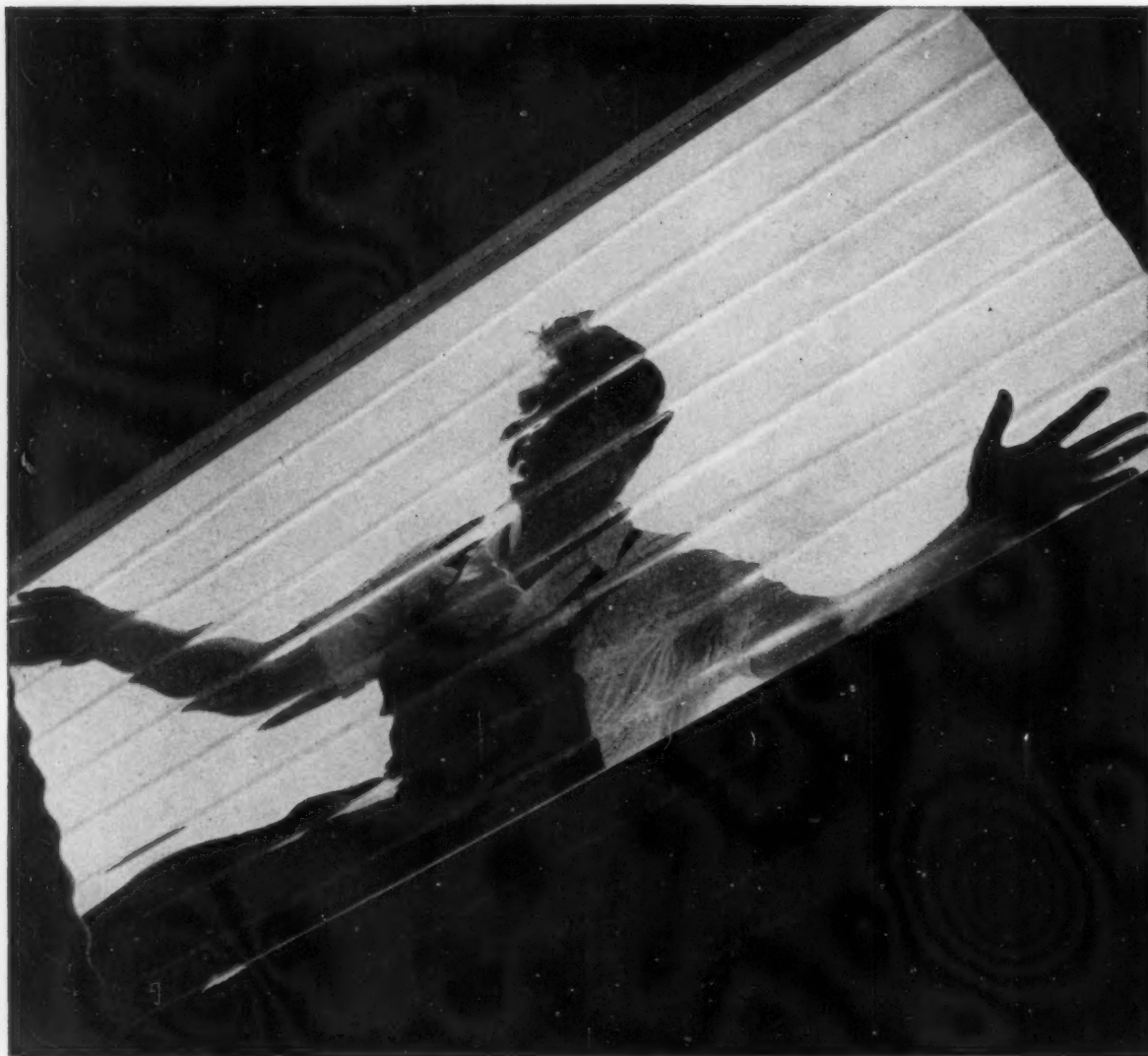
**and
is
easier
to
apply**

When you cost a job in future, remember that new Cementone No. 9 Waterproof Stoneface Composition will give you 25% more coverage. It is compounded from an indestructible aggregate and a special medium which gives a stone finish that is both waterproof and alkali resisting. No primer is necessary and there are 20 colours. New Cementone No. 9 is much easier and therefore faster to apply. The quality of course, is the same.

Cementone No. 9 **WATERPROOF
STONEFACE
COMPOSITION**

JOSEPH FREEMAN SONS & CO. LTD.

Cementone Works · London · S.W.18 · Telephone: VANDyke 2452 (10 lines)



Corrugated 'Perspex' rooflights have I.C.I. behind them and a long life ahead

WHEN YOU FIT Corrugated 'Perspex' rooflights, you can be sure you are fitting *the very best*. To begin with, Corrugated 'Perspex' is more efficient than any other rooflight because it transmits more light. With a properly planned rooflighting system, Corrugated 'Perspex' will provide adequate economical lighting using only a small number of sheets. It also has the ability to keep up this efficiency over the years even in corrosive atmos-

pheres, retaining its smooth, easily cleaned surface indefinitely. In fact, in the majority of cases, Corrugated 'Perspex' rooflights should last as long as the roof itself.

More than this, Corrugated 'Perspex' is unique among rooflights in being made by I.C.I. In buying it, you are not only buying the best, you are buying it from a manufacturer on whom you can rely.

Insist on—CORRUGATED 'PERSPEX'

'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

IMPERIAL CHEMICAL INDUSTRIES LIMITED • LONDON • S.W.1



CP171

Room to **EXPAND...**



*Kent County Council
Visual Aids Centre, Maidstone.
Reproduced by kind permission of
E. T. ASHLEY SMITH Esq., F.R.I.B.A.
County Architect for Kent.*

*A reception room at Wrightington
Hospital, near Wigan.
Reproduced by kind permission
of the Management Committee.*



The demountable building keeps pace with modern needs

Authorities and industries throughout the country who have to cope with rapid expansion find the answer in Hall's Demountable Buildings. Almost endless permutations of length, variety of width and partitions allow for growth as the need arises. Prefabrication saves time and money and permits easy removal from site to site, while Hall's erection service can normally offer "from foundation to occupation in six weeks". The outstandingly handsome clear grade Western Red Cedarwood of Hall's

Demountable Buildings need no paint, creosote or preservatives, so saving all maintenance costs.

Hall's expert advisory staff will be glad to discuss your particular needs. Free Brochure available on request.



Immediately available for

**OFFICES • SPORTS PAVILIONS
CANTEENS • CHURCH HALLS
HOSPITALS • CLASSROOMS
RECREATION HALLS ETC.**

* **SEE THE COLOUR FILM.** A 16 mm. 30-minute documentary colour film which shows in detail the erection sequence and the adaptability of Hall's Demountable Buildings for varying sites available on request.



HALL'S

OF PADDOCK WOOD

ROBERT H. HALL & CO. (KENT) LTD.
33 Paddock Wood, Tonbridge, Kent Phone: Paddock Wood 561

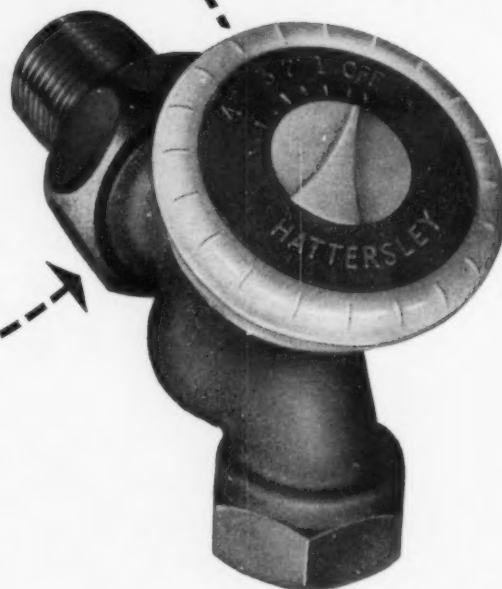
ONE OF THE AUSTIN-HALL GROUP OF COMPANIES

Styled for the modern home

a revolutionary

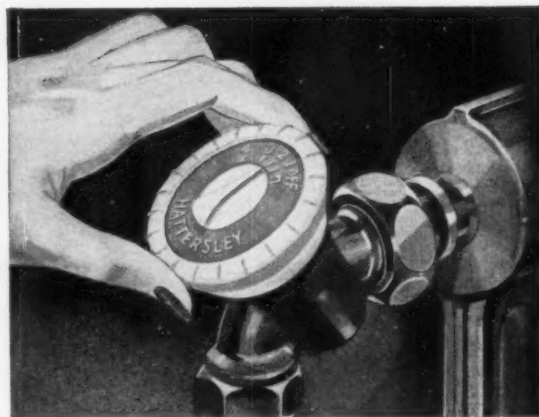
NEW

**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.

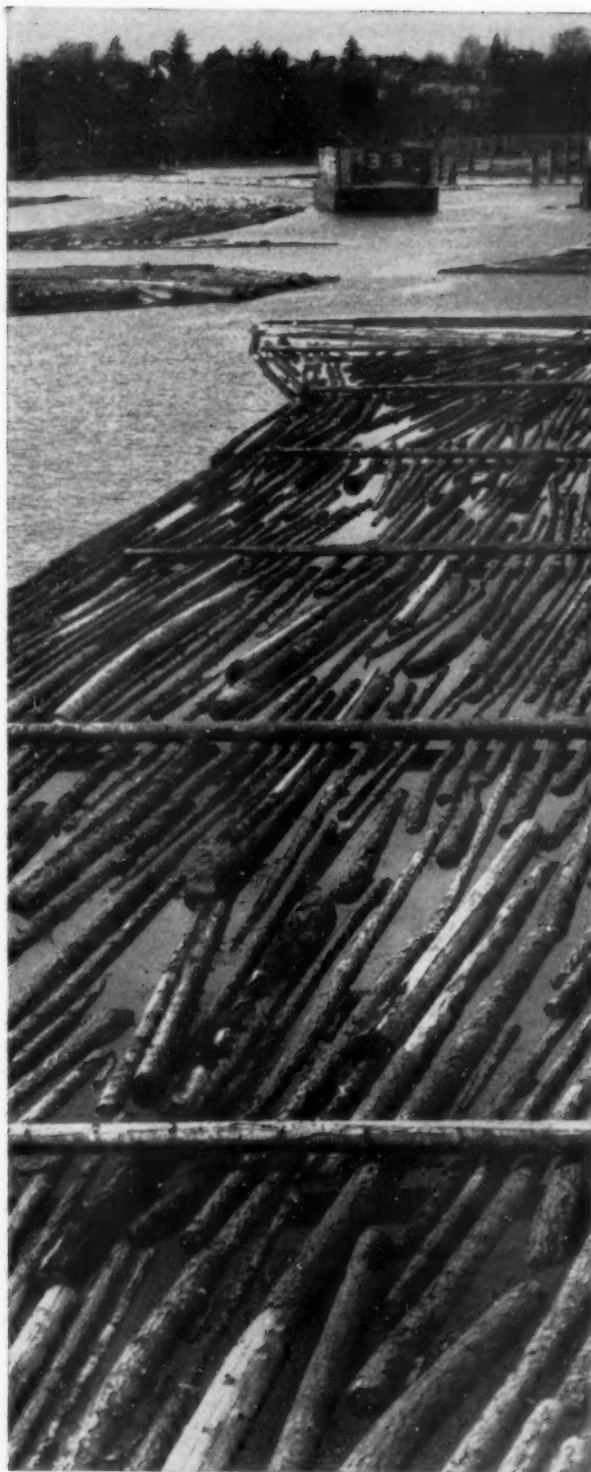
HATTERSLEY
ESTABLISHED 1897



the name for good valves

HATTERSLEY (ORMSKIRK) LIMITED • ORMSKIRK • LANCASHIRE
and at HALIFAX and LONDON

H.10



Specialists in high class Standard Joinery

The Midland Woodworking Co. Ltd. Melton Mowbray

MW28



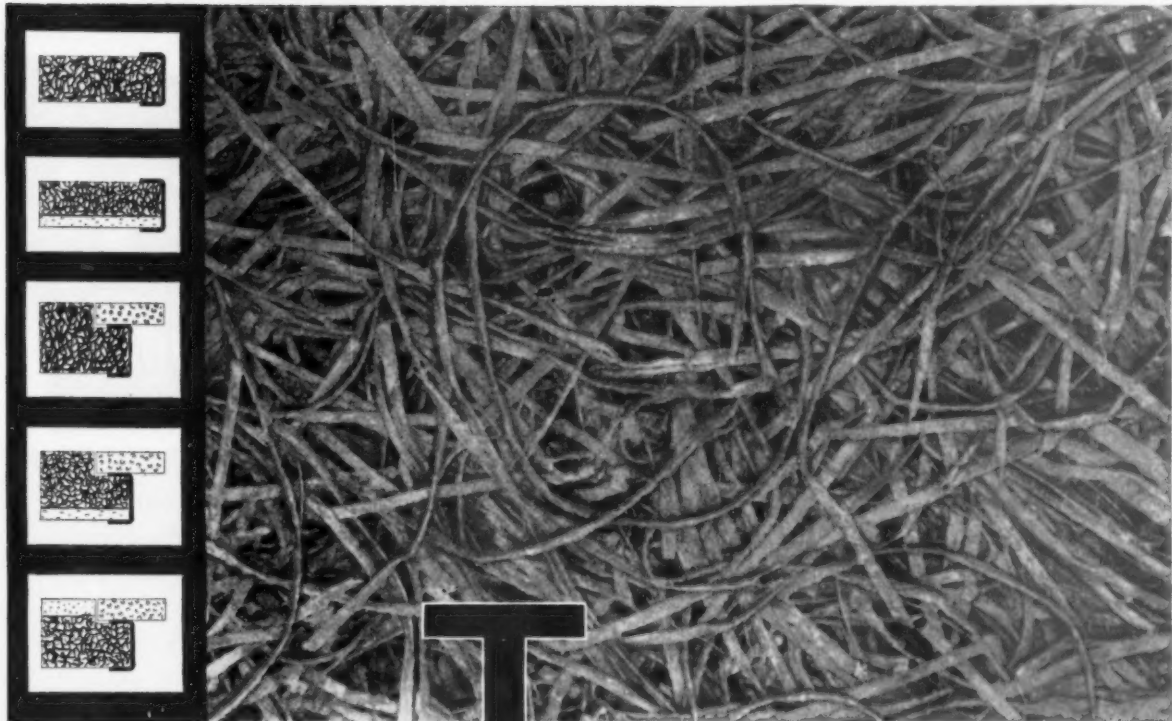
DOUBLE BAY WAREHOUSE

*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 multispan
- 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



Reproduction of unretouched photograph actual size. Small illustrations show some of the range.

1 A faultless surface that requires no false ceiling. Can be directly spray-painted for special decorative effect.

2 100% consistent. Every slab is as good as the next, giving greater overall structural strength.

3 Rigorous quality control at every stage of manufacture and made from specially selected imported timber machined to very close tolerance in Thermacoust's own factories.

4 Many types—for high thermal insulation, sound absorption, fire resistance, and use in humid conditions. Plain, pre-plastered, pre-screeded (the latter saving weight and up to 14 days' time on site). Steel channel reinforced in spans of up to 8 feet.

5 Exclusive accessories to help the architect—including dome lights.

6 Prompt delivery—normally from stock—and the service of technical representatives who can save your time by preparing layout drawings and working out the details.

THE NAME THAT MAKES THE DIFFERENCE

THERMACOUST

WOOD WOOL ROOFING SLABS

Wood wool roofing slabs with all these advantages can only be obtained direct from Thermacoust Ltd.

Write for leaflets A.1 THERMACOUST LTD.

20 Albert Embankment, London, S.E.1 Telephone enquiries: Southern—ELMbridge 5773/4/5 Northern—Doncaster 54138 Ext. 25

A member of the Cementation Group of Companies

TA 1278

There's more than one reason
for using



'PUDLO'

CEMENT WATERPROOFING POWDER

You see, 'Pudlo' does so much more than just waterproof concrete—it actually improves the concrete to which it's added. You want to know how?

**Better
Concrete**

- 1 'Pudlo' Cement Waterproofing powder increases the compressive strength of concrete, particularly in the early stages.

**Better
Concrete**

- 2 'Pudlo' causes greater durability, particularly in low temperature conditions, by providing controlled air-entrainment in small amounts with increased strength.

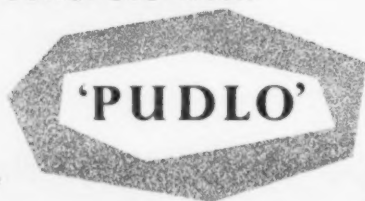
**Better
Concrete**

- 3 'Pudlo' increases concrete's resistance to the effects of destructive agents, sulphates for example by decreasing permeability and providing better compaction.

**Better
Concrete**

- 4 'Pudlo' helps to reduce segregation and 'bleeding'—making for better concrete.

You gain in more ways than one when you
waterproof concrete with



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

WT 31

CEMENT WATERPROOFING POWDER

OTHER 'PUDLO' PRODUCTS INCLUDE: Waterproof Cement Paints, Cement Paint Primer, External Water Repellent, Cement Bonder, Plaster Bonder, Frost Protector/Rapid Hardener, Mortar Plasticiser, Cement Hardener/Dust Proofer, Concrete Plasticiser, Permanent Colours for Cement and 'Feusol' Fire Cement.

KERNER-GREENWOOD & CO. LTD., KING'S LYNN, NORFOLK. Telephone: King's Lynn 2293

'HIDUTAC' switchfuses pack more space into a smaller size

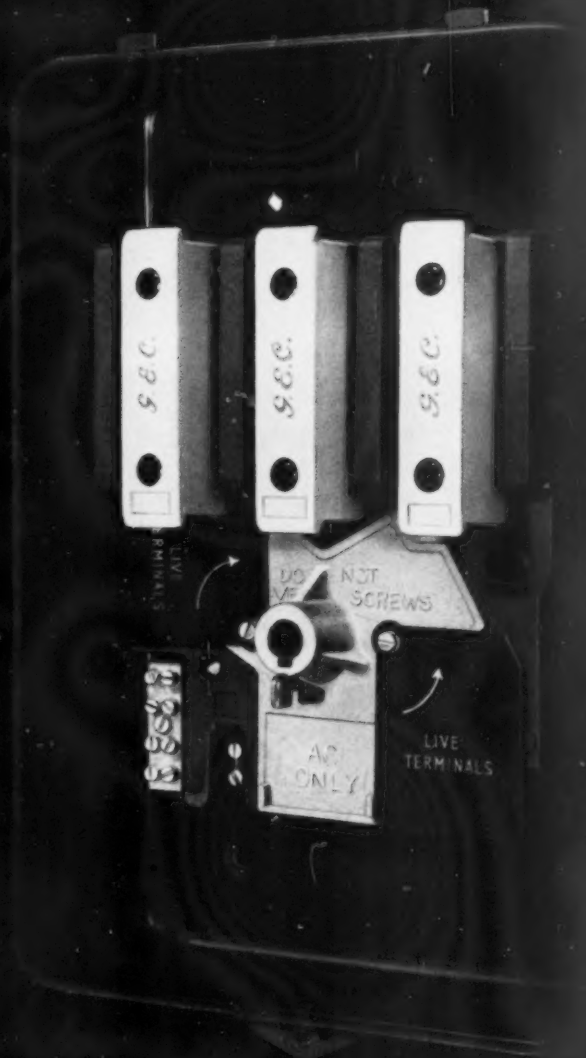


Radial positioning of the contacts of 'Hidutac' switchfuses allows a *unique compactness*. This is just one of many 'Hidutac' exclusive features resulting from G.E.C. Installation Equipment Group's *new approach*, based on many years' experience of making switchgear superbly well. The 60 amp. TPN 'Hidutac' measures only $13\frac{1}{8} \times 8\frac{1}{2} \times 4\frac{1}{2}$ in. yet there is still generous wiring space and easy access to the terminals at the front.

Consider these other impressive advantages: *Unlimited full load switching*—'Hidutac' switchfuses operate at their full load current with unfailing reliability. *High breaking capacity*—8 times the rated full load current—through cam-operated, double-break, silver contacts. *Total internal enclosure* of all moving parts, with shields over live terminals. *High fault current protection* in Single Pole and Neutral, Double Pole, Triple Pole, Triple Pole and Neutral switchfuses with H.R.C. or rewirable fuses. Categories of duty are: H.R.C. fuses, all ratings, AC4 of BS88 (33,000 amp.); rewirable fuses, 15 and 30 amp. ratings, S2A of BS3036 (2,000 amp.); rewirable fuses, 60 amp. rating, S4A of BS3036 (4,000 amp.). *Modern styling* of pressed steel case with fully interlocked cover.

These exclusive features make 'Hidutac' switchfuses vastly superior for tungsten and discharge lighting control, motor control, and transformer and capacitor switching.

IMMEDIATE DELIVERY of 'Hidutac' switchfuses from wholesalers throughout the country. For more detailed information ask your wholesaler for 'Hidutac' literature.



that's the New Approach of **G.E.C.**

INSTALLATION EQUIPMENT GROUP

**From
The Expanded Metal Company
comes a significant
advance in partitioning**



As important as the system itself—the swift, complete Permalock Service

At your request a Technical Representative calls to explain the system—tells you about fire ratings, sound reduction, choice of panel boards, doors and windows—guides you on price—notes all your requirements. A firm quotation will quickly follow . . . with a designed layout if required. Work can begin at short notice . . . standard parts are supplied from stock and erected by our installation crews. In a surprisingly short time—panelling and glazing are under way.

** You are dealing with one company
from start to finish . . . guaranteed
materials and guaranteed service . . .
at reasonable cost.*

Patents pending

permalock

IS A PRODUCT OF THE EXPANDED METAL COMPANY LIMITED

... the new **permalock** system



THE PERMALOCK SYSTEM IS DESIGNED TO...

1 Sell at a price uncommon to quality partitioning.

2 Reduce site labour to an absolute minimum—to keep down installation costs and to cause minimum disturbance.

3 Use mass produced factory components of guaranteed quality and

accuracy—to assemble into a light-weight steel framework—quickly.

4 Be versatile. To allow for a variety of panelboards to fix to the steel framework. Plasterboard or Chipboard, veneered, plastic-faced or painted. THE CHOICE IS YOURS!

5 Be installed at short notice—without the need for any detailed drawings and to fit varied dimensions.

6 Be in keeping with surroundings, contemporary or traditional — new building or conversion.

PERMALOCK PARTITIONING — DURABLE, DEMOUNTABLE

... phone **PERMALOCK** centres at:

LONDON — ABBey 7766
ABERDEEN — 51862
BIRMINGHAM — East 3791
BRISTOL — 292451

CARDIFF — 33757
GLASGOW — Possil 8597
LEEDS — 25343

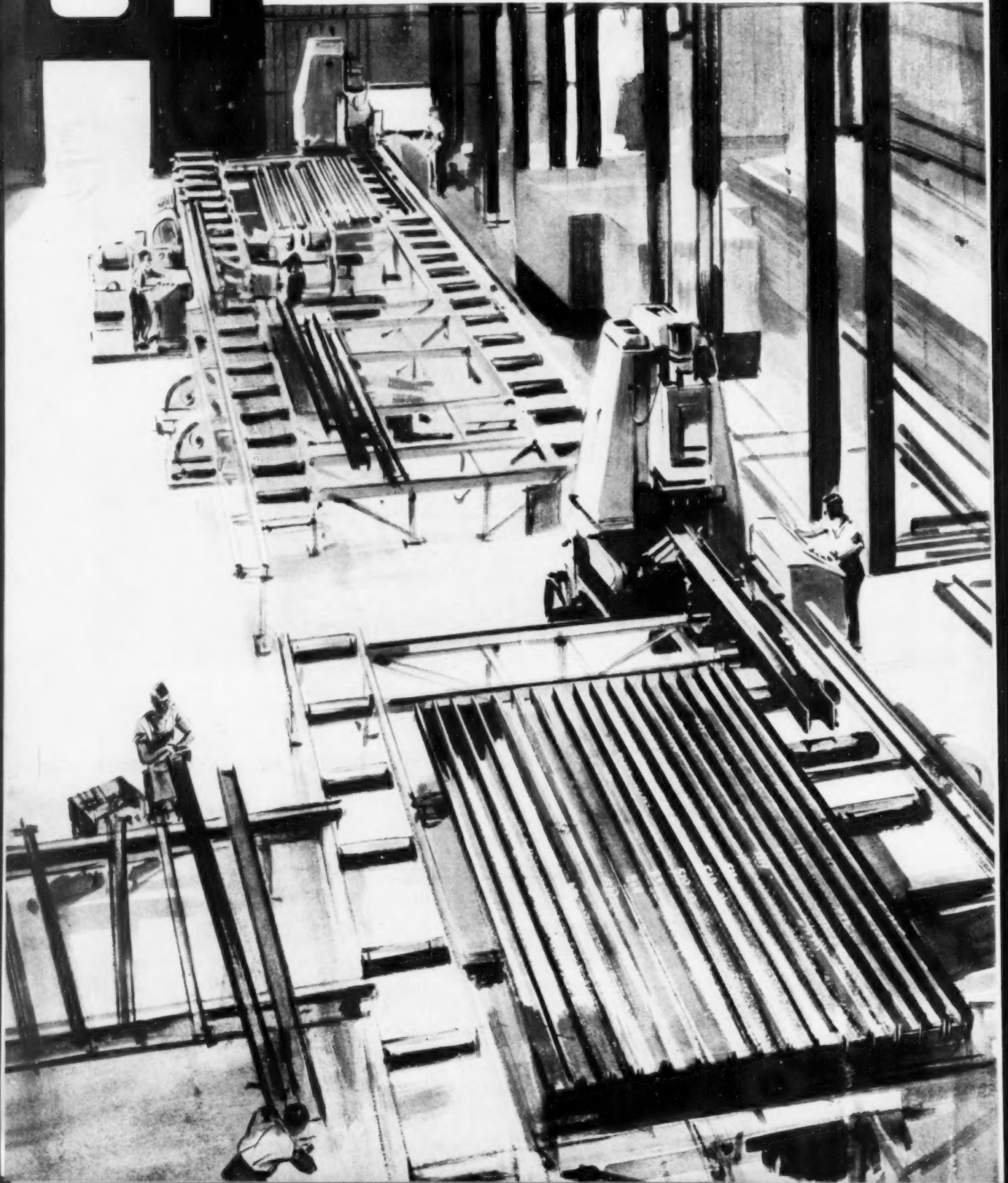
MANCHESTER — Central 9855
NEWCASTLE — 810388
NOTTINGHAM — 42897

OR WRITE TO:

THE EXPANDED METAL COMPANY LIMITED
16 CAXTON STREET · LONDON · S.W.1

S&F

STANDARD STEEL-FRAMED



BUILDINGS *COST LESS* BECAUSE...

...a completely mechanised fabricating technique reduces costly manhandling of materials...reduces labour requirements...keeps work flowing smoothly and fast... makes *big* savings in production costs—*savings that are passed on to the purchaser.*

WIDE RANGE OF TYPES AND SIZES

Tied portal, Clearportal, Crane and Sawtooth (northlight) buildings are available, each type being produced in a wide choice of spans and heights... a comprehensive range of buildings designed to serve almost every industrial requirement.

ADAPTABILITY, SPEED AND SIMPLICITY

S & F buildings are *permanent* structures and can be extended on all sides as and when the need arises. Frame spacing of 20ft. reduces foundation and maintenance costs... speeds erection.

S & F Unified Site Control is an all-embracing service covering steel erection, cladding and insulation by SANDERS & FORSTER'S own skilled teams—a service that ensures *completion on time.*

S & F standard buildings are being erected at the rate of $2\frac{1}{2}$ million square feet each year, serving industrial activities in the United Kingdom and overseas territories in widely varying climatic conditions.

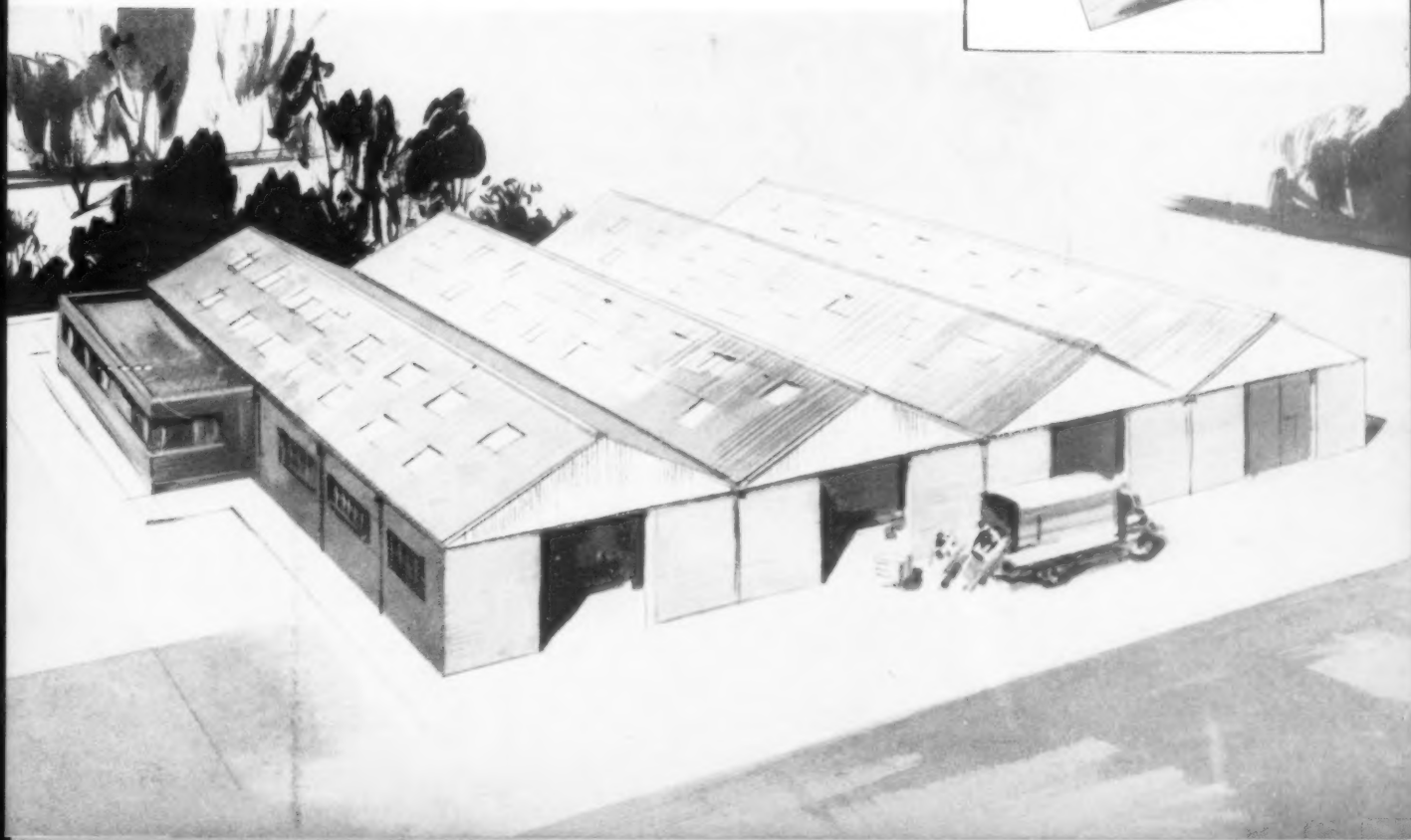
SANDERS & FORSTER
LTD

(DEPT. AJ18) 3 BUCKINGHAM PALACE GARDENS, LONDON, S.W.1.

Telephone: SLOane 0833 (10 lines). Cables: Sanforsted, London

ONE OF THE CHAMBERLAIN GROUP OF COMPANIES

This brochure illustrates how S & F buildings can solve factory accommodation problems quickly, permanently and at low cost. Have you had a copy?

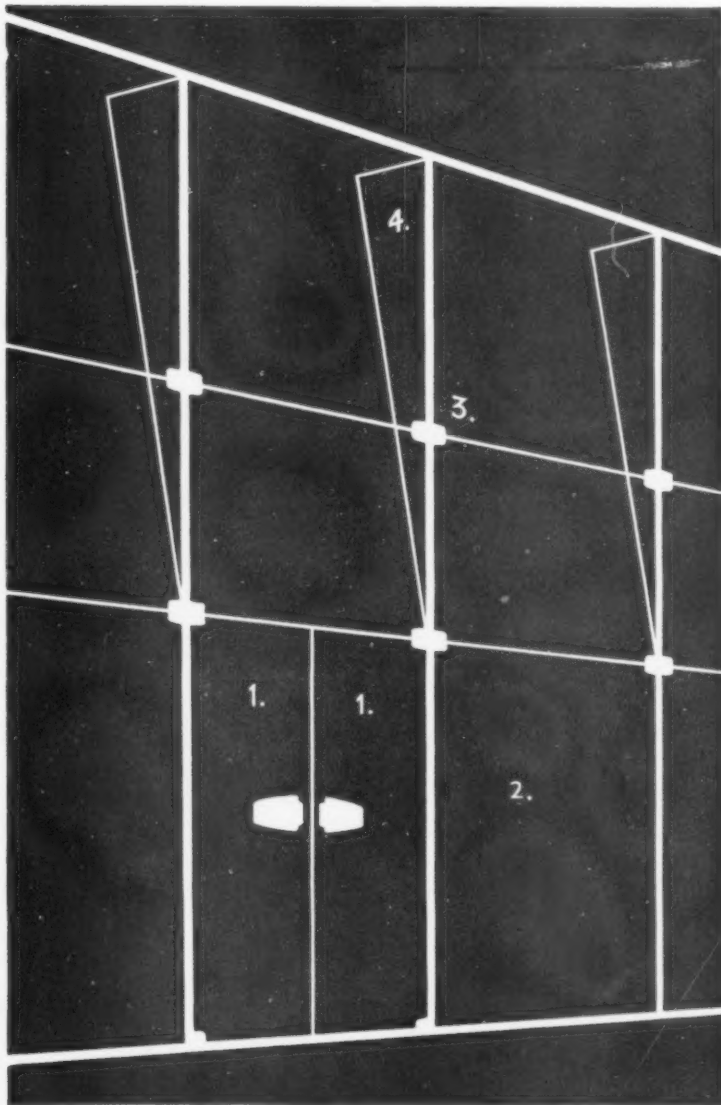




This showroom front, based on an idea by Edward D. Mills, F.R.I.B.A., exemplifies the opportunities for erecting imposing all-glass assemblies using Pilkingtons' "ARMOURPLATE" Glass Doors and Panels.

Expansive Elegance

Pilkingtons' "ARMOURPLATE" Glass Doors and Assemblies



Now, the inviting elegance of "ARMOURPLATE" Glass Doors can be expanded to include the whole frontage. For full details of Pilkingtons' "ARMOURPLATE" Glass Assemblies and fittings—which make possible uninterrupted expanses of glass, two storeys high—write to the manufacturers, Pilkington Brothers Limited.

- 1 Pilkingtons' "ARMOURPLATE" Glass Doors (guaranteed five years) are available in standard sizes up to 96" x 36". Non-standard sizes made to order.
- 2 "ARMOURPLATE" Glass fixed panels and transoms are available in sizes up to 164" x 60".
- 3 "ARMOURPLATE" Assemblies require no metal framing. Small patch fittings link and secure the separate panels.
- 4 Rigidity is ensured by interior "ARMOURPLATE" Glass fins.



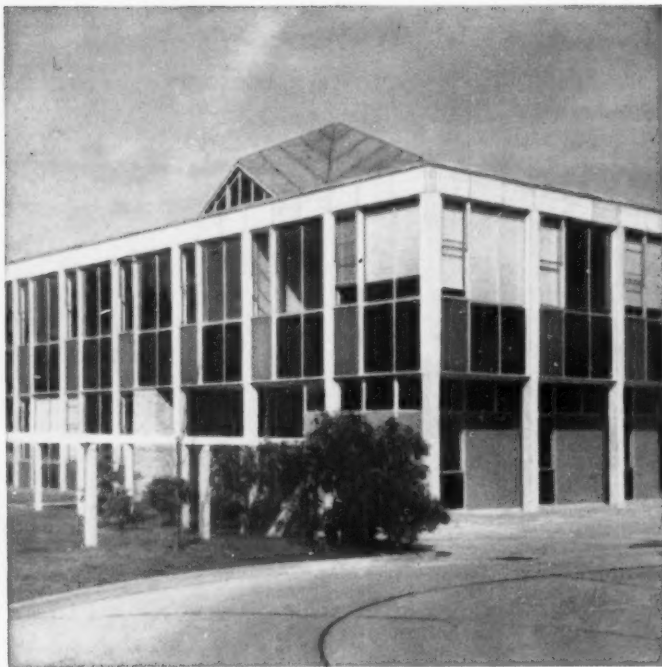
PILKINGTON BROTHERS LIMITED

HEAD OFFICE: ST. HELENS, LANCASHIRE (TEL: ST. HELENS 4001)

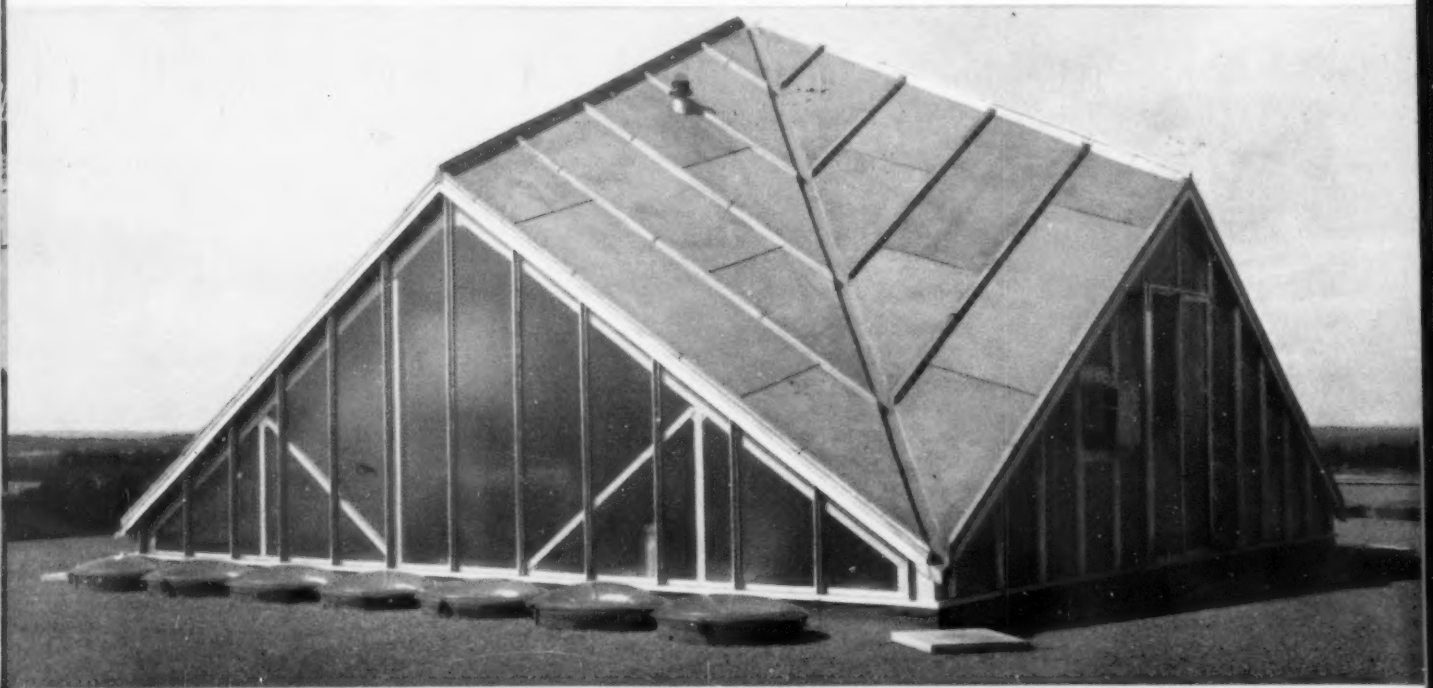
LONDON OFFICE: SELWYN HOUSE, CLEVELAND ROW, ST. JAMES'S, S.W.1 (TEL: WHITEHALL 5672-6)

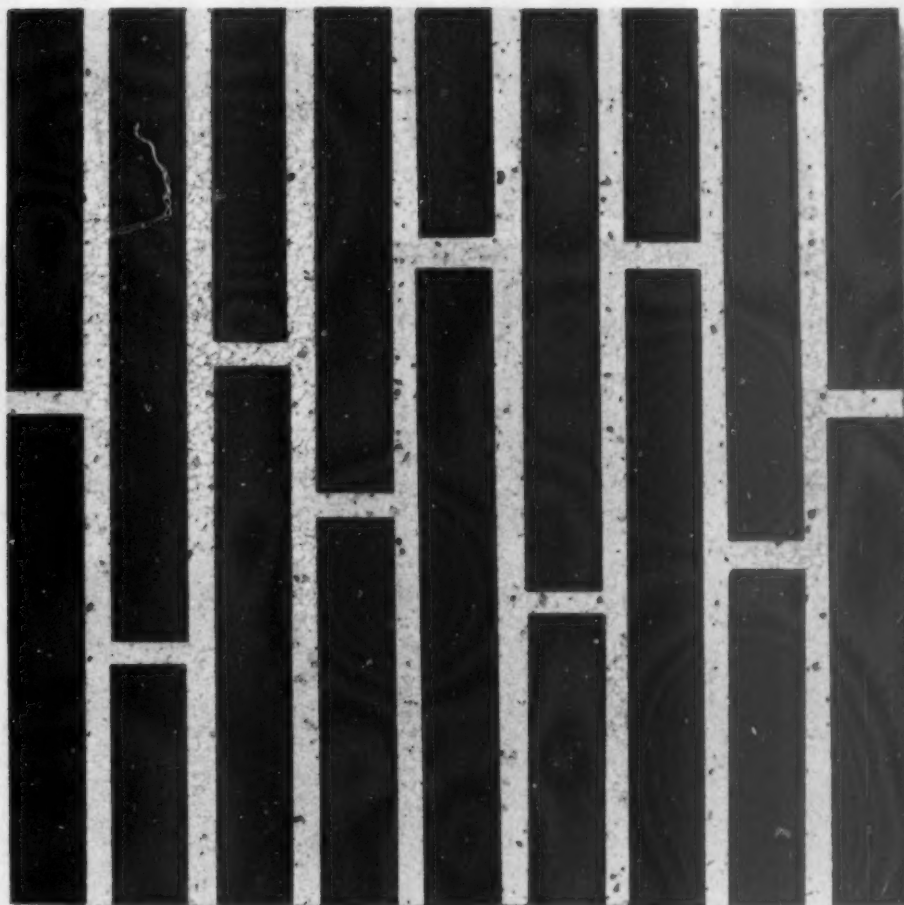
"ARMOURPLATE" is a registered trade mark of Pilkington Brothers Limited. Supplies are available through the usual trade channels.





Zinc for geometry, zinc for adaptability, zinc for lightness, long life and economy. Zinc for appearance too, as on this structure on the roof of the Max Factor offices at Bournemouth, where the architects Farmer and Dark 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





NEW NON-SLIP SLATE FLOORING

Wincilate non-slip slate flooring and paving completely overcomes the disadvantage of slipperiness often associated with surfaces of this type while retaining the properties of durability, inertness, ease of maintenance and - not least - a precise and pleasing appearance.

The standard unit, 1'6" x 1'6" x 1½"-2" thick, is made up of narrow blue-grey slate strips firmly keyed to a specially prepared jointing and to a backing of reinforced cement.

Wincilate non-slip flooring and paving may be arranged to form any pattern desired and specially provided infills used for trimming or dividing-up the pattern.

Further information on this and other Wincilate products is available from the manufacturers:

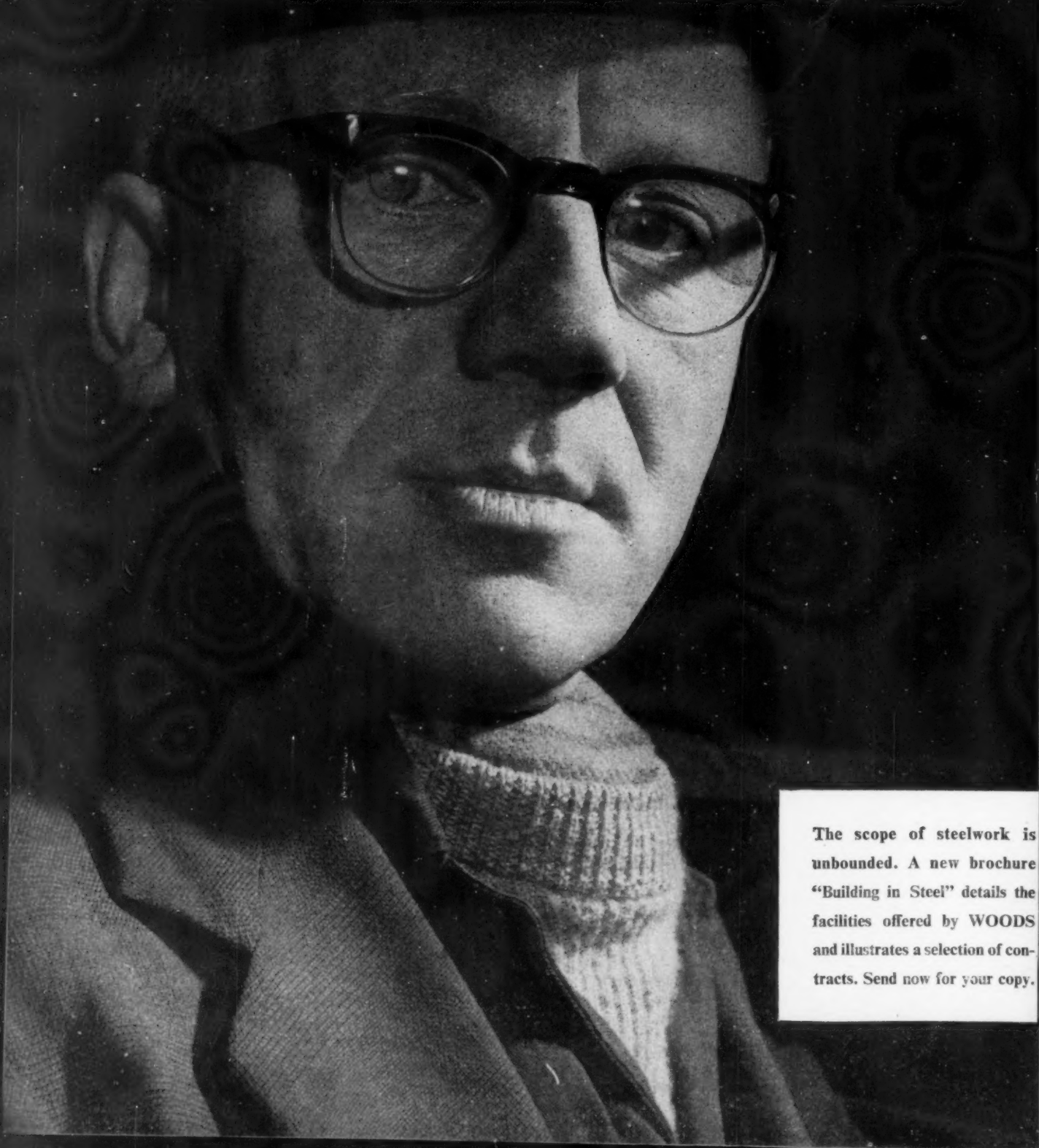
The Bow Slate & Enamel Co. Ltd., The Town Hall, Bow Road, London E.3. Telephone: ADVance 2203.

Works: Bow and Battersea. Quarries: Aberllefeni, North Wales

THE WINCILATE GROUP

THE ARCHITECTS' JOURNAL
(Supplement) June 22, 1961

BUILDING



The scope of steelwork is unbounded. A new brochure "Building in Steel" details the facilities offered by WOODS and illustrates a selection of contracts. Send now for your copy.

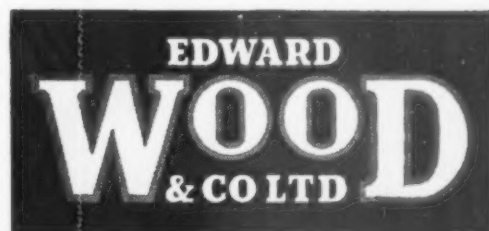
IN STEEL

— the people who count

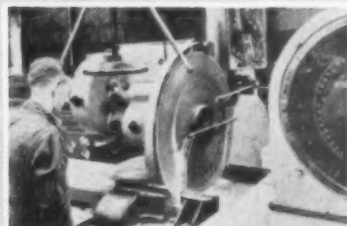
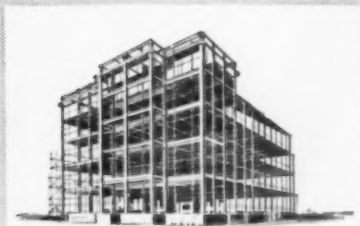
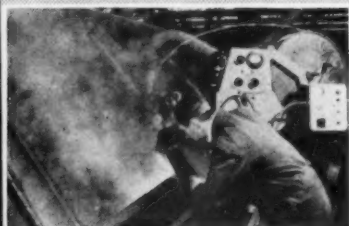
Working at Woods is a Heason family tradition.

Henry Heason, chargehand plater, has a mere sixteen years to go to equal his father's fifty years service!

Two brothers also work for the Company. Meticulous craftsmanship is vital in his work—he marks the steel for sawing, drilling and notching and, after machining, assembles it for riveting and welding. The experience and skill of men like Henry Heason have played a big part in maintaining for Woods their high reputation in the field of steel construction.



CONSTRUCTIONAL ENGINEERS



Registered Office and Works:

HEAN IRONWORKS • TRAFFORD PARK • MANCHESTER 17

Tel: Trafford Park 2341 (10 lines)

London Office:

78 Buckingham Gate, S.W.1.

Tel: Abbey 1948/9

EDW011

THE ARCHITECTS' JOURNAL
(Supplement) June 22, 1961

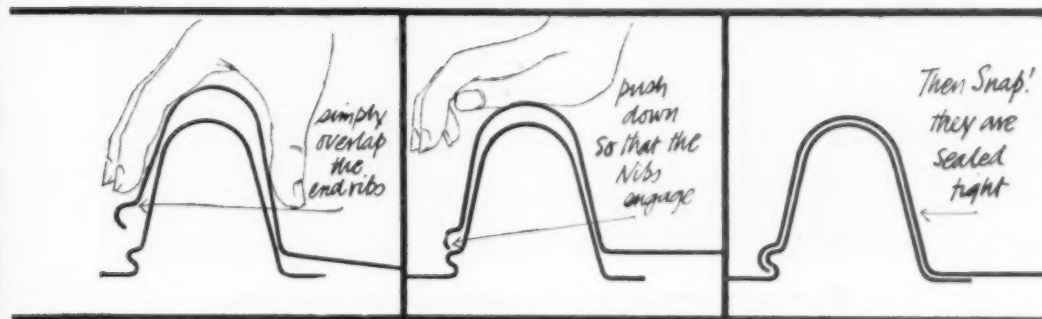


Looks neatest, fits tightest, snaps on— it's Noral Snaprib

Now with sealed ends, too

By an ingenious new process these snap-tight aluminium sheets for roofing and siding, which interlock along their whole length, are now made with an integral seal at ridge and eaves. Anchored to the roof without piercing or visible screws or nails, Sealed-end Snaprib gives complete weather-tightness even on shallow-pitched roofs. It is now still quicker to erect, has a better finish and a greatly improved appearance. Look for Snaprib on schools, houses, public buildings, offices – wherever good looks and long life must be firmly keyed to economy. Our nearest Sales Office will gladly give you further information and the names of your nearest roofing contractor.

The Snaprib system is fully covered by patents held by Cookson Sheet Metal Developments Ltd.



ALCAN INDUSTRIES LTD

A member of the ALUMINIUM LIMITED OF CANADA group of companies

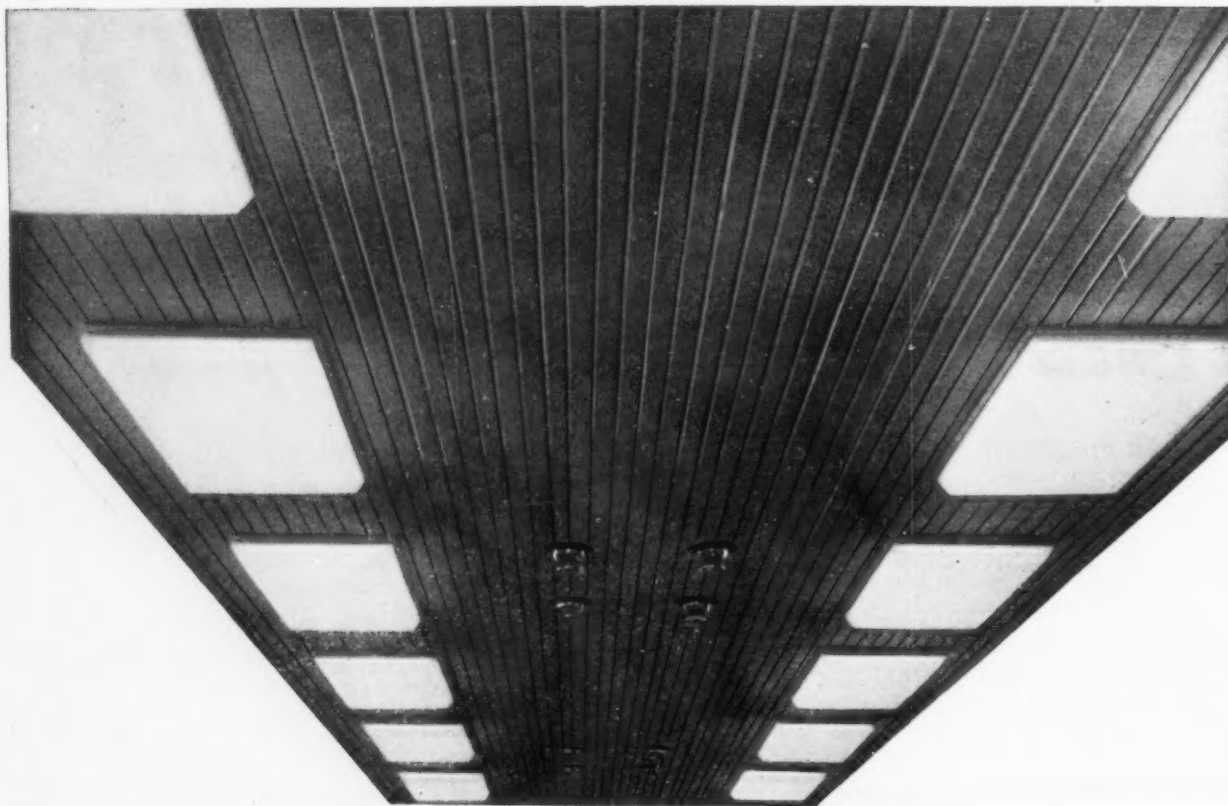
FORMERLY NORTHERN ALUMINIUM CO. LTD

Makers of Noral Alloys

Sales Offices: BELFAST: Donegall House, 7 Howard Street, Belfast 32805 • BIRMINGHAM: Devonshire House, Great Charles Street, 3, Central 7393 • BRISTOL: Pelouquin Chambers, 18 St. Augustine's Parade, 1, Bristol 20351 • LEEDS: 26-27 Park Row, 1, Leeds 33621 • LONDON: 50 Eastbourne Terrace, W2, Paddington 3281 • LUTON: 57 Bute Street, Luton 7364 • MANCHESTER: 23 Princess Street, 2, Central 9335 • NEWCASTLE UPON TYNE: Groat House, Collingwood Street, 1, Newcastle 20878 • Castings & Forgings Sales Division: Middlemore Road, Handsworth, Birmingham, Northern 3671.



LONG STRIPS OF SILENCE



the foundation of the PANTHER Acoustic Suspended Ceiling System

- Standard lengths up to 12 feet by 12 inches wide.
- Three ribs forming four 3 inch strips.
- Panel sides bevelled to match ribs.
- In stove-enamelled steel or aluminium in any B.S.S. colour —or plastic-coated steel.
- Mineral wool blanket for efficient sound and heat insulation.
- Can be used with heating elements.
- Light fittings easily incorporated.

Please write for more complete details and technical information.

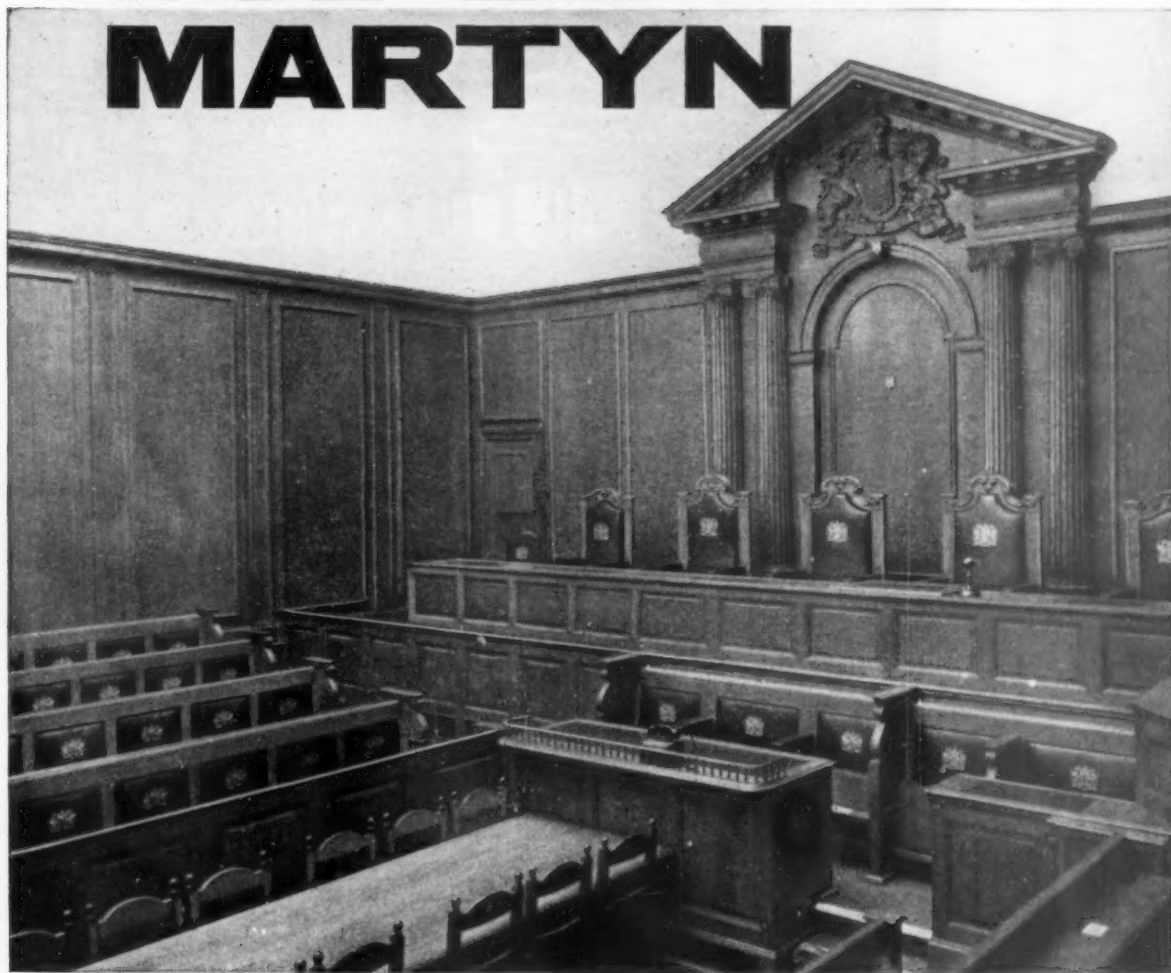
PANTHER CEILINGS LIMITED



IRVINE AYRSHIRE SCOTLAND. Tel: Irvine 2271
London: Grand Buildings, Trafalgar Square, W.C.2. Tel: TRAlfalgAr 6651
Birmingham: Union Chambers, 62 Temple Row. Tel: Midland 1993
Subsidiary Company of AYRSHIRE METAL PRODUCTS LTD.

At the Old Bailey is found the fine craftsmanship of

MAPLE MARTYN



It is not only famous places which enjoy the benefit of Maple-Martyn craftsmanship. The comprehensive service offered to Architects by the MAPLE-MARTYN ORGANISATION embraces every aspect of constructional, decorative and furnishing contract work. If you are concerned with work of the highest class, please enquire further.

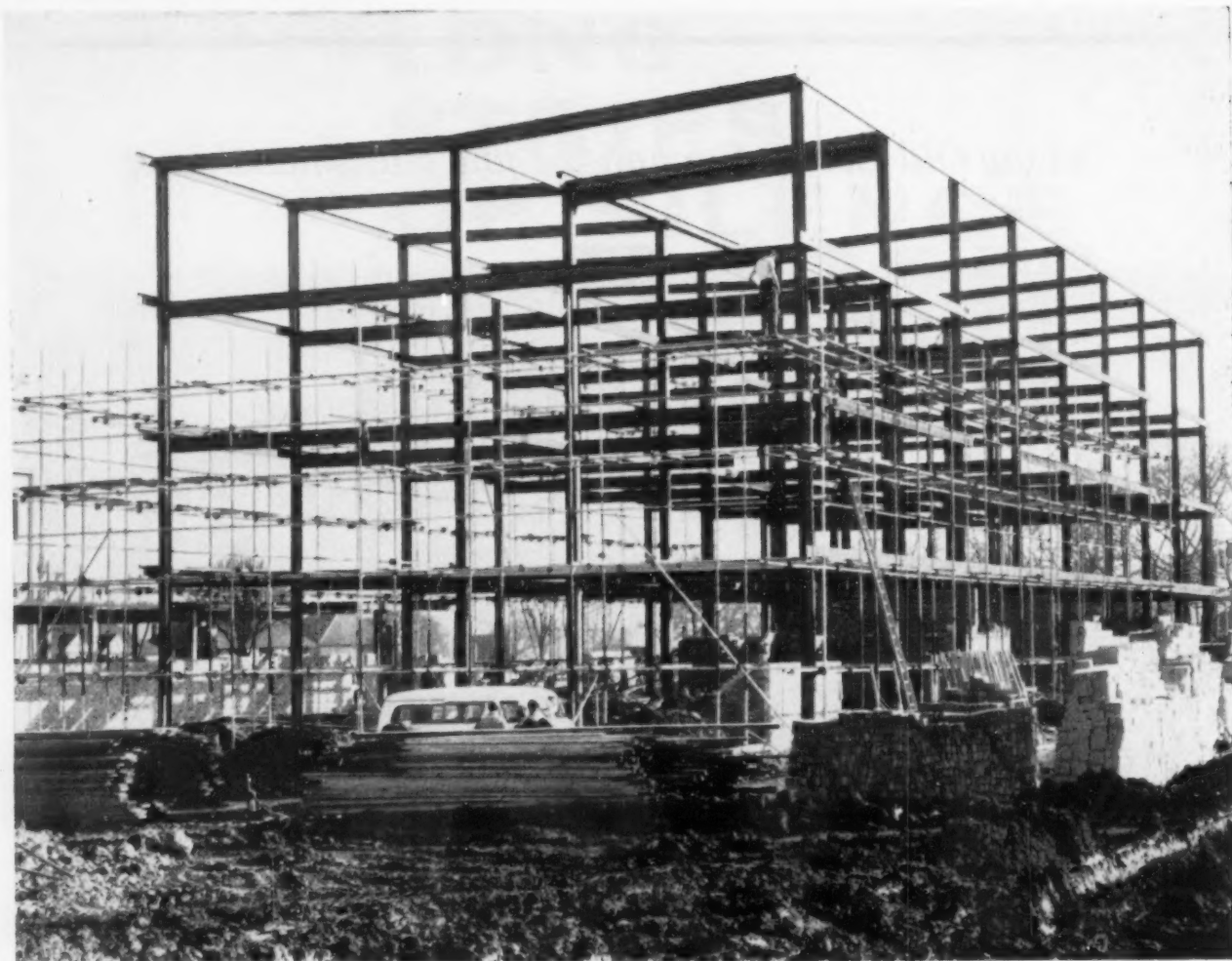
CONTRACT DEPARTMENT

MAPLE & CO. LTD. TOTTENHAM COURT RD. LONDON, W.1

IN ASSOCIATION WITH ITS SUBSIDIARY

H. H. MARTYN & COMPANY LIMITED, CHELTENHAM

The service of the MAPLE-MARTYN ORGANISATION is also available through the contract department of ROBSON'S, Newcastle-upon-Tyne and RAY & MILES, Liverpool. Representatives are also in attendance at MARK ROWE LTD., Exeter, SHEPHERD & HEDGER, Southampton and Salisbury, and at MAPLE & CO. LTD., Bournemouth, Bristol and Birmingham.

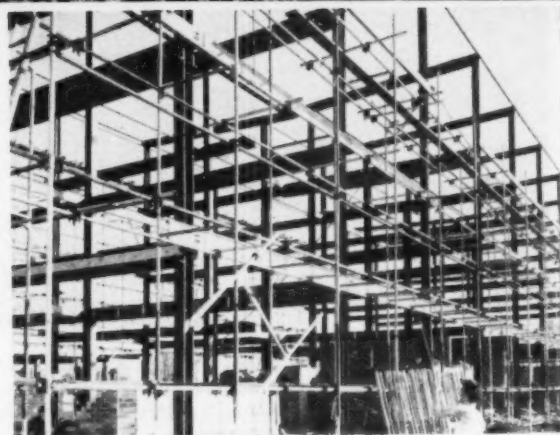


Extensions to **KETTERING BOYS GRAMMAR SCHOOL**

Extensions to Kettering Boys' Grammar School for Northamptonshire County Council Education Committee comprises a four-storey block as illustrated; also gymnasium, Science lecture room and assembly hall—160 tons of steelwork in all.

Architect:

A. N. Harris, Esq., F.R.I.B.A.
County Architect,
Northamptonshire County Council.



Main Contractor:

Messrs. A. J. G. Potter & Sons Ltd.,
Stanwick,
Wellingborough.

STEELWORK designed, fabricated and erected by

RUBERY OWEN & CO. LTD., STRUCTURAL DIVISION
P.O. BOX 10 DARLASTON, WEDNESBURY, STAFFS.

RUBERY OWEN

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

ROLLING SHUTTERS

IN STEEL
ALUMINIUM ALLOY
OR WOOD

hand or power operated

- QUICK DELIVERY
- SERVICE AFTER SALES

FOR ANY SIZE AND
KIND OF OPENING

*Send for illustrated literature
to DEPT. R1*



ROLLER SHUTTERS LTD

ANNE ROAD, HANDSWORTH, BIRMINGHAM 21. Telephone: SMethwick 2211 (6 lines)



Don't just say "Hang the washing"

SPECIFY **Hills**
HOISTS **LOW-COST SPACE-SAVING**
ROTARY CLOTHES DRIERS

You can't ignore the washing. It may make all the difference to the final appearance of your housing project. The choice is between untidy, sagging, space-stealing clotheslines and the simple pleasing symmetry of Hills Hoists. These revolutionary revolving clothes driers enhance the landscape, save valuable ground, are so easily and quickly installed and cost very much less than you would imagine. They need no maintenance and last a lifetime. Write to us now for full details.



IT'S NEAT AND TIDY
—no unsightly lines or props,
no sagging or broken lines.
Constructed in rust-proof
galvanised steel.



IT'S DUAL PURPOSE
—fit our canvas canopy to
the 'Super' model and it
changes into an attractive
garden sunshade.

HILLS HOISTS (UK) LTD. 424 Upper Richmond Road West, East Sheen, London SW14. Tel: PROspect 8221



Bringing a building to life

In this new building, Radiation Limited's office block now under construction at Neasden, Haden are already at work doing just that—making it breathe, tailoring its internal climate to suit the comfort and efficiency of its future inhabitants. The new building is to be heated and supplied with fresh air by Haden using the "Weathermaster" System which has several advantages over conventional methods for existing as well as new structures.

Treated air is delivered at high velocity through small diameter conduit to individual window units. Heat can be added *locally* using the most efficient and economical medium—water instead of large volumes of air. The system enables the occupants of each office to modify the room temperature to suit themselves. It also offers considerable space saving. Both conduit and water pipes can be housed without difficulty between floors or within walls and partitions and this can mean savings of up to 10% on valuable interfloor space—virtually an extra storey in every ten.

Where required, the functions of the system can easily be extended to provide cooling. "Weathermaster" installations of this type give full control of internal air conditions throughout the year.

"Weathermaster" is only one of the many different systems and mechanical services that Haden design and install in buildings throughout the world. Their considerable experience and resources are at your service—please contact your nearest branch.

*Architects: Dennis E. Pugh and Associates
Main Contractors: Sir Robert McAlpine & Sons Ltd.
Consulting Structural Engineers: Ove Arup & Partners
Quantity Surveyors: Davis, Belfield & Everett*

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 & overseas

TAB 794

THE ARCHITECTS' JOURNAL
(Supplement) June 22, 1961

BOWATER T/A PANELS

FROM ONLY

7/6

EACH



The success of Bowater T/A panels has surprised even Bowaters. Production has gone up - so prices have gone down to as little as 7/6 each. That means efficient sound and thermal insulation (and a splendid-looking ceiling too) for only 17/- a square yard or about 29/- including fixing.

Can be nailed to battens or joists up to 2ft centres

For economical installation, T/A panels are nailed to battens or joists up to 2 ft centres. For a suspended ceiling, specify the Bowater T/A 1 metal fixing system. Hardboard splines interlock the panels to ensure a level ceiling.

Pre-decorated, with a wide choice of finishes

The panels are pre-decorated with emulsion paint and thermal panels only can be faced with P.V.C. Decoration can be permutated with a wide choice of finishes: smooth or leathergrained hardboard, perforated or slotted.

Excellent thermal- acoustic performance

Thermal insulation: $K=0.22$ B.t.u./sq. ft.h °F in.
Sound absorption of thermal acoustic
types (coefficient at 500 c/s): Perforated: 0.70.

More information is yours by return of post

Send for the new "Quick Guide to Bowater Module Ceilings."
It tells you a lot more about the T/A panel—and it deals with our Dry Construction panels and our brand-new VERSA-TILE too.

Bowater Module Ceilings

BUILDING PRODUCTS DIVISION · BOWATERS SALES COMPANY LIMITED

BOWATER HOUSE · KNIGHTSBRIDGE · SW1 · Telephone: KNightsbridge 7070

Also at: Bowaters Irish Wallboard Mills Ltd., Athy, Co. Kildare, Ireland. Telephone: Athy 80

NEW BUILDINGS LOOK NEW LONGER

when they're treated with



I.C.I. Silicones keep brick, stone or concrete looking as fresh as new by preventing water and water-borne dirt from penetrating the pores.



Imperial Chemical Industries Ltd., London, S.W.1.



The firms listed opposite
supply treatments
based on
I.C.I. Silicones.

FUNCTION-DESIGN OR BOTH

How many projects fall down or go off at 'half-cock' due to the incompatibility of these two partners? All too few industrialists know enough about design and many designers could improve their knowledge of the functions in industry.

In the design and furnishing of office buildings, the work to be carried on within their walls must of necessity make certain demands, just as it does in a factory.

The question therefore arises as to whether you as an architect can appreciate those demands and satisfy them. In other words, can you marry the aesthetics of design with functional requirements?

To do this effectively you would need a knowledge of office planning, but to expect you to become an expert on this subject would be unreasonable.

MAKE USE OF OUR EXPERIENCE

We have studied this problem for years. Indeed, in our '846' functional furniture we have successfully combined the dictates of function based on Time and Motion Study with the aesthetics of pleasing and colourful design.

Our new full-colour publication will show you this. Moreover, it will give you a few of the basic facts of scientific office planning.

Later, when you are confronted with a problem of this nature, a fully-trained Shannon consultant would be pleased to advise you more, fully and without charge, should you so request.

Some of this country's finest office buildings are the result of the combined efforts of leading architects and Shannon consultants.

Firstly though, make sure you have a copy of our booklet on record. If you have not already received a copy, attach the coupon to your letterheading and one will be sent to you by return.

Please send me free and without obligation your booklet on planned office furniture.

Mark it for the attention of

THE SHANNON LIMITED
72 Shannon Corner, New Malden, Surrey



Shannon Systems

O & M TO BRITISH BUSINESS

- 'ANCOSIL'** James Beard Ltd.,
16 Great Ancoats Street, Manchester, 4.
- 'AQUASEAL' No. 66** Berry Wiggins & Co. Ltd.,
Field House, Breams Buildings, Fetter Lane, London, E.C.4.
- 'COLORSHIELD' No. 5** C. R. Averill Ltd.,
Alyn Mills, Caergwrle, Wrexham, Denbighshire.
- 'DAMPOL'** Stephenson & Co.,
Robins Lane, Carleton, Blackpool, Lancs.
- 'DUROLITE CAST STONE'** Pearson Brothers & Campbell
Limited, 11 Dale Street, Liverpool.
- 'ENPRUF'** Enfield Chemicals Ltd.,
Clayton-le-Moors, Nr. Accrington, Lancs.
- 'FULPRUF'** D. H. Fulton,
30 Templehill, Troon, Ayrshire.
- GEM WATER REPELLENT** Joseph Gilman & Sons, Ltd.,
Stafford Street, Birmingham, 4.
- 'HYDRALEX'** Associated Building Products Limited,
North Mills, Frog Island, Leicester.
- 'HYDROCIDE' SX** Floorlife & Chemical Co. Ltd.,
Mosley Road, Trafford Park, Manchester, 17.
- 'IMPERVION'** Solignum Limited, Dagenham Dock, Essex.
- 'KELPIE'** John C. Walker & Co. Ltd.,
71-77 Tobago Street, Glasgow, S.E.
- MASONRY WATER REPELLENT** Smith & Walton Ltd.,
Haltwhistle, Northumberland.
- 'MOONRAKER' BRICKSTONE SEAL**
John Hall (Warminster) Ltd., Weymouth Street,
Warminster, Wilts.
- 'PALLASIL'** Pallas Chemicals Ltd.,
7 Eldon Square, Newcastle-upon-Tyne, 1.
- 'PENETREX' 53** F. A. Winterburn Ltd.,
Holborn Street, Woodhouse, Leeds, 6, Yorks.
- 'PUDLO'** Kerner-Greenwood Ltd.,
St. Anne's Street, King's Lynn, Norfolk.
- 'ROMANITE' W.R.** Liverpool Borax Co. Ltd.,
Andrew Maxwell Division, Maxwell House, St. Paul's Square,
Liverpool, 3.
- 'SETCRETE' No. 19** Quickset Water Sealers Ltd.,
20 Albert Embankment, London, S.E.11.
- 'SILBEKONE'** James A. Beck & Sons Ltd.,
Dalton Street, Belfast, 5.
- 'SILICONE C & R'** Craig & Rose Limited,
Caledonian Paints & Varnish Works,
172 Leith Walk, Edinburgh, 6.
- 'SILICONE LIQUID' No. 103** Szerelmey Ltd.,
Rotherhithe New Road, London, S.E.16.
- 'TRETOL' SILICONE WATERPROOFER**
Tretol Ltd., The Hyde, London, N.W.9.



Imperial Chemical Industries Ltd.,
London, S.W.1.

NS.92

NEW LAMINATES FROM PERSTORP

Meet the sensational new surfaces from Sweden—Perstorp MINOR and Perstorp RELIEF—high quality laminates specially designed for vertical surfacing.

PERSTORP MINOR—Light and economical, good to look at and easy to fix, it's perfect for vertical surfaces of kitchens, bathrooms and furniture. Available in a range of 25 colours, patterns and woodgrains. MINOR can be curved under certain conditions and subject to top quality core and first-class fabrication can also be used horizontally.

PERSTORP RELIEF—The first laminate with a surface texture, it has the same easy-to-clean hard-wearing qualities as the famous Perstorp STANDARD. For vertical application RELIEF makes possible a greater decorative effect and gives an impression of softness and warmth. In six magnificent pastel shades, Perstorp RELIEF brings a new conception of decorative elegance.

Popular Swedish PERSTORP STANDARD—the original plastic laminate—continues unchanged and is particularly suitable for horizontal applications. 15 exciting new colours, patterns and woodgrains have been introduced into the range making a total of 69.

For further details contact your nearest Perstorp distributor

Perstorp Distributors:

London & Home Counties

C. F. Anderson & Son Ltd., Harris Wharf, Graham Street, London, N.1.

George E. Gray (Plastics) Ltd., Joinant House, Eastern Avenue, Ilford, Essex.

Heaton Tabb & Co. Ltd., Cobbold Road, N.W.10.

West Country & South Wales

Channel Plastics Ltd., Flowers Hill, Brislington, Bristol 4.

Midlands Area & East Anglia

Rudders & Paynes Ltd., Chester Street, Aston, Birmingham, 6.

N. E. England

A. J. Wares Ltd., King Street, South Shields.



N.W. England & North Wales

Heaton Tabb & Co. Ltd., 55 Bold Street, Liverpool, 1.

Scotland

G. & R. (Boards & Plastics) Ltd., Rivaldsgreen Works, Linlithgow, West Lothian.

N. Ireland

John McNeill Ltd., 109 Corporation Street, Belfast.

** Make it Perstorp Perfect when you come to interior surfacing*

revolutionary new method of air conditioning



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

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.

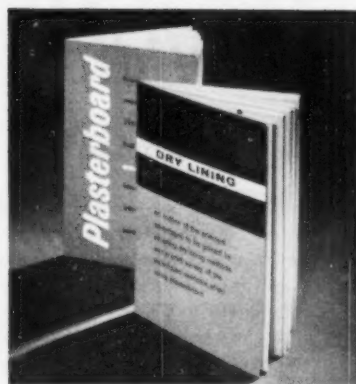
NAME _____
POSITION _____
COMPANY _____
ADDRESS _____

P5832/K

FACTORY ROOFS
line or reline them with
FIRE PROTECTIVE
PLASTERBOARD
conforming to B.S.476
Spread of Flame Test Class 1

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.

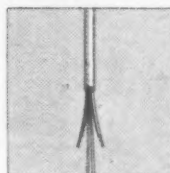
EXECUTIVE...

A new range of commercial lighting fittings, pendant and ceiling type, offering a wide choice of glasses, reflectors, skirts and suspensions, based on a quite small number of standard components. This is **EXECUTIVE** lighting, elegant, versatile and easy to maintain. Particularly suitable for offices, shops and stores, schools and public buildings.



Newsimple 'TURN and LOWER' action for easiest ever installation and maintenance.

G.E.C.'s new positive bayonet fixing with 'turn and lower' action means **EXECUTIVE** glasses can be fixed or removed in an instant, saving time and money on maintenance and lamp replacement. (Patent applied for).



EXECUTIVE suspensions in ten different lengths are either $\frac{1}{2}$ in. silver anodised aluminium tube or this new steel reinforced white flexible. (Patent applied for).



Internal locking screw on lampholder prevents unscrewing when relamping.

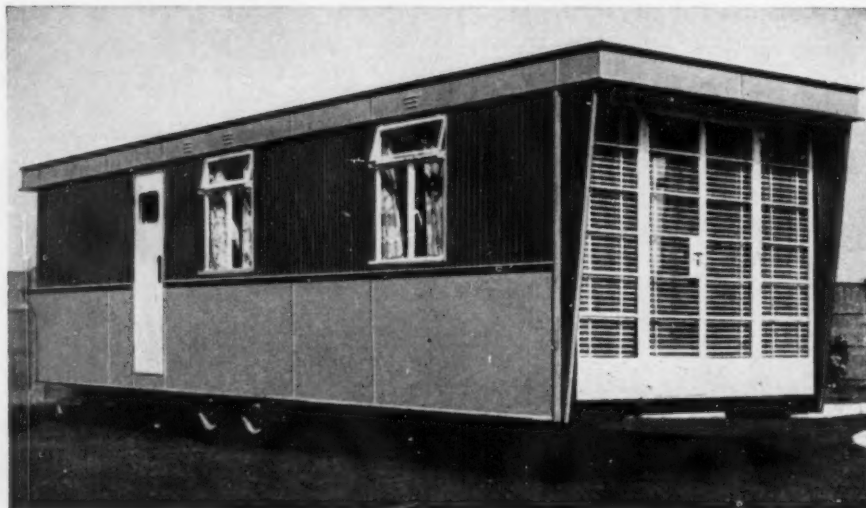


EXECUTIVE

G.E.C.

LIGHTING & HEATING GROUP, THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

the beauty of Plydek



outdoors

Plydek cladding on the 'Housemaster' mobile home, built by Fairholm Products Ltd. This firm says: "Plydek is a great attraction and we are very pleased with it."

the contemporary decorative plywood

indoors

The Grill Room of the Curtiss Restaurant, Lowestoft has the contemporary Plydek look. The proprietors are so pleased with it that they are using Plydek for a second restaurant.



There is more than mere good looks behind the success of Plydek. Developed over five years ago for the toughest outdoor application imaginable, boat decking, the rugged strength of Plydek is due to modern gluing techniques to Weather- and Boil-proof standard. Now the beauty and proven weather stability of Plydek, in Makore or Teak, are being applied in hundreds of new ways—outdoors

and indoors. External wall cladding, dados, counter fronts, window soles, panelling, display stands, shop fronts, reception desks, furniture, and caravan flooring, fittings and panelling—all are getting the contemporary Plydek look. The standard size is 8' long by 4' wide, the strips running lengthwise. Standard thicknesses in Makore are 5, 6 and 9 mm, in Teak 6 mm. Other thicknesses to order.

THAMES-PLYDEK

W.P.

Write for list to:

THAMES PLYWOOD MANUFACTURERS LIMITED, HARTS LANE, BARKING, ESSEX. TELEPHONE: RIPPLEWAY 5511 (9 LINES)

TA 4065

stockists throughout the country

Monumental proof of

Delta Bronze No. IV

is shown by its extensive use, for almost a century, for the repair and preservation of ancient buildings. Developed in 1883, the great strength and high resistance to corrosion of Delta Bronze No. IV makes it ideal for cramps, dowels, tie-rods, rag bolts and wall ties for the reinforcement and repair of masonry. Today, almost a century later, "Delta" Bronze No. IV is still extensively used for restoration and increasingly used, by enlightened architects, for new construction in building work of all kinds.

Have you seen our new catalogues on "Delta" bronzes?

Maximum resistance to corrosion.
Resistant to acid fumes.
Resistant to salt laden air.
High tensile strength.
Stable in concrete.
Excellent adherence to concrete.
Does not draw verdigris.
Readily forgeable.

SALISBURY CATHEDRAL
Restoration of spire and tower
employing "DELTA" Bronze No. IV.

Photo: British Travel Holiday Association.

The Delta Metal Company Limited

TUNNEL AVENUE, EAST GREENWICH, LONDON, S.E.10

Telephone: Greenwich 0123

Telegrams: Delta London SE10

What makes a roof
really weather-proof?

Dinorwic slate

What repels acids,
but attracts buyers?

Dinorwic slate

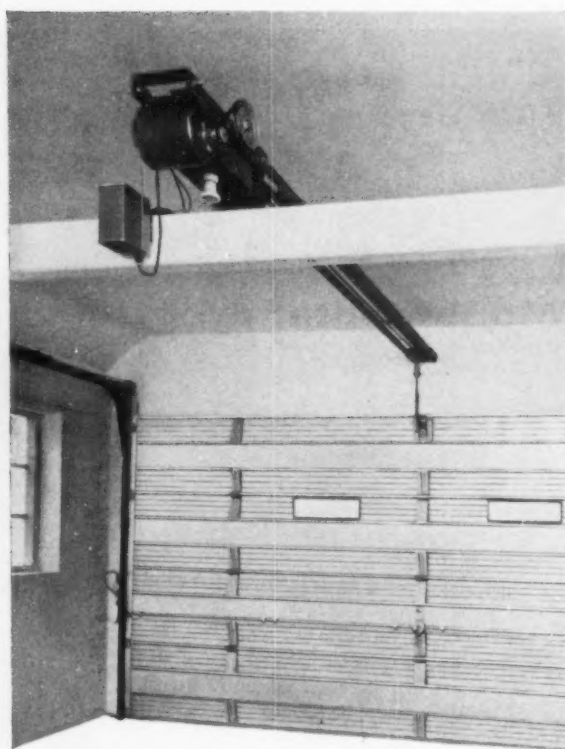
What's subtle in texture,
and rugged in strength?

Dinorwic slate

What's the finest quality
roofing slate?

Dinorwic slate

*The Dinorwic Slate
Quarries Company Limited
Port Dinorwic
Caernarvonshire*



Interior of private garage, showing heavy-duty electrical operating unit for Glydover door, radio controlled from car.

**Effortless by hand—
smooth by power...**

Only a touch and the Glydover Garage Door rises effortlessly open, glides smoothly shut. Power operated, it exemplifies luxurious efficiency. Architects will find in Glydover a combination of good, functional design and all-weather durability.

GLYDOVER OVERHEAD
GARAGE DOORS



Write now for leaflet ref. AJ 395

BOLTON GATE COMPANY LTD • BOLTON • LANCASHIRE
Branches at
London, Glasgow, Birmingham and towns throughout the country

ⓈBG395



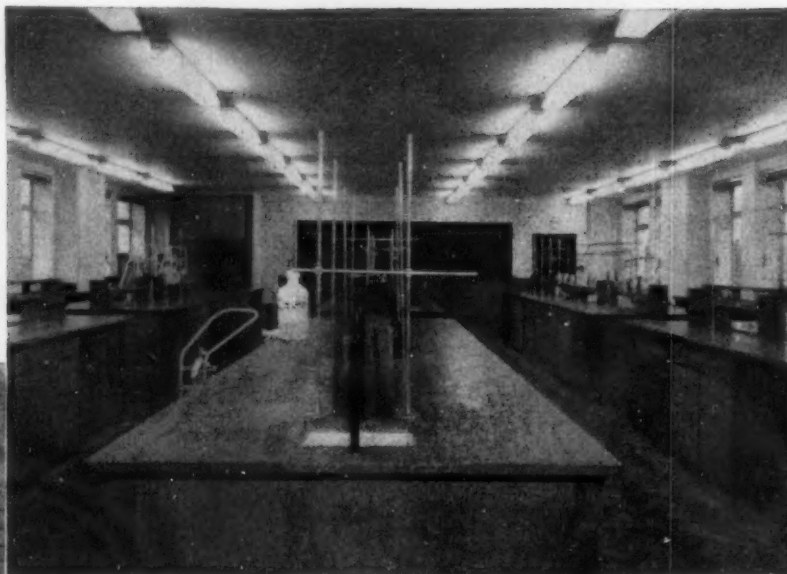
Change of Address

The Helical Bar & Engineering Co Ltd
have moved to spacious new offices at
Eastbury House
30-34 Albert Embankment London SE1

Telephone: Reliance 9123 (12 lines)

Telegrams: Helistelba London SE1

We shall be pleased to receive your usual
enquiries at our new address.



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



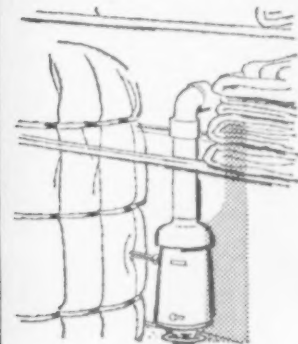
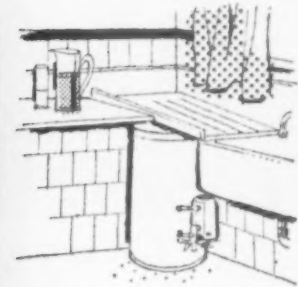
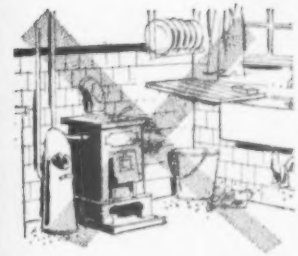
This is IROKO, a stable, durable, good-looking African hardwood now enjoying great favour for high quality joinery, often in preference to traditional timbers.

IROKO is in store for you, in large quantities, at Morris. Air-seasoned from 1" to 4", ready kiln dried up to 2". All lengths and widths; free of sap and knots; far below the price of Teak and joinery Oak. Morris for IROKO.



TEAK, MAHOGANY AND OTHER HARDWOODS

Ravensdale Wharf, Stamford Hill, London, N.16. Tel: STAMFORD HILL 0611



The most effective way to heat water

Anyone using a solid fuel water heating system would welcome details of the New World Circulyn. It provides a constant and reliable supply of hot water efficiently economically and cleanly. No dirt, no dust. No fuel to store and carry. No work, no worry.

How it economises

Fitted to a well lagged cylinder, the New World Circulyn will provide a family with all their hot water requirements. For example, in the case of two adults and two children the cost is normally between 5/- and 7/- per week dependent on the local price of gas.

* The Radaloy heat exchanger—and the fitting of a scale reducer in hard water districts—ensure that the need for maintenance is negligible.

* When fitted, an economy valve efficiently cuts running costs by allowing the user to heat small or large quantities of water as required.

The New World Circulator can be connected to a storage tank or cylinder from 20 gallons up to 100 gallons capacity as a sole means of water heating or as an auxiliary to the existing solid fuel system for summer use or as a booster.

In three sizes for tanks or cylinders

C12LF up to 30 galls.
C28 up to 60 galls.
C60S up to 100 galls.

Output about 5½, 13
and 28 gallons per hour
respectively, raised 80° F.

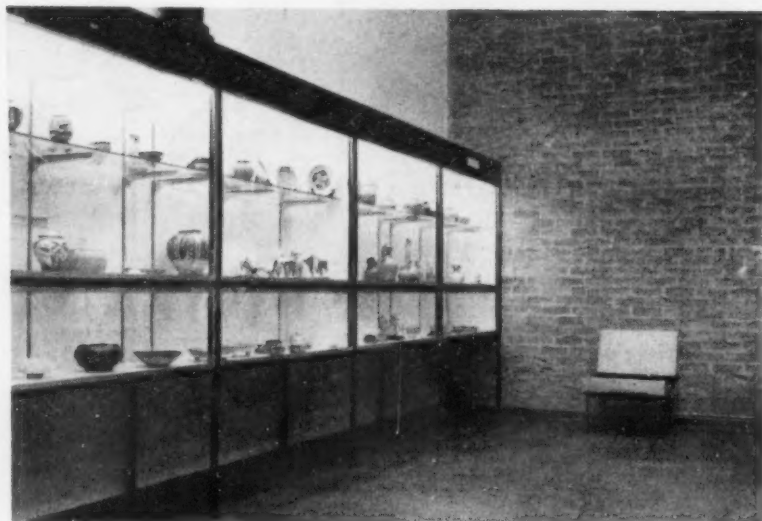
RADIATION NEW WORLD LIMITED,
RADIATION HOUSE,
NORTH CIRCULAR ROAD,
LONDON NW10. (TEL: WILlesden 1234)

NEW WORLD

NEW WORLD

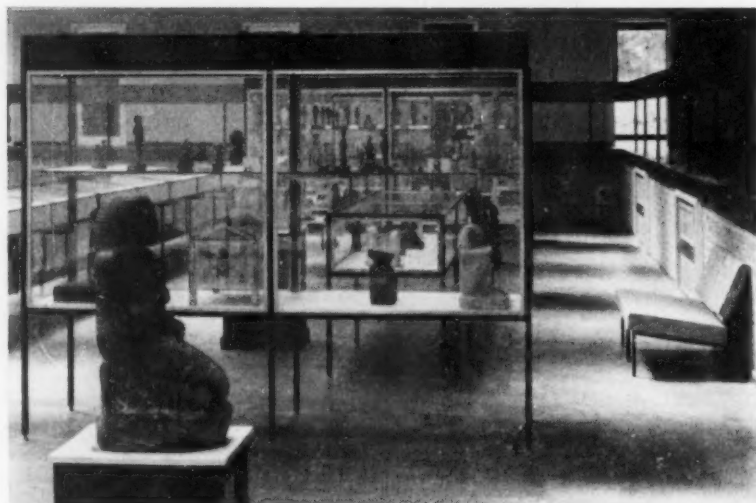
Visit the Radiation Domestic Appliance
Centre, 58-65 Baker Street, London W1

GAS STORAGE WATERHEATERS



Museum cases constructed by our organization with black square tube frames and satin aluminium sashes. Heads and coin drawer fronts in wild Ancona Walnut.

GULBENKIAN MUSEUM · DURHAM COLLEGE



Architects: Philip Middleton & Partners, Middlesbrough.

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



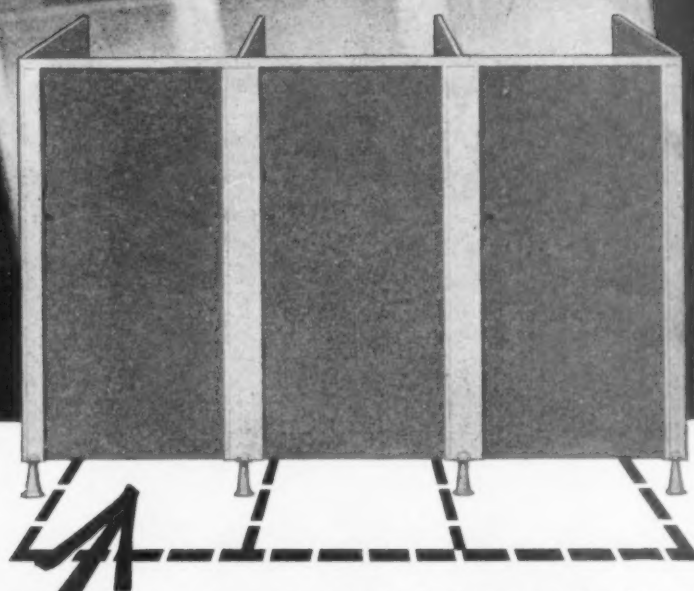
Harris & Sheldon Limited

The organisation with a background of 75 years experience
BIRMINGHAM · LONDON · GLASGOW · TORONTO

WE ARE EXHIBITING AT
THE MANCHESTER
BUILDING CENTRE, 115
PORTLAND STREET,
MANCHESTER 1.
Information CENTral
6933



**OFF
THE
SHELF
SERVICE**



despatched in 14 days from receipt of order and site sizes

PLYMAX

QD

Quick Delivery

**WC
COMPARTMENTS**

Plymax "QD" Compartments are of the proven quality and design of Plymax Type "G" W.C. Compartments which architects have widely specified with great saving of time for the past eight years—but there is a difference. We will guarantee despatch within 14 days from receipt of order and site sizes if you will accept the standard specification. They arrive pre-fabricated ready for immediate erection and for fixing to a plain wall by secret cleats. Ask us to send you full details.

STANDARD SPECIFICATION

Material: 1" chipboard covered two sides with aluminium or galvanised steel.

Size: 5 ft. from front to rear, 6 ft. 5 ins. high including 6" ground clearance. Centres 2 ft. 6 ins. to 3 ft. in half inch stages.

Fittings: Standard 3" loose pin hinges. Barrel bolt or indicator bolt. Secret fixing cleats. Pedestal.

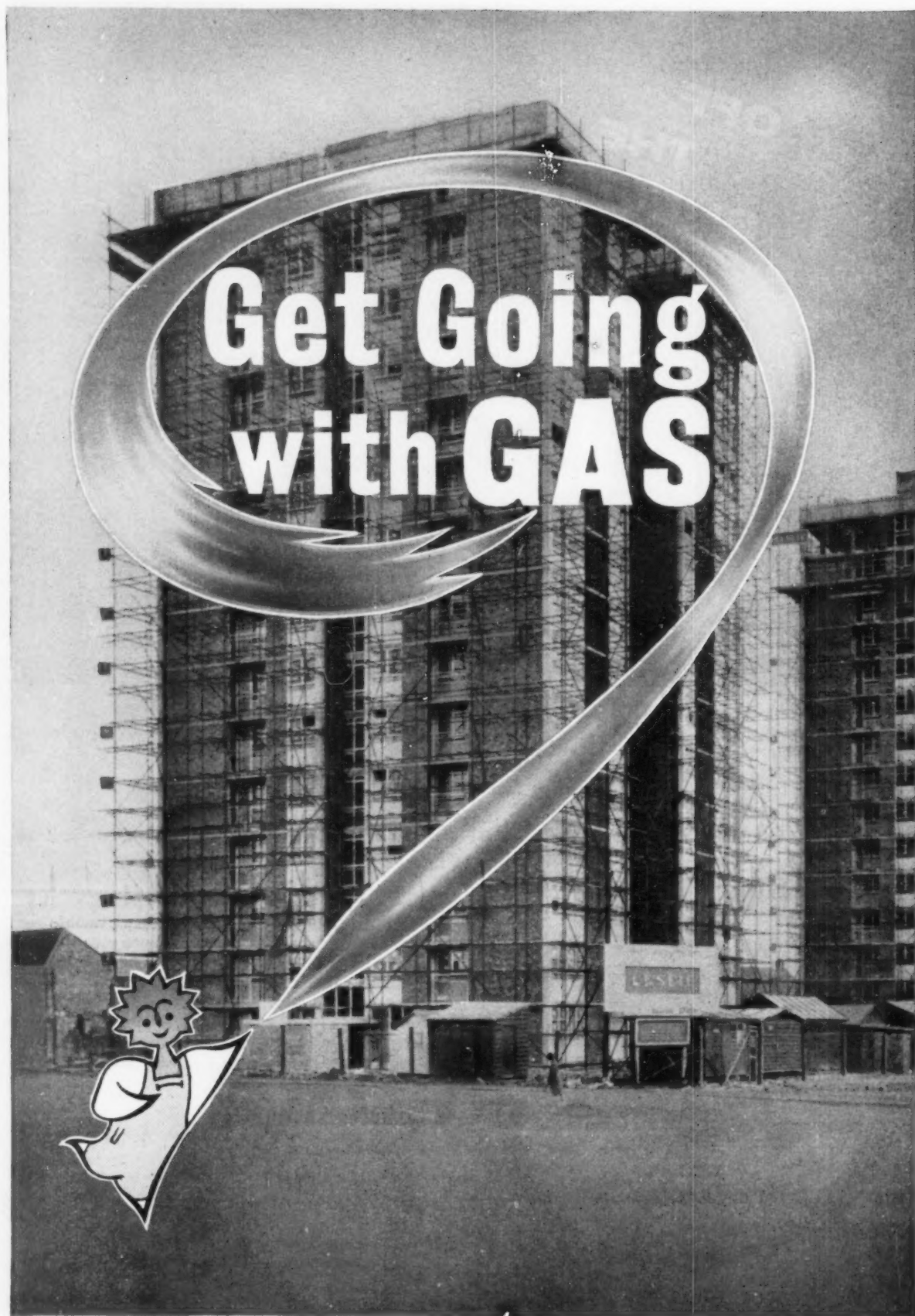


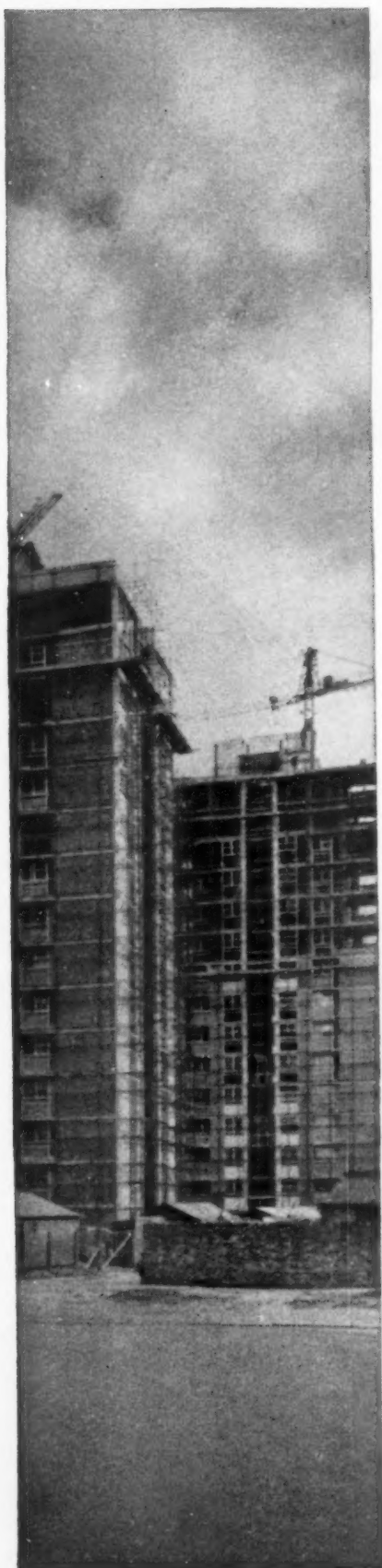
VENESTA PLYWOOD LTD.

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

Telephone CENTRAL 3040

▲ 6589





THE FLEXIBLE FUEL SERVICE

Get going with *Gas*, whatever the job.

Gas gives fierce or gentle *Heat*;

fast or slow *Heat*; flexible *Heat*;

fully automatic *Heat*...but always clean,

economic and reliable *Heat*.

With the benefits of the industry's research
and its free technical advisory service,

enjoy confidence with *Gas*.

ISSUED BY THE GAS COUNCIL

K18



FORMICA

TECHNICAL SERVICE!

To architects and designers

To builders

To fabricators

To furniture manufacturers

To shopfitters

For full information on all
Formica products and
services, please write to:
Formica Ltd., De La Rue
House, 84-86 Regent Street,
London, W.1. REGent 8020





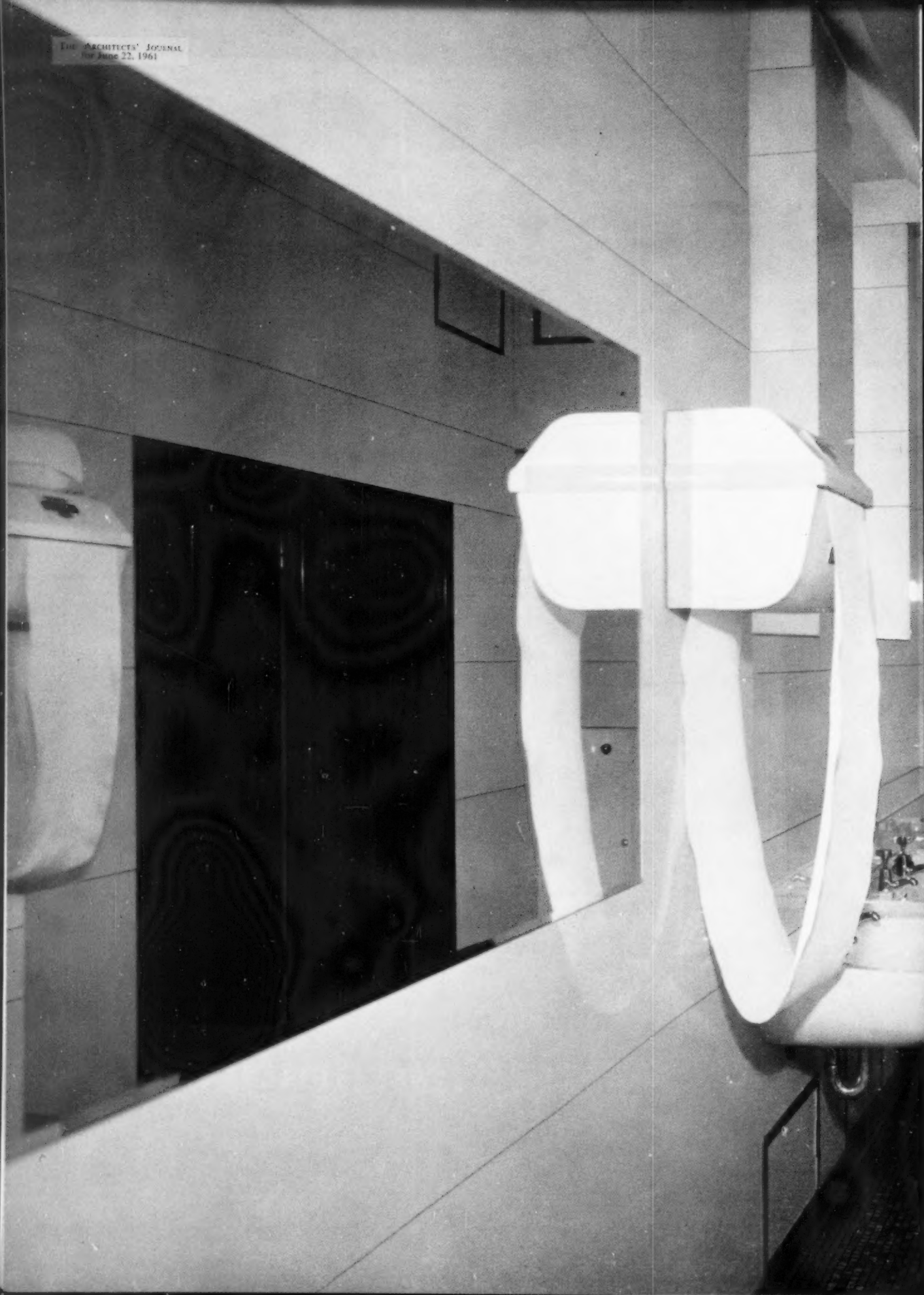
LONGER LIFE—IN HIDUMINIUM

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**



FOR PERMANENT HYGIENE

**non-
CRAZING
"VITROLITE"**

Hygiene is permanently safeguarded by the new high-finish "Vitrolite" in the toilets of the new Barclays Bank branch, Broad Street, London. "Vitrolite" never crazes. Its permanently smooth surface provides no lodgement for germs; and attractive colour, inherent in the glass, gives a long-lasting, reassuring look of luxurious cleanliness.

* Registered
Supplies available through the usual trade channels.

For full information about the new 'Vitrolite' write to:—

PILKINGTON BROTHERS LIMITED



ST. HELENS LANCs, (ST. HELENS 4001) SELWYN HOUSE, CLEVELAND ROW, ST. JAMES'S, S.W.1. (WHITEHALL 5672)



The Leicester & County Mission for the Deaf. Architects: Pick, Everard, Keay & Gimson, Leicester. Nominated specialist 'Noxallac' contractor: T. E. Candy & Son Ltd, Leicester

We're your Man Friday... when it comes to finding the right facade finish

Have you heard about the new facade process we have introduced to this country? It is the NOXALLAC facade process. It blends a touch of texture with a shade of colour to produce a new concept of form to provide a really attractive facade finish with outstanding durability and colours that stay fast. The NOXALLAC facade process offers free rein to imaginative design with twenty standard colours and many variations of texture. Applied

on site to existing wall surfaces by specialist contractors or in a workshop to panel units, NOXALLAC keeps the weather at bay. Other NOXALLAC finishes include smooth, coloured and clear coatings and a specialised range of wood finishes.

One last word about 'Bostik' research: if you've any problem to do with scaling or bonding building materials, don't hesitate to get in touch with us. It's our job. We may have solved your

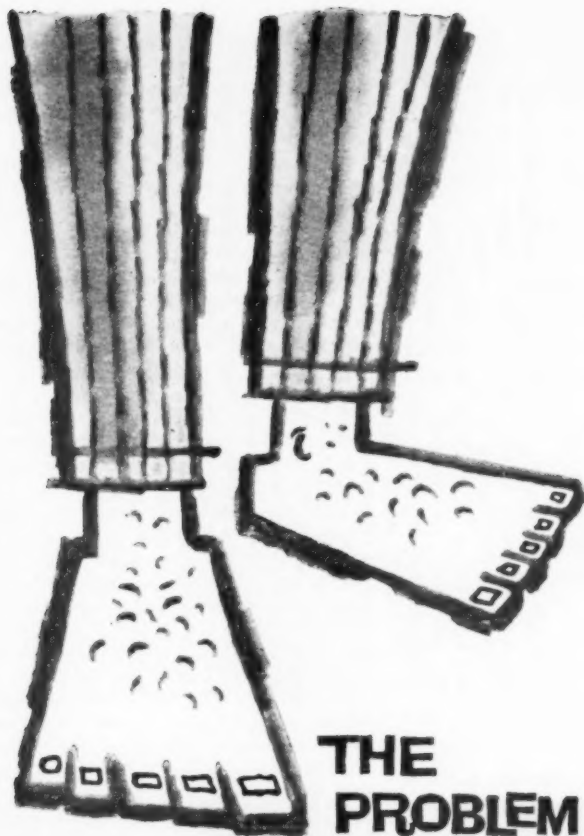
problem already. And if we haven't, we'll get down to it right away.

Write to 'Bostik' Building Advisory Department, B.B. Chemical Company Ltd, Leicester.

Bostik

Noxallac

The words 'Bostik' and 'Noxallac' are trademarks registered in the United Kingdom and many other countries. Manufactured by B.B. Chemical Co. Ltd (the 'Bostik' people), Leicester, England



THE PROBLEM OF SQUARE FEET...

Space we mean. The kind that elbows look for . . . the sort that cats swing in . . . square feet . . . the kind that give the architect his headaches. It only needs a few to make all the difference. With the growing need for small roomed compact dwellings, plus the numerous conversions taking place, Marley Space-Saver Doors solve many a problem. Doors that provide eight sq. ft. of *extra* living space—each. Room dividers that glide smoothly and gently open and back into the slimmest space possible. They're a boon to the modern home—and to those who plan it.

MARLEY SPACE-SAVER DOORS

- Available in 9 attractive colours—off-white, black, oak, blue, beige, grey, mushroom, cream and red.
- Made of extremely hard wearing Vinyl over durable rigid panels. Simple to install. No maintenance.
- Now fitted with Vinyl closure strip.
- In standard sizes or to order.

For full details write or 'phone

MARLEY SEVENOAKS · KENT

Telephone Sevenoaks 55255

London Showrooms:

251 Tottenham Court Road, W.1.



The Architects' Journal

No. 3453. Vol. 133. June 22, 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

No happy returns, Pheidias!

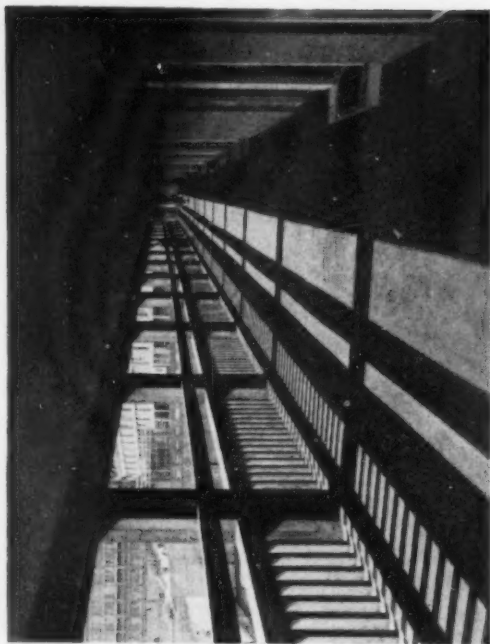
"The Return of the Elgin Marbles" can usually be relied upon for a few rousing cheers from the gallery. Yet this once popular melodrama found little favour when recently revived by Mr. Noel-Baker, MP, apart from a rather touching, if not unexpected, display of sentimentality by Earl Russell and Sir Compton Mackenzie—nationalism finds strange bed-fellows! It goes without saying that the Athenians went wild with enthusiasm (doubtless with one bright eye on their newest, largest, and most booming industry—tourism). Mayor Tsoukalas sent a telegram to the PM and Noel-Baker rushed off to Athens "accompanied by a British architect to discuss the technical aspects of the eventual restoration of the marbles to the Acropolis." And doubtless to enjoy a brief if heady moment of Byronic glory, for the wholly misleading statement "that a large body of opinion in Britain warmly supports his proposals."

Confusion between Greek independence and the Elgin marbles was created first by Byron who, in comparing poor Elgin with Alaric, was even more gratuitously offensive than usual!

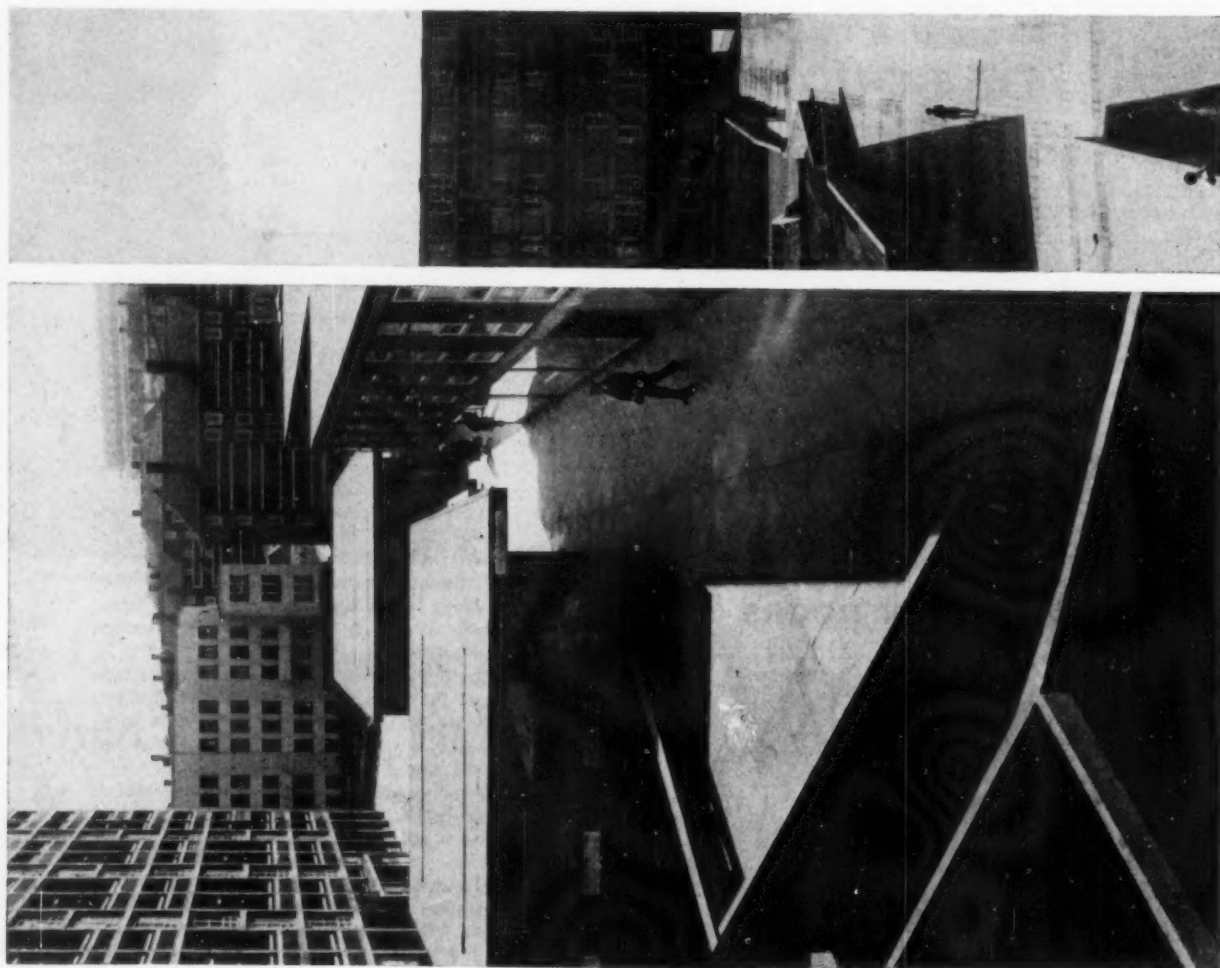
Byron wasn't interested in their preservation but he left a hazy feeling of British (Scottish?) guilt that we had pinched the sculptures while the defenceless Greeks lay prostrate under the Turkish lash. The truth is somewhat different.

When Lord Elgin went to Turkey as envoy in 1799, his first intention was merely to make drawings and casts from the sculp-

Sheffield's Street Decks



Park Hill I, towering above the centre of Sheffield and completed in nice time to impress overseas delegates to the IUA Congress, represents the kind of architectural triumph that one has always hoped that a local authority would achieve. An advanced sociological and architectural concept—the street-deck (above)—has been put to work for the first time in this country, not as a small pilot experiment (which would be doomed to failure by its untypicality) but on the scale of a sizable district, with some 1,000 dwellings. Furthermore, the architectural idiom in which the scheme has been realised seems fully aware both of the scale of the enterprise and the possibilities of the steeply sloping site, left, while its social completeness as a community is reinforced by four pubs and a comprehensive shopping centre, far left, designed into the project from the very beginning. Early reports suggest that the intended social cohesion, promised by the neighbourly association of front doors on the street deck, begins already to exist, while its architectural virtues are strikingly visible: on both counts, Sheffield and its City Architect's Department under J. L. Womersley clearly deserve our congratulations.



tures many of which lay smashed where they had been left by Admiral Morosini after his disastrous bungling of the removal of the west pediment in 1687.

In using the Parthenon as an ammunition dump the Turks have often been blamed for the destruction. But it should not be forgotten that the Acropolis was traditionally a fortress as well as a shrine. But as any traveller in the eastern Mediterranean soon becomes aware, Christianity not Islam was the great destroyer. Neglect, not Turkish vandalism, caused Elgin to change his plans. So shocked was he at the bad condition of the sculptures that he obtained a *firman* for their removal with the help of the enlightened Turkish governor. Anyone who has compared photographs, of those parts of the frieze left extant, with the casts of them made by Elgin must recognise the wisdom of his action. He removed only those sculptures which were detached or in danger of falling and spent the equivalent in our money of over a million sterling in acquiring them from what was, as it had been for 300 years, the lawful government. Few more disinterested acts of preservation have been performed. Not only did Elgin take the greatest care to avoid damage to the sculptures but allowed the nation to buy them at less than half their cost to himself. Assuming then that the purpose was high principled, the legal right undisputed, what would now be gained by returning the Parthenon sculptures to Athens?—other than meeting the strictly narrow nationalist view that they are Greek—a view which must equally demand the return of most of the treasures in the BM, the V&A and the National Gallery producing (desirably perhaps to some of our governors) a country free from art with some major sites ripe for development. It must be assumed that there is no intention of restoring the sculptures to their original positions on the Parthenon for if there was we should resist it at all costs. Not only would they suffer as those sculptures remaining have suffered but they would damage that image of the ruined Acropolis which rightly or wrongly the world has come to admire. There is certainly little space for them in the Acropolis museum and to increase its size would be detrimental to the whole site. We are left with the possibility of putting them in the Archaeological Museum (entrance 2s. 6d.) open less frequently than the British Museum and far less accessible to the great majority of people—surely by now we consider that works of art belong, not to any one nation, but to the world. There is one practical, as opposed to sentimental, justification for returning the sculptures to Athens—the light. In Bloomsbury the marbles are dulled by the diffused light of London. But it should not be beyond the ability of even our museum display boys to arrange good artificial lighting—as well as the removal of those funereal granite plinths. By all means let us give Greece a full set of plaster replicas but let us leave the originals where they can be seen so easily by so many.

FELLO ATKINSON

The Editors

WHERE ARE WE GOING?

“WHAT is essential,” said Henry Brooke, Minister of Housing and Local Government, at the Rural District Councils Association conference last week “is to guide change by wise foresight and planning.” Sound words, to which no one can take exception. But what the nation needs is a greater indication from our planning leaders of what their objectives are and to what target their foresight is directed. Mr. Brooke warned rural councils that much more countryside would be needed for housing in the next 20 years to cope with a population increase of four to five million, slum clearance overspill, and the increase in homes needed as the number of households increase with a rising standard of living.

But where do the planners want the housing to be put? The last census indicated that London and the south-east is still the great magnet. The whole population of Great Britain is tending to crystallise at certain centres. Is this a tendency which should be encouraged or prevented? Mr. Brooke rightly supports the preservation of green belts, but should cities be allowed to expand beyond their green belt but still within their sphere of attraction? Can it be agreed that whatever else London's satellite New Towns may have achieved they have contributed handsomely towards congestion in the south-east? Unfortunately the government is giving no clear lead on this. And indeed one senior government adviser has said that population movements can't be resisted.

Mr. Brooke pointed out that the experts underestimated population and household increases. The experts have also underestimated the demand for motor cars, and also for water, now that plumbing is becoming general and industry's needs grow. They are also underestimating the demand for electricity, and for recreational facilities as leisure increases. Without doubt there is plenty of trouble ahead. But we could confront it with rather more confidence if we could be given some indication of the goal to which our masters consider we should be striving.

Desmond Heap, P/P TPI, last week recommended that more high-density flats be built to prevent “too many little houses taking up too many acres” with which many would agree. And the high price of virgin building land is at last forcing builders to consider redeveloping built-up land. But savings achieved this way will not last long. The family who live in a flat during the week will not be content to remain there during the weekend, so the pressure will eventually build up for holiday camps, caravans, chalets, weekend cottages, and not least, for the motorways to enable the family to drive there quickly.

Our planners and experts estimating future trends should

look more shrewdly at the life now led by the middle and higher income levels and realise that the bulk of the population will be living like that—if Conservative promises of prosperity hold—in twenty-five years time. When the time comes will we have created yet greater congestion by encouraging development round too few centres? Will we still be trying to escape from the man-made hell our planners have not yet discovered how to destroy?

The population's sympathy with planning would be increased, and its determination to achieve results strengthened if Mr. Brooke or his advisers could give some indication of the literal shape of things to come.



A LOT ON SHEFFIELD'S PLATE

Sheffield, believe it or not, is *the* place to go to this summer. Before long local complaints about neglectful tourists will give way to complaints of infestation by visiting architects. While J. L. Womersley's immense Park Hill housing scheme will be the pilgrims' main calling-point, there are other things for the not-to-be-missed list—the university, the technical college, the market buildings and so on. And while serious visitors will discuss long and hard such matters as the sociology of street decks and the aesthetics of connectivity, they should not miss one engaging piece of frivolity at Park Hill—the pubs. These occur where roads or paths penetrate the snake-like main

block—and thus have the Park Hill equivalent of the traditional street-corner location. They also have comfortable, unassuming interiors—in the pub tradition but without a hint of period revival—and very gay, frame-and-fill exteriors. My congratulations to the brewers and architects concerned.

NOT MERELY ACADEMIC

Twickenham's motto is "Looking forward, looking backward"—doubtless an admirable sentiment, though to look at most of this inter-war mess of a town you might think it had always looked squintingly sideways. But amongst the mess there are a few buildings, and even a few streets, that are worth preserving. The local council is aware of its scraps of ancient heritage, but like most bodies of laymen when faced with problems of development, it gets snarled up in thoughts of mock-Georgian grandeur. In fact, by the time this note is published the council may have accepted Sir Albert Richardson's comical neo-Georgian scheme of shops and maisonettes for Twickenham's Church Street—currently to be seen at the Royal Academy.

*

When I first saw this building in the Architecture Room I thought it one of those whimsical fantasies that sometimes get commissioned by fuddy-duddy preservationists, but I find to my horror—in a defensive editorial in the *Richmond and Twickenham Times*—that it was commissioned by the council. Here are some excerpts from the editorial, which was written in reply to a letter describing the scheme as "a genteel museum piece" and asking for

"houses of good honest modern design":

*

"Without knowing what proposals Sir Albert has for the whole area, it is impossible for anyone to say what its character will be when he has finished with it. He might be proposing some 'good honest houses' of the kind the writers think he should build."

(Pause for sick laughter)

"What he has obviously done is to immerse himself in the atmosphere of the place, and allowed it to influence him in putting down his first ideas for rebuilding its old village centre. That is the artistic approach to the problem. Twickenham Council presumably agreed to pay him the fee he is asking for the very reason that he is an artist who would use his imagination to create something, however controversial, and not just a jobbing builder's overseer."

*

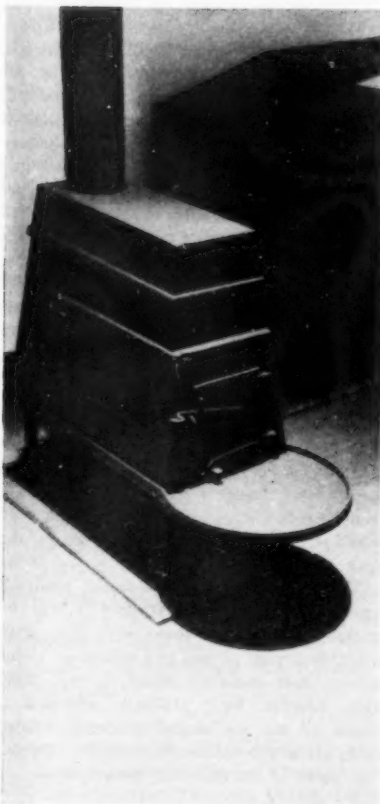
The only good laugh provided by this terrible editorial is its reference to the fact that the four letter writers who complain about the scheme are "leading members of Twickenham Labour Party." Ah well, if we must drag politics into architecture I can report that at least one Twickenham resident I know intends to vote Labour in future if gentility comes to the town.

BLACK MARKS TIME

The exhibition of industrial design students' work at the RCA is disappointing. When Misha Black was appointed professor and began to gather in new staff, like Frank Height, there seemed a good chance of something different in design teaching—but the exhibits show the same old smarty-pants styling. There are two exceptions—some splendidly Heath Robinson projects for rotary engines and such, by a student whose name, Ravilious, means much to old stagers like ASTRAGAL, and some work by a Japanese student who seems to have asked himself fairly radical questions about the things he was called upon to design. Otherwise most of the designs are just fancy box work.

*

One visitor pointed out that in all the outboard motor schemes (a set subject



Ian Nairn has already commented elsewhere in the *AJ* on the American Museum at Claverton Manor, near Bath, which is opening on July 1. ASTRAGAL shows here two of the many delightful exhibits: a severely simple 19th century Shaker table and an efficiently detailed iron stove from Philadelphia (about 1800). The Director of the Museum is Ian McCallum, a former editor of *The Architectural Review*. Top, a pub in J. L. Womersley's Park Hill housing estate, Sheffield. See the first note, opposite page

for every student) no one appeared to know that America has quietly revolutionised small outboards by moving the engine unit. It used to be balanced on the pivot point, but is now behind and below it—thus saving height and weight and making a more compact design. A little more of that kind of thinking would help to justify the use of the word *engineering* which is always

bracketed with the name of the department nowadays.

PRETTIER PITS

Gordon Cullen's drawings and succinct articles have probably made a bigger—if unacknowledged—impression on a greater number of architects than the work of any other critic or historian. It is good, therefore, to see

that his deceptively casual sketches, excellent photography and hard-working prose is now aimed at a wider audience—the client. This month's issue of *The Director* (the journal of the Institute of Directors) includes an article by Cullen on the opportunity given by gravel extraction to give certain communities the amenity of a Water Belt. He says that gravel pits should be allowed to fill with water, that the edges should be carefully landscaped and planted (but not with ornamental shrubs), and that islands, shallow lagoons and connecting canals should be created. The whole thing, in fact, should become what he describes as a "working landscape": that is, a place for swimmers, yachtsmen and anglers where subtopia is avoided and the art of landscaping is confined to "making the artificial appear natural."

NEW LIGHT ON OLD ARGUMENT

Incidentally, you may have read of the Institute of Directors' Export/Action Now Committee which has erected one more sign in Piccadilly on the Monico site. The slowly-blinking message states that "either exports go up" (in green) is replaced by: "or Britain does down" (in red), while a hand makes appropriate thumb gestures. A large illuminated union jack is part of the design (the chairman of IOD is the kind of chap who can say "it won't do foreigners (in Piccadilly) any harm to see this country's flag" without a trace of embarrassment.) Cotton and Clore and Guinness (whose clock is below the sign) agreed to the sign's erection for one year, (presumably the Gropius building goes up after that) and no rent is being charged for the vertical site valued at about £7,000 p.a.

*

All this propaganda has had its effect on impressionable ASTRAGAL, and self-preservation compels him to ask the overworked RIBA if they are satisfied that architects are given the facilities and scope to help increase exports. CLASP is being sold to Germany, of course, but are there other brain-children which can be put to work for us in what is an extremely dangerous situation?

ASTRAGAL

LETTERS

Ronald Thurston

Frederick Hill

Malcolm MacEwen

Noel Brandon-Jones

Michael Brawne

Overworked

SIR: ASTRAGAL's recent remarks referring to the indifference of principals in private practice to the future well-being of the profession indicate that he is far removed from both private and local authority offices. As a past local authority architect now in private practice I can assure him that the majority of private practice principals are far too overworked to be able to sit down and compile statistics or other ditties, or even read their JOURNAL. Local authority architects, on the other hand, have a tendency immediately to shelve work in order to fill up any form or questionnaire and invariably digest their JOURNALS during office time on the day of publication.

RONALD THURSTON

Dunstable

Ivory tower?

SIR: Malcolm MacEwen's public statement (ASTRAGAL, June 8) that an architect may be unable to recover fees if the resulting building exceeds his client's cost limit is nothing short of mischievous. Mr. MacEwen should try coming down from his ivory tower and run a private practice to see how the building industry works.

I presume that this shocking statement is based upon a completely unrealistic legal ruling some time ago and I can only hope that intending clients do not take it too literally.

Even with the greatest care in the world, it is quite impossible with the set-up of the building industry and the "I'm-paying-for-it-and-I'll-have-what-I-want-when-I-want" attitude of the average client, to be certain of anything at all. The average small builder leaves all accounting until some time after the building is finished, whether he is asked for an interim statement by the architect or not and all the professional backroom boys in the world will not change his attitude.

I am convinced that the only situation where Mr. MacEwen's attitude could be defensible would be when the client gives the architect a completely free hand and goes off for an 18 months' world cruise.

FREDERICK HILL

Birmingham

The EDITORS: We passed Mr. Hill's letter to Mr. MacEwen, who has replied below:

SIR: Had I said that an architect may be unable to recover fees if the resulting build-

ing exceeds his client's cost limit my statement would indeed have been mischievous. But, as I said nothing of the kind, I can only suggest that Mr. Hill should apply his mind to what I did say:

"An architect who is given a firm cost limit by his client, and produces designs which cannot possibly be built within that limit, or nearly so, would not appear to be entitled to recover his fees."

In the case quoted by *Ideal Home* the client, so far as one could judge from a rather garbled account, appeared to want a small house for £1,500. If this was so, the architect should never have taken a commission, but should have told the client directly that it is not possible to have an architect-designed house for that sum.

It should be appreciated more widely than appears to be the case that the most common complaint made by members of the public is that they have been misled by architects about cost. It is obvious, from the cases received and investigated at the RIBA, that too many architects are less than frank with their clients, and that some fail properly to control or estimate costs, with results that can be tragic for their clients. One bad case of this kind can do untold harm not only to the architect concerned, but to the profession as a whole, and it is necessary for architects and the public to understand that, where the architect is clearly incompetent, the public have a remedy. This view has been upheld recently in the courts.

MALCOLM MACEWEN

Chief Information Officer

66, Portland Place

Span development

SIR: Mr. Eric Lyons and his employers are no doubt congratulating themselves on the evidence of personal favour which the Minister of Housing and Local Government has displayed in allowing them to cram 10 houses and 10 garages on to the site of 44, Blackheath Park against the advice of his own Inspector. Let them get what satisfaction they can from the trivial profits to be derived from the intensive development of this tiny corner site, but let them also remember to make a particular point of showing it on all future occasions to the foreign visitors who come to admire their housing projects, as a salutary warning of the danger of being lured by desire for financial gain to depart from all the principles of "planning for neighbourly living."

NOEL BRANDON-JONES

Blackheath, S.E.3

Of course!

SIR: The first two columns of the AJ are intended to be amusing; occasionally they succeed. The description of the chimneys at the chemical works at Hül's as reinforced pvc was however not an intentional joke but merely a printer's error. They are of course polyester fibreglass.

MICHAEL BRAWNE

London, N.W.3

NEWS

DURHAM UNIVERSITY

New Degree in Architecture

An innovation in the Durham University School of Architecture at King's College, Newcastle upon Tyne, is the establishment of a new degree of Bachelor of Arts in Architectural Studies: the degree will be awarded at the end of the three-year course which now forms the first part of the full five-year architectural training. It is intended that a graduate in architectural studies should have achieved a good general education in the nature and techniques of architecture at the end of his three years. It will then be open to him, and his tutors, to consider a choice among several possibilities of study and experience for which the degree of B.A. in Architectural Studies will have prepared him. The majority of students will wish to continue towards a full professional qualification in architecture and they will seek admission to the two-year honours course leading to the degree of Bachelor of Architecture, equivalent to the Present B.A.R.C.H. awarded by this University. The new degree of B.A. will open the way for a few students who wish, on the basis of a general architectural training, to turn towards careers in building administration, building science, architectural history, archaeology, preservation of ancient monuments, and certain types of research within the University. It is believed that it will be of value in directing architecturally educated minds into fields where they are badly needed and which do not attract the professionally qualified architect. Perhaps the most important of these may prove to be building administration. From the point of view of the individual student it will be specially valuable to those who find, after being for a year or two in a school of architecture, that creative design is not their main interest. Such students, awarded a degree of B.A. on sound academic attainment, are in a satisfactory position to review their plans at the end of three years.

RCA

Interior Design Students' Work

The RCA doesn't teach architecture, but it does have a School of Interior Design. Sir Hugh Casson is head man there, with a staff that includes Lady Casson, Terence Conran, Richard Hamilton and Norman Potter—a mixed bag by any standards.

Interior Design is a dirty phrase in the architect's book, with its images of Mrs. Beaver chromium-plating the family seat, or expensive young androgynes at their *trompe l'oeuil*. However, the RCA handout refers discreetly to "particularised architecture" in establishing the interior designers' field of operation—ships and shops, exhibitions, public and domestic interiors. "The interior designer's work is specially directed toward the usefulness, in practical and psycholo-

gical terms, of intimately scaled environment, and his aim is to make such experience humanly intelligible." That is, he has to deal with small-scale, often ephemeral stuff at the point where the architect leaves off, just one more specialist in the building team, smoothly taking over another aspect of the job that, a hundred years ago, no one questioned the architect could and should do.

Nothing much in this exhibition encourages a more sympathetic conception. Within a bolted-up softwood-stick and pin-up cage, each third-year student presents a three-panel selection of his diploma work. In most cases this includes a bit of real-life work like a shop department or an exhibition layout, since actual jobs are tackled in this final year. Like most of these school exhibits, an ostensibly public display is presented with that gnomish abstraction so simply achieved by omitting the printed word. The most interesting objects—Gunter Plessow's furniture, Fred Wildbur's holiday-camp chalet complex—are strictly outside the ID category. Within the canon, visual images lean turgidly towards the atmospheric, wispy perspectives and interesting colours disguising unconsidered forms.

Admittedly the interior man has the unique problem of having in his drawings to represent specific objects related to each other within an enveloping space. What he does with these objects and this space is what his job is about, but he first has to show what he intends, two-dimensionally, in a manner

that his client can understand. (The architect's task is easier, in having to show forms, leaving the spaces to read by implication.) The feeling of space is notoriously difficult to get across on paper. Whatever will solve this problem of the expression of an idea, it is certain that the freehand impressionistic view won't. Then who wants these drawings—student, client or staff? A new system of design communication is long overdue.

KIT EVANS

CRAMLINGTON NEW TOWN

Draft Master Plan

The draft master plan for Cramlington new town to accommodate 40,000 people, with an eventual maximum population of 48,000, has been approved by the Northumberland County Council planning committee. It was submitted by Mauchlen, Weightman and Elphick of Newcastle in association with C. F. Riley, senior lecturer in the Department of Town and Country Planning, King's College, Newcastle, and commissioned by a local consortium, William Leech (Holdings), Ltd.

It will be the first new town in Britain to be built by private enterprise. Its estimated cost is about £50 million, and time for completion, 20 years. A total of 16,000 new homes will be provided, and on the western side of the town over 500 acres of land, ready for immediate development, are set aside for industry.

Based on the plan, a statutory "Comprehensive Development Area Scheme" is being prepared by J. B. Ross, county planning officer, for submission to the Minister of Housing and Local Government.

KENT CC

Proprietary Prefab Schools

Because of changes and shortages of staff, Kent county architect is not able to take full advantage of the opportunity for the forward planning of schools afforded by the ministerial approval of school building programmes two years in advance.

Consequently, the county education committee propose that up to five primary schools in the 1960-63 programme be built by a proprietary modular system of construction, using local sub-contractors.

According to the committee, the plans would to some extent be developed by the main contractor, with a considerable saving of the time of the county architect's staff; the county architect would, however, deal with the siting and sketch plans, also working drawings up to ground slab level.

TDA

More Timber Could be Used in Houses

At last month's annual luncheon of the Timber Development Association, Hubert Bennett, Chief Architect of the London County Council, said that as the vast majority of homes were built on one or

two floors a good case could be made out for increasing the timber content of houses in Britain.

On the theme of design freedom, Mr. Bennett said that the LCC had granted no less than 1,700 waivers where codes of practice were concerned. This, he thought, indicated recognition that codes of practice could never be ahead of the individual designer. It was an attitude that enabled architects to look at timber as a basic material and to develop its use with much more freedom.

Visualising wider adoption of timber frame construction, the LCC architect said that points in favour of the technique included speed of erection, basic economies made possible by prefabrication, greater scope for the designer and quicker turnover of capital for all concerned.

"And," added Mr. Bennett, "no 11-in. cavity wall can have anything like the comfort of timber frame construction."

SPAN

Further Blackheath Houses Allowed

The Minister of Housing and Local Government has decided to allow Span Developments Ltd. to proceed with their proposed developments in the Blackheath area subject to various conditions, some affecting layout and materials.

Three sites are involved, and for one of them, No. 44 Blackheath Park, a Ministry inspector recommended after a public inquiry last February that the Span planning application should be dismissed.

The Minister now states that he has carefully considered the case put forward by the Blackheath Cator Estate Residents' Association, the Blackheath Society and others. While appreciating the anxiety to preserve buildings of character, he accepts the London County Council view that No. 44 Blackheath Park is not a building for which a preservation order should be made. He notes that the council decided not to object to its demolition after full consideration by their historic buildings sub-committee.

MERSEYSIDE DISCUSSION GROUP

Continuity for Building Teams

An appeal for greater continuity in building operations was made by Mr. P. Wyatt, managing director of Holland & Hannen & Cubitts (North West) Ltd., speaking at a meeting of the Joint Discussion Group for Members of the Building Team at Merseyside last week; in particular he urged that the team which is now on the last stages of building the Widnes-Runcorn bridge should go on to build the proposed Mersey bridge. Mr. Wyatt deplored the fact that the team which built the M1 motorway was disbanded when the motorway was completed, although there was an urgent programme of road construction waiting to be done. He believed that continuity and more standar-

DIARY

H. H. Richardson, a great 19th century American Architect: lecture by Henry Russell Hitchcock, architectural historian, Professor of Art, Smith College, Massachusetts, at the American Embassy Theatre, Upper Brook Street entrance, at 6.30 p.m.

JUNE 23

The Church in the University—Architectural Needs: conference arranged by the New Churches Research Group for architects and others directly concerned with projects for new college chapels at Pusey House, Oxford, Friday evening and all Saturday.

JUNE 23 AND 24

RIBA General Meeting: council election results, presentation of 1960 London Architecture Bronze Medal, presentation of Royal Gold Medal to Lewis Mumford, at 66, Portland Place.

JUNE 27

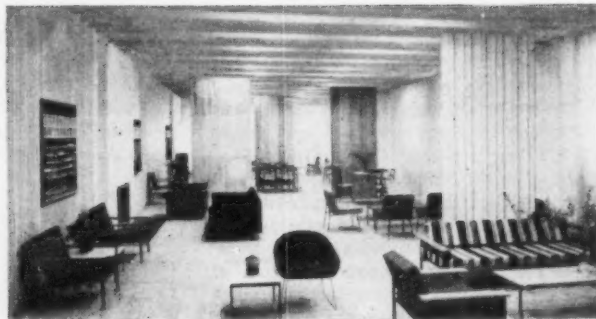
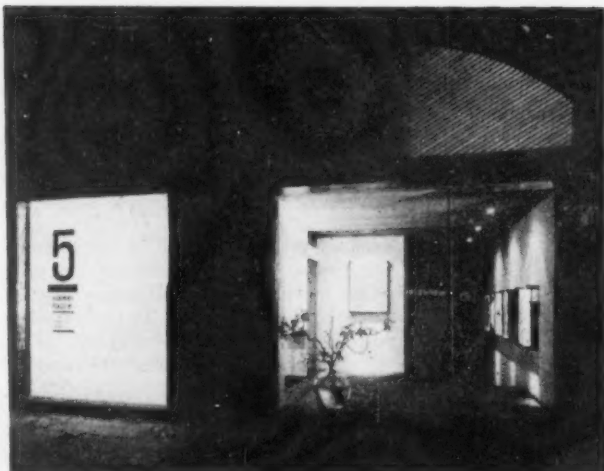
Architecture Today: exhibition of six years of British architecture arranged jointly by the Arts Council and the RIBA at the Arts Council Gallery, 4, St. James's Square, S.W.1.

JUNE 28 TO JULY 29

Informal talk and discussion with Lewis Mumford: AA, 36, Bedford Square, W.C.1, at 8 p.m.

JUNE 29

New Conran showroom



The entrance hall and the main showroom of Conran Fabrics Limited new premises at 5 Hanway Place, London, W.1, designed by the Conran Design Group, and built by their Contracts Division. The original high elaborate ceiling beams are still visible above the louvred pine ceiling of the showroom, 100 feet long by 30 feet wide, which contains modern furniture for office and domestic use

disation would result in saving time and also lead to better buildings.

Speaking for the architects, F. J. M. Ormrod appealed to clients to give architects rather more time, and for greater flexibility in building procedures, and for the quantity surveyors A. T. Fisher pointed out that it was at the design stage that the main costs were incurred, and if the client was to get full value for money the job required planning in much greater detail at the beginning.

Mr. Stanley May, regional secretary of the National Federation of Building Trades Operatives, urged the advantages of a staff college where all the kinds of people involved in the building team could be educated together.

WOODLAND PRESERVED

New motorway going below ground level

After nearly three years, residents of the Charnwood Forest, North Leicestershire, have won their battle to stop the building of a motorway across the woodland. Mr. Marples, Minister of Transport, has decided that much of the six-mile link between the M.1 and the South Yorkshire motorway going through the forest is to be below ground level, like a railway cutting. It is the first of its kind to be built in Britain, and will take several years to complete.

NFPO

Satisfaction with housing policy

That the views of the National Federation of Property Owners had made some impact on the Government's housing policy was an achievement welcomed by Lord Broughshane in his presidential report to the Federation's 73rd annual conference in Bournemouth last month.

On the better terms for improvement grants

they could claim some credit, he said, pointing out that under the Housing Bill an owner who spent money on improvements would be entitled to a return of 12½ per cent compared with 8 per cent a year ago.

"This is not as good as it sounds," he commented, "but we must be grateful for small mercies."

The Government had responded to representations for a depreciation allowance on residential and commercial property alike, without which "private enterprise will be unable to build new houses for letting," and in its White Paper on Housing had admitted the desirability of this objective.

But its practical proposals were limited to providing a sum of £25 million to help non-profit-making housing associations. The President continued:

"The White Paper estimates that houses built by housing associations at a cost of £3,000 could be let at an exclusive rent of about £4 a week. The Federation was curious about this figure and submitted calculations to the Ministry which showed that a private landlord would have to charge a rent of £6 7s. a week on such a house in order to obtain 8 per cent on his capital and write off the investment in 60 years. The Ministry's reply was that a non-profit-making concern would pay little or no income tax and that £26 a year would probably be enough to cover repairs and management. The reply added: 'Presumably the large item for management and insurance (£51) in your estimate reflects commercial practice'."

Lord Broughshane deplored such an attitude, adding: "Ironically enough, the new Housing Bill proposes a new system of subsidies which is designed to compel local authorities to charge more realistic rents!" On the Bill's proposal that in all tenancies of fewer than seven years there will be an implied covenant on the part of the landlord to keep the property in good structural repair, the Federation agreed that in the case of a short lease—three to five years—structural repair should not be the responsibility of a tenant. But it was obvious that "under

the umbrella of the law, an unscrupulous or vindictive tenant would be able to make unreasonable demands."

The President wondered if, in these days of staff shortages, the projected Offices Bill was really necessary. "Why? Because if the staff aren't comfortable they just won't stay."

Earlier in his report he had praised the immense amount of work done by the Federation in the previous year. "As you all know," he said, "nearly eighteen months of this Government's expected life have elapsed; not much more than three years are left. We must do all we can to improve the lot and the prospects of the private-property owner while the political climate is reasonably fair."

COLONIAL OFFICE

Prefabs for Nyasaland

Houses employing a prefabricated frame and locally built walls are to be built for Government staff in remote areas of Nyasaland at a cost of £200 a time. £25,000 has been set aside for their provision, 90 per cent of it provided by the Colonial Development and Welfare Scheme.

Prefabricated parts consist of a steel frame, a roof and door and window frames, which can be erected by four labourers in four hours; walls are made from whatever building materials can be found in the locality. At a recent show in Northern Rhodesia such a house was completed in seven days.

HAMPSHIRE CC

Green belt power station opposed

Hampshire County Council is to oppose a proposal by the Central Electricity Generating Board to build a large power station on the shores of Southampton Water at Calshot because much of the site is within a green belt and also has recreational importance. The buildings would be about 180 ft. high with chimneys of 600 ft., jetties for large oil tankers and a cooling system needing

16 million gallons an hour from Southampton Water.

"Calshot Spit is one of the first glimpses of England foreign visitors get as their ship passes on the way to Southampton. A power station with chimneys of 600 ft. is not the most welcoming sight," said County Councillor Mr. W. H. Ewart-James.

To the claim that it would provide much-needed employment and scope for apprentices, the chairman of the planning committee retorted: "There is adequate employment in the area. If you increase jobs, you will have to bring in more people which means building more houses. The issue here is simple—industry or green belt—we prefer the latter."

The council is also to object to the exclusion from the Hampshire coastal green belt of any of the land between Fawley oil refinery and Calshot Point.

ROYAL ACADEMY

Reopening of school of architecture

The Council of the Royal Academy is to open an evening studio of architecture in October, which will be associated with the day schools of Painting and Sculpture. Only a limited number of senior students, qualified or partly qualified, can be considered. No fees will be charged and attendance will be voluntary. Students will work on subjects of their own choice with discussion and criticisms by a visiting panel of members of the Royal Academy and others.

Enrolment forms are available from the Secretary, Royal Academy of Arts, Piccadilly, W.1.

Town planning award

The Committee for the RIBA Award for Distinction in Town Planning has recommended that this be conferred upon Sir Basil Spence and Percy Johnson-Marshall.

S. L. G. BEAFOY

Death of MOHLG chief inspector

Samuel Leslie George Beaufoy, chief housing and planning inspector of the Ministry of Housing and Local Government since 1958, died suddenly at Llandudno on Wednesday, May 31, at the age of 61. He was due to give the toast to guests at the dinner held during the Town Planning Institute's conference, but was taken ill at his hotel and died later in a Llandudno nursing home.

Born in 1899, he was educated at Dover Grammar School and then gained a RIBA distinction in town planning and a London University diploma in town planning and civic design. As architectural assistant to Professor S. D. Adshead he was associated in preparing many town planning schemes. Appointed town planning officer in Liverpool in 1927, he went in 1933 to the Ministry of Health to become chief housing

and town planning inspector. From 1942 to 1947 he was assistant secretary at the Ministry of Town and Country Planning. He became chief technical planner in 1947, a position he held until his appointment in 1958.

He was a Fellow of the RIBA and past president of the TPI. He was made C.B.E. in 1947.

DESIGN CENTRE

Functional efficiency safeguards

Defending its policy of verifying functional efficiency of Design Centre products—both those in the Design Index and those shown in displays—the Council of Industrial Design has issued a statement reiterating the procedures followed. It says:—

Where official organisations—such as the Gas Council, Coal Utilisation Council and British Electrical Appliances Board—exist, acceptance for the Index depends on a favourable report. For most other industries with goods in the Index, a technical adviser—a research organisation, a panel or an individual—has been appointed to ex-

IN COURT

Change of completion date

Mr. Justice Pennycuik in the Chancery Division on May 3 upheld a claim by A. Roberts & Co. (Holdings) Ltd., building contractors, of Eccleston Street, Victoria, London, against the Leicestershire County Council, for rectification of a contract for the building by the company of Hinckley Burbage Secondary Modern School.

The judge ordered that September 30, 1955, be inserted in the contract as the completion date for the work, in place of September 30, 1956. The County Council had asserted that the latter date was correct, and the one which had always been intended.

His lordship said that the council had accepted the company's tender, in which the company undertook to complete within 18 months, but the council had inserted in the contract a completion date which extended the period to 30 months. The company failed to notice the change.

The date had been altered for the benefit of the council and not that of the company, because if the company had made its tender on the basis of 30 months the price would have been higher.

"Apparently neither Mr. Ernest Smith (assistant county architect for the education section of the council) nor Mr. Charles Thornton (the progress officer in the architect's department of the council) considered that he was under any obligation to call the attention of the company to this change," said the judge.

The question was: did Mr. Smith who had the handling of the matter know that the company believed that the period for completion was 18 months? In his lordship's judgment the facts gave rise beyond reasonable doubt to the inference that he did.

amine and approve products before their final acceptance. Where appropriate British Standards exist, such as those dealing with safety, all products must meet their requirements.

In the case of domestic appliances and equipment, some items are also given user tests at the Queen Elizabeth College for Household Sciences (University of London). In addition, the Council makes use of the findings of the two consumer organisations. In the course of the next few weeks, cross references will be added to the captions of those of the 10,000 items in Design Index on which testing has been undertaken by appropriate bodies.

AA

Leverhulme Scholarship in Architecture, 1961

This has been won by S. M. Pepper of Gosport, Hants., who studied at Lancing College, Portsmouth College of Art and Royal Military Academy, Sandhurst.

The Leverhulme Scholarship, value £2,500, includes payment of fees and maintenance for five years at the AA.

"Only if he was unusually stupid or unusually heedless could he have failed to understand, and I am satisfied that he was neither stupid nor heedless and that he did realise the company's mistake."

It had been suggested that it would be inconceivable for an official in Mr. Smith's position, when he had realised the company's mistake, to stand by without bringing it to the company's notice; but after hearing Mr. Smith's evidence—and in particular his views upon the propriety of inserting a new date for completion in the contract without communicating with the company—his lordship was unable to attribute any weight to that argument.

"It was also contended that Mr. Smith had no motive in acting as he did. No one suggests that he had any corrupt personal motive, but as a loyal officers of the council he must have recognised that it would be extremely inconvenient if the contract were to go off, bearing in mind that the work under it must begin by the end of March in order to qualify for the Ministry grant."

The issue depended upon the state of Mr. Smith's knowledge, and the judge did not feel himself concerned either to criticise or excuse Mr. Smith's conduct. He proposed to order that the contract be rectified, and that the county council pay the costs of the action.

From July 5, 1961, THE ARCHITECTS' JOURNAL will be published every Wednesday instead of Thursday

PLANNING AT THE CROSSROADS

Summary of the paper presented at the TPI's conference last month by Lewis B. Keeble, director of studies in the department of town planning at University College, London

This is a time of destiny in the field of planning. Since 1945, although one can criticise much of the development which has taken place, not very much of it has been in forms or in places where it badly prejudices the creation of a reasonable future pattern. But it would be over-optimistic to think that, without a considerable revision of techniques, machinery and legislation, this will continue to be so for very long. Main roads, overspill, residential density, town centre redevelopment and the very structure of towns, all seem to me to be in dire peril.

Town planning is a subject of enormous importance.

What are we really trying to do?

The aims of planning

I would put first an unviolated countryside free from all unnecessary objects, with all necessary objects well designed and well sited. These objects include roads; the country needs to be traversed by an adequate system of roads, well designed in every way. It ought to be possible, once having reached a main road, to travel from any town in the country to any other town without going through a built-up area. The countryside is punctuated by towns and villages of various sizes; looking at them from the outside, the most important thing is that they should have clear clean edges, that all buildings should be part of a place, not sporadic interruptions to the countryside.

Within the towns themselves, not only should one be able to make long journeys without entering built-up areas, but one should be able to drive from the outside of a town to its heart, or to any of its principal component parts, along safe and uncongested roads. This is one of the minimum requirements for good town planning.

The town ought to have a clear structure, a pattern of uses and communications designed for maximum accessibility and minimum congestion and danger, with compatible uses placed together as far as possible and incompatible ones apart.

The town centre, places of employment, schools, playing fields and subsidiary centres for shopping and other facilities need to be arranged so as to meet fully and conveniently the daily needs of their users, and this involves especially, of course, a well-articulated minor road system within the general framework of main roads.

A well-designed system of main roads should itself help greatly to avoid congestion in the town centre, but it seems abundantly clear that, in addition, virtually all

central shopping areas need to be converted to pedestrian precincts.

The great need for the residential area is that it should contain homes of all kinds in such proportions that every family has a good chance of securing a home of the size and kind it wants, whether flat, house or bungalow, with outdoor space of the size and kind it wants, whether in the form of an individual private garden, a common garden or merely drying space.

Visually, it is necessary that every building should be well designed as regards its own intrinsic properties and in relation to the buildings and other objects seen with it. We ought surely to be aiming at a state of affairs in which every part of every town comes up to the visual standard of, say, Stevenage Town Centre or Roehampton.

Regional planning

Let us first consider regional planning. Its main function is the balancing of population and employment.

We are not really doing any regional planning today.

It seems to me ridiculous, to use as moderate a word as possible, that, 15 years after publication of the Greater London Plan, heated and confused discussion should still be going on about the location of London overspill. Does the Minister seriously think that the LCC, Middlesex and the rest can as individual planning authorities somehow produce a regional plan for London?

If one looks at the Manchester region, the position is if anything worse. Here, numerous interminable inquiries, followed by frankly silly ministerial pronouncements, led to the appointment of Mr. J. Ramsay Willis to hold an independent inquiry and report. This was not a task that should have been laid upon him. A regional plan, which was what he was really being asked to create, needs to be drawn up in the light of impartially obtained and presented information under many heads. I suppose that the only absolutely impartial information Mr. Willis had before him was that of Dr. G. P. Wiberley, but neither he nor the Minister seems to have been able to make much use of it. In the end regional planning in Manchester seems to have come down to a process of simple arithmetic: finding sites physically capable of carrying houses, estimating the number that could be built on each and deducting these from the total of Manchester overspill requirements. A travesty.

Sub-centralisation within the main built-up mass of London to draw employment out of

Central London and, as opportunity offers, the blasting of belts of open space to define communities and provide local major open space, seems to be an operation of vital importance for the future well-being of London and the other great conurbations.

It seems fairly crazy for the LCC to be developing at 200 and 136 persons per acre while elsewhere strenuous efforts are made, and are indeed quite often supported by the Minister, to prevent density rising above one or two houses to the acre.

Green Belts

The absence of regional planning also leads to pitiful absurdities in drawing Green Belt boundaries.

In the vicinity of a large city or conurbation a Green Belt is decided upon and its inner boundary is very often rightly drawn closely around the limits of existing development. The exact position of the outer edge is not usually so important, but actually within the Green Belt there are often considerable numbers of towns and the policy is to bring the boundary of the Green Belt very close indeed to their existing developed limits.

Yet how can anyone draw a Green Belt close around a substantial town with the confidence that it will be permanent if no regional plan exists to allocate future distribution of population and industry and if, in such a plan, the town concerned might well qualify for substantial expansion necessarily involving development over the present boundary of the Green Belt?

We should plan for development only where it is appropriate.

Development plans

What I feel sure is needed is, first, a regional policy map and statement, the map, probably at a scale of a quarter of an inch to one mile, showing d'agranatically the principal proposals.

Instead of the one-inch map, I believe that there should be two and a half-inch maps showing, in outline, areas for development, broadly allocated as to use, for all towns and for all villages in which any appreciable amount of development is intended to be permitted, together with principal road proposals and sites for any substantial areas of non-agricultural use in the countryside.

These should be followed up quickly with six-inch town maps for all towns and for all villages where substantial development is intended.

No real planner could possibly think that the planning process is completed by the preparation of a six-inch plan. 1/2,500 scale plans need to be prepared urgently for every part of every town where development, including piecemeal redevelopment, is going on or seems likely to start soon, and such a map is also needed for every large village.

Of course, if you put all the building uses in the town as near the centre as possible, and all the non-building uses, including schools, on the outside, you will get a very compact built-up mass, indeed, probably an overwhelming and oppressive mass.

You will still, however, need some neighbourhood centres, even though sub-centres may disappear. It is interesting that the urge for high densities has recently become linked with a campaign against the neighbourhood idea. The neighbourhood unit is something which comes about, at any rate partially, in virtually every unplanned English town with a population of more than about 30,000. Planning by neighbourhoods is simply a rationalisation of this tendency. The only substantial obstacle to a good density policy is the lack of a proper compensation-betterment policy to enable land to be developed with reference to need instead of to cost.

Redevelopment of town centres

It is almost undisputed that we need pedestrian shopping areas in town centres, yet town maps rarely reveal this as an intention, and most of the comparatively few detailed centre plans make no effort to achieve it, but resort to proposals for immensely costly, certainly useless and probably even harmful road widening within the town centre.

Residential density

Policy and thought about residential density are in chaos.

By doing a lot of arithmetic it is possible to work out from a town map the average permitted net density in persons per acre for a cartogram area. One can then guess or argue with the local planning authority about probable occupancy rates and, after deciding how many rooms per dwelling are desired, work out how many dwellings per acre can be built. The density at which residential development or redevelopment actually occurs is much more often arrived at after some crude horse trading between local planning authority and developer.

But density control is very important; without it, it is quite impossible to ensure that the provision of schools, open spaces and shops shall match the population, and to keep the population of the town concerned even within broad limits. The only answer to this problem is to prepare 25-in. plans, in which residential areas are broken down into quite small areas of specific net density designed to produce a deliberate and meaningful density pattern. This, however, has nothing to do with making decisions about what densities are appropriate in various circumstances. I would advance the following as reasonable general propositions:—

- (i) Metropolitan man and small town man are not different species, their residential space needs are similar though the space needs of individual households differ enormously.
- (ii) It is sensible for there to be a higher proportion of flats, and therefore higher densities near town centres, than further out, because the households suited to flat life are those most likely to look to town centre services rather than neighbourhood services for the majority of their needs, but this is no excuse for stuffing all the households in the more central areas of

large cities into flats, however many children they have.

(iii) Occupancy rates are likely to continue to fall. Eighty habitable rooms per acre will often mean about 56 persons per acre.

(iv) Compactness without congestion, spaciousness without sprawl are the things to aim at, and these aims can be reconciled at a density of about 50 habitable rooms per acre.

It is a hard fact that the 45 million inhabitants of England and Wales can be accommodated at generous space standards, including seven acres per 1,000 open space, schools in compliance with Ministry of Education standards, ample room for industry and a residential density of 40 persons per acre, within a circle with a radius of 38.6 miles. The answer to urban sprawl lies in getting development into appropriate form, not in squeezing it up. For example, about half of the land within this 38.6 miles circle is net residential land. If you spread all that out in the form of ribbon development along both sides of roads with plots 150 ft. deep, it would need 40,000 miles of road to accommodate it.

A town with 60,000 population, developed at the kind of standards I have mentioned, in circular form, has a radius of 1.2 miles. The non-residential elements are not flexible. So leaving those as they are, let us see what happens when the residential density is varied. At 60 persons per acre the town has a radius of 1.1 miles. At 106 persons per acre the radius is still 0.99 miles, and at 160 persons per acre it is 0.94 miles. On the other hand, if density is lowered to 35 persons per acre, the radius only goes up to 1.24 miles.

Where main radial roads into towns are lined by shops the town cannot be satisfactory until either the shops or the roads are moved. No town map which fails to meet this requirement can be regarded as a satisfactory one.

Faults in planning administration

There are some things which local planning authorities could do without ministerial change of policy or new legislation:—

1. They could employ more staff in preparing detailed proposals. Every year dozens of talented young men and women enter the planning profession who would be fully capable of preparing detailed planning proposals, provided their efforts were vetted before submission to committees. This talent should be much more fully used.
2. In counties where there is a very considerable amount of delegation, the authorities exercising delegated powers are allowed far too much rope. Why are county councils so scared of their district councils?
3. I wish that planning officers could be encouraged to give rather more vigorous evidence at inquiries. I wish, too, that they would draft amplification statements in the same spirit.

The principal parties involved in planning are the Government, county councils and county borough councils, other authorities, and developers. All have achievements to their credit, but all are guilty of misfeasance

and nonfeasance. In my opinion, the county councils on the whole are the least guilty, and the Government the most guilty.

First, it is patently an illusion to think that local government can carry out the biggest planning jobs without Government aid. The present Minister seems much too fond of urging local authorities to undertake for themselves tasks which are in their nature too big.

Second, it is illusion to think that delegation on the scale laid down in the new delegation arrangements of 1960, still less on the even greater scale which seems to be threatened, can do anything but damage planning seriously. It is impossible to believe that in this respect planning has not been sacrificed to political expediency. Third, if the Minister cannot for some reason set up a proper organisation to deal with regional planning, why does he not use his powers to form joint boards so as to cover the country with authorities at least able to carry out regional planning even if not ideally constituted to do so?

Fourth, why does he not take action to bring into existence development plans which mean something and are a real guide? He is constantly complaining about the vast numbers of appeals upon which he has to adjudicate. If there were proper development plans in appropriate detail, and if he supported local planning authorities solidly in implementing them, there would inevitably be a great falling off in appeals, for the great majority of applications would either comply or not comply with the plan and appeals would lose their popularity.

I should also like to urge the Minister to place more reliance upon the advice of his technical officers. It is a remarkable thing that in relation to appeals it always seems to be the most sensible recommendations by inspectors which are overruled by the administrators, while the silliest are accepted.

Why, above all, does the Minister not take a deep breath and create a reasonable compensation-betterment code?

Planning is caught in a frustrating log jam of inaction, and, though everyone concerned with it can do something to help, it is intrinsically impossible for anyone except the Minister to effect a decisive improvement.

How can planners help?

What, finally, can members of the planning profession individually do to help? One great difficulty is that so many of us are necessarily muzzled by virtue of our official positions, but those in local government are, after all, only muzzled in relation to the activities of their own authorities. They need not be silent with regard to general planning issues. Planning is important, it is beginning to recapture the public imagination, and the people who are capable of enlightening the public are, by and large, members of the Town Planning Institute. If they do not do it no one else will. We have done the country a lot of good during the last 15 years and need to persuade it to allow us to do so at our full bent instead of in the present anaemic fashion.

Less frustration for every square foot of Weyroc thinking You may be leaning or sitting on Weyroc now. This versatile and amenable constructional board can core good architectural ideas. Smooth, homogeneous and waste-free, it can be jointed, bonded to films, veneers or laminates or painted with outstanding effect. Thinking Weyroc into a project can put a cutting edge on your intentions without ever blunting your pencil. For partitioning, interior walls, ceilings, floors and built-in furniture, Weyroc is a brilliantly logical choice.

Weyroc is a product of the Aircraft Company & Jigsaw Limited, Weybridge, Surrey.

— think **weyroc**

SS CANBERRA

The largest passenger fleet in the world, P&O-Orient Lines, now have their latest liner on her maiden voyage to San Francisco via Port Said, Sydney and Honolulu. She left on June 2nd, and returns to Southampton on September 1st.

The Canberra follows her sister ship, the Oriana, by seven months, and together with her has cost £30m. She can carry 2,238 passengers, which is more than any other passenger-carrying ship. 3,270 tons heavier than Oriana, Canberra (45,270 tons) is 818 ft. overall and has a beam of 102 ft. Her turbo-electrically driven twin screws push her along at 27½ knots.

The designer of this revolutionary ship is John West, aged 33. As the ship has taken five years to complete, this looks as if it represents a sensational breakthrough in the naval architecture world for Mr. West. During this period, Sir Hugh Casson has led a design team so that the interior design could be integrated from the start.

The ship is revolutionary in that the engines are placed tanker-fashion in the stern, thus releasing valuable midship space for passenger accommodation and deck recreation. The ship is also air conditioned so that the familiar bell-mouthed ventilators of the past are no more, the exhaust air being blown out through the large funnel-ventilator paired beside the

boiler funnel.

Thus the dramatic top deck of the past is gone, and instead there is increased promenade and games space, additional open air swimming and paddling pools. But, in spite of taking nostalgia into account, the top deck of the Canberra is bleak and rather dull. Viewed from this deck, the bridge is terraced up weakly to a minimal mast. There is streamlining which seems to owe more to car styling than ship-building. The twin funnels have an awkward junction with the deck housing.

The design team was led by Sir Hugh Casson. His associate, Timothy Rendle, did the first class spaces with Sir Hugh. Tourist class spaces, John Wright, F. Hickman. Cabins, Barbara Oakley.

The works of art incorporated in the ship are not too many or too oppressive: on the whole they are a positive embellishment to the rooms where they are placed. The successes are Geoffrey Clarke's cast aluminium bas-reliefs in the tourist restaurant, Robert Buhler's colourful murals on plastic laminate panels in the Island room (like Bonnard but magnified by 10) and Ardizzone's murals on the same material in the first class children's playroom.

SS Canberra of the P&O-Orient Line

NAVAL ARCHITECT

John West, of the P&O-Orient Line

DESIGNERS

Sir Hugh Casson, co-ordinator of all design

First class: Sir Hugh Casson; Timothy Rendle

Tourist class and observation lounge: John Wright

All cabins and crew's quarters: Barbara Oakley

BUILDERS

Harland and Wolff, Belfast

1
Swimming pool and Bonito Club dance floor: first class.
DESIGNERS, SIR HUGH CASSON AND TIMOTHY RENDLE.
This is the most interesting area of the ship, situated immediately aft of the bridge terraces. The large swimming pool of white mosaic is in the open air but the teak flooring surrounding it runs in one level to form the dance floor, which is separated from the pool area by a large vertical sliding window (lowered

for the photograph). The dance floor is surrounded by a teak boarded parapet. The furniture is also teak, with Conran stacking chairs. The lighting over the dance floor is through a cellular, glass-reinforced, plastic suspended ceiling of a honey colour developed from panels used in aircraft as partitioning, and is one of the many successful applications of plastic materials in the ship. Part of the weakly designed ship superstructure can be seen at the top





2

SS CANBERRA

2

Meridian Room: first class. DESIGNERS, SIR HUGH CASSON AND TIMOTHY RENDLE. This room is one large space incorporating writing rooms, library and an "island" enclosing bars, servery, and a circular staircase to higher levels. The chairs and sofas were specially designed by Timothy Rendle, and are made of fibreglass covered with blue fabric or black leather. The legs are not a happy choice but the soft undulating lines of the seats make a pleasant contrast with the dark Indian laurel boarding of the enclosing walls. The faceted metal sculpture/light fitting was designed and made by John McCarthy; it has a powerful presence which seems out of place in this space for relaxation

3

Staircase from Meridian Room to observation lounge: first class. DESIGNERS, SIR HUGH CASSON AND TIMOTHY RENDLE. This staircase has terrazzo treads (slippery in the Bay of Biscay?) which are suspended from structural steel balustrades faced with aluminium sheet, which appear to have presented difficult manufacturing problems in cutting and fixing on the curve. The soffit of the balustrade conceals lighting which illuminates the treads very dramatically

4

Restaurant: first class. DESIGNERS, SIR HUGH CASSON AND TIMOTHY RENDLE. This large room, stretching across the full 100-ft. width of the ship, would have been oppressive with an unvaried ceiling and floor level. In fact the designers have raised the ceiling and dropped the floor over the centre portion, at left, to provide variety of space. They have also introduced screen walls to break up the long views. The wood veneer panelling is again Indian laurel, which gives the room a grand atmosphere rather spoilt by the triviality of the central area glass-reinforced, plastic, cylinder lights. The room is too low in the ship for natural light, but the sides of the room are brightly lit through woven glass screens giving the effect of bright sunlight. At dinner this lighting is replaced by table lights, and the atmosphere becomes more intimate. Tablecloths shown are striped blue and white. Carpet is patterned gold, brown and black. Circular columns are cast in spun glass fibre made by the Bristol Aircraft Co.

5

The Century bar: first class. DESIGNERS, SIR HUGH CASSON AND TIMOTHY RENDLE. The fine curvilinear bar top is made of Indian laurel strip, a wood which is

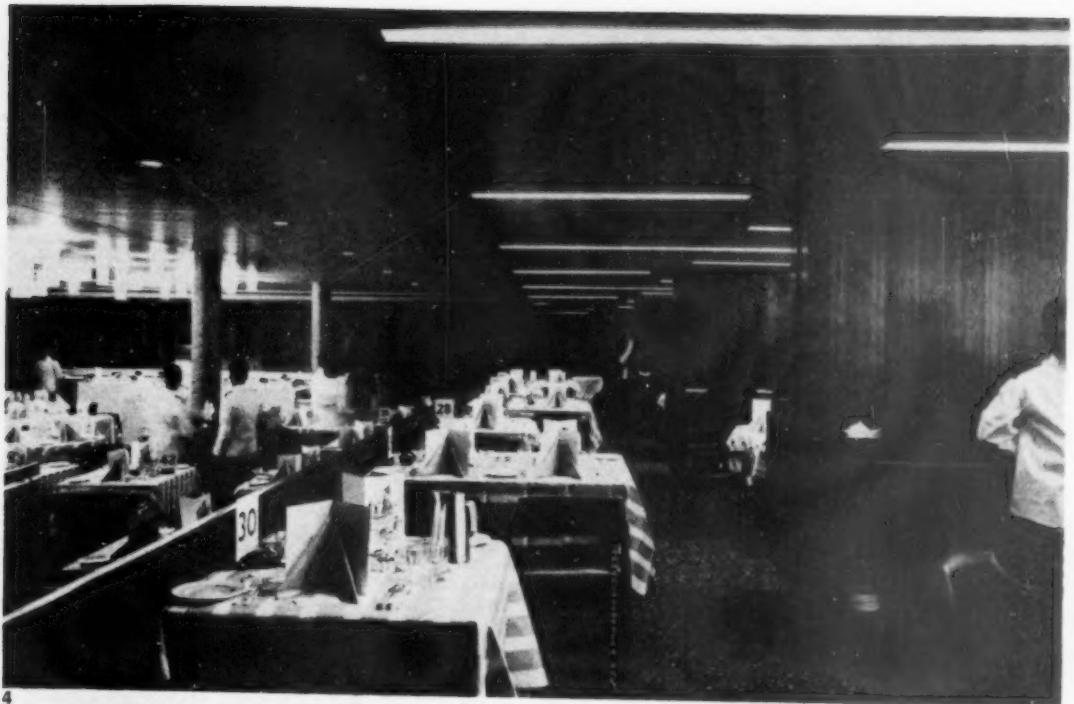
3



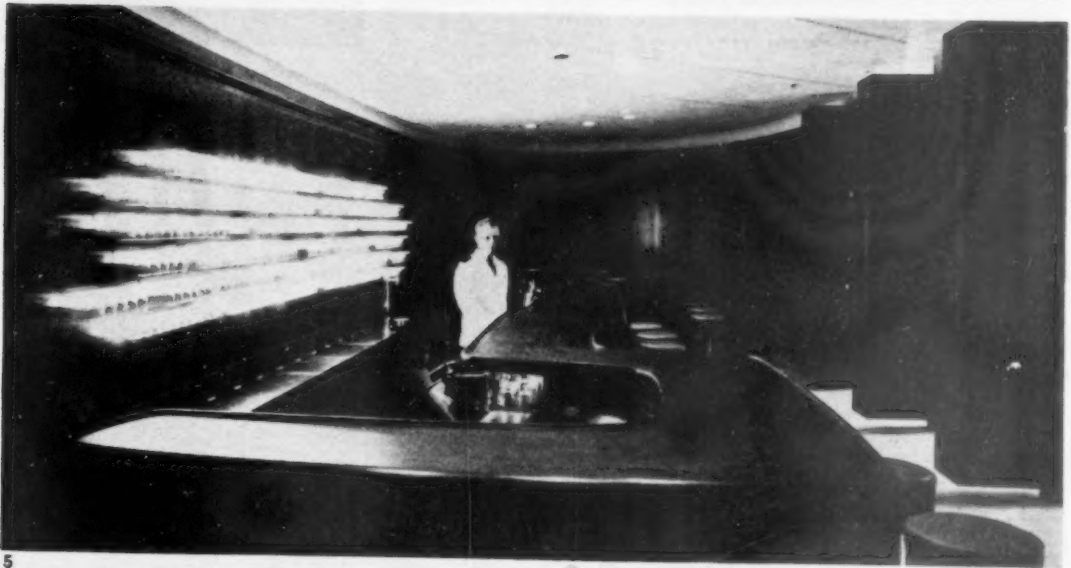
resistant to drink stains. The boarding runs along parallel with the bar edge giving a laminated effect. The bar shape and the simple tan leather stools contrast with the glitter of the glasses, which are suspended by their bases in Perspex racks lit from behind. This sophisticated atmosphere is a little spoilt by the ceiling where the large square acoustic panels impinge on the curved walls leaving awkwardly cut tiles at the edge

6

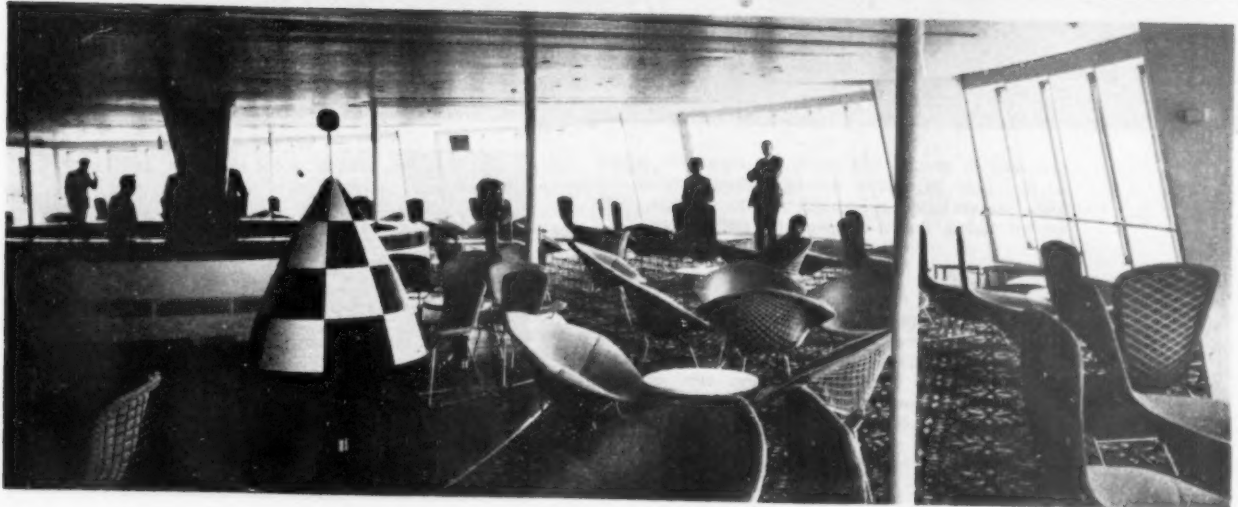
Observation lounge (Crows' Nest): first class. DESIGNER, JOHN WRIGHT. Heals Contracts Ltd. carried out the work in this room, which has a magnificent view forwards through floor to ceiling windows. The simplicity of the white painted boarded ceiling, with recessed random-placed spotlights, is effective, and could have been repeated more often in the ship with advantage. The floor is teak boarded and partly carpeted, but the carpet design of a compass rose brings back a whiff of the Festival style. (DESIGNER, AUDREY TANNER.) At the left of the photograph is the top of the spiral stair shown in 3



4

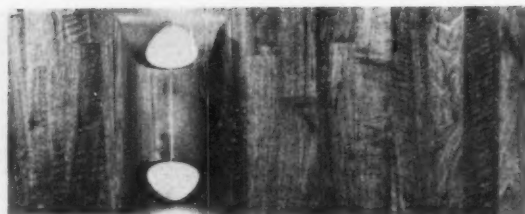


5

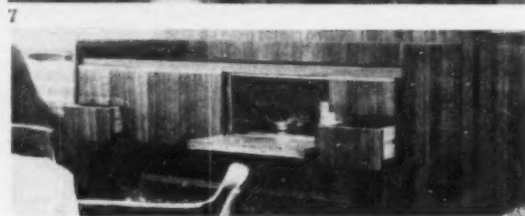


SS CANBERRA

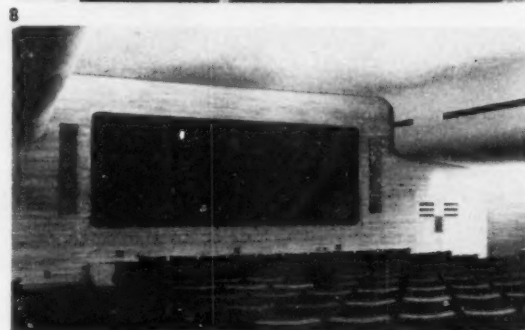
7
Wall bracket light fitting. Writing room: first class. DESIGNER, TIMOTHY RENDLE. This fitting, cut out of Indian laurel, gives general light in an unobtrusive manner



8
Typical dumb waiter: first class Restaurant. DESIGNERS, SIR HUGH CASSON AND TIMOTHY RENDLE. These are austere and simply designed and are integrated unobtrusively with the screen walls



9
Cinema: first and tourist class. DESIGNERS, SIR HUGH CASSON AND TIMOTHY RENDLE. All the walls and doors are in ash acoustic strip boarding. The ceiling is plywood with a sprayed textured finish. The ceiling profile across the room is oppressive but this is due to structural considerations. The room is lit by continuous strip lighting at the junction of walls and ceiling, which throws the horizontal boarding into relief. The screen and speakers are not related very happily with the curves of the ceiling

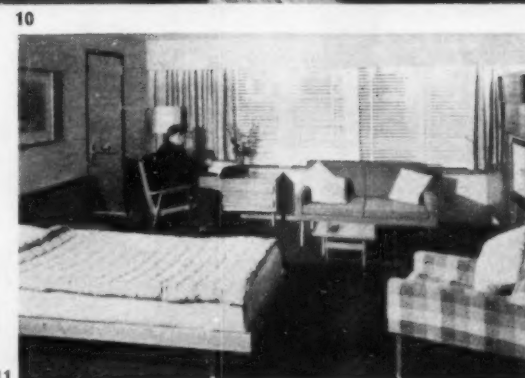


10
Two-bed cabin: first class. DESIGNER, BARBARA OAKLEY. All the designers investigated the cabin problems, and mock-ups were made. The designer has managed to keep the many disparate cabin elements under control, resulting in an unfussy design. Carpets are charcoal, walls white vynide, with bitter coloured cushions, curtains, etc., varied from cabin to cabin. The ceiling has escaped the tidying-up process. A large proportion of these first-class cabins is



arranged in groups looking on to highly lit courts, so that they all borrow day-light. Some tourist cabins have prefabricated cylindrical plastic showers, with curved sliding doors, designed by JOHN WEST

11
De luxe cabins: first class. DESIGNER, BARBARA OAKLEY, WITH HEALS CONTRACTS LTD. These cabins might be hotel rooms: however, there are only eight on the ship. There are four colour schemes for eight cabins, the woods being teak, Swedish pine, elm, and Rhodesian rosewood. The ceiling is white painted boarding, the walls grass cloth or wall paper





12

12

Peacock room: tourist class. DESIGNER, JOHN WRIGHT. This is a large room for quiet sitting and reading, though there is a bandstand. The dance floor is the black and white striped area. The walls and ceiling are dyed blue wood veneer, giving the room an extremely cool atmosphere. The chairs of cut-out, bent plywood appear in different variations throughout tourist class, their distinct form giving rather surprising comfort though the upholstered arm rests are a bit sharp for the elbows. ROBERT ADAMS did the white wood relief "sunburst" and also the canopy, which is lit from above

SS CANBERRA

13
"Pop Inn": tourist class. DESIGNER, JOHN WRIGHT. Juke box, drink dispensing machines, pine boarding with slogans and graffiti burnt on with pokers: all very hep for the teenagers. There is also jiving space aft in this bar. The decoration invites a do-it-yourself approach already accepted by various pre-voyage visitors. The bar top is made of hundreds of strips of coloured plastic placed side by side

14
Restaurant: tourist class. DESIGNER, JOHN WRIGHT. This room seats 704 at one sitting, the largest restaurant afloat. The photograph shows only a part, the tables being divided into groups by low partitions, one of which is seen at the left. Each bay has three GEOFFREY CLARKE, cast aluminium, bas-relief sculptures. The ceiling of slotted acoustic panels spans

13



across the room in a shallow parabolic curve. The walls are panelled successfully with greeny-gold iridescent glass fibre sheets with aluminium trim, used also in the main tourist lounge. The floor is dark blue, the upholstery on the bent plywood furniture is dark blue and khaki-green leather

15
Island room: tourist class. DESIGNER, JOHN WRIGHT. This large room is used for dances, concerts and games. Both sides open on to the deck. The room is dominated by a mural by ROBERT BUHLER on most of the wall surfaces, whose colours, Bonnard like, are powerful. Down each side of the room, hinged seat

screens can swing round to divide the space athwartships when needed

16
Card room: tourist class. DESIGNER, JOHN WRIGHT. This is one of the more shiplike rooms, uncomplicated by works of art, with recessed lights and pine boarded ceiling and walls

17
Cricketers Tavern: tourist class. DESIGNER, JOHN WRIGHT. The strong flavour of this bar might not be to everyone's taste, but it is a good bar. The photograph shows only the sitting area, but there is also a large standing-up bar for bulk consumption. The display of caps, etc., seems forced (DESIGNER, MARGARET REDFERN). There are odd spaces at floor level between the semi-circular banquettes and the wall, which seem rather left over. The boarding is, of

course, willow, the bar elbow rests are bound with black twine like a bat handle (not in picture). The paintings of Bradman and other masters are by Ruskin Spear

18
"You are here" indicators: first class. DESIGNERS, SIR HUGH CASSON AND TIMOTHY RENDLE. These occur at every landing and are flush with the panelling. They are back lit, the surround to the ship being blue, with the various decks in different colours. Accommodation shown is only first class

14

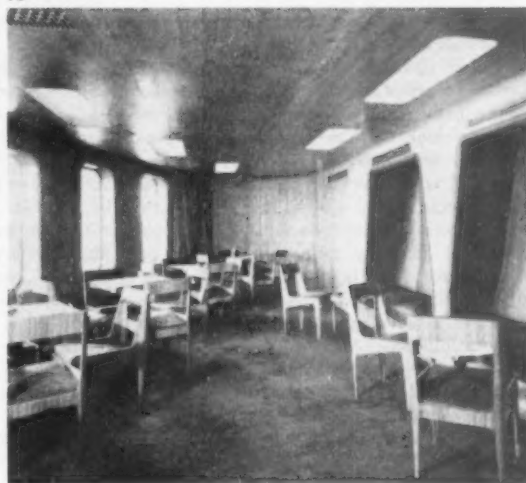


15

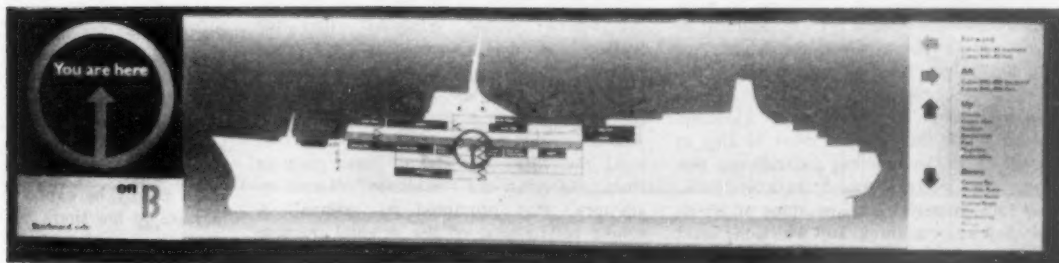


18

16



17



Dust from a chalk pit

Following the Saffron Walden case, the writer discusses the original function of "the appeal inquiry" and the public misconceptions that have grown up round it

Lords and Commons, lawyers and leader-writers have had much to say about the rights and wrongs and constitutional implications of the Saffron Walden case. For the student of public administration, however, it is not the merits of this dust-up in a chalk-pit that most deserve attention, nor yet its bearing on the doctrine of the *droit administratif*. Far more remarkable, though astonishingly unremarked, is the proof it gives of the power of public opinion, without benefit of legislation, to transform in 10 short years the whole nature and function of a piece of governmental machinery, merely by persistently misconceiving its purpose. The piece of machinery in question is the public inquiry into a would-be developer's appeal against an unfavourable decision by the local planning authority. In all but outward form this is quite a different kettle of fish from the public inquiry into objections to a development plan, to a compulsory purchase order, or to a comprehensive development scheme, though the distinction is often overlooked—and many are the muddles this oversight has bred. This article deals only with what might be called, for brevity's sake, the appeal inquiry. What is it for?

The operative Act of 1947 provides that, in determining an appeal, the responsible Minister shall have regard to any relevant provisions of the development plan, and to "any other material considerations"; and that before reaching his decision he shall appoint a representative to hear what the appellant and the local planning authority wish to say. He is not obliged to afford a hearing to any third party, nor is his choice of means to inform himself of "other material considerations" in any way circumscribed. But he is empowered to cause a local inquiry to be held, if he thinks fit, "for the purpose of the exercise of any of his functions" under the Act.

Ten years ago the purport of these provisions was clearly understood and generally accepted. It was assumed that an owner of land should be allowed to use it as he wished unless he would thereby prejudice a public interest, national or local. It was recognised that any particular development proposal (and especially a proposal to work land for minerals) might involve technical or policy considerations which the local planning authority, the developer himself, and even, perhaps, the Minister's own experts were not adequately qualified to evaluate, and on which the Minister must be free to consult other Government departments. But it was also recognised that there might be other local material considerations of which Whitehall knew nothing, and which the local planning authority might be unable or unwilling

ing to represent adequately at a statutory hearing. For this reason alone the Minister was given discretionary powers to hold a public local inquiry instead of a hearing confined to the two parties in dispute—the aggrieved appellant and the local planning authority. The decision rested solely with him, as the Minister responsible for "securing consistency and continuity in the framing and execution of national policy with respect to the use and development of land." It was his duty to determine how much restriction on the owner's proposed use of the land was warranted by the public interest, either on the grounds adduced by the local planning authority or on grounds made known to him by his own or his colleagues' advisers. But where he had reason to suppose that the public interests involved were largely of a local character, he might supplement this information by holding a public inquiry. This was simply a convenient way of ensuring that he was made aware of any other material consideration which any third party might care to bring to his notice; and the sole function of the inspector conducting the inquiry was to report to him the elicited facts and arguments.

In making this decision Parliament recognised that other people might have relevant personal interests in the way the appellant used his land. But Parliament clearly did not intend them to be regarded as "rights," qualifying for legal protection like the appellant's right of ownership and entitling their claimants to the status of parties to the dispute. If such had been its intention, Parliament would not only have made the holding of a public inquiry mandatory in all appeal cases, and given third parties the same opportunity (under the 1959 Act) as an aggrieved appellant to challenge the validity of the Minister's actions in a court of law. Parliament would also have been bound to give third parties a right to appeal to the Minister against any decision by a local planning authority to allow a proposed development; for such a decision would affect the interests of third parties in exactly the same way as a decision by the Minister to reverse, on appeal, a contrary decision by the local authority.

Yet it now seems to be taken for granted, everywhere outside Whitehall, that the Saffron Walden appeal inquiry was primarily the trial of a dispute between a third party and the appellant, and that the inspector was acting as a judge, whose verdict could not in justice be reversed until the third party had been given a chance to rebut the "evidence," factual or advisory, that prompted its reversal. A simple restatement of the original purpose of an appeal inquiry, and of the function

of the Minister's inspector, is either airily dismissed as an "odd" view or angrily condemned as an evasive circumlocution. The extraordinary bitterness which this case has evoked evidently springs from the fact that the Minister and his critics are arguing at cross-purposes. The Minister assumes that what was generally understood and accepted ten years ago is, or should be, understood and accepted still. But it is clear from the very phraseology his critics use that the original conception of an appeal inquiry's purpose has been completely erased from their minds.

In this, of course, the critics are only reflecting a public image. That the Government's spokesmen are unquestionably right in law and historical fact will avail them nothing. A public institution is not what its creators intended, or the law lays down, that it should be, but what it has become in the public mind.

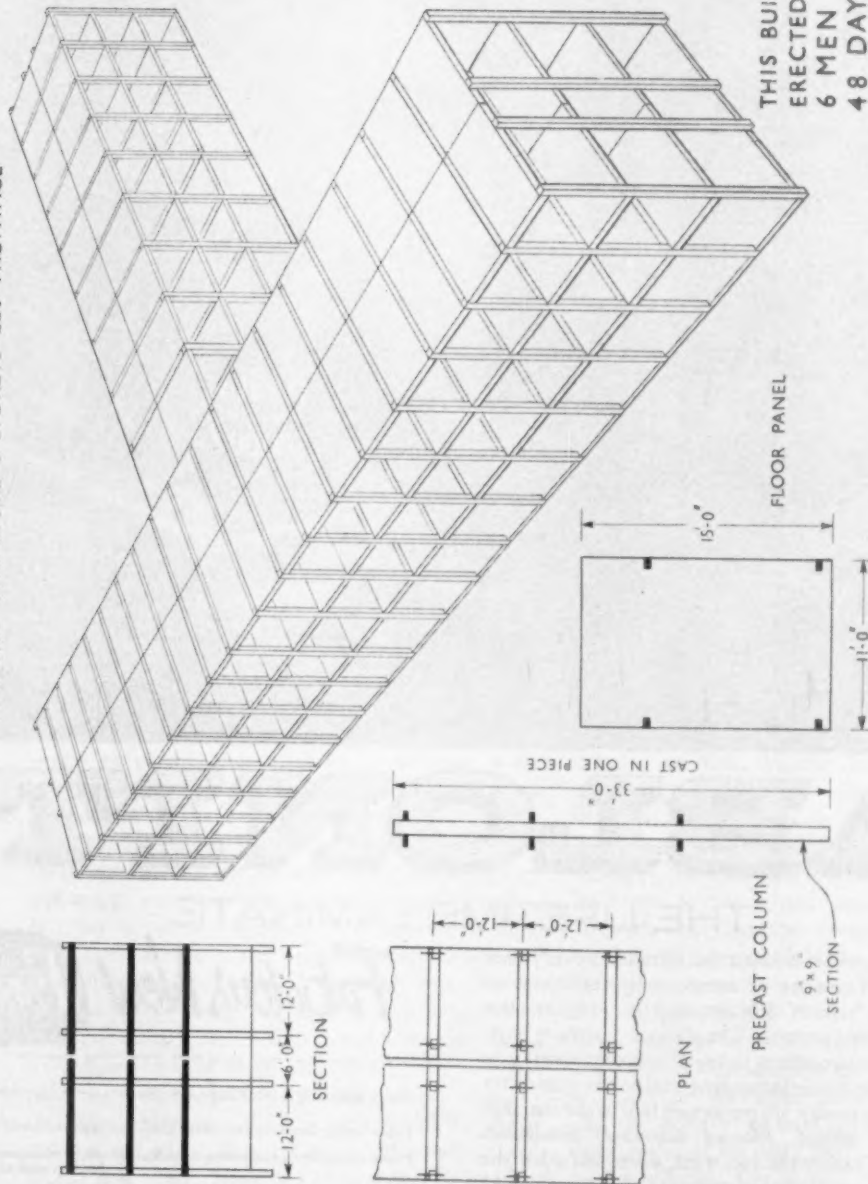
The Minister and his predecessors have themselves to blame for much of his present embarrassment. Of their own free will they made the holding of public inquiries the normal drill in appeal cases, allowed the lawyers to invest them with the atmosphere of court proceedings, encouraged inspectors to make recommendations as well as reports, and accepted the Franks Committee's suggestion that new factual evidence (as distinct from expert evaluation of factual evidence heard at the inquiry) should be referred for comment to all who participated in the inquiry. All this they did because they were commendably anxious that every private interest should find full expression, and that a mounting number of appeals should be expeditiously decided by a limited staff. But the djinn they so well-meaningly let out of the bottle is ungovernable; their staffs now have no time for planning, and soon will have no power to plan. The public conception of an appeal inquiry's function cannot logically be reconciled with a continued denial to third parties of the right to appeal against planning consents, or even, in the last analysis, with the principle of Ministerial responsibility for planning decisions.

A bold Minister might still stop the rot by instructing his inspectors to make no more recommendations, forcing public opinion at least to take cognisance of the original purpose of the appeal inquiries. But the resultant political storm would hardly dispose the Treasury to sanction the large staff increase the Minister would need to cope with the demands he would receive for the calling in of locally contentious development proposals for determination by himself, instead of by the local planning authority.

A former Deputy Secretary in the Minister's department was once asked to explain how the Minister could deal with 7,000 appeals a year, which worked out at one every seven minutes. "The Minister," he blandly replied, "is a very fast worker." But now that vast fortunes hang on planning decisions, and every other third party seems to have influential friends, the most diligent of Ministers could hardly be expected to court a heavy increase in his share of the work.

DEREK SENIOR

FINISHED STRUCTURE—3 STOREYS—228' FRONTAGE



The structure illustrated indicates just one of the services offered by the Modular Concrete Co. Ltd. A prefabricated building on a 12' x 12' column grid with a 6' corridor between. Plan form and height variable.

It consists of TWO components:—
33' columns cast in one length
15' x 11' floor slabs with
integrated perimeter beams

Columns contain fabricated steel shear connectors on to which the floor slabs seat directly without propping. The method makes for extremely quick and safe erection procedure and eliminates hazards often associated with connection of precast elements.

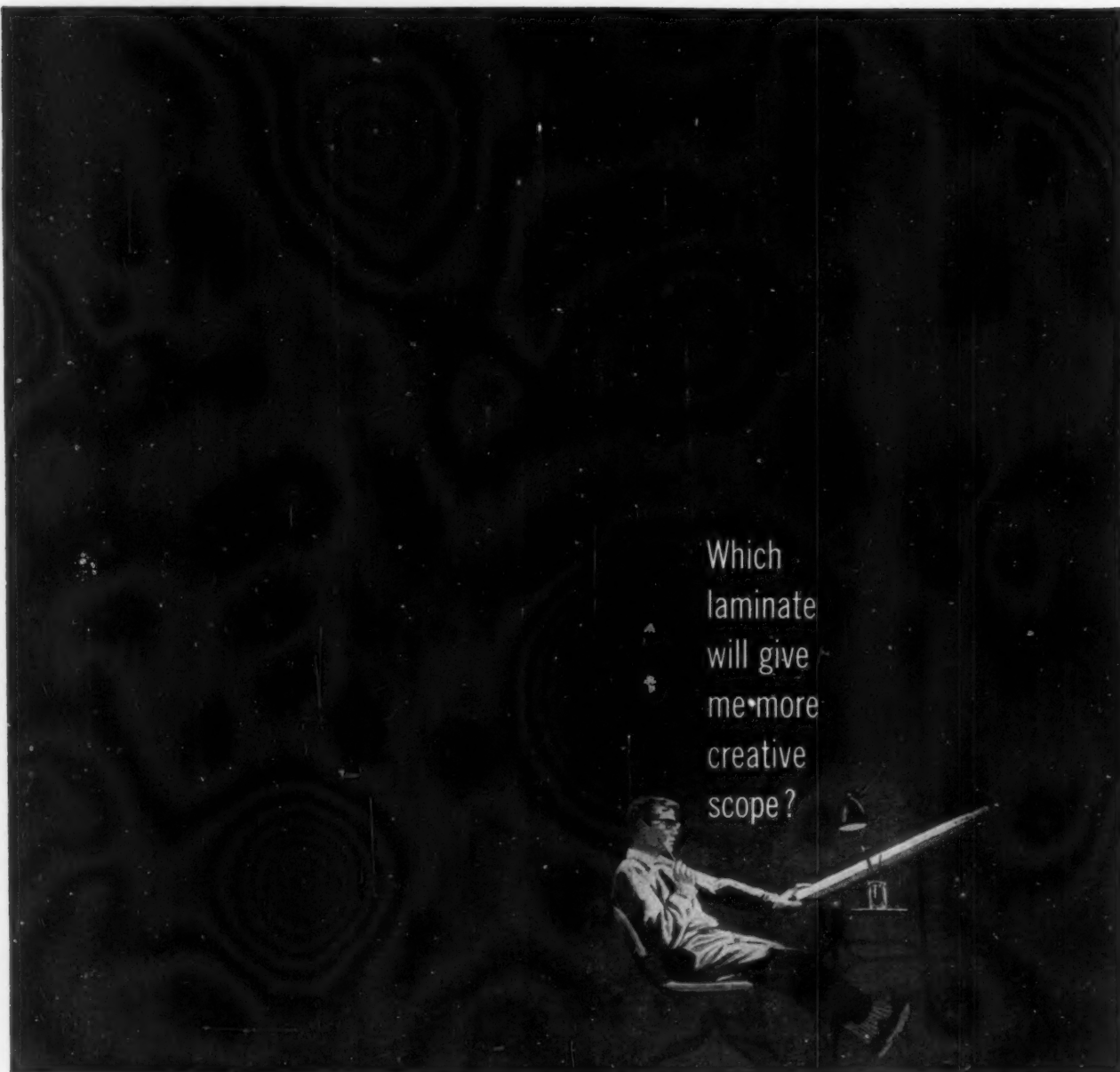
All services can be catered for quite simply.

Speed and economy result from SIMPLICITY AND REPETITION
 —attained by this example of OPTIMUM PREFABRICATION.

Write or 'phone Modular for further details.

THE MODULAR CONCRETE COMPANY LIMITED
 Construction Division, 1260 London Road, Norbury S.W.16
 TELEPHONE: POLLARDS 5000





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 _____

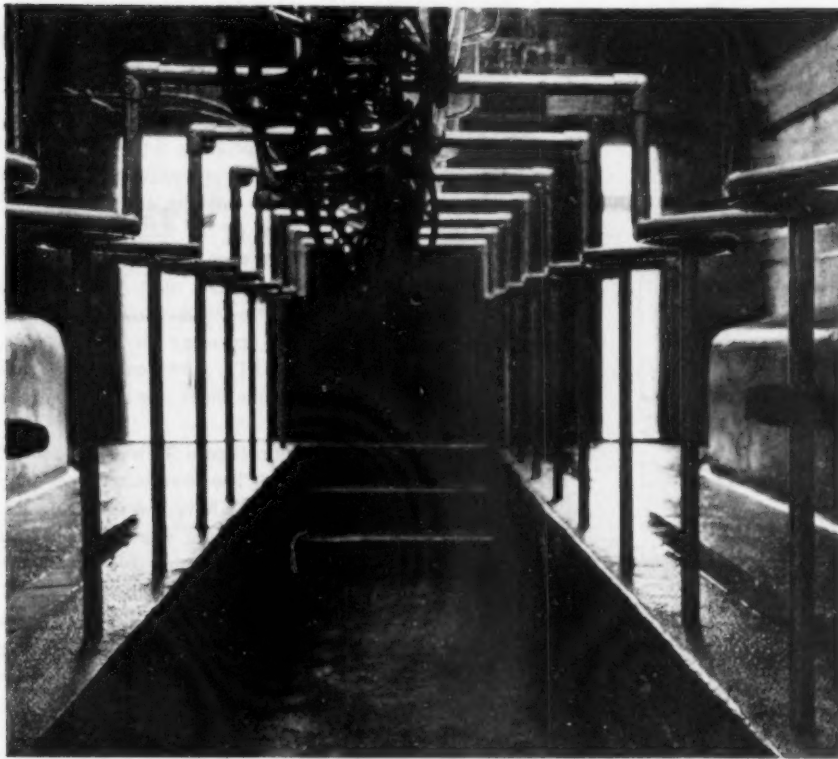
ADDRESS _____

AJ.11

Farm Buildings Competition

91

631·2



Few architects have any wide experience of farm building, despite the volume of work resulting from Government subsidies made available through the farm improvement scheme. This competition is an opportunity for the design characteristics to be examined of one important and very interesting building type, the milking parlour, even though none of the winning designs was by an architect

Herringbone parlour entered by E. C. Vestergaard at Whitchurch, Shropshire. The illustration shows the simplicity of the tubular steelwork in this type of parlour. The bottom of the operating pit wall is set back to provide toe space. The black tiles are used to determine the condition of the milk: any clotting will show up against the black surface. The assessors suggested that this parlour could be improved as a work place by painting

The Country Landowners' Association prepared a competition for the design of milking parlour layouts constructed since 1948. Entrants were asked to provide a simple drawing, photographs and milk production records of the parlour they entered. 123 schemes from 41 counties were judged by a farmer, Ted Owens, an architect, Peter Dunham, F.R.I.B.A., and a land agent, Nigel Elgar, F.L.A.S.

Traditionally dairy cattle have been housed in cowsheds, each cow being tied in a stall with a manger at the head and a dung passage at the rear. The cattle would spend the colder months of the year in the cowshed and they would be milked twice a day in the cowshed all the year round. The cowmen had to move to and from the tethered cattle feeding them, milking them and cleaning out the shed. A great deal of time and energy was required to handle cows in this way.

In order to reduce labour costs a method of handling dairy cattle known as the "yard and parlour system" was introduced. In principle the cattle move to the cowmen rather than the reverse, this principle is practical because dairy cattle are docile and can be trained to a routine easily and quickly. The yard and parlour system consists of a yard, which may be partly or fully covered, in which the cattle spend the winter months and where they are given their bulk rations of hay and silage. There is a lying area with a straw, sawdust, or (more recently) a slatted base, and a feeding area which can be easily cleaned. Adjoining the yard there is a smaller one in which the cattle are collected at milking time, and next to this the parlour

and dairy complex, usually a small building but containing a considerable amount of expensive equipment. The assessors of the competition concerned themselves with the planning of the system, but their chief object was to judge the detailed design of the parlours.

The primary function of the parlour is to milk the cows. In addition it is usual to feed them with their ration of concentrates while they are being milked. It has been pointed out that the yard and parlour system was introduced to reduce time and energy, but it must be remembered that as always when the machine meets the organic, there are organic rhythms which cannot be changed without detriment and must be respected. In the case of milking parlours, the design must start from the assumption that each cow will give her milk and eat her concentrates in her own time. Savings in the cowman's time and energy, therefore, can only be made through the planned handling of the animals before and after milking, and by ensuring the maximum flexibility of handling while they are being milked.

There are four common types of milking parlour in use, each is characterised by the plan of the stalls in which the cows stand while they are being milked and the capacity of each parlour can be varied to suit the size of the dairy herd and the routine adopted by the cowmen. The parlour is a multiple of milking machine units, one unit serving two standings. As a guide to the capacity of a milking parlour, it is generally accepted that one cowman can operate four units as well as feeding the necessary concentrates,

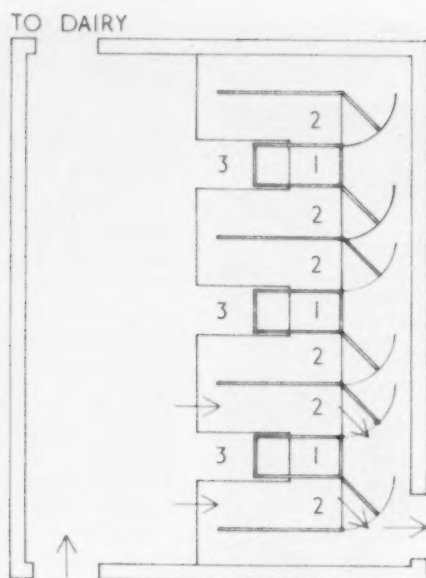


Figure 1.
Abreast Parlour. 3 Point—6 Stall.
1. Milking points and feed.
2. Stalls.
3. Operating level.
4. Arrows indicate flow.

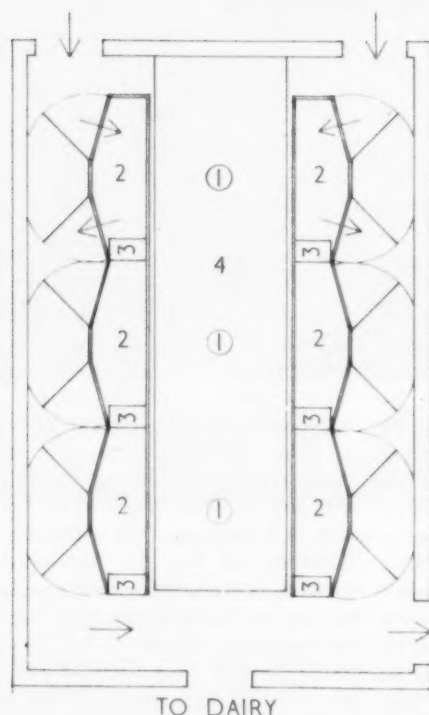


Figure 2.
Tandem Parlour. 3 Point—6 Stall.
1. Milking points.
2. Stalls.
3. Feed troughs.
4. Operating pit.
[Scale: $\frac{1}{4}$ " = 1' 0"]

and that between eight and twelve cows can be milked and fed by each unit in an hour. From the cowman's standpoint, work study indicates that it is desirable that milking should not last for more than $1\frac{1}{2}$ hours.

The diagrams show the four different types of parlours in use. The abreast parlour (figure 1) has been in use for about 25 years and its design has changed very little. The cows stand side by side in pairs on standings up to 14 in. above the operating floor. They enter from the back of each stall mounting the step and at the end of milking go out through a remotely-operated door at the front of the stall. The cowman works in the alley between each pair of cows.

The tandem parlour (figure 2) is a more recent type in which the cows stand head to tail on standings running parallel to the cowman's operating pit 30 in. below the level of the standings. The cows enter and leave the stalls by a passage on the outer side of the parlour at the higher level.

The herring bone parlour (figure 3) was introduced from New Zealand in 1958. The cows stand diagonally in simple stalls raised 30 in. above the operating pit, entering and leaving on the outer side. A great deal of attention is being given to adapting this type to the particular needs of farmers in the United Kingdom. So far only one firm manufacturing this equipment has arrived at satisfactory arrangements for feeding concentrates and recording the milk produced, but on account of its cheapness and simplicity, this type will possibly be used increasingly in the future.

The chute parlour (figure 4) is generally felt to be a compromise which is useful when it is necessary to fit a parlour into an existing building of narrow width. It lacks the advantages of the tandem or abreast parlours in which cows can be released individually. Equally, it lacks the simplicity of the more intensive herringbone type.

Of the schemes submitted for the competition 57 were abreast, 43 were tandems, all erected after 1956. Nine were chutes all erected after 1957, and 14 were herringbones all erected after 1959. The joint winning schemes submitted by Mr. E. C. Vestergaard and Mr. L. B. Thwaites were herringbone and tandem parlours respectively. The third prize went to Mr. Rex Paterson who entered a transportable milking bail which had been set down in concrete and fitted up as a two-point abreast parlour. A prize for ingenuity was awarded to the herringbone parlour entered by Mr. R. P. Walley. In addition five prizes of £5 and five "Highly Commended" certificates were awarded.

In commenting on the entries the assessors made a number of valuable criticisms. Among these it was suggested that more attention should be given to natural and artificial daylighting, that more attention should be paid to the selection of building materials and finishes, and that the arrangements for feeding, milk recording and access could be improved. The assessors state quite rightly that it is desirable to store concentrates at high level over the parlour. This, together with provision for the use of bulk milk tanks in the dairy, is in line with the market trend toward bulk delivery and collection.

JOHN VOELCKER



Crown 75 was too good... it earned us a black mark.

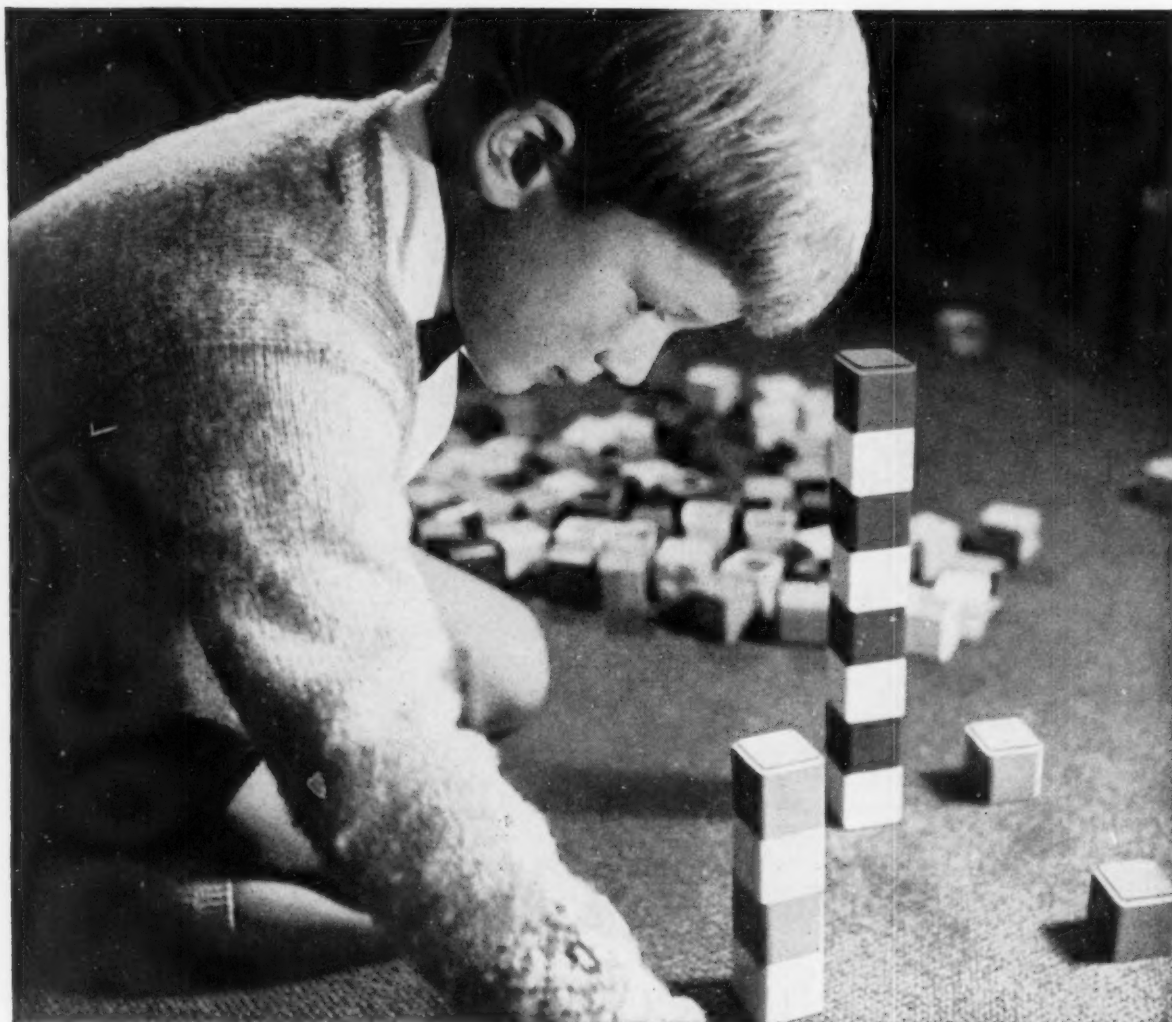
The demand for Crown 75 surprised even us:—and our trouble has been to keep pace with it. As a result we have got black marks for delivery. That phase is now over. We began making Crown 75 two years ago on one plant; a year ago we got a second into production; we now have three. Now, we can keep pace and can offer short deliveries. In fact, we are ready to deliver Crown 75 when you want it, where you want it and in any quantity you ask for. So you, the architect can specify Crown 75 with certainty of not having to accept 'or equal'—for there is none.

Builders will save on costs since Crown 75 can now be delivered to the site precisely when it is needed.

FIBREGLASS  CROWN 75

For all STRUCTURAL INSULATION

FIBREGLASS LTD · ST. HELENS · LANCS · TEL: ST. HELENS 4022



Construction problem

It isn't just a matter of putting them one on top of another.
There's more to it—the lie of the carpet and
the selection of colours and a very steady hand.
Maybe his urge to build will stay with him, and when he grows up
the chances are he will specify the same plastic
from which his blocks are made today—Shell's 'Carinex' polystyrene—
in all its grades and all its colours. 'Carinex' is
easy to mould, of good appearance, rigid and of high purity.
Its grades are tailor made to meet the needs of your
specific application or fabrication technique.



Shell Chemicals



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

SHELL and CARINEX are Registered Trade Marks.

P.S.I.

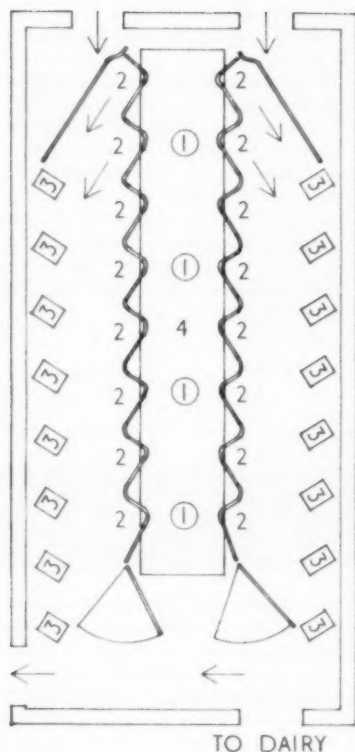
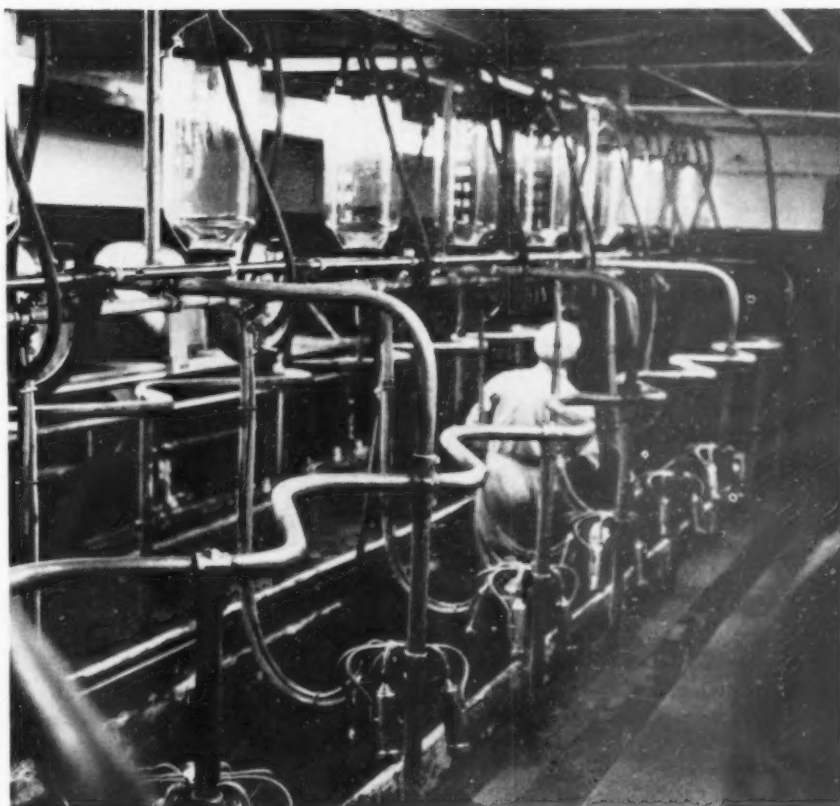


Figure 3.
Herringbone Parlour. 8 Point—16
Stall.

1. Milking points.
2. Stalls.
3. Feed troughs.
4. Operating pit.



Herringbone parlour entered by R. P.
Walley at Darnhall, Cheshire.
The illustration shows the clusters of
the milking units and the calibrated
recording jars suspended over the

operator's pit. Black tiles, similar to
those shown in figure 1, are set in the
floor and a 6-in.-high curb is fixed
along the sides of the standings to
protect the operator from kicks.

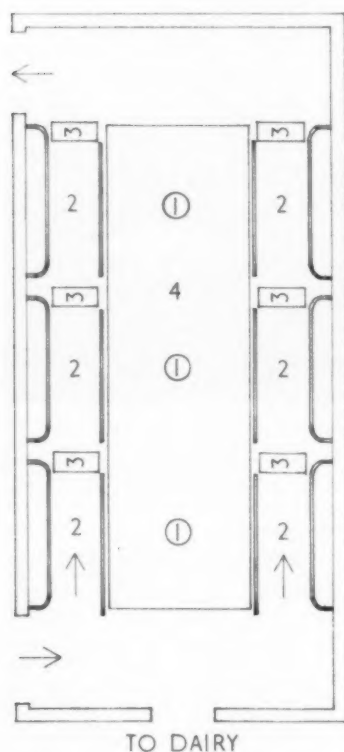
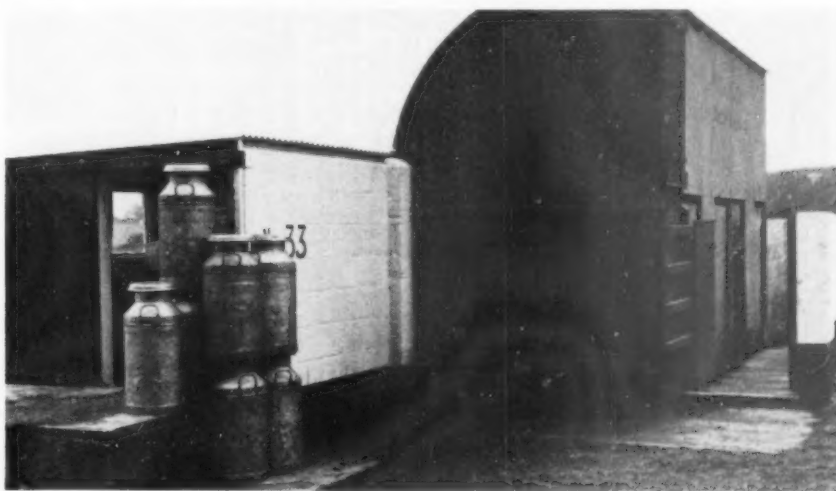
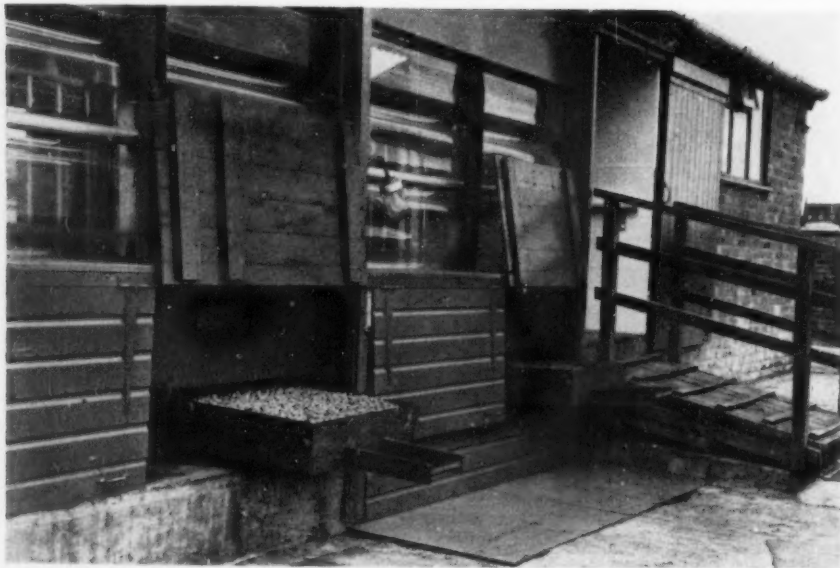


Figure 4.
Chute Parlour. 3 Point—6 Stall.
1. Milking points.
2. Stalls.
3. Feed troughs.
4. Operating pit.



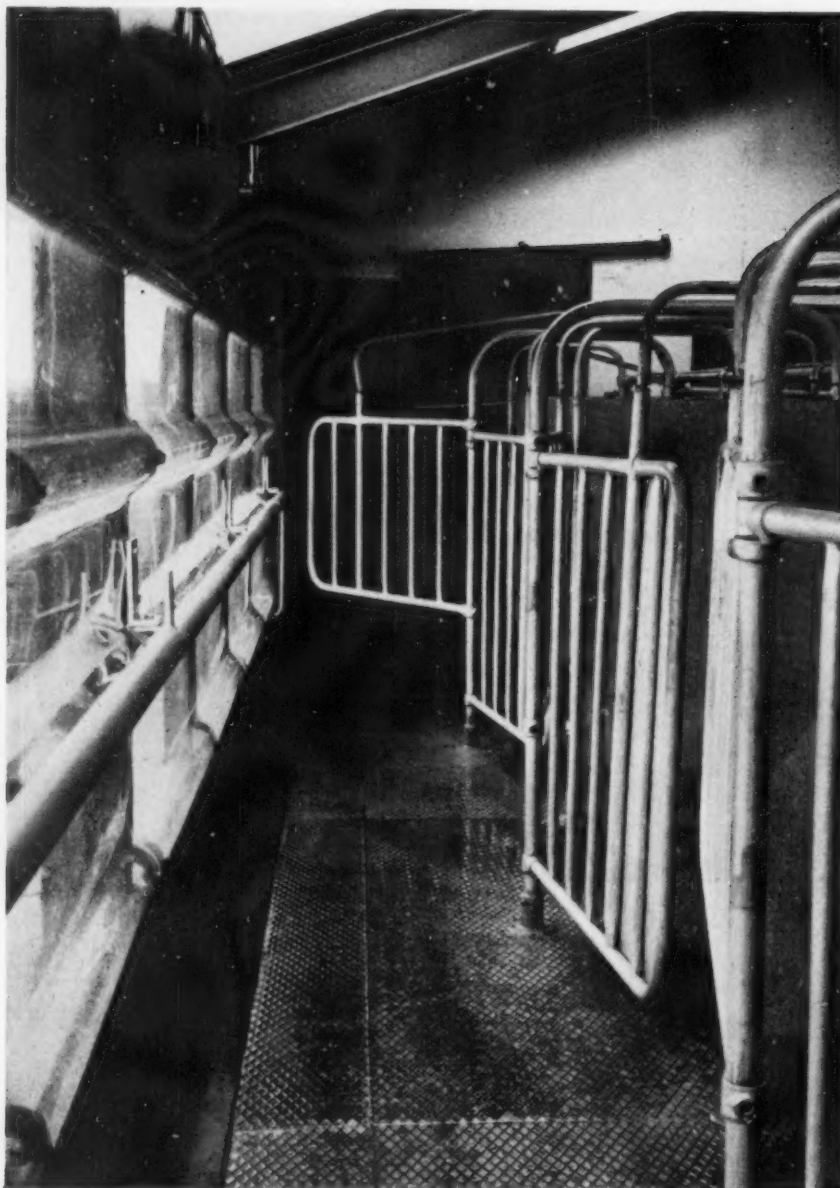
Abreast parlour entered by Rex
Paterson at Alresford, Hants.

This parlour is an adaptation of a
Hosier milking bail. A bail is a milk-
ing parlour set on skids or wheels
which can be moved by tractor. In
this instance the bail has been set
down on a permanent base. The con-
centrates are stored in the roof space
over the parlour. The building con-
structed of concrete blocks is the
dairy with a milk stand at the door.

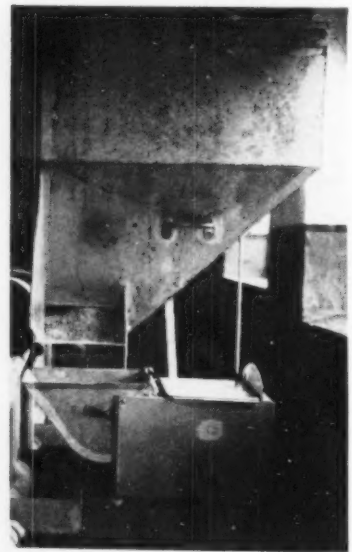


Tandem parlour entered by L. B. Thwaites and erected at Leamington Spa.

This is a steel framed building. Special hatches have been constructed under the standings to house sliding drawers each holding 1½ cwt. of concentrates. The concentrates are offloaded into the drawers which are then pulled through into the operator's pit for weighing and feeding. Good natural lighting is provided by the transparent plastic sheets used for the side walls.



The inside of the tandem parlour (figure 2). A comparison with the herringbone parlour (figure 1) shows that the tubular steel stalls are more elaborate in this type. Chequer plates have been used for the standings under which the concentrate drawers slide. The plastic wall sheeting is protected by a tubular steel rubbing rail.



Feeding equipment in the herringbone parlour entered by R. P. Walley. Concentrates are stored in bulk over the parlour. The hopper runs on overhead rails and is filled by a chute from the loft. No concentrates are spilled in the feeding operation because the outlet overlaps the weighing bucket which, in turn, overlaps the feeding bowl. The ration chart giving the amount of concentrates due to each cow can be seen by the weigh dial behind the weighing bucket.

THE INDUSTRY

*This week Brian Grant describes
a bituminous roofing material,
plastic rainwater goods,
filler panels faced with ceramic,
and application sheets on
the use of Fibreglass*

Bituminous Roofing

A material known as Veral, quite widely used on the Continent, is now available in this country. It is a bituminous roofing reinforced with a strong layer of woven glass fabric to limit thermal movement, and faced with a thin layer of either high purity aluminium or pure copper to prevent the loss of the waterproofing properties of the bitumen. Three stove enamelled colours are also possible on the aluminium faced material. Veral is used for covering barrel vaults and other curved structures, for roof decking generally, and for flashings and gutter linings of all kinds. Standard rolls are 11 yards long with an effective cover width of 37 inches. With the copper facing the cover width is reduced to 28½ inches. (Langley London Ltd., 163, Borough High Street, London, S.E.1.)

More Plastic Rainwater Goods

Following quickly on the Rymway plastic rainwater goods mentioned previously comes the ABM system, made with the same 4 in. gutter and 2½ in. downpipe size. P.v.c. is also used, but the jointing is slightly different and is made with mastic in paste or cord form. Fixing brackets are plastics covered steel which are spaced at 3 ft.

centres and have nibs which are turned over to grip the gutter. Standard colour is black, but painting to other colours is possible, though misguided, as the main argument in favour of plastic rainwater goods would seem to be that they should need no maintenance. (Associated Builders' Merchants Ltd., Upper Thames Street, London, E.C.4.)

Ceramic Faced Filler Panels

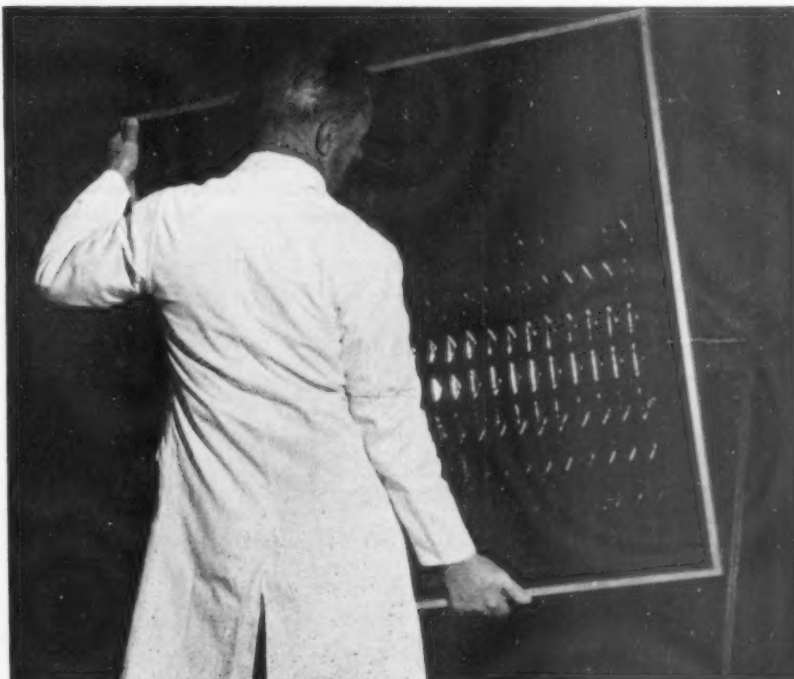
Carters are now producing ceramic tile and mosaic faced wall panels with an inner face of Asbestolux and a core of expanded foamed plastic, the panels being framed in an extruded aluminium section so they are rigid to handle on the site. Completely weathertight butt joints can be made between panels and the framing allows a positive fix. Sizes can be anything up to 20 sq. ft., and the normal thickness is 1½ in. Weight per sq. ft. is 4½ lb. and the

U value 0.20, these two figures varying slightly according to the material used for the surface finish. (Carter Panels Ltd., 157, Clapham Road, London, S.W.9.)

Uses of Fibreglass

The first of a new series of application sheets on the uses of Fibreglass have just been issued. They deal with the insulation of houses and flats and give details of the savings in heating costs in relation to the cost of the insulating material. The sheets also contain information about the type of Fibreglass to be used, the method of fitting it, and a short model specification. All types of construction are covered, pitched and flat roofs, walls, and both timber and concrete floors. Size of the sheets is to BS. 1311 and additional sheets, when published, will be sent direct to anyone who asks to be put on the list. (Fibreglass Ltd., St. Helens, Lancs.)

Carters ceramic faced panels, framed in extruded aluminium sections





"Cypher" designed by Elizabeth M. Gould. M1013 shown to scale.

A new collection of machine printed wallpapers has just been compiled by the London Office of The Wall Paper Manufacturers Limited 19/21 Mortimer Street, W.1. and is now available through wallpaper suppliers. Many prominent designers are associated with this collection among them Lucienne Day, Jacqueline Groag, Terence Conran, Joyce Storey and William Gear.

Modus wallpapers, because machine printed, are moderate in price, and in order to increase their usefulness to Architects and Interior Designers all these papers have been treated with a special protective coating.



MODUS

THE WALL PAPER MANUFACTURERS LIMITED
19/21 MORTIMER STREET LONDON W1

INFORMATION CENTRE

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

(95)

725-8

10.213 design: building types

STAGE LIGHTING

Stage Planning 1961. Published by Strand Electric & Engineering Co. Ltd., 29, King Street, London, W.C.2. Free on application. This is the fourth edition of the well-known booklet published by Strand Electric. It describes in a clear and readable form the minimum provisions that should be made for the production of plays in schools, village halls and similar buildings.

It is an interesting commentary on the literature of the subject that this booklet, published by a manufacturer of stage lighting equipment and issued free on application, is not merely the best of its kind, but one of the very few good books obtainable.

It does not confine itself to lighting only, but deals with the size of the stage, its height, provision of wing space, curtains, and so on.

The greater part of the book is concerned with the conventional proscenium stage, and more novel forms are dealt with rather briefly at the end. Without wishing to enter into the controversy on open and arena stages which has been adequately ventilated in *The Observer* and elsewhere, it is quite clear that the sponsors of the book prefer the proscenium, perhaps with a fair-size apron. They make the point that for any sort of open stage a square plan is more suitable than the usual rectangle, and the matter cannot be dealt with simply by building an ordinary type of hall and leaving out the proscenium.

Most school halls are practically useless for the production of plays, not always because too little money is spent on their equipment but because the functional requirement for an adequate stage is not properly understood by those who draw up the client's brief. It is not, therefore, surprising that the hall itself is so often treated purely as an environment for an audience *before the play begins*. What happens afterwards is either regarded as of secondary importance, or thought to be somebody else's business. Complaints are often brushed off with the statement that the production of plays is only one of the functions of the hall, which will be more frequently used for assembly, examinations, dances, films, concerts, and so on. All this is true, but apart from the vexed question of the flat versus the stepped floor for the seating, the provision of adequate facilities for plays will not

detract from any of the other uses of the hall, and in fact will enhance most of them.

It would do a great deal to improve matters if this booklet were carefully studied by everyone who has to do with the design of school halls, and it should be realised that, when the authors give certain dimensions as *minima*, they mean exactly what they say.

Ab4

624-04

19.238 construction: theory

STRUCTURAL TIMBER

The Strength Properties of Timber. HMSO. 3s. 6d.

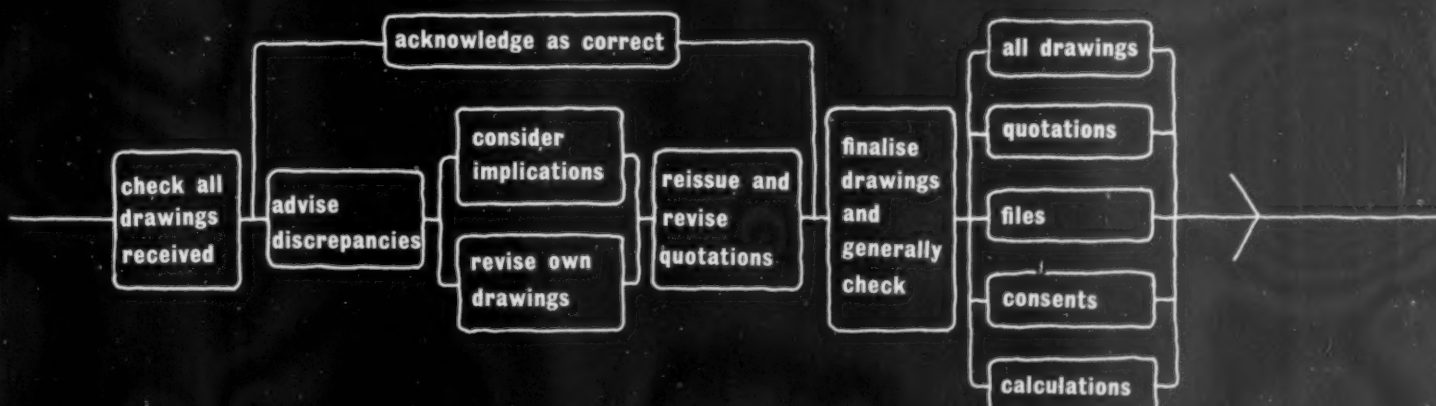
This is Forest Products Research Bulletin 45 which supersedes Bulletins 28 and 34 and is a description of the tests, method of testing, etc., in compiling a comprehensive list of strength properties of the various structural timbers.

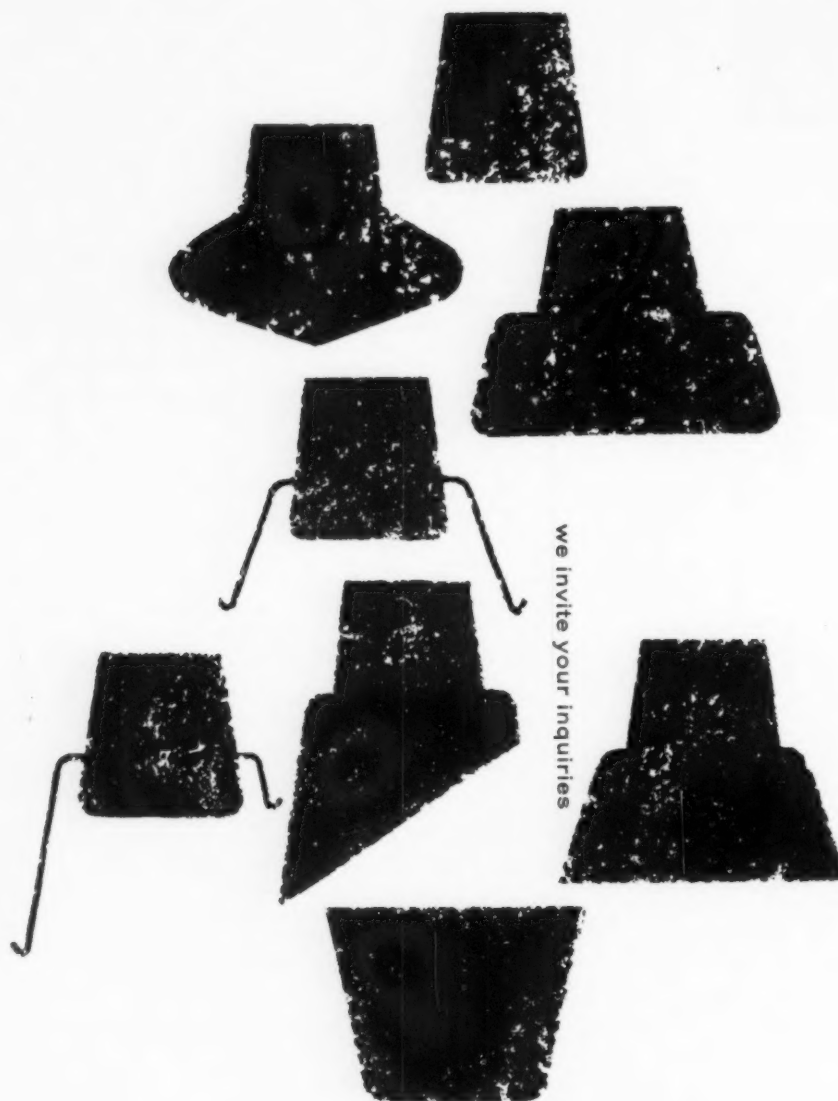
The mechanical tests employed are static bending, impact bending, compression parallel to the grain, hardness, shear parallel to the grain, and cleavage. Each test is considered separately, both the purpose of the test and the method being described.

Physical tests are also applied to give information on moisture content and specific gravity. These are characteristics which influence the strength of the timber and their effect is considered in some detail. Altogether information is provided on 172 home-grown and imported hardwoods and softwoods, and the Bulletin is copiously illustrated.

CORRECTION: Contract Administration

The wrong diagram was published in the issue 1.6.61 for *Contract Drawings 36* in this series. The correct diagram appears below and readers are asked to cut this out and paste it over the wrong diagram.





we invite your inquiries



SPERRIN



BERWYN

Summit range of fluorescent fittings by **FALKS**

FALKS, 81 FARRINGTON ROAD, LONDON, E.C.1. HOLBORN 7654. LONDON SHOWROOMS: 20/22 MOUNT STREET, PARK LANE, W.1. MAYFAIR 5871/3
AP144

Contract administration

quantity surveyor brief

37

Information required by the quantity surveyor for the preparation of his bills of quantities but not necessarily shown on the drawings will include:—

1. Appropriate fees related to statutory or other consents and copies of the consents where clauses need to be incorporated in the bills.
2. Copy of the building owner's or agents' specification requirements or tenancy conditions.
3. Details of party settlements such as access to adjoining properties.
4. Survey of existing site (should include levels and details of existing drainage) or buildings with photographs.
5. Details of access to the site or any site restrictions (not forgetting arrangements for inspection by the contractor when tendering).
6. All details of the contract, terms of agreement, including information on the form of contract to be used and, after discussion with your client, all the information on those clauses which make specific arrangements, such as insurance, arbitration and appendix items.
7. Whether a clerk of works is to be employed on the site.
8. Copies of all sub-contract or suppliers' estimates.

In briefing the quantity surveyor reference should be made to the check list

overleaf. Discuss with your client whether he wishes to include a provisional sum for photography (for his future maintenance information) in the bills as part of the contract in order that the contractor can arrange to have the work photographed at regular intervals. Include an allowance in the bills of quantities for all the tests you will require on materials during the course of the work and give details of the types of tests and methods of carrying them out.

The contractor will be pricing the work primarily on the basis of the information given to him in the bills. Without the fullest information he cannot accurately assess the cost of his work in building up his tender. It is essential, therefore, that everything he needs to know for the complete operation is included in the information given by you to the quantity surveyor at this stage for the preparation of fully comprehensive bills of quantities. This ensures that when the bills go out to competitive tender each contractor is provided with a clear picture of the whole job.

Although the date for handing all information to the quantity surveyor has been decided in the general programme, check with your client the final arrangements for the length of time to be devoted to:

1. Analysis and measurement of all drawings and information and preparation of bills by the quantity surveyor.

2. Printing of bills.

3. Tendering.

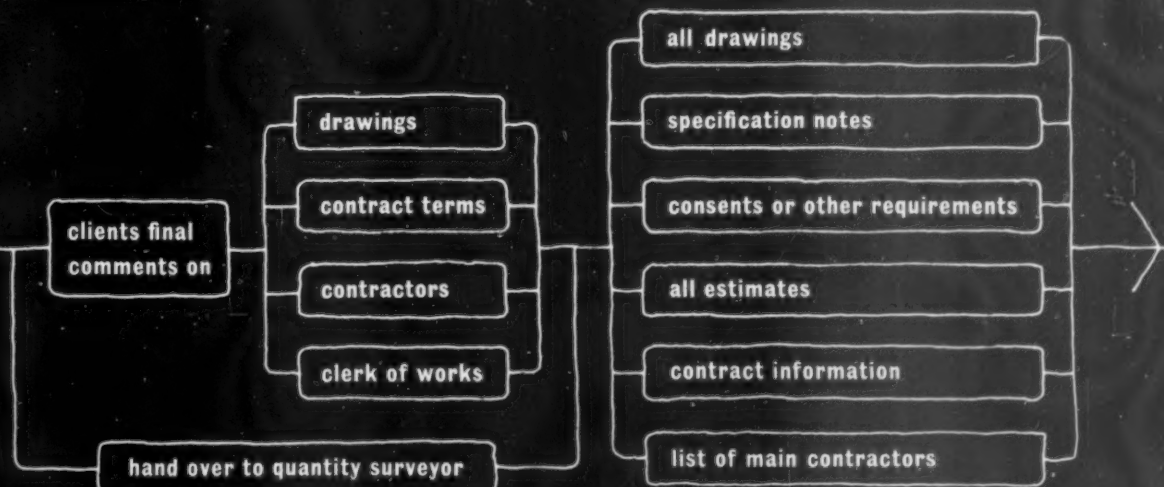
4. Contract negotiations and approval by client.

5. Placing the contract and starting work on site.

Send copies of all the completed drawings and information to your client for final comment and records immediately before issuing them to the quantity surveyor.

From the moment the quantity surveyor is given this contract information, copies of all letters, instructions and drawings issued from your office and any revised quotations or other information in respect of the contract should be sent to the quantity surveyor's office until the termination of the contract. This enables him to follow the course of the work and to abstract all relevant information as it affects measurement of the works in progress on the site or anything else which will affect the final account.

Inform the quantity surveyor at this stage how many copies of the bill of quantities will be required, remembering the client and his agents, the contractor and the clerk of works.



Contract administration**quantity surveyor brief****check list****General information**

1. List of contractors invited to tender.
2. Date for sending out tender documents.
3. Date for receipt of tenders.
4. Access for contractors to inspect site.
5. Employer's name.
6. Address of site.
7. Form of contract to be used.
8. Any amendments to standard form.
9. Period of final measurement (clause 9).
10. Method of paying quantity surveyor's fees (clause 10).
11. Defects liability period (clause 12 and 24(f)).
12. Liability for insurance (clause 15).
13. Date for possession (clause 16).
14. Date for completion (clause 16).
15. Liquidated and ascertained damages (clause 17).
16. Period of interim certificates (clause 24(a)).
17. Period for honouring of certificates (clause 24(a)).
18. Percentage of certified value retained (clause 24(c)).
19. Limit of retention fund (clause 24(d)).
20. Method of dealing with retention moneys (clause 24(d)).
21. Date of tender for purposes of fluctuations (clause 25(a)), if not a fixed price contract.

Preliminaries

1. Scope of contract.
2. Programme of work.
3. Office for clerk of works if required.
4. Procedure for paying for clerk of works' telephone.
5. Foreman's hut.
6. Particulars of hoardings or gantries required and advertising rights on same.
7. Temporary screens or other protections.
8. Any special watching and lighting.
9. Provision for supply of samples.
10. Provision for testing materials.
11. Temporary roads.
12. Storage of materials on site.
13. Welfare arrangements for workmen.
14. Particulars of other works expected to be in progress on or adjacent to the site.

15. Particulars of any other special conditions not normally anticipated.
16. Contingencies.

Excavator

1. Datum level.
2. Site levels and floor levels.
3. Description of sub-soil.
4. Trial holes.
5. Water table.
6. Return, fill in and ram.
7. Disposal of surplus soil.
8. Hardcore:
 - (a) type of material
 - (b) maximum size of material
 - (c) thickness of beds
 - (d) weight of roller to be used
 - (e) finishing for concrete.
9. Building paper.

Concretor

1. Description of all materials.
2. Proportions of mix and where to be laid.
3. Tests.
4. Finishes to formwork.
5. Reinforcement.
6. Expansion and construction joints.
7. Damp proofing.
8. Hardening and dust proofing.
9. Key for plaster.
10. Precast concrete.
11. Hollow tile and precast concrete slabs.
12. Prestressed concrete.
13. Pavement lights.
14. Column guards and masonry anchors.
15. Piling.

Bricklayer

1. Types of brick and where to be used.
2. Brick bonds.
3. Mortar mixes.
4. Pointing.
5. Ties in cavity walls (type and spacing).
6. Damp proof courses.
7. Partitions.
8. Decorative brickwork.
9. Air bricks.
10. Flue linings.
11. Throat units.
12. Chimney pots.
13. Soot doors.
14. Reinforcement.

Contract administration

quantity surveyor brief

check list

15. Method of closing cavities:

- (a) at jambs
- (b) at sills.

16. Vertical joints between brickwork and concrete.

17. Vertical joints between brickwork and partition blocks.

18. Horizontal joints between partitions and ceilings.

19. Glass blocks.

20. Gas flues.

21. Fireplaces (including fires, back boilers, stoves, surrounds and provision for gas ignition).

22. Slate, terrazzo or other sills.

- 1. British Standard specification.
- 2. Thickness (and heights of skirtings).
- 3. Number of layers.
- 4. Colour.
- 5. Finish.
- 6. Felt underlay.
- 7. Reinforcement.

Asphalter

horizontal tanking,
vertical tanking,
roof covering,
roof skirtings,
pavings,
skirtings to paving.

- 1. Description.
- 2. Mix.
- 3. British Standard specification.
- 4. Thickness and size of units.
- 5. Colour.
- 6. Screed or floated bed.
- 7. Bedding and jointing.
- 8. Adhesive.
- 9. Hardening, dust proofing and sealing.
- 10. Polishing.
- 11. Non-slip finish
- 12. Expansion joints and separation strips.
- 13. Skirtings to paving.
- 14. Staircase and step finishes (treads, risers, strings, skirtings, nosings, landings).

Pavior

- 1. Quarry.
- 2. Bed.
- 3. Mix.
- 4. Aggregate.
- 5. Colour.
- 6. Texture and finish.
- 7. Mortars.
- 8. Bonding to backing.
- 9. Treatment of back of stone.
- 10. Cramps.
- 11. Dowels.
- 12. Joggles.

Mason

natural stone (each type)
artificial stone,
reconstructed stone.

natural stone
(each type)
artificial stone
reconstructed stone.

13. Lengths of stones (sections as on drawings):

- (a) copings
- (b) sills and string courses.
- (c) Mullions and jambs
- (d) columns and pillars.

14. Protection.

15. Sculpture and carving:

- (a) where to be executed (on or off site).
- (b) weight if executed off site.

Roofer

tiles,
slates.

- 1. Description of materials.
- 2. Size.
- 3. Gauge.
- 4. Method of fixing.
- 5. Size of battens.
- 6. Finish at eaves.
- 7. Finish at verges.
- 8. Finish at abutments.
- 9. Ridges, including ends.
- 10. Hips, including ends.
- 11. Valleys.
- 12. Special fittings, e.g. glass tiles and vent tiles.
- 13. Undertelt.

asbestos cement,
corrugated metal,
corrugated plastics.

- 14. Description of material.
- 15. End and side laps.
- 16. Method of fixing.
- 17. Finish at eaves.
- 18. Finish at verges.
- 19. Finish at abutments.
- 20. Ridges, including ends.
- 21. Hips, including ends.
- 22. Valleys.
- 23. Expansion joints.
- 24. Special fittings, e.g. ventilators and roof lights.

felt roofing.

- 25. Type of felt.
- 26. Number of layers.
- 27. Weight of each layer.
- 28. Bonding.
- 29. Applied finish.
- 30. Lapping and jointing.
- 31. Falls.
- 32. Finish at eaves.
- 33. Finish at verges.
- 34. Finish at abutments.
- 35. Treatment of ridges and hips.
- 36. Treatment of valleys.
- 37. Treatment of outlets.
- 38. Working around pipes and balusters.

Contract administration

quantity surveyor brief

check list

39. Roof decking.

For lead and other sheet metal roofings, see "External plumber."
For asphalt roofing, see "Asphalter."

1. Type and/or stress grading of timber. **Carpenter**
2. Preservatives.
3. Bolts and other connectors.
4. Strutting for floor joists.
5. Battens to edges of suspended ceilings.
6. Noggings for plasterboard and other linings.
7. Fittings.
8. Insulation in floors and roofs.
9. Snowboards and gang boarding.
10. Cistern casings.
11. Matchboarding, thickness, width and bearers.
12. Asbestos cement wall and ceiling linings, type and fixing.
13. Wall boards, type, thickness and fixing.

1. Types of materials:

- (a) softwoods
- (b) hardwoods
- (c) ply, blockboard, chipboard, hardboard
- (d) plastic boards.

2. Timber.

3. Jointing.
4. Margins.
5. Finish.

Joiner

- | | |
|---|-------------------|
| } | boarded flooring, |
| | strip flooring, |
| | block flooring, |
| | parquet flooring. |

6. Particulars of the following where not shown on detail drawings or schedules:

- (a) doors and frames
- (b) windows and frames
- (c) borrowed lights
- (d) roof lights
- (e) hatches
- (f) skirtings
- (g) architraves and cover fillets
- (h) cornices
- (i) dados
- (j) sub-frames
- (k) cupboard units
- (l) pelmets
- (m) cloak rails
- (n) pipe casings and access doors

- (o) backboards
- (p) picture rails
- (q) window boards
- (r) staircases
- (s) shelving
- (t) trap doors

Ironmonger

1. Information on the following where not shown on detail drawings or schedules:

- (a) ironmongery for doors
- (b) ironmongery for windows
- (c) ironmongery for fittings
- (d) fixing cramps for joinery
- (e) dowels for joinery
- (f) water bars
- (g) shelf brackets
- (h) handrail brackets
- (i) hat and coat hooks
- (j) mat wells and mats
- (k) lettering and numerals
- (l) curtain tracks
- (m) special ironmongery.

Ironworker

1. Structural steel:

- (a) shop finish
- (b) site treatment
- (c) holding down bolts.

2. Metal windows, doors and roof-lights:

- (a) material
- (b) section
- (c) fixing lugs
- (d) shop finish
- (e) glazing beads
- (f) ironmongery
- (g) gearing.
- (h) curtain rod brackets
- (i) bedding and pointing
- (j) sub-frames and sills.

3. Curtain walling.

4. Particulars of the following when not shown on detail drawings:

- (a) railings and balustrades
- (b) staircases and balconies
- (c) cat ladders and gangways
- (d) fire doors
- (e) shutters
- (f) collapsible gates
- (g) other doors and gates
- (h) ventilators and grilles
- (i) shop fittings
- (j) steel partitions
- (k) blinds
- (l) refuse hoppers and fittings.

Contract administration**quantity surveyor brief****check list**

- | | | | |
|---|------------------|--|--|
| <ol style="list-style-type: none"> 1. Metal lathing: <ol style="list-style-type: none"> (a) gauge and mesh (b) surface finish (c) method of fixing. 2. Plasterboard: <ol style="list-style-type: none"> (a) type of board (b) method of fixing (c) jointing and scrimming (d) plaster finish. 3. Acoustic tiles. 4. Keying fluids. 5. Ceiling and wall plaster: <ol style="list-style-type: none"> (a) number of coats (b) type and mix of plaster for each coat (c) finish to salient angles. 6. Coves and cornices, including bracketing. 7. Fibrous plaster. 8. Rendering: <ol style="list-style-type: none"> (a) types (b) number of coats or thickness (c) mix for each coat (d) method of application (e) finish. 9. Screeds: cement and sand: <ol style="list-style-type: none"> (a) mix (b) thickness and falls (c) waterproofing. 10. Screeds: lightweight: <ol style="list-style-type: none"> (a) aggregates (b) mix (c) thickness and falls (d) toppings. 11. Cement glaze. 12. Terrazzo: <ol style="list-style-type: none"> (a) aggregate and matrix (b) thickness (c) mix (d) finish (e) separation strips (f) external angles (g) internal angles. 13. Wall tiling: <ol style="list-style-type: none"> (a) type and quality (b) colour (c) thickness and size (d) external angles (e) internal angles (f) bands (g) method and type of bedding, jointing and pointing. | Plasterer | <ol style="list-style-type: none"> Plumber <ol style="list-style-type: none"> lead, zinc, copper, aluminium. flashings, soakers, aprons, cavity wall d.p.c.'s and gutters. rainwater gutters, rainwater pipes. external water main, rising main, cold water services, hot water services, overflows, wastes, soil pipes, vent pipes, expansion pipes. cold water, hot water. | <ol style="list-style-type: none"> 1. Weight. 2. Maximum size of sheets. 3. Methods of jointing and fixing. 4. Underlay. 5. Material. 6. Weight or gauge. 7. Wedging for flashings. 8. Material. 9. Size. 10. Type. 11. Method of fixing. 12. Method of jointing. 13. Connection of pipes to drains. 14. Roof outlets. 15. Rainwater heads. 16. Gratings. 17. Connection to company's main. 18. Pipes. 19. Material. 20. Method of jointing. 21. Method of fixing. 22. Type of fittings. 23. Stop valves. 24. Bib valves. 25. Drain-off cocks. 26. Safety valves. 27. Ball valves. 28. Meters. 29. Sanitary fittings: <p>Give particulars or state name of supplier and reference to quotation and/or schedule.</p> 30. Traps: <ol style="list-style-type: none"> (a) material (b) type. 31. Cisterns and tanks: <ol style="list-style-type: none"> (a) type and quality (b) capacity (c) size 32. Lagging and other insulation: <ol style="list-style-type: none"> (a) pipes (b) cisterns. |
|---|------------------|--|--|

Contract administration**quantity surveyor brief****check list**

1. Type of glass.
2. Weight or thickness.
3. Quality.
4. Method of glazing.
5. Patent glazing.
6. Roof lights.
7. Mirrors and other glazing accessories.

Glazier

1. Name of paint manufacturer.
2. Preparation of surfaces.
3. Primer.
4. Type of paint and number of undercoats.
5. Type of paint and number of finishing coats.
6. Staining.
7. Wax polish.
8. French polish.
9. Lettering.
10. Other types of finish.
11. Paper hanging.

Painter

The quantity surveyor should be supplied with the name and address of the consultant, if any, for each of the following services:—

1. Electrical.
 2. Gas.
 3. Heating.
 4. Hot water.
 5. Ventilating.
 6. Fire.
 7. Lifts.
 8. Mechanical plant.
 9. Kitchen equipment.
 10. Lightning conductors.
 11. Telephones.
 12. Bell and call systems.
 13. Radio and television system.
- State the method by which each service will be dealt with in bill:
- (a) measured in bills of quantities
 - (b) P.C. from sub-contract bills of quantities
 - (c) P.C. from specification and drawings, or by selection
 - (d) P.C. as (c) but design developed by sub-contractor
 - (e) P.C. from artist or craftsman.
 - (f) P.C. from local authority or public authority.

Specialist services**Builder's work
in connection
with services**

1. Stop cock and valve pits:
 - (a) sizes
 - (b) materials
 - (c) covers.
2. Bases for pumps, motors, boilers and other equipment.
 - (a) sizes
 - (b) materials
 - (c) mortices
 - (d) special finishes
 - (e) ash pits.
3. Ducts in floors, walls:
 - (a) sizes
 - (b) pipe bearers
 - (c) filling
 - (d) covers
 - (e) access traps.
4. Pipe casings:
 - (a) sizes
 - (b) materials
 - (c) access panels.
5. Tank bearers.
6. Tank casings.
7. Pipe sleeves.
8. Hangers and brackets to be fixed by general contractor.
9. Soot doors.
10. Draught stabilisers.
11. Backboards for sanitary fittings and equipment.
12. Floor channels:
 - (a) type
 - (b) size
 - (c) outlets
 - (d) covers.
13. Bearers or frames for electric switch gear.
14. Cupboards for electric switch gear and meters.
15. Fuel boards and baffles.
16. Fuel for testing installation.
17. Fittings when not included with installation:
 - (a) lighting fittings
 - (b) cookers
 - (c) refrigerators
 - (d) wash boilers
 - (e) water heaters
 - (f) gas fires
 - (g) other unit heaters
 - (h) pumps
 - (i) fuel bins
 - (j) water softeners
 - (k) machinery
 - (l) kitchen equipment
 - (m) fire fighting equipment.

Contract administration

quantity surveyor brief

check list

18. Paint on pipes (if different from that specified in "painter")

(a) cold water pipes
(b) waste and soil pipes
(c) hot water pipes
(d) heating pipes
(e) gas pipes
(f) electric conduit
(g) other service pipes.

1. Type and grade of pipe.
2. Jointing.
3. Particulars of bed or surround.
4. Land drains.
5. Gullies and traps:
 - (a) types
 - (b) gratings
 - (c) sealing plates
 - (d) raising pieces
 - (e) inlets
 - (f) kerbs.
6. Cleaning eyes.
7. Connections to sewer:
 - (a) to be done by
 - (b) approximate cost.
8. Manholes.
9. Fresh air inlets.
10. Interceptors for petrol and other special effluents.
11. Septic tanks.
12. Cesspools.
13. Soakaways.
14. Sewage disposal plants.

Drains

rainwater drains,
soil drains,
drains for special effluents.

External works

roads,
paths,
other pavings.

1. Excavation or filling.
2. Base—material and thickness.
3. Finish—material and thickness.
4. Weight of roller for consolidation.
5. Expansion joints.
6. Kerbs, channels, bollards.

boundary walls,
fences.

7. Type.
8. Height.
9. Foundations or bases.
10. Piers or posts.
11. Filling between piers or posts.

12. Gates.
13. Crossovers.
14. External signs.
15. Road lighting:
 - (a) standards
 - (b) fittings
 - (c) bases for standards
 - (d) trenches for cable
 - (e) other work in connection.
16. Laying service mains:
 - (a) water
 - (b) gas
 - (c) electricity.
17. Other external work in connection with services.
18. Landscaping:
 - (a) preparation
 - (b) seeding and turfing
 - (c) hedging and ditching
 - (d) planting of trees, shrubs and flowers
 - (e) protection of trees, shrubs and hedges.

Contract administration

completed quantities

38

When the bills of quantities have been completed in draft form and before they are printed you should go through the documents with the quantity surveyor, carefully cross-checking all the drawings and transferring to your own drawings in the form of notes information which amplifies that already on the drawings. These, related to their appropriate sections of construction, ensure that the two sets of documents are complementary and that the man working from the drawing on the site is as much aware of the relevant bills of quantities notation as the general

foreman. Whilst it is appreciated that the contractor is responsible for conveying all information to sub-contractors and site operatives, there is a case for duplicating information from one document to another where there is any likelihood of the bills of quantities not being available to the person working from the drawing. An example is joiners' shop work. This general check also ensures that the architect responsible for the day-to-day running of the contract and the assistants dealing with the drawings in the office see the relationship between the bills of

quantities and each drawing and become fully acquainted with the bills before work starts on the site.

When the bills of quantities are printed send a copy or copies to the client, as pre-arranged, for his information and records. When he has approved them and depending upon arrangements made in your preliminary discussions, either instruct the quantity surveyor to issue them to contractors for tenders or prepare the appropriate documents for issuing from your own office.

check draft Bills
against all drawings

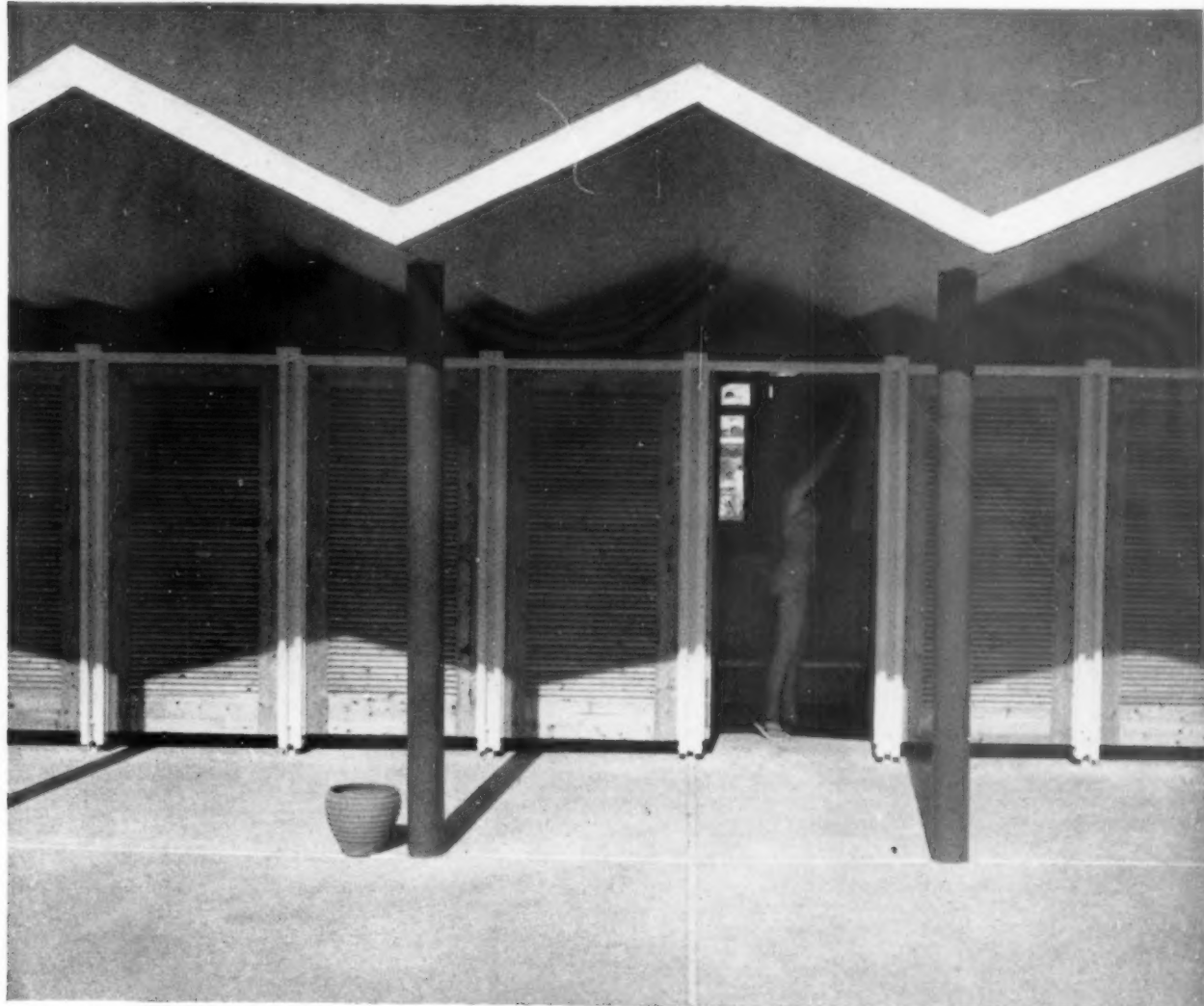
add information
to drawings

printing time
for Bills

client to approve completed
Bills of Quantities before issue

CHANGING CUBICLES: BEACH NEAR ATHENS

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



These cubicles show an interesting use of folded slab reinforced concrete for providing a canopy. This canopy is independent of the cubicles themselves and, therefore, allows a free circulation of air. The m.s. plates which support the slab at the column heads are shaped to the same profile as the slabs: their under-surfaces are flush with the underside of the slab and they are painted the same colour as the slab.

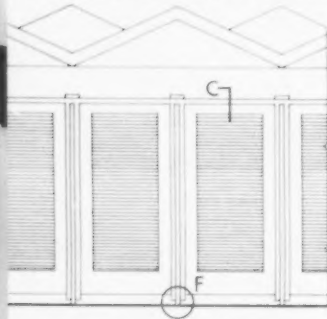
working detail

CHANGING CUBICLES: BEACH NEAR ATHENS

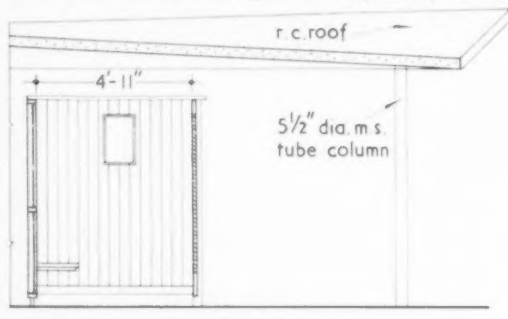
P. A. Sakellarios, E. Vourekas and P. Vasiliades, architects (material supplied by G. Urégian)

(74)

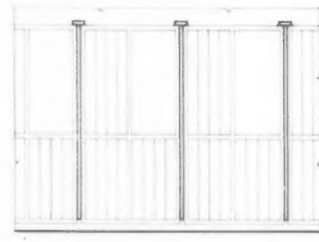
MISCELLANEOUS: 42



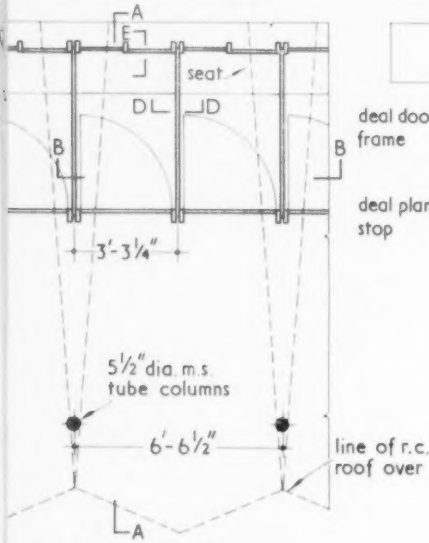
ELEVATION. scale $\frac{3}{16}''=1'-0''$



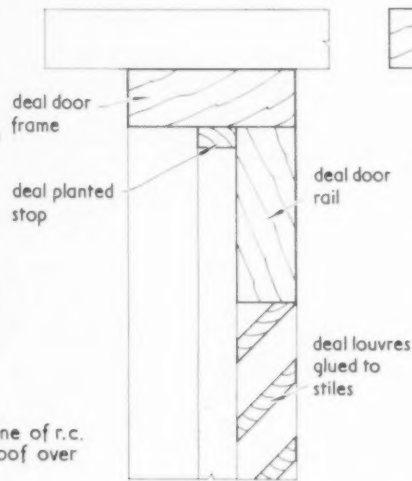
SECTION A-A. scale $\frac{3}{16}''=1'-0''$



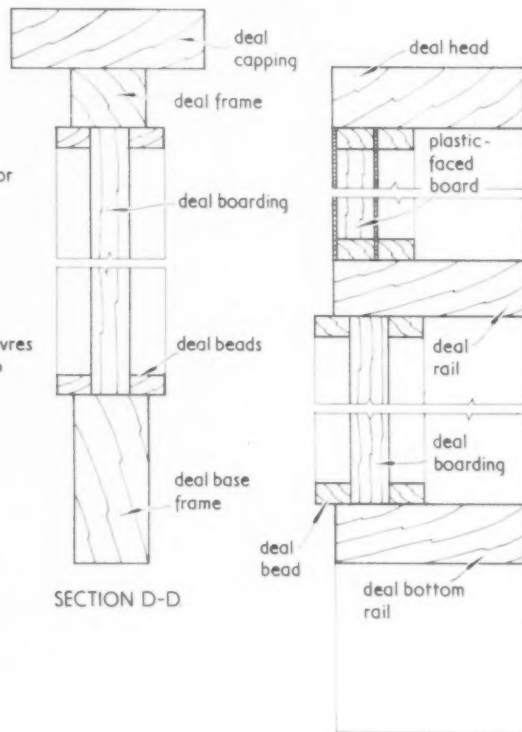
SECTION B-B.



PLAN. scale $\frac{3}{16}''=1'-0''$

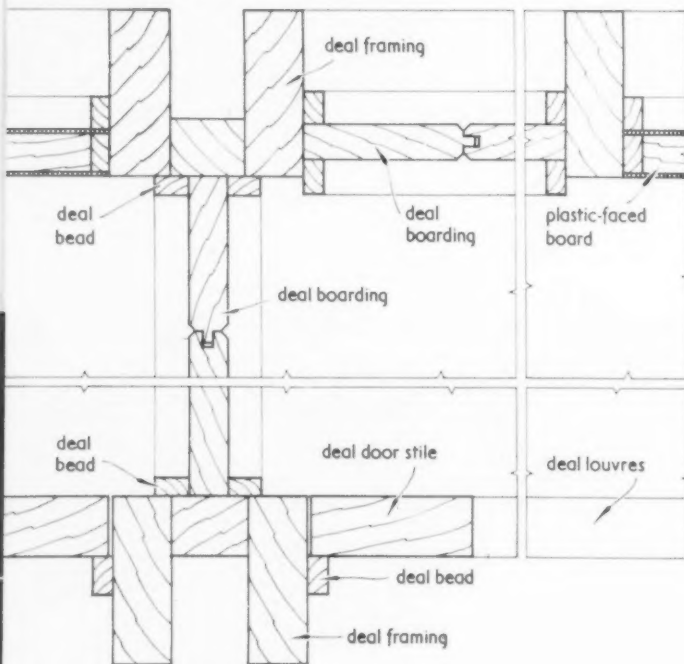


DETAIL AT C.

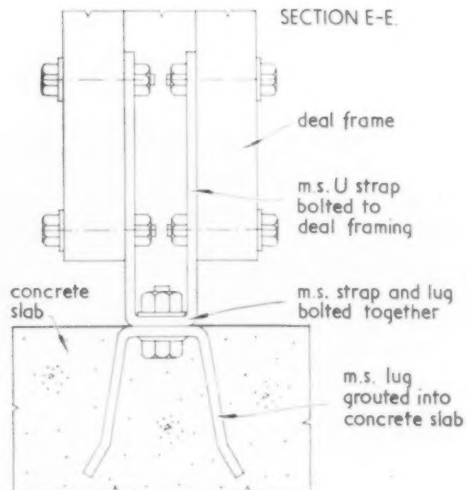


SECTION D-D

SECTION E-E.



PLAN. scale $\frac{1}{4}$ full size



DETAIL AT F. scale $\frac{1}{4}$ full size

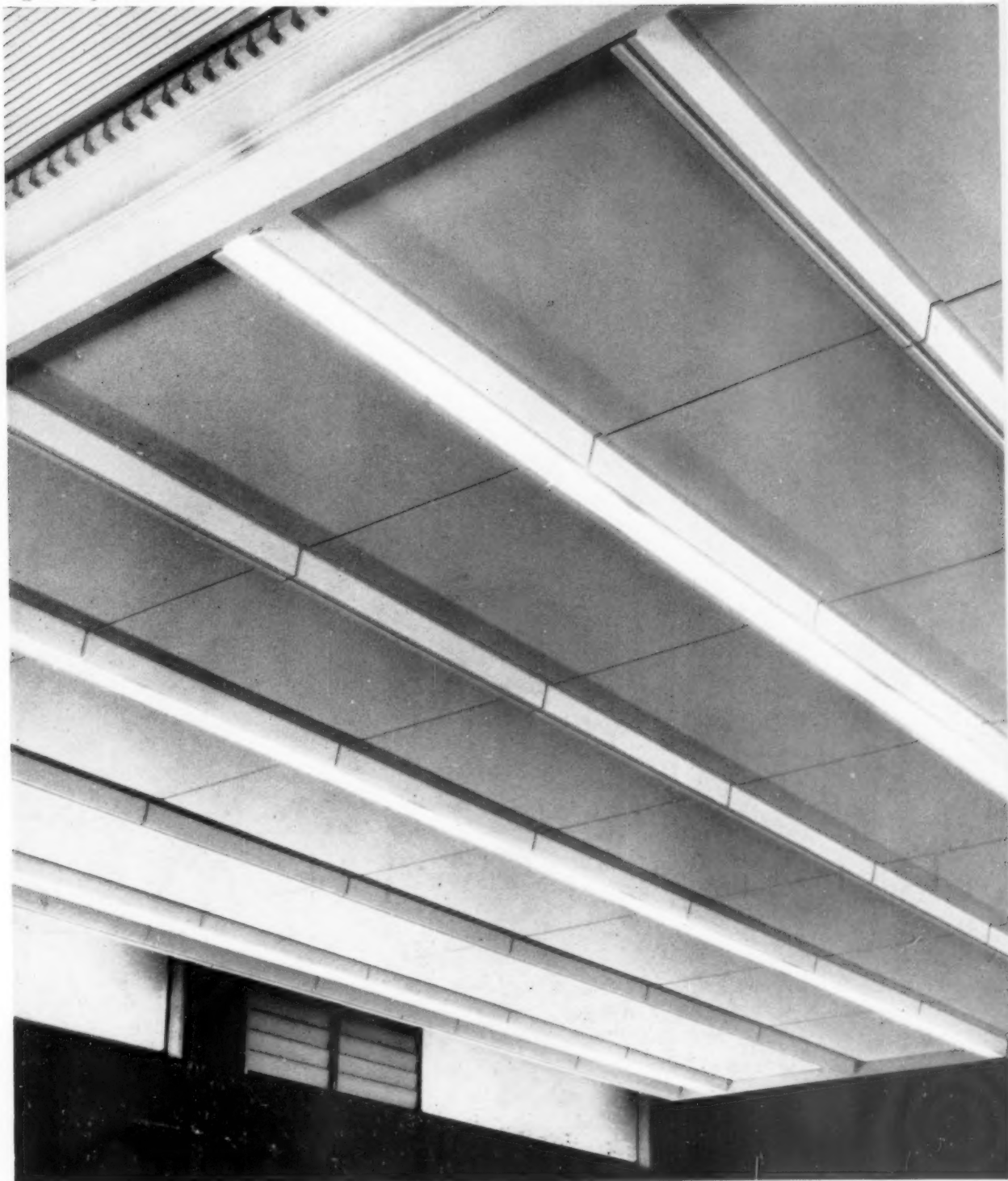
note: figured dimensions in feet and inches are approximate

working detail

ROOFS AND CEILINGS: 68

SUSPENDED CEILING: BANK IN LONDON, W.1

Clifford Culpin, architect

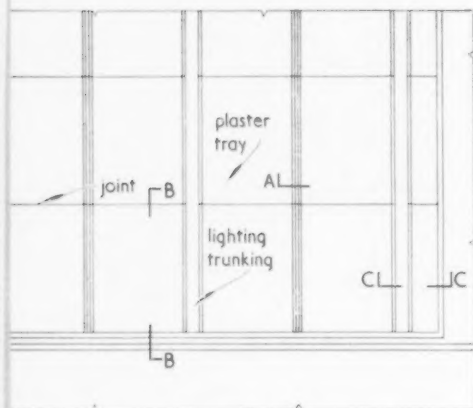
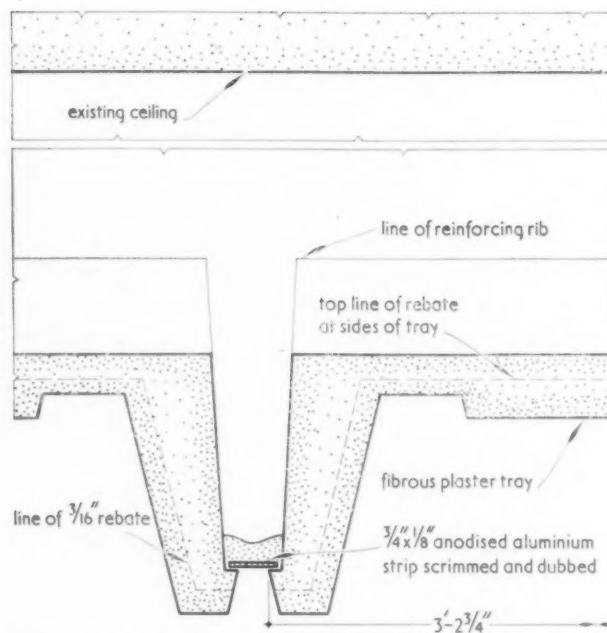
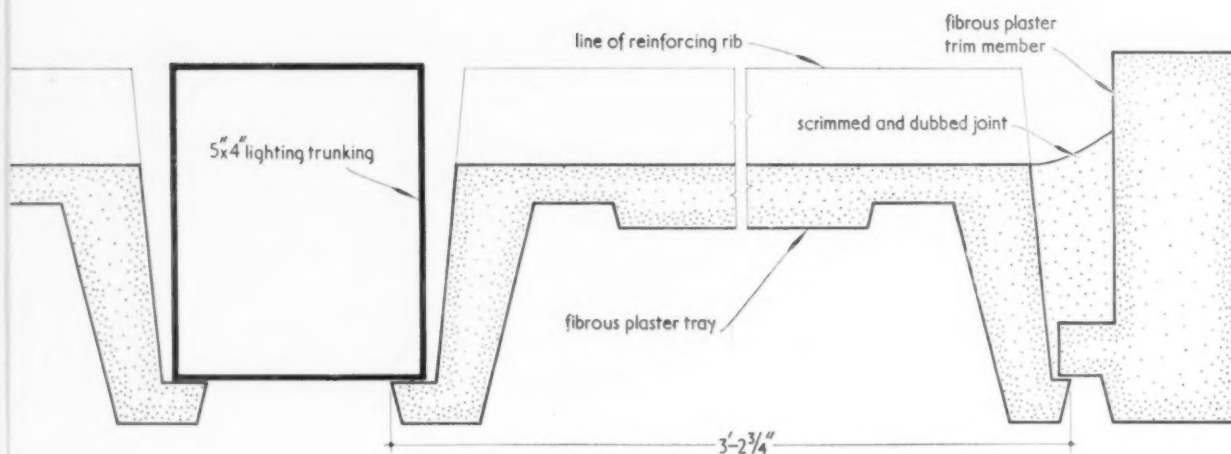
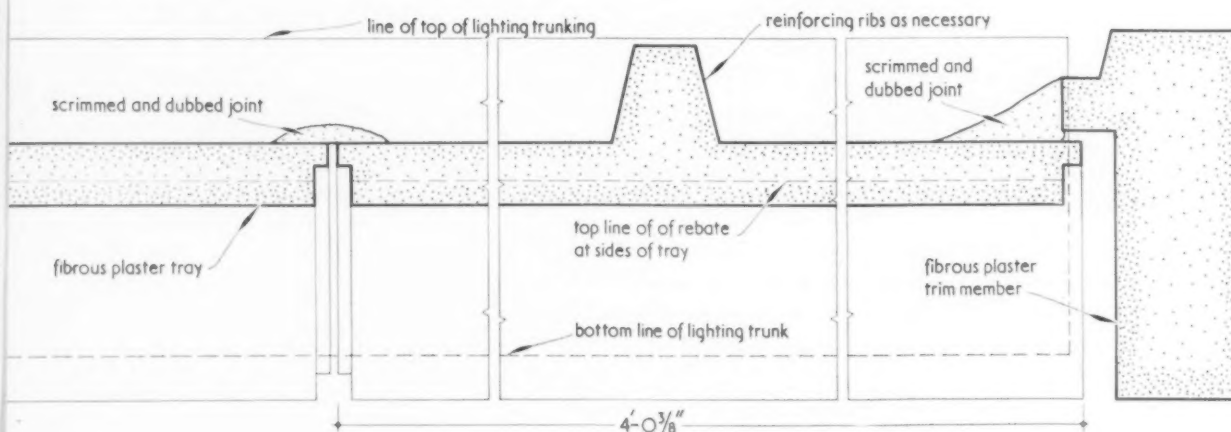


This ceiling is an interesting integration of fibrous plaster units with fluorescent lighting. Since this is a remodelling job, the suspension was settled on site and is, therefore, not fully shown on this detail. It consists of horizontal steel straps to which the ceiling units and trunking are wired: the straps run at right angles to the trunking. These straps are suspended by vertical ones which pierce the existing ceiling plaster and are fixed to the timber joists above.

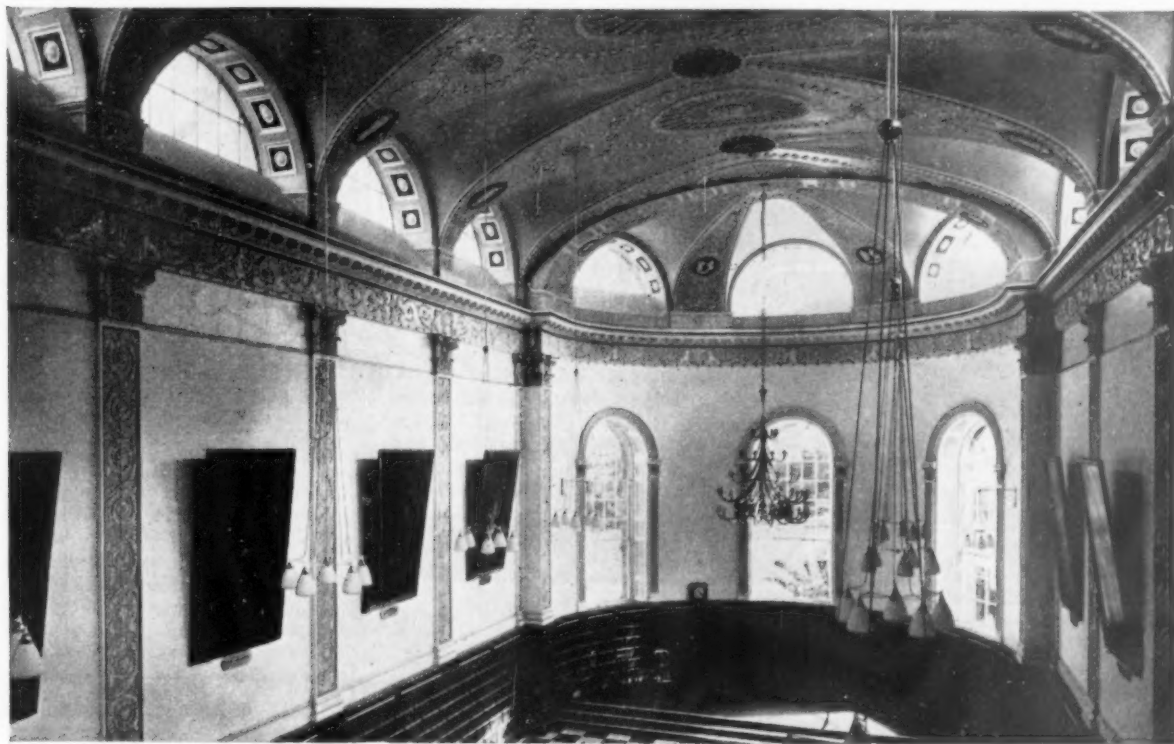
working detail

SUSPENDED CEILING: BANK IN LONDON, W.1

Clifford Culpin, architect

SECTION, scale $\frac{3}{16}''=1'-0''$ PLAN, scale $\frac{3}{16}''=1'-0''$ SECTION AT A, scale $\frac{3}{8}$ full sizeSECTION C-C, scale $\frac{3}{8}$ full sizeSECTION B-B, scale $\frac{3}{8}$ full size

he music goes round and round...



View from gallery of the Examination Hall, Trinity College, Dublin, showing the new matt white textural Travertone wall panels. Architects: McDonnell & Dixon Acoustic Contractors: Alex Malcolm & Co. Ltd.

...and now the music comes out in the proper places at the proper time in the Examination Hall of Trinity College, Dublin. Imperfect acoustic conditions were marring the quality of the concerts frequently held in the Hall. The architect, after careful investigation of the problem, recommended lining all wall panels with Armstrong Travertone tiles.

This treatment has proved most successful. Overlong reverberation time has been cut and sufficient resonance allowed for musical requirements. In addition, the aesthetic beauty of the hall has been retained in the classical tradition demanded.

Corkoustic and Cushiontone are other Armstrong tiles with a high sound-absorption coefficient. Armstrong experts are at your service to assist you in the choice of acoustic materials and the solving of acoustic problems. Please write for full details.

Armstrong acoustics

Armstrong Cork Company Ltd., Acoustics Department,
Carlisle Road, Colindale, London, N.W.9. Tel.: COLindale 9744.
Also at 24 Fitzwilliam Place, Dublin 2. Telephone: Dublin 61907/8.



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

9/18

Announcements

PROFESSIONAL

Martin Shaw, A.R.I.C.S., chartered quantity surveyor of 68, Great Russell Street, W.C.1, has opened a branch office at 19, Have-lock Road, Hastings, where Anthony J. Pettit, A.R.I.C.S., will be in charge. The style of the firm will be Martin Shaw & Partners.

The Town and Country Planning Association greatly regret that the dinner in honour of Sir Frederic J. Osborn to have been held on June 22 has had to be postponed owing to the illness of Sir Frederic. The present intention is that the tribute to Sir Frederic will be combined with the Association's National Conference dinner, to be held in the Connaught Rooms on Wednesday, October 25.

By permission of Mr. and Mrs. Derek Bridgwater, the Liverpool School of Architecture is holding a garden party at 37, Lansdowne Road, London, W.11, for members and their wives on Friday, July 14, at 6 p.m. There will be no charge. Will members please advise not later than July 1 if they intend to be present. Tickets will not

be sent out. RSVP Robert Shaw, 11, Billing Place, West Brompton, London, W.11.

Phillip O. Reece, A.M.I.C.E., M.I.Struct.E., A.M.I.Mun.E., F.I.W.Sc., is relinquishing his present appointment as director of the Timber Development Association on August 31 to join the board of the Phoenix Timber Company Ltd., of Rainham, Essex, with particular responsibility for production and development.

On May 1 the professional organisation to be known as Prichard Group, architects—town planners—quantity surveyors—civil and structural engineering consultants, commenced practice at 18, Castle Square, Caernarvon. Founder partners of the new firm are F. L. Prichard, dipl.ARCH.(L/POOL), A.R.I.B.A., A.M.T.P.I., and associates; H. B. Tweed, F.R.I.C.S., F.I.Arb. and associates; A. G. White, A.I.A.S., M.R.S.H., and associates; M. E. Szostak, B.Sc.(Eng.), M.A.Sc., A.M.I.C.E., M.S.C.E.(France), M.S.I.A.(Suisse), and associates. The group will be pleased to receive trade journals and technical literature.

From July 1, the Anthony Clark Partnership will combine and comprise the present practices of Spence Atkinson, Anthony Clark & Partners, of Liverpool

and Warrington; H. Anthony Clark, F.C. Roberts & Partners, of Wrexham, and F.C. Roberts, of Mold. The principals will be H. Anthony Clark, F.R.I.B.A., F.I.Arb., A. Spence Atkinson, F.R.I.B.A., F.C. Roberts, B.Arch., F.R.I.B.A., R. B. Heaton, B.Arch., A.R.I.B.A., and Brian F. Evans, A.R.I.B.A. The registered office of the partnership will be Martins Bank Building, Water Street, Liverpool, 2 (telephone: Central 2922), with branches at Wrexham, Warrington and Mold.

James Gibbons Ltd., have opened a Northern Area Sales Office at 5/7, New York Road, Leeds 2 (telephone Leeds 24271). The office will serve the three Ridings of Yorkshire and the four northern counties.

TRADE

Turner & Newall Ltd. have formed a new public company in Nigeria under the title of Turners Asbestos Cement (Nigeria) Ltd.

The Bath & Portland Group Ltd. have completed the reorganisation of their stone division, following a merger between the Bath & Portland Stone Firms Ltd. and the South Western Stone Company Ltd. As from June 29 three new trading companies,

FULLY EQUIPPED KITCHEN

DESIGNED, MANUFACTURED & INSTALLED BY

Stotts of Oldham

for Halford Cycle Company's new
warehouse and offices in Birmingham.
Architect, J. Alfred Harper and Son, Birmingham.



You'll want to know more
about our Large Scale
Kitchen Planning Service
so why not complete
the form below for
further details.

NAME

ADDRESS

11/6

J STOTT & CO. (ENGINEERS) LTD - VERRON WORKS - OLDHAM - LANCs

all wholly owned subsidiaries of the Bath & Portland Group Ltd., will operate under K. Selby, the group general manager. Masonry and contract work will be undertaken by The Stone Firms Ltd., whose registered office is Abbey Yard, Bath. A subsidiary firm is Souwestone Restoration Company Ltd., specialising in the restoration of old buildings. The quarrying interests of the group will be maintained by Dorset Limestones Ltd., Easton, Portland, Dorset. The production of pre-cast units will be the responsibility of another new company, Portcrete Ltd.

Walter W. Jenkins & Co. Ltd., have moved their London office to 9, Brady Street, E.1 (telephone: BISHopgate 3431/2).

Allied Ironfounders Ltd. have formed the Aga Heating Division, to develop sales of all appliances connected with central heating.

The Lead Development Association have moved from 18, Adam Street, London, W.C.2, to 34, Berkeley Square, London, W.1 (telephone: GROsvenor 8422).

J. L. Cowan & Co. have changed their style to Gripperrods Ltd.

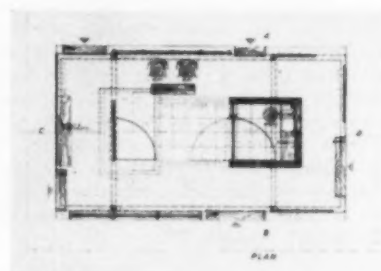
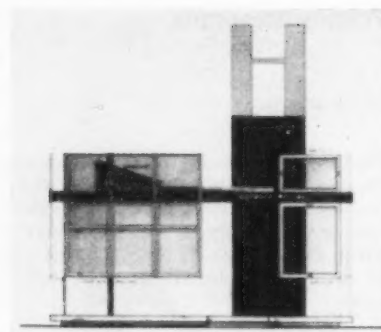
Blundell, Spence & Co. Ltd. have appointed

Building exhibition stand winner

Winning design in the Building Exhibition Stand Design Competition, promoted by Heywood-Helliwell Limited, submitted by R. C. Hammond, ARIBA, and J. R. G. Wheatley, ARIBA, awarded 200 guineas. "An excellent composition," says assessor Geoffrey A. Rowe, ARIBA, "with an awareness of the best means to display the promoter's various products... but I feel that the office is a little too small and would indeed be rendered almost untenable if the aluminium door on the drawing were to swing both ways."

Second prize of 50 guineas went to Colin Smith, ARIBA, and third prize of 25 guineas to A. J. Upton, ARIBA.

The design submitted by J. W. Cresswell, student RIBA, was commended.



P. J. T. Read as their first resident representative in the Far East. He will be based at Kuala Lumpur, and can be reached c/o The East Asiatic Co. Ltd. J. G. Devereux has been appointed as the new resident representative for the Central African Federation based at Salisbury, S. Rhodesia.

The Laing Housing Co. Ltd. has moved from Lowther Road, Stanmore, to new offices at 58, Edgware Way, Edgware, Middlesex.

Guest Keen & Nettlefolds have opened a technical centre situated at the Screw Division of G.K.N. (Midlands) Ltd.

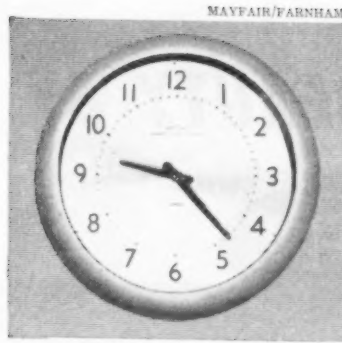
Complete laboratory fume extraction in these fine modern Research Buildings was carried out by TANKS & LININGS LTD., using Rigid P.V.C. thermoplastic for ducting and fans.

Photograph (left) reproduced by courtesy of May and Baker Ltd., Dagenham.

Photograph (above) reproduced by courtesy of Ashburton 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.

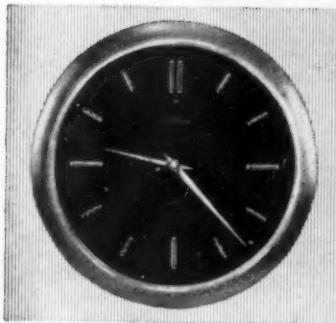
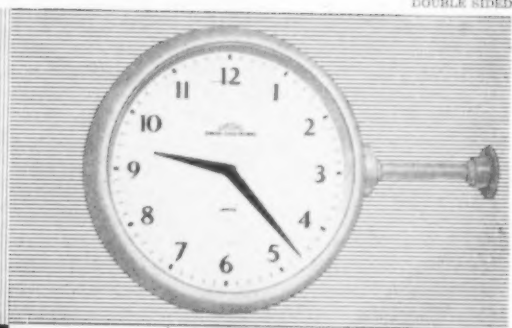


A certain style

MEDWAY/TIFE



DOUBLE SIDED



FALCON

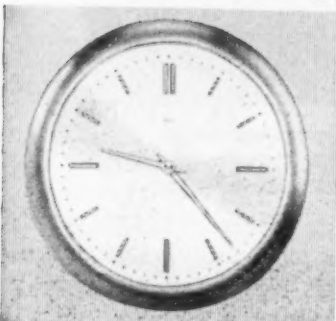


MOSTYN/FLEY



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 7225

Branch Offices:

BIRMINGHAM MANCHESTER LEEDS GLASGOW BELFAST

A branch of the Clock
and Watch Division of

SMITHS

GLEAMING BEAUTY BY

CARRON



Here's the Albany, a special Carron shallow bath—safe, compact, good looking. Corner tap positions are available to facilitate plumbing. It's tailored for modern bathrooms and finished in a range of gleaming Carron colours (or porcelain white if you wish).

THE **ALBANY**

To install the best costs you no more. Insist on the Carron Albany. Write today for detailed specification sheet.

CARRON

CARRON COMPANY • CARRON • FALKIRK • SCOTLAND

Telephone — FALKIRK 35

LONDON: 15 Upper Thames Street, E.C.4.

Telephone: CENTral 7581

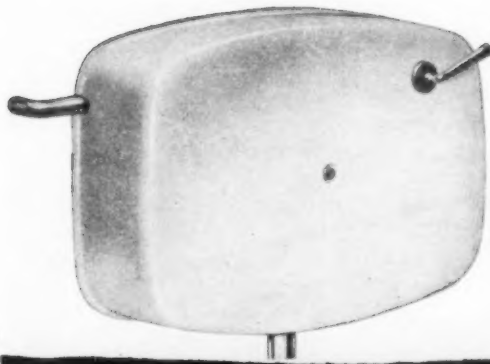
LIVERPOOL: 22-26 Redcross Street, 1.

Telephone: CENTral 1945-6

GLASGOW: 125 Buchanan Street, C.I.

Telephone: CENTral 8226

NEWCASTLE UPON TYNE: 33 Bath Lane. Telephone: 26940



Fordham Panel Model 'O'

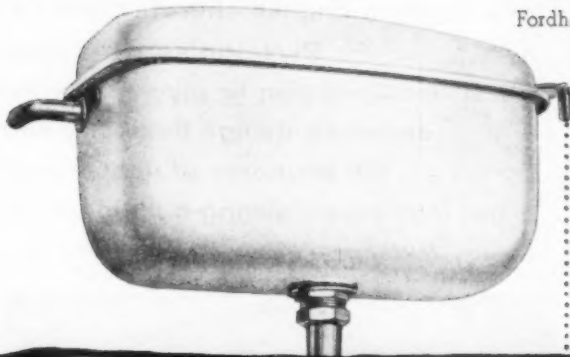
first and foremost for all

sanitary equipment...

Fordham 'Cleanline' low level Cistern



Fordham 'Cleanline' high level cistern



Some of the
Fordham Products
specified by Architects
throughout the world.



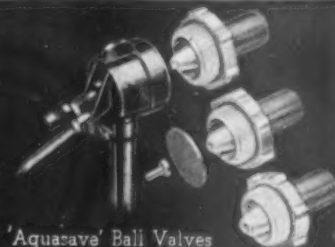
'All-Polythene'
Syphons



'All-Polythene'
Ball-Floats



Fordham Flushing Troughs



'Aquaave' Ball Valves

Fordham

Specialists in Sanitary Equipment

FORDHAM PRESSINGS LIMITED
Dudley Road, Wolverhampton
Telephone: Wolverhampton 23861

for more than a quarter of a century.

Other factories at Earlsfield (London), Sedgley (Staffs), Hinckley (Leics).



Fifty-nine ft. plywood web portals for offices of Salem Engineering Co. Ltd., Milford, Derbyshire. Designed by D. W. Cooper, B.Sc., A.M.I.Struct.E., F.Inst.W.Sc. Fabricated by F. and H. Sutcliffe Limited.

SEABOARD FIR PLYWOOD...IN ACTION



Church of the Sacred Heart, Rochdale, Lancashire. Cantilever arm portals fabricated by F. and H. Sutcliffe Limited.

From the largest hollow box plywood portals ever fabricated in the United Kingdom to cantilevered arm components for a modern English church, Canadian Fir Plywood sets the pace. Seaboard Canadian fir plywood unites complete design flexibility with the economy of light-weight but immensely strong building units. *Investigate today. Mail coupon below.*



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

Please send me details of varieties and uses of
Douglas Fir Plywood.

Name

Address

UK-61-43-1



SEABOARD

CANADIAN DOUGLAS FIR
PLYWOOD

SEABOARD LUMBER SALES CO. LTD., Seaboard House, Vancouver 1, Canada

Announcing
MANDERS New Range
of 131 Colours!



MANDERS new range includes the complete BS.2660 series plus 28 Supplementary Colours. Available in
MANDERLAC Enamel
SEMI-GLOSS Paint
VELOSHEEN Emulsion Paint
NEW AQUALINE Water Paint
MATT FINISH and
EGGSHELL,
this superb Range is the complete answer to practical colour scheming problems. Ask for YOUR copy of this brilliant new range to be sent to you at once.

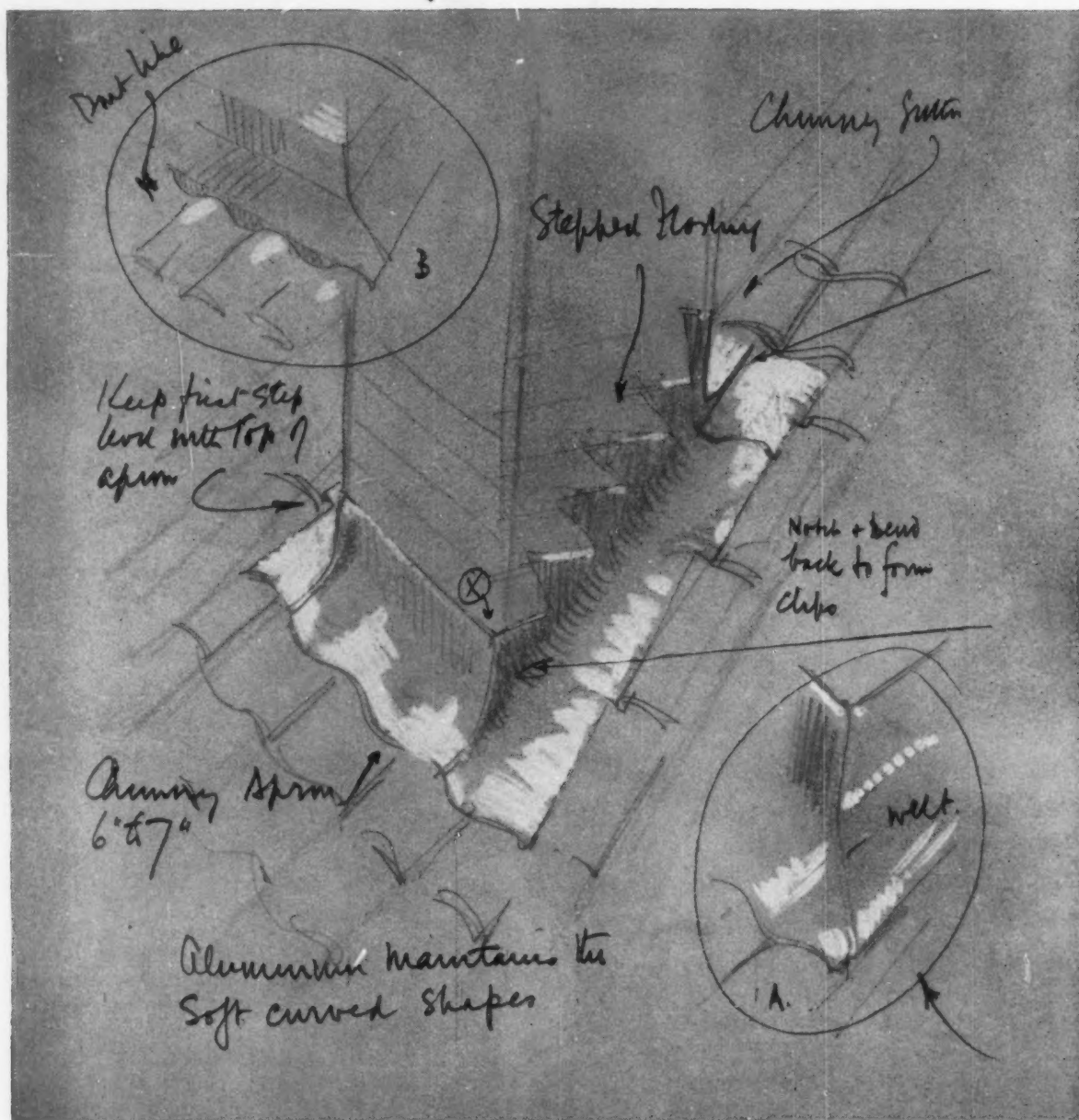
BARBOUR Inde

MANDER BROS LTD., Dept. A5, Wolverhampton, England.
Cables "Mander Wolverhampton."

Tel: Wolverhampton 20601 (8 lines).

Makers of Fine Paints and Varnishes since 1773.

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



OUTSTANDING FITTINGS

- * Improved integral standards to facilitate cleaning
- * Revised capstan design with coloured discs
- * Improved swivel nozzle

Outstanding delivery service

The new improved Prestex 520 'Dual-Flow' Fitting is a real 'eye-opener'! See its clean modern lines, its improved integral standards and tapered tap handles. Note its revised capstan design with rounded and coloured indices. Swivel nozzle shape has also been improved, and, of course, the exclusive 'Prestex' non-leak gland is still incorporated. This is a fitting worthy of the well-known 'Prestex' name and is accepted generally by Water Authorities.

PACKED INDIVIDUALLY to help you—like all 'Prestex' fittings!

* Approved by most authorities for direct connection to mains supply.



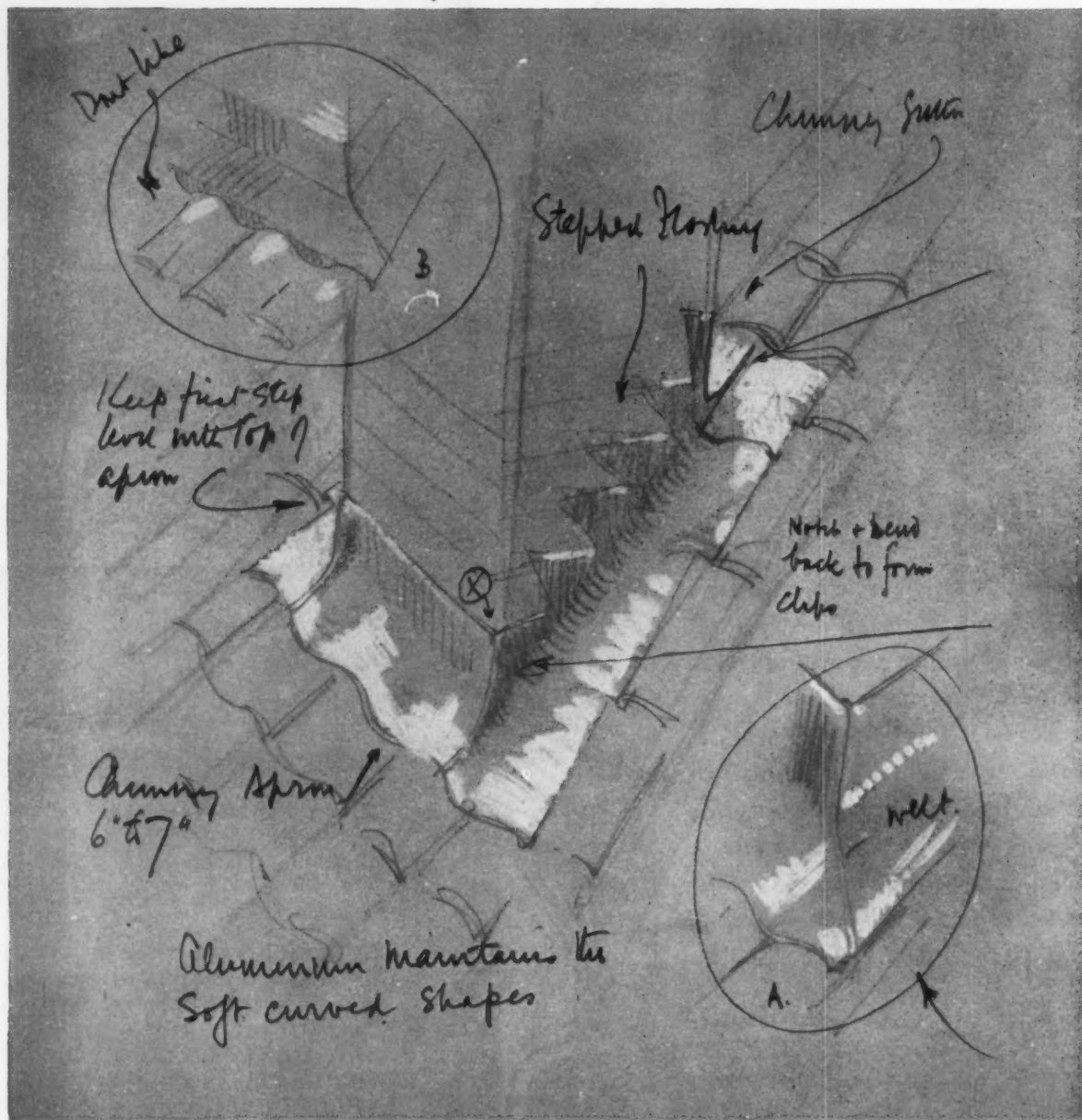
**FOR IMMEDIATE DELIVERY
AND ATTRACTIVE PRICES**

'Phone Doncaster 3431 (Northern Territories)
MIDland 6600 (Birmingham and the Midlands)
or HOP 2461 (London and the South)

PEGLERS LTD., Dept. A4, BELMONT WORKS, DONCASTER. Birmingham Depot: 28 Thorp St. Birmingham 5. London Depot: Prestex House, Marshalsea Rd. S.E.1.

TGA/WP16

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



OUTSTANDING FITTINGS

- * Improved integral standards to facilitate cleaning
- * Revised capstan design with coloured discs
- * Improved swivel nozzle

Outstanding delivery service

The new improved Prestex 520 'Dual-Flow' Fitting is a real 'eye-opener'! See its clean modern lines, its improved integral standards and tapered tap handles. Note its revised capstan design with rounded and coloured indices. Swivel nozzle shape has also been improved, and, of course, the exclusive 'Prestex' non-leak gland is still incorporated. This is a fitting worthy of the well-known 'Prestex' name and is accepted generally by Water Authorities.

PACKED INDIVIDUALLY to help you—like all 'Prestex' fittings!

* Approved by most authorities for direct connection to mains supply.



**FOR IMMEDIATE DELIVERY
AND ATTRACTIVE PRICES**

'Phone Doncaster 3431 (Northern Territories)
MIDland 6600 (Birmingham and the Midlands)
or HOP 2461 (London and the South)

PEGLERS LTD., Dept. AJ, BELMONT WORKS, DONCASTER. Birmingham Depot: 28 Thorp St. Birmingham 5. London Depot: Prestex House, Marshalsea Rd. S.E.1.

TGA/W116

RILFLOR VINYL FLOOR COVERINGS by BRITISH MOULDEX LIMITED

A new era of classic elegance has begun with the expansion of the range of many types of floorings all manufactured at the Wellingborough Factory which combines luxury with practicability and economy and at the same time represents a style achievement. The 16 beautiful colours with the exclusive eggshell finish are designed to blend with any setting. These exclusive floorings are impervious to dirt, are stain resistant and grease-proof and are easy to clean because of their special surface treatment. These are truly magnificent floorings manufactured to British Standard Specifications. Tiles of 12" x 12" and 9" x 9". Rolls of 30 yards. Various thicknesses.



rilflor britannia

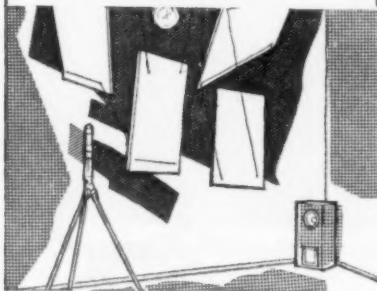


Write or ring for brochure to: British Mouldex Ltd., Rilex Works, Wellingborough, Northants. Telephone: Wellingborough 4033

cape **PLANNED** **service**

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

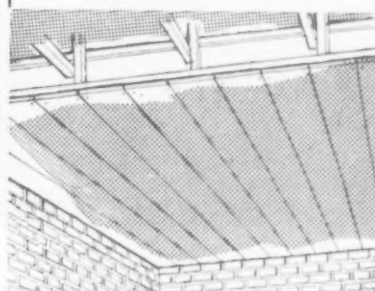
RETAINING A NUMBER OF
INDEPENDENT CONSULTANTS TO
ADVISE ON PROBLEMS COVERING
ACOUSTICS, DESIGN, INSURANCE
AND COSTS.



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

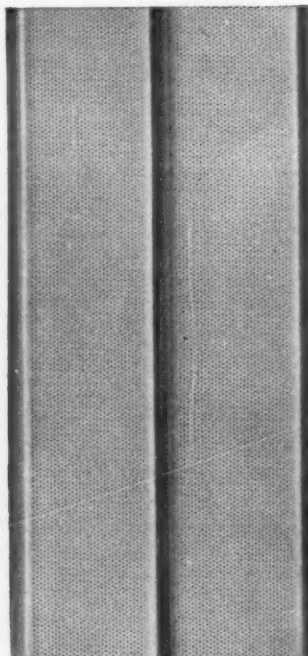
THE NON-COMBUSTIBLE ASBESTOS INSULATION BOARD



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

AN71/G

A SOUND CHOICE



for architects....

DAMPA ACOUSTIC CEILING

When you tackle the question of quietness the word to remember is Dampa. This Acoustic Panel Strip offers you a really economical and easy method of providing efficient acoustic ceilings. Made from anti-corrosive stove-enamelled aluminium and inlaid with specially processed $\frac{5}{8}$ " mineral wool and black tissue paper, the $2\frac{3}{4}$ " wide strip is designed to give maximum efficiency combined with lightness and non-inflammability. The fine perforations—there are 40,000 holes per square foot—are virtually invisible when the ceiling strips are in position. Dampa requires the minimum of fixing, is easily removable, if necessary, and can be applied direct to the ceiling or suspended.



ALSO AVAILABLE IN PARQUET FORM

For conversion of existing buildings where the ceiling cannot be suspended Dampa Parquet is most suitable. In sections $3\frac{35}{64}$ " x $23\frac{1}{2}$ " it is also useful for small areas and for walls.

For full information write to the manufacturers

Dampa Acoustics

A SYSTEM OF SOUND ABSORPTION
AND INSULATION

DAMPA ACOUSTICS LIMITED · 19 BERKELEY STREET · LONDON, W.1 · TELEPHONE HYDE PARK 7010

Approx. 120,000 sq. ft.
of Dampa Strip was
incorporated in the heated
ceiling installed throughout
Castrol House (illustrated above)
the Headquarters Building
of the makers of
Castrol Oil. Architects:
Messrs. Collins, Melvin,
Ward & Partners.



The latest developments in Solid Fuel Central Heating

The cheapest system and the most flexible



You know already that solid fuel is the cheapest central heating to run—that's why so many of your clients specify it.

You are probably aware that solid fuel central heating can be most economically adapted to suit any house, any budget. Central heating can be tailor-made to suit every household because solid fuel gives as much or as little heat as is wanted. Where it is wanted. How it is wanted. And when it is wanted. With two radiators or twenty. Here we show four different solid fuel central heating systems.

But do you know about the very latest techniques of designing and installing small-pipe systems? How to use them most economically for the smallest systems? The C.U.C. have several booklets, written by experts, which you would find helpful. Two are FREE, one costs 2/6d. You can get them by posting off the coupon below.

To: COAL UTILISATION COUNCIL
3 UPPER BELGRAVE STREET, LONDON, SW1

Please send me:

- ☐ FREE BOOKLET 'Small Central Heating Systems'
- ☐ FREE BOOKLET 'The Design and Installation of Small-pipe Heating Systems with Automatic Temperature Control'
- ☐ 'Central Heating for Houses' for which I enclose a postal order for 2/6

NAME _____

ADDRESS _____

Four Solid Fuel Central Heating Systems



2.3 RADIATORS FROM AN OPEN FIRE

A modern open fire with a high output back-boiler will give lots of hot water, heat a radiator, say, in the living room or hall, another in the bedroom, and a towel rail in the bathroom (with a warm living room thrown in). This is comfort! And very economical.



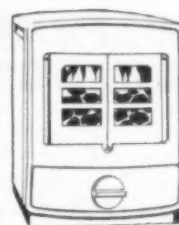
BACKGROUND CENTRAL HEATING FROM AN INDEPENDENT BOILER

Another way of getting a warm house, with three or four radiators placed just where they are wanted and as much hot water as is needed, is to fit one of the new independent boilers with thermostatic controls.



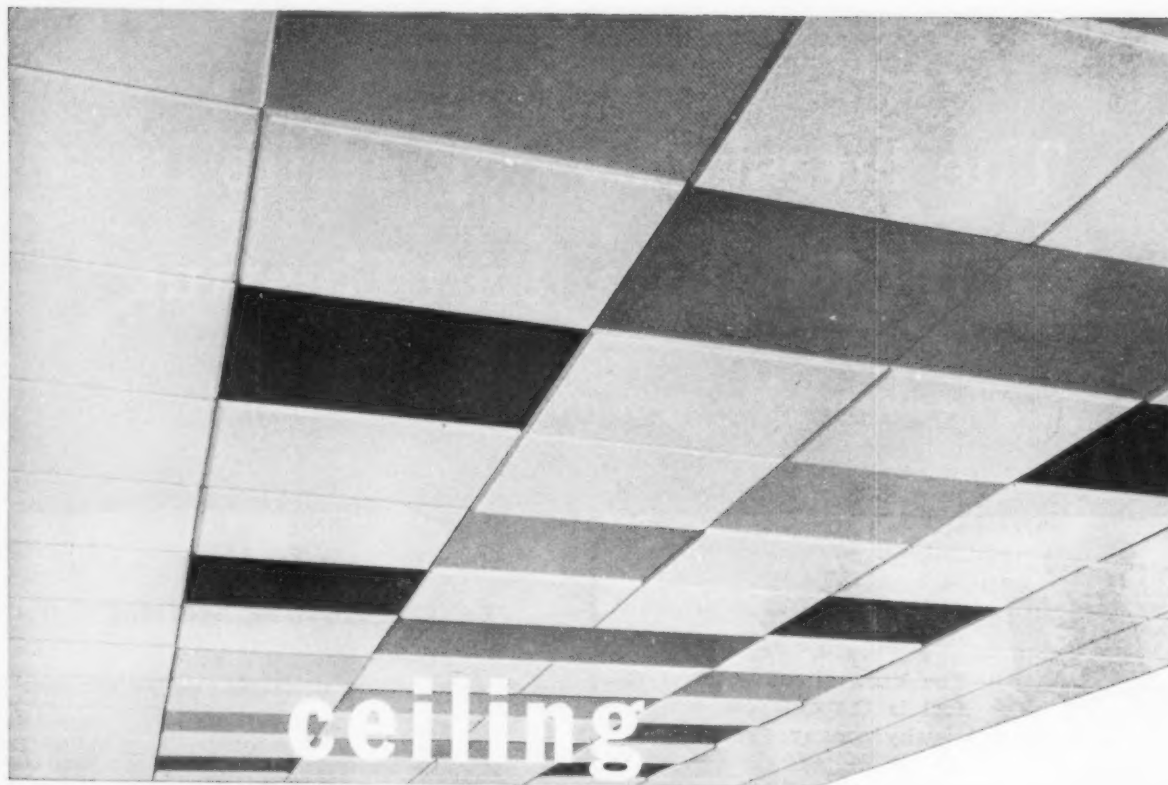
FULL LUXURY CENTRAL HEATING

For full central heating with the luxury of radiators in every room, solid fuel is the cheapest of all systems to run. The new central heating boilers are very streamlined and labour-saving and can heat anything from six to twenty radiators and provide constant hot water too.



ROOM HEATERS CAN ALSO HEAT RADIATORS

When there is an existing hot water system and a large living room to heat, it is a good plan to install a modern room heater with back boiler. This will give efficient and very economical heating of the room in which it is installed, plus heating for, say, two or three radiators in cold spots in the house, independently of the hot water system.



ceiling is believing!

Imagine a ceiling which absorbs noise, is fireproof, gives thermal insulation, and can heat a room either electrically or by a low-pressure hot water system. Imagine the same ceiling available in twelve tile sizes, in almost any standard colour, patterned or plain, and incorporating lighting, ventilation, or sprinkler systems. A ceiling at home in the most avant-garde building, but which can improve the decor and mask unsightly features in old rooms. Stop imagining!

Contact us and see a Burgess suspended ceiling for yourself.



BURGESS SUSPENDED CEILINGS

There are Burgess distributors throughout the country, and our design staff are ready to advise on domestic and industrial installations.

Full details from:

BURGESS PRODUCTS CO. LTD. (ACOUSTICAL DIVISION) HINCKLEY, LEICS.

Mellor Bromley

AIR CLEANER HUMIDIFIER

*for complete saturation and efficient
air cleaning—with no free moisture*

DATA

as illustrated

WEIGHT

approx. 2 cwts.

DIMENSIONS

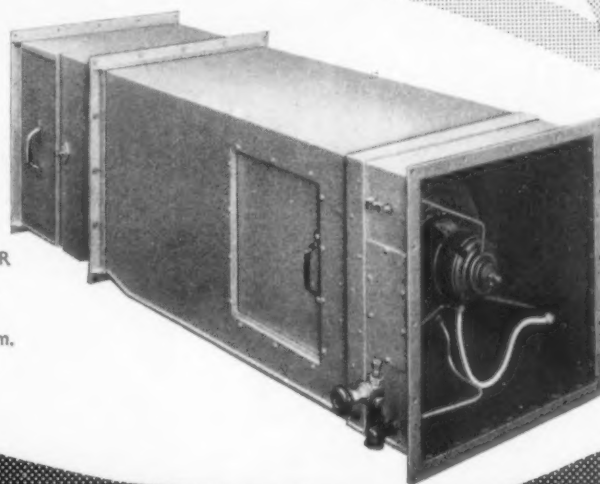
1'9" x 1'9" x 5'0"

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**

The £. s. d. of OSAL★

—Surface Waterproofing of Brick Concrete and Stone

**It always pays
to specify the best
especially
if the best costs
less**

Using Neocosal, a 1½d per square foot is all that it costs effectively to provide surface waterproofing of Brick, Concrete and Stone. Neocosal, a colourless liquid water repellent, penetrates the surface, forming an effective water seal.



Leading Architects have been specifying Neocosal for 30 years or more, for its economy, efficiency and because it does not discolour surfaces. Send for Information Leaflet No. 3.

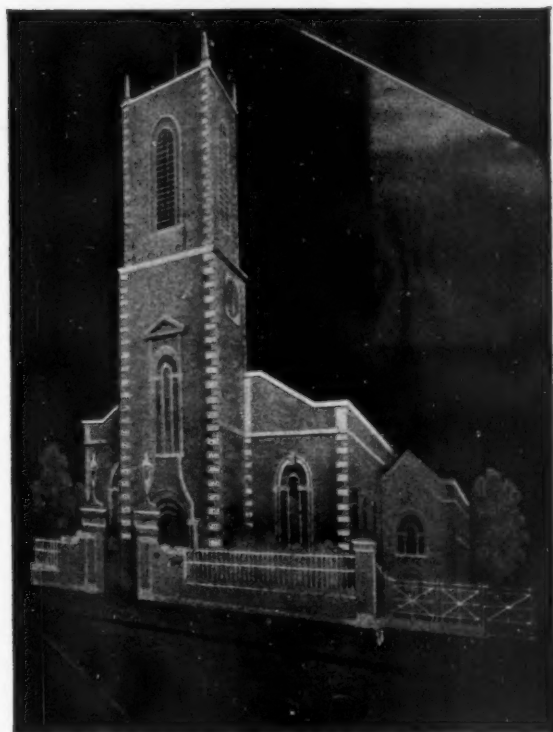
★ *Osas is the generic name for the products of A. A. BYRD & CO. LTD. Florosal, Neocosal I, Tricosal and Lubrosal. Literature about each individual product is available on request.*

A. A. BYRD & CO. LTD. (Dept. A8) 210 TERMINAL HOUSE, GROSVENOR GARDENS, LONDON S.W.1.

Phone: SLOane 5236

Grams: Byrdicom, Wesphone, London · Works · Basingstoke, Hants.

Decorative Glasswork by REED MILLICAN reflects civic pride in the new Town Hall at Stockton-on-Tees



Forming part of the balustrade of Stockton's impressive new Town Hall, this glass panel is one of a series of sand-blasted designs depicting local buildings of historical interest. Decorative glasswork such as this is playing an increasingly important part in civic architecture, and the versatility of this medium is being exploited to the full by Reed Millican craftsmen with notable success in many of these new municipal buildings in various parts of the country.

REED MILLICAN & CO. LTD.

NEWCASTLE UPON TYNE AND GATESHEAD
Telephone: Newcastle 78401 (6 lines)

Artists and Craftsmen in Glass since 1847



yesterday's craft
tomorrow's design

SCULPTURA

THE LILLESHELL CO LTD

OAKENGATES SHROPSHIRE

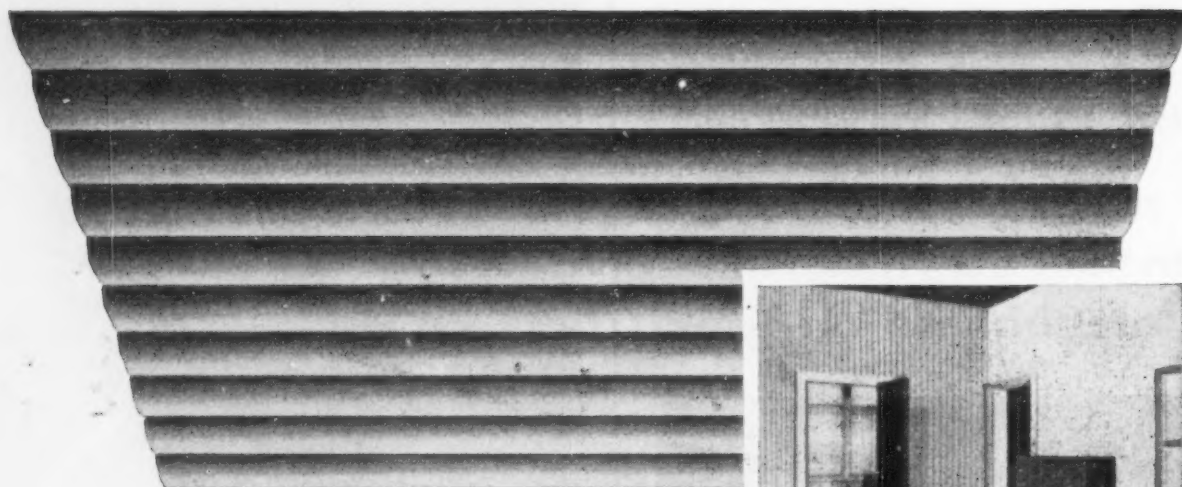
Oakengates 120

or 121 VICTORIA STREET LONDON SW1
Victoria 9992

Stall urinal c1960

Marquess of Queensberry MS1A

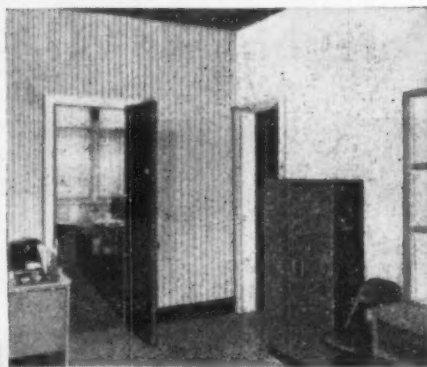
The Trevi fountain Rome c1762 Salvi



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



LOOK UP....

LOOK DOWN



Under the tiles, Zylex Slaters' Felt,
the most reliable secondary roof
known: standard, reinforced or aluminium foil surfaced.
Not only protection, but insulation as well.
And at dampcourse level, Astos, the *supreme* dampcourse,
with the gold band every eight feet for easy
identification on site.
Whichever way you look, complete protection.

ZYLEX SLATERS' FELT

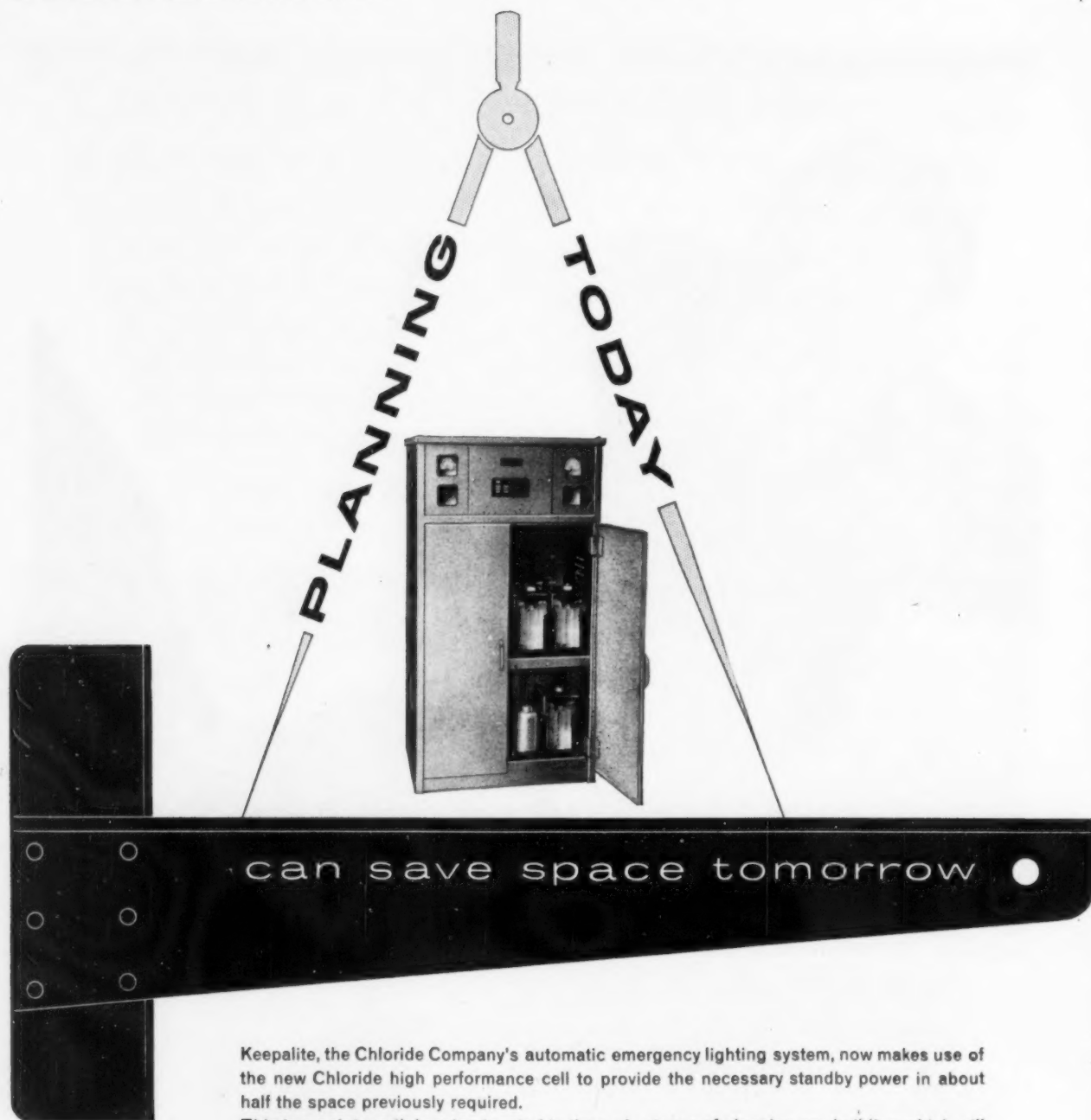
.....
ASTOS ASBESTOS DAMPCOURSE



ZAP0005

Full technical information available. Write or telephone

THE RUBEROID COMPANY LIMITED, 45 AB COMMONWEALTH HOUSE, 1-19 NEW OXFORD STREET, LONDON, W.C.1. HOLBORN 8797 AND 8501



S.108

Keepalite, the Chloride Company's automatic emergency lighting system, now makes use of the new Chloride high performance cell to provide the necessary standby power in about half the space previously required.

This is a point worth keeping in mind in the early stages of planning any building which will need emergency lighting.

Keepalite, completely automatic in action and automatically self-maintaining between times, has now an added advantage that only the architect can fully exploit. It can halve the space needed for battery installation.

The advisory service of the company's electrical engineers is at the call of any architect interested in emergency lighting. You have only to ask for it.

KEEPALITE

AUTOMATIC EMERGENCY LIGHTING EQUIPMENT

For Offices, Stores, Factories, Schools, Hospitals and Public Buildings

A PRODUCT OF CHLORIDE BATTERIES LTD. BACKED BY WORLD-WIDE SERVICE



TYPE H. T.
RIVETED BEAM

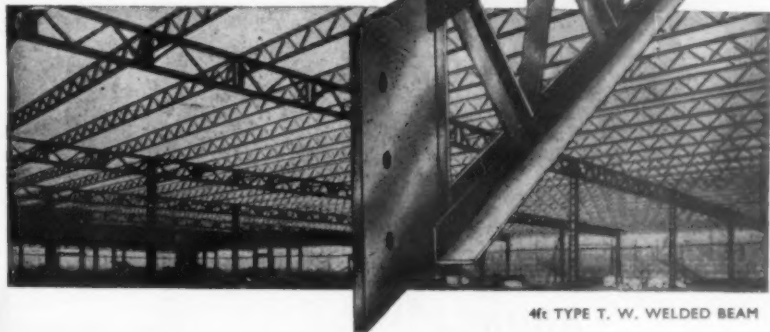
Our Beam system gives a maximum of standardization to obtain economy and yet at the same time allows complete freedom to architectural planning.

SOMMERFELDS
LTD.

LATTICE BEAMS

AND OF COURSE STANCHIONS

These beams are widely used in the modern planning of factories, school classrooms, offices, canteens, etc., where spans of 20ft. to 40ft. are encountered. They are most economic for all light roofing, combine well with the many prefabricated slabs which span directly between supporting joists.

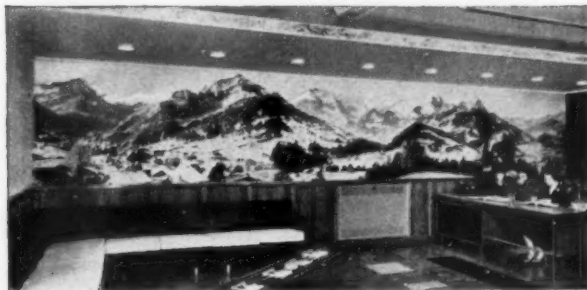


4ft TYPE T. W. WELDED BEAM

Our Structural Design Office are pleased to advise and quote for
THE COMPLETE STEELWORK OF ANY PROJECT.
Please write for full details and data sheets.

Head Office: WELLINGTON SHROPSHIRE ENGLAND Tel: Wellington 1000
London Office: 167 VICTORIA ST LONDON S.W.1. Tel: Vic 8843 & 1000

PHOTOMURALS . . .



Autotype Photomural for T. Wall & Sons Ltd., Godley Factory.
Architects: Beard, Bennett, Wilkins & Partners

. . . 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

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**

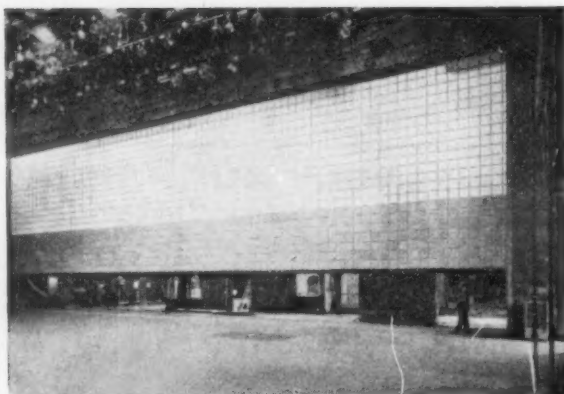
63g, Colledge Road, Holbrooks, Coventry

Tel: 87253

There's an
OPEN
AND SHUT
CASE for



door gear
whatever the
application



*Power operated vertical lifting sound resisting partition
for Associated Rediffusion's Studio 5.*

Standard, Domestic or Industrial door
gear—sliding, folding or 'around-the-
corner'—KING stock it. Readily available—
when you want it, where you want it.

You need a 'door with a difference'—
you still need KING—door craftsmen
for over 40 years. KING engineers
design and build special-purpose doors
for any industrial or other application.

KING DOOR GEAR—*the best there is!*

Why not write for the illustrated literature?

GEO. W. KING LTD.

Argyle Works (A.J. 69) · Stevenage · Herts

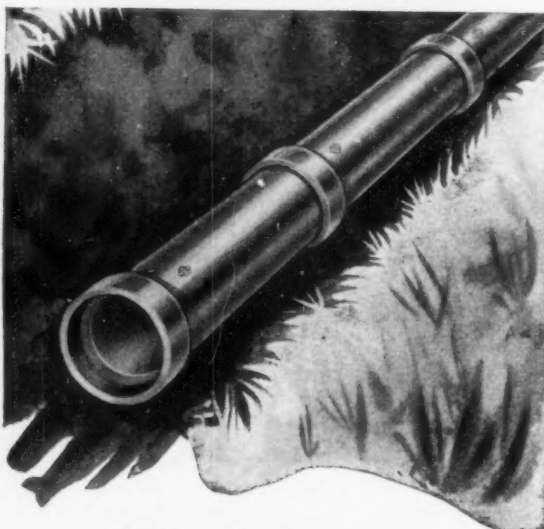
DOOR GEAR · MECHANICAL HANDLING EQUIPMENT
AGRICULTURAL EQUIPMENT

UP
for centuries . . .



Stonehenge, Salisbury Plain, Wilts.

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. BE, Doulton House, Albert Embankment, London, S.E.1
85396

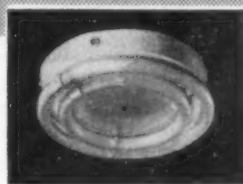


Harris & Sheldon (Electrical) Ltd., designed these special fittings for Woolworth's Head Office. Each houses the three Philips Circular Fluorescent Lamps - 94 watts of fluorescent lighting in a rectangle of small size.

Here's the new look in fluorescent lighting



Many manufacturers have selected Philips Circular Fluorescent Lamps for their fittings. Shown at left is a model by Allom Heffer & Co. Ltd., with opal perspex bowl and gilt 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
(103339)

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

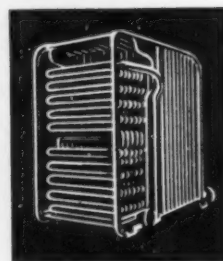
**CORNER
 TUBE
 BOILERS**

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

WAREHOUSES IN LONDON • MULTIPLE STORES IN BIRMINGHAM

WORKS IN SHEFFIELD • OFFICE BLOCKS IN MANCHESTER

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



Why be surprised

if the finished appearance doesn't please?

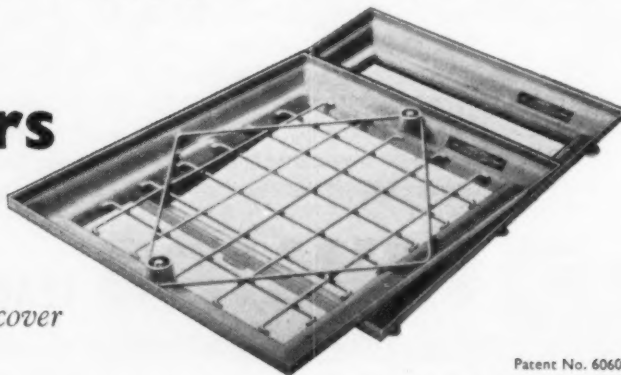
The Broadstel Cover is designed for use in Drives to Houses, Footpaths, Entrances, Shop Floors, Repairs and Renovations, *and*

The design of the Cover does matter

Broadstel Covers

are available ex stock, direct, from our Distribution Depots throughout the country and the cost

No dearer than an equivalent cast iron cover



BROADs

MANUFACTURING CO. LTD. 4 SOUTH WHARF, PADDINGTON, W.2. Telephone: PADDington 7061 (20 lines)

Patent No. 606014

Registered design No. 847545, 847382, 847383

SANDLIME BRICKS

give you

strength for FOOTINGS

Of guaranteed strength and thorough durability, Sandlime Bricks are available in Special Purpose and other load bearing grades to suit your job.

scope for FEATURES

A wide range of permanent colours in addition to the 'natural' whites, gives great scope and freedom.

serviceability for FACINGS

Sandlime Bricks of facing quality (Class A of B.S. 187-1955) are self-cleaning when exposed to rain, are durable under the most severe conditions and give maximum light reflection.

SANDLIME BRICKS FOR INDUSTRIAL DOMESTIC AND AGRICULTURAL BUILDING

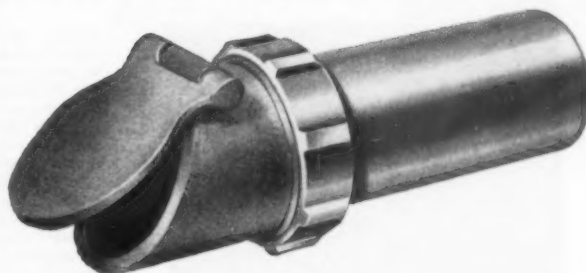
FREE

— The Association's booklet has been completely revised and rewritten under the title "Calcium Silicate Bricks" and copies can be obtained post free on application to the Secretary, The Sandlime Brick Manufacturers Association Limited, 73/78 High Holborn, London, W.C.1. Tel: HOL 5434.



The Sandlime Brick Industry is progressive and utilises continuous research carried out both by individual manufacturers and by the Sandlime Brick Division of the Chalk Lime and Allied Industries Research Association.

NON-STANDARD



AND STANDARD TOO



All high standard
pipe fittings from

KONTITE

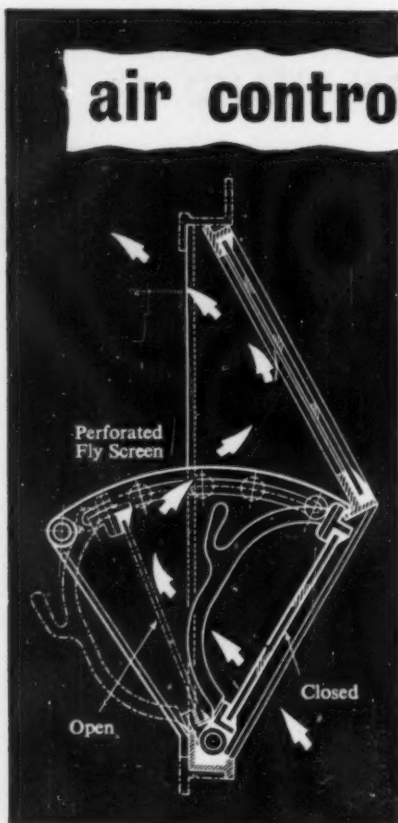
Kontite's range of over 22,000 different types and sizes of fittings for copper tube, is the biggest in the business. Many of these can be supplied straight from stock. Specials take only a little longer. That's what makes Kontite service the *best* in the business. First class materials and the proved efficiency of Kontite Gunmetal fittings are your guarantee of complete reliability.



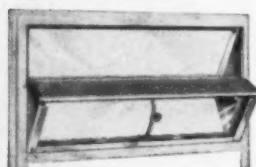
KAY & CO. (ENGINEERS) LTD.
BOLTON BRASS WORKS · BOLTON · LANCs.
TELEPHONE: BOLTON 21041/4

A MEMBER OF THE ALENCO GROUP OF COMPANIES

air control window assemblies



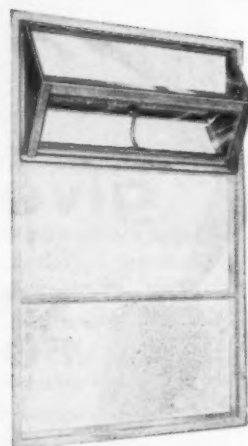
Auster patent air control windows offer a combination of advantages hitherto unavailable to architects. Purpose made or to standard specifications they are weather proof and ensure air control without draught and without penetration by dirt, insects, flies, etc. With these important features this window assembly is ideal for hospitals, clinics, canteens, laboratories, kitchens, larders, etc. Available in batteries with remote control operating or with cord operating to each individual window. Constructed in rust proofed steel, brass or light alloy sections, glazed or unglazed as required. Further information may be obtained on request from the manufacturers.



Remote control operating Model type B. 2628
Cord operating Model type B. 2626

LEFT: Illustration shows the interior view of the Air Control Window

Above: Illustration shows the exterior view



Auster

LTD

PATENT WINDOWS

AUSTER LIMITED, CROWN WORKS, BARFORD STREET, BIRMINGHAM
Telephone: MIDland 2123 (2 lines)

from

Pitman

NATURAL PERSPECTIVE

By James Last, M.I.Mech.E.

This book approaches the subject from the viewpoint of natural pictorial vision and the fundamental conditions of this determine the geometry of the constructions employed. Thus, the delineations are in agreement with equivalent optical projections, which they may anticipate when the objects drawn have yet to exist. It is usefully pointed out that drawing in perspective can only be learnt by drawing in perspective. Apart from architects this is also a book of great value to technical illustrators and art students. 21s. net.

From
all
Booksellers

☆ ☆ ☆

PEEL'S sectional buildings quickest up! longest up!



PEEL'S
Sectional BUILDINGS

- * 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

TURNTABLES — MANUAL OR POWER OPERATED

Flush Fitted New Showrooms, Service Bay or Car Park. Store Display and Exhibition. Permanent or Portable Designs.

**TECHNIGRAPHIC
BRISTOL
LIMITED**

CREWS HOLE ROAD, ST. GEORGE, BRISTOL 5
ST504-5



A range from 1 cwt. loading to 12 tons. Display or industrial. Technical Representatives by appointment.

Applied Lettering

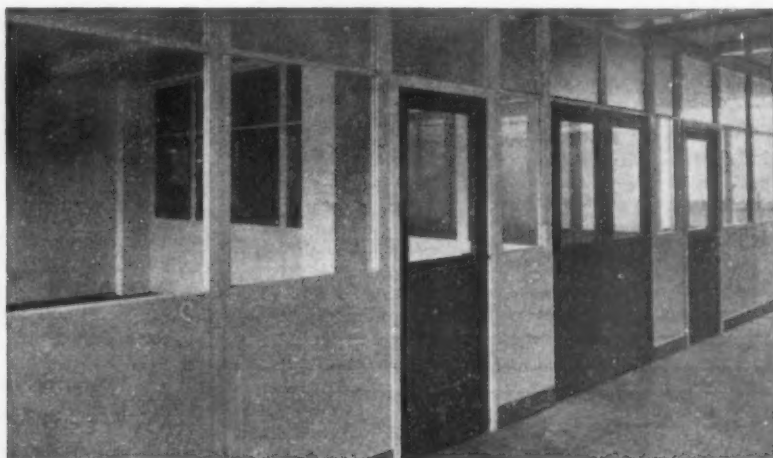


Variety of alphabets and materials for internal or external use, Illuminated Letters and Box Signs. Send for lettering sheets and brochures.

WARD & CO. (Letters) LTD.,
6-12 WILDER ST., BRISTOL 2 TEL. 293493

SEPARATE *and* CORPORATE

AYRSHIRE METAL PARTITIONS



Ayrshire Partitions provide the privacy necessary for executives' rooms, while uniting your accommodation in an attractive functional whole. There is a choice of styles to meet the requirements of your layout. Finish is stove enamelled, in a wide range of colours, and dado panels can be faced with textured plastic at no extra cost. Standard units arrive ready for immediate erection; they are corrosion, heat and warp resistant and can be re-used if accommodation has to be altered. The Ayrshire Partitions Planning Service is freely available to Architects and our latest catalogue awaits your enquiry.

AYRSHIRE METAL PRODUCTS LTD. IRVINE - AYRSHIRE - PHONE: IRVINE 2271/3

Grand Buildings Trafalgar Square, London W.C.2 Phone: Trafalgar 6651
Parkhouse St. St. Helens Lancs. Phone: St. Helens 2639
63 Temple Row Birmingham. Phone: Midland 1993

Contracts are safe with

Benbow
OF TORQUAY

Shopfitters and Bar fitters

Head Office Petitor Road Torquay

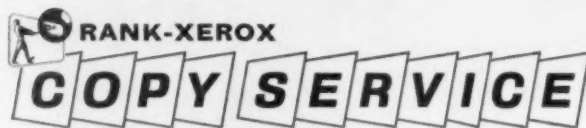
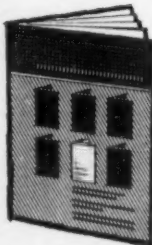
Telephone 89234/5

REGULAR CONTRACTORS IN DEVON CORNWALL SOMERSET GLOUCESTERSHIRE WILTSHIRE DORSET HAMPSHIRE SOUTH WALES
101

Complete priced bills of quantities... copied speedily!

Now—you can avoid delays, save money, prevent transcription errors! Any set of priced Bills of Quantities—large or small—can be copied quickly and accurately by the Rank-XeroX Copy Service onto ordinary paper, dyeline translucencies or offset masters.

Send for 16-page booklet RX30, and leaflet RX32 giving full details of this service, and of its use by the L.C.C.



40 Wilson Street, London E.C.2. Tel: BISHOPSGATE 1885
38 St. Charles Street, Birmingham. Tel: CENTRAL 0351
Also in Paris, Amsterdam, Dusseldorf, Munich and Sydney.

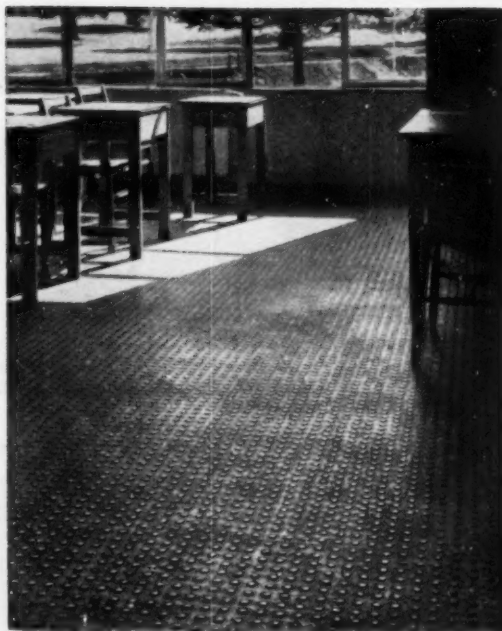
What are they called?

"Hill Bros."

Wire Rimmed:	They make 'Quickchange' noticeboards.
Horn Rimmed:	We're looking for something like that.
Wire Rimmed:	Give them a call, they make all sorts of boards. Directories for stores, Flight Indicator Boards for airports, etc.
Horn Rimmed:	'Really?' We need a board to list the occupants and personnel for a new office block.
Wire Rimmed:	Just the people. They go to infinite trouble to design a board to fit one's requirements.

HILL BROS

(SERVICE) LTD.
BEACONFIELD ROAD · ACTON GREEN · LONDON, W.4.
CHISWICK 2235/6



Photograph by courtesy of King Edward's School, Whitley.

rubber flooring by MORRIS

The photograph shows our "Studded Tile" flooring, selected by Gerald S. Jones & Sykes, architects, and installed by Chapman, Lowrie & Puttick Ltd., in King Edward's School, Whitley. Morris non-slip studded flooring is available in a very large range of colours, made in 12-in. square tiles, $\frac{3}{8}$ in. thick. Rubber flooring tiles designed and produced by Morris Rubber Industries Ltd. combine an inbred resistance to wear with an outward appearance which looks well in all kinds of surroundings. Available in many attractive colours and patterns, warm, hygienic, quiet and resilient, Morris Rubber Tiles will satisfy the need for hard-wearing floor covering wherever people work and live. Please let us send you more detailed information about Morris Rubber Flooring and, when in London, see our exhibit at The Building Centre, 26 Store Street, W.C.1.

SELECTED BY THE COUNCIL OF INDUSTRIAL DESIGN
FOR EXHIBITION IN DESIGN CENTRE

MORRIS RUBBER INDUSTRIES LIMITED



High Road - Byfleet - Surrey
Telephone: BYFLEET 45651/4
Telegrams: RUBBER, BYFLEET



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

LOOK!



over
60
coloured
samples

CORONET
NEW
PLASTIC
LAMINATES

Coronet is a highly decorative Swedish high pressure plastic laminate.

It's cheaper; and offers you the widest choice of colour combinations — over 60 attractive shades and patterns, including wood grains, plain colours and black or white.

Standard $\frac{1}{8}$ inch thick sheets, either 8 ft. x 4 ft. or 9 ft. x 4 ft., with matt or semi-gloss finish. Delivery ex stock — stockists throughout Britain.

Sole Agents for Coronet in this country —

PHOENIX

one of Britain's major timber importers

FREE

CORONET
SAMPLES

To: The Phoenix Timber Co. Ltd.,
Plastics Division, Frog Island,
New Road, Rainham, Essex.

Please send me free samples of Coronet laminates and the name of my nearest stockist.

NAME

ADDRESS

new techniques & long experience

AT YOUR SERVICE WITH

METCO
METAL FIXING SYSTEMS

**STRUCTURAL
INSULATION**





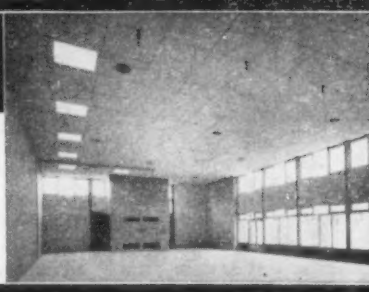
**SOUND
ABATEMENT**

UNITEX
ACOUSTIC TILES

'VEELAP'
INSULATING PANELS

**SUSPENDED
CEILINGS**

3' 4" module
(other sized panels available)

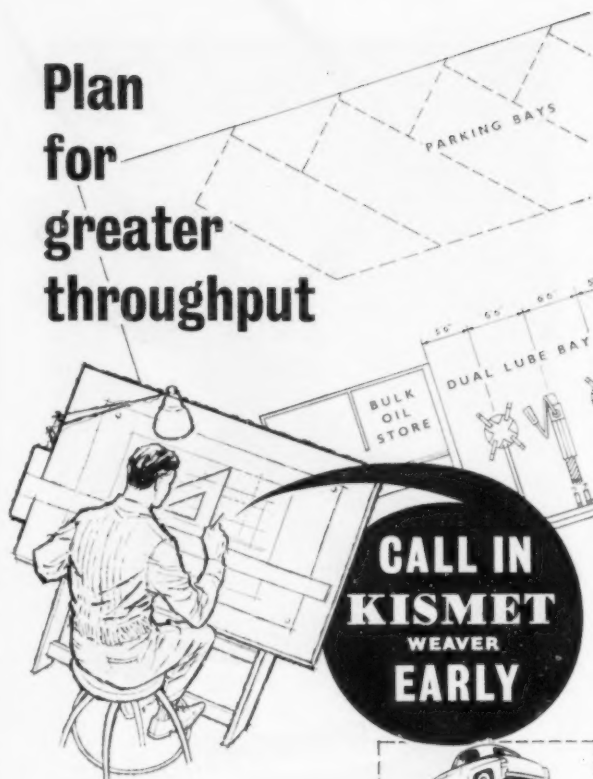




The **MERCHANT TRADING COMPANY Limited**

ADRIENNE AVENUE, SOUTHALL, MIDDX.
TELEPHONE: WAXLOW 6381

Plan for greater throughput



**CALL IN
KISMET
WEAVER
EARLY**

**Get more
efficiency
from every
square yard
of operative
floor area**

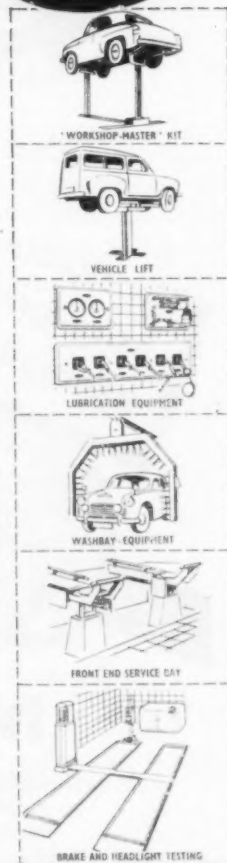
If you are considering extensions or alterations to existing buildings or planning new premises, you will find our Layout and Planning Department at Bedford of considerable value. Its unrivalled experience can provide the practical economic solution to cope with almost any situation—to make every square 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.

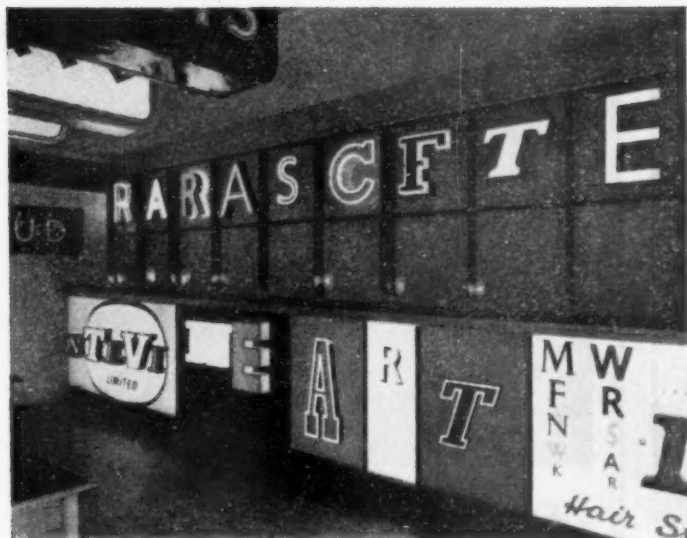


KISMET LIMITED

INCORPORATING WEAVER MANUFACTURING & ENGINEERING CO LTD
AND WILLIAM TURNER (KISMET) LTD

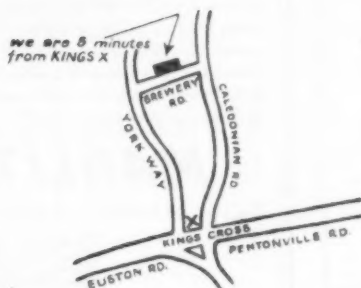
FENLAKE WORKS BEDFORD Phone BEDFORD 63871 (10 Lines)

SCOTTISH AGENTS: (Garage Equipment and Steam Cleaners) Gerard Wakeham Ltd 1 Clifton Street Glasgow C3 Phone: Douglas 4297.



A corner of our showroom

We invite you to visit
our Showroom and
Works, where we will
be pleased to demon-
strate the ranges in
our Reference Book
and many others



ACCLAIMED!

... THE most useful Reference Book on
Lettering and Signs ...

50 PAGES of detachable Type-Face Sheets,
Photographs, Classified Data Sheets
in colour, Specifications, etc., etc.
In loose-leaf form for tracing purposes

AVAILABLE ON REQUEST

INFORMATION SERVICE

To ensure that this Book is constantly UP-TO-DATE
Supplementary Pages are being regularly posted.
PLEASE INFORM US IF YOU ARE NOT RECEIVING THESE

MODERNEON

MODERN ELECTRIC (INSTALLATIONS) LTD.

BREWERY ROAD, LONDON, N.7.
North 6688/7311 (10 lines)

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



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



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. T3/20

Peasmarsh, Guildford, Surrey. (Head Office) Guildford GU1 1J
Shurdlington, Cheltenham, Glos. Shurdlington 344/5
Waterloo, Poole, Dorset. Broadstone 911/6
London Showrooms: 251 Tottenham Court Road, W.1.

Architects and Planners

with design talent and administrative ability will have excellent opportunities for carrying through projects from inception to completion in a wide and stimulating programme of work at the offices of Sir Percy Thomas and Son in Cardiff, Swansea and Shrewsbury. The design policy of the firm envisages the most progressive approach to the projects and special encouragement will be given to initiative and reliability by progressive promotion and Staff plus Government pension schemes, giving considerable security of engagement. There are vacancies at each of the Offices. Applications are invited for:

A

Assistant Architects.

Must be A.R.I.B.A., with three to four years, experience.

Basic salary range £1,000/£1,500 according to experience plus generous annual bonus based on individual merit and success of the firm.

B

Architect Planners or Planners.

Must be A.R.I.B.A., A.M.T.P.I. or A.R.I.B.A. plus Part I T.P.I. Final or at advanced study stage.

Basic salary range £1,000/£1,500 according to experience plus generous annual bonus based on individual merit and success of the firm.

C

Assistant Architects. Recently qualified A.R.I.B.A. or Inter standard plus some practical experience.

Salary range £800/£1,000 according to experience.

Paid overtime in all positions. Five-day week. Holiday: Summer two weeks; Winter one week.

Cardiff, Swansea and Shrewsbury offer pleasant working environment with attractive sea or country nearby for leisure and recreation.

Applicants should state age, education details, experience, present salary and preference of locale, and should be addressed in the first instance to The Secretary, Sir Percy Thomas and Son, 10 Cathedral Road, Cardiff.

DESIGN PARTNERSHIP

PRESTON LONDON MANCHESTER DERBY BLACKPOOL

Announce opportunities in a live organisation where good design of buildings and environment, efficient management and the chance to develop individual talent are the firm's main concerns. Existing income sharing structure.

Senior members, all professions
Qualified five years upwards
£1,400-£1,700 per annum

Assistant members, all professions
Qualified two years upwards
£1,100-£1,400 per annum

Welfare provisions and working conditions progressive. Movement allowances available. Invitations to practising membership are offered to Architects, Town Planners, Civil Structural and Services Engineers, Quantity Surveyors. Landscape Architects and Industrial Designers interested in future possibilities may also communicate. Strict confidence will be observed in treating enquiries stating training, qualifications and experience, to be sent in first place to Head Office:

**DESIGN PARTNERSHIP, 12-30 Guildhall Street,
Preston, Lancs.**

NORTH RIDING OF YORKSHIRE
COUNTY COUNCIL

SENIOR PLANNING ASSISTANTS

in County Planning Headquarters, Northallerton

4 Senior Assistants, Grades A.P.T. IV—V (£1,140 to £1,310 and £1,310 to £1,480); salary and grading in accordance with qualifications and experience.

Experience on Development Plan and Town Maps essential for three of the posts. One assistant will have special duties relating to the North York Moors and Yorkshire Dales National Parks. Further particulars available from the undersigned. Travelling allowance for 10 h.p. car.

Applicants must disclose in writing relationship to any member or senior officer of the County Council. Canvassing disqualifies. Applications, giving age, qualifications, previous appointments and experience, with addresses of two referees, to the Clerk of the County Council, County Hall, Northallerton, by 10th July, 1961.

SENIOR ARCHITECTS ARCHITECTS ARCHITECTURAL ASSISTANTS

We have vacancies in the Architects' Department in LONDON & EPSOM for qualified men and those who have passed the Intermediate R. I. B. A. Examination.

These are permanent positions:
Luncheon vouchers, five day week,
pension scheme.

Please write fully in confidence to the

**Personnel Manager,
W. S. Atkins & Partners,
158, Victoria Street, London, S.W.1**

SENIOR ARCHITECT PLANNERS

May be interested in an opportunity to take a leading design role in a new **PLANNING AND DEVELOPMENT TEAM** to be set up at Aldershot by **DESIGN PARTNERSHIP** working in collaboration with The War Office to rebuild Aldershot Military Town. The team, which will be composed of all the Building professions, will be responsible for initiating broad planning principles three-dimensional development studies, including Architectural and Landscape character, investigations into advance building techniques and new methods of organising building Contracts. Detailed building design is a distinct possibility as would be Industrial design, particularly Street Furniture and building equipment. This position would carry Co-ordinating Associate status in **DESIGN PARTNERSHIP**, and full use of a car. Welfare provisions and working conditions progressive; movement allowances available. Strict confidence will be observed in treating enquiries stating training, qualifications, experience and present situation.

**DESIGN PARTNERSHIP, 12-30 GUILDHALL STREET,
PRESTON**

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advertisement Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post 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.

AYCLIFFE DEVELOPMENT CORPORATION
(New Town of Newton Aycliffe)
ASSISTANT ARCHITECTS

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 Town Staff salary scales, i.e. £1,140-£1,565 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. TC6672

CORPORATION OF LONDON
CITY PLANNING OFFICE

TWO PLANNING ASSISTANTS in the following salary ranges: (a) £1,195-£1,480; (b) £1,055-£1,310 are required.

The City Planning Office has interesting Planning projects on hand and others in active preparation, e.g. large scale development is now proceeding in Barbican commercial zone where separated pedestrian walkways are planned for a large area.

The vacancies exist in the Civic Design Section for qualified Architectural or Planning Assistants to join small group working on the present important phase of rebuilding in the City. Opportunities for advancement should occur from time to time.

Local Act Superannuation.
Apply to the City Planning Officer, Guildhall, E.C.2. TC7719

ZETLAND COUNTY COUNCIL

Applications are invited for an appointment of ASSISTANT ARCHITECT in the County Architect's Department. Salary according to scale for Professional Assistants (£850-£1,150) with placing according to age, qualifications and experience. Candidates must be Registered Architects and should have had wide experience in the preparation of sketch plans, working drawings and details. The appointment is superannuable and housing accommodation will be considered.

Applications, stating age, experience and qualifications, and accompanied by copies of two recent testimonials, must be lodged with the undersigned by 30th June, 1961.

JOHN N. SINCLAIR,
County Clerk.

County Buildings,
Lerwick,
Shetland. S7961
2nd June, 1961.

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.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 20th June, 1961.

GEORGE D. GRANT,
Town Clerk.

Municipal Chambers,
Dumfries. S7966
2nd June, 1961.

ADMINISTRATIVE COUNTY OF LEICESTER

- (a) PRINCIPAL ASSISTANT ARCHITECT, £1,410-£1,565.
(b) CHIEF ASSISTANT ARCHITECTS, £1,310-£1,410-£1,565.
(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, 123, London Road, Leicester. TC7478

BRACKNELL DEVELOPMENT CORPORATION

Applications are invited for the following post in the Chief Architect's Department:—
ARCHITECTURAL ASSISTANT — Salary range £645-815.

The post offers the opportunity of working on progressive schemes in Housing, Industrial and Town Centre development. Housing can be made available in suitable circumstances. Superannuation schemes, medical examination, 5-day week. Apply by Thursday, 29th June, giving age, education, experience and any appointments held (with dates and salaries) and the names of two referees, to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. S8034

CITY OF NEW SARUM
APPOINTMENT OF TEMPORARY
ARCHITECTURAL ASSISTANT

A temporary architectural assistant is required to work on housing and redevelopment area schemes now in preparation. The work offers considerable scope on design and detailing of multi-storey dwellings for a scheme in which particular attention is to be given to the treatment of open spaces.

The appointment, which will be initially for a period of nine months, is thought to be suitable for an assistant with Intermediate R.I.B.A. or a newly qualified person requiring office experience.

The department works a five-day week. Applications, stating qualifications, experience, availability and salary required should be sent to the City Engineer, Council House, Bourne Hill, Salisbury, by 30th June, 1961.

GEO. RICHARDSON,
Town Clerk. S7996

HAMPSHIRE

TOWN DEVELOPMENT AT BASINGSTOKE

DIRECTOR OF TOWN DEVELOPMENT (£3,500-£4,000) required for pensionable post concerned with the expansion of Basingstoke under the Town Development Act, 1952, from its present population of 25,000 to about 75,000 by 1975. The Director will be appointed to the staff of the Hampshire County Council, but will work under the direction of a Joint Committee of representatives of the Basingstoke Borough Council, the London County Council, and the Hampshire County Council.

Candidates should hold appropriate qualifications and have had extensive experience of town expansion schemes. Separation allowance and assistance with removal expenses will be paid in approved cases. The salary will be fixed within the range according to qualifications and experience.

Applications stating full details of age, education, qualifications and experience, and accompanied by a copy of one testimonial and the names of two referees, should reach the Clerk of the County Council, The Castle, Winchester, by 30th June. S8036

HACKNEY BOROUGH COUNCIL
ENGINEER AND SURVEYOR'S DEPARTMENT
VACANCIES FOR ARCHITECTURAL STAFF

Applications are invited for permanent appointments of

ASSISTANT ARCHITECTS AND ARCHITECTURAL ASSISTANTS in the Architectural Section of the Department in Grades ranging between A.P.T. I (£645-£815) and A.P.T. V (£1,310-£1,480).

London Weighting Allowances (£45 p.a., for appointments in A.P.T. III and above) payable in addition.

Grading and commencing salaries will be fixed according to training, qualifications and experience.

The Department has on hand a heavy and varied programme of Housing Development and other architectural projects.

Modern staff canteen; alternate Saturdays; post-entry training facilities (in appropriate cases) and possible 100 per cent advances for house-purchase within or without the Borough.

Frequent electric train service to Hackney Downs.

Application forms obtainable from Town Clerk, Town Hall, Hackney, London, E.8, returnable by 9 a.m., 3rd July, 1961. S8007

AIR MINISTRY requires QUANTITY SURVEYING ASSISTANTS, Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom. The work includes abstracting and billing, site measurement and preparation of estimates.

Salary, which is dependent upon age, qualifications and experience, ranges from £726 (age 23) to £961 maximum in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher grades, viz.,

Technical Grade II: £961-£1,098 123 posts
Technical Grade I: £1,098-£1,348 42 posts
Technical Grade B: £1,348-£1,552 6 posts
Technical Grade A: £1,439-£1,697 6 posts

Vacancies occurring in the higher grades are, as a rule, filled by promotion of existing staff.

Overseas tours for which special allowances ranging at present up to £1,800 p.a. are payable in addition to a higher salary. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. Five-day week with 18 days paid leave a year initially.

Applicants who must be natural born British subjects, must hold O.N.C. (Building or Builders Quantities) or equivalent and have had good experience under Quantity Surveyor or Building Contractor. Knowledge of W.D. Scheme an advantage. Forms from Manager (P.E.2), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon Street, London, E.C.4. Candidates selected will be interviewed in Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview will be advised. S7028

OXFORDSHIRE COUNTY COUNCIL
ARCHITECT'S DEPARTMENT
ASSISTANT ARCHITECTS A.P.T. Grade V (£1,310-£1,480)

(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.

The Council will pay 50 per cent of any removal expenses. Five-day working week.

Applications for forms and further particulars should be made at once from the undersigned.

ALBERT E. SMITH,
County Architect.

Park End Street Offices,
Oxford. S7996

BOROUGH OF LEYTON
(in the County of Essex)
COMMITTEE FOR EDUCATION
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the permanent appointment of Architectural Assistant Grade A.P.T. III £950-£1,140 per annum, plus London Weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Department, Town Hall, Leyton, E.10. Five-day week is operated.

Details and forms of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11, to whom they should be returned within 14 days from the appearance of this advertisement. S7985

BOROUGH OF LEYTON
(in the County of Essex)
APPOINTMENT OF JUNIOR
ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of Junior Architectural Assistant Grade A.P.T. I £645-£815 per annum plus London Weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Department, Town Hall, Leyton, E.10. Five-day week is operated.

Details and forms of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11, to whom they should be returned within 14 days from the appearance of this advertisement. S7984

LONDON ELECTRICITY BOARD
ARCHITECTURAL DRAFTSMAN

Applications are invited for the above position under the supervision of an Architect in the Chief Engineer's Department in Central London (Waterloo).

Applicants should preferably have had several years' experience in an Architect's Office and have obtained five passes at "O" level and two at "A" level of the G.C.E. or have gained the Ordinary National Certificate (Building).

The post is graded under Schedule "B" of the National Joint Board Agreement, as Grade 13, Class "BX," and the commencing salary will be in the range of £780 to £1,065 per annum, inclusive of London Allowance.

Application form obtainable from the Construction Engineer, Lesco House, Stamford Street, London, S.E.1. Please quote ref.: PER/V/3250/A. S8024

CAERNARVONSHIRE COUNTY COUNCIL
Applications are invited for the following appointments:—

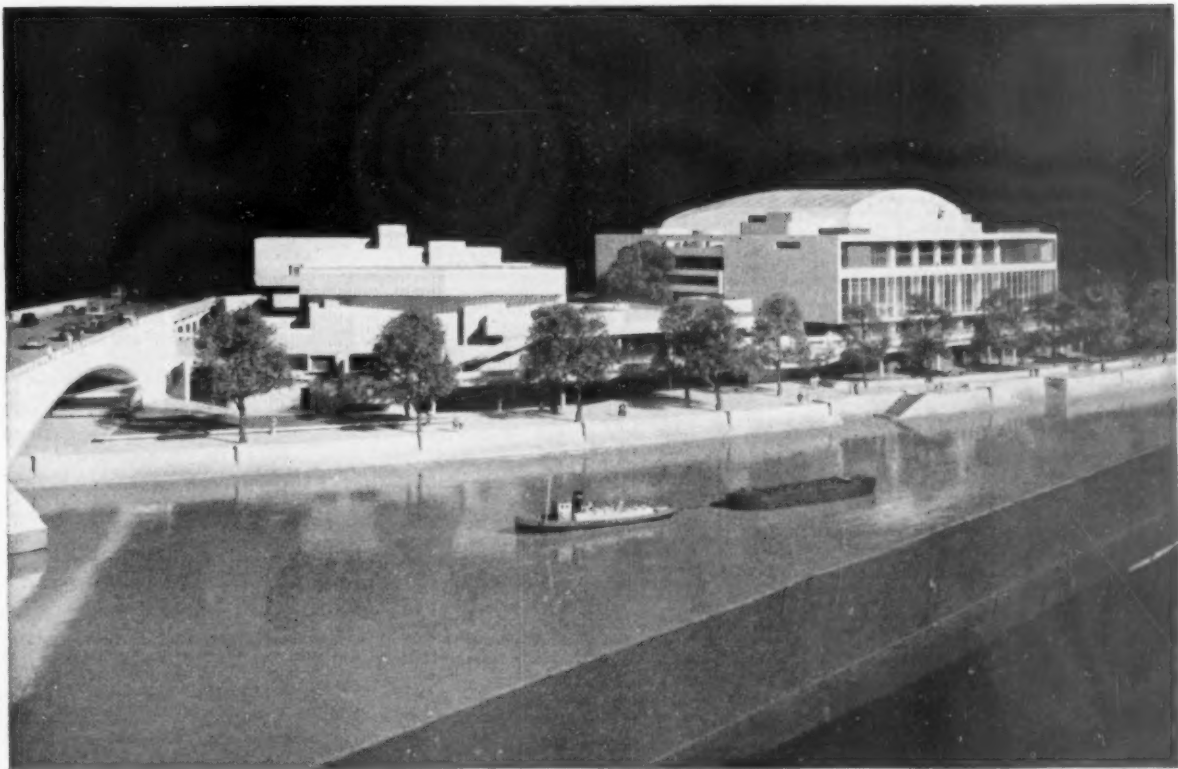
ASSISTANT ARCHITECT, A.P.T. V-£1,310/£1,480.

ASSISTANT ARCHITECTS, A.P.T. IV-£960/£1,310.

Further particulars and application forms from Clerk of the County Council, County Offices, Caernarvon. S7926

DESIGNING WITH THE L.C.C.

Architects required for 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.



Application forms and further particulars from Hubert Bennett, F.R.I.B.A., Architect to the London County Council, County Hall, London, S.E.1., quoting reference EK/1626/6

BRACKNELL DEVELOPMENT CORPORATION
Applications are invited for the post of ARCHITECT, Grade IV. Salary range £1,140-£1,310. The Minister is expected to give his decision shortly on the proposal to extend the scope of the New Town by increasing the designated area from 1,150 to 3,650 acres. Superannuation schemes, medical examination, 5-day week. Good housing accommodation available. Applications, stating age, education, qualifications, experience and appointments held (with dates and salaries), and the names of two referees, should be addressed to the General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks., to be received not later than 29th June. S8047

CITY OF BIRMINGHAM
CITY ARCHITECTS' DEPARTMENT
Appointments within Grade A.P.T. IV (£1,140-£1,310) are offered to enthusiastic and imaginative qualified 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.

Candidates who have passed Parts I and II of the Final R.I.B.A. Examination or hold equivalent qualifications will be eligible for these appointments.

Commencing salaries within the scale 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. S8064

BRACKNELL DEVELOPMENT CORPORATION
Applications are invited for the following post in the Quantity Surveyors section:—

JUNIOR QUANTITY SURVEYOR
A.P.T. Grade II, salary range £815-£960.

Applicants must have passed the R.I.C.S. Intermediate examination (Quantities sub-division). Duties embrace Housing, Town Centre and Industrial buildings. Superannuation schemes, medical examination. Housing available.

Apply by 3rd July, 1961, stating age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (Q.S.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. S8065

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

HUDDERSFIELD DIVISIONAL OFFICE
Applications are invited for the appointment of BUILDING INSPECTOR—Grade A.P.T. I, £645-£815, in the Huddersfield Divisional Office. Applicants should have a sound knowledge of building construction and maintenance, be capable of preparing reports and approximate estimates of cost for maintenance works and the checking of builders' accounts. Commencing salary according to experience.

Application forms, with conditions of service, are obtainable from this office and should be returned not later than the first post on Tuesday, 27th June, 1961.

F. W. KNEWSTUBB, A.R.I.B.A., Divisional Architect.

Divisional Architect's Office, Flint Street, Huddersfield. S138

BOROUGH OF ROWLEY REGIS BUILDING DEPARTMENT

Applications are invited for the post of ARCHITECTURAL ASSISTANT, salary A.P.T. Grade IV (£1,140-£1,310).

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 Wednesday, the 5th July, 1961.

G. C. COOKSON, Town Clerk.

Municipal Buildings, Old Hill, Staffs. S141

ARCHITECTURAL ASSISTANTS of Intermediate R.I.B.A. standard required by Ministry of Works in London for the design of interesting and varied types of buildings in all parts of the world.

Salary range from £658 (at age 21) to £1,048. Starting pay according to age and experience. Five-day week. 35 weeks' leave annually. Good prospects of promotion and permanency with non-contributory pension scheme. Apply, giving details of age, training and experience, to: E. Bedford, Esq., C.B., C.V.O., A.R.I.B.A., Chief Architect, Ministry of Works (A.J.), Abell House, Room 427, John Islip Street, London, S.W.1. Interviews will be held at the above address. S7699

AIR MINISTRY require **SENIOR WORKERS** UP in Quantities Division in London. Salary, which is dependent on age, qual. and exp., ranges from £1,014 to £1,158 (max.) on annual incremental basis. Five-day week with three weeks three days paid leave a year initially. Some promotion and pension prospects. *Quals.*: Applicants, who must be natural born British subjects, should hold O.N.C. or C. & G. (Quantities) or equiv. and be fully competent to work up entire bills of quantities. Financial assistance and time off allowed for recognised courses of study leading to higher qual. Forms from Manager (PE 519), Ministry of Labour, Professional & Executive Register, Atlantic House, Farringdon Street, London, E.C.4. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for interview will be advised. S8144

METROPOLITAN POLICE
RECEIVER'S OFFICE
Applications are invited for the following positions in connection with the design and erection of Police Housing, Police Stations, Single Men's Hostels, Cadets' Residential Training Centres and Magistrates' Courts within the Metropolitan Police District and schemes for major alterations to various Police buildings.

ASSISTANT ARCHITECTS—Salary: £991 p.a. at age 25, rising by annual increments to £1,490 p.a. (Maximum salary on entry £1,318 p.a. at age 34 or over.) Qualifications: Must be registered Architects.

LEADING ARCHITECTURAL ASSISTANTS—Salary: £1,048 p.a. rising by annual increments to £1,220 p.a. Qualifications: Inter-R.I.B.A. H.N.C. or equivalent.

ARCHITECTURAL ASSISTANTS—Salary: £658 p.a. at age 21 rising by annual increments to £1,048 p.a. (Maximum salary on entry £960 p.a. at age 22 or over.) Qualifications: O.N.C., Inter-R.I.B.A. or equivalent.

TECHNICAL ASSISTANTS, III—Salary: £752 p.a. at age 21 rising by annual increments to £1,043 p.a. (Maximum salary on entry £939 p.a. at age 28 or over.) Qualifications: Inter-R.I.B.A./R.I.C.S. (Building) or equivalent.

J. INNES ELLIOTT, B.Arch, F.R.I.B.A., Chief Architect & Surveyor.

Apply to: Chief Clerk, Architect & Surveyor's Department, New Scotland Yard, S.W.1. S145

COUNTY BOROUGH OF WEST HAM
A vacancy exists for a GROUP ARCHITECT in the Borough Architect and Planning Officer's Department. J.N.C. Scale "B"—£1,485-£1,670 p.a., plus Essential Car Allowance.

There are also a number of vacancies for SENIOR ASSISTANT ARCHITECTS, J.N.C. Scale "A"—£1,400-£1,565 p.a.

An expanded programme of work, including numerous official buildings, Fire Stations, Primary and Secondary Schools, high density housing, and Town Centre Redevelopment Scheme, is on hand.

Applications, with details of qualifications and experience (together with names of two referees), to be addressed to Thomas E. North, O.B.E., F.R.I.B.A., Dist.T.P., M.T.P.I., Borough Architect & Planning Officer, 70, West Ham Lane, Stratford, E.15, by 11th July, 1961. S146

HARLOW URBAN DISTRICT COUNCIL

require an ARCHITECTURAL ASSISTANT Salary within A.P.T. III (£960-£1,140) according to qualifications and experience. Appointment subject to medical examination.

Housing accommodation will be made available and removal expenses paid.

Full details from A. W. R. Webb, A.M.I.C.E., Engineer and Surveyor, Town Hall, Harlow, Essex, to whom applications should be sent by 30th June, 1961. S8066

CITY OF CARLISLE

CITY SURVEYOR'S DEPARTMENT

PRINCIPAL ASSISTANT ARCHITECTS
Applications are invited from qualified Architects for the above posts. A great deal of interesting and sizeable work is in progress and projected. Salary according to A.P.T. V (£1,310-£1,480 per annum) and staff houses are available.

Application forms obtainable from the City Surveyor, 18, Fisher Street, Carlisle. Closing date noon on July 10th.

H. D. A. ROBERTSON, Town Clerk. S8100

NOTTINGHAMSHIRE COUNTY COUNCIL
COUNTY ARCHITECTS' DEPARTMENT
APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR

Applications are invited from suitably qualified persons for the post of Assistant Quantity Surveyor, within A.P.T. Grades III/IV, the range of which is £960-£1,310 per annum.

Applicants for the post must be Chartered Quantity Surveyors (A.R.I.C.S.) with experience in taking off quantities, site measurements, interim certificates and final accounts.

Forms of application from W. D. Lacey, County Architect, County Hall, West Bridgford, Nottingham, to whom they should be returned as soon as possible.

A. R. DAVIS, Clerk of the County Council. S102

NOTTINGHAMSHIRE COUNTY COUNCIL
APPOINTMENT OF ASSISTANT ARCHITECTS AND ARCHITECTURAL ASSISTANTS
A.P.T. GRADES III-IV

Applications are invited from:—

(a) ARCHITECTS.
(b) STUDENTS who have passed the Final Examination of the R.I.B.A. or the Diploma Examination of a recognised school to work on the Council's major building programmes. Consideration will be given to students who expect to complete their courses in July next.

The salary of the A.P.T. III/IV scale ranges from £960 to £1,310 per annum, and the commencing salary to be offered in each case will be in accordance with ability and experience. Starting dates by agreement.

Forms of application may be obtained from the County Architect, County Hall, West Bridgford, Nottingham, to whom they should be returned as soon as possible.

A. R. DAVIS, Clerk of the County Council. S101

WARWICKSHIRE COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT

Applications are invited for the post of SENIOR PLANNING ASSISTANT, Grade A.P.T. V. Applicants must be professionally qualified and experience in Development Control is essential as the successful candidate will be mainly engaged on appeal work.

The commencing salary will be according to experience and qualifications.

The post is subject to the provisions of the Local Government Superannuation Act and to a medical examination. Consideration will be given to the granting of removal expenses.

Applications, together with the names and addresses of two referees, should be sent to J. J. Brooks, County Planning Officer, Northgate, Warwick, not later than Wednesday, 5th July, 1961.

L. EDGAR STEPHENS, Clerk of the Council.

Shire Hall, Warwick. S103

MIDDLESBROUGH EDUCATION COMMITTEE

Applications are invited for the following appointments in the office of the Education Architect (K. J. Caton, A.R.I.B.A.). Middlesbrough has a large and continuing educational building programme offering scope in interesting projects. Appointments will be made within the grades indicated, subject to qualifications and experience.

(a) SENIOR ASSISTANT ARCHITECTS, A.P.T. V (£1,310-£1,480).

(b) ASSISTANT ARCHITECTS, A.P.T. III (£960-£1,140) and IV (£1,140-£1,310).

(c) ARCHITECTURAL ASSISTANTS, A.P.T. I (£645-£815) and II (£815-£960).

(d) DRAUGHTSMEN, Miscellaneous Grades III-IV (£455-£685).

Housing accommodation will be considered for married applicants for posts (a) and (b).

Application forms and particulars from the Director of Education, Education Offices, Woodlands Road, Middlesbrough, to whom completed forms should be returned as soon as possible. S990

BELFAST EDUCATION COMMITTEE

COLLEGE OF TECHNOLOGY

Principal: D. H. ALEXANDER, O.B.E., F.C.G.I., M.Sc., WILSON, M.I.MECH.E.

COLLEGE OF ART

Applications are invited for the following position in the COLLEGE OF ART, College of Technology, Belfast, 1.

SENIOR LECTURER, GRADE A, IN ARCHITECTURE

The salary will be on the scale of £1,370 x £35 to £1,550 per annum, with allowance for previous experience in a position of similar responsibility.

Applicants should hold appropriate professional qualifications, and it is desirable that they should also have had industrial, professional or teaching experience.

Further particulars and form of application may be obtained from the Principal, College of Technology, Belfast, 1, with whom completed applications should be lodged not later than Friday, 14th July, 1961.

Canvassing is strictly forbidden and will disqualify.

J. STUART HAWNT, Director of Education. S991

LAMBETH BOROUGH COUNCIL

HOUSING DEPARTMENT

Vacancies exist for ARCHITECTURAL ASSISTANTS within the salary range £840-£1,525 per annum. Interesting new work includes multi-storey flats, maisonettes, houses, shops, public library, depots, etc.

Application in the first instance by letter to the Town Clerk, Town Hall, Brixton, S.W.2. Closing date 30th June, 1961. S136

METROPOLITAN BOROUGH OF POPLAR

ASSISTANT ARCHITECTS required by Poplar Borough Council for immediate appointment. Salary scale A.P.T. III/IV (£960-£1,140 p.a.; £1,140-£1,310 p.a., plus £45 p.a. "weighting").

Commencing salary according to qualifications and experience. Projects include multi-storey flats and maisonettes, etc., in redevelopment areas, and municipal buildings. Application forms from Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3. S137

MICHELIN

TYRE CO. LTD. STOKE-ON-TRENT

requires

a junior architectural assistant

to join a team engaged on interesting building projects ranging from housing to industrial buildings. Applicants, aged 22-25, should hold or be studying for Inter R.I.B.A. or H.N.C. Building, and should have had experience in a professional office.

Salary range £660-£850 per annum according to age and experience. The appointment is permanent and pensionable. Housing assistance may be given to a married candidate. Removal expenses paid. Five-day week. Three weeks annual holiday.

Please write in confidence giving full details of qualifications and experience to:

Mr. B. G. Tierney,
Technical Personnel Officer,
at the above address, quoting Ref. B/1023/AJ

Architect's Junior Assistants



PLAN YOUR CAREER
WITH THE

WESTMINSTER
BANK

COMMENCING
SALARY
£550 to £850
WITH
GOOD PROSPECTS

- Modern London Drawing Office
- Favourable House Mortgage Rates
- Luncheon Club
- Sports Club & other Social Activities
- Pensions Scheme
- Fare for Interview refunded

Write, stating age, experience and salary required to:

THE ARCHITECT, WESTMINSTER BANK LTD
Post Office Court, 10 Lombard Street, E.C.3

ATCOST

(FACTORIES) LTD

—the specialist designers and builders
of modern Industrial Buildings
are increasing their staff of

Qualified Architects and Assistants

IN WARWICKSHIRE · KENT · ESSEX

ABILITY AND ENTERPRISE
MUST BE CONSISTENT
WITH QUALIFICATIONS

Superannuation and substantial
bonus schemes in operation

EXCELLENT PROSPECTS
in rapidly expanding organisation

Replies, in confidence, to Sales Director.

**ATCOST (FACTORIES) LTD., YORK HOUSE,
TUNBRIDGE WELLS, KENT**

*Advance
with*

ATCOST



Capable Architectural Assistant

required by
MOBIL OIL COMPANY LIMITED
in their Sheffield Division office

The post offers opportunity for neat and experienced draughtsman to take responsibility for the design and supervision of small contracts and to gain experience in the surveying of new and existing sites. Salary in accordance with experience. Luncheon vouchers, sickness benefits etc.

Write giving full details of age, experience and salary required to:

Employee Relations Adviser,
MOBIL OIL COMPANY LIMITED
Caxton House, London S.W.1

HOSPITAL DESIGN

- With the rapid expansion of hospital building this Board has a large and varied programme of works involving several million pounds per year. This affords unique opportunities for young architects of ability and enthusiasm to gain experience and promotion.
- Full architectural responsibilities are delegated to working groups. Under the direction of Vernon Lee, Alfred Rigby, and Fred Woodhead, the department seek to rationalise hospital building by means of modular co-ordination and a systematic approach to design and construction.
- Study and research facilities exist for all architectural staff.
- The Board have modern office accommodation close to Paddington Station, and work a five-day week.
- Applications are invited for the following appointments, stating age, qualifications (with dates) and experience, giving the names of two Referees to the Secretary, North West Met. Reg. Hospital Board, 40 Eastbourne Terrace, London, W.2, by 17th July, 1961.

Assistant Architect £945-£1,360 inc.
Registered Architects.

Architectural Assistant £655-£940 inclusive.
Inter R.I.B.A. only.

These posts are superannuable and include London Weighting.

Mr. Maunder will be pleased to answer any telephone enquiries at AMBassador 8011, Extension 369.

NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD

Regional Architect:

F. A. C. MAUNDER, R.S., F.R.I.B.A., A.M.T.P.I.

BOROUGH OF HARROW

Applications are invited for appointments on the Architectural staff of the Borough Engineer's Department which is engaged on a varied programme of municipal building schemes and is also responsible for all building maintenance.

- (a) SENIOR TECHNICAL ASSISTANT, A.P.T. IV (£1,140-£1,310 p.a. plus London "weighting"). Must be suitably qualified and will assist in school maintenance works.
- (b) ARCHITECTURAL ASSISTANTS, A.P.T. III/IV (£960-£1,310 p.a. plus London "weighting").
- (c) BUILDING SURVEYORS, A.P.T. III/IV (£960-£1,310 p.a. plus London "weighting").

For works of maintenance and improvements to municipal properties, including schools.

Applicants must possess a sound knowledge of building construction and services and have extensive experience of specification writing.

Note: Commencing salaries will be in accordance with qualifications and experience, but in the case of appointments (b) and (c) qualified applicants will be given additional responsibilities and may be placed in A.P.T. IV (£1,140-£1,310 p.a.).

The Council may be able to help with housing accommodation in the light of the applicant's circumstances. A contribution towards removal expenses will be considered.

The appointments are subject to the Local Government Superannuation Acts and to the National Joint Council's Scheme of Conditions of Service.

Forms of application may be obtained from me and must be returned, not later than Friday, 30th June, 1961.

DAVID PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
Harrow, Middx. 8099

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/1045/6), County Hall, Westminster Bridge, S.E.1, for application forms and further particulars. Completed applications to be submitted before 1st September, 1961. 87181

QUANTITY SURVEYORS—OVERSEAS

AIR MINISTRY require chartered Quantity Surveyors for service initially in overseas areas on tours of 2 or 3 years' duration according to location.

Basic salary according to age and experience ranging from £961 at 25 to £1,298 at 34 or over to £1,470 (max.). An increase of £75 p.a. (within max. of scale) after 2 years' satisfactory service subject to corporate membership of R.I.C.S. being held. In addition Tax Free foreign service allowance varying according to location, marital status, etc., e.g. total emoluments at Cyprus vary at age 25 from £1,286 to £1,735 (single man) and £1,546-£2,351 for married man.

Kit allowances and free passage for self, and family when accommodation arranged. Free medical and education arrangements. Five-day week, paid annual leave initially four weeks and two days.

Completion of tour to be followed by duties in U.K. with opportunities for further tours overseas. Appointments are non-pensionable but there are good promotion and pension prospects.

Application forms and full particulars from Ministry of Labour, Technical and Scientific Register (K), 26, King Street, London, S.W.1, quoting J.79/10/A. 87914

LANCASHIRE COUNTY COUNCIL

ARCHITECTURAL ASSISTANT required at PRESTON, A.P.T. Grade V, salary £1,310-£1,480 per annum.

Applicants should have had experience in the preparation of housing layouts and schemes for central area redevelopment.

Disturbance allowances and removal expenses to a maximum of £125 may be granted in approved cases.

Applications giving age, qualifications, present appointment, experience, etc., and two referees to the County Planning Officer (S), East Chiff County Offices, Preston, by the 3rd July, 1961. 8075

CITY AND COUNTY OF BRISTOL

EDUCATION COMMITTEE

BRISTOL TECHNICAL COLLEGE

DEPARTMENT OF BUILDING

The Governors invite applications for post of ASSISTANT, Grade B, to teach BUILDING SCIENCE.

Applicants will be expected to teach principally in O.N.D. and O.N.C. courses but may be expected to assist in the advanced work. Burnham Technical Scale salary—£700 to £1,150, with graduate and training allowances where applicable.

Application forms, returnable as soon as possible, and particulars from Registrar, Bristol Technical College, Ashley Down, Bristol, 7. Please quote Ref. No. BTC 61/26. 8164

BUCKS COUNTY COUNCIL

Applications are invited for the following appointments in the County Architect's Department:

ASSISTANT ARCHITECTS, A.P.T. Grade V, £1,310-£1,480 p.a.

These appointments are superannuable and subject to medical examination.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.

Applications, on forms provided, must be returned by Monday, 3rd July, 1961.

F. B. POOLEY,
County Architect.

County Offices,
Aylesbury,
Bucks. 8116

BRITISH RAILWAYS

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 to those with ability. Applicants should be qualified with some years' practical experience. Starting salary £1,070 per annum. Modern working conditions, five-day week and substantial rail travel concessions. Apply in writing to the Architects, British Railways, Eastern Region, King's Cross Station, London, N.1. 8097

COUNTY BOROUGH OF READING
APPOINTMENT OF BOROUGH ARCHITECT

Applications are invited from Chartered Architects having experience in local government work in all aspects for the post of BOROUGH ARCHITECT which will shortly become vacant. The inclusive salary scale is £2,620 to £75/5/- £2,955 per annum, the commencing salary being according to qualifications and experience. A form of application and a statement of the terms and conditions of appointment and of the duties of the post may be obtained on application to me.

Applications should be delivered to me not later than Saturday, 1st July, 1961.

Canvassing in any form, direct or indirect, will be regarded as a disqualification, and applications are to be sent only to me.

G. F. DARLOW,
Town Clerk.

Reading,
17th June, 1961. 8079

COUNTY BOROUGH OF SOUTHEAST-ON-SEA
EDUCATION COMMITTEE
MUNICIPAL COLLEGE

T. L. Morgan, M.Sc., A.M.I.C.E., A.M.I.Struct.E.

Applications are invited for the post of STUDIO MASTER (Assistant Grade B) in the School of Architecture. Duties to commence 1st September, 1961. Teaching experience is desirable but not essential. Salary within Scale: £700 x £27 10s. 0d. -£1,150 according to experience, plus allowances for approved qualification and training.

Further particulars and forms of application may be obtained from the under-signed on receipt of a stamped addressed foolscap envelope.

Completed forms should be returned to the Principal, Municipal College, Victoria Circus, Southend-on-Sea, within fourteen days of the appearance of this advertisement.

D. B. BARTLETT,
Chief Education Officer.

Education Office,
Warrior Square,
Southend-on-Sea. 8078

SOUTH EASTERN ELECTRICITY BOARD

Applications are invited for the following appointments at the Surrey Sub-Area Headquarters, Dorking.

SUB-AREA SURVEYOR:

Applicants should preferably be a member of R.I.B.A., R.I.C.S., or I.A.A.S. The duties of the post involve taking charge of a small group concerned with the design, construction, repair and maintenance of Board's buildings, including showrooms, offices, depots and substations in Surrey. The building and maintenance work is carried out by contractors.

Salary £1,250 to £1,355 p.a. and conditions of service in accordance with Grade 5 of the National Joint Council Agreement for the Electricity Supply Industry. Superannuable.

ARCHITECTURAL ASSISTANT:

Salary £1,020 to £1,140 p.a. and conditions of service in accordance with Grade 5 of the National Joint Council Agreement for the Electricity Supply Industry. Superannuable.

Applicants should have attained intermediate level of a recognised professional body and have had experience in the design and construction of buildings, including preparation of drawings and specifications.

Candidates should indicate clearly for which post they are applying.

Applications, quoting AJ and naming two referees on forms from Surrey Manager, Seeboard, Rough Row, Ridgeway Road, Dorking, Surrey, by 28th June, 1961.

GEORGE WRAY,
Secretary. 8083

COUNTY OF RADNOR
COUNTY ARCHITECT AND PLANNING
OFFICER

Applications are invited for the appointment of COUNTY ARCHITECT AND PLANNING OFFICER at a salary in accordance with the maximum scale recommended by the Joint Negotiating Committee for Chief Officers of Local Authorities for authorities in the 20,000-30,000 population group, namely £1,635-£1,860 per annum, the point of commencement in this scale to be determined according to qualifications and experience.

The person appointed will be responsible for all the architectural work of the Council and its Committees, the architectural work within the County on behalf of the Mid-Wales Police Authority and for the administration of the County Planning.

Candidates must be Fellows or Associates of the Royal Institute of British Architects or have an equivalent qualification, must be competent to undertake educational and general architectural work for a local authority and should preferably have experience in the application and administration of the Town and Country Planning Acts.

The appointment will be subject to the National Conditions of Service, to the provisions of the Local Government Superannuation Acts and to termination by three months notice in writing on either side.

Applications should be made on forms obtainable from the undersigned to whom they must be delivered not later than Monday, the 3rd July, 1961.

D. C. S. LANE,
Clerk of the Council.

County Hall,
Llandrinod Wells,
Radnorshire 88082

EXETER CITY COUNCIL

CITY ARCHITECTS' DEPARTMENT

3 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 3rd July, 1961. 8076

BOROUGH OF EDMONTON

BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the undermentioned appointments in the Borough Architect's Department of a progressive Borough. Programmes of work include multi-storey flats, town centre redevelopment, industrial buildings and offices. Council are prepared to grant loans up to 100 per cent. of valuation to facilitate house purchase.

ASSISTANT QUANTITY SURVEYOR:
Grade A.P.T. III £1,005-£1,185 inclusive of London Weighting.

Applicants for the above post should have had experience of bonus schemes and target setting.

ASSISTANT ARCHITECTS:
Grade A.P.T. III £1,005-£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, to be delivered by 1st July, 1961.

H. BACKHOUSE,
Town Clerk. 8087

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 appointments can be obtained from ERIC DAVIES, F.R.I.B.A., A.M.P.L., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick,
June, 1961. 8104

BRITISH RAILWAYS

Applications are invited for the appointment of SENIOR ASSISTANT ARCHITECT. Applicants must be Associate Members of the R.I.B.A. with good experience of architectural practice, good design ability and must have previous experience in a responsible position. An interest in, and some knowledge of, development work would be an advantage. Salary in the range £1,350-£1,560. Apply in writing giving age, particulars of experience and qualifications to the Architect, British Railways, Eastern Region, King's Cross Station, N.1. 8098

**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 £1,560 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.

Forms of application may be obtained from the Principal Administrative Officer, 20, Trongate, Glasgow, C.I.

A. G. JURY,

City Architect and Director of Planning.

88092

JOINT COUNTY COUNCIL OF MORAY AND NAIN

APPOINTMENT OF ASSISTANT ARCHITECT

Applications are invited for the post of Assistant Architect in the County Architect's Department. Applicants must be Associate Members of the R.I.B.A. and preference will be given to applicants with experience of local authority housing and education building. The salary for the post will be in accordance with Grades "C" and "D" of the Administrative Division of the J.I.C. Scheme of Salaries, viz. £1,055 to £1,200 with placing according to qualifications and experience. Suitable housing accommodation is available if required. The successful applicant will provide a car and will be entitled to a car allowance in accordance with the approved scale of allowances. The post is superannuable and will involve a medical examination before an appointment is made. Applications giving particulars of age, qualifications and experience, together with copies of not more than three recent testimonials should be lodged with the County Clerk, County Buildings, Elgin, not later than 1st July, 1961.

8180

**CITY AND COUNTY OF
NEWCASTLE UPON TYNE**

**CITY ARCHITECT'S DEPARTMENT
APPOINTMENT OF PRINCIPAL ASSISTANT ARCHITECT**

(NEW TOWN HALL)

Applications are invited for the above post at a salary in accordance with the J.N.C. Scale "D" (£1,710 per annum, rising by annual increments to a maximum of £1,975 per annum).

Applicants must have appropriate professional qualifications, and the person appointed will be in charge under the direction of the City Architect of the section engaged solely on the New Town Hall, a project of some £4,000,000 in value. Work on the superstructure of the first stage has already commenced and an exceptional opportunity is presented for working on a building carried out in materials of the highest quality.

Further details and form of application may be obtained on application in writing to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne 1.

JOHN ATKINSON,

Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.
15th June, 1961.

8177

**UNIVERSITY OF SYDNEY
LECTURESHIP IN ARCHITECTURE**

Applications are invited for the above-mentioned position. The duties of the Lecturer will include responsibility for practical studio instruction in the First Year of the course as well as appropriate lecture courses.

The salary for a Lecturer is within the range £A1,730 - £105 - £2,435 per annum, plus cost of living adjustments (at present £A42 p.a.) and will be subject to deductions under the State Superannuation Act. The commencing salary will be fixed according to the qualifications and experience of the successful applicant.

Under the Staff Members' Housing Scheme, in cases approved by the University and its Bankers, married men may be assisted by loans to purchase a house.

Further particulars and information as to the method of application may be obtained from the Secretary, Association of Universities of the British Commonwealth, 36, Gordon Square, London, W.C.1.

Applications close, in Australia and London, on 4th August, 1961.

8172

**CITY OF OXFORD EDUCATION COMMITTEE
COLLEGE OF TECHNOLOGY**

LECTURER IN TOWN PLANNING

Applications for this full-time teaching post in the Oxford School of Architecture and Building are invited from architects who are Corporate Members of the Town Planning Institute and who have recent experience of planning.

The candidate appointed will, in the first instance, be required to develop a part-time post-graduate course for architects and others who seek a planning qualification.

Salary—Burnham Scale.

Further particulars and application forms (stamped addressed envelope) can be obtained from the Principal, College of Technology, Headington Road, Oxford, to whom they should be returned as soon as possible.

8160

HEREFORDSHIRE COUNTY COUNCIL

Following an establishment review, applications are invited for the following posts:—

(a) THREE SENIOR ASSISTANT ARCHITECTS. A.P.T. Grade IV or V. Must be A.R.I.B.A.

(b) ONE ARCHITECTURAL ASSISTANT. A.P.T. Grades I or II or III.

Salaries (per annum):
A.P.T. Grade V—£1,310 to £1,480.

A.P.T. Grade IV—£1,140 to £1,310.

A.P.T. Grade III—£960 to £1,140.

A.P.T. Grade II—£815 to £960.

A.P.T. Grade I—£645 to £815.

Appointments may be made on the higher Grade(s) if suitably qualified and experienced. If appointed in the lower Grade(s) candidates may subsequently be promoted to the higher Grade(s) subject to satisfactory service.

Superannuated posts subject to medical examination and one month's notice. Five-day week. Separation allowance payable to married men for limited period.

Hereford is an expanding City situated in the beautiful Wyke Valley.

Application forms from County Architect, Bath Street, Hereford, to be submitted by 10th July, 1961.

Please state clearly whether form for (a) or (b) is required.

8181

**DEVON COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT**

Applications are invited for the following posts:—

ASSISTANT DIVISIONAL PLANNING OFFICER, A.P.T. IV (£1,140—£1,310) with essential car user allowance.

(i) In the Eastern Divisional Planning Office at Exeter.

(ii) In the Southern Divisional Planning Office at Torquay.

A.M.T.P.I. required. To be responsible to the Divisional Planning Officer for approximately half of the division. Each division consists of about 12 Authorities and covers the coast from the Dorset boundary to the River Dart, extending inland to the Dartmoor and Exmoor National Parks and deals with about 3,500 applications a year.

Forms of application returnable by 4th July, 1961, from the County Planning Officer, "Bellair," Topsham Road, Exeter, Devon.

8159

**WARWICKSHIRE COUNTY COUNCIL
ARCHITECTS' DEPARTMENT**

Appointment of GROUP ARCHITECT, GRADE "C" (£1,560—£1,825) and DEPUTY GROUP ARCHITECT, GRADE "A" (£1,450—£1,565).

Applications are invited from qualified and experienced architects for these appointments which are for educational projects. The posts carry a high degree of responsibility and need a good standard of design ability in all forms of construction. Experience in the organisation and day to day running of a group dealing with large projects is essential.

The Council have schemes for the payment of removal expenses and a lodging allowance to married officers. Five-day week worked.

Application forms and full conditions applicable to the appointments can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall,
Warwick.
June, 1961.

88161

**CITY OF WORCESTER
APPOINTMENT OF SENIOR ASSISTANT ARCHITECTS**

The Architectural Section of the City Engineer and Surveyor's Department has been increased in establishment and applications are invited for Two Senior Assistant Architects within A.P.T. Grade IV (salary £1,140 to £1,310). Applicants must hold the A.R.I.B.A. qualification.

Housing accommodation will be offered, if necessary, and the Corporation are prepared to make a contribution towards removal expenses.

Casual Users' car allowance will be applicable. Applications, stating age, present and previous appointments, and experience, together with the names of two referees, are to be sent to the City Engineer and Surveyor, 22, Bridge Street, Worcester, by the 5th July.

BERTRAM WERTER,

Town Clerk.

Guildhall,
Worcester.

88162

EAST RIDING OF YORKSHIRE COUNTY COUNCIL

Applications are invited for the appointment of a CHIEF QUANTITY SURVEYOR on the staff of the County Architect. The salary will be in accordance with Scale "A" (£1,340—£1,565).

Applicants must be members of the Royal Institution of Chartered Surveyors and have had wide experience in the preparation of estimates, bills of quantities, cost analysis, adjustment of final accounts and other work incidental to such an appointment, including the control of staff.

Applications, giving particulars of age, past and present appointments with salaries, details of experience, together with the names of three referees, should be sent to the County Architect, County Hall, Beverley, not later than Friday, 30th June, 1961.

THOMAS STEPHENSON,

Clerk of the County Council.

8113

**CITY AND COUNTY OF BRISTOL
CITY ARCHITECT'S DEPARTMENT**

Applications invited from persons with appropriate professional qualifications for the following permanent posts:—

ARCHITECTS:
SENIOR ASSISTANT ARCHITECTS—J.N.C.

Scale "A" (£1,360/£1,565 p.a.) or A.P.T. V (£1,310/£1,480 p.a.).

ASSISTANT ARCHITECTS—A.P.T. IV (£1,140/£1,310 p.a.) or A.P.T. III (£960/£1,140 p.a.).

ARCHITECTURAL ASSISTANTS—A.P.T. II (£815/£960 p.a.).

JUNIOR ARCHITECTURAL ASSISTANTS—A.P.T. I (£645/£815 p.a.).

JUNIOR ASSISTANTS—General Division—Starting salary at 13 not less than £320 p.a. on scale rising (subject to qualifications) to £710 p.a.

QUANTITY SURVEYORS:
SENIOR QUANTITY SURVEYORS—A.P.T. V, IV or III, as above.

QUANTITY SURVEYORS' ASSISTANTS—A.P.T. II or I, as above.

Starting Grade for all posts according to qualifications and experience.

Housing accommodation will be provided for married men, if necessary, at an economic rent. Five-day week. Fifty per cent. of removal expenses.

Application form from City Architect, Council House, Bristol, 1, returnable by 10th July.

8163

ASSISTANT BUILDING SURVEYOR

Assistant Building Surveyor required for work in connection with expanding hospital building programme. The work includes the survey of existing hospital sites for future development, the preparation of working drawings and specifications for alteration works and minor industrial type buildings, and the preparation of enquiries in respect of specialised work connected with major building contracts.

Applicants must be corporate members of the R.I.C.S. (Building Sub-division). Salary scale £945—£1,360 per annum. Commencing salary above the minimum subject to certain conditions. Post is permanent and superannuable. Five-day week. Apply stating age, qualifications (with dates) and experience, with names of two referees, to Secretary, North West Metropolitan Regional Hospital Board, 40, Eastbourne Terrace, W.2, by 3rd July, 1961, quoting reference 940.

8106

**COUNTY BOROUGH OF DEWSBURY
BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT**

Applications are invited for the following appointments within the scope of the grades stated:—

(a) ASSISTANT ARCHITECT (Education Section)—A.P.T. Grade IV (£1,140—£1,310 p.a.). Applicants should be A.R.I.B.A.

(b) ARCHITECTURAL ASSISTANT (Education Section)—A.P.T. Grade I (£645—£815 p.a.).

The provision of housing accommodation will be considered if required.

The appointments will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Acts.

Applications, stating age, education, qualifications, full particulars of training and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than Wednesday, 5th July, 1961, in envelopes endorsed "Appointment of".

A. NORMAN JAMES,

Town Clerk.

Town Hall,
Dewsbury.
12th June, 1961.

8107

**BOROUGH OF TWICKENHAM
TECHNICAL STAFF**

Applications are invited for the following posts:—

(a) SENIOR ASSISTANT ENGINEER, A.P.T. IV (£1,140—£1,310).

(b) PLANNING ASSISTANT, A.P.T. III (£960—£1,140).

(c) ASSISTANT ARCHITECT, A.P.T. I to IV (£645—£1,310).

(d) ASSISTANT ENGINEER, A.P.T. I to IV (£645—£1,310).

Posts (a) must have passed the Final of an appropriate examination, (b) commencing salary in accordance with qualifications and experience, (c) and (d) please state commencing salary required if appointed.

All plus London weighting allowance. Five-day week.

Canvassing will disqualify, and relationship to members or senior officers should be disclosed. If married, consideration will be given to the provision of housing accommodation, assistance with removal expenses. Applications giving age, experience, etc., to the Borough Engineer, Municipal Offices, Twickenham.

W. H. JONES,

Town Clerk.

8112

LANCASHIRE COUNTY COUNCIL

A vacancy exists in a newly formed group in the County Architect's Department for a qualified and enthusiastic ASSISTANT ARCHITECT with a dominant interest in organisation and management processes.

The appointment will be within the salary scale £1,140—£1,310 and application form may be obtained from the County Architect, P.O. Box 26, County Hall, Preston, not later than the 7th July, 1961.

8114

**BOROUGH OF WEMBLEY
REDEVELOPMENT PLANNING**(a) SENIOR ASSISTANT—A.P.T. V.
(b) PLANNING ASSISTANT—A.P.T. IV.

Applications are invited from suitably qualified persons with knowledge and experience in the preparation of schemes for redevelopment of central areas. Applicants must hold a professional qualification in either Town Planning, Municipal Engineering, Surveying or Architectural design and have had practical experience in the design of town improvements.

The Corporation are about to commence the preparation of a major redevelopment scheme for the central area of the town and the new appointment will afford excellent opportunities to obtain comprehensive experience in the preparation of town development schemes.

The Council are unable to offer housing accommodation.

Application forms, returnable by 3rd July, 1961, are obtainable on request to the Borough Engineer and Surveyor, Town Hall, Wembley, or by telephoning ARNOLD 1212, Ext. 45.

N. CUMPTSY
Town Clerk.Town Clerk's Office,
Town Hall,

Wembley.

12th June, 1961. 8128

CITY OF CHESTER**JUNIOR ARCHITECTURAL ASSISTANT**

Applications are invited for the above appointment in the City Engineer & Surveyor's Department. Salary scale A.P.T. I, £645—£815 per annum. The successful applicant will work in a busy office on a wide variety of work. Applications should give the name of two referees. Closing date 5th July, 1961. 8129

NORTHAMPTONSHIRE COUNTY COUNCIL**COUNTY ARCHITECT'S DEPARTMENT**
Applications are invited for the appointment of ASSISTANT in the QUANTITY SURVEYING SECTION, Grade A.P.T. II (£815—£960).

A weekly sum of 25s. by way of temporary additional salary will be payable, subject to review quarterly, to a married officer unable to find a house locally.

Details giving age, education, qualifications and experience, with a copy of a recent testimonial, should be sent in an envelope marked "Staff" to the County Architect, County Hall, Northampton, by 27th June.

J. ALAN TURNER,
Clerk of the County Council.County Hall,
Northampton.

8117

LEYTON CORPORATION

(Municipal Borough in Essex. Population approximately 100,000)

Applications invited for appointment of:

ASSISTANT ARCHITECTS. Salary within Grade A.P.T. III, £960—£1,140 per annum plus London weighting.

Housing accommodation will be provided. Five-day week. National Joint Council Conditions of Service.

A large and varied programme of architectural and building works in hand and projected offers good opportunities of gaining experience.

Apply for details to Borough Engineer, Town Hall, Leyton, E.10, not later than 5th July, 1961.

D. J. OSBORNE,
Town Clerk.Town Hall,
Leyton, E.10.

88124

CUMBERLAND COUNTY COUNCIL**COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited for the following appointments. Commencing salaries within the scales shown according to ability and experience.

(a) SENIOR ASSISTANT ARCHITECT: A.P.T. Grade V, £1,310—£1,480. Must be a qualified and experienced Architect, capable of taking charge of a group of Assistants employed on major projects.

(b) ASSISTANT ARCHITECTS: A.P.T. Grade III/IV, £960—£1,310. Must have Final R.I.B.A. Exam. Preferably with some experience.

Further particulars and forms of application from the County Architect, 15, Portland Square, Carlisle, to whom completed applications should be returned not later than 12th July, 1961.

G. N. C. SWIFT,
Clerk of the County Council.The Courts,
Carlisle.

88125

COUNTY BOROUGH OF EAST HAM**HOUSING DEPARTMENT**
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited. Salary Grade A.P.T. II (£815 + £30 (4) × £25 (1)—£960) plus London weighting.

Applicants should be experienced in the preparation of working drawings, details for construction of new dwellings and conversion of existing properties.

Further details and application form (returnable by 5th July, 1961) from the Town Clerk, Town Hall, East Ham, E.6. 8105

BOROUGH OF CHATHAM**SENIOR ASSISTANT ARCHITECT**

Applications are invited for this appointment from professionally qualified and suitably experienced persons. Salary within A.P.T. IV (£1,140—£1,310).

Applications, with the names and addresses of two referees, should be delivered to Mr. J. A. T. Richards, Borough Engineer and Surveyor, Town Hall, Chatham, not later than Monday, 3rd July, 1961.

Housing accommodation will be available in an appropriate case.

The appointment will be (a) in accordance with the National Scheme of Conditions of Service, (b) terminable by one month's notice on either side, and (c) superannuable, subject to satisfactory medical report.

In accordance with their usual practice the Council will require the successful candidate to give an undertaking to remain in the Council's service for two years.

ROLAND NEWNES,
Town Clerk.Town Hall,
Chatham.

8126

BOROUGH OF LUTON**BOROUGH ARCHITECT'S DEPARTMENT****PRINCIPAL ASSISTANT ARCHITECTS**

Salary Scale A (£1,380—£1,565)

Applications from experienced architects are invited for the above appointments (four posts) at commencing salaries according to qualifications and experience.

Applicants must be Associate Members of the Royal Institute of British Architects.

Housing accommodation available for married applicants and reasonable removal expenses will be paid.

Luton is a rapidly developing borough with a large and varied programme of capital works in hand or projected which offers exceptional opportunities of gaining experience.

Forms of application may be obtained from the Borough Architect, Town Hall, Luton, by whom applications should be received not later than 10th July, 1961. 88136

COUNTY BOROUGH OF BLACKPOOL**CHIEF ASSISTANT (ARCHITECTURAL SERVICES)**

GRADE "C"—£1,560/£1,825

Applications (by 17th July) are invited for the above post. Particulars and form of application obtainable from Borough Surveyor (Arthur Hamilton, B.Sc., A.R.I.B.A.), P.O. Box 17, Municipal Buildings, Blackpool. 8125

Atomic Energy Research Establishment, Harwell

requires an

ARCHITECT or SURVEYOR

To be responsible for the preparation and supervision of schemes of minor works and conversion to scientific, technical and administrative buildings on the Establishment and its outstations, housing estates and hostels in a maintenance and minor works organisation. The work involves liaison with Scientific and Technical Staff and covers a wide field, many aspects of which are unusual and interesting.

SALARY: In the ranges £1,005—£1,535 p.a.
or £1,560—£2,090 p.a.
according to age and experience.

Applicants should be fully qualified Architects or Surveyors (Building Section) and have a wide practical experience in industrial work including interviewing and taking instructions from clients, supervising the preparation of sketch schemes and working drawings, preparing specifications and estimates. Experience in site supervision is essential.

Housing and contributory superannuation schemes. Send POST CARD for details to Personnel Manager (1972/119), U.K.A.E.A., A.E.R.E., Harwell, Didcot, Berks.

UNILEVER**ARCHITECT
ARCHITECTURAL
ASSISTANTS**

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/80), Unilever House, Blackfriars, E.C.4.**

BOROUGH OF WEMBLEY
ASSISTANT ARCHITECTS and ARCHITECTURAL ASSISTANTS are invited to apply for appointments on commencing salaries according to experience and qualifications within Grades A.P.T. I to IV (£645 to £1,310 per annum) plus London "weighting" of £15 to £45 per annum according to age and grade to work on a varied programme of public buildings, housing and parks projects. Scale A.P.T. IV-£1,310 is applicable to Associates of the R.I.B.A. or Registered Architects.

The successful applicants will be employed at the Town Hall where excellent transport facilities are available and a five-day week is in operation. Previous local government experience is not essential. The Council is unable to offer housing accommodation.

Application forms, returnable by 3rd July, 1961, are obtainable on request to the Borough Engineer and Surveyor, Town Hall, Wembley, or by telephoning ARNOLD 1212, Ext. 46.

N. CUMPTSY,
Town Clerk.

Town Clerk's Office,
Town Hall,
Wembley, Middx.
12th June, 1961.

8127

BOROUGH OF ALDERSHOT
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT
APPOINTMENT OF ARCHITECTURAL
ASSISTANT

Applications are invited for the position of Architectural Assistant on the staff of the Borough Engineer and Surveyor at a salary in accordance with Grade A.P.T. III. Applicants should have passed the appropriate examination of the R.I.B.A. or possess a similar qualification.

The appointment will be subject to one month's notice on either side; to the provisions of the Local Government Superannuation Acts, and to the successful candidate passing a medical examination. Canvassing will disqualify.

Applications, stating age, qualifications and experience, together with the names and addresses of two referees, should be sent to the Borough Engineer & Surveyor, Town Hall, Aldershot, not later than Monday, 3rd July, 1961.

Housing accommodation will be made available if required.

A five-day week is in operation.

H. B. SALES,
Town Clerk.

Town Hall,
Aldershot.
12th June, 1961.

8118

ARCHITECTURAL ASSISTANTS for preparation of working drawings.

BUILDING SURVEYING ASSISTANTS for building maintenance work.

Salary up to £960 according to qualifications and experience.

Apply to Chief Officer, L.C.C. Parks Department (A1/J/1299/6) County Hall, S.E.1. (Phone WATERLOO 5000, Ext 8076).

Architectural Appointments Vacant

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

BRYAN & NORMAN WESTWOOD require ASSISTANT ARCHITECTS and DESIGNERS. Salaries up to £1,200. Apply to 21, Suffolk Street, S.W.1. TRAFALGAR 1106. TC7932

BOOTH, LEDEBOER 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. TC3119

CHARLES PIKE & PARTNERS REQUIRE SENIOR ASSISTANT FOR INDUSTRIAL PROJECT. PUBLISHERS WAREHOUSE AND OFFICES. WRITE TO 14, LINCOLN'S INN FIELDS, W.C.2. GIVING DETAILS OF EXPERIENCE, OR PHONE HOL 3552 FOR APPOINTMENT.

OTHER ASSISTANTS ALSO REQUIRED FOR VARIED EDUCATIONAL PROJECTS. COLLEGES-HOSTELS-SCHOOLS, ETC. S7937

£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. TC6105

SENIOR ASSISTANTS required. Please apply to F. G. Frizzell, A.R.I.B.A., 80, Portland Place, W.1. LANGHAM 1732. TC4943

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. TC6984

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. TC7051

INTERMEDIATE to Final ASSISTANTS required immediately. Salary according to ability and experience. Theo. H. Birks, 38, Portland Place, London, W.1. LAN. 7236 TC9739

£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. TC4934

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. TC5970

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 2552 for interview. TC5617

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. TC5647

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. TC5633

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. TC6260

BRYAN & NORMAN WESTWOOD & PARTNERS require ASSISTANT ARCHITECTS. Salaries up to £1,200. Apply to 21, Suffolk Street, S.W.1. TRAFALGAR 1106. TC6736

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. TC6404

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. TC5307

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. TC7014

IMMEDIATE VACANCIES in leading Bristol office for all grades of ARCHITECTS and ARCHITECTURAL ASSISTANTS. Modern approach to design essential and considerable freedom of expression allowed. Top salaries paid according to ability and experience. Outstandingly good working conditions; five-day week; annual bonus; contributory pension scheme available; existing holiday commitments honoured. Apply giving particulars of age and experience to W. H. Watkins, Gray and Partners, 8, Colston Avenue, Bristol. Telephone Bristol 292333, reverse charge calls accepted. TC7675

SIR JOHN BURNET, TAIT & PARTNERS have vacancies for ARCHITECTURAL ASSISTANTS of all grades. Salaries from £1,000 per annum upwards. Non-contributory pension, life assurance, medical schemes and luncheon vouchers, five day week, generous holidays. Apply 10, Bedford Square, London, W.C.1. TC7640

SIR BASIL SPENCE, R.A. 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. TC9824

SENIOR ASSISTANTS required immediately. Salary by arrangement. Theo. H. Birks, 38, Portland Place, London, W.1. LAN. 7236. TC1495

REYNOLDS & SCOTT have vacancies for SENIOR AND JUNIOR ASSISTANT ARCHITECTS in their Manchester Office. Full programme of School and Church Contracts. Applicants, not necessarily qualified, should write giving full details, salary required, to 9, Albert Square, Manchester, 2. Telephone DEANSGATE 6558. 7606

LANCHESTER & LODGE urgently require ARCHITECTURAL ASSISTANTS of all grades. Work includes hospitals, laboratories, universities, offices, housing, etc. Write full particulars or ring for interview: 10, Woburn Square, W.C.1. MUS 0845-6-7. TC7248

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. TC6200

A FEW vacancies still left for experienced and confident ARCHITECTS 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. TC7443

BARBICAN REDEVELOPMENT

CHAMBERLIN POWELL & BON are now actively engaged in carrying out this project.

There are vacancies for the following:

Block Architects £1250-£1400 p.a.

Architectural Assistants £750-£1250 p.a.

Applications should be made in writing to Chamberlin, Powell & Bon at 75/76 Little Britain, E.C.1.



£1,000 /£2,000 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 TC9360.

SENIOR and JUNIOR ASSISTANTS urgently required for busy City Office. Excellent modern facilities and long term engagements. Holidays with pay this year. Salary increments and bonus. Luncheon Vouchers. Qualifications unnecessary but experience and ability imperative. Salaries varying from £1,000 to £1,650 according to ability. Box S7642.

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 House, High Street, Knowle, Slough, Bucks. TC7509

ARCHITECTURAL ASSISTANTS required immediately for interesting work in private practice situated 12 miles south of Birmingham. Five-day week and luncheon voucher scheme in operation. Apply Harker & Hall, London House, High Street, Knowle, Slough, Warwickshire. Telephone Knowle 3502. TC7534

SENIOR ASSISTANT ARCHITECT required in private practice South East Coast town. Must be experienced with ability to handle contracts from sketch plan to completion. Work consists of industrial, flats, schools, shops, etc. Starting salary £1,200 or according to ability. Housing accommodation available. Apply in own handwriting. Box TC7452.

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. Carnow Cooke, F.R.I.B.A., 15, Dix's Field, Exeter. TC6945

DAVID DU R. ABERDEEN & PARTNERS require qualified **ASSISTANTS** for positions of responsibility on detailed design for a variety of major developments in central areas. Apply in writing, stating age, qualifications, experience and salary required to: 19, Southampton Place, London, W.C.1. S7908

PLYMOUTH Architects require an **ASSISTANT** in the £750-£1,000 per annum range. Varied practice. Apply with full details and salary required to Box S7854.

ARCHITECTURAL ASSISTANTS required at Poole and Bolton offices, salaries £650 to £1,050 according to experience, also **JUNIOR ASSISTANT** at Great Missenden—W. Leslie Jones & Partners, 59 High Street, Great Missenden, Bucks. S7858

JAMES CURITT AND PARTNERS require **ASSISTANTS**. Very interesting work in England, Mediterranean and Tropics. Good prospects. All mod. con. S7990

ARCHITECTS (£800-£1,500) There are vacancies in the Co-operative Wholesale Society's expanding Branch Architect's Office in **BIRMINGHAM** for

ASSISTANT ARCHITECTS within the range £900-£1,200, with annual increments of £50. Commencing salary dependent on ability and experience.

Vacancies also exist for more experienced staff with a commencing salary up to £1,500, with prospects of promotion to a higher grade.

Five-day week.
Three weeks holiday.
Pension Scheme.

Apply in writing, with details of age, qualifications and experience to:—
G. S. Hay, F.R.I.B.A., Chief Architect,
Co-operative Wholesale Society Ltd.,
1, Balloon Street,
Manchester 4. 7919

ARCHITECTURAL ASSISTANT of Intermediate standard or over required for Streatham Office. Modern work and pleasant offices. Telephone Hewitt Mitchell & Partners, Tulse Hill 0077. S7978

QUALIFIED and Intermediate ASSISTANTS with experience and ability to assume responsibility, required at Charing Cross Office. Interesting commercial and other schemes. Generous salaries, Pension and Life Assurance Scheme. Phone Riches & Blythin, Whitehall 7926. S1618

DOWTON & HURST require **ARCHITECTURAL ASSISTANTS**. Present work includes Hospitals, Shops, Schools and Commercial buildings. Salary £700/£1,100, according to experience, and bonus. L.V.s provided. 10, Portman Street, Portman Square, W.1. HYD. 1822. S8048

TWO Senior and two Intermediate standard **ARCHITECTURAL ASSISTANTS** required in rapidly expanding practice for wide range of interesting contracts. Must be capable of accepting responsibility. Excellent future prospects for right type of man. Apply Brewer, Smith & Brewer, 11, The Green, Richmond. RIC 0667 and 6118. S8182

SENIOR QUALIFIED ARCHITECT required, age 35/50, preferably with experience of public house construction, alterations and maintenance. Good salary offered to man with experience. Contributory Pension Fund. Apply in confidence, with full particulars, to the Managing Director, The Birkenhead Brewery Co. Ltd., 73, Oxtown Road, Birkenhead. S7994

AN ASSISTANT is required for drawing and survey work in the Architect's Department of Schweppes Ltd. Minimum standard Intermediate R.I.C.S. Good knowledge of building construction is essential. Salary by arrangement. Excellent pension and profit sharing schemes. Please write full particulars to Asst. Personnel Manager (MRL), Schweppes House, Connaught Place, London, W.2. S7995

WE require qualified **ASSISTANTS** to completely run own contracts from beginning to end. Salary to match ability. Only ambitious men need apply.

Dalling and Partners, Chartered Architects,
14, Bloomsbury Square, London, W.C.1
CHANCERY 4725. TC7997

GEORGE, TREW & DUNN

Hospitals, University, Prestige Office, Ships.
We need your help.

Please write to us at 50, Eastbourne Terrace, W.2.
TC8000

ARCHITECTURAL ASSISTANTS, to Intermediate standard, required immediately for important Hospital and School projects. Five-day week. Adequate pay. Holiday arrangements honoured. No other inducements.

Martin & Martin & W. H. Ward,
106, Colmore Row, Birmingham, 3. S8049

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 TC6875.

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. TC6547

A LIVELY advertisement shows promise of an imaginative office where we are out to give everyone the opportunity for maximum amount of independence. Plenty of scope in projects throughout the country just waiting for you to join us. Our busy, friendly offices are in the exhilarating atmosphere of elegant Mayfair. Extremely handy for those lunch time forays to the Art Galleries or a look at the latest Continental furniture in Liberty's. Experienced **SENIOR ASSISTANTS** are what we are after. Telephone Mayfair 3111/2. TC7814

ARCHITECTURAL ASSISTANTS, at Intermediate R.I.B.A. standard, required by W. J. Simms Sons & Cooke Ltd., Haydn Road, Nottingham. Work is on interesting projects of traditional and prefabricated construction of Schools, Multi-storey Flats, Factories, Canteens, etc. Excellent working conditions in modern drawing offices. Sports Club and canteen facilities available. Apply giving details of training and experience, etc., to Russell Keen, A.R.I.B.A., Chief Architect. S7968

ARCHITECTURAL ASSISTANT

OF ... Finals standard
WITH ... flair for planning, required
BY ... leading prefabricated building manufacturers
TO ... develop building systems
IN ... friendly, congenial surroundings.

SALARY RANGE £800 - £1,000 p.a.

PLUS ... bonus, superannuation, five-day week, etc.

Apply in writing, giving details of experience and salary required, to: Sales Director, Middlesex Prefabricated Buildings Ltd., Green Lane, Hounslow, Middlesex. TC7787

SENIOR and JUNIOR ASSISTANTS required for small congenial office in Graves Inn. Senior with office experience preferably with pubs, capable of running own jobs from start to finish. £1,000 or more according to experience. Junior approaching Intermediate standard, £400-£500. Phone HOLborn 9547. TC7778

RICHARD SHEPPARD, RORSON & PARTNERS require **ASSISTANTS** of Intermediate and Final standard; salary according to ability and experience. 5, Southampton Place, W.C.1. CHANCERY 4261. TC7750

HAMP & BOISSEvain seek **ARCHITECTURAL ASSISTANTS** and **SECRETARY** in their London office. Holiday and salary plus incentive bonus this year to successful applicants. Write 37, Newton Road, W.2. S8139

EXPERIENCED ASSISTANTS required in busy office with interesting and varied practice. Five-day week. Pension Scheme. Reply giving full particulars of experience, age and salary required, to Godman & Kay, F.R.I.B.A., "Mildwood," 13, North Parade, Horsham, Sussex. S7767

ASSISTANT to work with partners required by F. Tomkinson, Son & Goom, Architects, 180, Edleston Road, Crewe. Salary commencing at £600-£900 in accordance with experience. S8026

ARCHITECTURAL ASSISTANTS required. Seniors and Intermediates. Large South Coast practice. Salaries up to £1,500 per annum, five-day week, pension scheme. Many most interesting projects. Vacancies also for **TEMPORARY STAFF** during the summer months. Apply in writing, with details of experience, to: H. Hubbard Ford, F.R.I.B.A., 24, Cornfield Road, Eastbourne. TC7791

BIGGINS & ASSOCIATES need some more forward-looking types to share the joys and burdens of their airy new premises at Richmond Place, Boughton, Chester. Cheerful bobs preferred, willing to join in the general busy contemporary spirit, and some experience would help too. Write soon, or ring Chester 26228 (3 lines). S7990

RUSSELL DIPLOCK ASSOCIATES NEED YOU

(Salaries can be arranged—TAT 0771/2) S7992

ORGANISATION men (or women) willing to be reconverted to individuals are offered opportunity to work in small and definitely unorganised office. Intermediate to Final standard. £800 to £1,000, Waterloo 4362 or Box S7965.

BEARD, BENNETT, WILKINS AND PARTNERS invite applications from **ARCHITECTS**, both Senior and Junior, with good design ability and enthusiasm for good architecture. The opportunity exists for work on a great variety of jobs, all of which will be of considerable interest. Luncheon vouchers, five-day week. Pension and Profit-sharing Schemes available. Salary according to age and experience. Write, giving particulars of training, qualifications and experience, to Beard, Bennett, Wilkins & Partners, 101, Baker Street, London, W.1. S7971

TWO ASSISTANTS required, in small office, one with office experience preferably in Flats and Houses and Multi-storey Car Parks, and capable of designing and detailing. Salary up to £1,000 p.a. Five-day week. Luncheon vouchers. Junior approaching Intermediate standard, £400/£500 p.a.

Apply to R. Jeinek-Karl, 6, Buckingham Street, W.C.2, for interview. S8016

SMALL office requires even smaller assistant, intermediate standard rather than completely incapable, year's subscription to punch or salary if insisted upon, no sundays, phone whi 0865 or call. S150

ARCHITECTS and Surveyors require **ARCHITECTURAL and/or SURVEYING ASSISTANTS** with minimum five years practical experience. Wide variety of work in pleasant offices in Norfolk, Suffolk and Essex and successful applicants would be encouraged to show initiative and to assist with supervision of contracts. Salary by arrangement. Replies to Box S151.

ARCHITECTURAL ASSISTANT. Turners Asbestos Cement Co. Ltd. has a vacancy for an Architectural Assistant at its Manchester Head Office to assist with factory development. Applications are invited from qualified men between 25 and 50 years of age. Write giving full details of career and present salary to The Manager, Central Personnel Services, Ashburton Road, Trafford Park, Manchester 17. S132

MARKET RESEARCH ASSISTANT. A major company in Manchester manufacturing materials for the building industry has a vacancy in its Market Research Department for a senior Assistant. Applications are invited from men who have building and sales experience with knowledge and interest in Market Research. An attractive salary will be paid and conditions of service are excellent. Write giving full details of career and present salary to The Chief Personnel Manager, Box S133.

HOWARD V. LOBB & PARTNERS require **ASSISTANT ARCHITECTS**. Salaries would be between £750 and £1,250 per annum. Please write to 20, Gower Street, W.C.1. TC7789

POWELL and MOYA require an **ASSISTANT** capable of taking charge of a £100,000 job on which work on the site is due to start in September, at a starting salary of £900-£1,100. There are also vacancies for other Assistants, preferably those with office experience, to work on a number of interesting jobs. Please write to 36 Great Smith Street, London, S.W.1, or telephone AIBey 3156. S143

JOHN & SYLVIA REID invite applications from young **ARCHITECTS** of ability and with good general educational backgrounds who are interested in joining a team capable of dealing with all architectural design problems. Applicants should be either recently qualified or have had two to four years' office experience. Applications by letter only to 88, Talbot Road, Highgate, N.6. TC8149

ARCHITECTS required in London. Salary up to £1,600 per year, plus non-contributory pensions and Insurance scheme. First class conditions with work on a variety of projects. J. G. L. Poulson, 15, Greycoat Place, S.W.1. Telephone: SULLivan 6308. S165

THE REED PAPER GROUP has vacancies for **JUNIOR AND INTERMEDIATE STANDARD ARCHITECTURAL ASSISTANTS**. The posts will be based on Head Office, pleasantly situated in Kent. The Architects Department is engaged in the design and erection of a variety of buildings, including Research Laboratories, offices, canteens, etc. Excellent conditions of service include a non-contributory pension scheme and assistance with house purchase. Written applications should be addressed to: The Group Personnel Office, Albert E. Reed & Co. Ltd., Larkfield, Nr. Maidstone, Kent, quoting reference AA/AD/15. S7983

ARCHITECTURAL ASSISTANTS, Intermediate and Final standard with some office experience, required for small, busy country practice with varied work over a large area. Salary according to experience. Write with particulars to C. J. Cunningham, M.A., A.R.I.B.A., A.A.Dipl., 15, Marlborough Road, Banbury, Oxon. S7989

CO-OPERATIVE WHOLESALE SOCIETY LTD.
BRANCH ARCHITECT'S OFFICE
NOTTINGHAM

THERE are vacancies for ASSISTANT ARCHITECTS

within the range £260-£1,200 with annual increments of £50. Commencing salary dependent on ability and experience. Excellent prospects of further promotion to higher grades.

Five-day week. Three weeks holiday. Pension scheme. Apply in writing, with details of age, qualifications and experience to:

G. S. HAY, F.R.I.B.A.,

Chief Architect,
Co-operative Wholesale Society Ltd.,
1, BALLOON STREET, MANCHESTER, 4. S8008

ARCHITECTS' CO-PARTNERSHIP require **ASSISTANTS** with experience for interesting projects, also recently qualified **ASSISTANTS** for research and development team now forming. Holidays honoured. Write 44, Charlotte Street, W.1, or phone LAngham 5791. S7998

PETER EDNIE & PARTNERS, Chartered Architects, of 4, Gray's Inn Square, W.C.1, require **ASSISTANTS** for permanent staff. Qualifications not essential. Life and Pensions Scheme operating. Salary and bonus according to experience. TC8015

SENIOR AND INTERMEDIATE ARCHITECTURAL ASSISTANTS required with experience of Hotel work and Licensed Premises. Qualification desirable but not essential. Salaries according to experience, supplemented by bonus and pension schemes.

F. J. Lenton & Partners, A/R.I.B.A.,
16, Broad Street,
Stamford, Lincs. S8009

£1,200/£1,500 P.A. CROYDON—Minimum starting salaries for energetic and competent **ASSISTANTS** in rapidly expanding youthful practice. Apply to Donald Rowse & Partners, 11/11a, George Street, Croydon, or telephone CROYdon 4080. TC8039

SCHERRER & HICKS

REQUIRE in their London and Manchester Offices:—

Qualified **ARCHITECTS** with at least five years' experience—
Salary £1,400-£1,500 P.A.

in their London Office

Experienced Intermediate **ASSISTANTS**
Salary £1,000 P.A.

Reply to: 19, Cavendish Square, London, W.1. S8040

TERENCE VERITY ASSOCIATES, Architectural Design Consultants, require immediately **SENIOR AND JUNIOR ARCHITECTS** to work in Mayfair and Henley. Apply: Mr. Gage, 15, Hay's Mews, Mayfair, London, W.1. Telephone: GROsvenor 8916. S7997

ARCHITECTURAL ASSISTANTS, Senior and Intermediate standard, required for interesting and varied work in Bristol and the West Country. Congenial position in new offices, five-day week, Pension Fund and Life Assurance Scheme, housing accommodation provided. Please apply, stating age, qualifications, experience and salary required, to: George Brown & Partners, Equity & Law Building, Baldwin Street, Bristol, 1. S8059

YOUNG ARCHITECT, with minimum five years' office experience, required in London office for senior position with good salary. Apply Box TC8064.

ASSISTANT ARCHITECT, with good experience and ready to assume responsibilities, required for well-established medium-size office in London. Good salary. Apply Box TC8055.

INTERMEDIATE ASSISTANTS with practical experience required for various interesting projects. Salary £600-£700 p.a. according to experience. Write stating experience etc. to Messrs. Dalghish & Pullen, 23, Old Bond Street, London, W.1. S8154

ASSISTANTS of all grades required by Lewis Solomon, Kaye & Partners, for important large London developments, including multi-storey hotel and comprehensive office developments. Applicants should have a good knowledge of design and construction for this type of development and London experience is an advantage. Apply Thavies Inn House, 5, Holborn Circus, E.C.1. Tel. No.: CITY 8811. S8045

ROBERT MATTHEW AND JOHNSON-MARSHALL require **ASSISTANTS** in their EDINBURGH and DUNDEE offices to work on an exceptionally interesting range of **HOSPITAL AND MEDICAL RESEARCH** projects.

Minimum starting salaries:—
(a) Passed R.I.B.A. Intermediate ... £750
(b) Completed full-time technical education ... £900
(c) Elected A.R.I.B.A. ... £1,100
(d) At least two years' experience since election A.R.I.B.A. ... £1,300
Write to 13, South Charlotte Street, Edinburgh, 2, or telephone CALedonian 3638. S8042

PACKAGE DEAL

SENIOR ASSISTANT, qualified, required to help run compact Architect's Department of recently formed associate company of major civil engineering concern, carrying out a design-and-construct service. Adaptable man with 3-5 years' post-A.R.I.B.A. experience. Salary about £1,350, with pension scheme and generous car allowance. Wonderful opportunity to get in on the ground floor. You may even get rides in the firm's aeroplane! Details of work done, please, to: W. J. Allen, A.R.I.B.A., Fitzpatrick & Nicholson, Ltd., 455, Old Ford Road, E.3. S8041

TWO Intermediate or Senior **ASSISTANTS** required. Salaries from £1,000 to £1,250 per annum according to age and experience. Apply to Box 6546.

REQUIRED immediately for interesting work, including schools, technical college, housing and industrial schemes. **ARCHITECTURAL ASSISTANTS** of not less than Intermediate standard with office experience, who will be responsible directly to partners; also **JUNIOR ASSISTANTS** with some drawing office experience. Application stating age, experience and salary required, to: Atkinson, Smith & Haywood, F.R.I.B.A., 4, Raymond Buildings, Gray's Inn, London, W.C.1. S7957

£1,600-£1,450-£1,000.

ARCHITECTS 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. 8166

ENFIELD, Middlesex office requires **SENIOR ASSISTANT AND INTERMEDIATE ASSISTANT**. Wide and interesting range of work available without the tedium and expense of travelling to town. Practice established over 25 years. Projects in hand include Hospital, Industrial, Domestic and Commercial schemes. Five-day week. Three weeks' annual leave.

Write giving full details of training, experience and salary required to:—

E. WILLIAM PALMER & PARTNERS,
Chartered Architects,
8 The Town, Enfield, Middlesex. S8123

ARCHITECT, preferably qualified, capable of carrying out schemes from design to completion including supervision of works on site. **ARCHITECTURAL DRAUGHTSMAN** also required for the preparation of working drawings and details under supervision. **QUANTITY SURVEYOR** required to assist in taking off, abstracting and billing under the guidance of the senior surveyor. Full details of age, salary and experience to A. T. Butler & Partners, 31, Priory Street, Dudley, Worcestershire. 8109

WELL-ESTABLISHED ESTATE AGENTS, Kingston Surrey area offer "EXCITING OPPORTUNITY" to **TOP ARCHITECTURAL ASSISTANT DRAUGHTSMAN**—full time (not necessarily qualified) or **ARCHITECT** part-time to help or take charge of Development Dept. building 30-40 Units annually (solid programme ahead—land acquired). Final A/c's contract supervision, good drawing board and planning experience essential. Box 8110.

ARCHITECTURAL ASSISTANT required of Intermediate standard or higher, for Norwich Architects. Good salary in accordance with experience, plus bonus. Write giving details of age, and previous experience. Fellden and Mawson, A/R.I.B.A., 71a, The Close, Norwich. 8111

ARCHITECTURAL ASSISTANT, Intermediate standard, required for office with large general practice in Southampton. Write stating experience and salary required. Box 8119.

FARMER AND DARK

have some vacancies for

ARCHITECTS AND ARCHITECTURAL ASSISTANTS

for varied and interesting home and overseas work. Five-day week.

Apply to Romney House, Tafton Street, S.W.1. Tel.: ABey 6311. S8003

wanted, left-handed assistant, or would sell left-handed tee-square, telephone whi 0865. 8151

ARCHITECTS in Watford, London and Glasgow require **ASSISTANTS** of Intermediate/Final R.I.B.A. standard for work on interesting commercial and industrial projects. Salary range: £800-£1,250. Quarterly bonus scheme. Non-contributory pension scheme. Apply Box TC8130.

ARCHITECTS: ASSISTANT required, Intermediate/Final standard for varied practice. David L. Nye & Partners, 172, Buckingham Palace Road, S.W.1 (Slo. 9730). 8121

ASSISTANTS REQUIRED by expanding firm of Architects in modern office next to Baker Street Station. Interesting work includes hotels, houses, flats, commercial and industrial premises. Opportunity to participate in all branches of the profession. The following vacancies occur:

An experienced assistant to work on sketch schemes, details, specifications.

A draughtsman with several years' drawing office experience.

Salaries according to experience, with good prospects of advancement. Apply to Box S8094.

COMPANY ARCHITECT required by John Perring Limited for building contracts, interior schemes, and maintenance works. Young, newly-qualified man preferred to take over existing studio. Written applications to John R. Perring, Sheen Lane House, 254, Upper Richmond Road West, London, S.W.14. 8093

ASSISTANT ARCHITECT urgently required. Salary £1,250; five-day week. Wilburn and Son, Architects, 11, South Parade, Doncaster. S8084

SENIOR ARCHITECTURAL ASSISTANT required by Huntingdon Firm of Architects. Vehicle available for private and office use. Apply Box S8085.

ARCHITECTURAL ASSISTANT required, experienced in preparation of working drawings, details, contract supervision, commercial practice. Pension scheme and other benefits. Salary £1,000-£1,200 p.a. Eric H. Davie, F.R.I.B.A., A.M.T.P.I., Chief Staff Architect, Hillier Parker May & Rowden, 77, Grosvenor Street, London, W.1. Mayfair 7666. S8086

ASSISTANTS AND ASSISTANT ARCHITECTS required within the salary range £1,100-£1,350 on a variety of projects. Qualifications in landscape architecture an advantage which would affect salary. Large progressive office offering outstanding opportunities for people of ability, both at home and overseas. Excellent working conditions; five-day week; three weeks' leave; lunch vouchers; bonus scheme and generous sick pay provisions. Write or telephone Norman & Dawbarn, Architects and Consulting Engineers, 7, Portland Place, London, W.1. LAngham 8011. TC8088

WYE VALLEY—**ASSISTANTS** required, Intermediate to Final standard. R. J. A. Wilson and MacMillan, A/R.I.B.A., 4a, St. Peter's Street, Hereford. S8089

ARCHITECTURAL ASSISTANTS required in Abingdon, Swindon and Faringdon offices of expanding firm of Architects in the following grades:

Grade II	£400-£500 per annum
Grade III	£500-£600 per annum
Grade IV	£600-£800 per annum
Grade V	£1,000-£1,200 per annum
Grade VI	£1,200-£1,400 per annum

to deal with local authority development and domestic, housing, commercial and industrial contracts, etc. Apply stating age and full details of experience to G. J. Caren, Esq., Messrs. Caren, Roscoe-Hudson and Partners, Architects and Surveyors, Faringdon, Berks. 8095

SMALL, and expanding practice needs **ARCHITECTURAL ASSISTANT** with experience for interesting and lively work. Francis Pym, A.R.I.B.A., A.A.Dipl., 11, Buckingham Street, W.C.2. Whitehall 0171. 8147

ARCHITECTURAL ASSISTANTS required by A. J. Douglass 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. TC6627

JACKSON & EDMONDS, London, have vacancies for **ASSISTANTS** to work on civic and university buildings, swimming pools, industrial and military buildings. Preference given to candidates with enthusiasm as well as skill—overtime, luncheon vouchers, pension scheme and paid time off for further study go with a salary in the range of £650-£1,250. Write or telephone Jackson & Edmonds, 30, Gloucester Place London, W.1. (HUNter 1485.) S7778

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 TC5848.

ARCHITECT AND ASSISTANTS required with experience in fast expanding development company at head office in South London. Non-contributory life and pension scheme. Holiday arrangements honoured. Write stating salary required and previous experience to Chief Architect Bunting Estates Ltd., 75, Acre Lane, London, S.W.2. S8174

MESSRS. JOSEPH MENDLESON & PARTNERS require Intermediate ASSISTANTS and qualified ARCHITECTS of all grades for work on a wide range of interesting and contemporary projects. Unique opportunities for applicants with initiative. Top salaries. Luncheon vouchers. **HUNTER 0361.** 8170

ARCHITECTURAL ASSISTANT, Intermediate. Final standard with some years' office experience. Salary £750-£1,250 p.a.

Forward looking firm of quality Building and Civil Engineering Contractors with wide and varied interests in the West Country.

Please write giving particulars, salary required etc., or telephone for appointment to:—
J. HAWKINS & SON LTD.,
BEACH AVENUE, CLEVEDON, SOM.
Tel.: Clevedon 2244. 88176

SENIOR ARCHITECTURAL ASSISTANTS Intermediate or Final standard, required immediately for offices at Leigh and Wigan. Varied and interesting programme including Schools, Churches, Municipal Buildings, Housing, etc. Bonus and pension schemes, five-day week and three weeks holiday. Top salaries paid commensurate with ability and experience. Applications giving full particulars to **J. C. Prestwich & Sons, Bradshawgate Chambers, Leigh, Lancs.** 88179

GOTCH AND PARTNERS, Architects, of 8, City Road, London, E.C.1, have vacancies in their London, Brighton, Bournemouth and Bristol Offices for keen and energetic ASSISTANTS. Salaries range between £13,1700 per annum, according to ability. Write or telephone for appointment. **Monarch 3235.** 88173

ROBERT S. GRINLING invites applications from ARCHITECTS and STUDENTS to join his Hyde Park Corner office. Salary range £800 to £1,400. Five-day week and holiday this summer. Telephone Belgraveia 6595 for appointment. **TC7916**

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. Five-day week. Full particulars to **Hadfield Cawkwell & Davidson, 17 Broomgrove Road, Sheffield 10.** 88183

D. FLASKETT MARSHALL & PARTNERS require ARCHITECTURAL ASSISTANTS of Intermediate standard. Some experience essential. Scope for those with initiative and sense of responsibility. One day off per week for study if required. Apply in writing, giving full details of education and experience to: 59, Gordon Square, W.C.1. 88171

PREFABRICATION. Unique opportunity, in London consultant architect's office, for QUALIFIED MAN to initiate and control development of advanced, sophisticated new TIMBER BUILDING SYSTEM. Excellent long-term prospects, immense scope. Only those with initiative, imagination, technical competence and relevant experience should apply. Full particulars to Box 88167.

ARCHITECTURAL ASSISTANTS required in small progressive office where ability to take responsibility will be welcomed. Opportunity to gain experience of all aspects of contemporary professional practice by working both as job architects in charge of smaller projects and as assistants on larger projects in various parts of the country. Five-day week. Fifteen days annual leave. Salary £750-£1,250.

Write or telephone for appointment:

Michael Greenwood,
Broadway Court,
London, S.W.1.
Tel.: ABBey 5264, Ext. 1. 88169

INTERMEDIATE ASSISTANTS and other grades required in a practice engaged on progressive works, schools, flats, etc. Applicants with initiative would have great scope in all aspects of work. Salary according to experience and ability. Write to **Julian Sofaer, 1, Montagu Square, W.1.** 8168

ARCHITECT'S ASSISTANT—Qualified or Intermediate standard. Torbay area. Pleasant conditions. Progressive practice. Full particulars including salary required: Box 8158.

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. **J. SEYMOUR HARRIS & PARTNERS,**
5/4, Greenfield Crescent,
Edgbaston, Birmingham 15. 88130

Architectural Appointments Wanted
3s. per line, minimum 12s. Box Number, including forwarding replies, 2s. extra.

KEEN but redundant Intermediate-Final Assistant seeks well paid job of responsibility in London. Box 8156.

SENIOR ASSISTANT, 33, widely experienced, competent and industrious; used to responsibility for large projects, would welcome offer of post with progressive firm who can provide interesting work and good conditions of employment. Birmingham area preferred. Box 8148.

SENIOR ARCHITECT with extensive experience at home and overseas in major academic and commercial projects returning to England this year desires interesting administrative and supervisory position with full responsibility. Box 87861.

BUILDING SURVEYOR requires temporary appointment in busy Architect's office, London. £1,200 or pro rata. All duties including surveys, drawings, specifications, measured schedules, etc. Box 88122.

QUALIFIED SPANISH ARCHITECT (experience: design and execution of one major project) seeks post in progressive London office at beginning of September. Box 8152.

A.R.I.B.A., A.A.Dipl., age 36, eight years varied experience, seeks post as Assistant in central London office. Box 8153.

Other Appointments Vacant

3s. per line, minimum 12s. Box Number, including forwarding replies, 2s. extra.

OLIVER LAW & PARTNERS, Chartered Architects, 36, Ebury Street, S.W.1, require ONE or TWO ARCHITECTURAL DRAUGHTSMEN, preferably with office experience. Salary according to experience. 87967

P.A. TO PARTNERS required by small firm of Chartered Quantity Surveyors in Central London to combine the duties of confidential secretary and accountant with the administrative work involved in running a professional practice. Upper age limit about 40. High shorthand and typing speeds not necessary but common sense, interest in work, and ability to work on own initiative are essential. We want someone who is looking for a career, not a job, and we will pay up to £1,000 p.a. to the right person, man or woman. Box 87969.

ASSISTANT BUILDING SURVEYOR required for Surveyors and Land Agents. Efficient in Struct. Surveys, plans, specifications and dilaps. Apply **Geering & Colyer, 24, High Street, Tunbridge Wells.** 88001

REPRESENTATIVES. A leading Manchester company manufacturing products for the building industry has vacancies for representatives in the main centres of England. Applications are invited from men between 25 and 40 years of age who are mobile, have sales experience and a good knowledge of the building industry. A car will be provided and a good salary paid. Apply giving full details of career and present salary to The Chief Personnel Manager, Box 8134.

DRAUGHTSMAN required for Building Surveyors and Land Agents' experience in alterations and specifications. Apply **Geering & Colyer, 24, High Street, Tunbridge Wells.** 88002

ARCHITECTS DEPARTMENT of The Home and Colonial Stores, requires DRAUGHTSMAN with building construction knowledge, able to take survey measurements and draw plans in connection with alterations and extensions to shops. Shop and shop front designing ability an advantage. Five-day week; Staff Restaurant; Sports and Social Club; Pension Scheme. Phone **CLE 7363, Ext. 47.** 8080

LEADING manufacturer of prefabricated building systems requires two further SENIOR REPRESENTATIVES, one in North of England and one in Midlands. Sound knowledge of building construction essential; architectural background or experience of prefabricated structures an asset. This is an opportunity for capable sales executives able to initiate and successfully finalise technical and commercial negotiations at highest level. Send fullest details, qualifications, experience, career with age and salary levels in confidence. Box 87804.

DESIGNERS. Three required by Architect, Portman Square area, for Interiors and Exhibitions. Excellent opportunities for advancement and outdoor work. Apply Box 88175.

INTERIOR DESIGNER required for a progressive Architects office in Westminster area. Ability to take control of a complete programme involving interior design and furniture for ladies' hair dressing salons. This is the start of a new connection and offers first class opportunities for the right designer. Apply **H. Owen Luder, A.R.I.B.A., 79 Regency Street, Westminster, S.W.1.** Telephone Victoria 2171. 88142

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. **TC1673**

PERSONAL SECRETARIAL SERVICE
MARY HADDOCK of 8 Woods Mews, Park Lane, W.1, after 20 years' experience of secretarial work for architects in London and the Provinces, has started a free-lance practice offering a PERSONAL SECRETARIAL SERVICE for special work needing individual attention. Drafting reports and articles from raw material; design and layout of typewritten matter; research; committee work; fees; business, travel or social arrangements. Services in London for provincial architects gladly undertaken. Telephones: Mayfair 1661 and 9603. 8115

FULLY experienced in all Building and Architectural work, I am available to undertake: Designs, Working Drawings, Details, Surveys, Specifications, Models, etc. Just telephone **Wallington 9885** (near Croydon) and I will call anywhere and take your instructions. Box **TC5548.**

SURVEY OF SITES or buildings carried out for the Profession. **Livingstone 1839.** **TC5071**

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. 87087

MODELS AND COLOUR PERSPECTIVES. Charles Houthuesen offers work of the highest quality. 16, Thames Street, Sunbury-on-Thames, Middlesex. Sunbury 3728. **TC2339**

"NAPIER MODELS." Specialists in Architectural work, Stanley Studios, S.W.10. **FLAXMAN 2118.** **TC3551**

ARCHITECTURAL MODELS.—Thomas K. Bartlett and Partners specialise in this work. 5, King's Ave., W.5. Phone Perivale 6283. **TC6176**

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.** **TC6088**

ARCHITECTURAL AND EDUCATIONAL MODELS of all kinds, accurately made to scale with latest up-to-date materials. Models of realistic and artistic appearance made for clients in all parts of the world for over 20 years. Send drawings for free estimate to: Educational Models, 4, Avenue Road, Duffield, Derby, England. Telephone: Duffield 2081. 87495

ANYTHING UNDERTAKEN from designing to drainage by an experienced and qualified London Assistant. Up to 16 hours per week of spare time available at 12s. 6d. per hour. Box 87855.

EXPERIENCED Structural Designer-Detailer, with University degree, wishes to work direct with architect on contract or percentage basis. Box 88155.

CASHMORE ARCHITECTURAL MODELS have a reputation for craftsmanship, speed and dependability, and will help you to "put it over to your clients."—Coleham Head, Shrewsbury. Tel.: 52186. 88033

DUPLICATING: First class work promptly delivered. **Eaves & Co. Ltd., Slater Street, Liverpool, 1.** Brochure free. 88046

G. CHAMBERLAIN AND SONS (WOODWORKERS) LTD., 6, Code Street, London, E.1. **RISHOPSGATE 7963.** Are now in a position to offer their craftsmanship and experience to the discerning architect who requires well-made built-in bedroom and kitchen fittings. We also carry out a purpose made joinery service. 88077

BUILDING DRAUGHTSMEN—Do you consider you have the ability to earn £1,500 per annum?

If so, you are invited to apply for appointments immediately available in a firm of Building & Civil Engineering Contractors. Appointments are permanent for work at Head Office on varied and interesting Building Projects.

5-day week, with 3 weeks' annual holiday; pension fund. Interviews can be arranged outside office hours.

Applicants should write giving brief particulars to Box 88081.

ARCHITECT with small office in Midlands offers assistance to other Architects. Full drawing office services available. Box 88018.

ALL Architectural work beyond the capacity of your office will be gladly taken on by London Assistant. Box 8157.

PROFESSIONALLY trained young men willing to undertake work for the profession, also Models, Perspectives, etc. Box 8184.

For Sale and Wanted

3s. per line, minimum 12s. Box Number, including forwarding replies, 2s. extra.

FOR SALE. Masons continuous dveline printing machine with Admel developing machine. £45. Tel. Wordsworth 4290. 8178

Premises To Let

3s. per line, minimum 12s. Box Number, including forwarding replies, 2s. extra.

TO LET.—Architect's Drawing Office attached to busy Estate Office, very well lit and appointed. Rent £200 per annum inclusive of rates. Apply: 152, Peckham Rye, East Dulwich, S.E.22. New Cross 2201. 8108



(LANGDALE PIKES)

Light Sea Green Slate

125,000 sq. ft.
now being used for cladding the
Commonwealth's Tallest Building
— 600 ft. high —

The Canadian Bank of Commerce,
Montreal.

Chosen for its beautiful and unique
bar markings, colour and ability to
withstand temperatures experienced
in Eastern Canada ranging from the
arctic to the tropical.
Samples and technical details on
request to:



CONISTON · LANCS · TEL. 22510



... but we are still in business after
30 years of specialising in the
construction of wooden buildings.
We are not mass producers. We
like architects to tell us what they
require and to give us the oppor-
tunity of advising how the job
can best be tailored.

We want our customers to have
the best that wood can produce.
It is always cheaper that way.

Full details and brochures on request.

GREGORY OF HEDGERLEY
HEDGERLEY BUCKS
Telephone: Farnham Common 666

GREAT YARMOUTH. To let. 2nd floor office
suite occupying prominent position in King
Street. Floor area 815 sq. ft. Ideal offices for
Architect. Chief Surveyor, Prudential Assurance
Co. Ltd., 142, Holborn Bars, E.C.1. 8140

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.—Harvest Works,
96/107, St. Pauls Road, N.1. Canonbury 2961.
TC2093

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. TC9429

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: Lough-
borough 2446/7. TC1609

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./F.R.I.B.A.,
M./A.M.T.P.I., prepare Students by correspon-
dence. 10, Adelaide Street, Strand, W.C.2. TEM.
1603/4. TC9953

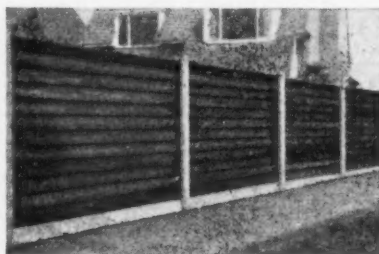
INTERIOR DESIGN AND DECORATION.
The Rhodex School offers a home study course
in interior design and decoration. Course 1, for
professional use. Course 2, for personal use about
your home. Send 4d. stamp for free booklet to
Dept. A.J. BCM/Rhodex, London, W.C.1. TC4989

FULL OR SUPPLEMENTARY TUITION

Provided by correspondence for R.I.B.A. examina-
tions. Revision Courses also available in any subject.
[Descriptive brochure on application]

ELLIS SCHOOL OF ARCHITECTURE

Principal: A. B. 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

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

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

HY-RIB

combined shuttering and reinforcement
long span metal lathing

HY-RIB DIVISION, TRUSCON LIMITED
25-41 Lower Marsh, London SE.1. Telephone: WATerloo 6922



D. & J. TULLIS LTD.
CLYDEBANK, SCOTLAND

Tel.: Clydebank 1861/2/3/4/5
Branches also at London, Birmingham
and Manchester

MODELS

for Architects & Civil Engineers

by **John B. Thorp**

EST 1883
98 GRAY'S INN ROAD, LONDON
W.C.1 Tel: HOLborn 1011

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
HL 99

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. 8.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. (1994), Ltd.	2	0004
Aircrow Company & Hewood, Ltd.	66	0011
Alcan (U.K.), Ltd.	34, 35	0865
Armstrong Cork Co., Ltd.	73	0028
Association of Vermiculite Exfoliators	10	0144
Auster, Ltd.	100	0039
Autotype Co., Ltd.	95	0043
Ayrshire Metal Products, Ltd.	101	1328

B.B. Chemicals, Ltd.	64	0055
Bath & Portland Stone Firms, Ltd.	6	1147
Batley, Ernest, Ltd.	95	0052
Benbow of Torquay	101	1262
Benjamin Electric, Ltd.	4	0058
Bolton Gate Co., Ltd.	52	0078
Boulton & Paul, Ltd.	11	0081
Bow Slate & Enamel Co., Ltd.	31	0083
Bowater Sales Co., Ltd.	42, 43	0082
British Aluminium Co., Ltd.	82	0090
British Mouldex, Ltd.	84	1306
Broads Manufacturing Co., Ltd.	98	0112
Broughton Moor Green Slate Quarries, Ltd.	120	0115
Burgess Products Co., Ltd.	88	0121
Byrd, A. A., & Co., Ltd.	90	0124

Cape Building Products, Ltd.	85	0131
Carron Co.	78	0132
Chloride Batteries, Ltd.	94	0141
Coal Utilisation Council	87	0147
Colt Ventilation, Ltd.	3	0152

Dampa Acoustics, Ltd.	86	0174
Danks, Edwin, & Co. (Oldbury), Ltd.	98	0175
Delta Metal Co., Ltd.	51	1063
Dinorwic Slate Quarries, Ltd.	52	1241
Doulton Vitrified Pipes, Ltd.	96	0186

Ellis School of Architecture	120	0202
English Clock Systems, Ltd.	77	0205
Evo-de, Ltd.	5	0878
Expanded Metal Co., Ltd.	24, 25	0211

F.E.B. (Great Britain), Ltd.	7, 9	0216
Fablon, Ltd.	68	0213
Falk, Stadelmann & Co., Ltd.	72	0214
Ferodo, Ltd.	74	0218
Fibreglass, Ltd.	69	0219
Fordham Pressings, Ltd.	79	0232
Formica, Ltd.	60	0233
Freeman, Joseph, Sons & Co., Ltd.	15	0236
Furse, W. J., & Co., Ltd.	120	0241

Gas Council	58, 59	0246
General Electric Co., Ltd.	23	0929
General Electric Co., Ltd.	49	0250
Gregory (Hedgerley), Ltd.	120	1215
Gypsum Plasterboard Development Assn.	48	0267

Haden, G. N., & Sons, Ltd.	41	0922
Hall, Robert H., & Co. (Kent), Ltd.	17	0271
Harris & Sheldon, Ltd.	56	0279
Hathernware, Ltd.	120	0691
Hattersley (Ormskirk), Ltd.	18	0846
Helical Bar & Engraving Co., Ltd.	53	0288
High Duty Alloys, Ltd.	61	0292
Hill Brothers (Service), Ltd.	102	0918
Hills Hoists (U.K.), Ltd.	40	0983
Hy-Rib Division Truscon, Ltd.	120	0645

Imperial Chemical Industries, Ltd.	16	0319
Imperial Chemical Industries Ltd.	44, 45	0321

Kay & Co. (Engineers), Ltd.	99	0715
Kerner-Greenwood & Co., Ltd.	22	0339
King, Geo. W., Ltd.	96	0342
Kirkstone Green Slate Quarries, Ltd.	120	0739
Kismet, Ltd.	104	0993

Laing, John, & Son, Ltd.	124	0345
Lanarkshire Steel Co., Ltd.	12, 13	1309
Lillishall Co., Ltd.	91	0910

Mander Brothers, Ltd.	81	0382
Manger, J., & Son, Ltd.	123	0383
Maple & Co., Ltd.	37	1294
Marley Concrete, Ltd.	106	1135
Marley Tile Co., Ltd.	65	0398
Mellor Bromley (Air Conditioning), Ltd.	89	0405
Merchant Trading Co., Ltd.	104	0408
Midland Woodworking Co., Ltd.	19	0412
M.K. Electric, Ltd.	8	0416
Moderneon	105	1149
Modular Concrete Co., Ltd.	67	1231
Morris, M. A., Ltd.	54	0914
Morris Rubber Industries, Ltd.	102	0759

Olsson, Martin (Fibreboards), Ltd.	92	0445
------------------------------------	----	------

Panther Ceilings, Ltd.	36	1132
Peel, H., Ltd.	100	1160
Peglers, Ltd.	83	0455
Philips Electrical Ltd.	97	0462
Phoenix Timber Co., Ltd.	103	1304
Pilkington Brothers, Ltd.	28, 29	0469
Pilkington Brothers, Ltd.	62, 63	0476
Pitman, Sir Isaac & Sons, Ltd.	100	1327
P'yrok, Ltd.	106	0741

Radiation Group Sales, Ltd.	55	0496
Rank-Xerox	102	1322
Rawlings Bros., Ltd.	105	0499
Reed, Millican & Co., Ltd.	91	0502
Reynolds & Co., Ltd.	39	0696
Richards, Charles, & Sons, Ltd.	123	0728
Roller Shutters, Ltd.	40	0517
Rowe Industries (Kirby), Ltd.	14	1158
Ruberoid Co., Ltd.	93	0521
Rubery Owen & Co., Ltd.	38	0522

Sanders & Forster, Ltd.	26, 27	0333
Sandlime Brick Manufacturers Assn., Ltd.	99	0531
Seaboard Lumber Sales Co., Ltd.	80	0542
Shannon, Ltd.	45	0549
Shell Chemical Co., Ltd.	70	0964
Sommerfelds, Ltd.	95	0576
Stotts of Oldham	75	0602
Swedish Perstorp	46	0612

T.G. Fencing	120	1184
Tanks & Linings, Ltd.	76	0616
Technigraphic Bristol, Ltd.	101	1198
Temperature, Ltd.	47	0746
Thames Plywood Manufacturers, Ltd.	50	1124
Thermaconst, Ltd.	21	0629
Thorp, John B.	120	0633
Tullis, D. & J., Ltd.	120	1164

Venesta Plywood, Ltd.	57	0816
-----------------------	----	------

Wall Paper Manufacturers, Ltd.	71	0671
Ward Brothers (Sherburn), Ltd.	20	1192
Ward & Co. (Letters), Ltd.	101	0676
Wiggins-Sankey, Ltd.	103	1058
Wood, Edward, & Co., Ltd.	32, 33	0700

Yorkshire Imperial Metals, Ltd.	2	0705
---------------------------------	---	------

Zinc Development Association	30	0707
------------------------------	----	------

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 _____

Because of the enormous
saving in

TIME & LABOUR

progressive Architects
are specifying

MANGERS CEMENT WELD

No need for hacking and raking! No need to waste unnecessary time and labour! Mangers new Cement Weld goes on straight from the tin by brush, spray or roller. This entirely new bonding fluid is specially formulated to ensure a perfect bond to sand cement screeds from $\frac{1}{4}$ " thick right down to feather thickness. Cement Weld provides a satisfactory bond for rendering to the following surfaces.

SMOOTH FACED CONCRETE
SOUND PAINTED BRICKWORK
FAIR FACED POINTED BRICKWORK
ANY FIRM, SOUND AND CLEAN SURFACE
HOWEVER SMOOTH.

Our Technical department will be very
pleased to help you with any sand/
cement bonding problem.
Write or phone.

J. MANGER & SON
Dept. A. J.
Kingsland, London, E.8.
Tel: CLIssold 8521

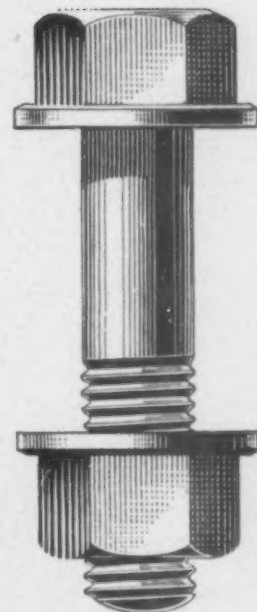
AN **Amasal** COMPANY



RICHARDS

The **BOLT & NUT** People

We produce a range of High Strength Friction Grip Bolts for constructional engineering. They are a practical and economic replacement for rivets. Our other lines include Black, Bright and Cold Headed Bolts and Nuts, "Hi-Strain" Bolts and Nuts, Alloy Steel Studs, Carbon Nuts, Permanent Way Fastenings and Telegraph Ironwork.



Look for these initials on the bolt head.

Send
for our
catalogues &
Stock list



To
Charles Richards & Sons Limited
P.O. Box 23 Darlaston, Wednesbury, Staffs
Telephone: James Bridge 3188 (8 lines)

NAME
ADDRESS

RI

Zinc Development Association ... 30 □ 079

Because of the enormous
saving in

TIME & LABOUR

progressive Architects
are specifying

MANGERS

CEMENT WELD

No need for hacking and raking! No need to waste unnecessary time and labour! Mangers new Cement Weld goes on straight from the tin by brush, spray or roller. This entirely new bonding fluid is specially formulated to ensure a perfect bond to sand cement screeds from 1" thick right down to feather thickness. Cement Weld provides a satisfactory bond for rendering to the following surfaces.

SMOOTH FACED CONCRETE
SOUND PAINTED BRICKWORK
FAIR FACED POINTED BRICKWORK
ANY FIRM, SOUND AND CLEAN SURFACE
HOWEVER SMOOTH.

*Our Technical department will be very
pleased to help you with any sand/
cement bonding problem.
Write or phone.*

J. MANGER & SON
Dept. A. J.
Kingsland, London, E.8.
Tel: CL15501 8521

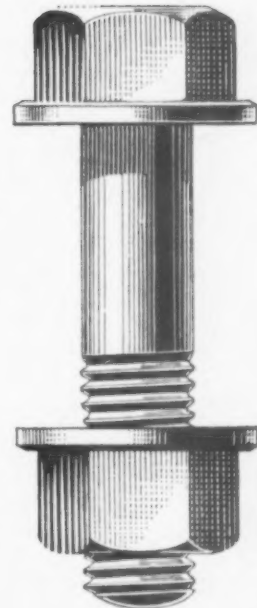
AN **Amasal** COMPANY



RICHARDS

The
BOLT & NUT
People

We produce a range of High Strength Friction Grip Bolts for constructional engineering. They are a practical and economic replacement for rivets. Our other lines include Black, Bright and Cold Headed Bolts and Nuts, "Hi-Strain" Bolts and Nuts, Alloy Steel Studs, Carbon Nuts, Permanent Way Fastenings and Telegraph Ironwork.



Look for these initials on the bolt head.

Send
for our
catalogues &
Stock list



To
Charles Richards & Sons Limited
P.O. Box 23 Darlaston, Wednesbury, Staffs
Telephone: James Bridge 3188 (8 lines)

NAME
ADDRESS

RI

**BRITAIN'S LARGEST
HYPERBOLIC PARABOLOID STRUCTURE**

Work is in progress on the foundations and basement area of the new Commonwealth Institute on a $3\frac{1}{2}$ -acre site, to the south of Holland Park, on Kensington High Street. A feature of the design will be the roof of the exhibition block, consisting of one shell concrete hyperbolic paraboloid and four side warps constructed of pre-stressed concrete beams supporting wood-wool slabs, all of which are covered by copper sheet. The walls are to be of *Thermalite* building blocks clad externally with curtain walling of coloured opaque glass.

New Commonwealth Institute

Architects: Robert Matthew and Johnson-Marshall

LAING

John Laing and Son Limited
GREAT BRITAIN AND OVERSEAS

The exhibition block, housing permanent exhibitions of Commonwealth countries, will contain three galleries, pierced under the main paraboloid to form a large central well, which will unite the gallery floors and permit long diagonal views of the curving roof planes indirectly lighted by concealed clerestory windows.

A two-storey linking block, containing art gallery, cinema, studios, public assembly rooms and restaurant, will join the galleries to the four-storey administration block. The ancillary buildings will have a reinforced concrete structure, and will be clad with precast concrete panels and brickwork. Large window areas will allow fine views across Holland Park and over the grassed forecourt.



