

THE ARCHITECTS' JOURNAL



standard contents

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

NEWS and COMMENT

Diary

News

Stragal's Notes and Topics

Letters

Societies and Institutions

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. 3189

[Vol. 123

THE ARCHITECTURAL PRESS

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

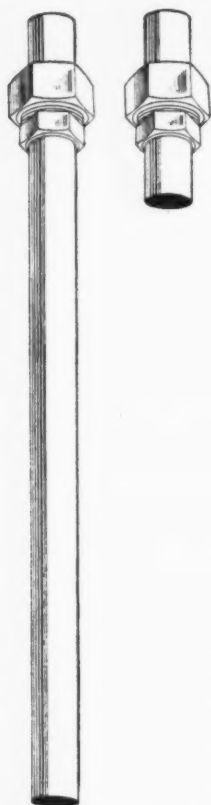
Price 1s. 0d.

Registered as a Newspaper.

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

| | | |
|--------|---|--------------------------|
| AA | Architectural Association, 34/6, Bedford Square, W.C.1. | Museum 0974 |
| AAI | Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts. | |
| ABS | Architects' Benevolent Society. 66, Portland Place, W.1. | Langham 5721 |
| ABT | Association of Building Technicians. 1, Ashley Place, S.W.1. | Victoria 0447-8 |
| ACGB | Arts Council of Great Britain. 4, St. James' Square, S.W.1. | Whitehall 9737 |
| ADA | Aluminium Development Association. 33, Grosvenor Street, W.1. | Mayfair 7501/8 |
| ArchSA | Architectural Students' Association. 34/36, Bedford Square, W.C.1. | |
| ARCUK | Architects' Registration Council. 68, Portland Place, W.1. | Langham 8738 |
| BAE | Board of Architectural Education. 66, Portland Place, W.1. | Langham 5721 |
| BATC | Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1. | |
| BC | Building Centre. 26, Store Street, Tottenham Court Road, W.C.1. | Reliance 7611, Ext. 1706 |
| BCC | British Colour Council. 13, Portman Square, W.1. | Museum 5400 |
| BCCF | British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5. | Welbeck 4185 |
| BCIRA | British Cast Iron Research Association. Alvechurch, Birmingham. | Ealing 9621 |
| BDA | British Door Association. 10, The Boltons, S.W.10. | Redditch 716 |
| BEDA | British Electrical Development Association. 2, Savoy Hill, W.C.2. | Fremantle 8494 |
| BIA | British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2. | Temple Bar 9434 |
| BID | Building Industries Distributors. 52, High Holborn, W.C.1. | Glasgow Central 2891 |
| BINC | Building Industries National Council. 11, Weymouth Street, W.1. | Chancery 7772 |
| BOT | Board of Trade. Whitehall Gardens, Horseguards Avenue, Whitehall, S.W.1. | Langham 2785 |
| BRS | Building Research Station. Bucknalls Lane, Watford | Trafalgar 8855 |
| BSA | Building Societies Association. 14, Park Street, W.1. | Garston 2246 |
| BSI | British Standards Institution. British Standards House, 2, Park St., W.1. | Mayfair 0515 |
| BTE | Building Trades Exhibition. 32, Millbank, S.W.1. | Mayfair 9000 |
| CABAS | City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Civic Centre, Newport, Mon. | Tate Gallery 8134 |
| CAS | County Architects' Society. C/o F. R. Steele, F.R.I.B.A., County Hall, Chichester. | Newport 65491 |
| CCA | Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1. | Chichester 3001 |
| CCP | Council for Codes of Practice. Lambeth Bridge House, S.E.1. | Sloane 5255 |
| CDA | Copper Development Association. Kendals Hall, Radlett, Herts. | Regent 4448 |
| CIAM | Congrès Internationaux d'Architecture Moderne. Doldertal, 7, Zurich, Switzerland. | Radlett 5616 |
| COID | Council of Industrial Design. 28, Haymarket, S.W.1. | Zurich, Switzerland |
| CPRE | Council for the Preservation of Rural England 4, Hobart Place, S.W.1. | Trafalgar 8000 |
| CUC | Coal Utilization Council. 3, Upper Belgrave Street, S.W.1. | Sloane 4280 |
| CVE | Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1. | Sloane 9116 |
| DGW | Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1. | Reading 72255 |
| DIA | Design and Industries Association. 13, Suffolk Street, S.W.1. | Reliance 7611 |
| DPT | Department of Overseas Trade. Horseguards Avenue, Whitehall, S.W.1. | Whitehall 0540 |
| EJMA | English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1. | Trafalgar 8855 |
| EPNS | English Place-Name Society. 7, Selwyn Gardens, Cambridge. | Regent 4448 |
| FAS | Faculty of Architects and Surveyors. 68, Gloucester Place, W.1. | Welbeck 9966 |
| FASS | Federation of Association of Specialists and Sub-Contractors, Artillery House, Artillery Row, S.W.1. | Abbey 7232 |
| FBBDO | Fibre Building Board Development Organization, Ltd. 47, Princes Gate, Kensington, S.W.7. | Kensington 4577 |
| FBI | Federation of British Industries. 21, Tothill Street, S.W.1. | Whitehall 6711 |
| FC | Forestry Commission. 25, Savile Row, W.1. | Regent 0221 |
| FCMI | Federation of Coated Macadam Industries. 37, Chester Square, S.W.1. | Sloane 1002 |
| FDMA | The Flush Door Manufacturers Association Ltd., Trowell, Nottingham. | Ilkeston 623 |
| FLD | Friends of the Lake District. Pennington House, nr. Ulverston, Lancs. | Ulverston 201 |
| FMB | Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1. | W.C.1. |
| FPC | The Federation of Painting Contractors, St. Stephen's House, S.W.1. | Chancery 7583 |
| FRHB | Federation of Registered House Builders. 82, New Cavendish Street, W.1. | Whitehall 3902 |
| GBPA | Gypsum Building Products Association, 11, Ironmonger Lane, E.C.2. | Langham 4341 |
| GC | Gas Council. 1, Grosvenor Place, S.W.1. | Monarch 8888 |
| GG | Georgian Group. 16, Hanover Square, W.1. | Sloane 4554 |
| HC | Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1. | Mayfair 5454 |
| IAAS | Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1. | Whitehall 2881 |
| ICA | Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1. | Sloane 5615 |
| ICE | Institution of Civil Engineers. 1, Great George Street, S.W.1. | Grosvenor 6186 |
| IEE | Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2. | Whitehall 4577 |
| IES | Illuminating Engineering Society. 32, Victoria Street, S.W.1. | Temple Bar 7676 |
| IGE | Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. | Abbey 5215 |

Sloane 8266



SECUREX
SOLDERLESS COMPRESSION
JOINTS

The LONG and the short of it...

You can have it "both ways" with SECUREX solderless compression joints. SHORT time fixing - a perfect joint in two minutes, and LONG time staying fixed, in fact a SECUREX joint is as lasting as the system it connects. A SECUREX joint is resistant to rust and fur and firmly withstands pressure and temperature variations. Precision built by engineers, here is the perfect range of joints, prefabricated in exact uniformity for your pride of craftsmanship - every joint alike in neat appearance and enduring reliability. Send now for full particulars of SECUREX, the modern time and money saver.

JAMES H. LAMONT & CO. LTD.

ENGINEERS—BRASSFOUNDERS

GYLEMUIR WORKS, CORSTORPHINE, EDINBURGH 12, SCOTLAND

Telephone: Corstorphine 2241-2

Telephone: "Solderless, Edinburgh"

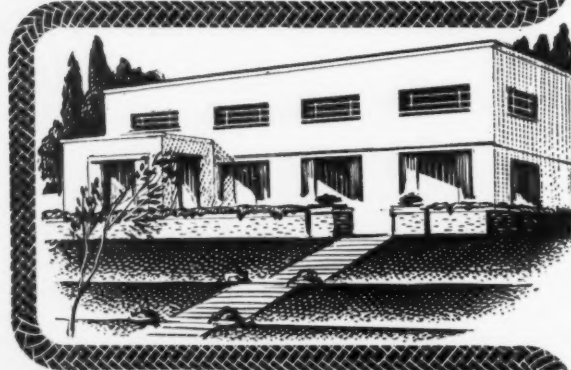
London Office: NORFOLK HOUSE, LAURENCE POUNTNEY HILL, E.C.4

Telephone: Mansion House 5700

Telegrams: "Yutaka Cannon, London"



Whatever the House
Large or Small
insist on---



RISTS

CABLES

You can be sure of complete satisfaction from Rists T.R.S. and V.I.R. house wiring cables. Manufacturers of Cables for internal maintenance wiring, electric fans, soldering irons, etc.

Write now for further details.

BRITAIN'S LARGEST MAKERS OF THERMOPLASTIC CABLES

RISTS WIRES & CABLES LTD.

LOWER MILEHOUSE LANE • NEWCASTLE-UNDER-LYME • STAFFS

0
4

2

from
hance

ES
D.
FS



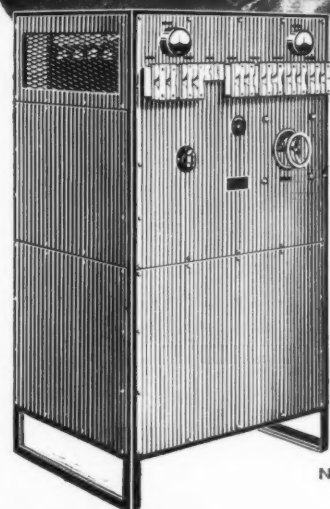
They never let you down



THE POLICE FORCE

The policeman patrolling his beat is backed by many specialist departments. In an emergency, a 'phone call will quickly bring an ambulance to the scene or put a police car on the track of a stolen car or wanted person. Special police telephone boxes and radio-controlled cars enable the police to be on the spot in a matter of minutes. They never let you down.

YOU CAN BE CERTAIN TOO that Nife-Neverfayle Emergency Lighting Equipment will never let you down. *Whenever needed*, these reliable units will instantly, automatically spring into action. That is the special advantage of the Nife Steel Alkaline Battery—it never deteriorates, even after long periods of inactivity. Nife-Neverfayle units occupy only one-third of the space required by conventional equipment, and, as they can be installed adjacent to other equipment, a separate battery room is not needed—a point worth remembering when planning new buildings. Maintenance costs are negligible—after years of trouble-free service you will realise just how economical your Nife-Neverfayle equipment has been.



NIFE - NEVERFAYLE

THE EMERGENCY LIGHTING EQUIPMENT WITH THE **STEEL** ALKALINE BATTERY

NIFE BATTERIES · REDDITCH · WORCESTERSHIRE

*"A deep depression is settling over a wide area.
Gales will be followed by heavy rain . . ."*

Where the weather report doesn't matter...



on all roofs weather-proofed by



CONTRACTS DEPARTMENT
*We can supply materials and
labour. Inspections made and de-
tailed estimates submitted without
obligation.*



ROOF WATERPROOFING

Evode Roof Waterproofing—embodying the famous cold applied Evode Insulating (Trade Mark) Pastes—continues to protect roofing structures old or new, large or small, in cold or tropical climates, for many years after it has been applied. This ability to endure and preserve is inherent in the unique properties found only in Evode Insulating Pastes, described fully in our leaflet 1021.

Cuts Building and Maintenance Costs!

EVODE LIMITED

STAFFORD

ENGLAND

Telephone: 1590/1/2

Telegrams: Evode, Stafford.

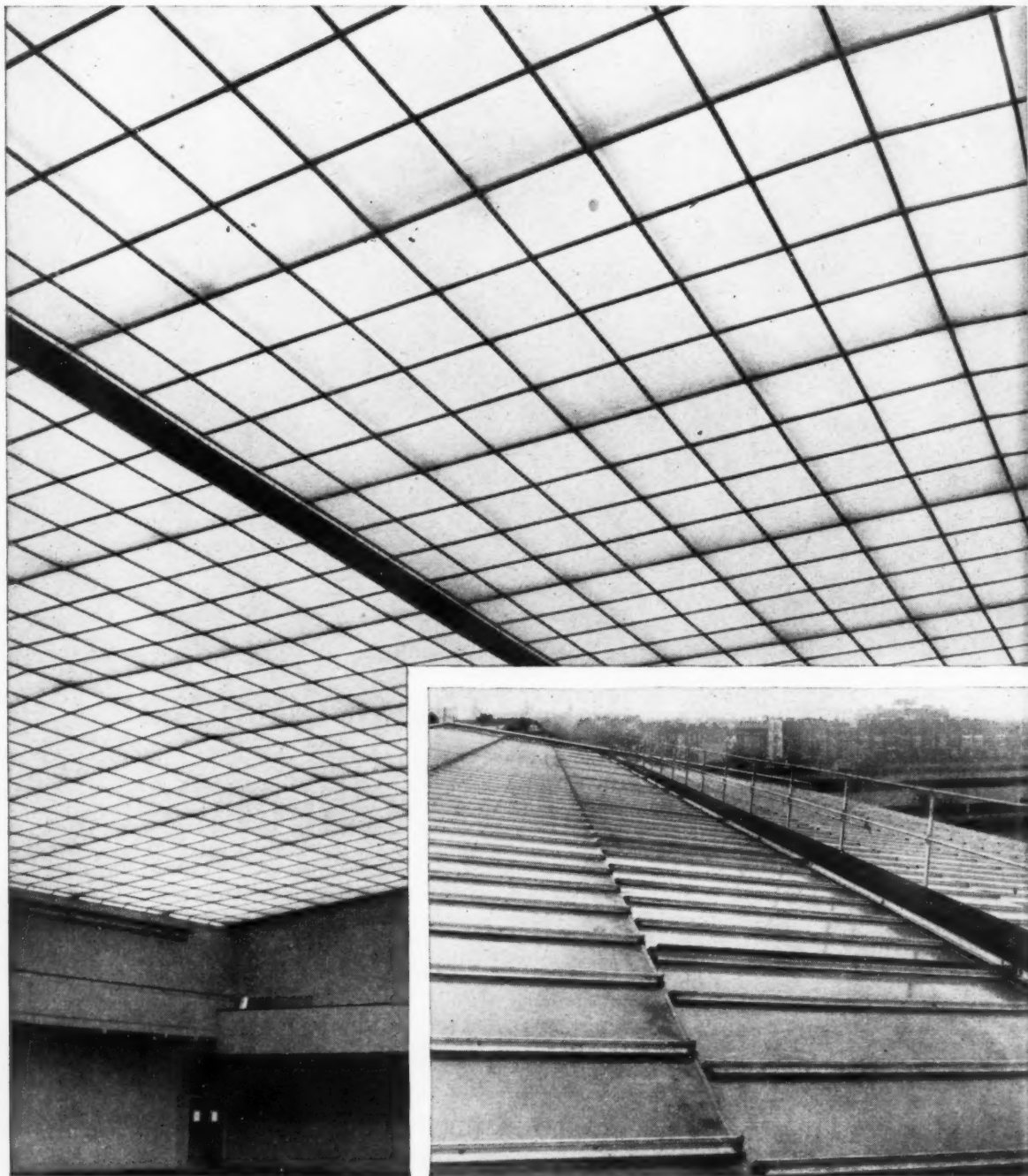
London Office: 1 Victoria Street, S.W.1.

Telephone: ABBey 4622/3

PATENT GLAZING

QUEEN'S CLUB, W

Architect: *T. Mortimer Burrows & Partners, London W.C.1.*



G SPECIFICATIONS

UB, WEST KENSINGTON

W.C.I. Contractors: *Kirk & Kirk Ltd., London S.W.15.*



The Queen's Club, Kensington, is a striking example of the effectiveness and efficiency of Patent Roof Glazing. A single span roof (120' 0" span) glazed eight panes deep at each side of the ridge, covers an area of nearly 17,000 ft. super. This includes aluminium alloy bars with $\frac{1}{4}$ " Georgian wired glass, plus opening lights and accessibility walkways.

The 14,250 super ft. of specially designed lay-lights, concealing the basic roof structure, is of particular interest. This has been carried out with standard aluminium alloy glazing bar as opposed to the customary casement section.

The outer glazing admits the maximum amount of daylight diffused through the glass of the lay-light, resulting in uniform light intensity over the whole floor area, without interference from shadow or rays of the sun.

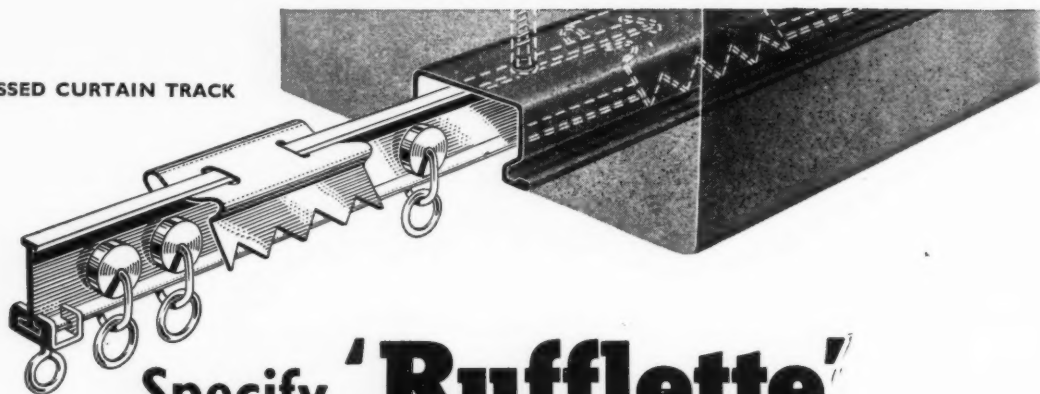
For its impressiveness and efficiency, this system of daylighting at the Queen's Club could not be surpassed.



ISSUED BY THE PATENT GLAZING CONFERENCE, BURWOOD HOUSE, CAXTON STREET,

LONDON, S.W.1

RECESSED CURTAIN TRACK

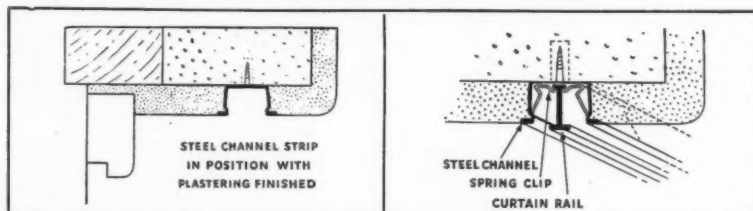


Specify 'Rufflette' (Pat. & Regd.) BRAND CURTAIN TRACK SYSTEMS

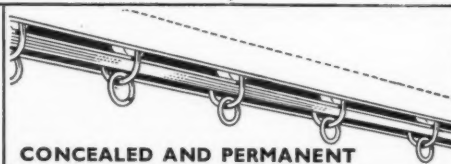
★ SEE OUR PERMANENT EXHIBITS

AT THE BUILDING CENTRE IN LONDON & GLASGOW

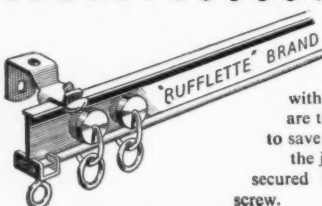
"Rufflette" Brand Recessed Curtain Track represents the perfect method of curtain suspension, being concealed, permanent and inexpensive. It is an integral part of the structure and can be fitted into wood or plaster lintels. The track is locked in position by a patent spring clip without screws. Many architects specify this product in new buildings.



"Rufflette" Brand Tracks have been installed by many local authorities including Ilford, Wandsworth, Lewisham, Willesden, Finchley, Wood Green, Poplar, Wimbledon, Greenwich, Stoke Newington, Islington, Holborn, Leyton & West Ham Borough Councils. Also London, Bucks, Surrey, Middlesex & Essex County Councils.



Cubicle Track installations have been made for many hospitals including Edgware Gen., Mount Vernon, Richmond, Bushey Maternity, Northwood & Pinner Gen., Liverpool Stanley East Suffolk & Ipswich, Southmead Bristol, Newcastle Gen., Darlington, Warrington Infy., and the Liverpool Royal Infy., and also for many municipal undertakings.

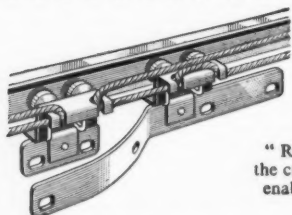
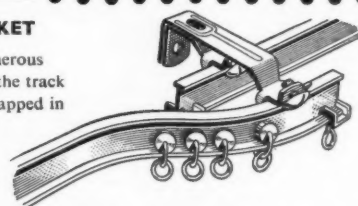


B/L TYPE TRACK

A strong track for all types of window, with or without cord control. Brackets are top or face fixing, designed to save valuable time and cost on the job, the track being rigidly secured by a single front-facing screw.

OVERLAP BRACKET

In order to give a generous overlap for curtains, the track can be cut and over-lapped in the centre, using the special BL7 bracket.

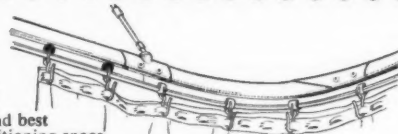


CORD CONTROL

On straight track curtains can be effortlessly opened and closed with this "Rufflette" Cord Control. Note the curved travelling section which enables curtains to be overlapped without cutting the track.

CUBICLE TRACK

The simplest and best method of partitioning space by curtains, in hospitals, schools, hairdressing establishments, clinics and stores. Suspension is from ceiling or wall and silent runners make the operation of curtains almost inaudible.



FULLY ILLUSTRATED CATALOGUE WILL BE SENT ON REQUEST TO:—

THOMAS FRENCH & SONS LTD. HEAD OFFICE: CHESTER RD, MANCHESTER, 15.

Also at Wythenshawe and London, Associate Company in U.S.A.



through...

AND

through...

AND

through...

Crompton

RUBBER CABLE

MAKES WIRING

A JOB TO LAST



ELECTRICAL EQUIPMENT

Crompton Parkinson Ltd., Crompton House, Aldwych, London, W.C.2. Tel.: Chancery 3333. Grams: Crompark, Estrand London.

CABLE WORKS: Alfreton Road, Derby. Tel.: Derby 45431.

FIRST

and still

FOREMOST

DURESCO

'King of Water Paints'

Duresco—the original oilbound water paint—with a history of close on 100 years—has been specified at one time or another for:—

- ★ The Royal Palace and Summer Residence of H. M. King Haakon of Norway
- ★ British Electricity Authority's Operations H.Q., Bankside House, London
- ★ Arundel Castle ★ The Robert Clack School, Dagenham
- ★ The Royal Opera House, Covent Garden
- ★ Houses and Factories, Basildon Development Corporation
- ★ B.O.A.C. Airways House.
- ★ Houses and Factories, Harlow Development Corporation
- ★ The Victoria and Albert Museum ★ London County Council Housing Estates
- ★ The College of Technology, Kumasi, Gold Coast
- ★ Manchester Corporation Housing Estates

and countless other outstanding buildings all over the world.



WHATEVER THE JOB, THERE'S A

Duresco

Product

FOR IT!

For full details, please write to:— The Technical Advisory Service

DURESCO PRODUCTS LTD., London: Charlton, S.E.7, GRE 0034/5/6 or Manchester: 65 Great Ducie Street, DEAnsgate 3161

WOOD... nature's best building material

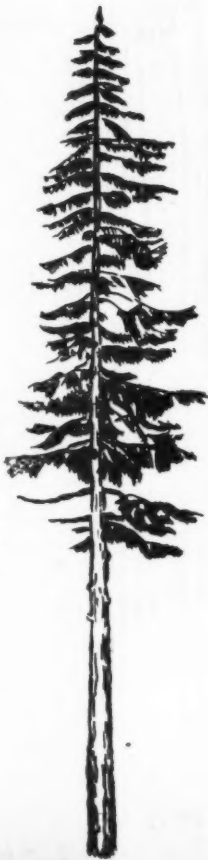
CANADIAN

Pacific Coast

HEMLOCK

has wide range of uses

Pale greyish yellow in colour with faint reddish tone in places. The grain is uniform and fine in texture.



Some of its special ADVANTAGES

- straight even grain with small light knots
- freedom from pitch and resin
- takes paint and varnish extremely well
- has exceptional glueing qualities
- rich in appearance, does not darken with age
- lightness in weight
- strength and resiliency
- little tendency to splinter
- edge grain wears evenly

Some TYPICAL USES

- general construction
- doors and millwork
- cabinets and cupboards
- shelves
- studding
- enamelled furniture
- interior and exterior finishes
- tanks
- railway sleepers
- ladder stock
- shiplap
- gymnasium floors
- ballroom floors

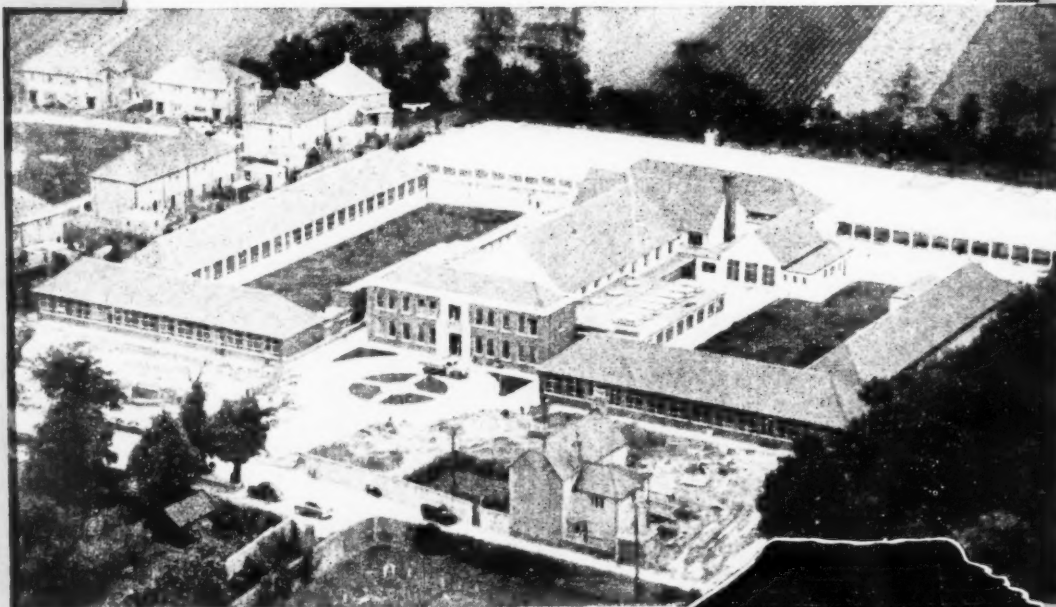
FOR FURTHER INFORMATION concerning Canadian woods contact The Commercial Counsellor (Timber), Canada House, Trafalgar Sq., London, S.W.1.

Reproduced here is figure of Pacific Coast Hemlock

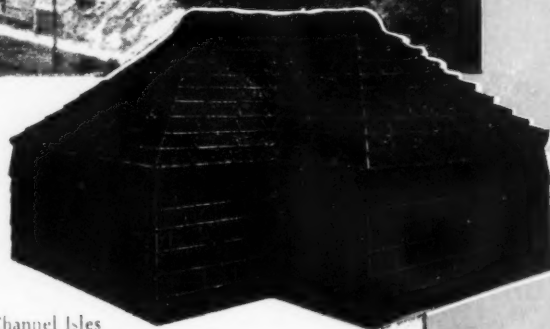
This advertisement is one of a series featuring Canadian Douglas Fir, Spruce, White Pine, Red Pine and Western Red Cedar.

TIM I

HARMONY SUSTAINED



*Designed by States Engineers Dept., Jersey, States Engineer:
G. C. Law Esq., A.M.I.C.E., M.I.Mun.E. Photograph
by courtesy of the Jersey Evening Post.*



Model Roof shewing
Tiles and Accessories.

Demands for further education facilities in the Channel Isles have resulted in the Hautlieu School, Jersey — a building of exceptional design in a natural setting. Dignus Sandstorm Clay Roofing Tiles were selected to harmonise with this building and its surroundings.
May we send you further details of our tiles?

BEST QUALITY TILES ARE GUARANTEED FOR FIFTY YEARS

DIGNUS
11 x 7 SANDSTORM CLAY ROOFING
Tiles

DIGNUS LIMITED : KEELE : NEWCASTLE : STAFFS.

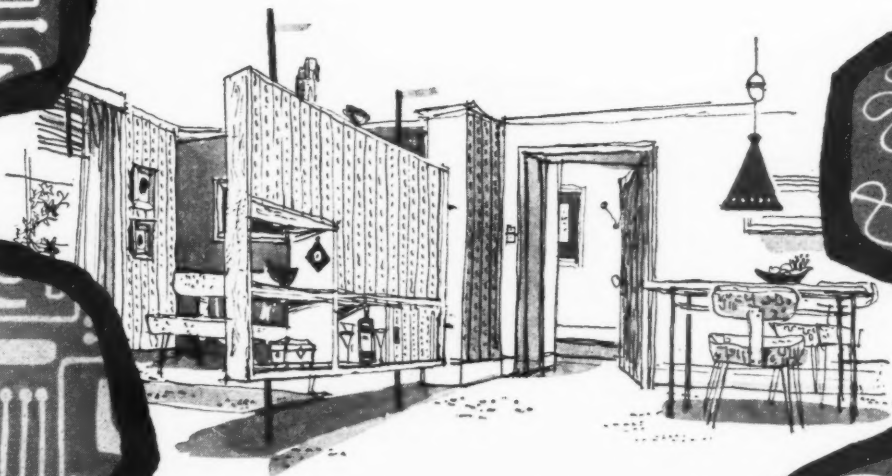
★ **Maximum output maintained — continuity of supplies guaranteed.**

Rydura

*the ideal contemporary fabric
for seating, walls and furniture decoration*



Design: 'Romanic'



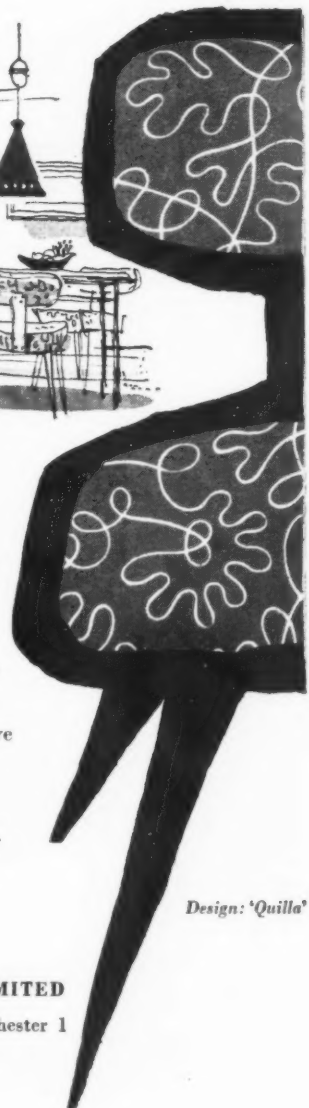
'RYDURA' is the cotton fabric with the 'Profilim' finish, combining modern designs and colours with practical qualities. It is durable and virtually unstainable, and is easily cleaned with a damp cloth. The ideal covering for chairs and seating in the home, hotels, restaurants, bars, hospitals, schools and in fact all public buildings, as well as for ships, caravans and cars.

A perfect wall surface, either applied direct (special adhesive available) or in the form of ready prepared panels.

Decorative and hardwearing for all kinds of wooden furniture, such as chairs, tables, cabinets and wardrobes.

Made in 48 inches width. Three qualities now available.

Write for samples and further information.



Design: 'Quilla'

'RYDURA' FABRICS ARE PRODUCED BY RYJACK PRODUCTIONS LIMITED
(Prop. The Calico Printers' Association Ltd.) Dept. AJ 89 Oxford Street Manchester 1

Important Revisions of British Standards for Lead Pipe

Many permissible minimum weights greatly reduced

**The new revisions
of B.S.602 for Lead pipe
reduce the minimum weights
for flushing and warning pipes
and represent
an average saving of**

32%

Tables incorporating the new standards have been prepared and are available in a revised edition of "CONCISE INFORMATION ON LEAD PIPE" free on request.



LEAD SHEET AND PIPE COUNCIL

In association with LEAD DEVELOPMENT ASSOCIATION

EAGLE HOUSE · JERMYN STREET · LONDON · SW1

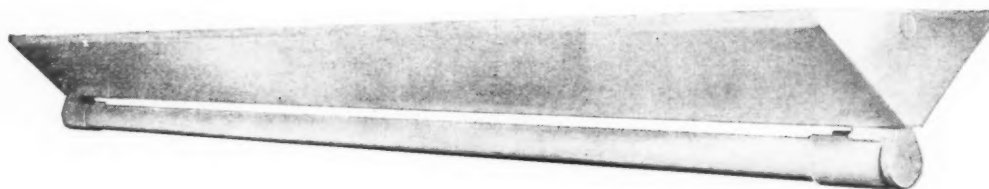
Telegrams: Ukleadman, Piccy, London Telephone: Whitehall 4175

B.127

Looking for something extra?

If it's lighting with extra *quality*, more and more architects and contractors are finding it at Siemens. The reason is a good one—from Siemens "Built-in-Quality" range they can specify lighting Fittings *from stock*.

These fittings are outstanding in design and superior manufacture, yet cost no more. Added to this they can make use of Siemens Specialist Advisory Service—the surest way to a first class industrial or commercial lighting installation.



FLUORESCENT LIGHTING FITTINGS

| | Length | Weight | Price | | |
|-------------------------------------|--------|--------|-------|----|----|
| | | | £ | s. | d. |
| F.T.F. 5451 Single 5' 80W - - - - - | 5' 4" | 24 lb. | 8 | 11 | 8 |

Manufactured from best quality silver sheet steel and finished inside and out with Siemens "Haligloss" super-hard white stove enamel. 'Low-watts-loss' switch start control gear is included. This model can be either ceiling or pendant mounted and is provided with adjustable suspension centres. Clip-on diffuser kit is available.

SIEMENS ELECTRIC LAMPS & SUPPLIES LIMITED



38-39 Upper Thames Street, London, E.C.4.

Member of the A.E.I. Group of Companies.

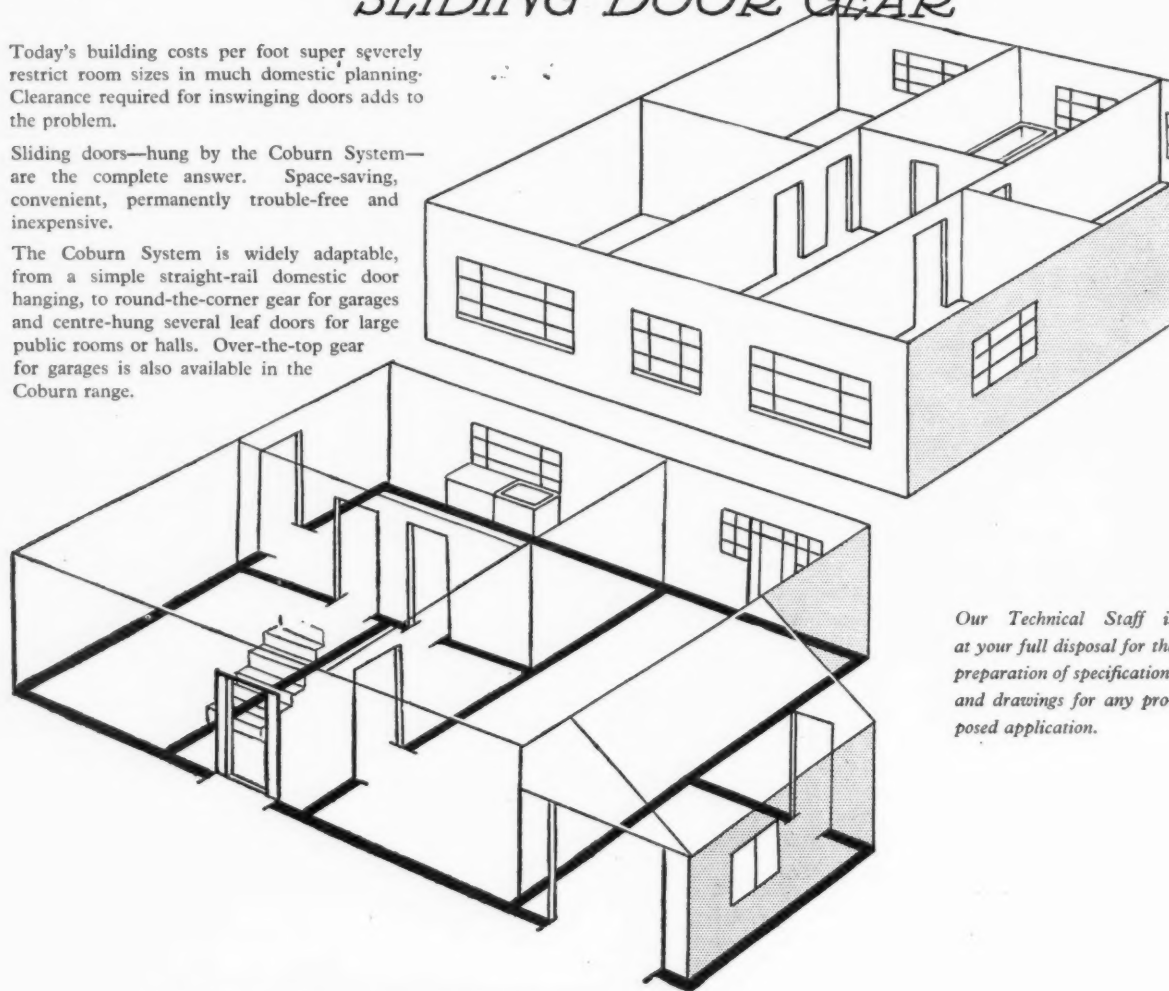


MODERN PLANNING *demands* SLIDING DOORS *operated by* **Coburn** SLIDING DOOR GEAR

Today's building costs per foot super severely restrict room sizes in much domestic planning. Clearance required for inswinging doors adds to the problem.

Sliding doors—hung by the Coburn System—are the complete answer. Space-saving, convenient, permanently trouble-free and inexpensive.

The Coburn System is widely adaptable, from a simple straight-rail domestic door hanging, to round-the-corner gear for garages and centre-hung several leaf doors for large public rooms or halls. Over-the-top gear for garages is also available in the Coburn range.



Our Technical Staff is at your full disposal for the preparation of specifications and drawings for any proposed application.

Write for catalogue, prices, questionnaire and advice :—

The British Trolley Track Co. Ltd.

COBURN WORKS · COPPERFIELD STREET · LONDON, S.E.1. TELEPHONE: WATERloo 4311 (3 LINES)



Additional lighting points . . .

A convenient way of obtaining natural light in a roof space is to specify the use of a number of Pilkington's Glass Tiles or Slates in the roof. They are made in patterns to match all standard types and sizes of tiles and slates. (Details on request).

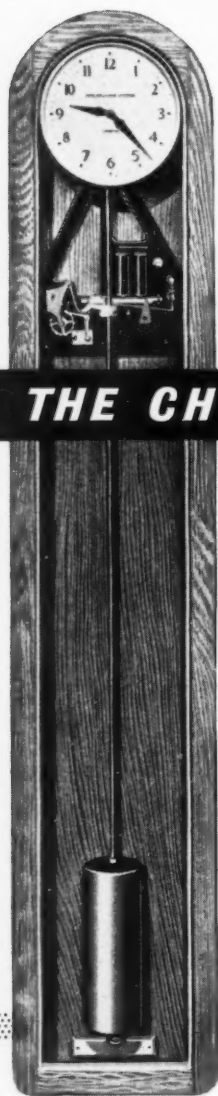
P I L K I N G T O N ' S
GLASS TILES AND SLATES
P I L K I N G T O N B R O T H E R S L I M I T E D



FOR FURTHER INFORMATION ON THE USE OF GLASS IN BUILDING CONSULT THE TECHNICAL SALES AND SERVICE DEPARTMENT, ST. HELENS, LANCs. (TELEPHONE: ST. HELENS 4001) OR SELWYN HOUSE, CLEVELAND ROW, ST. JAMES'S LONDON, S.W.1 (TELEPHONE: WHITEHALL 5672-6). SUPPLIES ARE AVAILABLE THROUGH THE USUAL TRADE CHANNELS.

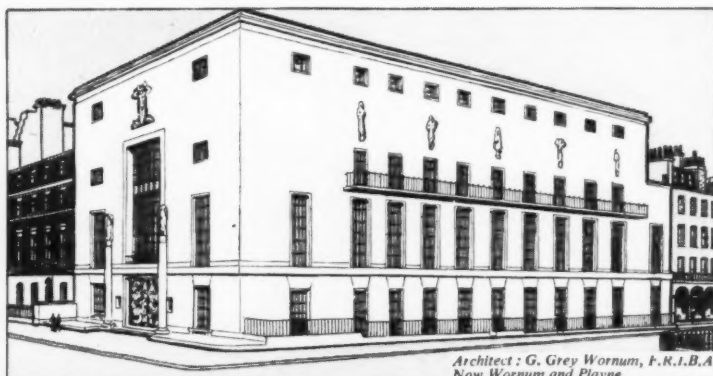


GST. 2.



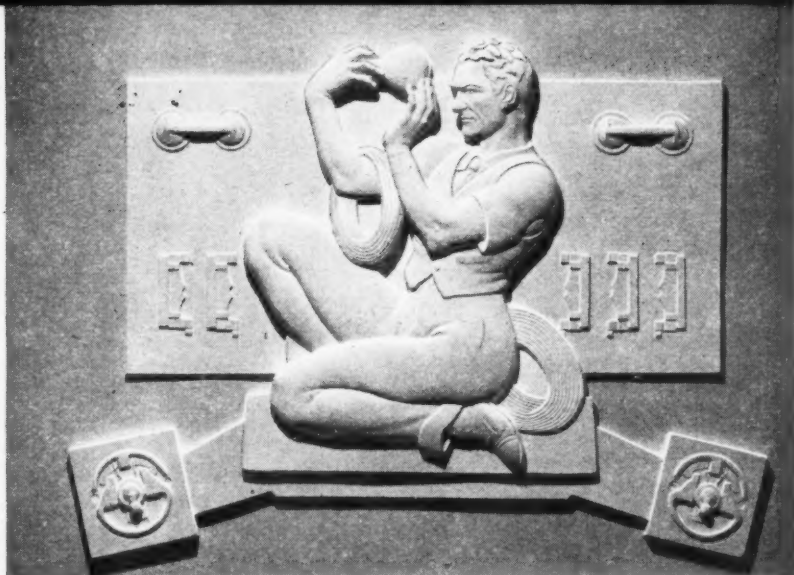
THE MASTER CLOCK

Smiths Pendulum Master-clock, working independently of the mains for its timekeeping, controls a whole system of slave-clocks and provides accurate and uniform time throughout the building. Any number of time-recorders and audible time signals can be incorporated into the same Master-clock System. Wherever correct time is required in Commerce and Industry, ECS clocks have proved their invariable efficiency.



Architect: G. Grey Wornum, F.R.I.B.A.
Now Wornum and Playne

THE CHOICE OF BRITISH ARCHITECTS



"The Electrician." One of the ceiling-plaques by James Woodford at the R.I.B.A.

Over twenty years ago an ECS Master-clock System was chosen for the R.I.B.A. new Headquarters in Portland Place and has given faithful and accurate service over the years. The precision and efficiency of this system are a tribute to the clockmakers who designed and manufactured it, and to the electricians who assisted in its installation.

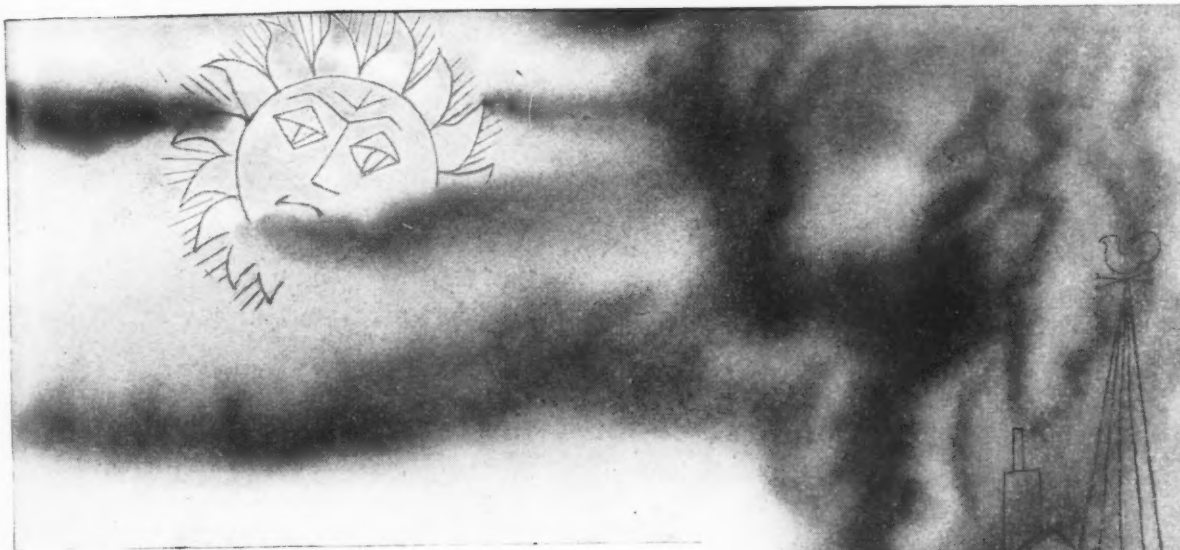
ENGLISH CLOCK SYSTEMS

179-185 GT. PORTLAND ST. LONDON W.1 LANGHAM 7226

A branch of the Clock and Watch Division

SMITHS

of S. Smith & Sons (England) Ltd.



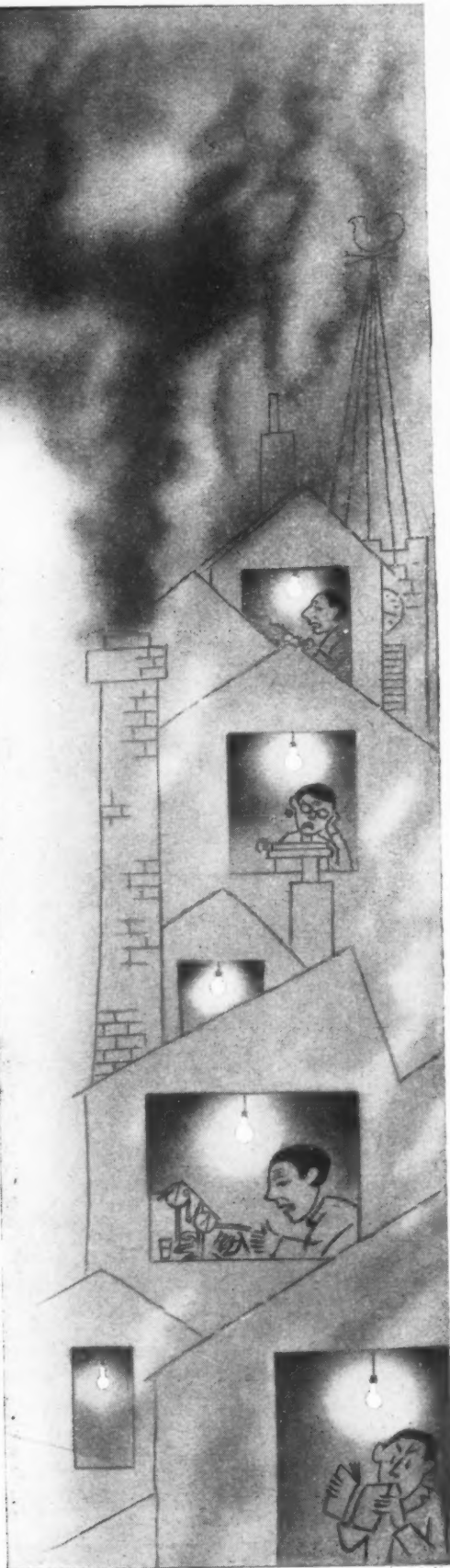
light can get lost....

Each imperfection that appears on a reflector-finish is a trap that holds light, instead of reflecting it. This means that in time, a fitting with a poor finish loses in both light and economy value.

Benjamin's Research Departments have given much thought to this problem—and the result? 'Crysteel' a pure white vitreous enamel finish that if kept clean, retains full reflectivity value under the most trying conditions. Subjected to every test, 'Crysteel' has proved itself to be *practically indestructible*. By specifying fittings with this rock-hard, easy to clean finish, you can be certain that all the light is always on the job.

*'Crysteel'—another part of the
plan for better lighting
by **BENJAMIN***

THE BENJAMIN ELECTRIC LTD • TOTTENHAM • LONDON N17
Telephone: TOTtenham 5252 (5 lines) Telegrams: "Benjalect, Southtot, London".
Birmingham: 5 Corporation Street, Birmingham, 2. Telephone: Midland 5197
Leeds: 49 Basinghall Street, Leeds, 1. Telephone: Leeds 25579



Smee's/1/6



*reinforcement
starts on paper!*

ROM RIVER

reinforcement service



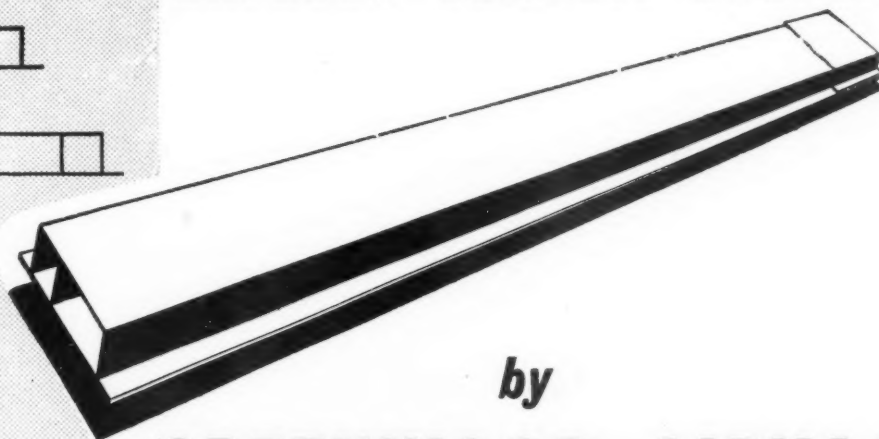
design • supply • bending • fixing

THE ROM RIVER CO. LTD.

St. Richards House, Eversholt Street, London, N.W.1
Telephone: EUSton 7814-9 • Telegrams: Romrivco Norwest London

T.A. 6688

IMPROVED UNDERFLOOR CONDUIT SYSTEM



by
GREENWOOD-AIRVAC

For depths of screed $1\frac{1}{2}$ " and over

Rustproofed all-metal construction

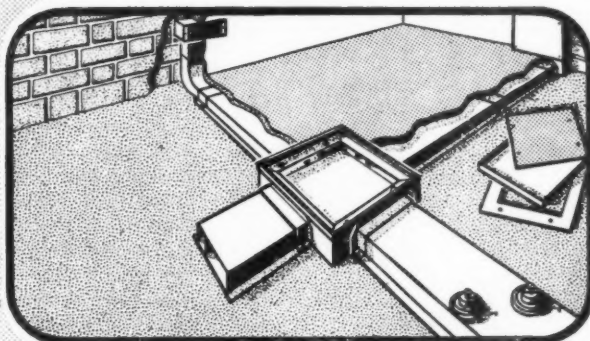
Sizes from $4" \times 1"$ to $12" \times 1\frac{1}{2}"$

Single or multiple divisions

One-way or multi-way junction boxes

Flyover separators if required

Floor outlets for future connections



GREENWOOD-AIRVAC CONDUIT SYSTEMS INCLUDE
UNDERFLOOR, SKIRTING AND CORBEL DUCTS—
PLEASE SEND FOR DESCRIPTIVE FOLDER

GREENWOOD'S AND AIRVAC VENTILATING CO., LTD
BEACON HOUSE, KINGSWAY, LONDON, W.C.2
TELEPHONE: CHANCERY 8135/6/7 TELEGRAMS: AIRVAC, LONDON



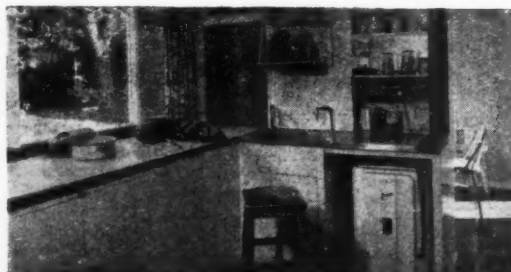
Klinger Bill's Capers No.2



In Chemistry young Klinger Bill
often made his friends feel ill,
and how he gave his friends a fright
by burning something every night.

But now the tables look a treat
and they can also stand the heat,
so Billie's spills can harm no more
—thanks to *heatproof* Klingdecor.

There's no substitute for versatile Klingdecor if you're planning to build in the modern trend. Yes, Klingdecor really is heatproof—to 320°F in fact. It's also stain resisting, non-porous and will not easily scratch. Hard-wearing, hard-working Klingdecor is pliable too, and so easy to cut and fix. Whatever colour scheme you have in mind there's a pattern or colour to match or contrast. It's versatile and attractive this Klingdecor and costs less than you think. FREE samples and full details are waiting to be sent to you if you'll just send us a postcard.



Klingdecor in the kitchen. Strong, smart and stainproof.

It's so easy to use

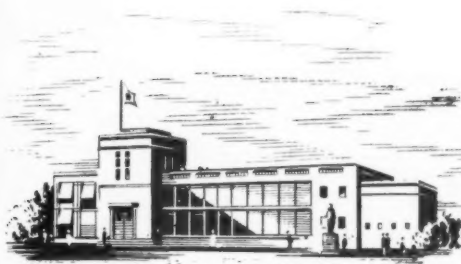
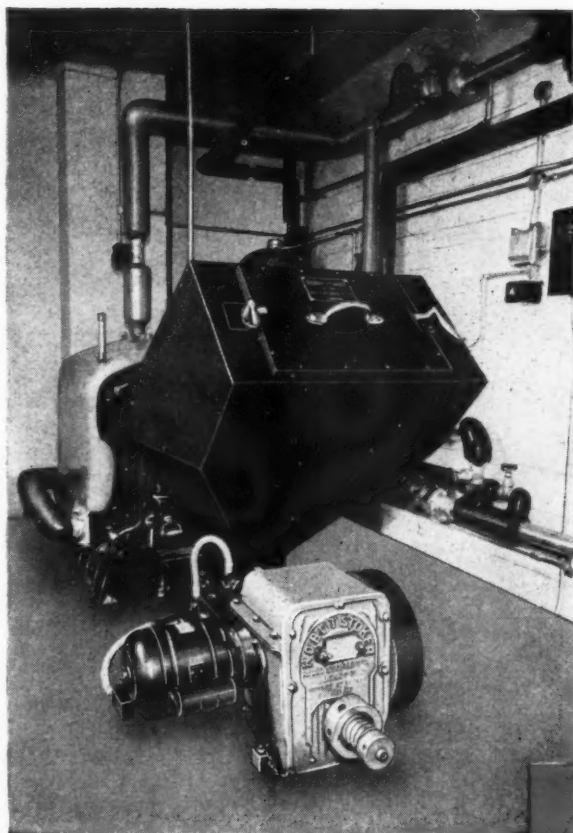


Regd. Trade Mark

the surface that TOPS everything!

Another **KLINGER** Product Manufactured by Richard Klinger Ltd., Klingerit Works, Sidcup, Kent.

Enquiries to: Klingdecor Dept., Horton Bridge Road, West Drayton, Middx. Telephone: West Drayton 3036



**Economical Heating for Clubs
and Recreation centres
in the**

New Towns

- *Smokeless combustion with bituminous coal.*
- *Automatic variable feed control*
- *Efficient and continuous operation*
- *Low maintenance costs*
- *Available for all types of boilers*

Write for full details

Fuel Saving is automatic with

RILEY STOKERS

RILEY ROBOT STOKERS

by promoting smokeless combustion, are helping the campaign against atmospheric pollution. They will provide efficient automatic boiler firing for clubs, halls and recreation rooms in the New Towns.

RILEY (IC) PRODUCTS LIMITED

ONE OF THE INTERNATIONAL COMBUSTION GROUP OF COMPANIES

NINETEEN WOBURN PLACE, LONDON, W.C.1. TELEPHONE: TERMINUS 2622

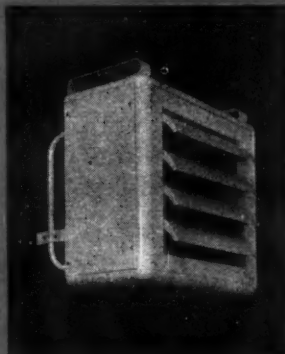
 B 51



BIDDLE AIR TREATMENT

"creates the right atmosphere"

Britain's leading manufacturers
of Heating, Ventilating, Cooling,
and Air Conditioning equipment.



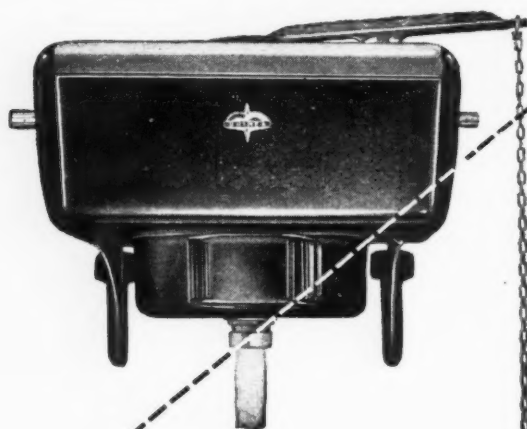
"UNIVECTAIR" UNIT HEATERS

These highly efficient units are ideal for workshops, canteens, stores, and similar industrial buildings. They are available in a wide range of sizes, and models can be supplied for use with steam, hot water, or electricity. Please write for further details to:—

F. H. BIDDLE LTD. (Sales Division of British Thermal Co. Ltd.) 16, Upper Grosvenor Street, London, W.1

Telephones: Hyde Park 0632-0

Telegrams: FBiddle, Audley, London.



introducing

United Merchants proudly introduce the newest addition to their range—the Unimer Plastic Well-Bottom Cistern—well received by virtue of its design and durability.

Plastics have superseded old fashioned cast iron in cistern construction. Plastics are quieter—impervious to rust and corrosion—resist frost—look smarter and cleaner—need no painting.

And what's more fit existing systems when used as replacements.

Write for Terms and illustrated literature.



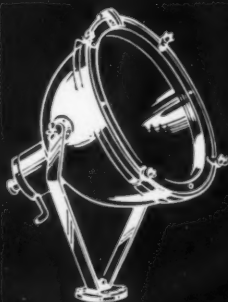
chain reaction



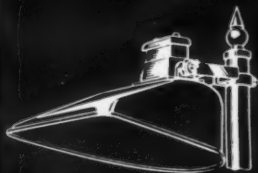
UNIMER
Plastic Well-Bottom Cistern

UNITED MERCHANTS LTD., WALTER HOUSE, 418/422, STRAND, LONDON, W.C.2. Tel: TEMPLE BAR 5883 (3 LINES)

where lighting must be good



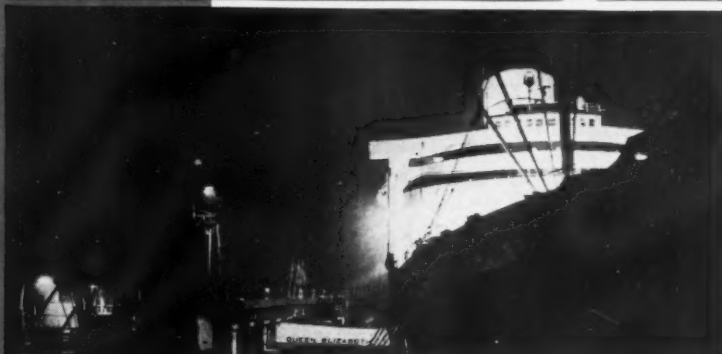
LS 51



LS 71



L 1816



From a single luminaire to a complete scheme — our experts are ready to advise you. And as pioneers in the lighting field our equipment has well over 50 years of design experience behind it.

CALL IN THE SIMPLEX SERVICE

Simplex

Branches in principal towns throughout Great Britain

Simplex Electric Co Ltd Blythe Bridge Staffs A  COMPANY

lighting equipment by



where's the connection?

Consider the key.
Universally accepted, and
used with confidence.

RAPID PRECAST FLOORS

are like that.
Time-tested and proved.
You just *know* from experience
they are
right for the job
and

you can rely on

RAPID

PRIDE & CO. (GLASGOW) LTD., Inchinnan Rd., Renfrew. KINGSTON CONCRETE PRODUCTS LTD., Ryde Ave., Hull. WOOLAWAY CONSTRUCTIONS LTD., Lanelay Works, Pontyclun, Glam.
TARMAC LTD., "VINCULUM" DEPT., Ettingshall, Wolverhampton. JOHN ELLIS & SONS LTD., 21, New Walk, Leicester. RAPID FLOORS (WESSEX) LTD., 17, George St., Bath
THE RAPID FLOOR COMPANY LIMITED, AFRICA HOUSE, KINGSWAY, LONDON, W.C.2. TELEPHONE : HOLBORN 3274



BY APPOINTMENT
TO HER MAJESTY QUEEN ELIZABETH II
BRICK MAKERS

THE ARCHITECTS' JOURNAL
for April 12, 1956



ASHBURNHAM COURT

ASHBURNHAM ROAD · BEDFORD

Used in the construction of these flats were:

220,000 'Phorpres' Sandfaced Facings.

630,000 'Phorpres' Common Bricks.



LONDON BRICK COMPANY LIMITED

Head Office: Africa House, Kingsway, London, W.C.2. Telephone: Holborn 8282
Midland District Office: Prudential Buildings, St. Philip's Place, Birmingham, 3. Telephone: Colmore 4141
South-Western District Office: 11 Orchard St., Bristol, 1. Telephone: Bristol 23004/5
Northern District Office: St. Paul's House, 20-22 St. Paul's Street, Leeds. Telephone: Leeds 20771
LB47

Architects: Max Lock & Partners.
Partner-in-charge: G. J. Easton, A.R.I.B.A.
Consulting Engineer: F. J. Samuely, B.Sc.(Eng.), A.M.I.C.E., M.I.Struct.E.
Quantity Surveyors: Cyril Sweett & Partners.
General Contractors: F. G. Minter Ltd.



Spans & Loads



| FLOORS & ROOFS | | | | | | | | | | | | |
|----------------|------------------------|---------------------|---|--------------------------|--------|---------|---------|--------|---------|---------|---------|---------|
| Depth | TYPICAL CROSS SECTIONS | Self Wt. per sq.ft. | Type | Superimp'd load lb./ft.² | 30 lb. | 40 lb. | 50 lb. | 60 lb. | 80 lb. | 100 lb. | 150 lb. | 200 lb. |
| 5" | | 36 lb | C5 Incl. 2" Structural Screed on 3" Wood Wool Slab | Case 1 | 12' 6" | 12' 0" | 11' 6" | 11' 3" | 10' 3" | 10' 0" | — | — |
| 5" | | 38 lb. | | Case 2 | 13' 9" | 13' 6" | 13' 0" | 12' 6" | 11' 9" | 11' 0" | — | — |
| 5" | | 40 lb | | Case 3 | — | — | — | 13' 9" | 13' 0" | 12' 3" | — | — |
| 5" | | 42 lb | | Case 4 | — | — | — | — | — | 13' 0" | — | — |
| 7" | | 35 lb | X7 | Case 1 | 20' 6" | 19' 6" | 18' 8" | 17' 9" | 16' 5" | 15' 3" | 13' 3" | 11' 11" |
| 7" | | 36 lb. | do. | Case 2 | 23' 8" | 22' 5" | 21' 8" | 20' 5" | 18' 11" | 17' 8" | 15' 4" | 13' 9" |
| 7" | | 40 lb. | do. | Case 3 | 25' 5" | 24' 1" | 23' 1" | 22' 1" | 20' 6" | 19' 2" | 16' 9" | 15' 0" |
| 7" | | 42 lb. | do. | Case 4 | — | 26' 9" | 25' 7" | 24' 6" | 22' 9" | 21' 4" | 18' 8" | 16' 9" |
| 7" | | 60 lb | do. | Case 5 | — | — | — | — | — | — | 25' 5" | 23' 0" |
| 9" | | 47 lb | X9 | Case 1 | 30' 5" | 28' 10" | 27' 10" | 26' 6" | 24' 9" | 23' 2" | 20' 4" | 18' 4" |
| 9" | | 53 lb. | do. | Case 2 | 35' 4" | 33' 8" | 32' 4" | 31' 0" | 29' 1" | 27' 3" | 24' 5" | 21' 8" |
| 10" | | 55 lb | I10 | Case 1 | 36' 9" | 35' 2" | 33' 10" | 32' 7" | 30' 5" | 28' 8" | 25' 2" | 23' 0" |
| 10" | | 60 lb. | do. | Case 2 | 41' 6" | 39' 10" | 38' 4" | 37' 0" | 34' 8" | 32' 10" | 29' 0" | 26' 4" |

PIERHEAD LIMITED

SPEKE BOULEVARD, LIVERPOOL, 19
 Telephone - HUNTS CROSS 1311
 FAGGS LANE, FELTHAM, MIDDLESEX
 Telephone - FELTHAM 2555 & 3031

Vizusell

*opens new frontiers
in store designing*



VIZUSELL provides a completely new system of shop-fitting which makes full use of space areas to maximum advantage. Amongst its main features:—

VIZUSELL gives pinpoint adjustment combined with rigidity and strength.

VIZUSELL permits quick and easy changeover to meet varying space and merchandising requirements.

VIZUSELL provides a valuable new dimension to retail shop design and adapts itself readily to the creative art of the architect and shopfitter.

VIZUSELL speeds site work through its simplicity in assembly.

VIZUSELL has proved itself in the highly competitive markets of Canada and America.

VIZUSELL is now manufactured in England and available for your use.

★
Write or
telephone
for full
information

VERSATILE FITTINGS (W.H.S) LTD.,
55, FETTER LANE, LONDON, E.C.4 Phone: Fleet Street 1887

A SUBSIDIARY OF W. H. SMITH & SON LIMITED



The little bird will tell you...

*For the best Service for Architects
Colour Schemes, Specifications*

say

Cox's PAINTS

COX BROS. & CO. (DERBY) LTD. Est. 1781, NORMANTON ROAD DERBY

Telephone: DERBY 45484/5/6 PBX

CLAY TILES —

for eight centuries

England's roof...

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

CLAY lasts

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



Private residence at Mollington.

ACME clay roofing tiles

DOWNING'S range of roofing tiles includes:—

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

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

Telephone: Newcastle-under-Lyme 65381



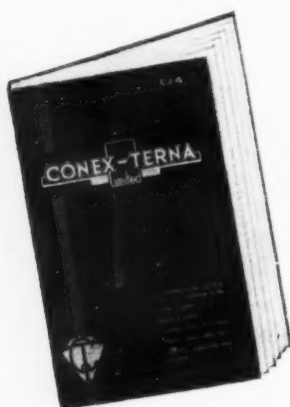


.. But "WHAT EVERY PLUMBER SHOULD KNOW"

is contained in the

CONEX CATALOGUE

of Compression Joints & Fittings



COMPRESSION
CONEX
JOINTS

Architects, Builders, Plumbers and Builders' Merchants will find the latest CONEX Catalogue an invaluable book of reference on all aspects of plumbing. A 64-page Illustrated Catalogue and Price List, it contains full details of the complete range of CONEX products and a wealth of other essential information, all clearly arranged for easy reference. Ask for CONEX Catalogue No. C.J.4.F.

★ SEND US A P.C. NOW FOR YOUR FREE COPIES

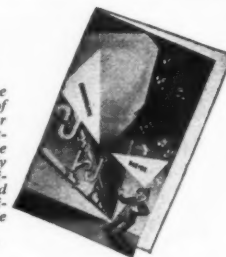
"CONEX FITTINGS AND POLYTHENE TUBE" FOLDER P.6

An informative guide to the use of CONEX Fittings and Polythene Tube for Cold Water Services. (CONEX is the joint for Polythene—approved by the B.W.A.)



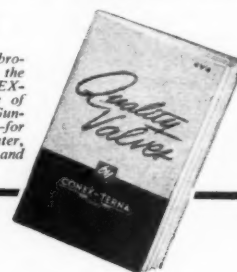
"UNDER-NEATH THE BASINS" FOLDER W.6

Details of the CONEX range of Drawn Copper Traps and light weight Waste Fittings, specially designed to facilitate quick and economical fabrication of complete Waste systems.



VALVE BROCHURE C.V.4.F.

Eight-page brochure on the complete CONEX-TERNA range of Brass and Gun-metal Valves—for use on water, steam, air, gas and oil services.



Hey Prestik!

**FIRST-CLASS SEALING AND JOINTING
INSIDE OR OUTSIDE
— IN HALF THE TIME !**

The new White PRESTIK Builders' Sealing Strip has made an immediate hit with the whole building trade. It's so quick and simple to use. So clean. So completely efficient! No need for special tools. Just make sure the surface is clean and dry, then reel off the ready-made Strip, press it into place and lo! you have a permanent, water-proof and paintable seal or joint inside or out.

Order PRESTIK from your Builders' Merchant.

white

PRESTIK

Builders' Sealing Strip

made by the Bostik people

PRESTIK and BOSTIK are registered trade marks of

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



Use PRESTIK for:

MASONRY—Jointing gutter sections and coping stones. Bedding and jointing concrete blocks and panels.

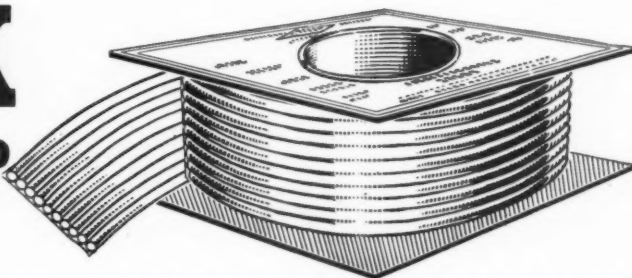
PRE-FABRICATION—Bedding and Jointing roof sections. Sealing joints in sectional buildings.

FLOORS—Sealing cable duct covers. Sealing skirting board joints.

WALLS and CEILINGS—Sealing wall-board joints (with cover strips). Sealing glass bricks to door and window frames.

DOORS and WINDOWS—Sealing door and window frames to brickwork. Bedding window frames and window boards.

SANITARY WARE—Sealing baths, wash-basins, etc., to walls.



Not made to Hide and Seek



This 'Superform' switchboard, with its clean lines, is designed to be in keeping with the modern buildings. There is no urge to hide it away. Its pleasant appearance invites installation in whatever position is desirable for convenience and accessibility. The smooth contour enables it to be kept clean easily.

'ENGLISH ELECTRIC' fusegear

THE ENGLISH ELECTRIC COMPANY LIMITED, QUEENS HOUSE, KINGSWAY, LONDON, W.C.2

Fusegear Division, East Lancashire Road, Liverpool, 10

FG. 2085

WORKS: STAFFORD • PRESTON • RUGBY • BRADFORD • LIVERPOOL • ACCRINGTON

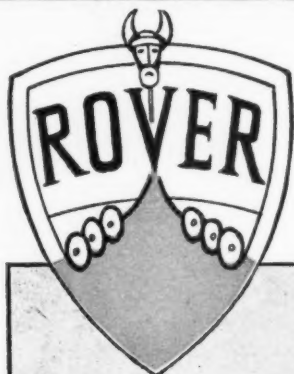


CARTER
exterior
GLAZED TILES

THE CARTER GROUP

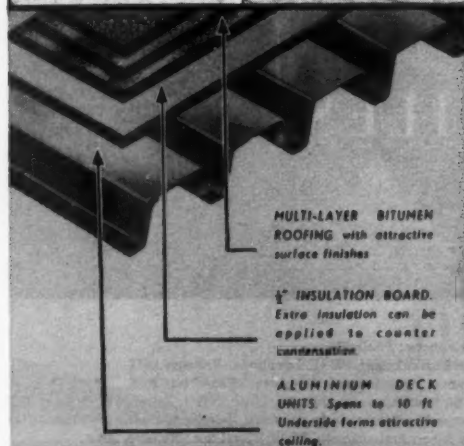
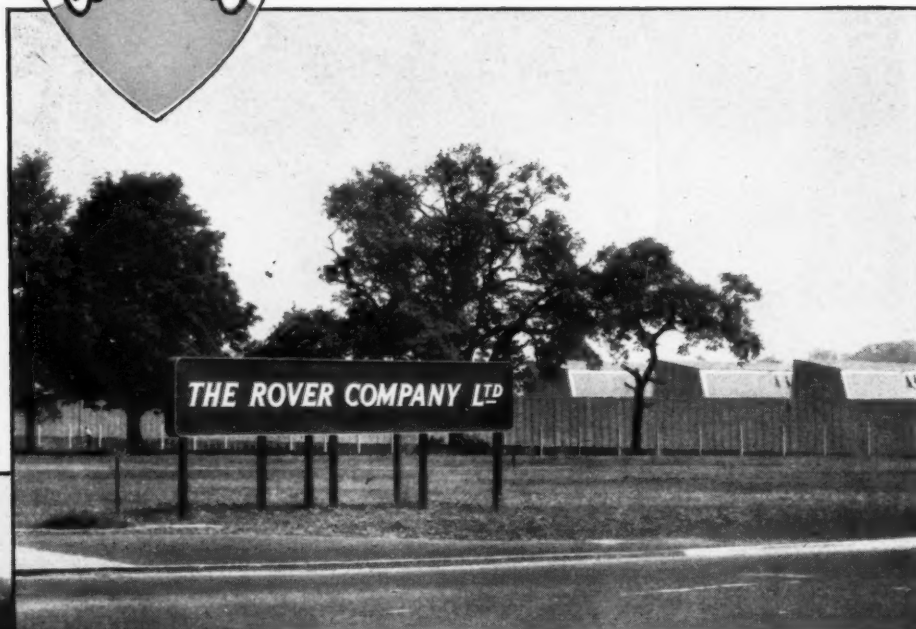
Carter & Co. Ltd. Poole, Dorset. Telephone: Poole 125
Carter & Co. London Ltd. 29 Albert Embankment, SE 11. Telephone: Reliance 1471
Manchester Office: 27 Brazenrose Street, Manchester 2. Telephone: Blackfriars 2098
Art Pavements & Decorations Ltd. St. Paul's Crescent, Camden Town, NW 1. Telephone: Gulliver 2226
J. H. Barratt & Co. (1927) Ltd. Bootham Tile Works, Stoke-on-Trent. Telephone: Stoke-on-Trent 44717
The Marbolith Flooring Co. Ltd. 29 Albert Embankment, SE 11. Telephone: Reliance 2062
Commercial Marble & Tiles Ltd. Selborne Gardens, Newcastle-upon-Tyne 2. Telephone: Newcastle 811373
R. Campbell & Sons, 13 Steads Place, Edinburgh 6. Telephone: Leith 39188

To Architects about to plan roofs —



relies on **BITUMETAL**

Architects:
HASKER & HALL, LONDON.



Where Craftsmanship, Dependability and Endurance mean so much, there you will find "BITUMETAL", Briggs Modern Development in Aluminium Roofing. The Rover Company Limited chose "BITUMETAL" for their large new factory at Solihull, Birmingham because, in addition to reliability, it provided Roof plus Insulation plus Ceiling in one unit at an economical cost.

Ask your nearest Area Manager for full technical details on "BITUMETAL" and discover how adaptable it is for small buildings as well as large.

WILLIAM BRIGGS & SONS LTD

Vauxhall Grove,
London, S.W.8.

Regd. Office,
DUNDEE.

Offices and Depots also at ABERDEEN · BELFAST · BRISTOL · DUBLIN
EDINBURGH · GLASGOW · LEICESTER · LIVERPOOL · NORWICH



**Here's a flooring
that takes
some beating**

Tough, hard-wearing Phenco flooring wears and wears and never loses its gay, colourful appeal. Marching, stamping, scuffling feet; spilt food and liquids; damp and dirt—Phenco was made to accept hazards like these as part of its everyday life. Non-slip, warm, fire-resistant and easy-to-clean, it is the ideal flooring for homes, hospitals, schools, laboratories, offices and many other premises. You can specify Phenco in any of 30 attractive colours, plain or 'marbled'.

Phenco flooring is supplied in 12in. square tiles, or in rolls 8 yards and 12 yards by 36in. Write for descriptive literature.

PHENCO

FLEXIBLE VINYL PLASTIC FLOORING

Manufactured by PHOENIX RUBBER CO., LTD., 91 BISHOPSGATE, LONDON, E.C.2
Phone: London Wall 3564 and 1622. Manchester Office: 472 Royal Exchange Building, Manchester, 2. Bristol Office: 39 Broad St., Bristol, 1
OA/3159

**CITIES
GET HIGHER
... LIFTS
GET FASTER**

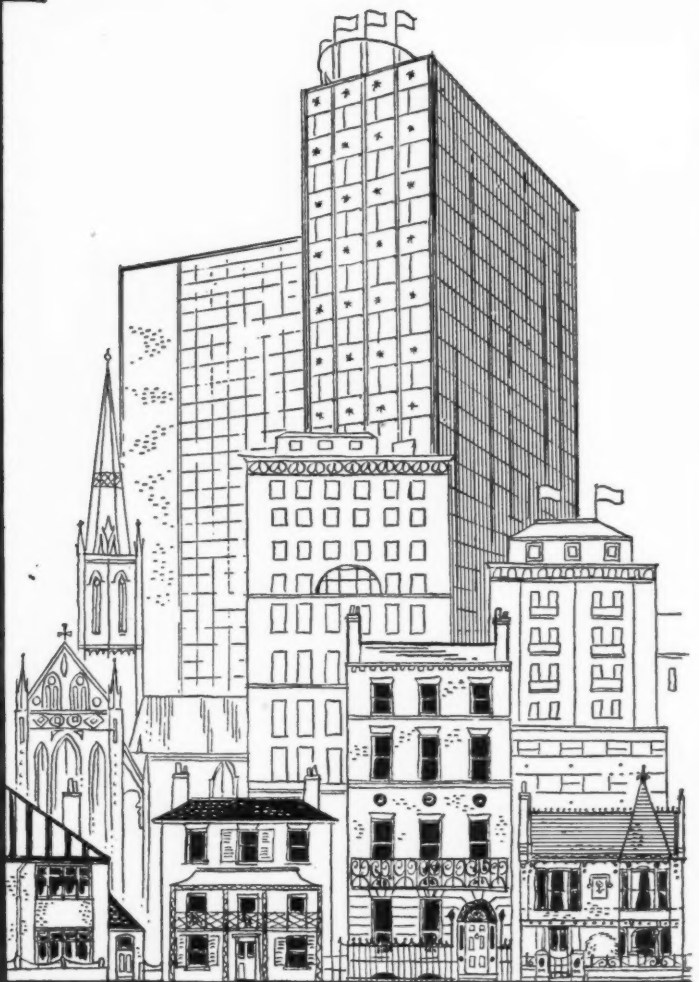
*They must serve more passengers
at greater speeds
with minimum waiting intervals.*

**The standard
of lift service
in very
high city buildings
should not be less
than this . . .**

Hammond & Champness Ltd.



V E R T I C A L T R A N S P O R T A T I O N



GEARLESS LIFTS ARE THE ANSWER
with the most up-to-date ancillary equipment
designed to give equal service
to the occupants of every floor.
Speeds of 300 to 500 feet per minute
with interconnected selective control,
joltless starting and stopping,
accurate floor levelling
and automatic safety doors.

Gnome House, Blackhorse Lane, London, E.17. Tel: Larkwood 1071

INSIDE STORY



IF THREE MEN...

Rather like an arithmetical problem set to torment small boys, we recently gave three tins of paint to three painters and told them to paint three long panels with a view to finding out how far they got within a specific time. The man painting the left hand panel was given a gloss paint. The man on the right was given a flat oil paint. The man in the centre was using KINSHEEN Plastic Emulsion Paint. This perfectly authentic picture speaks for itself. The wonderful covering power and ease of application are just two of the more notable advantages of KINSHEEN, and if you care to write for literature we should be pleased to acquaint you with the very many others.



Gloss paint 5½ sq. ft. covered.



KINSHEEN 15½ sq. ft. covered.



Flat Oil Paint 9 sq. ft. covered.

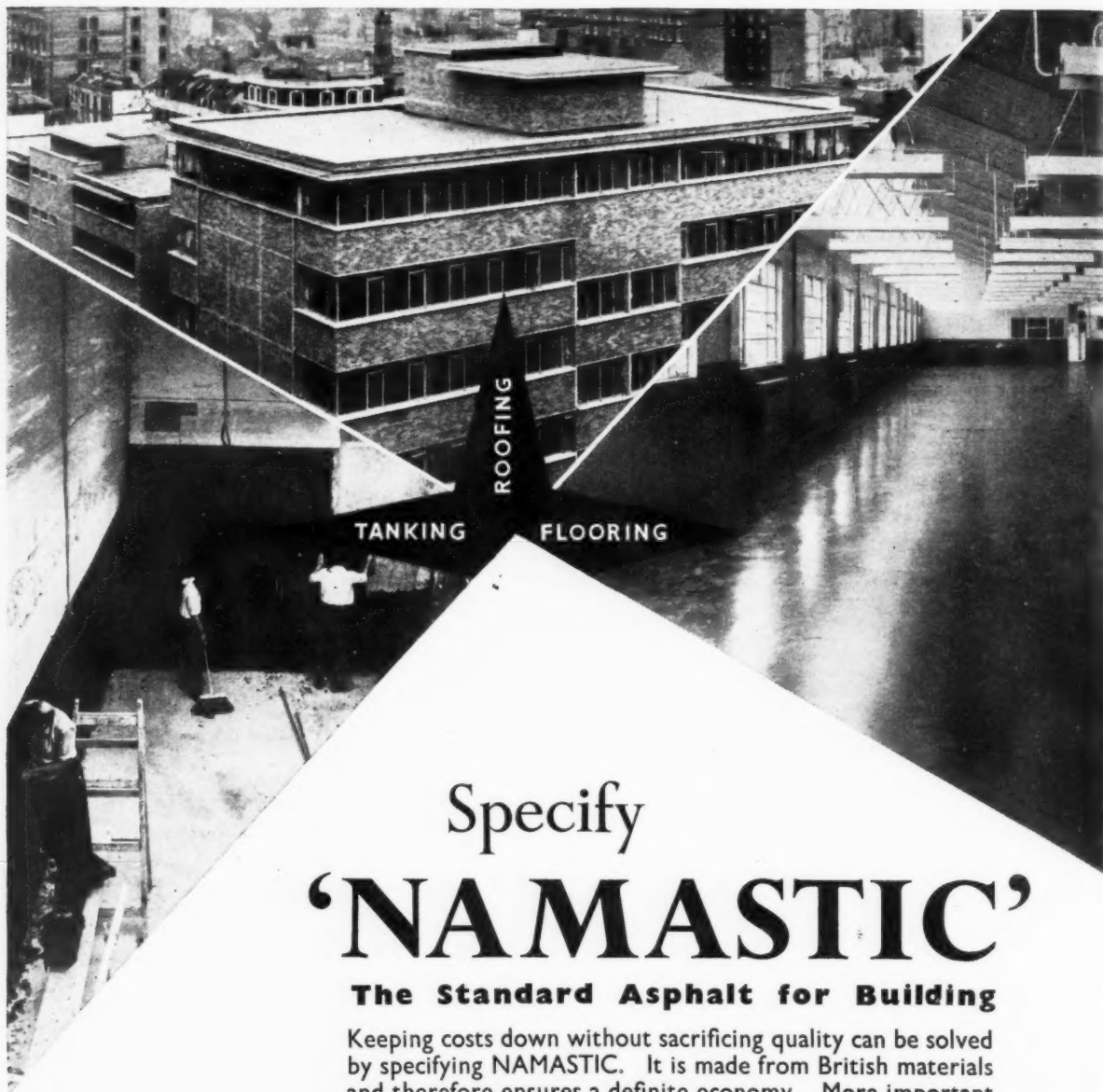
sanderson's



paints

A. SANDERSON & CO. LTD., HULL.
Specialists in Fine Paints

san/3969



Specify 'NAMASTIC'

The Standard Asphalt for Building

Keeping costs down without sacrificing quality can be solved by specifying NAMASTIC. It is made from British materials and therefore ensures a definite economy. More important still—it will produce results as highly satisfactory as those already achieved by the use of NAMASTIC for the many important contracts carried out over the past twenty years.

The Association has a nation-wide membership, made up of the following:—

Associated Asphalt Co. Ltd.
Bolton & Hayes Ltd.
Bolton Stone Concrete &
Asphalt Co. Ltd.
William Briggs & Sons Ltd.
British & Natural Rock
Asphalt Co.
Cambridge Asphalt Co. Ltd.
Davies Bros. (Asphalters)
Ltd.
J. Dunlop & Co. (Asphalt)
Ltd.

Durable Asphalte Co. Ltd.
Durastic Ltd.
Excel Asphalte Co. Ltd.
Faldo Asphalte Co. Ltd.
Field & Palmer Ltd.
"Flexi-Mastic" Roofs & As-
phalts Ltd.
R. J. Goddard & Co. Ltd.
Improved Asphalte Co. Ltd.



W. H. Keys, Ltd.
Natural Rock Asphalte Ltd.
Northern Asphalt & Roofing
Works Co. Ltd.
Oxford Asphalt Co.
C. Pasini (Ipswich) Ltd.
Permanite Ltd.
The Rock Asphalte Co. Ltd.
Charles Seagle

The Scottish Speedwell Co.
Ltd.
H. V. Smith & Co. Ltd.
Southern Asphalt Ltd.
J. Taylor & Sons (Asphalters)
Ltd.
Wm. Townson & Sons Ltd.
W. G. Walker & Co. (Ayr)
Ltd.
W. G. Walker & Sons
(Edinburgh) Ltd.

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

NATIONAL ASSOCIATION OF MASTER ASPHALTERS, 202 BISHOPSGATE, LONDON, E.C.2
Telephone: Avenue 8484

Established 1933

**specialists in
the design,
fabrication and
erection of
structural
steelwork**



1 New factory building for Messrs. William Cooke & Sons of Rotherham. 300 ft. x 120 ft. span.

2 The County Primary School, Crosland Moor, Huddersfield.

3 College of Further Education, Grimsby, in course of erection.

4 The completed College.

**Structural Steelwork
by AUSTINS**



JAMES AUSTIN & SONS

(Dewsbury) LTD

STRUCTURAL ENGINEERS · DEWSBURY · YORKSHIRE

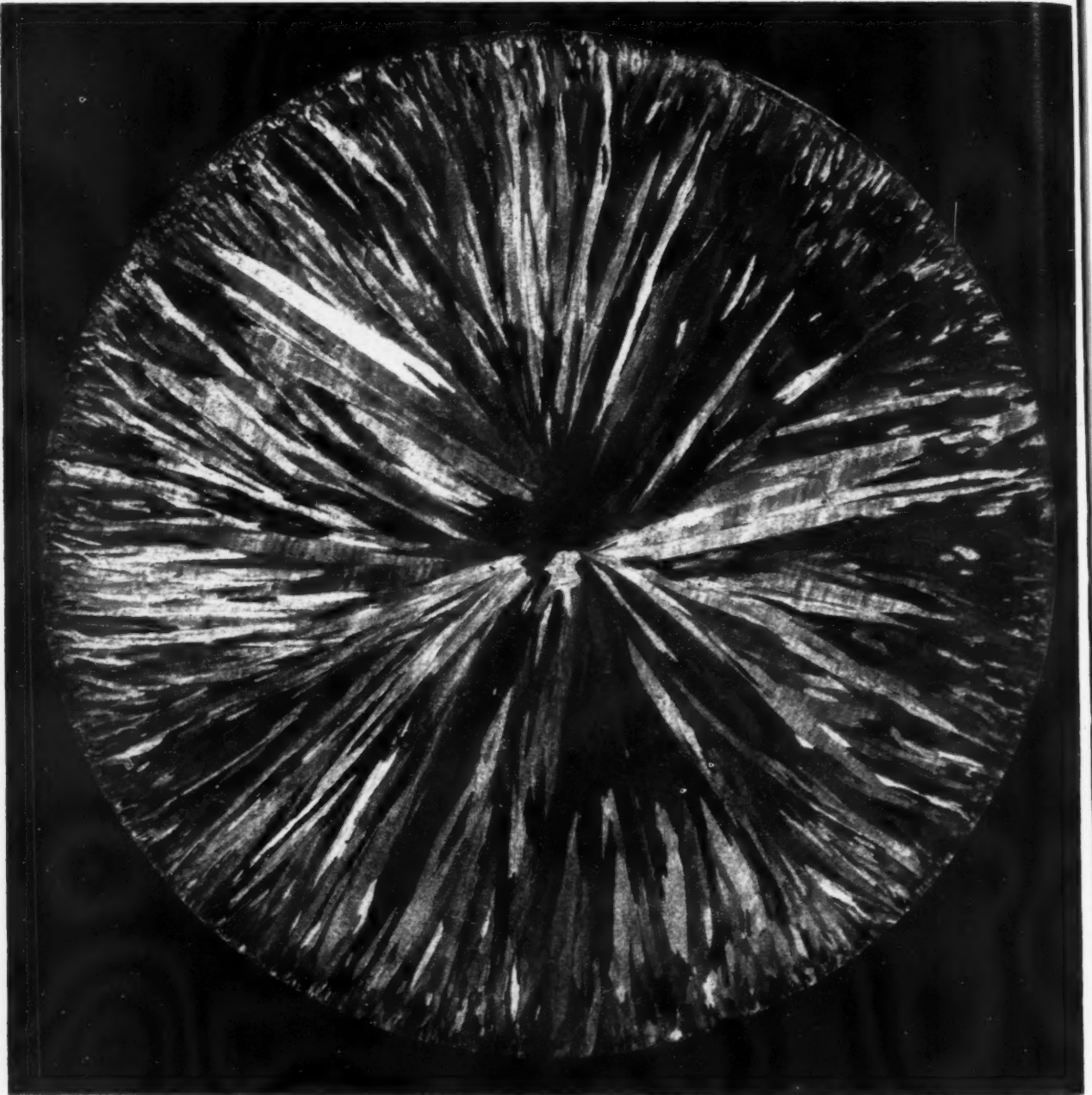
Telephone: 1750 (7 lines).

Telegrams: AUSTINS DEWSBURY TELEX.

Associated Companies:

ASTLEY BROOK & CO. LTD., ST. GEORGE'S WKS., HUDDERSFIELD
A. J. RILEY & SON LTD., VICTORIA WORKS, BATLEY





It will never be tested like this again

Wednesbury Copper Tubing owes its down-to-earth reliability to the most precise control of quality at every stage of manufacture. Copper tubing starts in the form of cylindrical "billets", about 5" in diameter. Before manufacture starts, the billets are checked by the laboratory. Slices about half an inch thick are etched before examination. If the etching reveals a long-ray sun-burst structure like that above, it means that copper tubes drawn from the billet will be strong and sound. This is just one of the many tests which ensure the highest quality in BSS Domestic Copper Tubing. So, when you buy or specify . . .

choose WEDNESBURY TUBE

Obtainable from your local stockist or builder's merchant. Manufactured by

THE WEDNESBURY TUBE CO. LTD., BILSTON, STAFFS

Famous Names

*The other day by one post
we received orders for Quarries for three of
the leading mineral water manufacturers, namely*

**SCHWEPPES, JEWSBURY & BROWN, AND
APPOLLINARIS**

*Looking through the order book
for the last three or four months, we notice
we have also supplied Quarries
to such nationally known concerns as*
**GLAXO, KODAK, COURTAULDS, EXPRESS DAIRY, NESTLES
AUSTIN MOTORS AND BROWN & POLSON**

In Quarries a famous name is

WHEATLY  **triton**

*Specimens of Wheatly burnt clay products may be
seen at the Building Centre, London. They include
Single-lap Roofing Tiles, Ridge Tiles (blue and red),
Floor Quarries, Air Bricks and Briquette Fireplaces.*

WHEATLY & COMPANY LIMITED
SPRINGFIELD TILERIES · TRENT VALE · STOKE-ON-TRENT
Telephone: NEWCASTLE (Staffs) 66251 Telegrams: WHEATLY, TRENTVALE

WH. 78

SPACE MAN?



No!—it's the John Thompson ZINC METALLISATION PROCESS in action!

Stage 1

*Shotblasting the surface
to ensure perfect
adhesion for the zinc
coating*

Among architects who specify metal windows and builders who instal them the important question is—are they proof against R-U-S-T?

The effectiveness of any rustproofing process depends almost entirely upon the adhesion of the zinc to the steel. In the Thompson 3-stage Zinc Metallisation process this is positively guaranteed by shotblasting each window at a pressure of 80 lbs. p.s.i. to produce a meticulously clean and slightly roughened surface upon which the essential zinc (99.5% pure) can be deposited by means of the oxy-propane

flame gun. Thus the whole of the window and its frame—every nook or cranny, in fact, where moisture can collect—receives a heavy overcoat of rust-defying zinc.

But that's not all. To ensure added protection against atmospheric corrosion, each window is immediately passed through a zinc chromate primer bath and stoved at a controlled temperature of 400°F. Builders should note, therefore, that no additional priming coat is ever necessary with a Beacon window. After installation, it is ready for finishing coats without further expense or delay.




Member of the
Metal Window Association

JOHN THOMPSON BEACON WINDOWS LTD · WOLVERHAMPTON



S

dow
, in
es a

pro-
each
h a
l at
ders
onal
acon
for
e or

n

ON



What type of floor is this?

see below

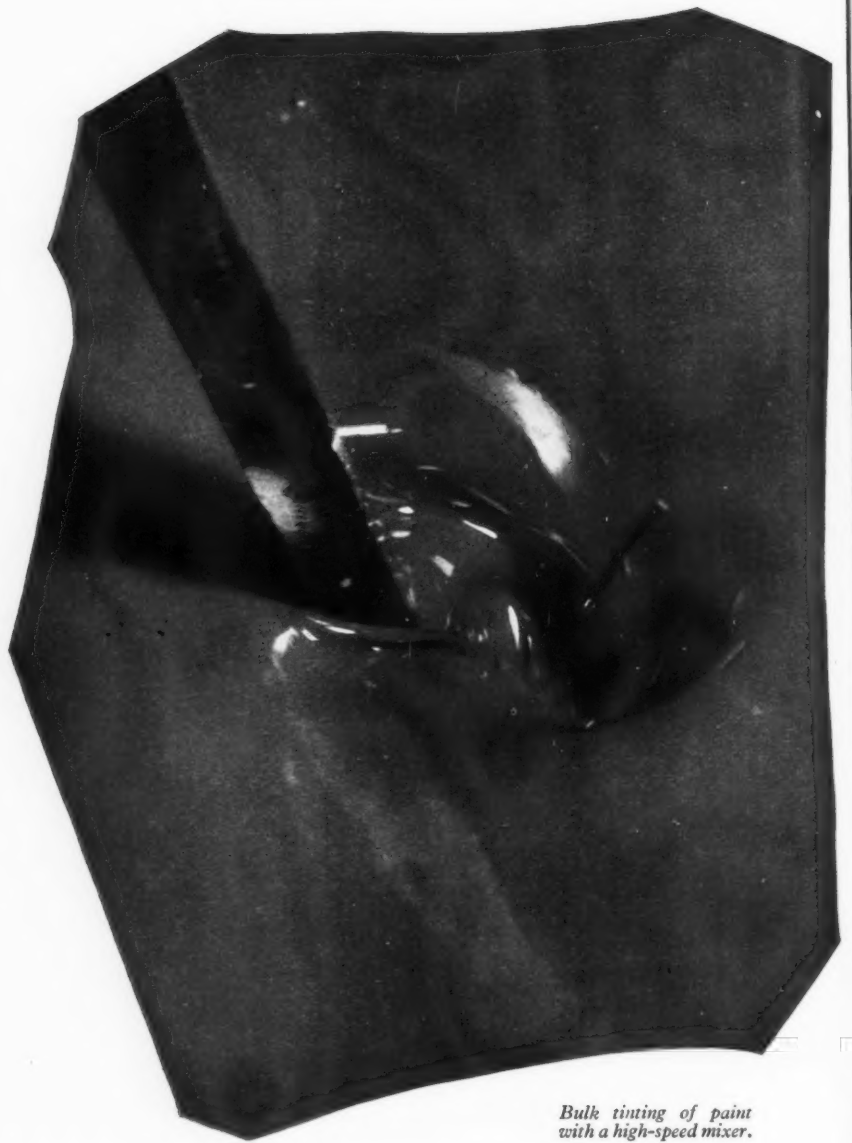
You don't need to be told that the setting is a classroom. It is, in fact, Prenton Primary School, Birkenhead; designed by T. A. Brittain, Esq., F.R.I.B.A., DIP. ARCH., Borough Architect. But the flooring? Obviously a colourful floor, planned for the purpose with alphabet cut-outs appropriately worked into its design. A hardworking floor this, tough and long-lasting, to cope with the constant traffic of many feet—easy to clean and maintain.



THE ANSWER . . . It is, of course, ACCOTILE, the well-known, versatile, low-cost flooring with the luxury look, the modern thermoplastic flooring laid tile by tile to any design or colour scheme. Made in 26 Plain, Monochrome or Marbled effects, size 12in. by 12in. or 9in. by 9in., with die-cut insets of letters, numerals, animals or special motifs and feature strip. The perfect material for Schools, as well as Public, Commercial or Domestic buildings of every type.

Armstrong ACCOTILE Flooring

ARMSTRONG CORK COMPANY LTD., Flooring Department, BUSH HOUSE, ALDWYCH, LONDON, W.C.2. COVent Garden 1101



Used by more and more architects, the International advisory service helps the profession in the preparation and supervision of decorative schemes. This service includes the inspection of buildings, the preparation of painting specifications and colour schemes and regular visits to the site while painting is in progress. It is a service that saves the architect many hours of detailed work and ensures the best results.

Bulk tinting of paint with a high-speed mixer.

International Paints Ltd.

Head Office: GROSVENOR GARDENS HOUSE, LONDON, S.W.1
TELEPHONE: YATE GALLERY 7070 (115 LINES)
TELEGRAMS: INLAND: CORROFOUL SOWEST, LONDON OVERSEAS: CORROFOUL, LONDON

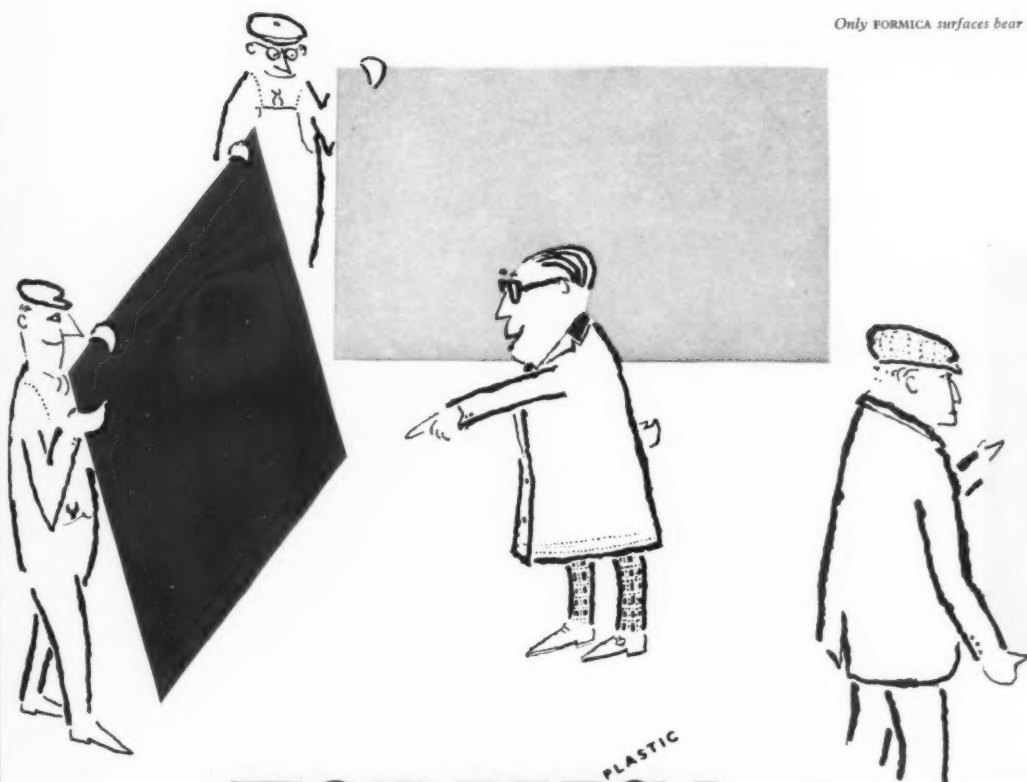
REGISTERED TRADE MARK



MAIN FACTORY IN U.K. FELLING-ON-TYNE

| | | | | | |
|-----------|----------------|---------|-------------|-------------|---------------|
| AUSTRALIA | SYDNEY | GERMANY | HAMBURG | NEW ZEALAND | WELLINGTON |
| BRAZIL | RIO DE JANEIRO | ITALY | GENOVA | SPAIN | BILBAO |
| CANADA | MONTREAL | ITALY | TRIESTE | SWEDEN | GOTHENBURG |
| CANADA | VANCOUVER | JAPAN | KOBE | U.S.A. | NEW YORK |
| DENMARK | COPENHAGEN | MEXICO | MEXICO CITY | U.S.A. | SAN FRANCISCO |
| FRANCE | LE HAVRE | NORWAY | BERGEN | VENEZUELA | MARACAIBO |

Only FORMICA surfaces bear this mark



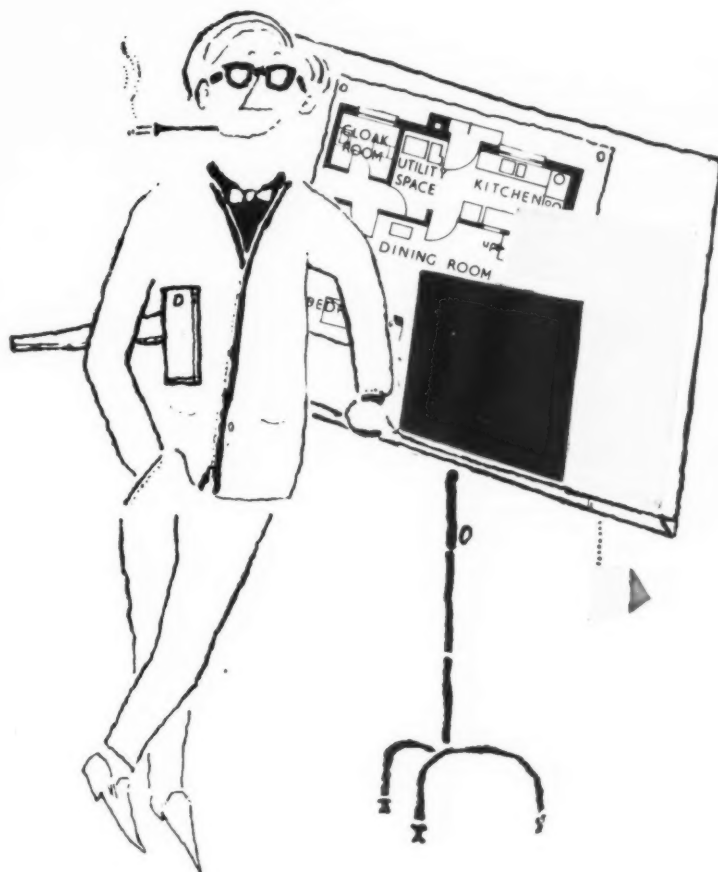
FORMICA^{PLASTIC} for me! ^{LAMINATED}

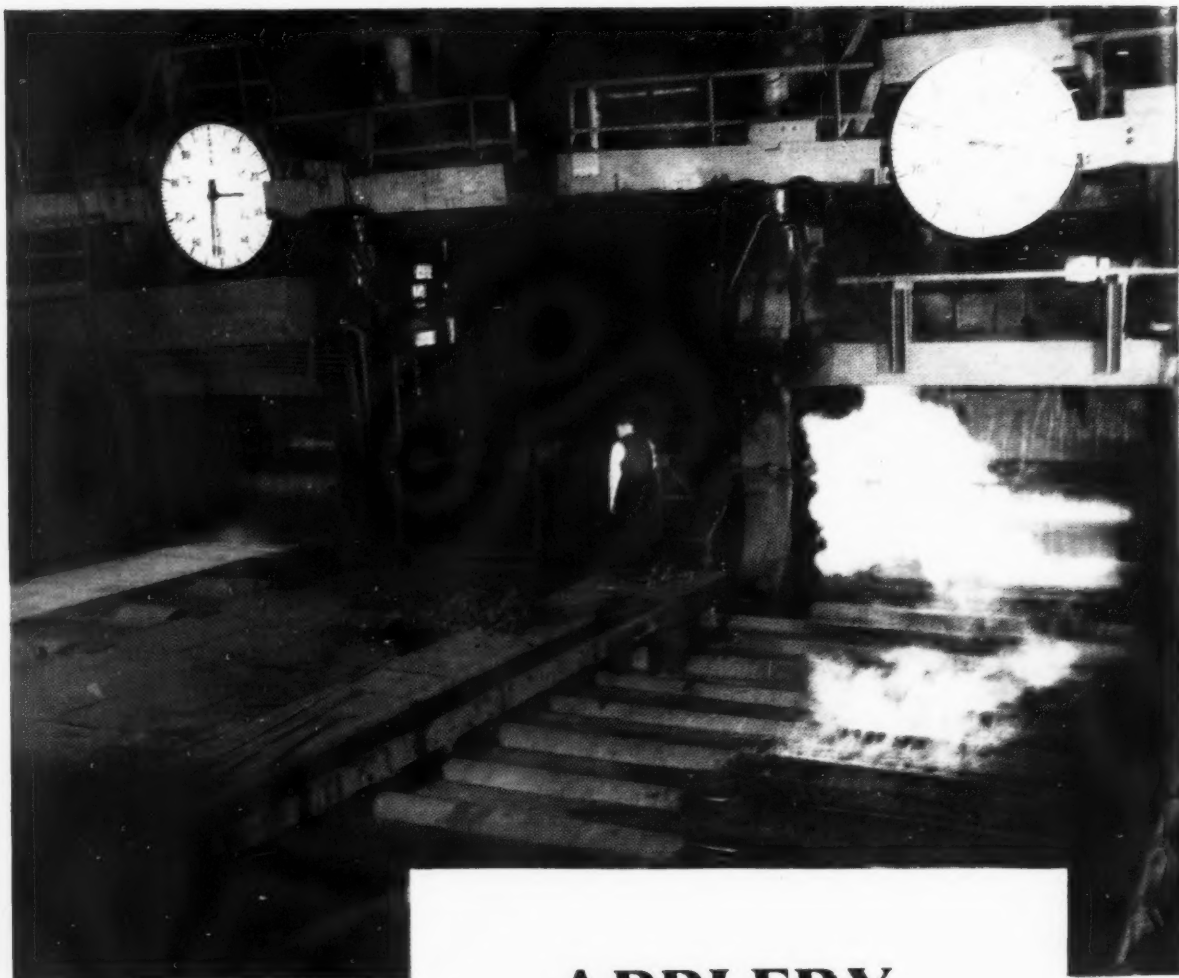
While it is true that FORMICA laminated surfaces have exceptional physical properties, it is just as true that they have charm. A FORMICA surface, cool and hard and satin-matt finished, is very pleasant to touch. The FORMICA range of clean, bright, modern designs and colours is its own best spokesman.

Planners of houses, being both artists and practical men, are interested to know that FORMICA Laminates will not stain, chip, crack or dent, are completely inert and non-porous, resist water, oil and all but the most violent corrosives, and resist heat up to 310° F. Here are the most easily cleaned surfaces in the world.

With all these virtues in mind, clients can safely be encouraged to say 'FORMICA for me!'

Write to Thomas De La Rue & Co Ltd, Dept 52b, 84-86 Regent Street, London W1





APPLEBY- FRODINGHAM PLATES AND SECTIONS

THE UNITED
STEEL
COMPANIES LTD

APPLEBY - FRODINGHAM STEEL COMPANY
SCUNTHORPE **LINCOLNSHIRE**

Branch of The United Steel Companies Limited

Tel: Scunthorpe 3411 (12 lines) 'Grams: 'Appfrod' Scunthorpe



Interior of the Royal College of Surgeons finished in Olimatt Enamels. (Photograph by courtesy of The Royal College of Surgeons. Architects: Young & Hall).

OLIMATT ENAMELS

For interior decoration where the highest class finish is essential for walls and ceilings Olimatt Enamels are without equal. They are made in a wide range of refined colours, are easy to apply, hygienic, washable and have extreme durability. Three types of finish are available: Flat, Eggshell and Satin Sheen.

Other high grade specialities:

OLIVETTE HIGH GRADE ENAMEL PAINTS.

Superlative gloss finishes in Interior and Exterior qualities.

NULON SUPER EMULSION PAINTS.

Interior and Exterior qualities.

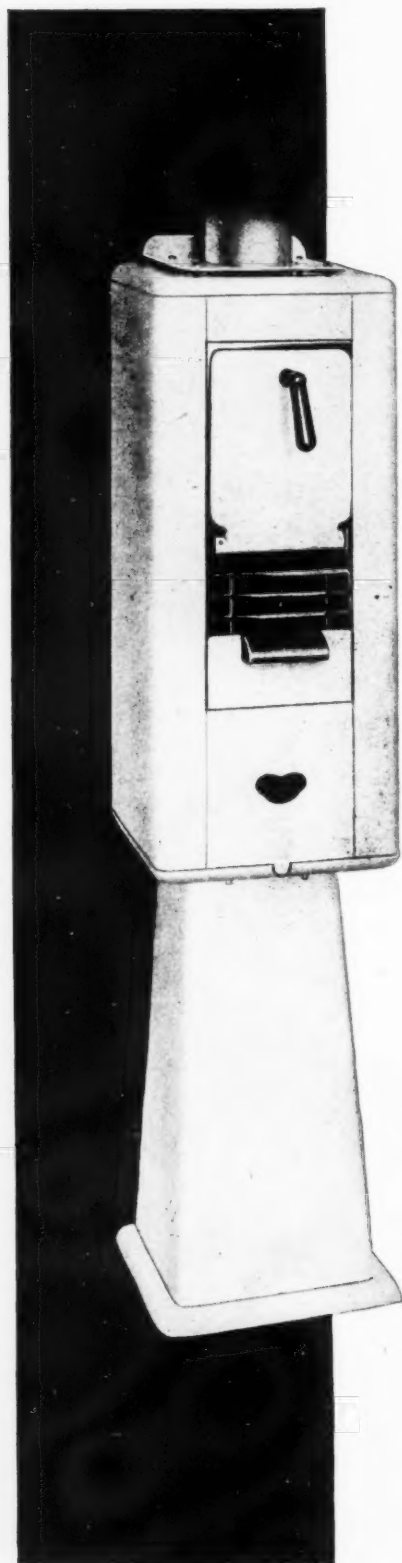
LEIGH PAINTS

FOR PROTECTION APPEARANCE AND ECONOMY

W & J LEIGH LIMITED TOWER WORKS MILL HILL BOLTON LANCs

SPECIALISTS IN THE MANUFACTURE OF QUALITY PAINTS

LONDON OFFICE 15 ST HELEN'S PLACE LONDON EC3



*Safeguard
Public Health
Encourage
Personal Hygiene*

in FACTORIES • HOSPITALS • CLINICS
SCHOOLS • HOTELS AND OFFICES

Investment by British industrialists and others in modern equipment to safeguard the health and welfare of the vast and growing numbers of workers, has proved beyond doubt the wisdom of a policy both far seeing and democratic in concept.

The installation of Sugg's incinerators wherever women employees form part of an organisation is plain commonsense.

Our sales and technical staff will be glad to advise and co-operate.

*The Sugg
Incinerator*

Gas-Fired

WILLIAM SUGG & CO. LIMITED

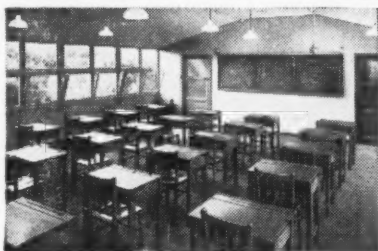
(Incorporating Cowper Penfold & Co. Ltd.)

VINCENT WORKS, REGENCY ST., LONDON, S.W.1. Tel: VIC 3211

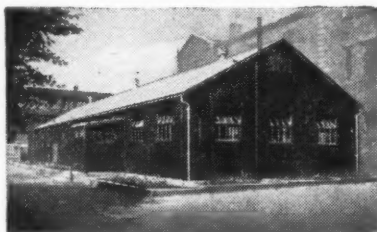




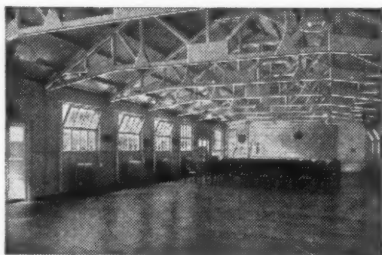
Reproduced by kind permission of the County Architect for Kent



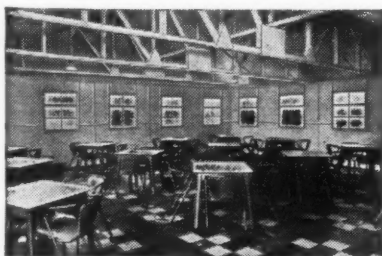
PORTSMOUTH CITY COUNCIL
Class Room



PADDINGTON GROUP HOSPITAL
Nurses' Recreation Room



PADDINGTON GROUP HOSPITAL
Nurses' Recreation Room



WAKEFIELD GROUP HOSPITAL
Canteen

BUILDINGS

*ready for occupation
in three weeks*

EXTRA ACCOMMODATION QUICKLY AND CHEAPLY

HALL'S Wide Span Buildings—up to 30ft. in one single span—provide the complete answer to all who need extra accommodation. On a simply prepared site, these rigid and permanent buildings can be erected and ready for occupation in three weeks or even less. Prime cost is lower than for almost any other type of building and cost of erection is negligible by comparison.

These graceful, attractive buildings, approved by Architects and Councils all over the country, are in use—many, now more than twenty years old—for Hospitals, Schools, Canteens, Workshops, etc.


Hall's Wide Span Buildings are available in Standard single spans of 10 ft., 12 ft., 18 ft., 24 ft. and 30 ft. and in any length in units of six feet. Interior details such as walls, corridors, ceilings, etc., are 'made to measure' to suit particular needs.

Constructed by craftsmen from selected timber, kiln dried, and processed at Hall's great plant at Paddock Wood, these Wide Span buildings will last indefinitely. Architects and others interested are invited to visit Paddock Wood or write for illustrated brochure.

Plans supplied for Local and Government Authorities



ROBERT H. HALL & CO. (KENT) LTD, Industrial Division
PADDOCK WOOD, TONBRIDGE, KENT Telephone: PADDOCK WOOD 508



ZYLEX and ASTOS

Keep a building warm and dry between them

ZYLEX Slaters' Felt

is a high-quality, bituminous felt with exceptional heat-insulation properties. It keeps warmth in, and draughts and weather out. In two grades: **Reinforced**, with a base of closely woven hessian, and exceptionally strong. Can be stretched directly over open rafters—saving the cost of a boarded roof. **Standard**, for boarded roofs, makes a clean, waterproof membrane under slates or tiles.

Well insulated above and protected from rising damp below, a building stays warm and dry longer. There is no more certain way of guaranteeing this protection than by specifying ZYLEX Slaters' Felt and ASTOS Asbestos Dampcourse—two Ruberoid products for two important positions.

The reliable, tested qualities of these two products make all the difference to the effective protection of buildings. Many architects and builders, all over the world, make a point of specifying ZYLEX and ASTOS by name, to be absolutely sure of having the best materials. Make sure of the very best protection for that building of yours—specify ZYLEX Slaters' Felt and ASTOS Asbestos Dampcourse.

ASTOS

Asbestos Dampcourse

is the 100 per cent. permanent dampcourse, an impervious and imperishable barrier against rising damp. Composed of asbestos fibre and bitumen, it is capable of withstanding normal foundation settlement without risk of failure. Complies with B.S.S. 743/1951. In two grades: **Standard** and **Leadlined**.

Further details, together with samples, will be gladly sent on request.

**THE
RUBEROID
COMPANY LIMITED**

2 COMMONWEALTH HOUSE
1-19 New Oxford Street, London, W.C.1

lighting for designers



by
EKCO
designers in
lighting

The design of the Lighting used by the Loewy Engineering Co. Ltd., of Poole, Dorset, was recommended by their Architects after considerable research into this problem. The users' requirements were that 40 lumens sq. ft. be provided over the whole working area and that fittings should be positioned for convenient maintenance.

It was economically advantageous to install multi-lamp fluorescent fittings and the scheme was prepared by the Architects in consultation with ECKO. The result can be seen from the accompanying photograph which shows a part of the main installation. Over 400 EKCO multi-lamp quickstart fittings were used. The majority of these were three-lamp 5ft. 80 w. trough fittings from the EKCO standard fluorescent range. The lamps used extensively throughout this building and the associated office block total more than 1,500 EKCO 3,500° white lamps.

EKCO-ENSIGN ELECTRIC LIMITED

4 Essex Street, Strand, London, W.C.2 Tel.: City 8951

Sales Offices, Illuminating Engineering Depts., Showrooms and Depots:

SOUTHERN: 45, Essex Street, London, W.C.2. Telephone: City 8951

NORTHERN: Blackett Street, Manchester 12. Telephone: Ardwick 4661.

MIDLANDS: 68, Caroline Street, Birmingham 3. Telephone: Central 2997.

E. MIDLANDS: 57, Hounds Gate, Nottingham. Telephone: Notts 45862.

SCOTTISH: 26, India Street, Glasgow, C.2. Telephone: Central 2012.

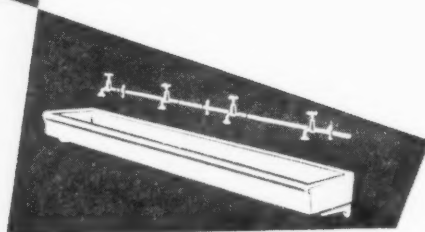
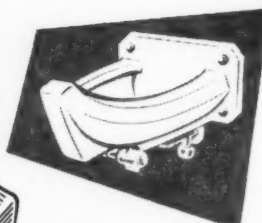
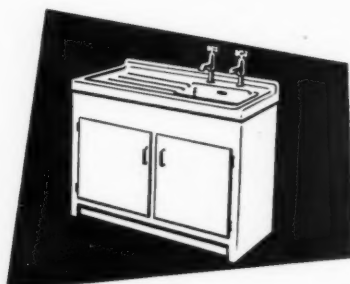
SOUTH WALES: 50, Bridge Street, Cardiff. Telephone: Cardiff 33803.

LEEDS 'IMPERIAL PORCELAIN' FIRECLAY

The strength and high resistance to thermal shock of "IMPERIAL PORCELAIN" FIRECLAY SANITARY WARE are a guarantee of long life in service.

"IMPERIAL PORCELAIN" FIRECLAY SANITARY WARE outlasts all other types and proves that the best is cheapest in the long run.

All the resources of England's largest organization manufacturing Fireclay Sanitary Ware stand behind the product.



PRODUCTS OF THE

Leeds Fireclay GROUP OF COMPANIES

WORTLEY, LEEDS 12. Tel. LEEDS 638021

LONDON OFFICE: LEEDS HOUSE, CAVENDISH PLACE, LONDON, W.1.

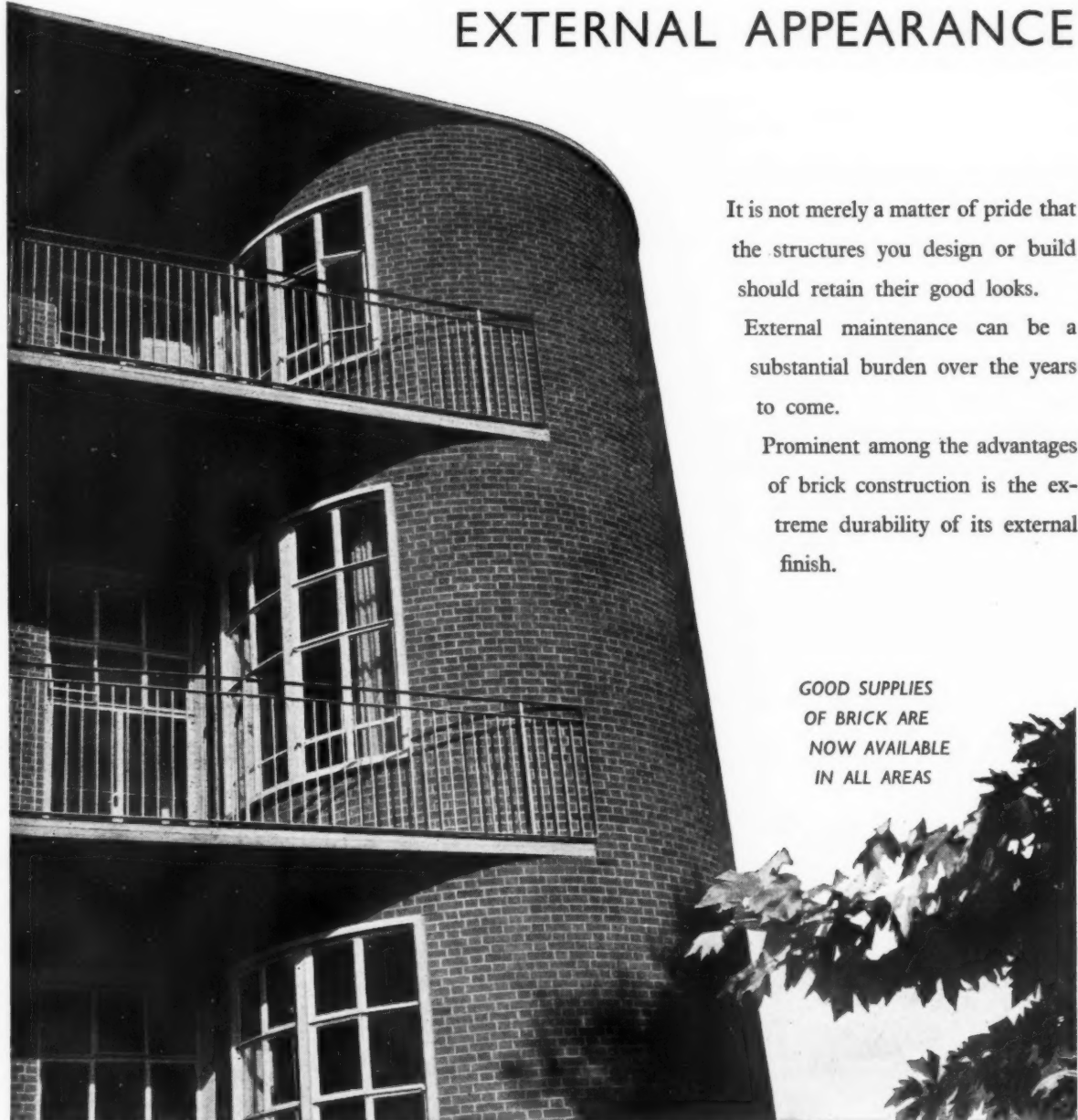
Telephone: LAngham 3511.

Telegrams: FIRECLAY WESDO LONDON

Cogent

Safeguarding

EXTERNAL APPEARANCE



It is not merely a matter of pride that the structures you design or build should retain their good looks.

External maintenance can be a substantial burden over the years to come.

Prominent among the advantages of brick construction is the extreme durability of its external finish.

GOOD SUPPLIES
OF BRICK ARE
NOW AVAILABLE
IN ALL AREAS

Extension to St. Andrew's Hospital, Dollis Hill, London, N.W.2. Architect: H. H. Clark, F.R.I.B.A.

BRICK *Saves Maintenance*

ISSUED BY THE NATIONAL FEDERATION OF CLAY INDUSTRIES, DRAYTON HOUSE, LONDON, W.C.1



Bartrev the chipboard supplied in any length

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

The board was supplied by William Evans and Company Limited.

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

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

WM. EVANS AND CO. (Distributors) LTD.
52 Stanley Street, Liverpool 1
Telephone: Central 5171

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

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

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

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

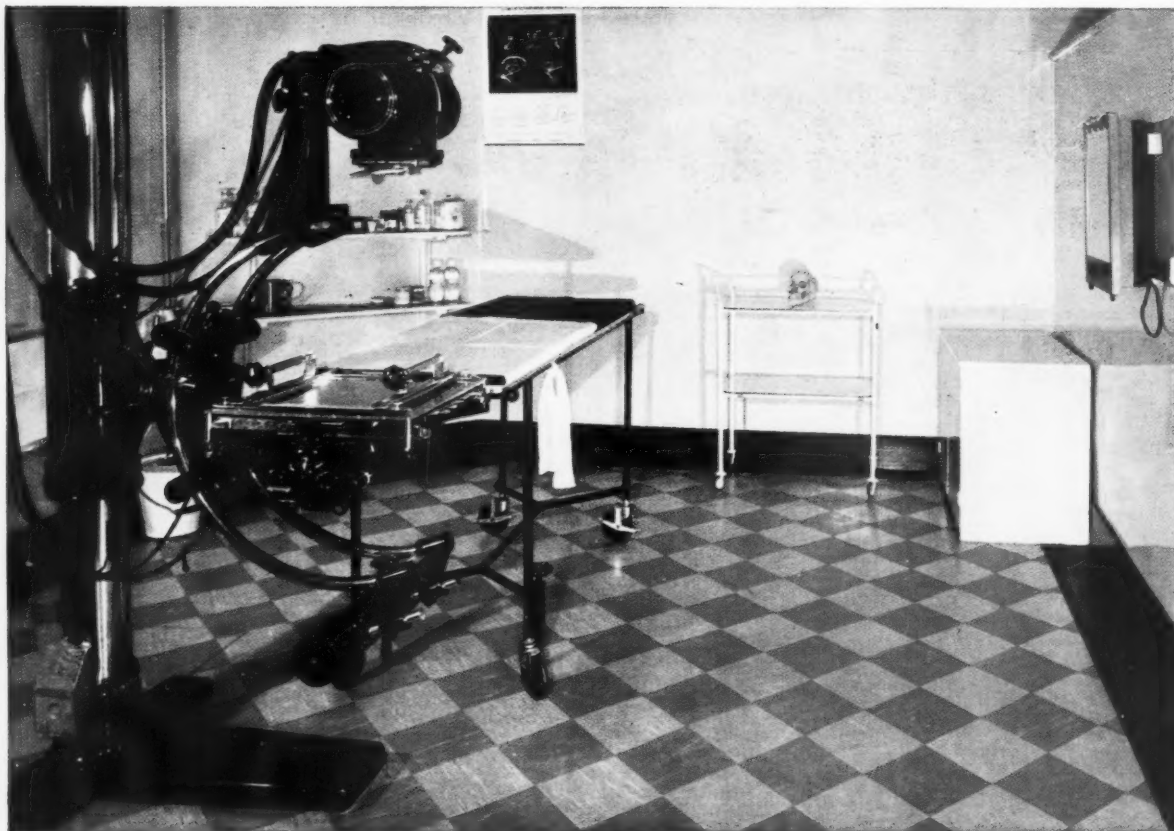
THE BRITISH DOOR MARKETING CO. LTD.
Shobnall Road, Burton-on-Trent
Telephone: Burton 4851



BARTREV

Nairn brings you floors of "Never Before" Beauty and Service-ability

NAIRN VINYL TILE FLOOR LAID
IN THE X-RAY DEPARTMENT OF
IPSWICH BOROUGH GENERAL HOSPITAL



Proprietors, managers and executives of business premises and institutions all over the country are specifying Nairn Vinyl Tile Floors. Housewives, too, are making enquiries at their architect's or builder's about Nairn Vinyl Tile Floors. Everywhere the news is spreading that Nairn brings you floors of 'never before' beauty and utility.

'Never Before' Wear-ability Since the floors of the 53 laboratories in the new Biology Building of Nottingham University would be subject to continual traffic and exposure to all manner of chemicals, the University laboratories themselves tested various types of floor covering. Nairn Vinyl Tiles proved to be the most satisfactory and were used exclusively.

'Never Before' Clean-ability Grease, oil, mud... bleach, alkalis, cooking fats... all the things that might ruin an ordinary floor don't affect a Nairn Vinyl Tile Floor. And all that's needed to keep it shining clean is an occasional polishing.

'Never Before' Versatility Nairn Vinyl Tile Floors can be laid on any kind of level surface, upstairs, downstairs or in the basement. As a design component the Nairn Vinyl Tile is extremely versatile too... AND, LAST BUT NOT LEAST THE COST IS SURPRISINGLY LOW.

For years, both here and in the U.S.A., laboratory research and stringent practical tests have *proved* the wear-resistance of Nairn Vinyl Tile Floors.

Please write to us (at Office 102) for further information, literature and advice.

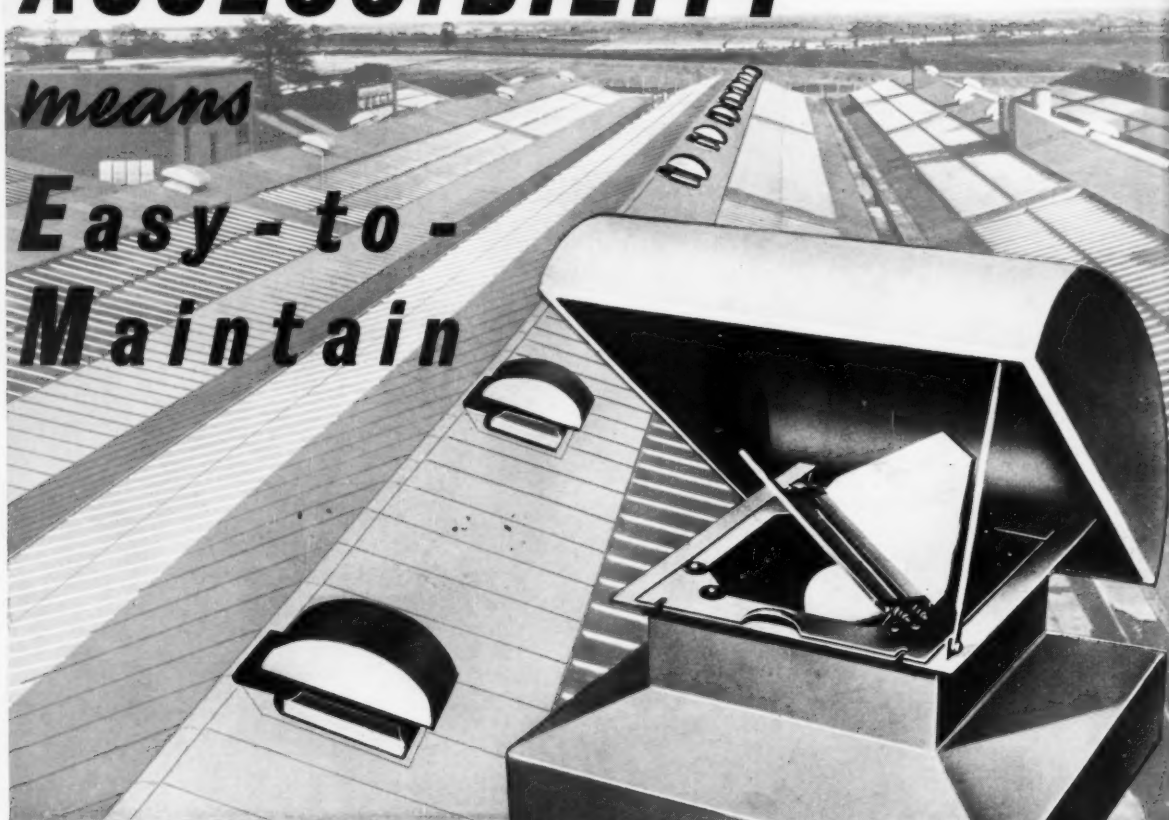
MICHAEL NAIRN & CO., LIMITED, KIRKCALDY, SCOTLAND



ACCESSIBILITY

means

Easy-to-Maintain



* Unit shown with hinged weather-cap in raised position for maintenance and wiring.

BROOKS

fan-powered

VENTILATION UNITS

Simply fixed, by four bolts only, the Brooks Fan-Powered Roof Extract Unit gives *positive* extraction, summer and winter. Shutters open and close Automatically when motor is started or stopped. Hinged weather-cap gives easy access for maintenance. Robustly built, of heavy gauge steel, HOT DIP GALVANISED, with gun-metal sleeve bearings for shutter spindles, and grease-gun nipples to allow positive lubrication. Write for details.

BROOKS VENTILATION UNITS LIMITED

TRAFALGAR HOUSE, GREAT NEWPORT STREET, LONDON, W.C.2. Tel: COVent Garden 1355-1356

D
356

B.I

THURROCK
TECHNICAL COLLEGE
for
ESSEX COUNTY COUNCIL

Architect:
H. Conolly, Esq., F.R.I.B.A., County Architect.



THURROCK TECHNICAL COLLEGE, recently completed by Richard Costain Limited, is contemporary in design and decorated in a variety of pastel shades. It has been equipped to provide training in mechanical and electrical engineering, and for the various craft courses of the City and Guilds of London Institute. The buildings are in steel frame construction with brick infilling panels and include a 2-storey main laboratory block, boiler house and caretaker's bungalow. Flooring and roofing were supplied by Stahlton Floors Limited.

Richard
COSTAIN
Limited

**BUILDING AND
CIVIL ENGINEERING
CONTRACTORS**

AVENUE LODGE, 2 PALMERS AVENUE, GRAYS, ESSEX

Head Office: 111 WESTMINSTER BRIDGE ROAD, LONDON, S.E.1

Telephone: WATerloo 4977



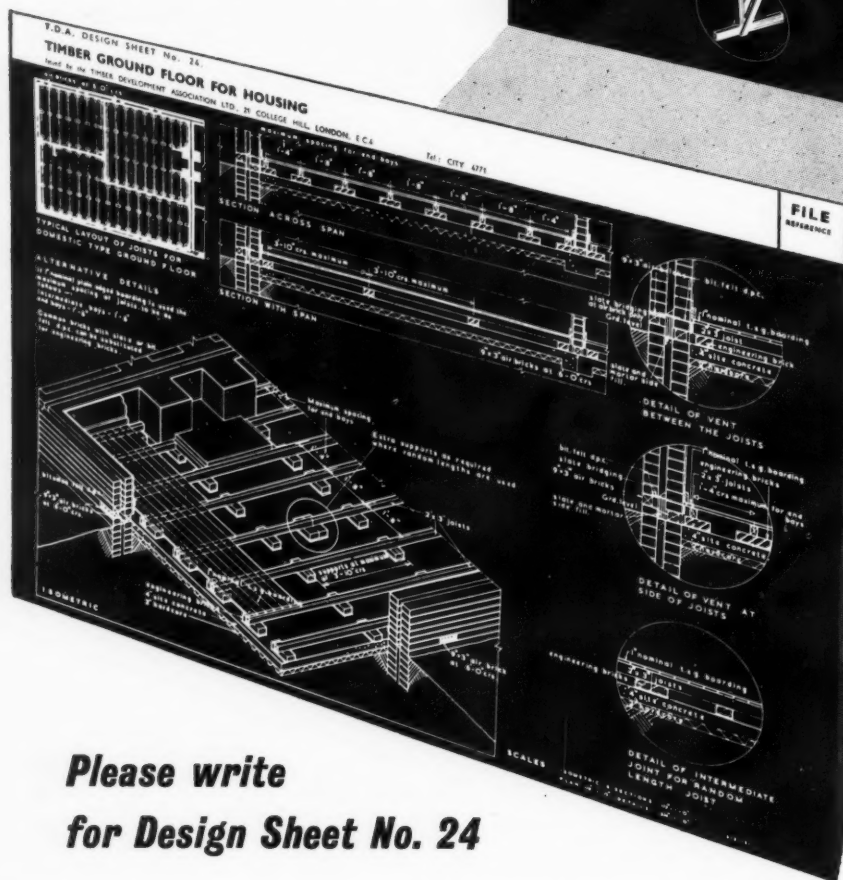
And now-

the T.D.A. Ground Floor follows the T.D.A. Roof, known and used by Housing Authorities in all parts of the country, as a further contribution to efficiency and economy in building.

the TDA-

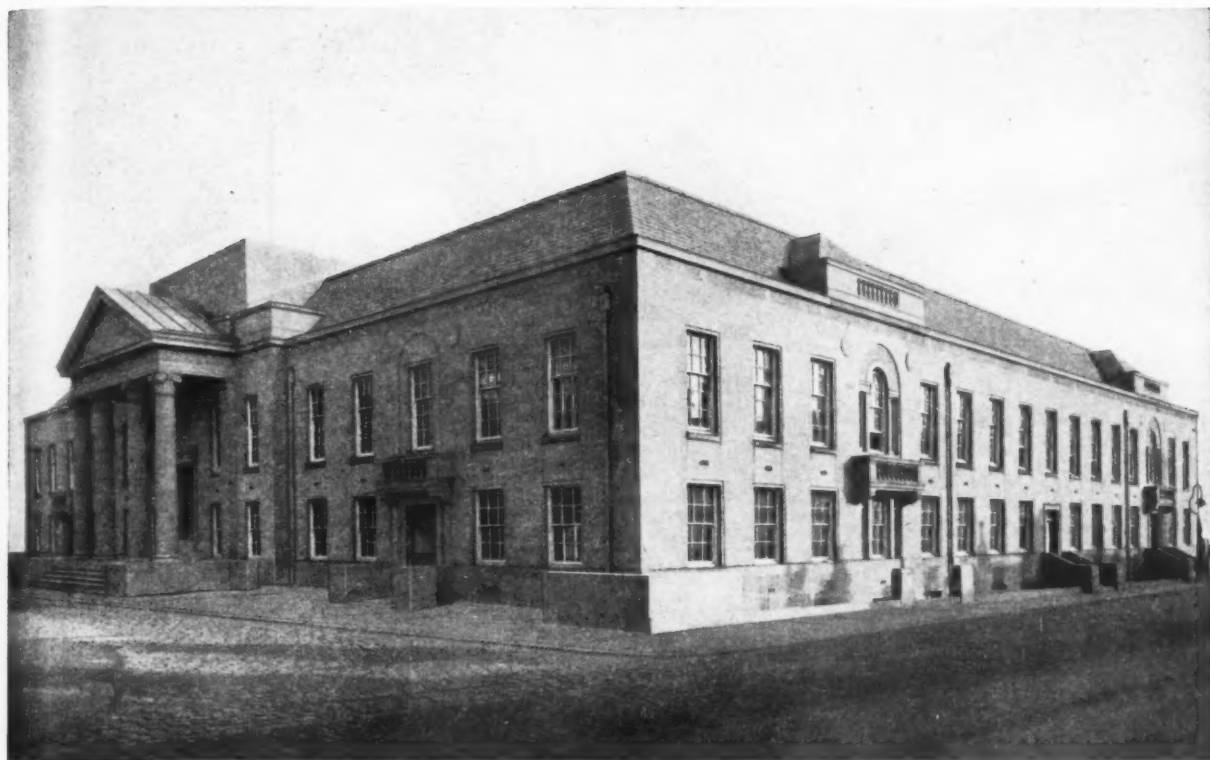
floor design saves cost, time, excavation and bricks; it allows the use of joists in random lengths, finished with softwood boarding or decorative hardwood strip, and above all provides a warm, resilient . . .

Ground Floor



**Please write
for Design Sheet No. 24**

ISSUED BY THE TIMBER DEVELOPMENT ASSOCIATION LIMITED • 21 COLLEGE HILL • LONDON • E.C.4
and branches throughout the country



By courtesy of the County Borough of Burnley and
the main contractors Leonard Fairclough Ltd.

Architects: Messrs. Bradshaw, Gass & Hope
Sub-Contractors: Messrs. William Livesey & Sons (Blackburn) Ltd.

THE NEW BURNLEY POLICE HEADQUARTERS

ROYAL FLUSH

DOORS

Strength and dignity combine well in the design and construction of this imposing new building. But such features are not confined to its outward appearance... inside too, "Royal Flush" Doors offer similar characteristics. During the last twenty years these famous doors have been specified for many other newsworthy buildings. "Royal Flush" Doors are craftsman-made and can be supplied with solid or semi-solid cores in a wide variety of veneers. Send for full details and prices.

SOUTHERNS
LIMITED

HEAD OFFICE: BOLD SAW MILLS • WIDNES • TEL: WIDNES 2641

BRANCHES AT LONDON • GLASGOW • MANCHESTER • DUDLEY • HANLEY • BRISTOL AND KETTERING

You'll need this for reference

New EDISWAN Catalogue

This new catalogue of Electrical Accessories gives full details of all our well established lines plus a number of new additions to the range. Pages are arranged in handy reference style with illustrations, descriptions, catalogue numbers and prices alongside each other.

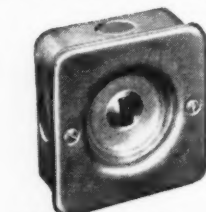
Sections are shown by a tabbed index.



Some of the NEW LINES

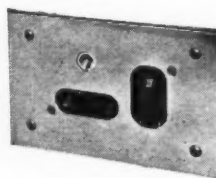
AVON Ceiling Switch

All moulded.
Nylon connector
gives extra
strength and
double
insulation.



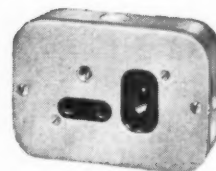
AVON Metalclad Switch Unit

Aluminium finished pressed steel box. A.C. only.
Nylon dolly.



AVON Flush Switch Socket Outlet

with moulded or metal plate
Protected nylon dolly. 5
and 15 amp.



AVON Metalclad surface Switch Socket Outlet

Has protected nylon dolly.
5 and 15 amp.

EDISWAN Electrical Accessories

THE EDISON SWAN ELECTRIC CO. LTD. 155 Charing Cross Road, London, W.C.2. and Branches
Telephone : Gerrard 8660. Member of the A.E.I. Group of Companies Telegrams : Ediswan, Westcent, London.

LANDMARKS IN STEEL

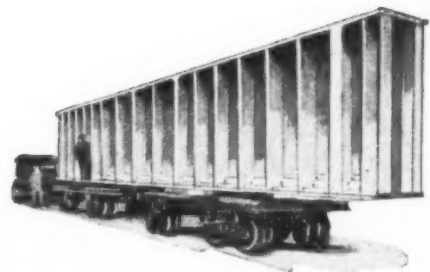
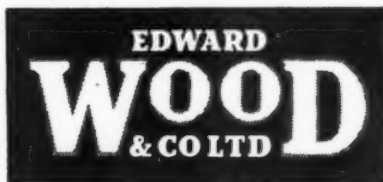


Architects and Surveyors: Harry S. Fairhurst & Son,
55 Brown Street, Manchester, 2.

STEELWORK *for Commerce*

SHIP CANAL HOUSE, MANCHESTER

This fine building is the nerve centre of the great inland waterway, The Manchester Ship Canal and is also the home of The Manchester Chamber of Commerce. Big business is built on solid foundations and once again it's Steelwork by:



Registered Office & Works: **MANCHESTER, 17**

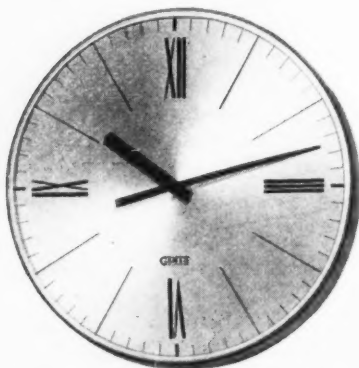
Telephone: TRAfford Park 2341 (10 lines)

London Office: 68 Victoria Street, S.W.1. Telephone: VICtoria 1331/2.

Technical Offices: Birmingham, Loughborough



The dial of this model is natural sunburst aluminium with black Gill Sans chapters and black hands. 9" or 12" dials.



This model is similar to the above but has black elongated Roman quarter chapters. 9" or 12" dials.

Changing Faces

2 new designs
leading the field in
contemporary styling.

These two models which have been added to our very successful range of contemporary clocks are outstandingly attractive and will appeal to those who are conscious of the trend of modern styling.

The shallow, spun aluminium case, finished satin silver, and the convex glass, give a very slim appearance to these surface fixing clocks. Both models are available for Synchronous or Master Clock operation. May we send you details of these attractive new models?

GENTS'
OF LEICESTER
Electric Clocks

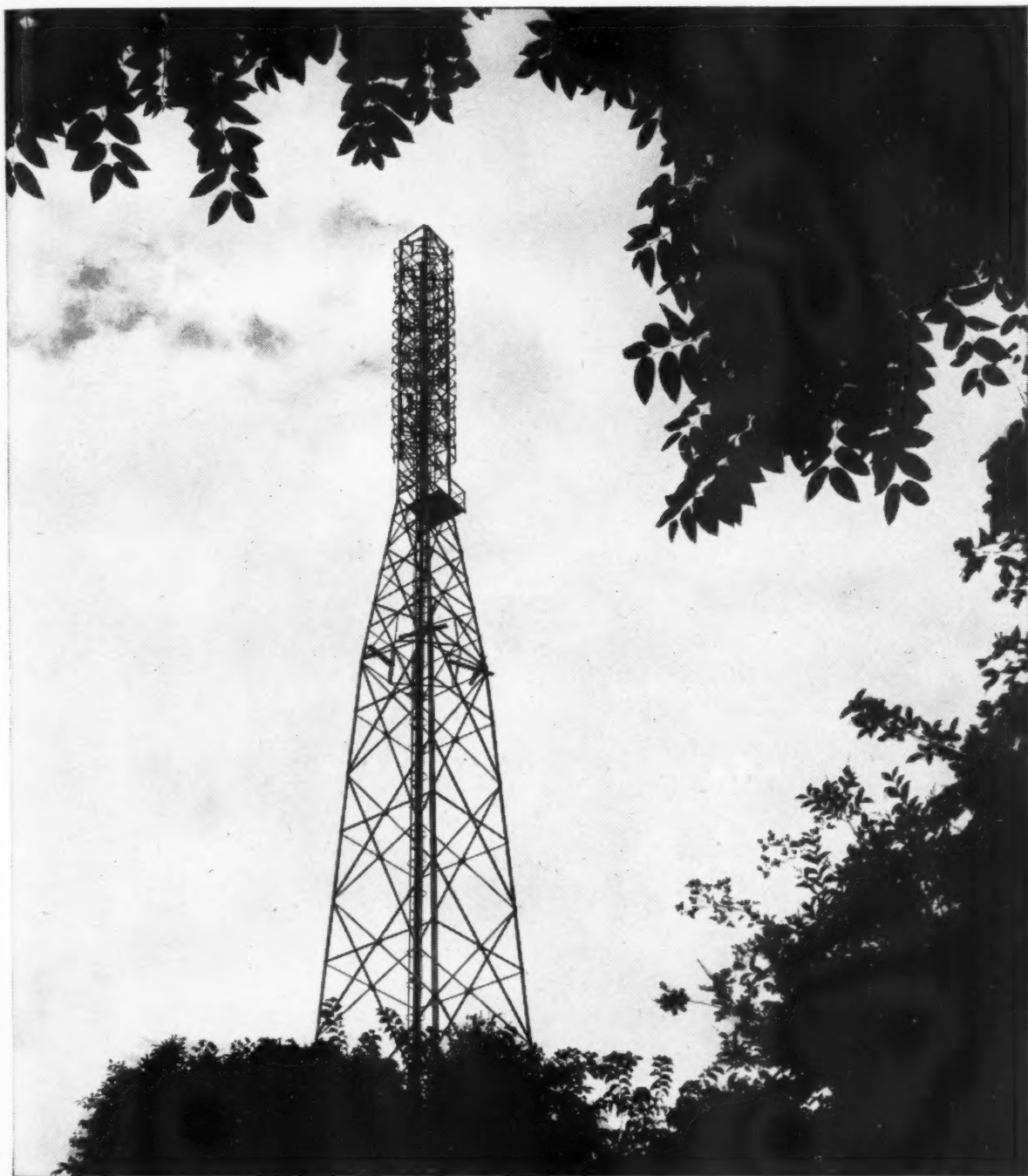
Comprehensive illustrated literature FREE on request:—

GENT & COMPANY LIMITED • FARADAY WORKS • LEICESTER

London Office and Showrooms: 47 Victoria Street, S.W.1.

Also at: BELFAST • BIRMINGHAM • BRISTOL • EDINBURGH • GLASGOW • NEWCASTLE

Other Products include: TIME RECORDERS WATCHMAN'S CLOCKS PROGRAMME INSTRUMENTS LUMINOUS CALL SYSTEMS
TOWER CLOCKS FIRE ALARM SYSTEMS STAFF LOCATION SYSTEMS BELL & INDICATOR SYSTEMS, ETC., ETC.



**I.T.V. stands
on lino laid by
Catesbys**

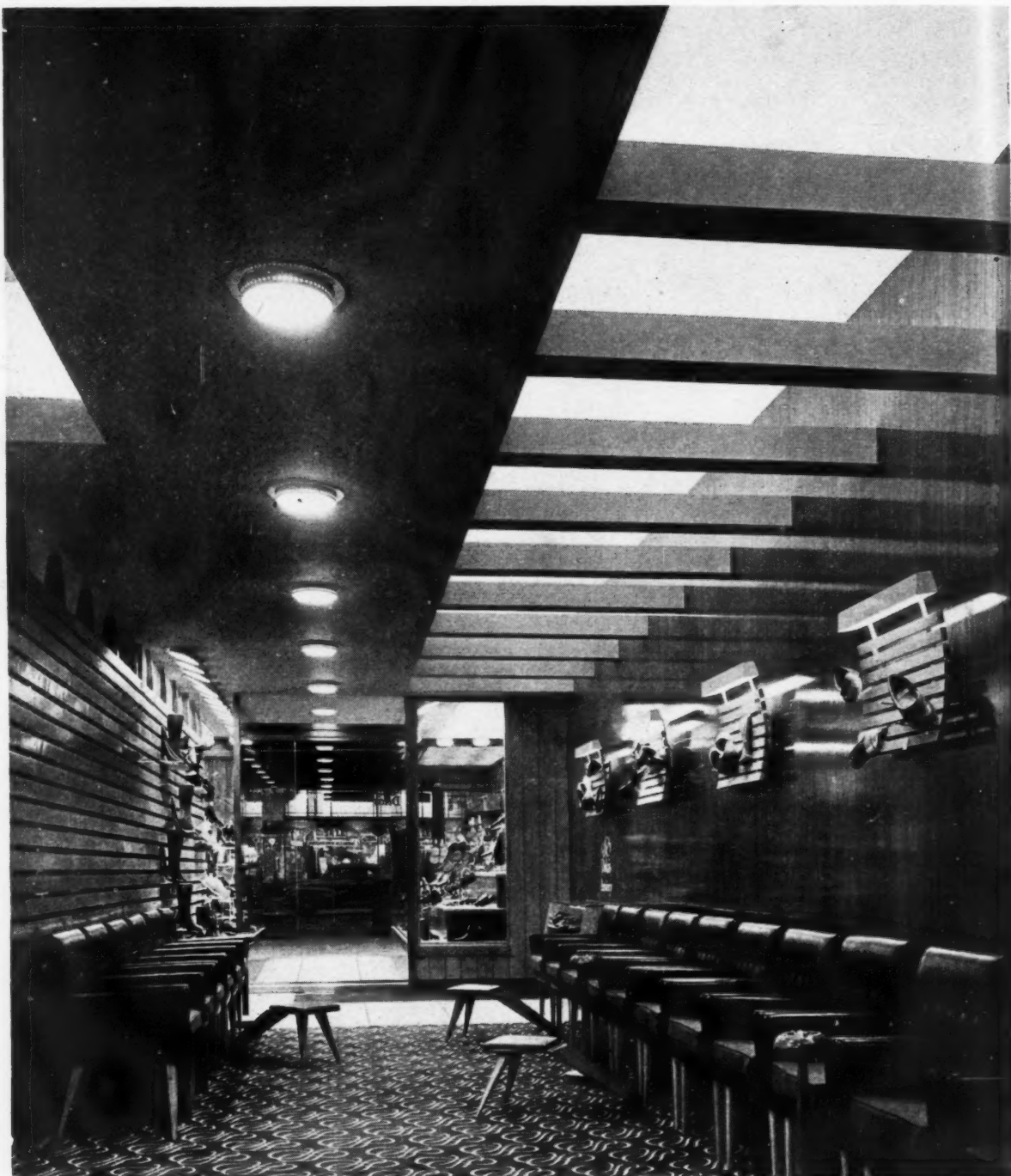
When the first you-know-what went out from this station, busy feet back at T.V. House* went scurrying around on Catesbys Lino. Not that they noticed it—we hope! Nerve centres are high-tension places which need quiet underfoot. That's why they had Catesbys, with their 60 years experience, to lay lino. Which all goes to show that the bravest new enterprise works on a basis of wellproven practices!

**Conversion architect: Peter Moro F.R.I.B.A.*

Catesbys LINOLEUM CONTRACTS

TOTTENHAM COURT ROAD • LONDON W1 • MUSEUM 7777

C R E A T I O N W I T H C R A F T S M A N S H I P



The Dolcis Shoe Company, Liverpool. Staff Architect: Ellis E. Somake, F.R.I.B.A.

THE ASSOCIATED COMPANIES OF

COURTNEY, POPE

COURTNEY, POPE LTD., Shopfitting, Architectural Joinery and Metalwork

COURTNEY, POPE (ELECTRICAL) LTD., Lighting Specialists

AMHURST PARK WORKS, TOTTENHAM, LONDON, N.15 • STAMFORD HILL 4266 (TEN LINES)



THE ARCHITECTS' JOURNAL

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

TECHNICAL EDITOR: (6) Lance Wright, A.R.I.B.A.

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

ASSISTANT EDITORS: (18) *Chief Assistant Editor*, Kenneth J. Robinson. (19) *Assistant Editor (Buildings)*, L. F. R. Jones. (20) *Assistant Editor (Production)*, W. Slack. (21) *Assistant Editor (Information Sheets)*, V. A. Groom. (22) *Assistant Editor (Costs)*, J. Carter, A.R.I.B.A. (23) *Photographic Department*, H. de Burgh Galwey, W. J. Toomey. (24) *Editorial Secretary*, Monica Craig.

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

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

No. 3189 April 12, 1956 VOL 122.

Subscription rates: by post in the U.K. or abroad, £2 10s. 0d. per annum. Single copies, 1s.; post free, 1s. 3d. Special numbers are included in Subscriptions; single copies, 2s.; post free, 2s. 3d. Back numbers more than 12 months old (when available), double price. Half-yearly volumes can be bound complete with index in cloth cases for 30s.; carriage, 1s. extra.



THE EXTREMISHNESS OF ENGLISH ART

Now that it is available in book form, Dr. Pevsner's "Reith Lectures" disquisition on *The Englishness of English Art** will receive—one hopes—the reflective and considered treatment that it failed to receive at the time of its serial delivery on the Home Service. It was pleasant to see distinguished contemporaries caught with their editorial hair down, and one of our most determinedly "contemporary" contemporaries announcing that what we wanted were "more squares, more vistas" for all the world as if it were Prof. Richardson. But these partial and partisan objections, these mean-minded haggings over Gothic and Gothick, dates and reputations, were not the kind of treatment

that the main Pevsnerian thesis deserved.

Reading the book one realizes that the thesis deals with the several *different* Englishnesses of English art, and that the evocation of the anti-geometrical tradition of English planning which stuck in so many Beaux Arts gullets, had been preceded by an appraisal of the ultra-geometrical tradition of so much English building. It is Dr. Pevsner's "polarities" that stick out, the extremes which a middle-minded nation—like its temperate climate—is capable of embracing. If, as ASTRAGAL secretly suspects, Dr. Pevsner has proved that we are a nation of extremists, then he has indeed said something new that needed saying.

RIBA DINNER

The RIBA's fourth post-war dinner, held at the Guildhall, was a thoroughly enjoyable occasion. If the speeches were not quite up to the standard of the last dinner (notably those of Sir Hugh Casson and Sir Howard Robertson), the setting of the Guildhall, despite an awkward entrance and Sir Giles Gilbert Scott's centre light fittings, was a pleasant, even impressive, change from the normal hotel atmosphere. A few lamented the lack of a bar with which to fortify themselves during the period of the reception, but there was an impressive array of appalling, immensely-detailed paintings of past Royal occasions in the ante-room with which to while away the time (a tip for students of historic costume and others who may have wondered, with ASTRAGAL, where such artistic *tours de force* of the Victorian and later reigns may have got to).


ASTRAGAL's favourite speech on this occasion was that by Basil Spence. This may have been due in part to the fact that it was the only one he heard clearly. Spence, as you will have read, took the opportunity to support publicly Holford's proposals for St. Pauls, when he adroitly proposed the health of the Lord Mayor and the City of London, and to plead also for "courage, imagination, sensitivity, and invention, all British characteristics which have been expressed in the past by a great line of buildings. . . ." Alderman Ackroyd, the Lord Mayor, refused to be drawn, in reply, save for the doubtful hope expressed that the City Corporation would see "that the dignity and strength of a great commercial city will be upheld." (ASTRAGAL is naturally nervous of the word dignity when applied to building.)

President C. H. Aslin, replying to the toast to the RIBA, also praised Holford's plan as bold and imaginative. He went on to point out *à propos* the criticisms expressed by the PRA, Professor Richardson, that he did not speak for architects or even for the RA itself, which is nice frank speaking.

PRAISE FOR SPENCE

C. H. Aslin also found time to praise Spence's Coventry Cathedral design in his Guildhall speech. Praise from one's confrères is satisfying, so also is praise in the popular Press. Gilbert Harding, writing in *Illustrated* recently, deplores criticism of Spence's design on the grounds of it being too modern, and very reasonably expresses contempt for "buildings in fancy dress." Unfortunately, he seems to carefully avoid saying whether he likes Spence's cathedral design, although the general tone

* Architectural Press 16s.

| | | | | | | | | | | | | | | | |
|-------|--|--|----------|--|-------|--|-------|--------|--|------|--|------|--|--------|--|
| | January | | February | | March | | April | | | | | | | | |
| 1 | <h1>HOPE'S</h1> <h2><i>Standard Windows</i></h2> <p><i>for lower cost and quicker delivery</i></p>  <p><i>Delivery ex-stock in standard sizes</i></p> <p><i>See Catalogue 284</i></p> <h3>HENRY HOPE & SONS LTD</h3> <p><i>Smethwick, Birmingham & 17 Berners St., London W.1</i></p> <p>MEMBER OF THE METAL  WINDOW ASSOCIATION</p> | | | | | | | 7 | | | | | | | |
| 2 | | | | | | | | 8 | | | | | | | |
| 3 | | | | | | | | 9 | | | | | | | |
| 4 | | | | | | | | 10 | | | | | | | |
| 5 | | | | | | | | 11 | | | | | | | |
| 6 | | | | | | | | 12 | | | | | | | |
| | | | | | | | | May | | June | | July | | August | |



Keeping in Keeping (1). See note "Addition or Subtraction"

of the article seems to imply approval. When asked recently by a colleague his views on the cathedral he replied "The Church of England has got what it deserves." And that doesn't help much either.

BC LUNCH

The Building Centre's annual lunch was, as usual, an all-too-short occasion, with the pick of the building industry present, and nearly every face familiar. The BC's annual report for '55 shows that enquiries are now running at over 100,000 a year. This is about four times the enquiries received at BRS, so there can be little doubt that the BC provides a most important service both to the public and the industry.

ADDITION OR SUBTRACTION?

ASTRAGAL was surprised and dismayed to see the new bookshop in front of the Jerusalem chamber between the Wren towers of Westminster Abbey and the entrance to Dean's Yard. This shop (photograph above), which is intended for the sale of postcards and guides of the Abbey, has been incorporated in the existing one-storey annex. There can be no question that the solution is neat, harmless and un-

Keeping in Keeping (2). "If St. Paul's precinct were to be strictly classical," wrote John Summerson in the *NEW STATESMAN* for March 31, "it would be . . . dead from the start." But if it were "loosely classical," he continued, it would be relegated to "the same detestable category as those buildings which Mussolini's architects so unkindly placed at the entry to Bernini's piazza." On the right is a reminder of this depressing "loosely classical" street.

assuming, and that it fits into the general *mise en scène*. But it is also negative and contributes nothing to a corner of the Abbey precinct which would lend itself admirably to a little townscaping. A number of possibilities come to mind. Why not pull down the annex and give the extra space to the piazza and erect a free-standing, well-designed, demountable kiosk? Or what is wrong with a wheeled trolley in the Abbey itself?

This is a good example of the danger of good architectural manners. The result of such polite additions is often the confusion and smudging of the character of the major building. The worst example of this sort of thing is, of course, to be found at the Distillers Company's premises in St. James's

Square, where the charming three-bay Adam house has been entirely lost within scholarly and careful additions.

FEWER HOMES OFF THE PEG

There was a time when the *Daily Mail's* annual book of houses showed no more than the exhibition jobs, but over the years more and more space has been given to architect-designed houses in various parts of the country, and in this year's effort* the proportion is nineteen to the exhibition's six.

Not that all the architects' houses are all that good, but they make the spec. work look pretty grim. Looking at the spec. plans one can only assume that the Housing Manual has never been heard of by the designers. There are

* *Daily Mail*. Book of House plans 1956. (*Daily Mail* Publications 2s. 6d.)





Some System Wanted

The clutter shown above, arising from a half-carried out desire to keep back numbers of the JOURNAL, is no exaggeration of what happens in countless offices within a surprisingly short space of time—a mere two or three years suffices. We have seen rooms virtually unusable, due to the stacks of JOURNALS, and other periodicals, which the architect has felt compelled to keep. The answer to the

ensuing disorder is, for the majority, some form of system which helps the architect to reduce the bulk of what he has to keep and a simple method of filing. From next week the JOURNAL will be adopting a format which should assist the architect in this respect. The proposals are described in this week's leading article, opposite page, and in the article on pages 336-337.

POINTS FROM THIS ISSUE

| | |
|---|-------------|
| ASTRAGAL reviews <i>The Englishness of English Art</i> .. | .. page 331 |
| The new <i>easy-to-file AJ</i> | .. page 336 |
| <i>New Brutalism</i> defined at last | .. page 339 |
| Exclusive publication of Grosvenor Square competition designs | .. page 340 |
| The L.C.C.'s <i>Tidey Street</i> scheme | .. page 350 |
| The new <i>rating procedure</i> | .. page 355 |

cavity walls, admittedly, though their presence is more likely to be due to bye-laws than anything else, but four of the six exhibition houses have the chimneys on external walls and other amateurish faults. Altogether a very good argument for not buying houses off the peg, if only the public knew how to read a plan.

THE SPEC. MEN CATCH UP

ASTRAGAL had his doubts when the American magazine, *Architectural Forum*, split itself into two—*Forum*, the magazine on building, and *House and Home*. The reason for the split was an understandably commercial one—the publishers wanted to appeal to the enormous speculative housing industry. In spite of his original doubts, ASTRAGAL finds himself more and more impressed by the consistently high standard of *House and Home*. It occasionally has top-grade architect-designed individual houses, but for the most part it is concerned with the American speculative housing market in all its aspects, and one has to remember that most housing in America is built by private enterprise. What is so impressive is that *House and Home* has not been satisfied to follow the trends; it has led them. It has consistently put forward enlightened policies and examples. And it has consistently stressed the architect's contribution to house building.

In an article on the Los Angeles market, in the February number, the magazine shows features which have become popular elements in Los Angeles builder-designed houses. For example, the patio has been popular since 1946, the open plan and glass walls since 1947, the low-pitched roof since 1950, and so on. Architects thought up all these features, usually a decade before they became popular.

What would happen to a journal appealing to the same market in this country? ASTRAGAL has a feeling that it would sink into a slough of mediocrity. Anyhow, builders here fail to recognize that in almost every major technical advance in house building, the architect by his very nature has been the first to put forward the idea, though it may not take a fully realisable form until the builder has worked over it.

ASTRAGAL

The Editors

TEAR IT OUT OR TEAR IT UP

ARCHITECTS today, as never before, are swamped by paper—forms to fill, letters to answer, codes to study and, not least, periodicals to read. The architect is weighed down by the things he is supposed to have read all about and understood. Because this fact has been brought home to us we started our research fellowships, and now the first recipient of a fellowship, Michael Ventris, is studying some aspects of the problem. But we feel that there is one aspect which we can, and should, tackle ourselves because, if the architect suffers from having too much to read, we are one of the main causes. (We hasten to add that we would not have it otherwise, and as our steadily rising sales graph shows, neither, apparently, would the bulk of the profession.)

Every JOURNAL consists, in the main, of part news, comment and gossip, of general, but probably ephemeral, interest to most; of part technical information of potential interest to all; and of part specialist articles and descriptions of buildings of interest mainly to specialist readers. From next week we propose to divide the JOURNAL into roughly those three categories. At the front will be the comment and news, the stuff which the ruthless, paper-ridden architect will cheerfully throw away once he's read it. At the back will be the material to file, Information Sheets, Working Details (in greater number), a detailed study of a building with cost analysis, a technical article, and Information Centre. Sandwiched between will be the industry and other features of technical and general interest, so arranged that they can be filed if they are wanted.

For those who like to keep their JOURNALS whole, and unspoiled, there will be little noticeable change, save in the order of the articles, but for those many who wish to break up the JOURNAL for filing we hope the changes, which are described in detail overleaf, will be of some real assistance. In this way we can, we hope, contribute a little towards lessening the very real strain the would-be efficient architect bears today through having to be "well-informed."

THE PRINTING DISPUTE HAS PREVENTED THE PUBLICATION OF TWO ISSUES OF THE JOURNAL. ALL SUBSCRIPTIONS WILL THEREFORE BE EXTENDED FOR AN ADDITIONAL TWO ISSUES.

From next week, as announced on the preceding page, the JOURNAL will be revising its format as part of our never-ceasing endeavour to give the best possible service to our readers. The emphasis in the new

JOURNAL will be on providing material which can be more easily extracted, physically, and filed for future reference. The following article shows the method we are adopting.

A NEW AJ FORMAT FOR EASY FILING

Enquiries made over the past year reveal that there is a great demand, by all sections of the profession, for a JOURNAL which is simpler to file. Today, when many architects have to ration their reading time it has become the task of the profession's newspapers to do their utmost to aid architects by presenting news, comment and technical information in a form easy to follow, easy to segregate by the individual into what he wants to keep and what to throw away, and finally, easy to file.

The filing of the contents of the JOURNAL is a task which, if not undertaken at regular intervals, becomes quite a formidable task. In a year the reader receives about 2,000 editorial pages, of which about 1,000 are of special value if filed. These one thousand pages are devoted to technical articles, descriptions of buildings, Working Details, Information Sheets and so on. The remainder are mainly comments, by ASTRAGAL, leader-writers and correspondents, and news-items which are of interest, we hope, at the time of publication, but which never—or rarely—require filing for future reference.

each article separable

The JOURNAL, with Information Sheets, Working Details, and Information Centre, has for many years now endeavoured to satisfy this growing demand. It has become evident, in recent months, however, that we have not gone far enough. It is time that we took a further step to ensure that every item of technical importance can be readily filed. The snag all along which has prevented easy filing has been, of course, the article which has one page backing on to another article that is of equal importance to the reader. One way to avoid this, which is obviously only possible with long articles (otherwise it becomes hopelessly extravagant, or the reverse, in space) is to ensure that each article starts on a right-hand page and ends on a left-hand page. The other answer which, up to now, has not been practicable, is to use advertisements as make-weights. That is, to insert an advertisement page where necessary to ensure that each article is contained on an even number of pages.

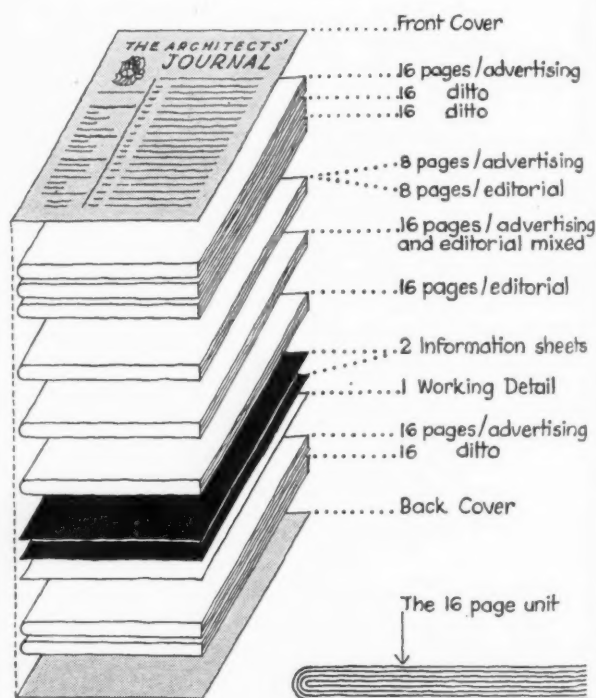
That is the course which we are going to take from next week. We are going to arrange the JOURNAL in three sections. In the front will be the news, comments, and correspondence. At the end will be the articles and features which are of value to almost everyone, if filed. And in the centre, as an essentially feasible buffer, will be those articles—part news, part technical—which may be wanted by some readers for their files. It is in this third, central, section that the advertisements will mostly appear, but they will also be used in the last section to ensure that a technical article does not end on the back of the page on which an article illustrating a building commences.

A slight change is also being made to the position of the list of contractors and sub-contractors for the buildings

illustrated. In future the list will appear at the end of the article describing the building. This has been done, again at the request of readers, in order that the reader can file the list, together with the article on the building, so that he can readily assess firms by the quality of their work or material shown in the article.

the composition of the Journal

Perhaps the best way of describing a typical JOURNAL, with the contents as they will appear in the future, is by means of the expanded drawing, below. The drawing should also make clear, to those who have never dissected a JOURNAL, how it is built up, and therefore show the simplest method of breaking a JOURNAL down for filing. The basic and most economic unit with which the printer makes the JOURNAL is a sheet which is folded and cut to form sixteen pages. Occasionally a half unit of eight pages is used, and for special purposes, advertisements in colour or information sheets, units of only two or four pages are printed. Between the main units of sixteen pages, or in the central fold of the sheets are placed the special inserts: advertisements in colour, Information Sheets or Working Details. All these are then collated by hand, and fastened



A diagram showing a typical JOURNAL format of 16-page sheets of advertising, editorial pages, and special inserts.

with three wire staples. Over all is gummed the cover. If the reader tears off the back cover of an issue and prises out the staples with a knife, the JOURNAL will fall apart and can be separated back again into the basic units.

The line drawing shows a typical future JOURNAL in the new format. At the beginning are three sixteen-page units—or sheets—of advertisements. In reality they would be interleaved with advertisements in colour. Then comes a sheet of which the first eight and a half pages are advertisements, and the remaining seven and a half are editorial. These will consist of the frontispiece, the leading article, ASTRAGAL'S Notes and Topics, the correspondence columns and some news. This is the first section mentioned earlier—the section of topical interest which it is not important to file. Then follows a sheet consisting of nine editorial pages and seven advertisements. This is the flexible buffer section where, whatever the length of the articles and features, they can be saved for filing if they are of special interest. Here will be news, foreign buildings, illustrated technical features, and the start of the Technical Section, with Brian Grant's The Industry articles and Information Centre. The last named is arranged, of course, for cutting out, pasting up and filing, and in future the same action can be taken with The Industry articles.

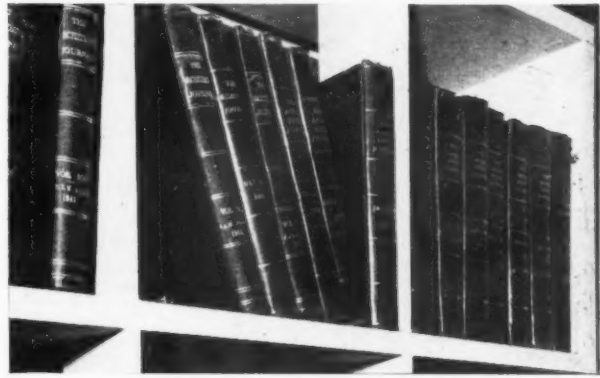
the four essentials for filing

Then follow the four regular features which are essential parts of the architect's library: the technical article; the full description of a building, with cost analysis; two Information Sheets and a Working Detail. The Working Detail is an extra item. As well as alternating two Information Sheets and two Working Details each week, an additional Working Detail will be published in the same week as the Information Sheets, making a total of seventy-eight Working Details a year. All these four features will be easy to file.

Readers will be familiar with the ease of handling Information Sheets and Working Details. The record of a building will be easy to file because it will be on an even number of pages and in the last sheet. On occasion it may fill the whole sixteen pages. In any event only two or four pages will have to be detached by slicing down the back of the sheet with a paper knife. These two or four pages, together with the last two or four pages of the previous sheet, will form the technical article.

Then follow two sheets of advertisements. The last two pages of the last sheet will contain another improved feature. The present enquiry form for building products advertised is being enlarged to contain the whole list of advertisers, so that a reader wanting further information has merely to tick the relevant advertisers' names, give his own name and address, tear out the page, fold it and post it to us. The emphasis so far has been on filing editorial pages, but of course the advantage of unpinning the JOURNAL is that advertisements which give useful information to architects are also more readily removed for filing—a point which advertisers will doubtless note.

Finally, a brief mention should be made of methods of filing. The illustrations, right, show three simple and obvious methods in frequent use: the box file, the suspended file, and the loose-leaf binder. These individually, or in combination, enable the reader to keep the information in the JOURNAL at his finger-tips.



The traditional method of keeping periodicals is in bound volumes. The efficiency of this as a reference system for the architect depends on an index. More flexible and more efficient systems are the use of box files, below, or the use of suspended files and special folders, as shown bottom. By using these systems the architect is able to keep articles according to his needs.





Richard Sheppard, F.R.I.B.A.
Chairman of RIBA's Ad Hoc Committee.

Eric de Mare, A.R.I.B.A.

Andor Gomme

L. G. D. Thompson, A.R.I.B.A.

Raymond K. Miller

Geoffrey Dunn,
of Dunn's of Bromley

The Ad Hoc Committee Replies

SIR.—The exigencies imposed on the public by one trades union dispute have interrupted the discussions about the formation of another. You recently published two letters (issues of March 1 and April 5) both critical of the Interim Report of this Committee. As chairman I would like to be allowed to reply to them.

Each letter (over the signatures of a number of people in London and Coventry respectively) takes the same form. Each complains that our report does not go far enough and fast enough in its interim recommendations and fulminates against an apparent indifference to the resolution passed at the celebrated annual general meeting last May.

I was also present at that meeting, and I must remind the writers of these letters that all the speakers stressed the need to maintain unity in the profession. The immediate formation of a conventional union, sponsored by the RIBA, would automatically split the profession. If we are to maintain unity, a union must be conceived on a new basis. However, I consider our real objective is an increase in the remuneration of many salaried members, and it should be a substantial increase in cases where responsibilities are not matched by reward.

In order to achieve this end we already know there are several means open to us, of which a union is only one. Our problem is to find which of these, singly or in combination, will achieve our ends most quickly. The writers of these letters have apparently pre-judged the issue and decided upon one remedy.

My committee is investigating these conditions and hopes eventually to produce a further report. There are a number of questions to be answered bearing upon the questions of salaries in relation to responsibilities. When we have this information, it will be possible to decide on the course to be adopted. Clearly we shall only recommend the formation of a union if we consider the causes of discontent are such as

can be effectively met by union action. In our interim report we recommended closer liaison between the RIBA and the existing organisations which represent salaried architects.

This investigation is bound to take time and must be precise and factual if it is to be effective. I do not myself think that we can carry out this part of our work in less than two years. This will seem a long time in view of the urgency of the situation, but I do not think it can be done in less, and answering unconstructive letters does not help.

Finally, this is a matter which arises out of and must be conducted through the RIBA. The Institute has a journal which reaches all its members rather than the section which can afford a subscription to the Architectural Press. Why then are these letters not directed to it?

RICHARD SHEPPARD.

London.

Architecture In A Vacuum

SIR.—Mr. Patrick (March 1) does well to praise Mr. Summerson's "brilliantly clear and simple English," for such writing rarely receives its due credit. Obscure and complicated writing arises from muddled thinking; the abuse of words continues to be dangerously destructive as a result.

But why should writing on architecture necessarily be virtuous because it has "no political slant"? There is some muddled and dangerous thinking for you. Politics affect the visual environment fundamentally whatever architects try to do as architects and to discuss architectural development without reference to social-economics and therefore to politics is to discuss it in a meaningless vacuum. To pretend that architects can avoid politics and still hope to improve the environment and prevent sub-topian inflation is silly. Politics may stink but so does the environment. Hold your nose with delicate disdain if you must but don't in that case expect the stink to go away. One tidy window grid does not make a civilization.

ERIC DE MARE.

London.

Cathedral For Parlour Games

SIR.—The excisions made in my letter published in the JOURNAL for February 16 removed most of its point and made it seem, what I had not intended, a bad-tempered personal snarl at a design that I did not like. What I want to emphasize is the fundamentally secular approach, and the essential wrongness of such an approach to an ecclesiastical problem. Sir Edward Maufe's work is indeed unsatisfactory, but his failure may, in large measure, stem from the terms of reference according to which he was evidently working. For the attitude which demands of a cathedral that it should be worthy not so much of God as of a "great city" is the attitude that turns a church into a civic hall. If a city needs a church, then it needs it as a place in which to worship God, not as an annex to the town hall. And a cathedral conceived apparently as a home for municipal parlour games is a disservice both to the religion which it ought to enshrine and to the community, which, in building a church, claims to owe that religion allegiance.

ANDOR GOMME.

Cambridge.

Are Competitions A Farce?

SIR.—I am appalled at the assessor's first award in the Enniskillen Competition (AJ: March 1). The winning design shows

about as little sympathy towards the town of Enniskillen as Oliver Cromwell had when he was last here.

I, as a native of Northern Ireland, as a young struggling architect just returned from qualifying in Great Britain, and as a competitor in the said competition, am continually perturbed at the standard of architecture that exists here at the present time.

When such a competition of this kind arises, one expects to see a winning design worthy of the many ideas that were submitted and also a contemporary solution to the problem. I consider this winning design as a thoroughly mediocre piece of architecture in all respects, and not at all the result one should expect from an architectural competition.

The winning author's building belongs to any "Subtopian" town: it is not just designed for that particular site in Enniskillen as it should be, and it has no atmosphere or feeling in keeping with such a town as Enniskillen. For these reasons alone I deplore it as the selected design.

It would be interesting to know if twelve cars could be crammed into the space provided in front of the building.

Does the author sincerely believe that by setting his symmetrical building back from the frontage line he successfully avoids duality with the existing symmetrical courthouse, which he has not included in his drawings, and which he must at least have seen in photographs!

These are only two of the many questions I would like to put to the assessor and to the author of the first award.

L. G. D. THOMPSON.

N. Ireland.

Up The Schools

SIR.—Referring to your leading comment in the JOURNAL of January 26, concerning the need for professional responsibility as well as creative skill, it is time that the schools gave a lead to the profession, as they are badly in need of a more rational approach to design in the light of present day conditions. I call to mind a phrase from the introduction to a design programme which I had recently at a well-known school, namely, that "the clients had in mind a building costing something in the region of £100,000" (it was a Civic building). This, at first sight, would seem a commendable and practical proviso to include in a students' programme, until the final schemes arrive, most of which at a guess would have cost three times as much. Such padding in a studio scheme would appear to be merely a Sop to Cerberus, a belated attempt to add realism, instead of frankly admitting that school schemes are one thing, and practice another.

The excuse put forward to justify lavishness in school schemes is that site, financial and bye-law restrictions, make good alibis for bad design, and so students are given considerable freedom. The absurdly irrational attitude to design can only cause harm at a time when the profession badly needs to gain public confidence in its ability to control building design and construction.

RAYMOND K. MILLER.

London.

Putting The Lid On It

SIR.—Hardly a week has gone by lately that your publication has not found it fit to caption something:—"Another nail in So and So's coffin."

Let us get this straight, we undertakers screw lids down!

Trusting you are in the best of health.

GEOFFREY DUNN.

Bromley.



NEW BRUTALISM

Defined At Last

When New Brutalism was discussed recently at the Institute of Contemporary Arts (writes a correspondent) the four speakers produced four definitions of it.

Toni del Renzio's definition, which alert listeners were able to rescue from such phrases as "the need to narrow down our fundamental postulates to a few possibilities" and "pragmatic experiments with theories of culture in depth," was surprisingly simple: "Do as Corb. does, not as Corb. says."

The second speaker, D. F. Tomlin (a student) told the meeting, to which he had "been dragged by the scruff of his neck," that New Brutalism was "a widening of the possible fields of mental action—an attempt to broaden the range of techniques now available to us."

Ronald Jenkins, an engineer, said "It is a movement in search of a meaning, and a meaning may come out of it."

John Summerson had the most original and most popular definition of New Brutalism. "I don't believe it exists," he said. He accused Peter Banham, who had written about it in the December issue of the *Architectural Review*, of "tickling-up" a new movement. "Once every thirty years," he said, "there is a big sneeze in architecture. A new movement is due, and Mr. Banham perfectly well knows it. If I were in his position I should do the same. If he is rewarded by the emergence of a new movement I shall be the first to congratulate him."

Three of the speakers had something to say about the effects of New Brutalism. Even Mr. Summerson, who denied its existence, said "it can't do any harm, and it may do good." Mr. Tomlin said "it has made me and my fellow students think more about architecture, and I think it's done that for a lot of people." Mr. Jenkins was more concerned with the harm it was doing to its originators, the Smithsons. "They are good architects," he said (applause from Peter Banham). "I should like to see them doing some work and keeping pretty quiet about it." He felt, however, that it was "a banner which might help young architects to express themselves."

The chairman, Ove Arup, wisely refrained from summing up.

MODULAR

What the Manufacturer Wants

On March 27 the Modular Society followed up W. E. Tatton-Brown's lecture on "What

an architect wants from the Modular Society" (see AJ February 16, 1956) with a counterpart by Peter Gardiner, a Director of Gardiners of Bristol, entitled "What a manufacturer wants from the Modular Society." W. E. Tatton-Brown had called for the opening up of the closed systems (i.e. the establishment of interchangeability), the establishment of a code of jointing conventions similar to those current in traditional building and the training of a new race of "assembler-jointers" to handle them, and the acceptance of a form of contract which would ensure that the potential savings from speedier erection were realized in fact and were equitably shared between contractor and building-owner.

Peter Gardiner's wants were of a more simple nature: he did not want the Society to do anything, he only wanted more builders and architects to join the Society so that they could learn how profitable Modular building was: for the architect, of course, profitable in drawing office time, for the builder profitable in money. Stating that it was now difficult to get builders to quote for a modular building and attributing this to their fear that their profit would be limited to the share of building work carried out by their own men, he made the point that the real saving to the builder lay in the elimination of hold-ups, the consequent saving of building time and the quicker turnover of capital. As an instance he quoted a contract on which his own firm had been concerned which had been finished three months before schedule, and where the builder had made an additional profit of about £6,000 on a contract sum of £60,000. He pointed out, however, that this result could only come from real pre-contract planning, in which even fixing-time was exactly pre-determined. Taking up W. E. Tatton-Brown's call for "assembler-jointers" he said that he feared that the demarcation problem in the unions would make these difficult to come by but he suggested that there was a real need for "modular building contractors" whose men would be versed in the techniques of dry construction. On the question of "closed" and "open" systems, he argued thus: in the present phase of development the advantage of modular over traditional building lies in the greater speed of erection, rather than in intrinsic cheapness of components. This speed is best realized in "closed" systems, since the manufacturers of these systems are able to ensure the delivery of all components on time. The other kind of economy inherent in modular design (i.e. the cheapening of components) can only be fully realized when the demand for modular components is sufficiently great to enable manufacturers to pass from batch- to mass-production. When this occurs it will be both feasible and desirable to pass from closed systems in which components are not generally interchangeable to a common "open" system in which they are.

LAW REPORT

Issue of Final Certificate: the Architects Liability

A recent court case caused a stir in legal and building circles. The case concerned the issue of a final certificate by the architect in respect of a job in which there remained a number of minor defects. The Court of Appeal, by a majority of two to one, concluded in favour of the architect on the ground that the house was confessedly being built to a cut price and that the architect, in interpreting the contract, may take this fact into account in issuing his certificates. This is an interesting example of what lawyers call "the new equity": that

is, of the permissibility of taking all factors into account when interpreting even the wording of such documents as the RIBA Form of Contract. Here is a report of the court case:—

A contract was drawn up in the ordinary RIBA form whereby the builder agreed to build a house for £1,910 (admittedly a low figure), the plaintiff in the action being nominated as the architect. He himself was a Fellow of the Auctioneers' Institute, but he had a qualified architect on his staff. There was an oral agreement between the plaintiff and the owner of the house, the defendant, that the former would charge a stated fee. There was later some disagreement about the amount of the fee and an action was started for it in the county court, the defendant counter-claiming for damages for alleged lack of skill and care. The counter-claim was not successful, either in the county court or in the Court of Appeal.

The contract provided, among other things, (a) that the contractor should complete the work in accordance with the directions and the reasonable satisfaction of the architect, the plaintiff being nominated as such in the contract; (b) that defects or faults appearing within the defects liability period should, on the architect's instructions, be made good by the contractor; and (c) that on the expiration of the defects liability period or on the making good of defects the architect should issue a final certificate. The specification issued under the contract required that the materials and workmanship were to be the best of their respective kinds and to the full satisfaction of the architect, who had liberty to reject. At the end of the defects liability period the plaintiff issued a final certificate. The defendant's counter-claim that the certificate had been carelessly given was rejected by the trial judge and the appeal was brought on the ground that the judge had treated the architect as entitled to disregard the specification as to how the work was to be done, and what was to be done, and had really given the architect a dispensing power to pass bad work, whereas good work (and good work only) was necessary for the performance of the contract by the builder, it being the duty of the architect, as the watch-dog on behalf of the owner, to see that work was carried out properly.

Some of the complaints about bad building work were trivial. First, it was said that pipes were not lagged before the owner went into the house. However, the lagging (which was required by the contract) was done afterwards and although at a later date 2 ft. of pipe were found to be exposed and not lagged the court accepted the evidence of the builder that he had completed this particular work throughout. Secondly, it was complained that woodworm had been found in the bathroom. But the attention of the architect was not drawn to this by the building owner, and it was not a matter which was so obvious as to be seen. The worm apparently worked its way eventually through the paint and the Court of Appeal ruled that the trial judge "could not possibly hold against the architect that he was negligent for not observing this if his attention was not drawn to it." The third matter

(Continued on page 349)

DIARY

Opera Houses. Hone Bagenal. At AA, 34, Bedford Square, W.C.1. 6.15.

APRIL 16

Colour in Buildings. D. L. Medd and H. L. Gloag. 6 p.m.

APRIL 17

Picton Street Flats. Cleeve Barr talks about AA visit. At AA, 34, Bedford Square, W.C.1. 6.15.

APRIL 18

The JOURNAL is able to illustrate exclusively this week both the winner's and the runner-up's design drawings in the recent limited American competition for an embassy building for Grosvenor Square, London. As announced in the JOURNAL for March 1, the winner was Eero Saarinen, and the runner-up was Edward D. Stone. The building, for which the US Congress have appropriated over £1,000,000, is to be tendered for by both English and American contractors, and it is hoped to start construction next January. As the first contemporary building—if in a very res-trained way—in this part of Mayfair, it will provide a welcome example for future development in an area unduly wedded to neo-Georgian commonplaceness.

WINNING DESIGN FOR AMERICAN EMBASSY IN LONDON

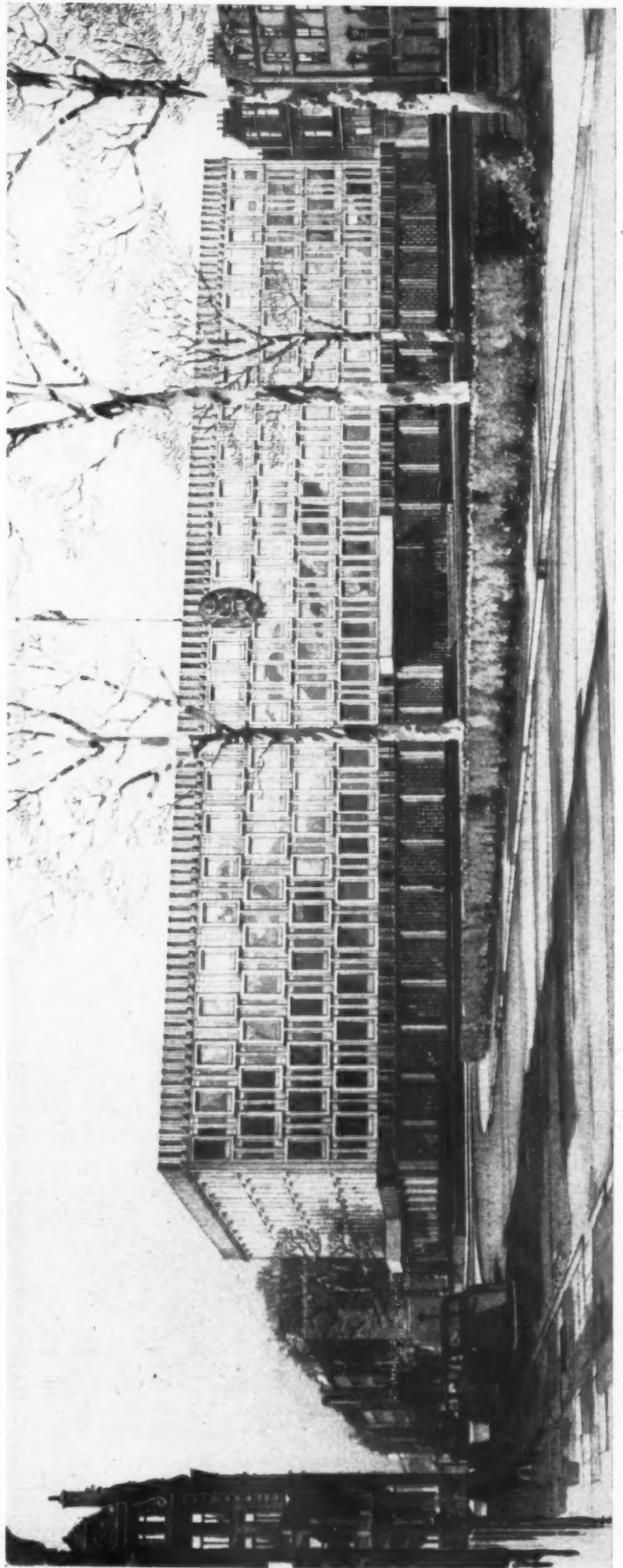
The US Government appointed Robert W. McLaughlin, of Princeton, N.J., to prepare the competition, and invited the following architects to compete: Anderson and Beckwith, Ernest J. Kump, Eero Saarinen, José Luis Sert, Hugh Stubbins, William W. Wurster and Minoru Yamasaki. The Government also appointed a Jury of Award of the following: Pietro Belluschi, FAIA; George Bain Cummings, FAIA; Loy W. Henderson, Deputy Under Secretary of State; William P. Hughes, Director of Foreign Buildings; Livingston T. Merchant, Assistant Secretary of State; Henry R. Shepley, FAIA, and Ralph T. Walker, FAIA. The jury had to assess unsigned drawings—as is customary over here—but had to select the winner by secret ballot, and within 21 days of the date for the submission of drawings. All the competitors were paid a fixed fee of \$4,000, which had to cover an obligatory visit to the site. The competition conditions contained a statement of architectural policy, which, in view of the criticism which has been levelled, on the whole unjustly, at US Embassy building on the Continent, we quote in full as an example of extreme tact. "The policy shall be to provide requisite and adequate facilities in an architectural style and form which is distinguished and will reflect credit on the United States, will create goodwill by intelligent appreciation, recognition and use of the architecture appropriate to the site and country. Major emphasis should be placed on the creation of good-

will in the respective countries by design of buildings and distinguished architectural quality rather than adherence to any given style of architecture. Design shall adhere to established good practice and, to the extent practical, use construction techniques, materials, and equipment, of proven merit and reliability. Buildings shall be dignified and economical to build, operate and maintain." The conditions further stated: "The building will occupy and will visually establish one side of the Square. Its visual relationship to the other three sides as well as to the surrounding area of London is of the utmost importance." And again: "Careful consideration should be given to the relation of the building to Grosvenor Square and surrounding London as far as scale and materials are concerned. This does not imply copying anything. The building should represent the United States at this time; it will form one side of Grosvenor Square and be of great importance in relation to London. This program calls for a minimum of detailed planning of internal spaces, so as to permit maximum study of the form and character of the American Embassy in London." After such admonition it is not surprising that Saarinen's winning design is an unemphatic, symmetrical building, only five storeys high, in contrast with the nearby seven- and eight-storey neo-Georgian buildings beloved by the conservative surveyors of the Duke of Westminster. The site has been acquired from the Duke's estate on

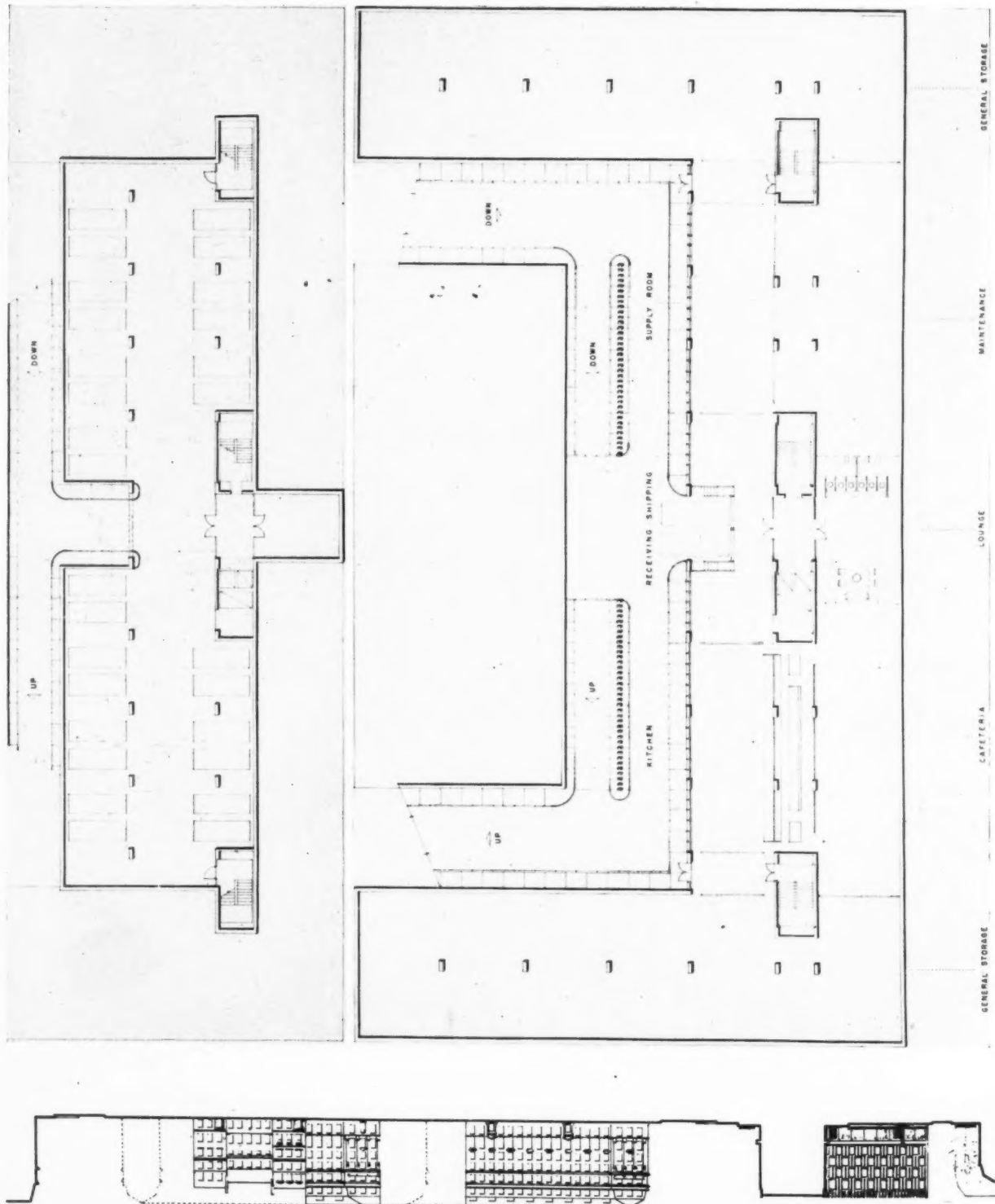
a 999 year lease. The proposed Embassy, the competition conditions stated, was fundamentally an office building, and a maximum of 150,000 square feet of floor space was to be provided. The building should be divisible into three areas, each requiring a separate entrance. These are: first, an area of not more than 121,500 square feet, called a central functional area, which should include an entrance lobby of 1,000 square feet, offices for the Ambassador and staff (1,675 square feet), for the Deputy Chief of Mission (800 square feet), for the Political Counsellor (2,000 square feet) and a conference room of 600 square feet. The Ambassador's office should be planned so as to be reached directly, or through private corridors, from all the offices listed above, which constitutes a working unit. This unit should not be on the ground floor, and the first floor was not desirable. There should be two floors, or more, over the Ambassador's floor. Second: an area of 15,000 square feet for the consular and visa area. Third, an area of 13,500 square feet for the US information service. A basement should be provided for storage, service, cafeteria and facilities other than office space, and a sub-basement should be provided for parking 25 motor-cars. The building is not to be air-conditioned. Materials should be procured as far as possible in England. (Saarinen is facing his frames with Portland Stone.) The height should not exceed 100 ft.

EERO SAARINEN'S WINNING DESIGN FOR THE NEW US EMBASSY IN GROSVENOR SQUARE

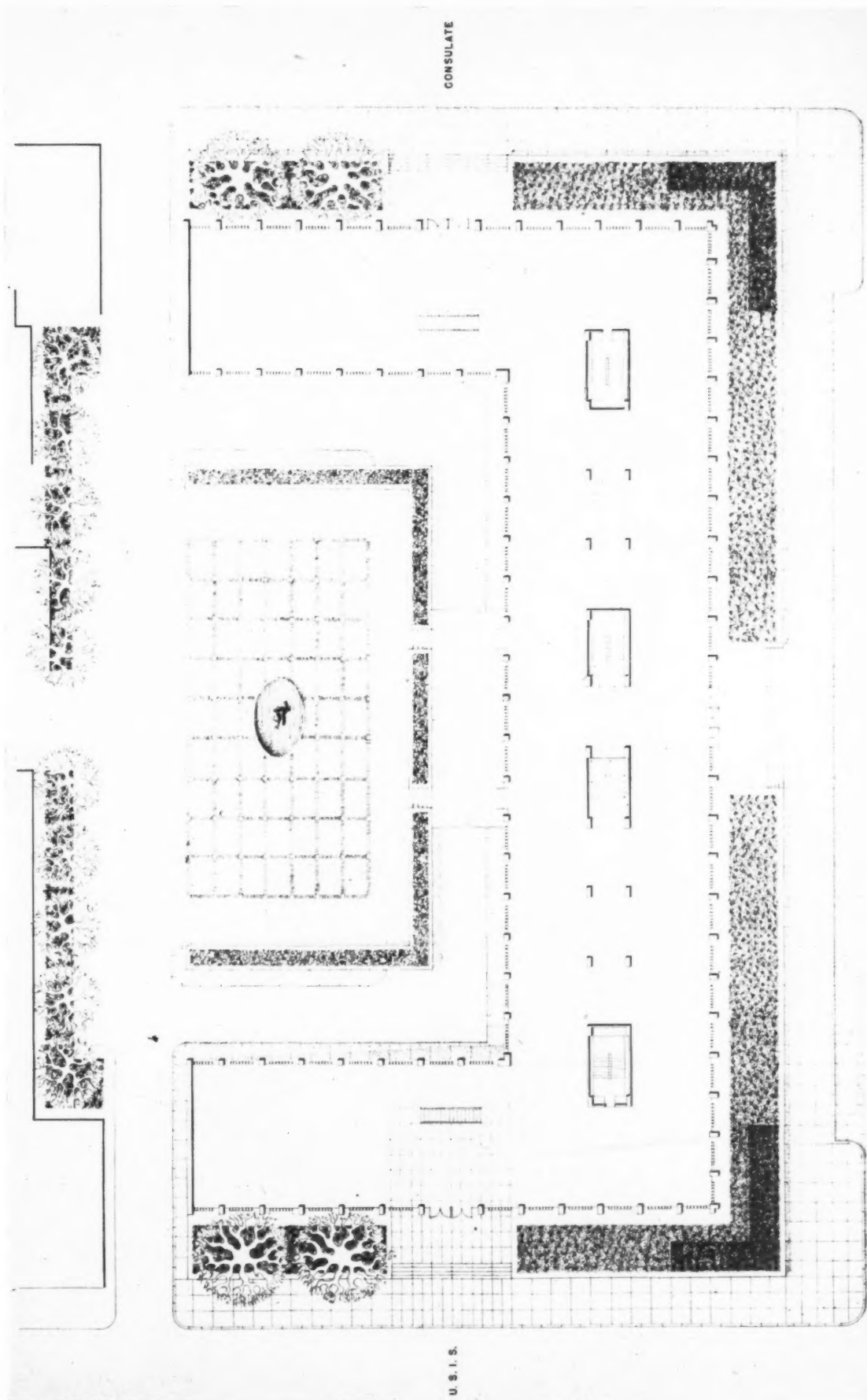
The perspective below, first reproduced in the JOURNAL of March 1, shows Saarinen's design for a new American Embassy building on the west side of Grosvenor Square. It is 71 ft. high, the frontage is 330 ft., and at each end two wings project toward the rear to a depth of 250 ft. The floor area provided is 146,007 sq. ft. The column 2,554,279 cub. ft. Saarinen suggests that the building could be enlarged by the addition of a third wing to the rear, on the central axis of the building. This would provide a further 23,000 to 35,000 sq. ft. of floor area. The site plan, right, shows the new building sited at the top, the west side of Grosvenor Square. The north, south and east sides are "indicated according to the realization of the estate of the Duke of Westminster's ten-year programme." The construction is best indicated by the part section shown on page 345. Saarinen states: "The design uses an English pre-cast structural system. The exterior wall consists of pre-cast box frames. They support pre-stressed T-beams which are bonded laterally by and act structurally with a concrete floor slab poured in place. Materials: blocks of Portland stone form the grille in front of the concrete framework on the office floors. The balcony frieze, with seals of the States in low relief, and the cornice are sand-moulded, black oxidized bronze. The great seal of the United States and the first floor protective grilles are natural bronze."

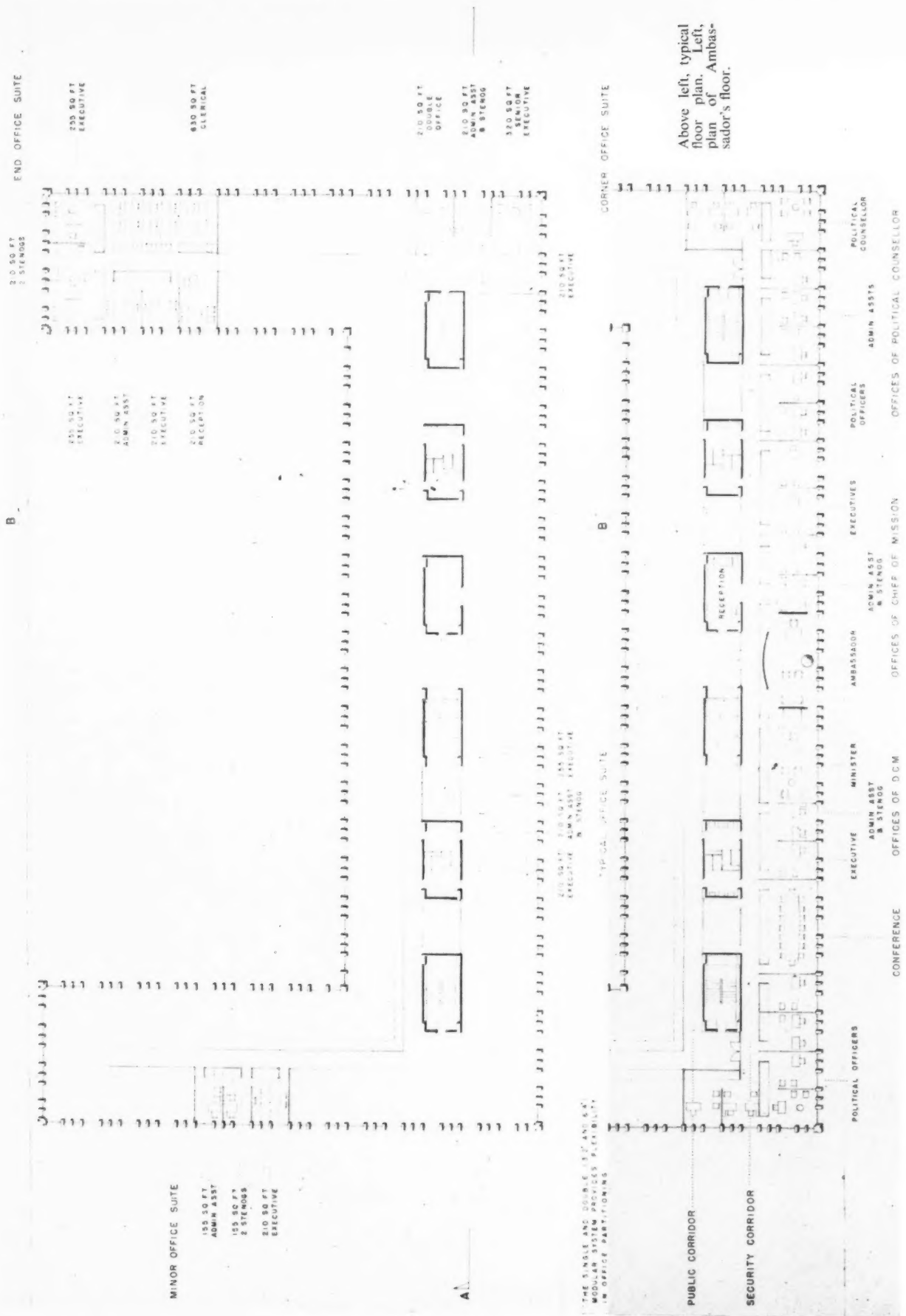


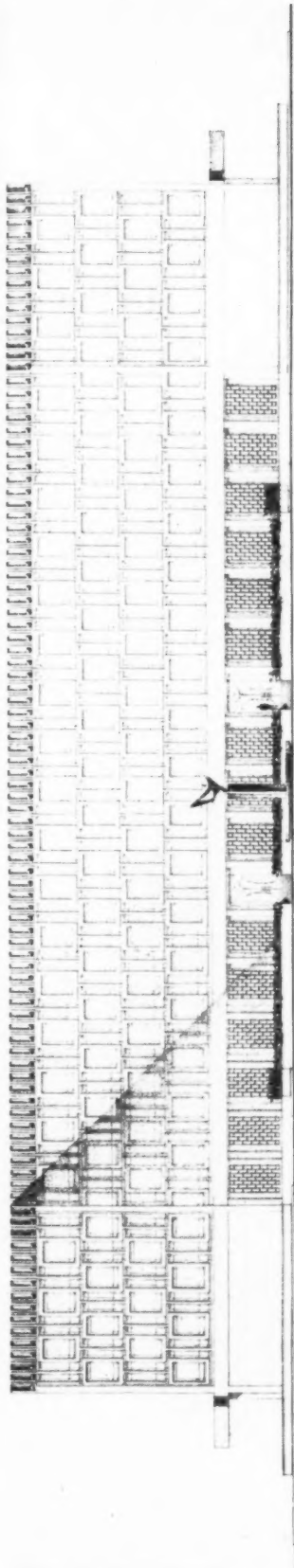
WINNING
DESIGN
USA EMBASSY
COMPETITION



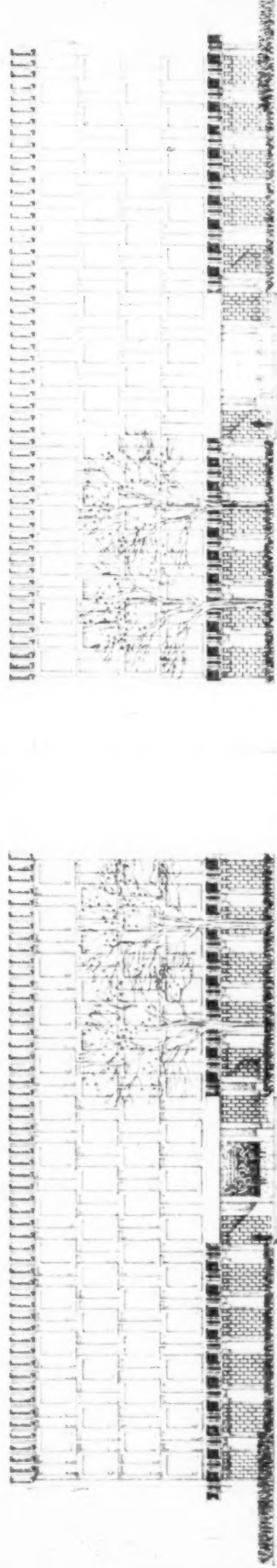
Above left, the sub-basement, left, the basement. Extreme left, and above are longitudinal and cross-section through Grosvenor Square, showing the size of the new embassy in relation to the existing buildings. Opposite page, the ground floor plan.





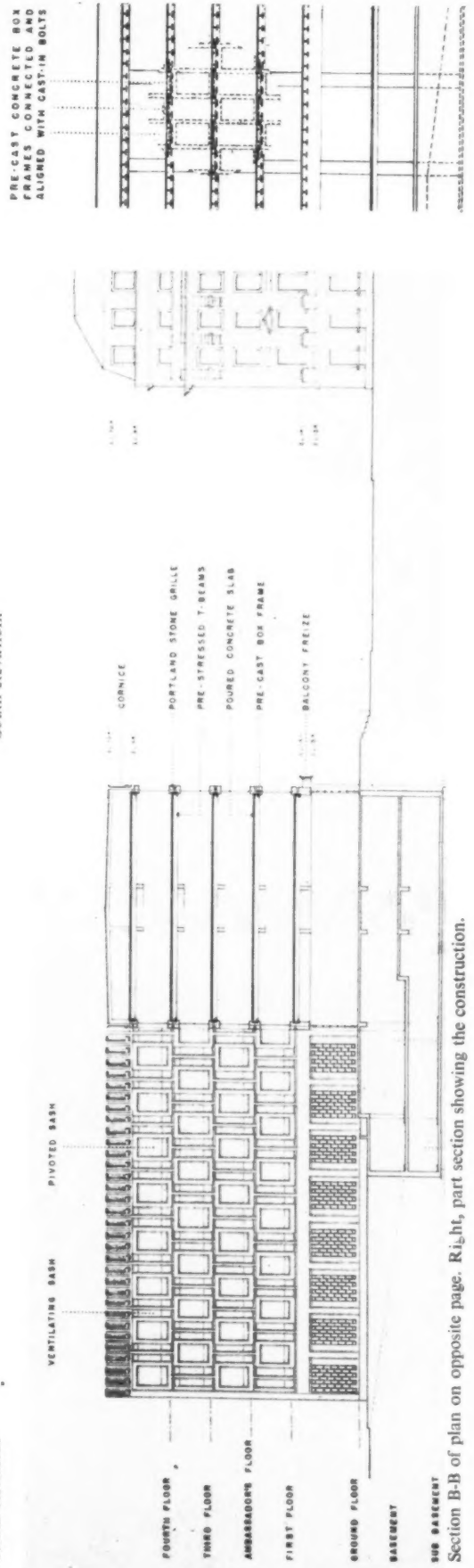


West elevation.



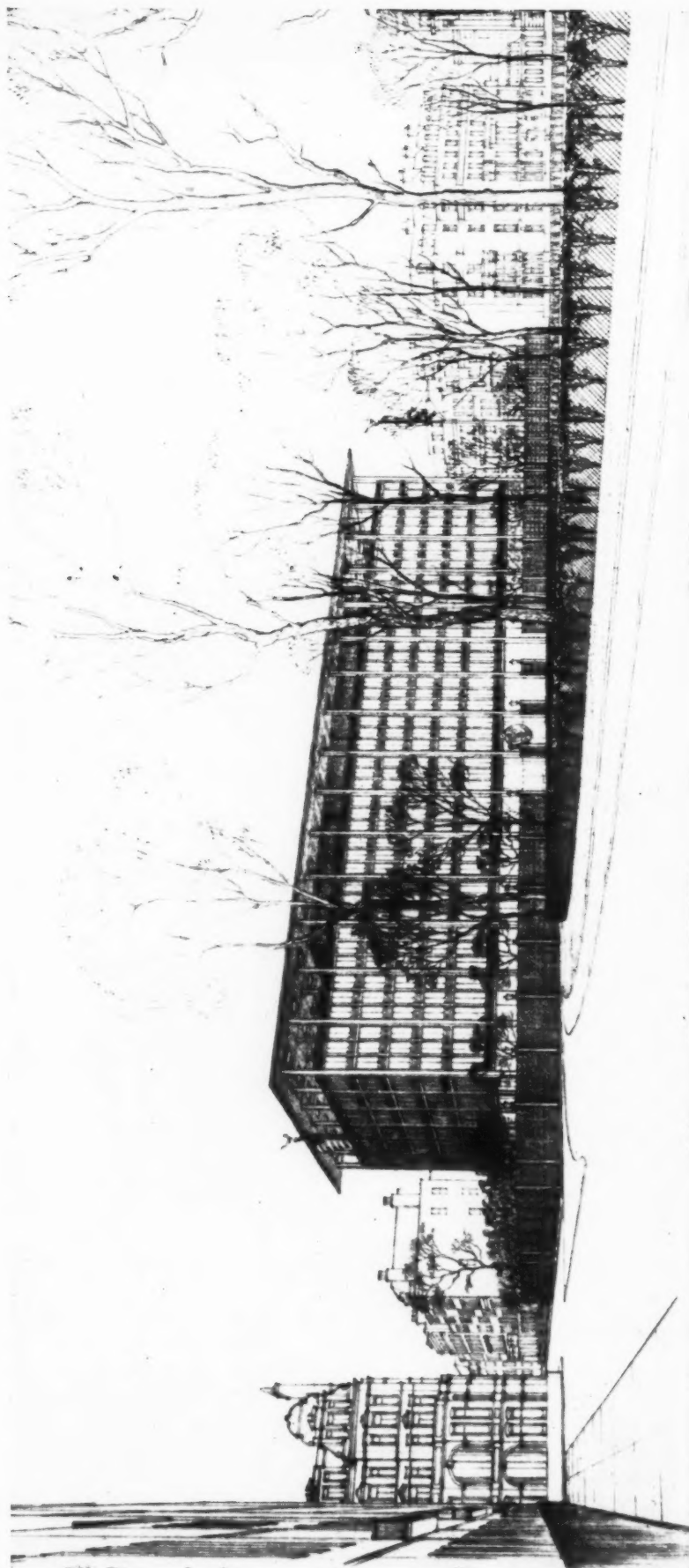
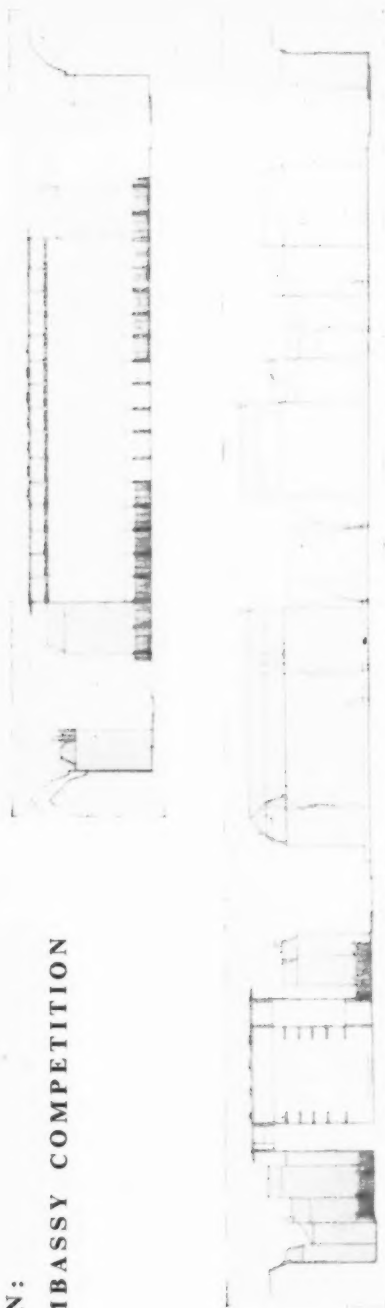
North elevation.

South elevation.

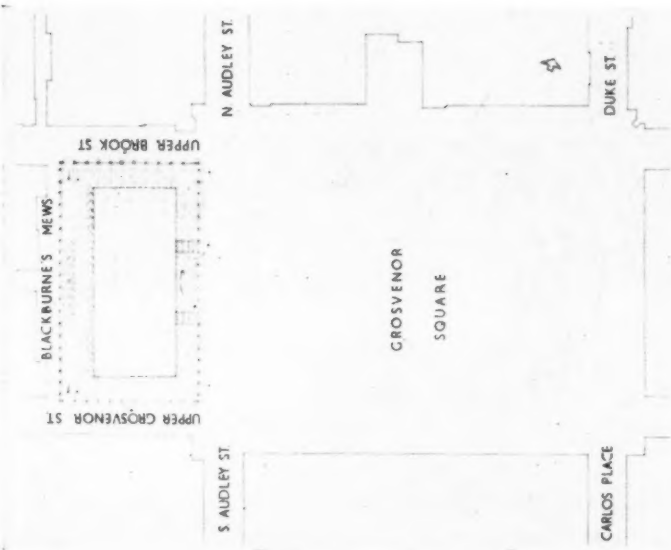


EDWARD D. STONE'S DESIGN: RUNNER-UP IN THE USA EMBASSY COMPETITION

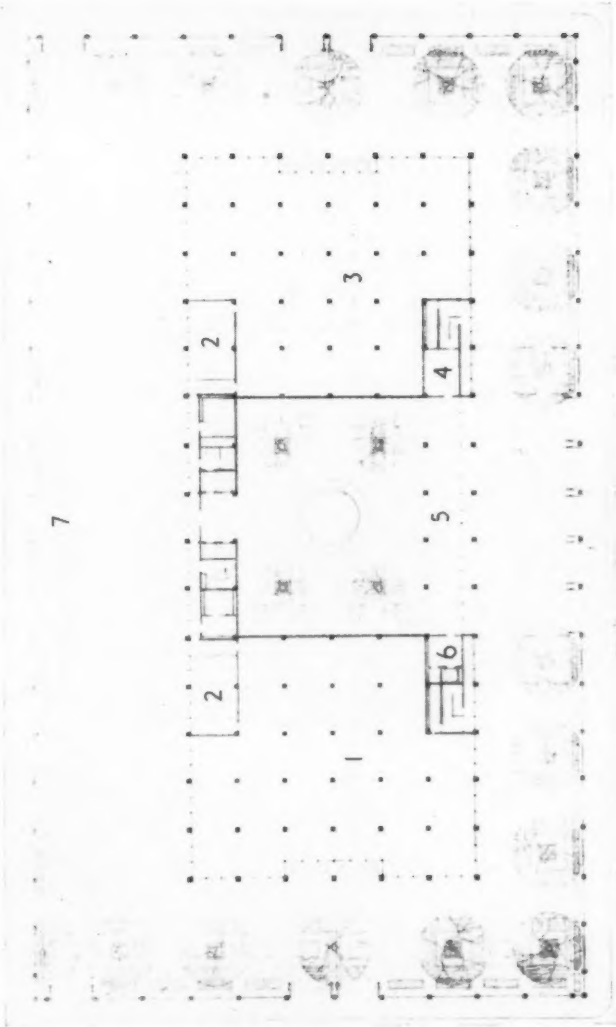
The runner-up in the recent competition for the US Embassy building in Grosvenor Square was Edward D. Stone. Below is a perspective view from the south-east. On the right are cross and longitudinal sections through the square, showing the proposed embassy in relationship to existing buildings.



Left, site plan.
Right, ground
floor plan.

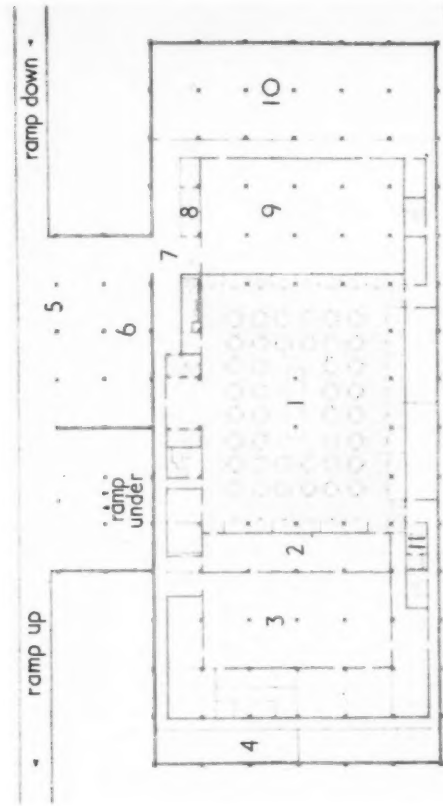


- KEY
- 1. United States Information Service
 - 2. Private office
 - 3. Consular and visa area
 - 4. Guards
 - 5. Entrance lobby
 - 6. Ambassador's elevator
 - 7. Parking



Sub-basement plan.

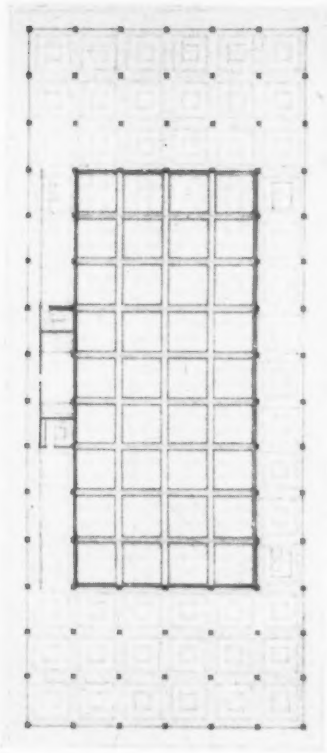
- KEY
- 1. 25 automobiles
 - 2. Automobile landing
 - 3. Ambassador's elevator
 - 4. Chauffeurs
 - 5. Control
 - 6. Automobile shop and supplies



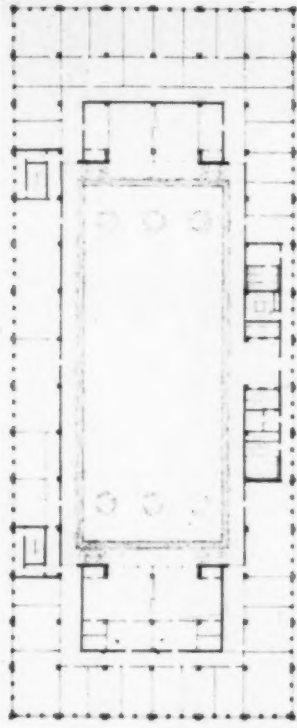
Basement plan.

- KEY
- 1. Dining
 - 2. Serving
 - 3. Kitchen
 - 4. Lockers
 - 5. Grille
 - 6. Loading platform
 - 7. Receiving
 - 8. Office
 - 9. Mechanical
 - 10. Storage shops
 - 11. Ambassador's elevator

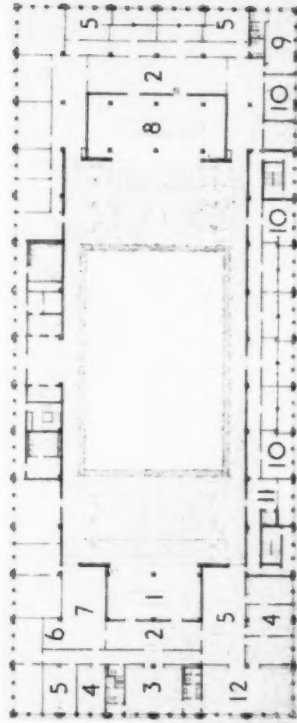
USA EMBASSY COMPETITION



Roof deck



Typical floor plan



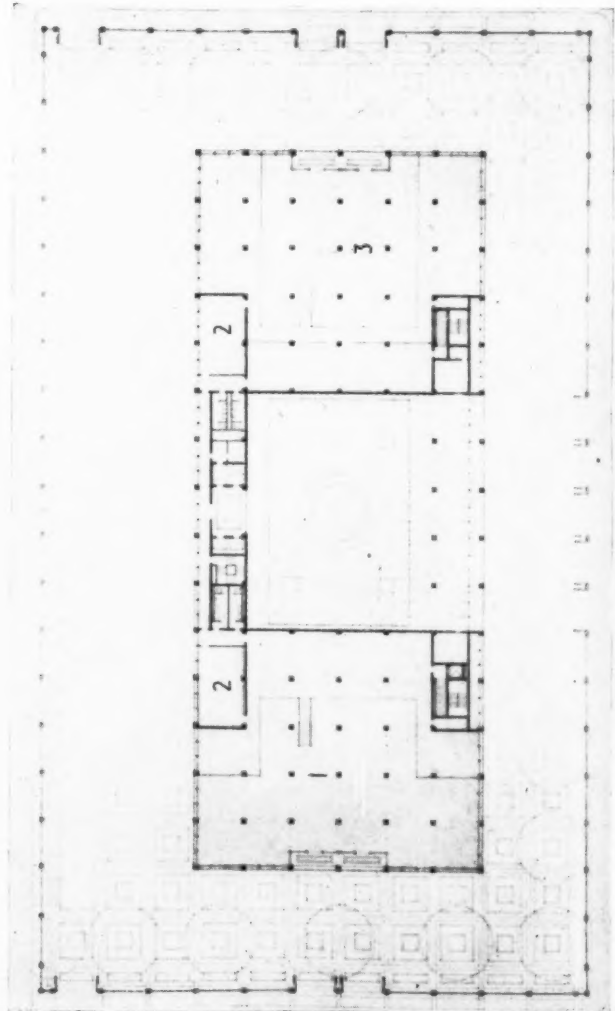
Third floor plan

- KEY
- 1. United States Information Service
 - 2. Private office
 - 3. Consular and visa area
 - 4. Executive
 - 5. Administrative assistant
 - 6. Coats
 - 7. Reception
 - 8. General conference
 - 9. Political Counselor
 - 10. Political officers
 - 11. Ambassador's elevator
 - 12. Ambassador

Above, longitudinal section, showing the top-lit central court which rises through all floors.
Below, the first-floor plan.

KEY

- 1. United States Information Service
- 2. Private office
- 3. Consular and visa area



News (Continued from page 339)

was the paintwork and the plastering. The trial judge took the view that the standard of paint-work was moderate. He had inspected the house and had taken into account the fact that the paint had been on for two years, and that there were only two coats of paint.

The trial judge looked at the matter in this way: "There are certain complaints that are made which complaints really amount to this, that the architect did not supervise properly and allowed the builder to get away with a certain amount of shoddy work. I think that there is no complaint that does not come under that head in one way or another—at any rate the painting, plastering and exterior is not admittedly as good as it could be. I am not at all sure one might not say 'not as good as it should be'. One must remember that, as Mr. Cotton very properly put it to me, they were building down to a price. That must mean that a certain tolerance must be expected. I think that this accounts for a very great deal of the complaints, if not indeed for all of them." As the judge said later, there were imperfections in the house, as he thought there were in practically every house, but in very few matters did it seem to him that there was anything like the position where he could say, "Their architect failed here—he ought to have noticed this—or he ought to have ordered the

builder to put this right." The majority of the Court of Appeal thought that such a judicial approach was not wrong. Whether some other architect in the same circumstances might have come to a different conclusion from that reached by the plaintiff did not necessarily matter.

In the judge's view the plaintiff had not been as hard on the builder as he might have been, or as another architect might have been, but the plaintiff "never passed anything 'rank bad'", and could not be found guilty of professional negligence.

But a fourth matter of complaint by the house owner raised a slightly different issue from that raised by the previous three. The plaintiff was obviously not simply backing up the builder at every stage and doing nothing for his client because he did draw the builder's attention to certain things which needed to be put right. His attention was drawn to a certain number of stained tiles, the stains having no doubt been caused by the builder's men dropping paraffin on the tiles. The stains were not very bad, but they were noticeable. When the question of dealing with the tiles arose the builder came round with some other tiles with a view to replacing the marked ones, but the tiles which he then brought did not match to the satisfaction of the owner. The tiles were taken away and nothing more was done. The final certificate was given without anything more being done.

None the less the decision of the Court of Appeal was that the plaintiff had properly certified that he had been reasonably satisfied with what had been done by the builder, although all that had been done by the builder was to do the best he could to match the tiles which had previously been laid. It seemed a little odd to one of the members of the Court that there were no tiles left over, or that it was not possible to match tiles of a well-known make, like these, without difficulty. An architect will know better than a lawyer whether this is really odd.

The crux of this important decision of the Court of Appeal is that, when measuring the finish of building work, it is proper to have in mind the kind of house that was being built, and the price of that house. It seemed to Lord Justice Morris "only natural that where there is a house that is being built at a very great expense, and another house that is being built at a very moderate price, one would expect different quality in the work." At the same time his lordship hoped that nothing in the decision would give any countenance to the view that a sort of general dispensing power is given to the architect under the standard RIBA contract. But the minority member of the Court, Lord Justice Denning, thought that the decision amounted to precisely that. Perhaps many who are not lawyers will think so too.

OFFICES AT CHISWELL STREET LONDON, E.C.1



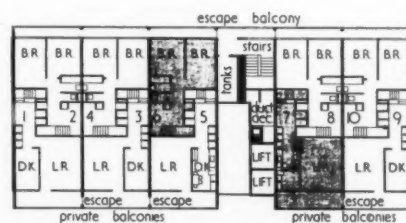
This new office block, above, at the junction of Chiswell Street and Bunhill Row, E.C.1, for the Friendly House Property Investment Company Limited, is an extension of their existing building on the adjoining site. The building has been designed by Cecil C. Handisyde, in association with Hammett and Norton. It has a total floor area of 47,100 sq. ft. The structure is steel framed with hollow pot floors. The upper floors, which are supported on white circular terrazzo columns, have curtain wall cladding in a Portland stone frame. The offices will be fully illustrated in a later issue. The general contractors are Bovis Ltd.

L.C.C. TIDEY STREET NEIGHBOURHOOD

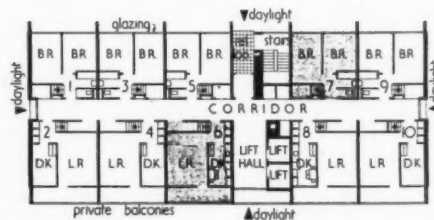


The scheme for the Tidey Street area in Poplar, which was illustrated by a model photograph and briefly described in last week's JOURNAL, will be a further step in the development of the Stepney-Poplar redevelopment area. The redevelopment area covers 1,495 acres and has been planned as a series of twelve neighbourhoods, varying in size from 2,200 to 10,700 people. Tidey Street forms part of the eastern half of neighbourhood 7, immediately to the north of Lansbury. The planning of the neighbourhood unit and the constructional work are under the direction of Dr. J. L. Martin, architect to the council, assisted by H. J. Whitfield Lewis, Principal Housing Architect, M. C. L. Powell, Assistant Housing Architect, A. J. M. Tolhurst, architect-in-charge, Mrs. M. O. Stephen of the Housing Division, J. H. Humphreys, Senior Structural engineer, F. Barford and E. W. Bunn of the Structural Engineering Division, L. W. Lane, Senior Planning Officer, P. Johnson-Marshall and G. C. Logie, Group Planning Officers, W. G. Bor and Mrs. A. M. McEwen of the Planning Division. The photograph above is of the model from the south-east, with the 19-storey maisonette block, which is illustrated on the opposite page, in the foreground. It was considered desirable that the housing should generally be low in height and that as many dwellings as possible should have private gardens. It was also required that dwellings should look away from the Bow Common gas-works to the west of the site on to gardens or across open spaces. These considerations and the need to provide ample space for garages, estate workshops, etc., and at the same time attain a housing density of 136 persons per acre, made it essential to plan some of the accommodation in an unusually tall building. The scheme therefore includes one 19-storey block of cross-over maisonettes, mainly open on the ground floor. The block is planned so that all living rooms face south, away from the gas-works and railway lines, and obtain an excellent view over the docks and river, and beyond to the hills and countryside of Kent and Surrey. In the planning of the 19-storey block a new cross-over 3-room maisonette plan has

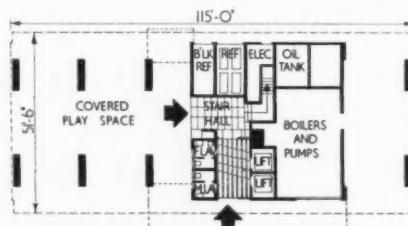
been evolved, in which two dwellings are grouped in a unit two-storeys high, with a frontage of 19 ft. 1 in. between crosswalls. Although each dwelling has an actual clear internal width of 18 ft. 6 in. the provision of two dwellings in a two-storey unit makes the effective frontage per dwelling 9 ft. 6½ in.



Typical plan, floors 2-18



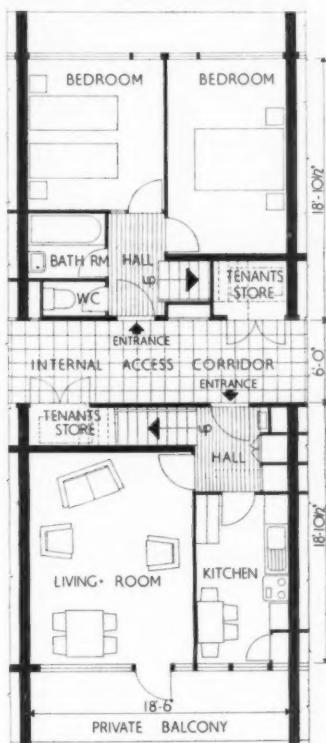
Typical plan, floors 1-17



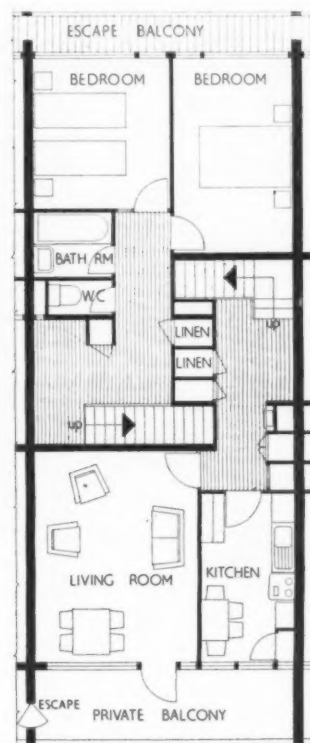
Ground floor plan [Scale: 1/4" = 1' 0"]

This compares favourably with previous narrow-frontage maisonettes planned as one dwelling to a height of two storeys on a frontage of 12 ft. 3½ in. The dwellings are approached from short, well-lit and ventilated internal access corridors, which have a maximum distance of 28 ft. from a source of natural light. One dwelling has the living room and dining-kitchen at internal access corridor level, the bedrooms and bathroom on the upper floor being approached by the internal staircase, over and across the access corridor. The other dwelling is the reverse of this. Another advantage of this method of planning is that noisy rooms, living rooms and kitchens, are over each other, and the same applies to quiet rooms, i.e. bedrooms. The planning of kitchens, bathrooms, etc., over each other makes for simplicity of services and allows for full use of ducts. The internal bathrooms and w.c.'s will have mechanical ventilation. Each dwelling will be centrally heated by convectors and hot water will be supplied from the oil-fired central heating plant. For the provision of cold water, storage tanks will be installed at different levels throughout the building to minimise and balance pressures. The block will be of reinforced concrete cross wall construction, with concrete floors and pile foundations. The cross walls will be 7-in. thick. The building, which has 18 floors of living accommodation,

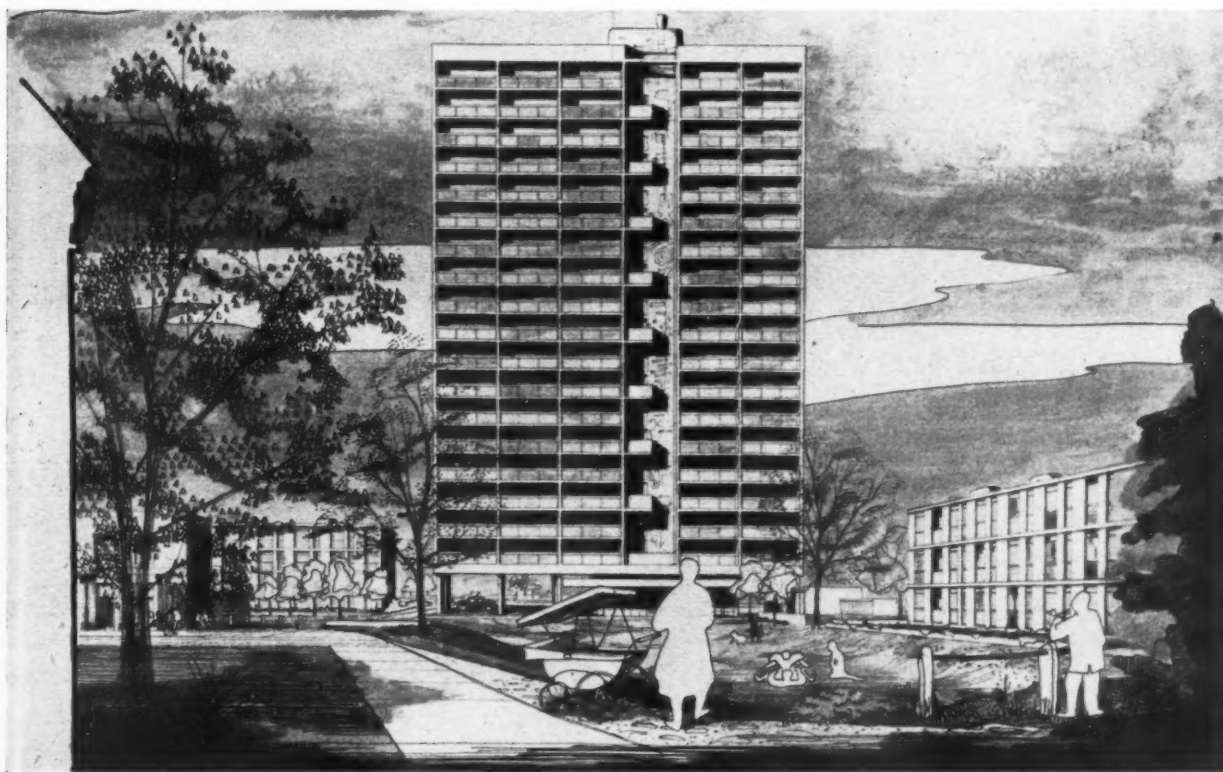
has an overall plan size of 114 ft. by 52 ft. and contains 90 three-room dwellings and 90 tenants' stores. Refuse chutes are accommodated in the open lobby linking the internal access corridors with the staircase. Two high-speed lifts will deliver at every access corridor level. The sketch below shows the south facade of the 19-storey block.



Typical plan at access corridor level
[Scale: ¼" = 1' 0"]



Typical plan at intermediate floor level



VILLA FOR LOW-GRADE PATIENTS AT HOSPITAL FOR



This "villa" for 52 of the lowest-grade mentally-deficient patients was designed for the East Anglian Regional Hospital Board by its architect, Guy Aldis. (Deputy regional architect, W. K. Ferguson; senior assistant architect in charge, R. E. Manwaring). The left-hand wing in the picture above is the day room (seen also on the left: note specially-designed furniture to prevent patients damaging themselves). The kitchen lies beyond the day room. The wing nearest the camera houses one of the two dormitories (another projects on the other side). Both are supervised at night by a nurse who occupies the kiosk shown bottom left, from which all electrical switches are operated. (Note: the glass-brick and metal windows were provided to cut down maintenance costs in a building where the patients are destructive). Ample lavatory space, with little privacy, was required, (below),

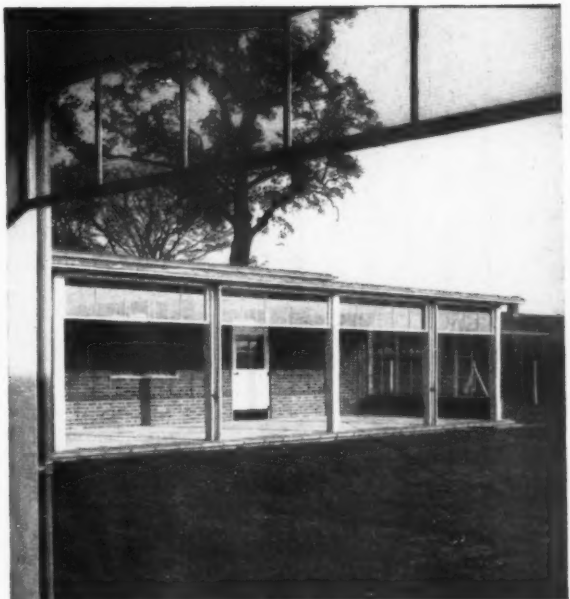
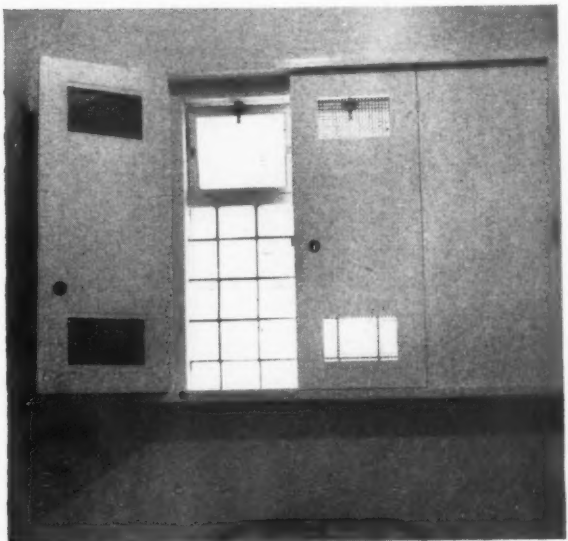
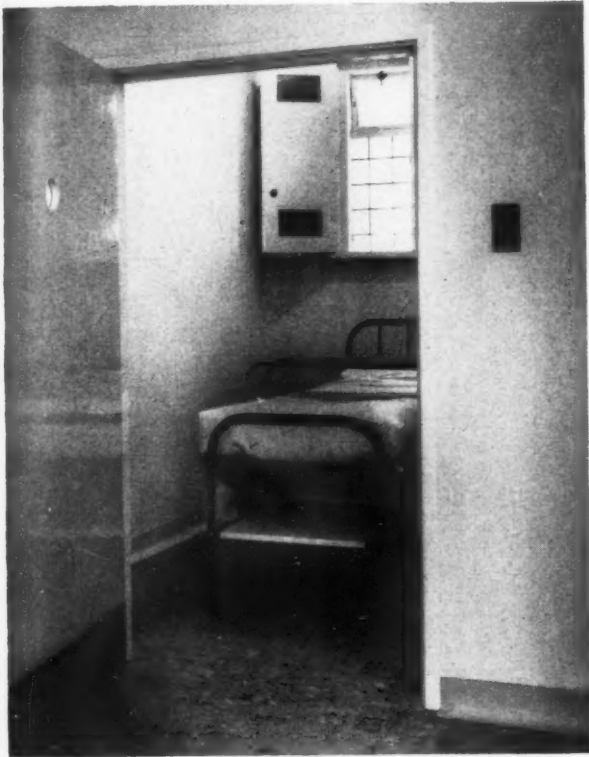


and the architects had to provide arrangements for frequent hosing down of this area. On the opposite page, top left and right, are photographs of one of the two quiet rooms in which the more noisy patients have to be placed at times. Beneath these pictures are, left, one of the lock-back doors which separate the

THE MENTALLY DEFICIENT, LITTLE PLUMSTEAD, NORFOLK

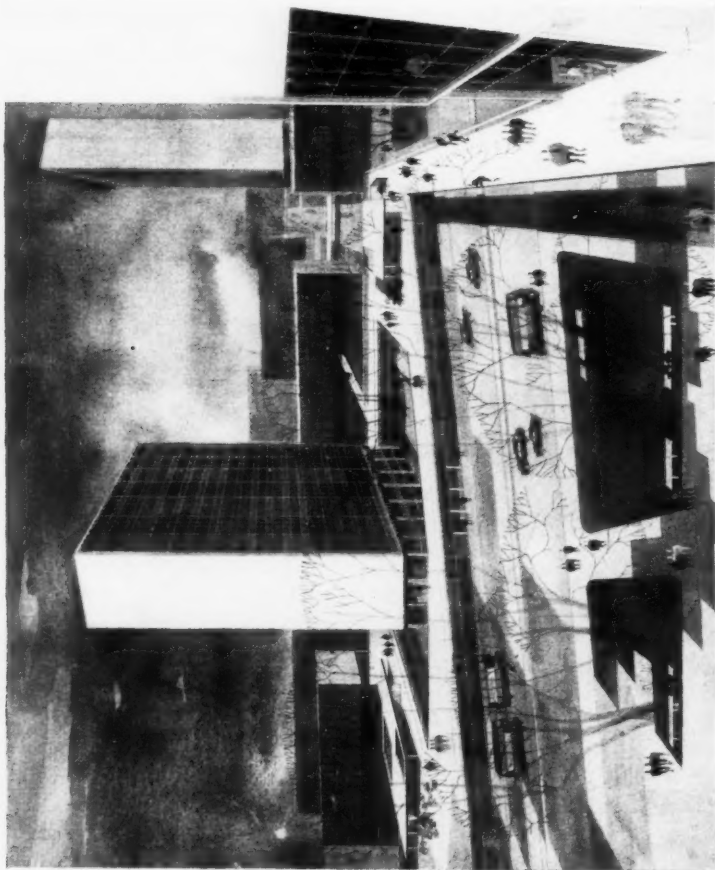
day room from the dormitory area and, right, one of the terraces outside a dormitory. The dormitories and the day room have radiant-heated floors; remaining rooms are heated by low-temperature heating panels. Crawlways and floor ducts have been constructed to carry the service mains and all pipes have been placed in vertical chases to stop interference by destructive patients. The heating chamber is in the basement. The walls

are of 11-in. cavity and 13½-in. solid load-bearing brickwork, with reinforced concrete roofs over the sanitary blocks, dormitory and kitchen block. The day room has a copper roof on wood-wool slabs supported on eight steel trusses. The concrete roofs are insulated with 2-in. wood-wool slabs and foam slag screeds; the roof finish is of three-layer bituminous roofing. The roofs over the verandah are reinforced concrete, supported on half Portal frames. The ceiling over the day room is suspended from the metal trusses and consists of ¾-in. insulation board, with chamfered edges, in 2-ft. by 2-ft. panels. Other ceilings are plastered. The floors generally are 9-in. by 9-in. by ¾-in. thermoplastic tiles; the kitchen and toilet blocks have 9-in. by 9-in. by ¾-in. heather-brown quarry tiles.



MORE ABOUT THE ARBICAN SCHEME

The LCC and the City Corporation have just issued this perspective and details of their joint plan for the Barbican area (see also plan and photograph in issue for March 8-15):—The scheme provides primarily for 19.5 acres of offices, 3.4 acres of commerce, 11.25 acres of residential development and approximately 6 acres of open space. A wide range of ancillary uses has also been suggested, depending partly on the wishes and needs of the various developers. The office buildings are proposed mainly in the form of tall towers on the west, south and east of the area, all surrounded by plenty of light and air. Each of the towers rises from a generous site (unlike those of American cities), most of which will be covered by a platform or slab which will consist of one high or two low storeys above ground and two storeys below ground. These platforms will contain entrance halls, shopping terraces and arcades, showrooms, cafes, restaurants, public houses and other similar uses. Generous space can also be provided for garden and roof terraces, and great scope is thus given for imaginative architecture. It is also suggested that there should be pedestrian ways on and between all sites at an upper level. The siting of the office towers has been arranged so that the highest ones are furthest away from St. Paul's, and also adjacent to the underground stations of Aldersgate and Moorgate (which have a considerable additional passenger-carrying capacity), while the lower ones are on both sides of Route 11, thereby opening up this important new thoroughfare, so as to give a fine feeling of space and openness. The residential area (which could be expanded or contracted as may ultimately be decided) is centred around St. Giles' Church, mainly with six-storey maisonettes in traditional squares. This not only gives a precinctual atmosphere, but takes advantage of the proposed open space around the church and along the bastions of the Roman Wall. Residential use, largely in the form of tall towers, is also suggested to the north between the Metropolitan railway and the Barbican so that full advantage can be taken of the open space which will be created when the railway has been covered over. Part of this residential land could, of course, be diverted to educational needs, should it be thought necessary, to provide schools within the area. Full provision is to be made in the scheme for garages, car parking, shopping, cafes, pubs and other community facilities. A public open space has already been proposed in the development plan for the area adjacent to the Roman Wall bastions south of St. Giles, and a large new open space could be created over the Metropolitan railway if it were roofed over. Also, the proposed tower form of development would enable a number of new private open spaces and roof terraces to be created, which should all give a greenness to the scheme comparable with

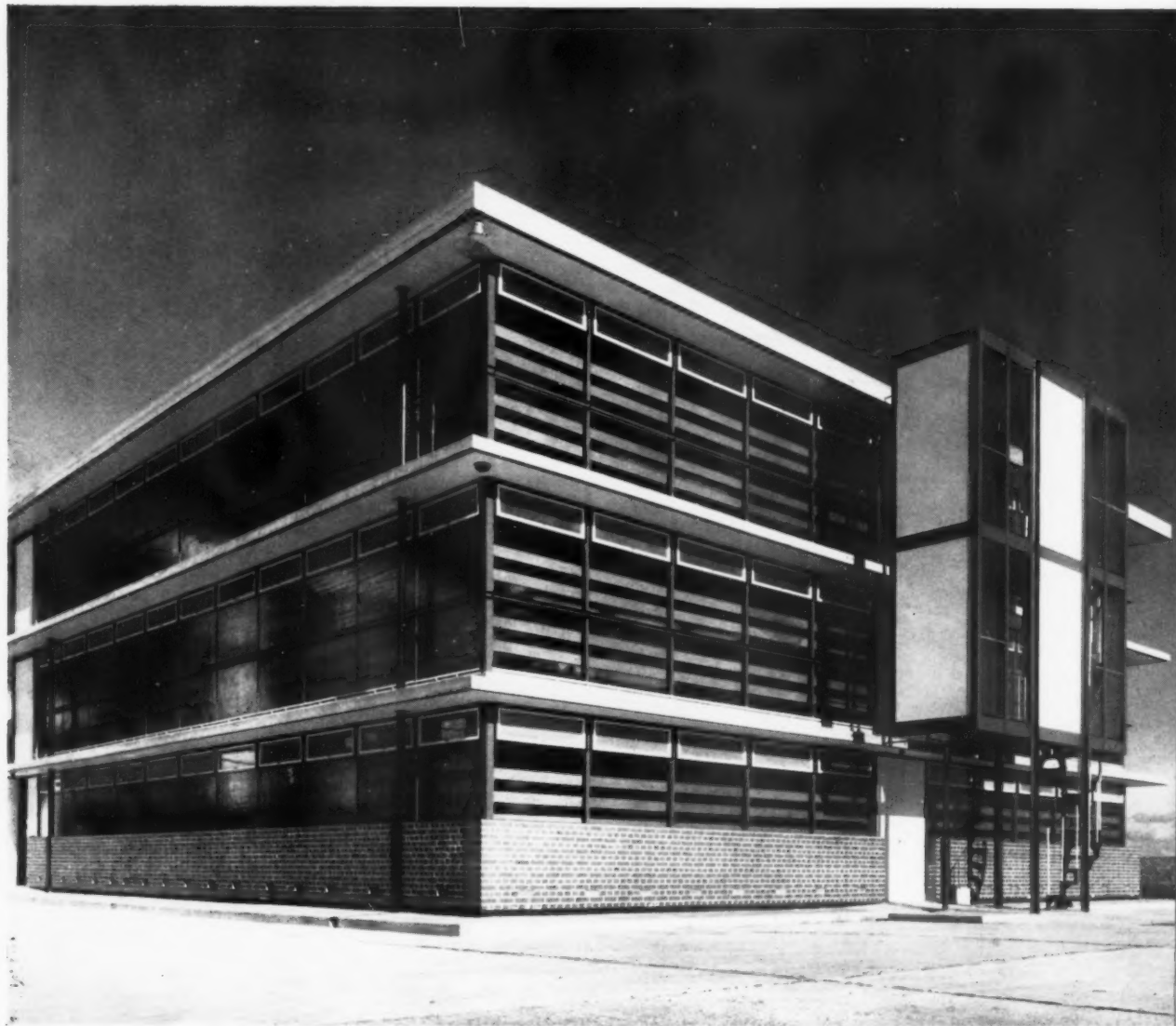


the Temple or the Inns of Court. Development is being co-ordinated with the LCC's comprehensive development area of Bunhill Fields. The scheme has been prepared jointly by the following: LONDON COUNTY COUNCIL. Dr. J. L. Martin, Architect to the Council; F. G. West, Deputy Architect; the Senior Planning Officer, A. G. Ling (until April, 1955), L. W. Lane (from April, 1955); Reconstruction Group Planning Officer, P. Johnson-Marshall. In charge of the Comprehensive Area, G. C. Logie. In charge of the Detailed Scheme, R. H. King; assisted by W. Kay and S. Sturdy. CORPORATION OF THE CITY OF LONDON. A. H. Mealand, City Planning Officer; H. H. Jackson, Deputy City Planning Officer; Principal Planning Assistant (Civic Design), A. D. Knapp (until August, 1955), S. A. E. Johnson (after August, 1955); Principal Planning Assistant (Development Control), L. P. Brooks; assisted by H. Blacknioki.

and the same companies with prices listed by 11, DICKINSON,

WORKING DETAIL**WALLS AND PARTITIONS: 28**

GLAZED WALL, SEED WAREHOUSE AT WITHAM, ESSEX

Chamberlin, Powell and Bon, architects

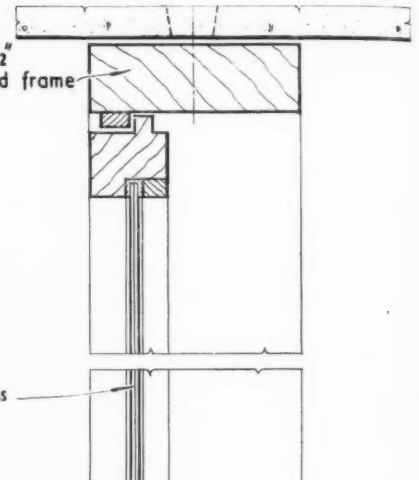
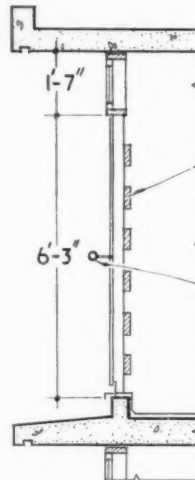
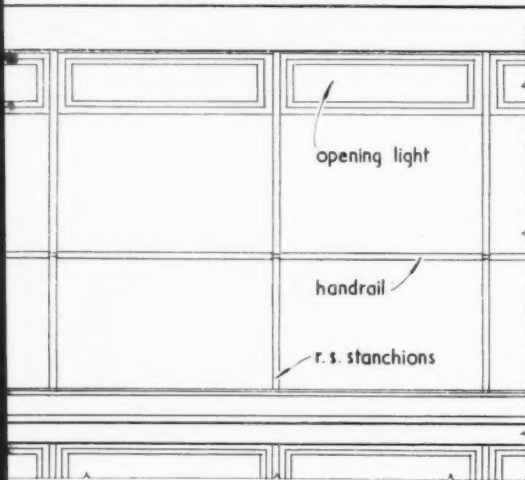
The chief determining factor was the need to keep the seeds dry and well ventilated. It was found that the method chosen—walls clad with heat-resistant glass with natural ventilation top and bottom—was cheaper than the more usual solid concrete, owing to the saving in weight on the structure. A common fault in seed warehouses of solid construction is that condensation forms where the sacks lie against the walls. Here the fixing of guard rails to the inside of the framing prevents this by allowing a free circulation of air between the sacks and the wall surface. The wide eaves screen the ventilators against rain penetration and these and the handrail assist building maintenance. The structural metalwork is shot-blasted, chromate-sprayed and painted (four coats) crimson, the fixed timber frames are painted dark blue and the opening lights are painted white.

WORKING DETAIL

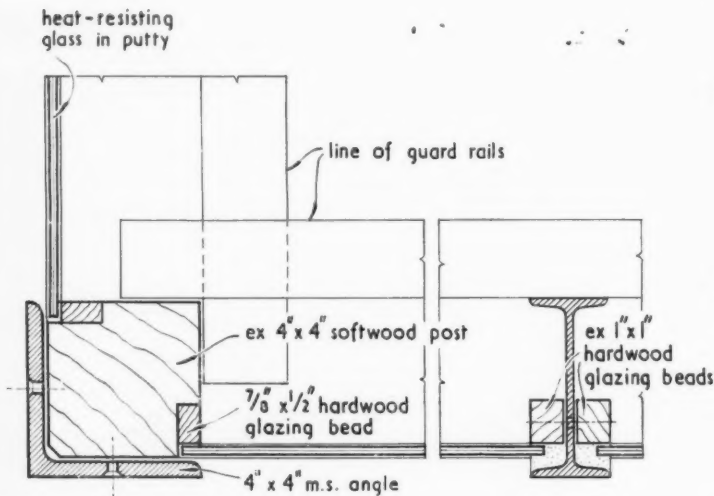
GLAZED WALL, SEED WAREHOUSE AT WITHAM, ESSEX

Chamberlin, Powell and Bon, architects

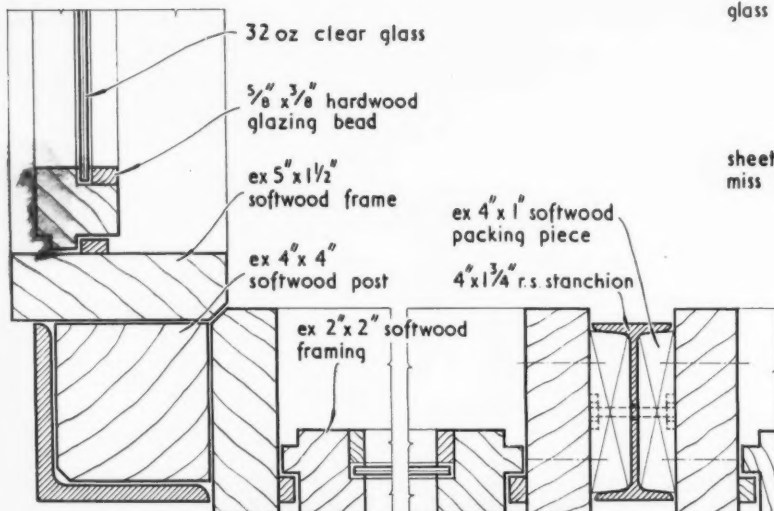
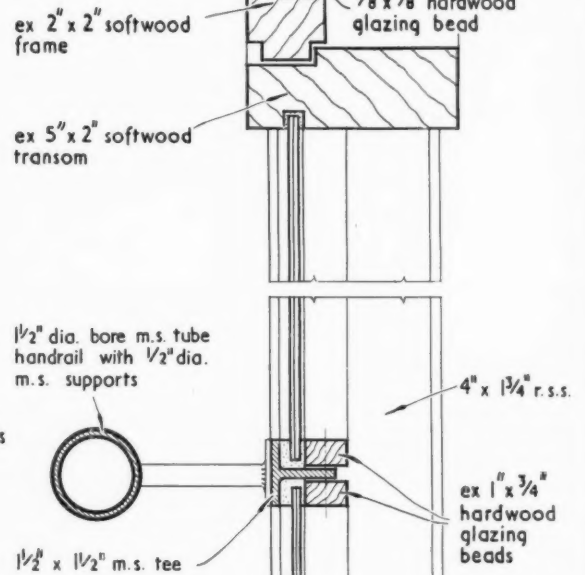
WALLS AND PARTITIONS: 28



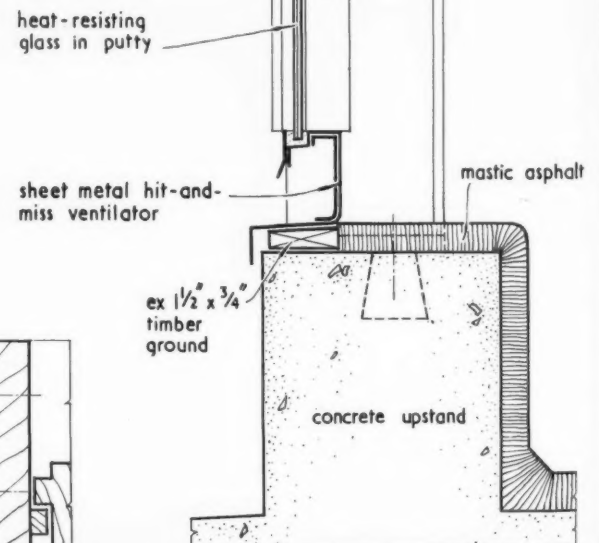
ELEVATION AND SECTION OF WINDOW. scale $\frac{1}{4}'' = 1'-0''$



PLAN OF CORNER.



PLAN OF CORNER WITH OPENING LIGHT. scale $\frac{1}{4}''$ full size



SECTION OF WINDOW.

WORKING DETAIL

WALLS AND PARTITIONS: 29

GLAZED WALL: SEED WAREHOUSE AT WITHAM, ESSEX

Chamberlin, Powell and Bon, architects



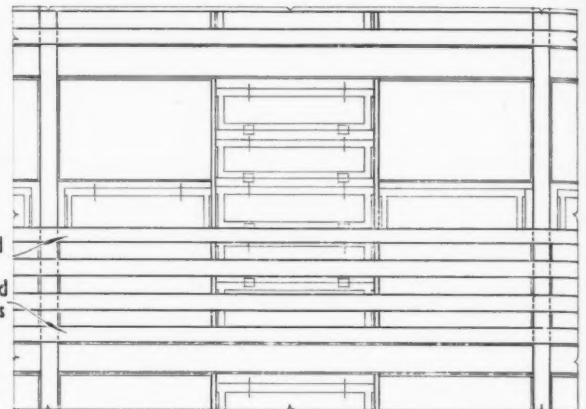
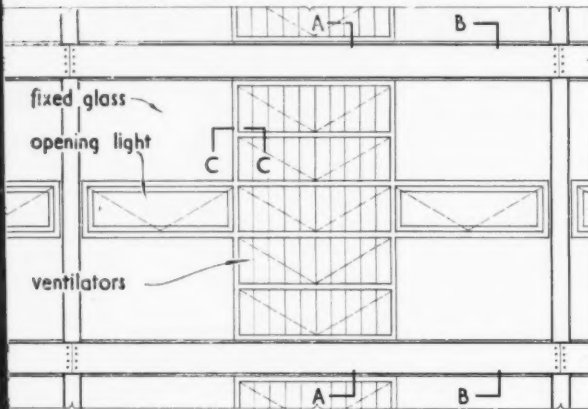
The ventilators are designed to open between deep mullions in such a way that they can remain open in wet weather without letting in the rain. Added ventilation is obtained by leaving a gap at intermediate floors round the perimeter of the building between the edge of the floor and the cladding. The opening lights lift off their hinges to enable the fixed lights above and below to be cleaned from inside. The structural steelwork is shot-blasted, zinc-sprayed and painted four coats; the hardwood frames are iroko treated with an aluminium primer; the softwood frames are yellow pine.

WORKING DETAIL

GLAZED WALL: SEED WAREHOUSE AT WITHAM, ESSEX

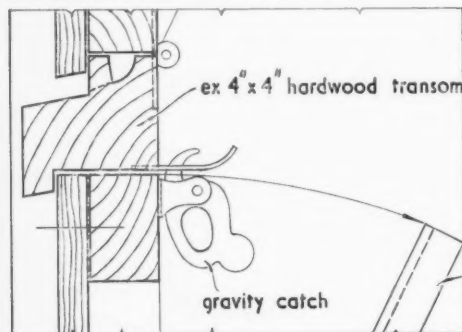
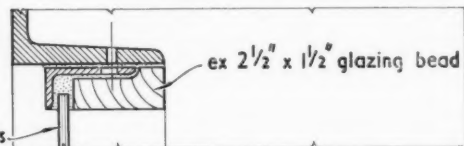
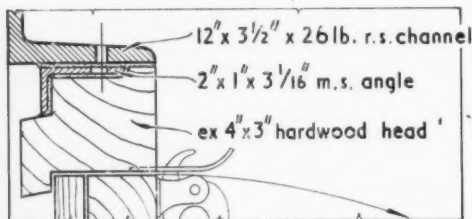
Chamberlin, Powell and Bon, architects

WALLS AND PARTITIONS: 29

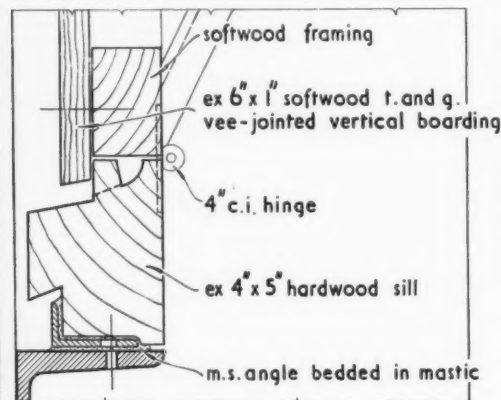
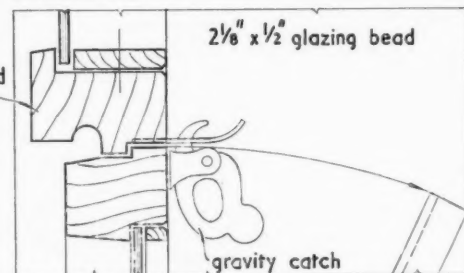


EXTERNAL ELEVATION OF ONE BAY

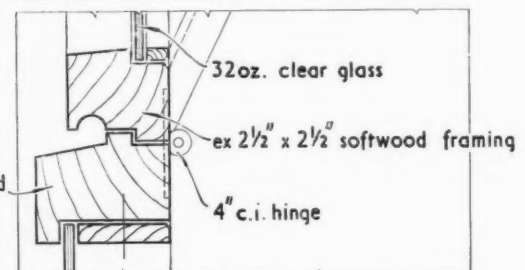
INTERNAL ELEVATION scale $\frac{3}{16}'' = 1'-0''$



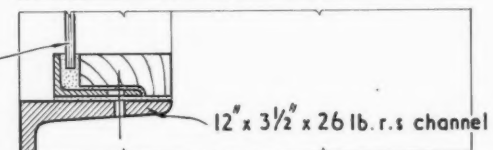
1/4" heat-resisting glass
ex 3 1/2" x 2 1/2" hardwood transom



ex 2" x 2" hardwood stop planted on mullion

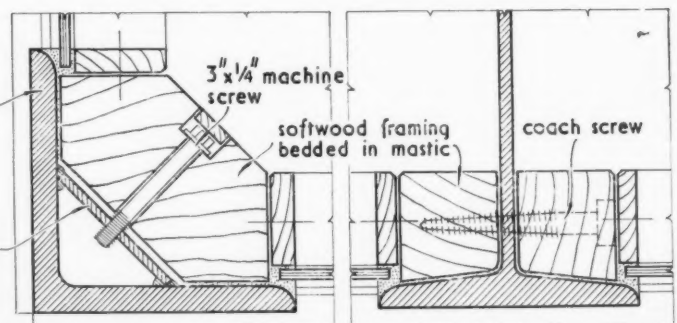
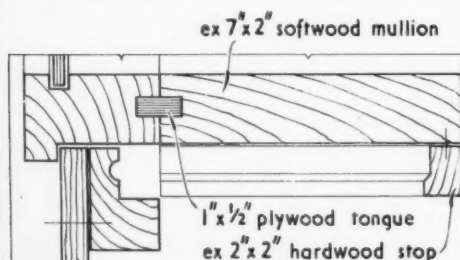


1/4" heat-resisting glass bedded in mastic



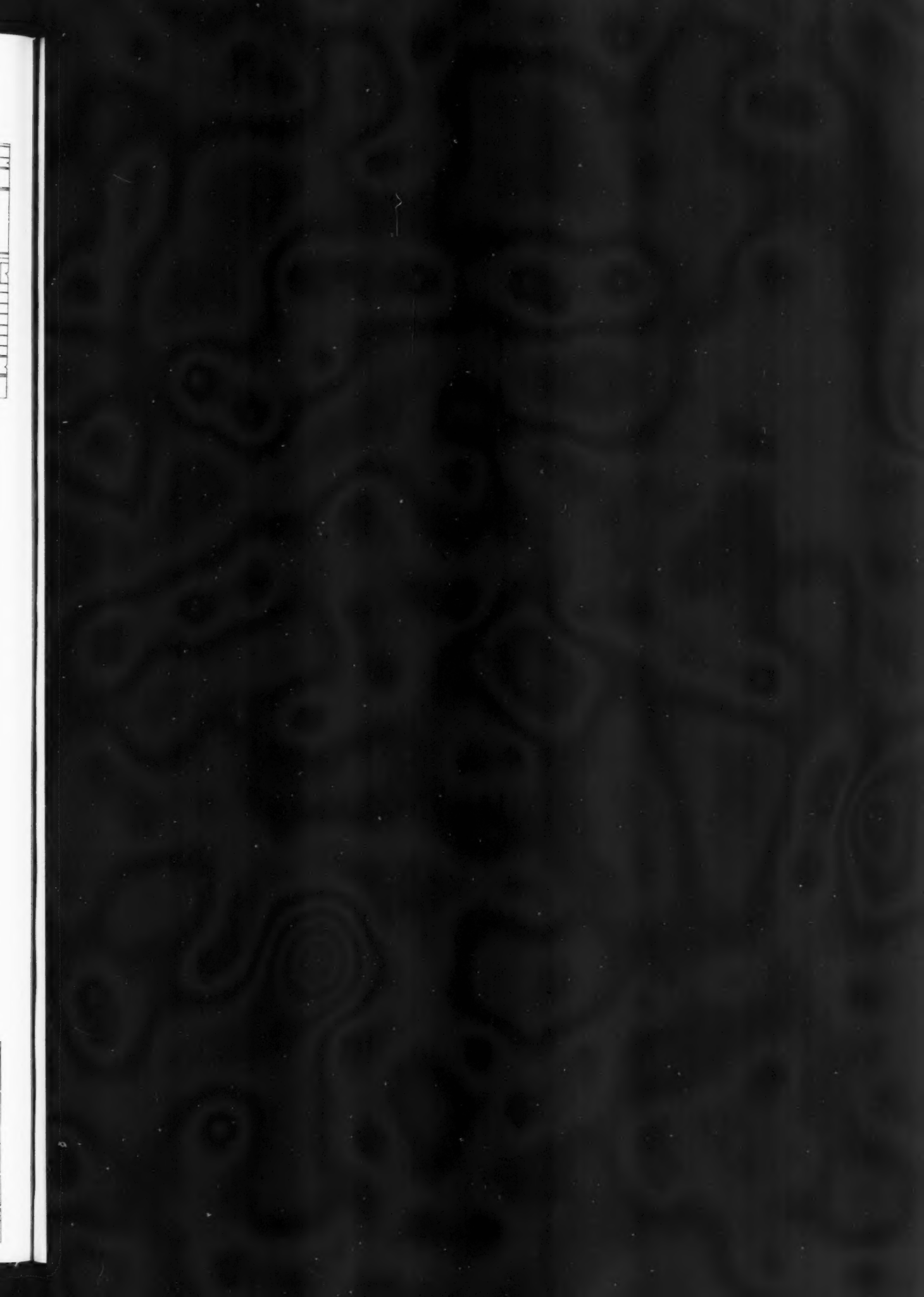
SECTION B-B.

SECTION A-A.



PLAN AT C-C

PLAN OF CORNER AND STANCHION scale 1/4" full size



TECHNICAL SECTION

The last revision of the Model Byelaws was in many ways an advance on earlier versions but in one respect it seems to have resulted in a very drastic increase in building cost. The new attitude to fire resistance is an improvement in that it specifies resistance in terms of "hours of fire resistance" in a way which enables requirements to be related to performance of elements of structure under standard fire testing procedure. What seems unfortunate is that the present model requires a fire resistance of two hours for the walls of very many factory buildings which would previously have been constructed with simple sheeted cladding. To provide a two hour period of resistance usually involves a relatively expensive walling and the result in terms of the present industrial building programme must be a very much increased capital expenditure. Is this the result that was anticipated when the Byelaws were drafted and is it always justified?

We would welcome the general views of architects who have met this problem and would also be glad to hear of specific cases where the present regulations appear to have resulted in unjustifiable expenditure. If the problem is a general and serious one the profession ought to state its case and endeavour to obtain an amendment to the Byelaws. Safety is important but it should be reasonable safety, especially at a time when the country needs to get the best possible value from its capital investment.

7 PRACTICE: the new rating procedure

This week's
special feature

The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

Since April 1 ratepayers have known how much more or how much less they will have to pay in rates as a result of the new valuation and many will feel inclined to make an appeal. Since rateable value affects the economics of almost any building project it is fitting that architects should have some grasp of this subject and we have therefore asked D. Compton-James (formerly of the Inland Revenue) to describe the new procedure and what the building owner and/or his architect should do about it.

The new valuation lists show that over England and Wales as a whole the average increase in rateable value is 72.2 per cent. There are no separate figures for business premises as yet, but individual cases show increases ranging from 50 to 1,100 per cent. Such poundage rates as have already been declared indicate that most districts will have a poundage rate one-third less than in 1955-56. Business premises will therefore pay more in rates, while private houses will pay about the same or perhaps a little less. The turn of private houses will not

come until 1961, in which year they too will be re-assessed up to full current rental value. In this present revaluation, private houses have been re-assessed at 1939 rental value.

DUTIES OF THE ARCHITECT

For the next five years, which is as far ahead as we need to look at the moment, architects who are called upon to design or convert business premises will need to keep an eye on the question of the rating

assessment. We may as well include industrial premises also, because there is a strong possibility that industry may be re-rated. In some districts the valuation officer may, as a friendly gesture after he has seen the plans, give a hint as to what the rating assessment is likely to be, but there is no incumbency on him to do so, and in other districts the valuation officer will refuse to comment in advance. In any case the architect would do well to advise his client to submit the plans to a licensed valuer for a professional opinion as to the probable rating assessment, and for advice as to amendments in the plans that might result in a reduced rating.

Architects will also need to have some knowledge of the new rating procedure. Any ratepayer, including an occupier who pays an inclusive rent, or a duly authorized agent of a ratepayer, or a ratepayer in some other rating area, may at all reasonable times inspect the valuation list and make copies of it or take extracts from it without payment. (If he wants to see the previous valuation list, a charge of 2s. 6d. may be made.) Obstruction by a person having the custody of the list, either in its inspection or in the copying of items, is a punishable offence. So also is the demanding of an unauthorized fee. In either case a fine of up to £5 may be imposed.

HOW TO MAKE AN APPEAL

The right to make a proposal (appeal) is not confined to the ratepayer. Proposals may also be made by rating authorities (after the expiry of a temporary stand-still order imposed by the 1955 Act) or by valuation officers. Thus, if a rating authority is dissatisfied with the assessment on a particular property it can put in a proposal for an increase (or a decrease). Proposals by valuation officers should be negligible, for reasons which will become apparent. Valuation officers have just had full opportunity to make correct assessments, according to their lights, and only the exceptional case in which there has been a recent change of circumstances will bring them into the proposal picture again.

Proposal forms can be obtained on application to the valuation officer. As a matter of convenience most rating authorities will also carry stocks of proposal forms. The proposal form is rather a complex document containing no fewer than 11 "boxes"; but most ratepayers will be able to master its complexities after a short study.

THE EFFECT OF AN APPEAL ON THIS YEAR'S RATES

Where a proposal is made, the amount recoverable in respect of rates levied for that year (or for any subsequent year if the appeal is still unsettled) shall not be more than the total amount of rates levied in 1955-56, but this does not necessarily mean that the first instalment will be reduced. Most rating authorities will try to collect the full first instalment, provided it is not more than the total rates of 1955-56, in the hope that the appeal will be settled before the second instalment becomes due. If it is not so settled, the ratepayer will then get the benefit of this provision because he will not have to pay the second instalment (or, in some exceptional cases, not all of it) until the appeal is settled.

All rating authorities that offer a discount for prepayment take the view that although a proposal may have been made, the full amount of rates assessed must be paid by the due date in order to qualify for discount. This is rather a sharp view, but nothing can be done about it because the granting of discount is optional to the rating authority, and the rating authority is therefore in a position to dictate its own terms for discount.

THE HEARING OF APPEALS

Many proposals will be settled by compromise between ratepayers and valuation officers. Whether or not to compromise is a matter for personal judgment, but personal judgment should not be swayed by non-relevant factors, by counsels of despair over the difficulties of pursuing an appeal, or by impatience with the inevitable delays which will ensue. Owner-occupiers should also bear in mind the possibility that their Income Tax Schedule assessment may sub-

sequently be increased to the new rateable value, and any such increase will not be offset by an automatic decrease in the rate of tax.

Proposals not settled by compromise will be heard, in the first instance, by the local valuation court. Considerable delays—possibly up to three years—are expected in some areas. It has been difficult to find a sufficient number of persons who are suitable, willing, and able to devote a considerable portion of their time to the hearing of appeals.

Certain relevant documents, such as rating returns made by occupiers of similar premises may be introduced by both sides at an appeal, or rather may be introduced if the valuation officer decides to initiate this step. This arrangement is a little one-sided. It means that in a case where the valuation officer cannot find any returns favourable to his case, he can block the production of unfavourable returns merely by doing nothing.

Normally it pays to be represented at an appeal. It is impossible to estimate the average cost of such representation. Indeed, it is quite likely that towards the middle of the year, many valuers will be forced, owing to pressure of work, to decline new clients. In one district where a local Chamber of Commerce is arranging for a valuer to represent its members, the valuer has been guaranteed a sum of £200 for not less than 20 and not more than 40 appeals.

The decision of the valuation court can be challenged by a further appeal to the Lands Tribunal. Here, of course, representation is almost essential.

CONCLUSION

Experience shows that it pays to appeal. As a rough working guide, it can be said that if business premises have been put up by more than 100 per cent., an appeal will have a 50 per cent. chance of success. In considering the cost of an appeal, it should be borne in mind that a saving of £10 a year in rates is equivalent to a total saving of £50, because five years will elapse before another revaluation is made.

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.

3.30 planning: regional and national RECLAMATION OF DERELICT LAND

Dereliction. (Two articles under the same heading appearing in the *Architectural Review*. The first, in the issue of November, 1955, by Kenneth Browne, and the second, in the issue of December, 1955, by Sir Hugh Casson.)

After their success in persuading people to notice roadside ugliness after their issue on "Outrage" last summer, the Editors of the *Architectural Review* have now turned their searchlight on to a problem of first-rate importance—the reclamation and control of derelict land. Their November issue contained a report, the first of a series covering different parts of the country, by Kenneth Browne on conditions in Lancashire, where a go-ahead county planning authority is trying to do what it can to clear up the

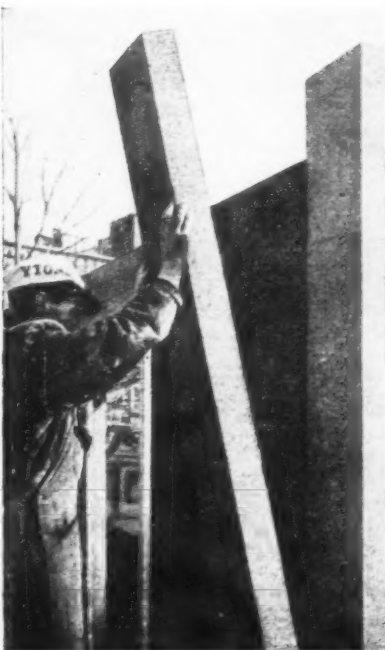
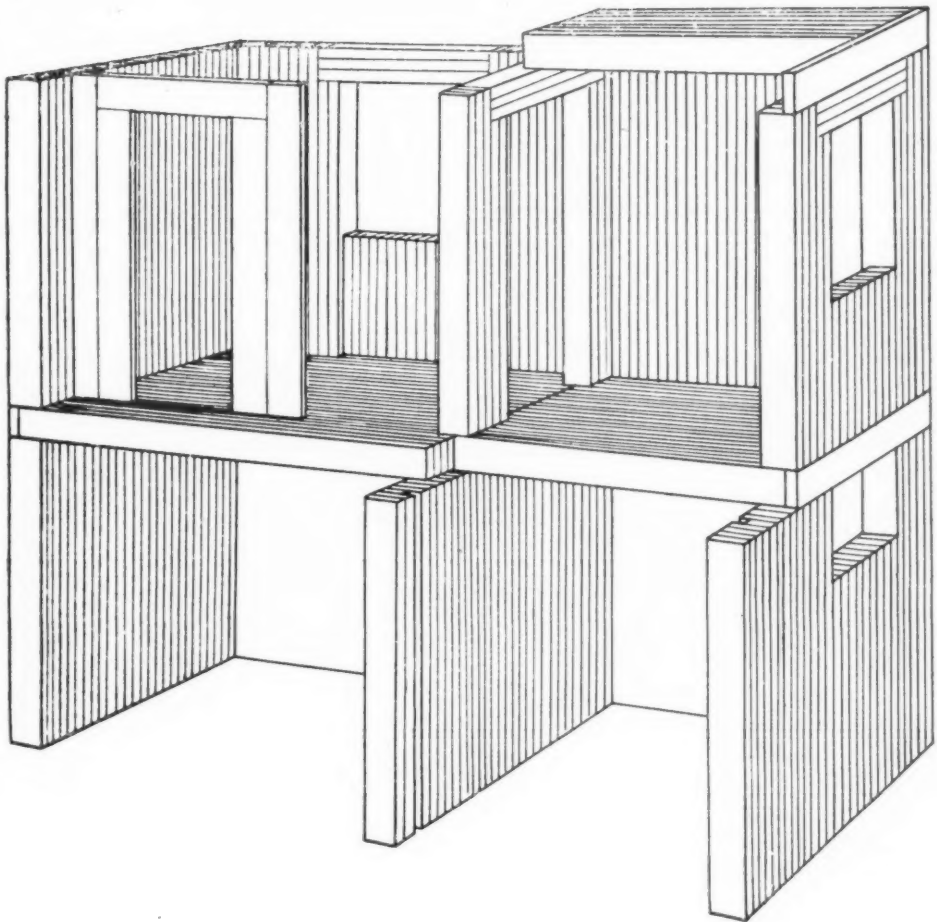
mess left by a century of mis-use. In the following month's *Review*, Sir Hugh Casson quotes in full a long letter from the County Planning Officer describing Lancashire's aims and technique.

Derelict land, in one form or another, is common throughout the whole country, but in parts of the industrial Midlands and the north it may almost be described as the natural landscape. In his visit Mr. Browne was shocked to find that there are some 10,000 acres of man-made desolation in Lancashire alone, and that in some districts as much as 40 per cent. of the total area is derelict. (A similar state of affairs on a much reduced scale is reported from Cheshire, where the County Planning Officer has recently estimated that some 3,000 acres are derelict, one third of it from salt working.) The cause of the devastation in Lanca-

(Continued on page 358)

NAILED MASONRY

We illustrate on this page a system of dry wall construction evolved by the Swedish "International Ytong," company. Storey height members of cellular concrete, of cross section 4 in. by 12 in. and weighing 110 lb. each are stuck together with two strips of asphalt adhesive and secured with 6 in. nails. The most interesting feature of the system is that the elimination of mortar joints has much increased thermal insulation. The Swedish Building Research Station attests that, whereas a 12 in. mortared wall built of this material gives a U value of 0.13 a similar glued and nailed wall gives a U value of 0.086. Beams



are cast in steel moulds and their finish is sufficiently smooth to cut out the need for plaster. Floor joists are normally 4 in. by 8 in. and are reinforced; non-loadbearing internal partitions are formed by gluing standard beams edge to edge. Chases for pipes and recesses for radiators are formed by using members of 4 in. by 8 in. cross section. Though the logic of the system assumes that builders will specify the exact dimensions and the number of each component they require, the material can be readily cut on site. The need for scaffolding is much reduced, there is no drying-out time, and dimensions are more accurate than in traditional construction.

shire is primarily coal-mining: generations of coal-getting have produced severe and wholesale subsidence often accompanied by widespread flooding. These conditions have been aggravated by indiscriminate tipping, first of colliery spoil (sometimes in heaps 200 ft. high) and later by domestic and other industrial refuse. Abandoned industrial buildings and disused sand pits cover large areas.

In the industrial counties the process of devastation is still going on and is difficult to check. For example, the National Coal Board are unwilling to adopt the underground stowing of spoil, because of the extra costs involved, although it is acknowledged that this would substantially reduce the amount of subsidence. In their daily struggle to keep down the cost of coal-getting, they continue to tip on the surface. Moreover, the Board is apparently entitled to extend—without planning consent—any spoil heap which was in existence before July 1, 1948. The shortage of tipping sites for industrial and domestic waste is now great in many highly urbanized areas, so much so, indeed, that the fortunate owners of available tipping land demand, and obtain, high prices for its use. Under these conditions some firms have found it cheaper to buy good unspoiled land some distance away and tip on that. Local planning authorities everywhere are constantly being badgered to approve proposals of this kind. In Lancashire it is calculated that a further 10,000 acres will be required for tipping during the next 20 years, so there seems a clear case for employing controlled tipping as a means of reclaiming existing derelict areas where filling is needed. An effort is, in fact, being made to co-ordinate the large-scale tipping programmes with the first stages of reclamation schemes, but in practice this is often difficult, because of the long distances between source and tip and the extra costs involved. Even when suitable fill can be found close by, the process of grading and levelling the site for future use can be lengthy and expensive.

The reclamation of thousands of acres of useless land, either by controlled tipping or by levelling and planting, is therefore a very big job. The practical and administrative difficulties are so great that few planning authorities have as yet made any serious attempt to draw on these "hidden reserves" of land in their development plan proposals.

It seems obvious that we cannot for long afford to waste our limited supplies of land in this way while schemes for new industry and housing go on eating up agricultural land at an alarming rate. The "mine and move on" phase in Britain should have come to an end by now. But the scale of the problem is so big that it can only be tackled successfully on a regional basis. Individual schemes by local authorities, however laudable, can hardly be expected to contribute much to its solution. There are some signs that the Government is beginning to pay some attention to the matter. A little time ago a Ministerial circular to local planning authorities asked for a survey to be made of derelict areas. This first flutter of animation should not be allowed to die away again.

The present efforts of the Lancashire County Planning Department are a valuable example. Systematic reclamation of a number of sites is now in progress, although the cases tackled so far are of necessity relatively simple and cheap ones. In addition to forestry and open space, it is hoped that the restored land will be put to a variety of uses, including housing, agriculture and industry. We need more land for all these purposes; money spent on providing for them out of what is now useless waste would surely be good national investment. Nor, it appears, is additional legislation re-

quired, for we are told that the Town and Country Planning Acts, the National Parks Act and the Forestry and Agriculture Acts between them provide powers for the reclamation and improvement of land. At present, these powers remain almost entirely unused. In their efforts to make use of them for a practical purpose, Lancashire have received support from both the Ministries and the developers. What is needed is a national reclamation campaign, executed regionally and financed if necessary by a charge on all industries and undertakings that devastate land.

4.82 planning : urban and rural NEW TOWNS

Planning in the New Towns. (Town & Country Planning. January, 1956.)

Planners in this country are subjected to such a barrage of continual and, it must be admitted, occasionally undeserved criticism that sometimes they are tempted to believe that their positive achievements are deliberately overlooked or written down. The best ammunition for a counter-attack is the success of the new towns. The January issue of *Town and Country Planning*, devoted to a progress report on development in the new towns, supplies this in quantity. In the 14 new towns established under the Act of 1946 some 50,000 houses had been completed at the end of 1955, together with 6½ million feet of new factory space, and since their designation they have provided, in all, homes for more than 146,000 persons. These are impressive figures by any standard, and are a tribute both to the drive of the Development Corporations and the wisdom of the Governmental policy which created them. If this country is the acknowledged leader in town planning today, the contribution that the new towns have made to our pre-eminence can be gauged from the wide range of comments—some laudatory, some wistful, and a few critical—collected by the Editor from distinguished visitors from 13 different countries.

Running through this symposium of international comment is a bemused astonishment, first at the deliberate action of the British Government in trying to decentralize urban population, and second at the co-operation they are receiving from the authorities of the great cities themselves in doing so. The principle of urban decentralization has long been widely accepted, and often fiercely advocated, abroad, but until the results of the British experiment became known the possibility of carrying the proposal into effect was dismissed as pipe-dream stuff.

Although doubts are expressed by some visitors as to whether or not this bold effort can wholly succeed, the most severe critics are, quite properly, two distinguished British observers. Professor Richardson gives us one more, wholly expected, denunciation of new town architecture. Sir William Holford allows "a pass, but without distinction," in the same subject. He considers that the chief value of the new towns is not as a solution for the overspill problem but as an experiment in a new form of administration.

Probably the most interesting thing that emerges from the general survey is the undoubted financial success of the new towns. Six of the twelve towns designated in England and Wales now show a surplus on their revenue account, and the remainder may be expected to do so when their de-

velopment is further advanced. This raises the nice question of who should share in the profits. There have been several suggestions; the local authorities, the Treasury—in their capacity as the developers who put up the money in the first place—or that the whole estate should, after a decent interval, be sold to private enterprise as a going concern. None of these suggestions seems satisfactory. If the construction of new towns has proved to be a profitable investment and has now passed beyond the experimental stage, then the most sensible course would surely be to set up 50 more and use the profits as they come along to create a public trust designed to help in the construction of the further new towns which will all be badly needed to decentralize our other great cities. These would be in addition to the expanded town projects which at the moment seem to be considered as the only practical alternative to more peripheral expansion. In some respects it is proving more difficult to begin to disperse the population of the provincial conurbations than that of London. South Lancashire and North Cheshire, for example, have an overspill problem almost as severe as London's, but as yet not one new town. The experience gained in the successful new town corporations could be put to good use here.

7.52 practice DRAWING OFFICE TECHNIQUES

Graphical Symbols for Heating and Ventilating Installations. BS 1553: Part 4: 1956. (BSI. 3s. 6d.)

Drawing office techniques were recently discussed at the RIBA and, concerned as architects and engineers were about this subject, it is obvious that many are confused as to ways and means of achieving uniformity. This standard sets out a very detailed method for the graphic illustration of one small facet of building—the heating and ventilating services. It should and would establish a code of practice, but whether every draughtsman in the country will be prepared to memorize a new language of no fewer than 139 symbols remains to be seen.

7.53 practice PROFESSIONAL PRACTICE

The Practising Architect. Alec S. Eggleston, F.R.A.I.A. (Cambridge University Press for Melbourne University Press. 37s. 6d.)

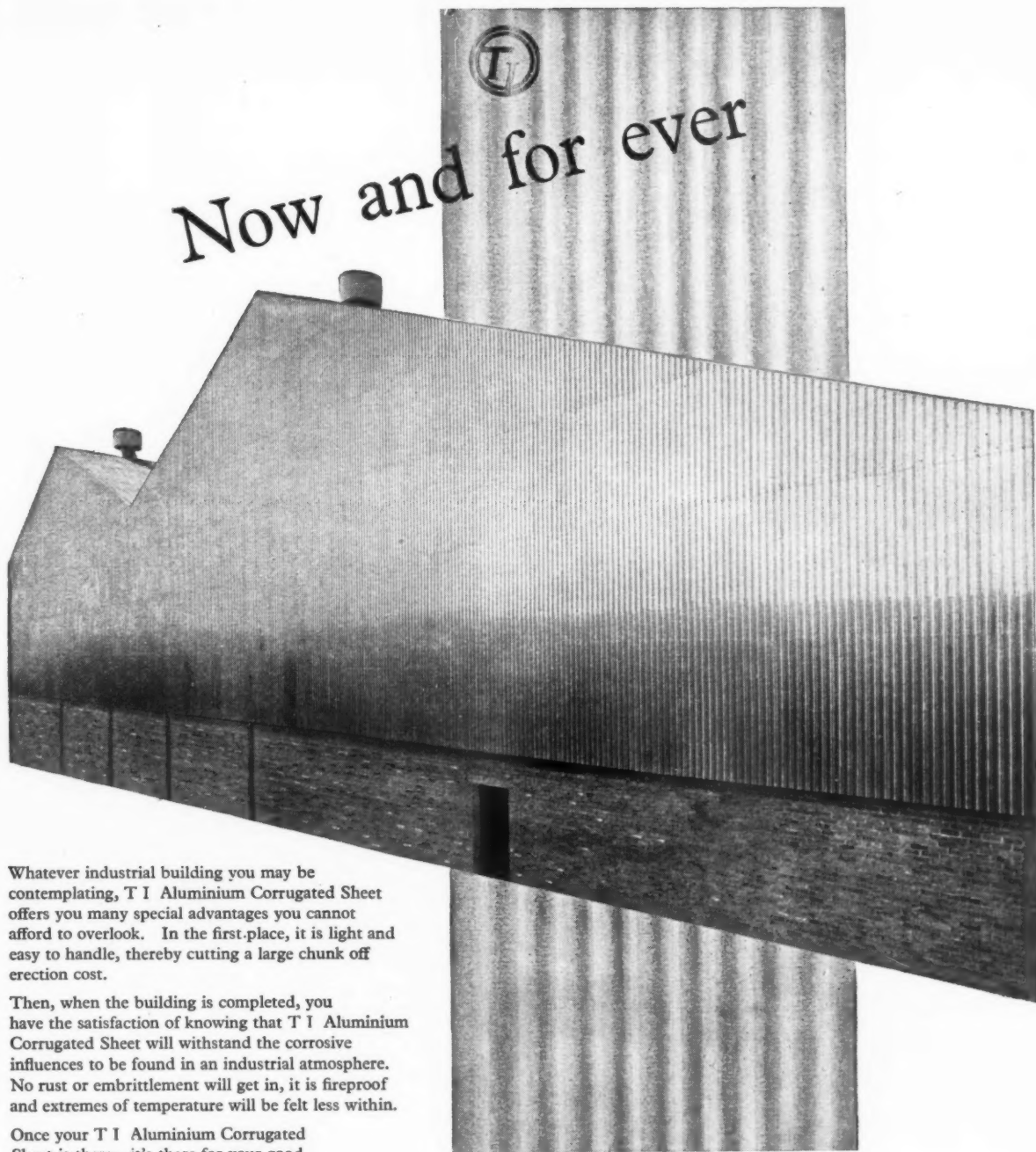
Mr. Eggleston lectured in the University of Melbourne on Professional Practice and Architectural Economics, and consequently most references are drawn from Australian precedents. Practice in the Antipodes is not unnaturally based on British ways and means, and so 80 or 90 per cent. of the book is relevant to many situations likely to occur in this country. Without doubt this is a book for the emigrant or would-be emigrant architect.

8.49 surveying : specification BUILDING SURVEYS

Building Surveys. F. R. Huggins, ARIBA. (B. T. Batsford Ltd. 10s. 6d.)

A well written, well illustrated, sensible guide for students on the art of measuring. Unfortunately it omits instructions on how to use a level.

Now and for ever



Whatever industrial building you may be contemplating, T I Aluminium Corrugated Sheet offers you many special advantages you cannot afford to overlook. In the first place, it is light and easy to handle, thereby cutting a large chunk off erection cost.

Then, when the building is completed, you have the satisfaction of knowing that T I Aluminium Corrugated Sheet will withstand the corrosive influences to be found in an industrial atmosphere. No rust or embrittlement will get in, it is fireproof and extremes of temperature will be felt less within.

Once your T I Aluminium Corrugated Sheet is there—it's there for your good.

T I Aluminium Ltd

ONE OF THE LARGEST U.K. FABRICATORS OF ALUMINIUM AND ALUMINIUM ALLOY
SHEET, CORRUGATED SHEET, STRIP, CIRCLES, PLATE, EXTRUDED SECTIONS AND TUBES.

T I Aluminium Ltd. Head Office: Redfern Road, Tyseley, Birmingham. 11. Tel. Acocks Green 3333.

A  COMPANY

London: 10, Buckingham Place, Westminster, LONDON, S.W.1. Tel: Victoria 0902. Birmingham: 10, Needless Alley, BIRMINGHAM. 2. Tel: Midland 0672. Manchester: 14, Brown Street, MANCHESTER. 1. Tel: Deansgate 2584. Leeds: Russell Chambers, 54, Merriam Street, LEEDS. 1. Tel: Leeds 31870. Glasgow: 38, Bath Street, GLASGOW. C.2. Tel: Douglas 5161. Bristol: 16, Charlotte Street, BRISTOL. 1. Tel: Bristol 25401



THE MIDLAND WOODWORKING CO. LTD. MELTON MOWBRAY

Specialists in high class Standard Joinery for the Building Trade

AP/MW.13

10.141 design: building types CHEST CLINICS

Chest Clinic Design; Report of the National Association for the Prevention of Tuberculosis Architectural Committee. N.A.P.T. 1956. (12s. 6d.)

The aims of this book are "to summarize the main objectives that come to the mind of the architect and chest physician when asked to design a modern clinic for tuberculosis and chest diseases." It includes an historical summary, as well as chapters describing the principles which should underlie the design, and details of all the special rooms required for various types of clinic. Appendices give schedules of accommodation, dimensions of rooms and inventories of the equipment required. The book is illustrated with plans of recently constructed clinics.

No new ground is broken and no ideal is postulated; but the approach to the problem is entirely practical, and the recommendations made are, by and large, sound common sense. The planning problem is not a difficult one, but it is very useful to have the various objectives summed up in this way. The book is a necessary primer for an architect about to design a chest clinic.

10.142 design: building types CLINICS

Doctors' Offices and Clinics. Paul Hayden Kirk and Eugene D. Sternberg. (Chapman & Hall Ltd. for Reinhold Publishing Corporation, New York. 96s.)

Though we do not hear so much about group practice among doctors in this country as we did immediately after the war, this seems to have become normal in America and has led to the creation of a new architectural form, the clinic. Characteristically the American "clinic" is a one-storey building of good quality (costing \$14 per sq. ft.) standing in an open site in a suburb where two or more doctors see their patients. This book, like others in the publishers' Progressive Architecture Library series, is directed as much to potential clients as to architects. Thus it devotes a whole chapter to group practice as such and another to presenting the arguments (supported by full financial data) for building anew. This is admirable. A defect arising from this dual aim is that the actual examples of clinics illustrated are insufficiently supplied with technical data, with the result that the volume tends through the greater part of its length to fall to the level of a picture book. We can imagine a prospective client thumbing it through and saying "I'd like a waiting-room like the one on page 60 and an entrance with a curved freestone wall as on page 112 . . ." There are 42 clinics for doctors, among which Llewellyn Davies' Corby—the only non-American example—figures chastely, eight for dentists, 20 for both combined, and four public health centres; all are presented with small scale plans, several photographs and a schedule giving the staff served, the cost, the main materials used, the heating system, and some general comments. Whatever else it is valuable testimony of the growing association in the minds of American patients between medicine and non-traditional architecture.

11.42 materials: general FIRE PROTECTION

Flammability Test for Thin Flexible Materials. BS 476: Part 2: 1955. (BSI. 2s. 6d.)

Since the deletion of the non-flammability test of BS 476:1932 from the 1953 edition, a general test has been devised to measure the flammability of thin flexible material. The apparatus involved is a simple frame for suspending the material under test and the Standard lays down that six specimens shall be tested.

12.59 materials: metals ALUMINIUM

Aluminium in Contact with Other Metals. (Aluminium Development Association. 2s.)

Gives some information additional to that put out in BRS Digests 39 and 40 on *Aluminium and Aluminium Alloys in Building* published in February and March, 1952. In particular it points out damage which may be caused by moisture held by surface tension in faying surfaces (e.g., lap joints in corrugated roofing) which should be coated before assembly with a jointing compound, preferably in the form of a paste (or tape) loaded with zinc chromate or barium chromate. In the BRS Digest the opinion was expressed that aluminium/steel joints were not a likely source of bimetallic corrosion. Here, however, it is suggested that where aluminium is bolted to steel, care should be taken to insulate the two metals, either by means of a jointing compound or by neoprene or other sleeve and washer—though the booklet does not, of course, fail to point the moral that all-aluminium structures should be used whenever feasible.

Another new point discussed is the possibility of damage to aluminium through contact with condensation fostered by unsuitable thermal insulation materials. Suggests painting with bitumen paint or use of borosilicate glass wool, cork, or aluminium foil as insulation.

12.60 materials: metals ALUMINIUM AND ITS ALLOYS

Wrought Aluminium and Aluminium Alloys: Sheet and Strip. BS.1470: 1955; Drawn Tube. BS.1471: 1955; Forging and Forging Stocks. BS.1472: 1955; Rivet, Bolt and Screw Stock for Forging. BS.1473: 1955; Extruded Round Tube and Hollow Sections. BS.1474: 1955; Wire. BS.1475: 1955; Bars, Rods and Sections. BS.1476: 1955; Plate. BS.1477: 1955. (BSI. BS.1470, 7s. 6d. BS.1471-1477, 6d. each.)

More and more aluminium is being used and specified by architects, but the latest batch of British Standards on the subject is hardly within the architect's province. These Standards are the specialist's reference, but as such are most valuable and welcome in the industry. The Standards regroup and revise earlier Standards issued in 1948 and 1951 and include three new materials: the super-priority aluminium 1, which is the almost pure aluminium used in flashings, and two aluminium magnesium silicon alloys designated H.20 and H.30. H.20 contains copper, and H.30 has an obligatory manganese content. Many manu-

facturers have in fact been including manganese in structural alloys but the new Standard will ensure additional design strengths of up to 1 ton per sq. in. in tensile stresses.

12.61 materials: metals STEEL FOR PRE-STRESSED CONCRETE

Steel for Pre-Stressed Concrete. BS.2691: Part 1: 1955. (BSI. 2s. 6d.)

This is the first part of a projected series of specifications for steel in prestressed concrete and is confined to the subject of plain hard drawn steel wire. Gives technical requirements of six recommended sizes with tensile ranges up to 140/150 tons/sq. in.

13.128 materials: timber IDENTIFICATION OF WOOD

What Wood is That? A. Schwankl. (Thames & Hudson Ltd. 25s.)

This is handbook which sets out to tell the reader how to identify 40 different timbers in common use without recourse to the microscope or (generally) to laboratory technique. The method chosen is to publish a series of keys such as colour, the clearness with which the annual rings and ray figure show, types of pores, etc., with a list of the "possibles" conforming to each description. So that, by beginning with the most striking characteristics of the piece of wood you wish to identify, you can systematically narrow the field. Best of all, you can refer to a collection of cardboard sheets with actual veneers 3 in. by 1 in. square of each of the 40 woods pasted to them and which are tucked into a folder under the cover. Though this book is not designed specifically for architects, and though the woods chosen (30 home grown and 10 imported) suggest a bias to the cabinet maker as against the builder, it would form a useful architect's office reference.

13.129 materials: timber TILE BATTENS

Wood Battens and Counter-Battens for Slating and Tiling. BS.1318: 1955. (BS. 2s.)

Revision of the BS publication August, 1946. This revision includes the specification of counter-battens, which should not be confused with the "vertical" battens running up the slope of a roof when using Roman or Spanish tiling. Six species of timber are listed as permissible alternatives.

14.80 materials: concrete FIRE RISK AND PRESTRESSING

Fire Resistance of Prestressed Concrete. BRS Digest No. 84. January, 1956. (HMSO. 3d.)

Tests to BS 476:1953 have established that from the point of view of fire resistance prestressed concrete is different from ordinary reinforced concrete, but that any desired degree of fire resistance can be imparted to it by suitable design. Fire resistance for unprotected composite floor made of light prestressed concrete beams may be as low as 15 to 20 min.; $\frac{1}{4}$ -in. plasterboard gives an extra 10 min., $\frac{1}{2}$ -in. plasterboard with $\frac{3}{8}$ -in. plaster finishing coat gives an extra 25 min. and 1-in.



Design for colour with Perstorp

The thoughtful planner specifies Perstorp Panels when the need is for surfacing. He knows he will enjoy ample scope for imaginative decorating schemes, thanks to a more than usually wide colour range. His client, too, will have the benefit of a lifetime's hard-wearing service.* Coated with melamine resin for super-hardness, Perstorp Panels unite beauty with toughness for innumerable surfacing requirements - domestic, commercial and industrial. Yet cost is no higher than that of comparable products. Cutting and trimming are readily done on site. Installation is speedy and simple.

* Perstorp Panels fitted in Stockholm's main railway station 22 years ago are still in excellent condition today!



PERSTORP PANELS

Made in Sweden and sold throughout the world by

SKANSKA ATTIKFABRIKEN AB · PERSTORP (SWEDEN)

The leading plastic laminate manufacturers of Scandinavia for over 30 years.

LOOK FOR THIS LABEL! YOUR GUARANTEE OF HIGH QUALITY

All enquiries to agents for the U.K.: C. F. ANDERSON & SON LTD., Harris Wharf, Graham Street, London N.1. CLerkenwell 4582 · GEO. E. GRAY LTD., Joinant House, Eastern Avenue, Ilford, Essex. VAleNTine 2211 · HEATON TABB & CO. LTD., 55 Bold Street, Liverpool, 1. ROYal 3437 · RUDDERS & PAYNES LTD., Chester Street, Aston, Birmingham, 6. ASTon Cross 3071 · A. J. WARES LTD., King Street, South Shields. South Shields 2380

sprayed asbestos or 1-in. vermiculite gypsum plaster on lath can give an extra 2 hours or more. For larger beams 2½-in. concrete cover to steel gives 2 hours resistance; 4 hours or more may be obtained by an additional 1-in. vermiculite concrete, ½-in. vermiculite gypsum plaster or ¾-in. sprayed asbestos.

15.135 materials: applied finishes, treatments SANDS

Building Sands from Natural Sources. BS. 1198, 1199, 1200: 1955. (BSI, 3s.)

These three Standards are issued in one volume and are designed as a companion to BS.882 and BS.201 (August, 1954) issued as *Concrete Aggregates from Natural Sources*.

The first, BS.1198, deals with sands for internal plastering and gypsum plasters including qualities and gradings for two types of undercoat and one type of finishing coat with or without lime. BS.1199 is concerned with external renderings and internal plasterings with lime and Portland cement, whilst BS.1200 is devoted to sands for mortars.

British Standards, among other things, aim at consistency, and in this respect there have been difficulties in implementing the suppliers' certificate clauses. Agreement with trade organizations has been reached and it is hoped that this will lead to wider testing at source.

15.136 materials: applied finishes, treatments CHLORINATED RUBBER PAINTS

Chlorinated Rubber Paints. BRS Digest No. 84. January, 1956. (HMSO, 3d.)

Chlorinated rubber paints (as distinct from rubberized paints and synthetic rubber or latex paints) are characterized by the replacement of oils and resins by chlorinated rubber. The special thinners used make it inadvisable to use these paints over paints of traditional type or *vice versa*; while the impermeable skin they produce and the consequent danger of blistering make it imperative that all traces of damp be removed from the surface to be painted.

15.137 materials: applied finishes, treatments PAINT COLOURS

Colours for building and decorative paints. BS.2660: 1955. (BSI, 7s. 6d.)

An exceedingly important standard comprising a range of 101 colours for preferred use, set out on cards which have been specially designed for use by the architect. Discussed at length in technical article in *JOURNAL* for February 16, 1956. A "must" in every office.

16.120 materials: miscellaneous COLLIERY SHALE

Colliery Shale as Hardcore or Filling. BRS Digest No. 84. January, 1956. (HMSO, 3d.)

Don't use colliery shale unless it is well burnt (*i.e.*, red in colour); and even when it is, cover it with waterproof building paper to protect concrete against sulphate attack.

16.121 materials: miscellaneous MASTICS

Building Mastics. BRS Digest No. 82. (HMSO, Nov., 1955. 3d.)

The use of mastics is increasing, especially

as a joint filler between facing slabs of various kinds. There are few British Standards so clear thinking plus advice from manufacturers has to be relied upon for correct choice and application. This Digest is a general discussion of the problem and as such is useful for, though it does not help in giving definite recommendations of types to use for particular situations, it does state the basic requirements clearly.

16.122 materials: miscellaneous MODERN BRICKMAKING

Modern Brickmaking. A. B. Searle (4th Ed. Ernest Benn Ltd. 90s.)

This book is probably as important to the shelves of a clayworks manager as is, say, the *Encyclopædia Britannica* to the shelves of any self-respecting library. The *Encyclopædia* contains almost everything of record and in the field of brickmaking so does Mr. Searle's book. Of the 734 pages architects come in after page 574 when such things as rustic, perforated, glazed bricks and hollow blocks are dealt with.

Fuel Ash bricks receive only 11 lines in this huge tome, but the book is worth looking at if only for such tips as can be found in chapter 19 on Uses for Waste Bricks: "Discoloured bricks may be set aside and, sometimes, with others, used as facing bricks. A highly profitable side-line has been developed by several brick manufacturers by this means among architects who are looking for 'new or unusual effects'."

18.176 construction: theory STRUCTURAL DESIGN

Studies in composite construction—Part II. (HMSO, 1955. 5s.) Research paper of BRS dealing with the interaction of floors and beams in multi-storey buildings, of interest to architects and engineers.

Part I was reviewed two years ago in these columns and dealt with brick walls supported on reinforced concrete beams. It gave some fairly straightforward formulae for bending moments and was quite a readable document. Part II has two opening chapters and a closing chapter which will give architects an insight to the objectives, the remaining seven chapters will only be appreciated by the engineer or mathematician. The work done on the problems of composite construction has included the study of stresses in the steel frames of large buildings and the observation of the stress history of the steel frame of a large office block during construction. Chapter II attempts to show the way in which stress relief is obtained and later chapters indicate the magnitude of this relief after recourse to mathematical analysis.

The following conclusions are formulated: 1. The nature of the problem, and the principal difficulty appears to be the determination of the reactions between the floor slabs and the beams. This has been shown to be a very similar problem to the distribution of reactions between walls and their supporting beams. The distribution of reaction between a beam and a floor slab undergoes remarkable changes for the same applied load, depending on the relative stiffnesses of the beam and the adjacent slab. Still further changes in the beam loads have been noted when either the beam or the reinforcement of the slab has yielded. It is not rational, therefore, to use a load factor

for collapse design based on either assumed or measured loads of the beams under working conditions.

2. The principal features of composite action can be demonstrated quite clearly when the deformation of the system is limited to bending and twisting of the slab and beam, and without involving overall tension or compression in the slab.

3. Under the working loads, when the beams and slabs remain elastic, it has been found that it is possible to reach a state of affairs whereby on changing the size of a supporting beam there is little or no change of maximum stress in the beam. This apparent "freezing" of the stress has been called "Stress insensitivity" in this report. It implies that the deflection of the beam may well become the important consideration at working conditions.

4. When the load is uniformly distributed over the floor slabs, and at a certain value of the beam/slab stiffness ratio, it is found that there is no twist in the slab anywhere (to a first order of approximation). Each strip of slab then behaves as an independent beam.

5. It has been found that simple rules for the design of the beams might be based on the assumption that a certain proportion of the width of the slab can be assumed to act as though it were merely an additional beam joined to the supporting beam. Although this is a gross simplification it has so far given remarkably accurate estimates for the stress in the beams and deflection of the beams. It suggests that there is every possibility of producing simple design rules for composite structures in the future.

6. The rotational stiffness of the beams can be considerably increased by floor stiffening, and likewise, if the beams are encastered, the fixed end moments are altered. Both these effects influence the maximum stresses in stanchions and their buckling loads.

7. Attempts to estimate the collapse loads of floor-and-beam systems have met with success when tested in the laboratory. By the use of modern plastic theories it has been shown that the actual mode of collapse may undergo marked changes, depending on what beam section is chosen. Above a certain critical beam strength the beams will not collapse at all, under distributed floor loads, and independent slab failure occurs. It is usually a very simple matter to calculate the approximate collapse load of the whole system.

8. A study of composite action reveals that, in a multi-storey building it may be pointless to undertake elaborate calculations for the design of the bare frames. This does not imply that a careful analysis of the behaviour of the bare frame is unnecessary but that the calculations should be concentrated on primary features only.

Further research will be devoted to T-beam action between slabs and beams and catenary stresses in the slabs themselves. Experimental verification of beam loads is required.

19.187 construction: details DOMESTIC BUILDING CONSTRUCTION

Building Technique for Domestic and Similar Structures. Edwin Gunn, A.R.I.B.A. 3rd. Ed. revised by John Brandon-Jones, A.A. Dip., A.R.I.B.A. (Hilffe & Sons Ltd. 21s.)

This is a book which was first published in 1939 under the title "Building Technique." The author, who is a distinguished architect and writer of the country house period of English architecture, *i.e.*, c. 1900-1930, records a lifetime's experience with traditional building. This experience has been "brought up to date" by John Brandon-Jones, mainly by the insertion of

cut
this
out!

Can you afford to waste money by using outdated construction methods?

Take a look at the illustration on the right. All the costly shaded items are replaced by the one simple Finlock Gutter Unit shown below, with lintel cast in situ in the patent rear trough. Maintenance costs? There are *none*.

If you have not seen the Finlock technical literature yet, why not send for it today? It covers the five types of gutter, the hot bitumen and aluminium lining service and the Finlock Sprocket. It all adds up to

better building at lower costs.

and you
save all
the way
round

FINLOCK

FINLOCK GUTTERS LIMITED

Finlock House, Frant Road, Tunbridge Wells, Kent. Telephone: Tunbridge Wells 3396/9

Works at : Southborough, Kent; Royston, Herts; Cwmbran, S. Wales; Crewkerne, Somerset; Leeds, Yorks; Wakefield, Yorks; Musselburgh, Scotland; Belfast, N. Ireland

DHB/2495

references to British Standards and BRS Digests and by the inclusion of useful little tables of costs. Mr. Gunn's approach to practical problems is admirable, and his manner of writing a model of architectural journalism. Unfortunately the change in building technique since the period about which he was writing, even when represented by a country builder handling traditional materials, is so fundamental that too many of these words of wisdom and of the drawings which accompany them will strike the reader as being obsolete.

19.188 construction: details

PRECAST, PRESTRESSED FLOORS

Precast Prestressed Floors. Robert Maguire. (The Architectural Review. Feb. 1956.)

A useful review illustrating and giving spans and loadings of all major varieties of proprietary prestressed beam units for use with and without a structural topping.

19.189 construction: details

WOOD MOULDINGS

Wood Trim. BS.584: 1956. (BSI. 2s. 6d.)

One of the most welcome signs in this new British Standard, which deals with mouldings and cover strips, is a return to better building and an observance of the older and well-tried methods of the craftsman. For example, larger skirtings (4½ in. × ½ in.) are included as the smaller wartime 3-in. plinths tended to warp, especially when under seasoned timber was used.

As for the craft of building, the practice of hollowing out the back face of mouldings seems to have been lost in the general tendency to produce cheaper buildings; it is, after all, an additional labour which the client cannot see and consequently does not really want to pay for. This hollowing consequently is reintroduced with BS.584, though it is difficult to see why it is restricted to mouldings more than 2½ in. wide. Older architects will remember that the shallow gouging out of the back face prevents warping and gives better fixing to the plaster—it does in part stress the timber into position locking the wood tight against the plaster.

The standard only deals with the mouldings themselves and should be read in conjunction with BS.1186, *Quality of timber and workmanship in joinery.*

19.190 construction: details

SILLS AND LINTELS

Sills and Lintels (Clayware, Cast Concrete and Natural Stone). BS. 1236-40 : 1956. (BSI. 2s. 6d.)

These five Standards were first published in 1945, and at that time were confined to sills and lintels for use with casement windows and doors whether metal (as described in BS. 990) or wood (as described in BS. 644 : Part 1). It is now extended to take wood sash windows (as described in BS. 644 : Parts 2 & 3) into account, and metal casement windows and doors in wood surrounds to BS. 1285.

These Standards represent a useful codification of traditional practice (i.e. for 9 in. and 11 in. walls, rendered and plain). Inevitable bias towards practices of speculative builder, particularly as regards the inclusion of every form of bay window.

19.191 construction: details

WOOD STAIRS

Wood Stairs. BS. 585:1956. (BSI. 2s.)

Revision of Standard first published in 1944. Timber dimensions now give finished sizes instead of nominal sizes and systematic reference is made to the new BS. 1186: Part 2 on *Quality of Workmanship in Joinery.*

20.225 construction: complete structures

SPACE FRAME

Unistrut Space-Frame System. Paul H. Coy and Leo M. Legatski. (University of Michigan Press. \$7.50.)

This is a useful reference for anyone interested in the pure maths of structures and consequently engrossed with the practical justification of their theories. The publication sets out in the clearest and most logical fashion how the University of Michigan developed and tested Charles Attwood's Unistrut System, finally arriving at a structure capable of carrying a gravity live load of 60 p.s.f. This same structure withstood a wind load of 45 p.s.f. or an earthquake load equal to 30 per cent. of the roof and wall weights without distorting the frame. Connectors as usual provided the greatest difficulty, especially as the strut adopted was "U" sectioned 3 ft. 11½ in. long. Experiments were made to find the most economical method of bolting the eight members which concentrate at every interior joint and finally a plate with four arms on one plane to take the horizontal members and four arms on the diagonals to connect the web members were evolved, each strut being fixed with a single nut and bolt. This assembly proved to be self-aligning and the connector has withstood laboratory test loads in excess of 15,000 lb.

For further reference on Unistrut readers should see *Architectural Forum*, November, 1951, and *L'Architecture d'Aujourd'hui*, April, 1954.

22.80 sound insulation and acoustics

ACOUSTICAL PROPERTIES OF CARPETS

Acoustical Properties of Carpets. Cyril M. Harris. Journal of the Acoustical Society of America. Vol. 27, No. 6, November, 1955.

This reports a typically thorough examination of the acoustic properties of carpet in an American Laboratory. The variations in sound absorbing properties with type of backing material (of the carpet itself), underlays, texture, fibre material, pile height, etc., etc., were examined. It appears that large differences in efficiency are caused mainly by different underlays. For example, an Axminster type carpet without underlay (on bare concrete) had an absorption coefficient at 500 c/s. of 0.15, but with a 40-oz. felt underlay the value rose to 0.55.

Average typical coefficients for a good quality carpet on a thick felt underlay are as follows:

| | | | | | |
|-----|-----|-----|-------|-------|------------|
| 125 | 250 | 500 | 1,000 | 2,000 | 4,000 c/s. |
| .07 | .23 | .48 | .51 | .58 | .65 |

which give a noise reduction coefficient of .45.

22.81 sound insulation and acoustics

MUSIC ROOMS

Acoustics in Music School Buildings. R. N. Lane and E. E. Mikeska. Journal of the Acoustical Society of America. Vol. 27, No. 6, November, 1955.

The paper reports some useful data on the desirable sound insulation, acoustic properties and size of music school rooms, collected in four American Universities.

The measurements made coupled with an opinion survey, show that an average sound insulation value of 55 db should be provided between teaching studios. The value might be reduced to 50 db between rooms where students are primarily engaged in practising and the situation where a student or class needs a quiet background for critical listening or study next to a practice room, does not occur.

A number of typical wall constructions are shown, all based on single or double leaf block walls with multiple linings of such materials as lath and plaster or plywood, and giving average insulation values of from 50 to as high as 78 db.

The best average reverberation time for practice rooms is 0.4 to 0.5 seconds with possibly a slight (but not excessive) rise in the low frequencies. These rooms have inevitably to be on the small side, and the advice given is to make them as large as is practically possible.

Teaching studios are said to be satisfactory if they are about 12 ft. by 20 ft. in plan, and should have some provision for diffusion of sound and an average reverberation time of between 0.55 and 0.65 seconds.

It is finally suggested that some simple means of varying the acoustics should be provided in teaching studios to allow for musicians' individual preferences.

INFORMATION CENTRE

INDEX FOR 1955

An alphabetical index covering Information Centre items and special articles published in the Technical Section during the twelve months ended December 31, 1955, is being prepared. Readers who wish to have a copy—it is free of charge—should complete the form below and post it to the Technical Editor, THE ARCHITECTS' JOURNAL, not later than May 14, 1956. This form will not be acknowledged.

Please send me the Information Centre Index for 1955:

Name.....
(Block letters)

Address.....
(Block letters)



Owing to heavy demand, supplies of facings of most types are booked for a long time ahead, and reservations for 1956/7 are now being made.

3 Ibstock Facings for "THE DIAL" NORWICH

*Architects: Berry, Crane and Noble, F.I.F. R.I.B.A.
Contractors: R. G. Carter Ltd.
Bricks supplied through—
The Builders Direct Supply Co. Ltd., Norwich.*

Ibstock facing bricks have been used for several new licensed houses in the Norwich district. Main elevations of "The Dial" are in a multi-coloured hand-made Ibstock Golden-brown brick. Variations and contrast are provided by two other Ibstock shades—Light Buff rustics for panels between windows and Purple hand-made for plinth and dressings.

Ibstock

FACING BRICKS

Ibstock Brick & Tile Co. Ltd., Near Leicester.
Phone: Ibstock 591 (2 lines)

London: L.M.R. Goods Depot, Wright's Lane, Kensington, W.8.
Phone: WEStern 1281.

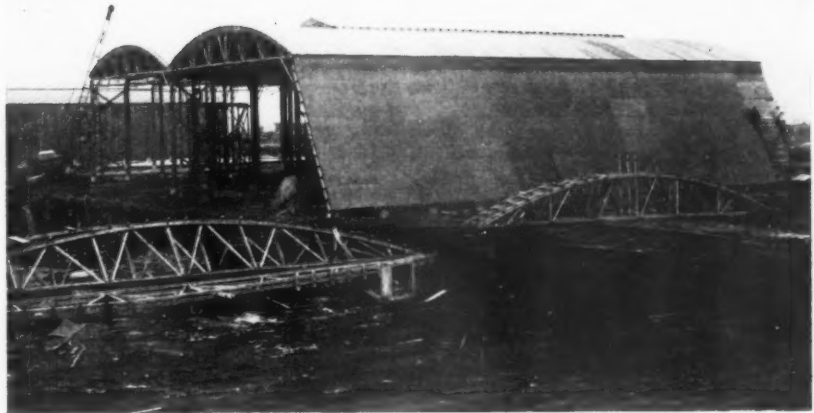
THE INDUSTRY

From the Industry this week Brian Grant reports on an addition to a range of grid switches which were referred to in the JOURNAL for March 31, 1955, some glued laminated timber bowstring trusses which can be produced in standard designs for spans up to 150 ft. and a fluorescent tube which is partly coated with a special reflecting material.

ELECTRICAL SWITCHGEAR

The MK range of grid switches has already been referred to in these notes: this consists of a series of interchangeable one-way or two-way switches which can be mounted in standard boxes containing up to eight switches. To this range has now been added an intermediate switch, interchangeable with the other types, so that lamps can now be controlled as necessary from more than two positions. Prices are 61s. 4d. per dozen in brown, 63s. 4d. in ivory. The same firm has also recently produced a leaflet (No. 229) which, though quite modest in its aims, is a useful guide to the specification of electrical accessories in housing schemes, and contains, among other things, a clear explanation of the ring main circuit and its advantages. Suitable accessories are also listed, with notes on the requirements of individual rooms. (M.K. Electric Ltd., Wakefield Street, Edmonton, London, N.18.)

MK intermediate switch in the 'gridswitch' range.



Glued laminated bowstring trusses by The Rainham Timber Engineering Co.

GLUED LAMINATED BOWSTRING TRUSSES

A recent pamphlet from The Rainham Timber Engineering Co. illustrates glued laminated timber bowstring trusses which can be produced in standard designs for spans up to 150 ft. The trusses are designed in accordance with CP.112 and urea-formaldehyde gap-filling glues are used complying with BS.1204. Laminated timber has the advantage that individual members can be built up to almost any length and size, and as knots, shakes or cross grain are not superimposed in successive layers, the Code of Practice allows higher stresses than in natural timber. In these trusses the laminated members are used only where greater strength is essential, verticals and diagonals and sometimes the bottom chords being in natural timber. Connectors are used for all joints except where bolting gives adequate strength.

These trusses compare favourably in cost with standardized steel or concrete units of the same strength, and are considerably cheaper than specially designed trusses. The cost of the complete building is further reduced, as site assembly is easy and the roof covering can be nailed direct to the purlins and hook bolts are unnecessary, while insulating board is also simple to fix. The manufacturers, who are members of the Phoenix Timber Group, maintain a full engineering staff which will design any type of timber structure. (The Rainham Timber Engineering Co. Ltd., Frog Island, Rainham, Essex.)

FLUORESCENT LAMP DEVELOPMENTS

The various members of the Electric Lamp Manufacturers Association have recently introduced a new 4-ft. fluorescent tube which incorporates its own reflector. The upper two-thirds of the inner surface of the tube is coated with a special reflecting material so that the light output is reflected downwards over an arc of 120 degrees and a separate reflector is not necessary. When these lamps are used with fittings having comparatively little directional control they

provide nearly twice as much light on the working plane as the conventional lamp: they will also reduce dazzle in shops, where it is common practice to mount lamps vertically at the sides of windows and display cases. The price of the lamps is 13s. 9d. plus 2s. 10½d. purchase tax, and they are interchangeable with the standard 4-ft. lamp, having the same rating of 40 watts. (Electric Lamp Manufacturers' Association, 25, Bedford Square, W.C.1.)

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

ENQUIRY FORM

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

.....

Please ask manufacturers to send further particulars to :—

NAME

PROFESSION or TRADE

.....

ADDRESS

.....

Buildings Illustrated

Sports Pavilion, Stirling Corner, Barnet by-pass, Barnet, Herts., for the Finsbury Borough Council. (April 5, pages 313-316.) *Architects:* Sudell & Waters, P.L.L.A., A.R.I.B.A. (Richard Sudell, P.L.L.A., landscape and executive architect, D. H. Gillies-Reyburn, A.R.I.B.A., A.I.L.A., D. Tennyson Waters, A.R.I.B.A., architects). *Quantity Surveyor:* Gordon Fanshaw. *General Contractors:* Townsend & Collins Ltd. (building construction) and Doe & Sons Ltd. (landscape work and sports fields). *Sub-contractors (structure):*—Steel reinforcement: Helical Bar & Engineering Co. Ltd. *Heating and ventilation:* G. M. Haden & Sons Ltd. *Asphalt:* Paramount Asphalte Flooring Co. Ltd. *Electrical installation:* Electengs Ltd. *Electrical fittings:* Utility Lamp & Fittings Co. Ltd. *Bituminous felt roofing:* William Briggs Ltd. *Thermoplastic tiling:* Marley Tile Co. Ltd. *Hardwood flooring:* Hollis Bros. Ltd. *False ceilings:* Sundeala Board Co. Ltd. *Metal work and balustrades:* Clark, Hunt & Co. Ltd. *Metal windows and doors:* Henry Hope & Sons Ltd. *Sanitary fittings:* B. Finch & Co. Ltd. *Doors:* Jayanbee Joinery Ltd. *Ironmongery:* Broad & Co. Ltd. *Fire fighting apparatus:* Merryweather & Sons Ltd.

Announcements

TRADE

Copperad Ltd. announce that the telephone number at their Head Office and Works at Colnbrook has been changed to Colnbrook 521.

Matthews & Yates Ltd., makers of Cyclone fans and fan equipment, have opened a new Branch Office at Jacey House, The Lansdown, Bournemouth. (Tel.: Bournemouth 2493.) J. R. Barlow will be in charge, and A. T. Barlow will take charge of their Birmingham branch.

The Sheffield Branch of British Insulated Callender's Cables Ltd. has moved to 87, Spital Hill, Sheffield, 4. (Tel.: Sheffield 24251.)

Thermadore (Great Britain) have moved to larger offices at 94/98, Petty France. (Tel.: ABBey 6586/7/8.)

D. K. Coutts, M.S.C., A.R.I.C., has been appointed Manager of the Technical Office of The Mond Nickel Co. Ltd. in Bombay. He succeeds J. McNeil, whose death occurred recently.

Stramit Boards Ltd. will not increase the price of their tank lagging units (for the insulation of cisterns and tanks) for six months. The price of roofing and partition grade Stramit building slabs will be "pegged" for the same period.

The London offices and stores of J. A. Crabtree & Co. Ltd., Walsall, have moved to 230, Tottenham Court Road, W.1. (Tel.: LAngham 6756.) The Manchester office has moved to Lincoln House, 16, Lloyd Street, Manchester, 2.

Edward Ormesher, A.M.I.S.T.R.U.C.E., has retired from Henderson Sliding Door Gear after 30 years as Northern technical representative. He is succeeded by his son, John Ormesher, and Frank Thomas.

Carricks (London) Ltd. have established a Sales Division at 44, Tower Hill, London, E.C.3 (Tel.: ROYal 1461). This will handle the increased business of their Hedetaire Industrial Space Heater Unit.

The Manchester Office of Brightside Heating & Engineering Co. has moved to 105-107, Princess Street, Manchester, 1. (Tel.: Central 4377.)

The Federation of Clinker Block Manufacturers has appointed A. H. Wardle as Technical Officer/Secretary in place of L. W. E. Rowbotham who has resigned.

Denis H. Reid has been elected Director with duties as Assistant to the Managing Director of D. Anderson & Sons Ltd.

PROFESSIONAL

S. Lothian Barclay, A.R.I.B.A., has taken over the practice of James W. Reid, A.I.A.R.C.H.T.S.(SCOT.), as the latter has retired from active business due to ill health. The practice will continue under the same name at 79, West Regent Street, Glasgow, C.2, where Mr. Barclay will be pleased to receive trade literature.

The association between Alan Reiaich, A.R.I.B.A., and Ralph Cowan, A.R.I.B.A., has been dissolved by mutual consent, except for their joint work on the new Edinburgh and East of Scotland College of Agriculture, owing to Mr. Cowan taking up the appointment of Head of the School of Architecture, Edinburgh College of Art, and Mr. Reiaich relinquishing his teaching appointment.

H. Edgar Bell, A.R.I.B.A., has relinquished his appointment with the East Suffolk County Council, and has entered into private practice at 6, Goyfield Avenue, Felixstowe, Suffolk, where he will be pleased to receive trade catalogues. (Tel.: Felixstowe 950.)

Anthony Cave-Browne-Cave, A.R.I.B.A., has commenced practice at 17, Greenhill Street, Stratford-upon-Avon (Tel.: Stratford-upon-Avon 3209), where he will be pleased to receive trade catalogues.

*Demountable partitions by Compactom Ltd.
on the Fourth Floor, Time and Life Building W1*

*Architect:
Michael Rosenauer F.R.I.B.A.*



**When
you
decide
to
divide . . .**

■ ■ ■ you'll find the most suitable materials and

finishes for all requirements combined in Compactitioning—

the complete, individual service of

COMPACTOM PARTITIONING

Write for full details to COMPACTOM LTD., OXGATE LANE, CRICKLEWOOD, LONDON, N.W.2

Telephone: GLAdstone 6633 (3 lines)

Heat-
105-
Tel.:

ufac-
Tech-
V. E.

ector
aging

taken
Reid,
etired
The
name
C.2,
d to

eiach,
, has
except
burgh
lture,
point-
hitec-
Mr.
point-

ished
ffolk
pri-
Felix-
ed to
stowe

, has
street,
upon-
ed to

Obliteration

The outstanding hiding power of modern paints is due to the exceptional opacity of Titanium Oxide. Paints based on Titanium Oxide need fewer coats, stay brighter longer. Eventually, when a repaint is required, burning off is unnecessary. These paints are ideal for nurseries, kitchens, hospitals, etc. for Titanium Oxide is non-toxic. It pays to remember Titanium Oxide for brightness, opacity and durability.



Issued in the interest of better paintwork by

**BRITISH TITAN PRODUCTS
COMPANY LIMITED**

COPPERGATE
YORK

Factories at Grimsby and Billingham and at Burnie, Tasmania. Agents in most principal countries.



This Happens EVERYDAY . . .

Burning, Scalding, Falling, Slipping and Bumping into objects, are amongst the many accidents that occur daily in large scale kitchens, and which, in many cases, result in serious injuries. A great deal can be done by careful planning and siting of equipment to reduce these dangers. Our experienced planners can advise you on how best to produce conditions under which accidents are far less likely to happen, so if you have a Kitchen Planning Problem from the supply of a single piece of equipment to the planning and installation of a complete Kitchen, our Planning Department is at your service.

Send now for a free copy of our Booklet, "Large Scale Kitchens and their Planning", a 32-page guide to planning for large scale catering.

★ **"Stotts of Oldham"**

VERNON WORKS OLDHAM

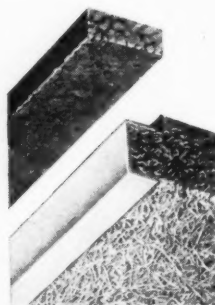
LONDON OFFICE
167, OXFORD ST., LONDON W.1.

CORK and the 'COLD BRIDGE' in ROOFS

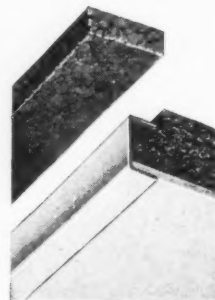
As is well known, structural members of high conductivity, in contact with the upper surface and the soffit of a roof, form in winter a "cold bridge" between the two surfaces.

For example: the channels of woodwool roofing slabs may in winter form such a cold bridge, with the result that in cases of high humidity the temperature of the soffit of the channels may be below dewpoint, when condensation will occur.

★ 3" REB.



3" REB.



3" REB. PP.

THERMACOUST 3" Rebated Channel Reinforced Roofing Slabs (3" REB), allow for a 1" thick cork strip to be placed over the channels, *without over-all increase in construction thickness.* This overcomes the "cold bridge" and prevents condensation.

Why CORK? Because to be effective in this reduced thickness the material must have nearly twice the insulating value of woodwool.

3" REB is unique. In one cheap unit all the following qualities are combined:—

- Low first cost and simplicity of construction.
- 30 lbs. superload up to 7' 0" span.
- Total roof thickness less than 4", saving inches of brickwork.
- Lightness of weight (8 lbs./sq. ft.), saving tons of supporting structure.
- Thermal insulation (U=0.17 BTh.U), saving in fuel and size of heating installation.
- Fine textured finish needing little decoration.
- Sound absorption (0.85 at 500 cps.)
- Condensation-free in very high humidities.
- ★ Availability ex stock in large quantities.

And now we offer, where no sound absorption is required, 3" Rebated Channel Reinforced Pre-plastered Thermacoust (3" REB PP) with the following additional advantages.

- Smooth finish.
- Highest possible light reflection.
- Preformed plaster in its strongest form.

★ **Exclusively**

Thermacoust

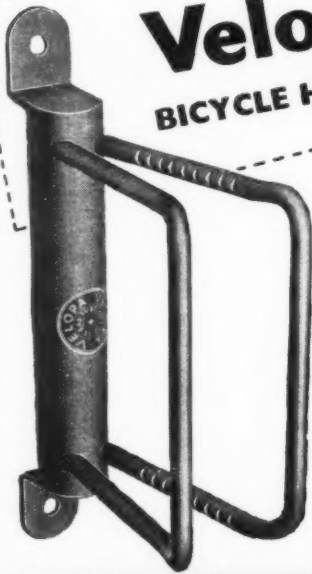
Patent 676,385. Other patents pending

T.20

THERMACOUST LTD., 39 Victoria Street, London, S.W.1. (ABey 2738)

The modern answer to
bicycle parking problems

VelopA BICYCLE HOLDERS

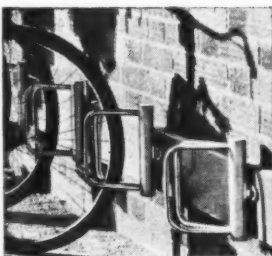


Serrated arms grip
tyre only *
Unobtrusive and
space saving *
Indestructible *
Heavily galvanised
steel * Wide range
of models for any
wall, post, railing,
etc. * Easily
installed by unskilled
labour.

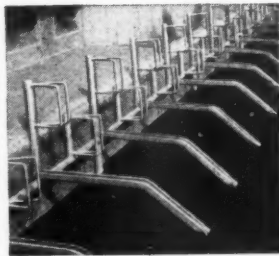
SYMMETRY
STYLE
SIMPLICITY



VelopA Bicycle Holders, 45°, at King's College, Cambridge,
specially made with extended upper bracket to suit recessed
wall.



Model RT. 45°, bolted to
timber beam.



Battery arrangement for
bicycles at 12-inch centres.

LE BAS TUBE COMPANY LIMITED

CITY WALL HOUSE, 129 FINSBURY PAVEMENT, LONDON, E.C.2

Telephone: Monarch 8922 Telegrams: Lebasco, Avenue, London

LONDON · MANCHESTER · GLASGOW · BELFAST

Quicker Work with the FINEST VENEER

Flexwood

Available in 20 Timbers.

Guaranteed fully seasoned.



Flexwood Iroko in Director's Office at Bridget House,
(Unilever).

It goes direct on the plaster and bends
—where wanted—to the smallest radius.

We quote for complete installations.

Send your DRAWINGS to

**ALEXANDRIA TRADING
CORPN. LTD., 121, LONDON WALL,
LONDON, E.C.2.**

Tel: MONarch 2272 (6 lines)



Light on the job . . .

Where good lighting is essential at working places adjacent to walls. Patent Glazing as side lights can be the ideal answer. It is pleasing, inexpensive, durable and trouble free.

THE STANDARD PATENT GLAZING CO. LTD
 WORKS: DEWSBURY Phone: 1213-4 LONDON OFFICE Phone: HOUnslow 3079
 Branches at BIRMINGHAM and BRISTOL

AFA in the
Royal Exchange

This photograph, which was taken in the Royal Exchange, London, where a comprehensive A.F.A. system has been recently fitted, gives further evidence that A.F.A. blends into any decorative scheme. It is equally applicable to existing buildings as above or to the hundreds of new offices, factories and shops going up all over Britain. The flush-fitting detectors are quite unobtrusive—yet if fire breaks out they call the Brigade at once to the exact location. May we send full particulars?



Photograph by kind permission of Royal Exchange Assurance and The Worshipful Company of Mercers.



ASSOCIATED FIRE ALARMS LIMITED
 CLAREMONT ROAD; WALTHAMSTOW, LONDON, E.17
 SERVICE IN ALL MAIN CITIES



what's METALLIC?

You'll seldom see it, but in many a school or factory, hospital or housing estate, METALLIC conduit and fittings plays a prominent, if undercover, part in the electrical installation. And why is METALLIC so often specified? Because architects and contractors alike know that METALLIC is reliable, really long-lasting. Strongly made from good materials, it's specially treated to resist moisture, chemicals, etc., while consistent accuracy cuts installation time to a minimum and avoids wastage.

Wherever you go you'll find conduit and fittings by



THE METALLIC SEAMLESS TUBE CO. LTD.,
LUDGATE HILL, BIRMINGHAM, 3

and at London, Newcastle-on-Tyne, Leeds, Swansea & Glasgow



Denton's DENTOLITE

+ Self-Sterilising +
EMULSION PAINT

*The only paint of its
kind in the world*

**"We would like Dentolite Finish,
but for this job it need not be
self-sterilising."**

This is typical of many requests received by us and appears to be the result of a misunderstanding brought about by the very success of DENTOLITE as a germicidal and fungicidal finish.

Actually, DENTOLITE, is the best quality P.V.A. Emulsion Paint it is possible to produce. It is non-poisonous, free from odour, scrubable and dries with a beautiful satin sheen. ONE COAT OVER ANY SIMILAR COLOUR GIVES FIRST-CLASS OBLITERATION.

DENTOLITE'S special self-sterilising properties are due to the unique method of manufacture (World Patents applied for) which confers on it the properties of permanently resisting disease-producing germs and mould, making it the PERFECT HYGIENIC WASHABLE WALL FINISH.

DENTOLITE is available in thirty attractive pastel shades AND COSTS NO MORE THAN ANY OTHER FIRST-CLASS EMULSION PAINT.

Shade cards, scientific reports, technical literature, etc., will gladly be sent on request.

Manufactured by the makers of

DENTONAMEL

TRADE MARK



SINCE 1789

**DENTON EDWARDS PAINTS
LIMITED**

Paint and Varnish Makers for over 160 years
ABBAY ROAD · BARKING · ESSEX

Telephone: Rippleway 3871 (10 lines)
Telegrams: EDLACA, BARKING

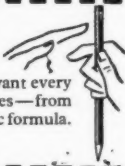
TURQUOISE

wins on every point

EAGLE "CHEMI-SEALED" TURQUOISE DRAWING HB

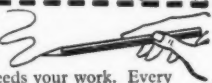
PRECISION GRADING

Turquoise gives exactly the line you want every time, because every one of the 17 grades—from 9H to 6B—is made from its own basic formula.




SMOOTHNESS

Turquoise smoothness speeds your work. Every particle of lead is lubricated with rare waxes, sealed in for permanent smoothness. No gritty flaws, no harshness.




OPACITY

100% Electronic graphite refined in the Eagle attrition mill to 1/25,000th" particles, produces a fine-textured lead that gives lines of maximum denseness for perfect reproduction.




STRONG POINTS

Turquoise points don't snap or crumble under pressure. The more compact lead—100% Electronic graphite again—takes and holds a needle point without crumbling.



CLEAN ERASURE

With Turquoise pencils there is no fear of "ghost" lines after erasure. Lines rub out cleanly every time.



T



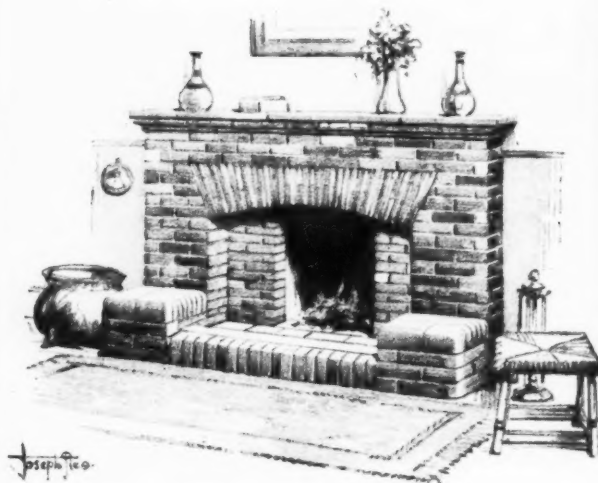
'CHEMI-SEALED' Super-bonded

TURQUOISE

DRAWING PENCILS

with 100% 'ELECTRONIC' Graphite

Comfort and Beauty



Even when the grate is empty a Claygate Fireplace still has a warm and mellow look about it. This combination of comfort and beauty helps to account for their ever-growing popularity. These fireplaces, which blend harmoniously with a wide variety of settings, are so constructed that they can all be modified to suit individual requirements.

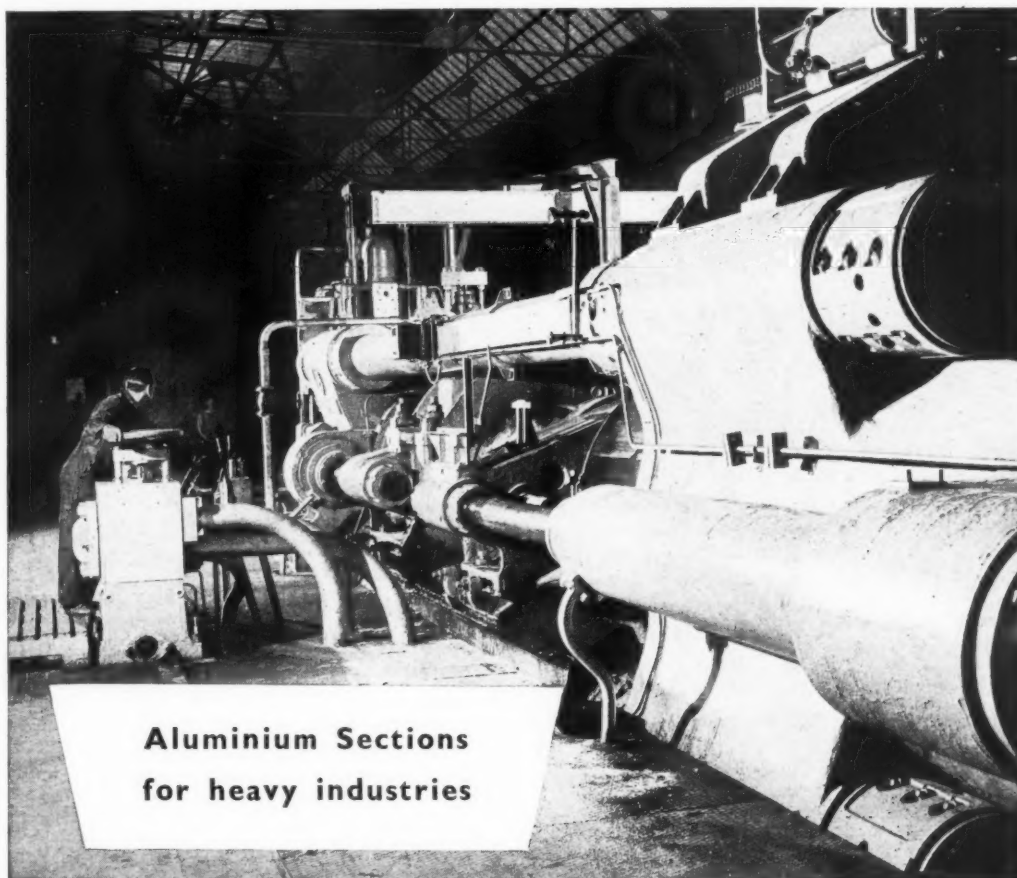
Claygate maintain a special staff who construct fireplaces to clients' own specifications. If for any reason you do not find just what you are looking for in the extensive existing range, these craftsmen will execute your own designs faithfully and to the letter.

★ The latest catalogue of original Claygate fireplace designs is profusely illustrated and contains all essential information for architects. A copy will be sent free on request, and quotations for special designs readily supplied. Ask also for details of the Claygate Stone Fireplaces.

PRIVATE DWELLINGS • HOTELS
CLUBS • CONFERENCE ROOMS
CENTRES • REST ROOMS

Claygate FIREPLACES

CLAYGATE FIREPLACES LIMITED, 7, CLAYGATE, SURREY
Scottish Works: Barrie Road, Hillington, Glasgow, S.W.2



**Aluminium Sections
for heavy industries**

Two additional extrusion presses, one of 5,000 tons and the other of 3,500 tons, have been installed at the Latchford Locks Works of the British Aluminium Company. These presses represent an important extension to the extrusion capacity of the aluminium industry in this country. They will be used to produce a wide range of sections for the road transport, building, ship-building and structural and general engineering industries.

Extrusions are available in sizes up to $13\frac{1}{2}$ " circum-circle and are specially designed to facilitate the economic use of aluminium in riveted or welded assemblies.



THE

British Aluminium

CO LTD

NORFOLK HOUSE ST JAMES'S SQUARE LONDON SW1

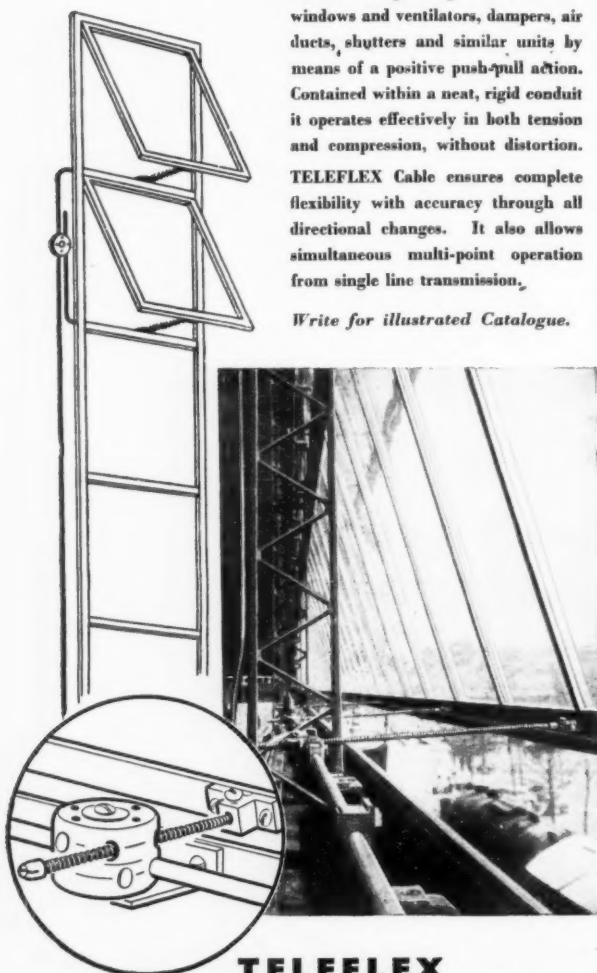
AP138-1267

VENTILATION without **VEXATION**

TELEFLEX Remote Control is a simple, inexpensive, and dependable method of operating 'out-of-reach' windows and ventilators, dampers, air ducts, shutters and similar units by means of a positive push-pull action. Contained within a neat, rigid conduit it operates effectively in both tension and compression, without distortion.

TELEFLEX Cable ensures complete flexibility with accuracy through all directional changes. It also allows simultaneous multi-point operation from single line transmission.

Write for illustrated Catalogue.



**TELEFLEX
REMOTE CONTROLS**

TELEFLEX PRODUCTS LTD.
BASILDON · ESSEX

Telephone: Basildon 22861

Electricity from Nuclear Energy

| 1955 | 1965 | 1975 |
|---------------------------------|---------------------------------|---------------------------------|
| TOTAL GENERATING CAPACITY | TOTAL GENERATING CAPACITY | TOTAL GENERATING CAPACITY |
| 20,000 MW | 35-40,000 MW | 55-60,000 MW |
| | 2,000 MW | 10-15,000 MW |
| 20,000 MW | 33-38,000 MW | 45-50,000 MW |

COAL FIRED POWER STATIONS
 NUCLEAR POWER STATIONS

20 years' development programme

Britain's nuclear power station construction programme provides for twelve such stations to be built at a cost of some £300 million in the next ten years.

The First Ten Years

Work will start on the first two nuclear power stations in 1957. These will each have two gas-cooled reactors and the stations will be in operation by 1960/61. Two further gas-cooled reactor stations — each housing two reactors of improved type — to be begun in 1958/9 will come into service by 1963. The output of these four stations will be between 400,000 and 800,000 kilowatts.

The construction of two groups of four stations each will begin in 1960 and 1961/2 and they will be supplying electricity to the Grid by 1963/4 and 1965 respectively. The first group of stations will probably have one gas-cooled reactor each. The second group will probably utilise liquid-cooled reactors — one high rated reactor each. These stations will add well over 1,000,000 kilowatts to the nation's power resources.

The Second Ten Years

By 1975, it is anticipated that nuclear reactor power stations in Britain will have an aggregate installed capacity of between 10,000,000 and 15,000,000 kilowatts; and about half the national consumption of electricity will be derived from nuclear energy.



7 YEARS' PROGRESS

50 NEW POWER STATIONS

10,000,000 ADDITIONAL HORSEPOWER INSTALLED



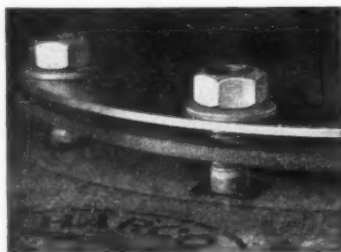
An Important Improvement

in

HOT WATER TANKS

IN keeping with their progressive policy, and to meet the requirements of the Building Industry, Harveys have designed a new type of Manhole and Cover for 'HARCO' HOT WATER TANKS.

The main advantage of this development is that of preventing the thread of the bolts from coming into contact with water, thereby avoiding corrosion—and the consequent risk of shearing the bolt heads—and greatly facilitating removal of the cover for servicing.



This is achieved by securing the heads of the bolts inside the tank, so that the screwed portion projects outside.

No hemp, red lead or other jointing material is required when fixing the cover, other than

Patent No. 664463.



the India Rubber Ring which is supplied with the tank. This ring, together with the grumets fitted under the bolt heads inside the tank, enables a perfect seal to be made in much less time.

The cover itself is slightly convex to give additional strength, and the turned-over edge of the manhole presents a smooth rounded surface which cannot injure the hands or arms when installing the tank.

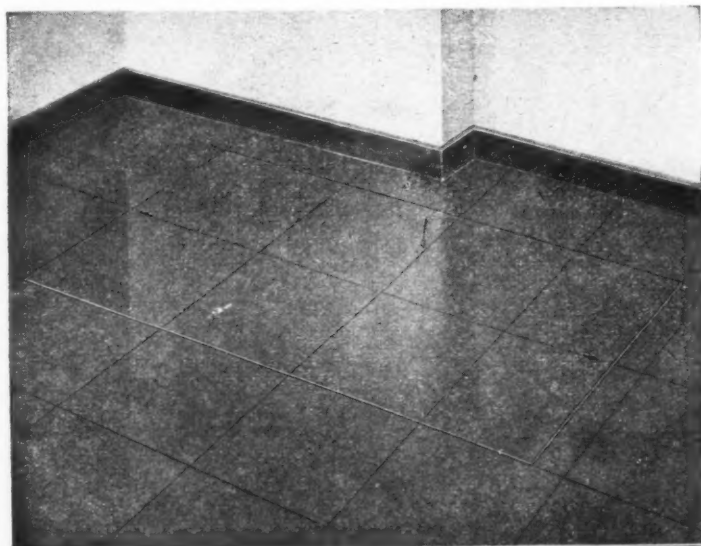
Ask for List No. AJ873.

'Harco' Patent Manhole & Cover

Please obtain your supplies through your usual Builders' Merchant or Ironmonger.

Harvey

G. A. HARVEY & CO. (LONDON) LTD., WOOLWICH ROAD, LONDON, S.E.7. (GREENWICH 3232, 22 LINES)



Detailed Brochure sent on request.

BROADSTEL COVERS

PATENT No. 606014

After a period of acute shortage of sheet steel the BROADSTEL COVER is now readily available for prompt delivery.

Designed for filling on site to match the surrounding floor or paving. Highly resilient to impact and almost invisible when installed.

*for paved
surfaces*

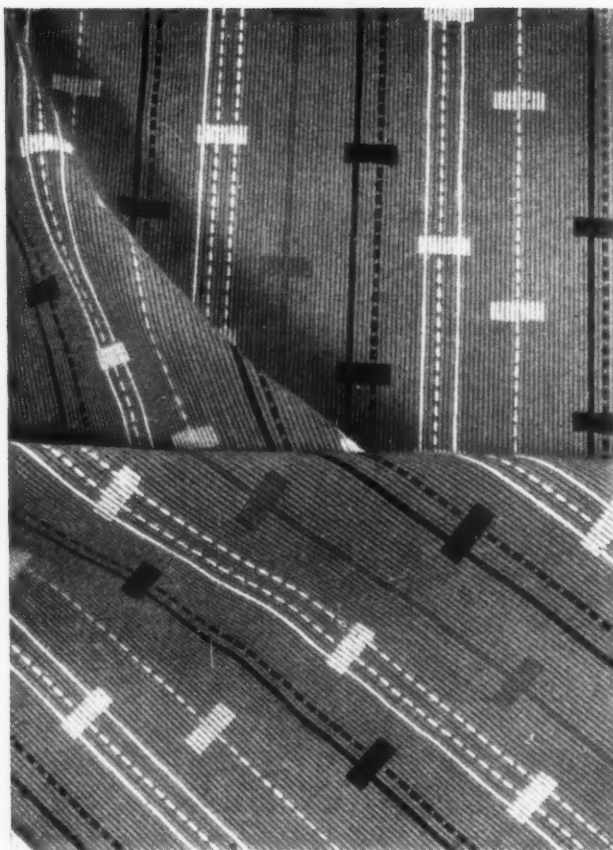
BROADS

MANUFACTURING CO. LTD. 4 SOUTH WHARF, PADDINGTON, LONDON, W2 • Tel: PAD 7061 (20 lines)

REPLIN is a hard wearing
easy-to-clean
upholstery material.
It can be obtained in any plain
colour including "House &
Garden" and British Colour
Council shades and in stripes
or a wide range of contemporary
and traditional designs.
Individual designs can be
woven to order.
More than thirty plain colours
are available from stock.

Replin

2 SOUTH AUDLEY STREET, W.1.
TELEPHONE: GROSVENOR 6692



CONTACT PYNFORD LTD FOR A

Complete Foundation Service

★ SITE INVESTIGATIONS AND REPORTS

that are clear and to the point.

★ FOUNDATIONS DESIGNED

to suit all site conditions

★ FOUNDATIONS CONSTRUCTED

quickly and accurately

★ UNDERPINNING

PYNFORD METHOD

by the proved

*Write for our illustrated brochure and for further details
write or 'phone*

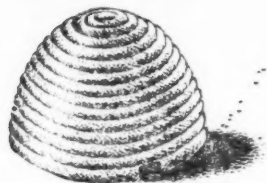
Site Investigations, Site
Clearance, Foundation
Design and Construction.
Site Tests During
Construction. Piling and
Underpinning. Controlled
Jacking, Mining Subsidence
Control, Plant Hire, Structural
Alterations.

Pynford Limited

Foundation Engineers

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

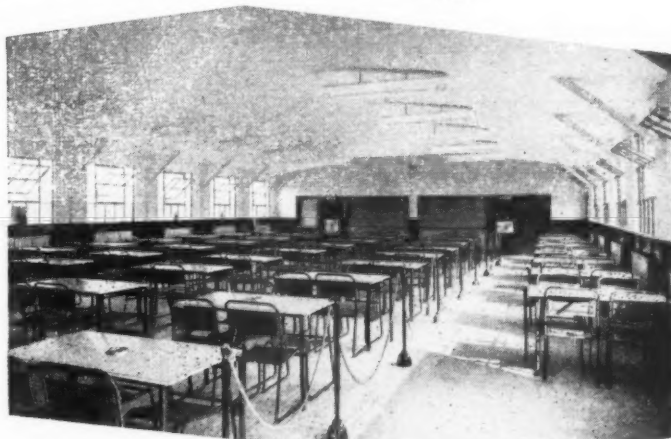
The Hive



provides shelter for the bee

CANTEEN, SIZE 120' x 37' x 10'
SUPPLIED TO:-
THOMAS HARRINGTON LTD., HOVE, SUSSEX.

OTHER TIMBER BUILDINGS
8' 10' 12' 15' 20' 25' & 30' WIDE
FOR INDUSTRY, COMMERCE,
HOSPITALS, SCHOOLS,
SOCIAL ACTIVITIES,
SPORTS,
ETC.



THORNS

provide shelter for **OTHER BUSY WORKERS**

PLEASE WRITE FOR CATALOGUE AND QUOTATION
GIVING DETAILS OR DRAWING OF BUILDING REQUIRED TO:-

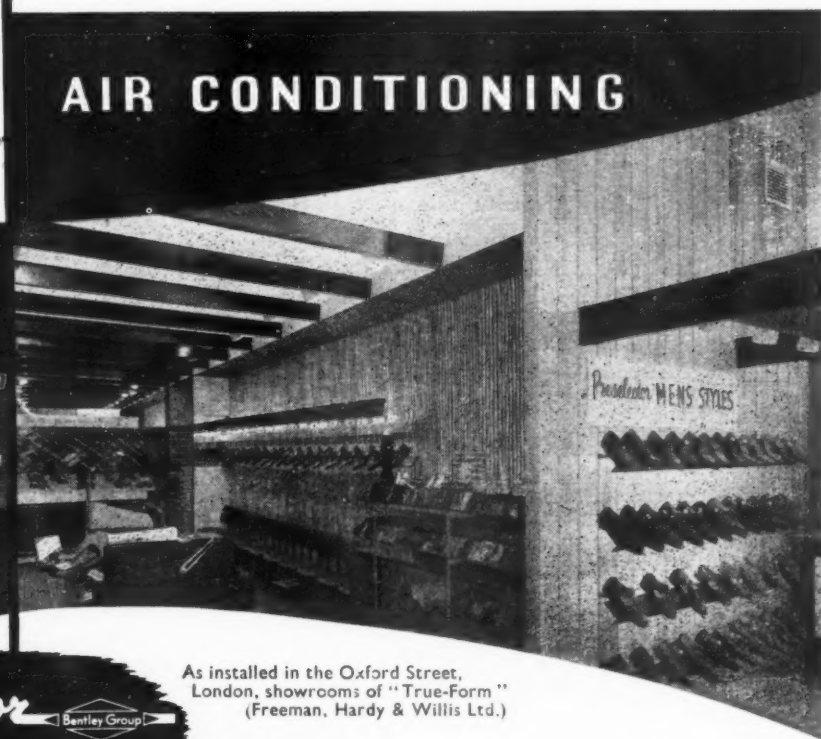
J. THORN & SONS LTD. (Dept. 188) BRAMPTON ROAD, BEXLEYHEATH, KENT

BD736

Quickly!

Modern

AIR CONDITIONING



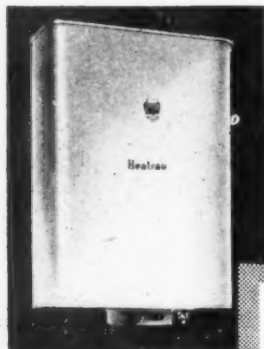
As installed in the Oxford Street,
London, showrooms of "True-Form"
(Freeman, Hardy & Willis Ltd.)

MELLOR BROMLEY & CO., LTD.
BARKBY ROAD, LEICESTER.

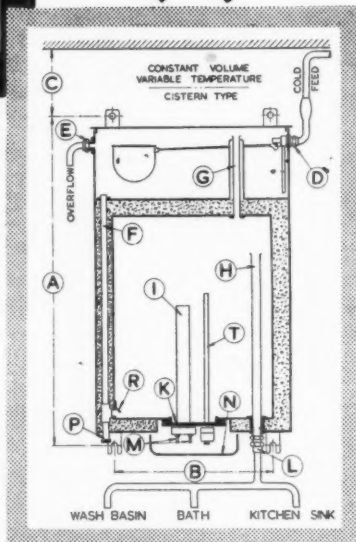
(Air Conditioning Division)
Telephone : 66651

Member of the Bentley Group of Companies

inside information



- C Top of heater should be at least 6in. from ceiling to give proper access to ball valve cistern.
- D Ball valve to B.S.1212: interchangeable seatings.
- E Overflow union: provision for interchange with D.
- F Cold water feed to heating chamber.
- G Vent or expansion pipe.
- H Hot water delivery pipe.
- I Immersion heater: removable heating core.
- K Removable bottom plate.
- L Union connection for hot water supply piping.
- M Main terminals for supply cable.
- N Removable cover: access to all electrical connections.
- P Drain fitting.
- R Cold water inlet baffle.
- T Temperature regulator.



Internal arrangement of standard model F.B. cistern type Electric Water Heater

Heatrae F.B. cistern type Electric Water Heater is a complete hot water system in itself. It has its own ball valve cistern, expansion pipe and overflow connection. Temperature is automatically controlled.

Rectangular in shape and designed for wall fixing, the F.B. occupies minimum space and is ideal for fitting in blocks of flats to meet hot water requirements of each flat. It is a multi-point heater that can be connected to any number of draw-off taps.

Capacities range from 5 to 30 gallons.

For full details, write and ask us to send you Leaflet DEG.



HEATRAE LTD. • NORWICH • ENGLAND

Manufacturers of Electric Water Heaters, Oil Heaters, Immersion Heaters, Urns, Towel Rails, Airing Cupboard Heaters, Flameproof Heating Apparatus, Breakfast Cookers, Electric Fires, Food Trolleys, Warming Plates, Air Heaters, etc.



Double grip means double strength.



Streamlining gives better appearance.



Can be 'made' in 10 seconds.



Tested to 5,200 lb. per square inch, hydraulic and still sound.



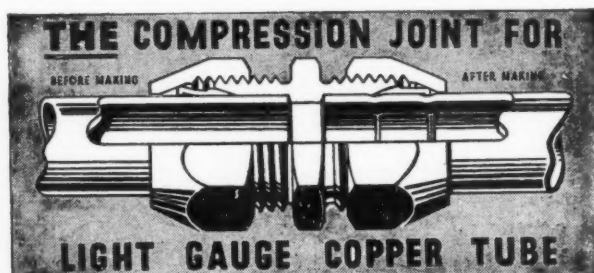
All castings gunmetal—water-tested.



Can be made and remade any number of times.

The Hanlo Joint has been proved to provide the perfect union for light gauge copper tube. The double grip ferrule ensures an absolutely permanent joint of almost welded strength and yet the joint can be remade any number of times without losing its efficiency. Hanlo is acknowledged by Municipal Authorities and leading Contractors to be the best Compression joint available—the sales figures prove it too!

Ask for details of the Hanlo Pillar Cock adaptor



The new fully illustrated Hanlo Catalogue is now available. Your copy will be sent on request.



— is made by

Lovell & Hanson Ltd

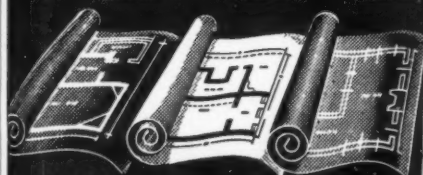
HEAD OFFICE & WORKS: HANLO WORKS, SPON LANE, WEST BROMWICH, STAFFS.
Phone: West Bromwich 1681 Grams: "Hanlo" West Bromwich

London Distributors & Stockists
The Builders Copper Tube Co. Ltd.
14, Norfolk Street, W.C.2.
Temple Bar 4696 (4 lines).
Riverside 4101 (24 lines).

Brooks & Walker Ltd.
47, Great Eastern Street,
London, E.C.2.

NOW !

BY ANY PROCESS!



SHARPER
white or blueprints

Strong...

Venus Pencil leads are pressure-proofed* for maximum strength

SMOOTH...

made by a special colloidal process* which removes all impurities

ACCURATE...

exactly graded in 17 different degrees of hardness

*Exclusive Venus Patents

Durable non-crumbling points; strong and smooth in action give lines uniform in weight and tone. Opaque lines for sharp, clear reproduction. No smudges. No "ghosts" from erasure. There's the right degree for your favourite paper. The result: sharper prints — by any process !

VENUS
DRAWING
PENCILS

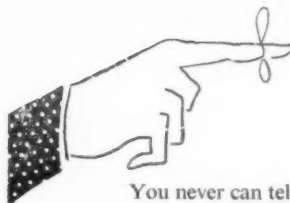


THE
PENCIL
WITH THE
CRACKLE
FINISH



Use also Venus Soft Pencil Eraser

VENUS PENCIL CO. LIMITED
LOWER CLAPTON ROAD, LONDON, E.5



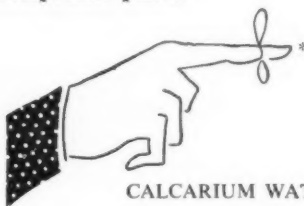
You never can tell what your thoughts will do
In bringing you hate or love,
For thoughts are things, and their airy wings
Are swift as a carrier dove.
They follow the law of the universe—
Each thing must create its kind,
And they speed o'er the track to bring you
back
Whatever went out from your mind.*

MORSE

FAMOUS FOR PAINTS & DISTEMPERS

IMPORTANT NOTICE TO ARCHITECTS

With a new factory completed in 1954 and new formulations in partnership with tried and trusted products such as CALCARIUM Water Paint and BELMURA Oil Bound Distemper we now offer Architects, Surveyors, Builders and Decorators a complete service in interior and exterior decorative materials at competitive prices.



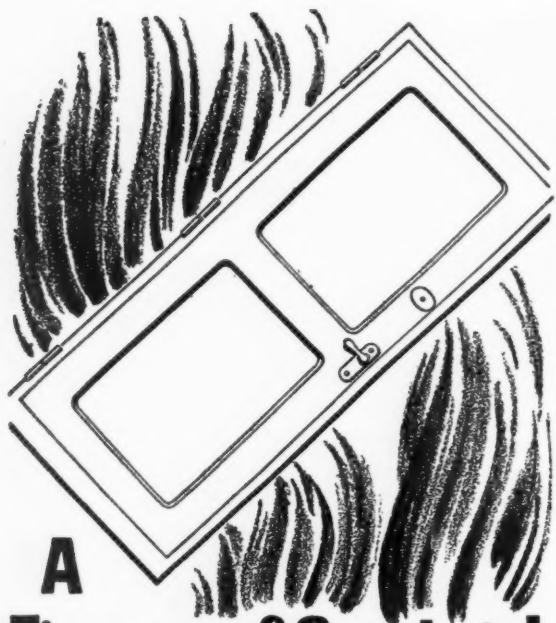
CALCARIUM WATER PAINT
BELMURA OIL BOUND DISTEMPER
VELVODURE SUPERFINE ENAMEL
TUNGCRETE STONE PAINT ETC.,

Write for details and brochures
or information to

A. T. MORSE, SONS & COMPANY LIMITED

Jupiter Works, Plaistow, London, E.13
Telephone: Grangewood 4081

PROMPT SERVICE · TECHNICAL ADVICE



A Fireproof Sandwich

Instead of bread and ham, use pressed steel plates and *Askieselos sandwiched between them and you have a Dreadnought Fireproof Door. It looks as like a good wooden door as makes no difference. You have probably seen these doors in London and Provincial Art Galleries, Government Offices, Banks and other buildings, and didn't know they were fireproof. The Fire Offices Committee and L.C.C. give them official approval.

★ "Askieselos" is one of the finest fire-resisting materials known to modern science. It is held in place by double channel steel frames rigidly secured by patent process.

DREADNOUGHT FIREPROOF DOORS (1930) LTD.

26, VICTORIA ST., WESTMINSTER, S.W.1

£2,108
for you at age 65

or

PENSION of £195 instead of lump sum

FAMILY PROTECTION

Capital Sums plus bonuses and a tax-free income to your wife and family in the event of your death before 65.

THE COST

£3.13.2d. per month (less than 2/6 per day).

These benefits are based on age 30 next birthday and assume continued rate of bonus.

Particulars from:

The Secretary,
A.B.S. INSURANCE AGENCY, Ltd.
66, Portland Place, London, W.1.
(Tel. LAngham 5721)

You are invited to write for an illustrated

(free) catalogue of

B O O K S on architecture, planning,

and kindred subjects to The Architectural

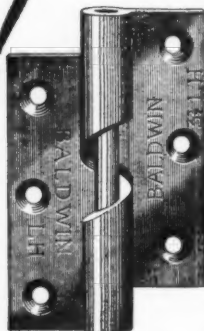
Press, 9-13 Queen Anne's Gate, London, S.W.1

CLICK!

...and the door smoothly closes for the fiftieth time today

It's amazing how people take the faultless service of little things for granted. Little things like Baldwin's Cast Iron Rising Hinges for example—their robust construction and the care and attention which goes into their manufacture ensures smooth and silent action day after day—year after year

**CAST IRON RISING HINGES BY
BALDWIN'S**



Sole Manufacturers: BALDWIN, SON & CO. LTD., STOURPORT-ON-SEVERN

"So I says to him, I says..."

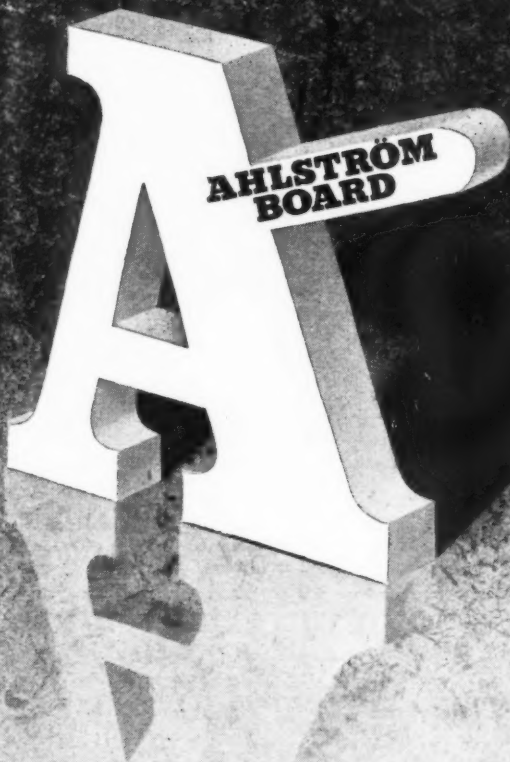


RYCROFTS HAVE THE NAME
FOR CALORIFIERS"

Your reputation and your customer's satisfaction both gain when you instal Rycroft calorifiers—get a price next time from Rycroft Works, Thornton Road, Bradford.

Telephone 27273 (6 lines)

RYCROFT & CO LTD



AHLSTRÖM

five three

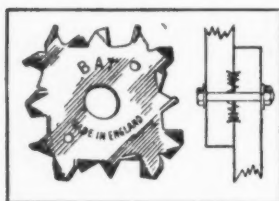
the hardboard with the extra width

Enquire from your local merchants or from
Plywood & Timber Products Agencies Ltd.
City-Gate House, (East), Finsbury Square, E.C.2

Manufactured by A. AHLSTRÖM OSAKEYHTIÖ, FINLAND

THE **BAT** PRODUCTS

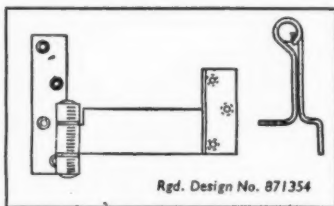
SQUARE TOOTHED PLATE TIMBER CONNECTORS



Modern structural timber design calls for the use of BAT Timber Connectors. Joints are doubled in strength. Timber sections are reduced. Rigidity is increased and weight saved by simplified designing.

IMPROVED DESIGN EASY-CLEAN CASEMENT HINGES

Special feature is the Arm Design which allows for interchangeability with the STORM-PROOF Butt Hinge fitting. Other types include the E.J.M.A. Hinge to BS644 and a light type.



Rgd. Design No. 871354

PRICES AND SAMPLES ON APPLICATION

Sole Manufacturers:

AUTOMATIC PRESSINGS LTD

BAT WORKS · BLACKHEATH · BIRMINGHAM

Phone: Blackheath 2085/6 (2 lines)

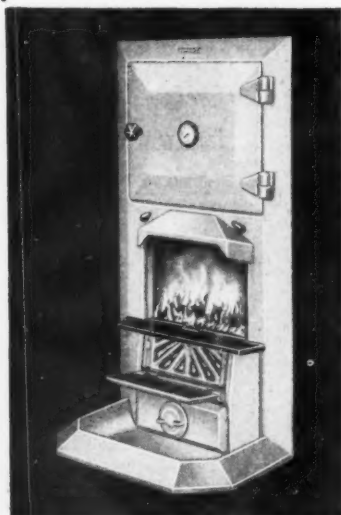
AP.335

FORESIGHT GRATES

Introduce their latest model

THE "RADCLIFFE"

THE MODERN COMBINATION GRATE



★
FOR COOKING
HOT WATER
AND
SPACE HEATING

★
Continuous Burning
on Household Coal
and Anthracite,
Intermittent Burning
on Coke

★
Fitted with concealed
soot doors for easy
cleaning

★
Illustrated with Open Fire
for daytime burning.
Supplied with closeable
cover plate for Overnight
Burning.

Recommended by the Ministry of Fuel and Power for Local Authority Housing.

SAMUEL SMITH & SONS LTD.
BEEHIVE FOUNDRY
SMETHWICK, 41, STAFFS.

Visit the INTERNATIONAL PADUA FAIR

and the

FIFTH INTERNATIONAL PACKAGING EXHIBITION

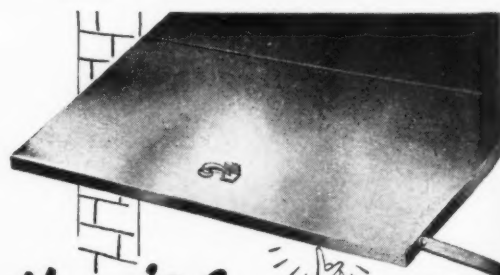


The combined Exhibition will be held from the 29th May to the 13th June. The emphasis this year will be on building and farm machinery equipment, wine cellar and bottling machinery manufacture. Refrigeration equipment of all types will also be prominent as the Fair is the venue for the 5th International Refrigeration Congress.

This year the Packaging Exhibition is run in conjunction with the 5th Packaging Congress which is organised in co-operation with the Italian Packaging Institute.

Padua is the ideal place to combine a holiday with a business trip. It is 25 minutes from Venice and just under two hours from the Dolomites and Lake Garda. There is ample accommodation of a high standard in Padua.

You can obtain full particulars regarding any aspect of the Fair from Auger & Turner Group Ltd., 40 Gerrard Street, London, W.1. (Telephone: Gerrard 6671.)



Here's a
Good Tip

Batley, smooth-sliding, trouble-free Up and Over Doors can be quickly and easily fitted to any width or height of opening. With finger-tip action, the door slides smoothly on ball bearing wheels, leaving an unobstructed opening with clear height of 6ft. 11in. There are no springs to lose tension; nothing to warp or sag. Will last a lifetime.

- Panelled with Aluminium Alloy, double crossed braced for strength and rigidity, or in exterior grade Mahogany Plywood, with grained finish to take varnish or paint.
- Size, 7ft. 6in. wide by 6ft. 3in. high.
- Price £18 delivered Free in England and Wales.

**BATLEY
UP & OVER DOOR**

Full details and literature from:—

ERNEST BATLEY LTD. 63 COLLEDGE ROAD,
HOLBROOKS, COVENTRY.

Softening the blows of FATE...

The Ancients personified Fate by the Three Sisters; Clotho, Lachesis and Atropos, who sat spinning the thread of each man's destiny, ruthlessly cutting it as the whim took them. Although the modern mind has abandoned this picturesque image of Fate, it believes in providing for every contingency through personal and corporate insurances.

In the business and professional world the name "Legal and General" has long been associated with almost every aspect of insurance; it has always been foremost in bringing to the service of industry and the general public, new and improved insurance cover.



The "Legal and General" deals with all normal types of insurance, including—

GROUP AND MASTER POLICIES COVERING ALL FORMS OF PENSION AND LIFE ASSURANCE SCHEMES, OR ENDOWMENT PENSION SCHEMES
INCOME POLICIES • MONTHLY PREMIUM LIFE ASSURANCE
ENGINEERING • GROUP PERSONAL ACCIDENT • FIRE AND CONSEQUENTIAL LOSS • HOUSEHOLDER'S COMPREHENSIVE
PUBLIC LIABILITY • MOTOR • EMPLOYER'S LIABILITY and many others

LEGAL & GENERAL

ASSURANCE SOCIETY LTD



CHIEF ADMINISTRATION 188 FLEET STREET, LONDON, E.C.4

can be applied to suit BRANCH VENTILATION

from BATH
from SINK
from BASIN

FOR SAFETY AND COMPACTNESS
IN THE SMALLEST DUCT

Econa
MULTI-BRANCH SOIL UNITS
can help you...

ECONA MODERN PRODUCTS LIMITED
AQUA WORKS • HIGHLANDS ROAD • SHIPLEY • BIRMINGHAM
Telephone and Telegram: Solihull 2078

RENTOKIL TIMBER FLUID

KILLS WOODWORM

The best with the largest national use. RENTOKIL TIMBER FLUID is easy to apply by brush and injector. Kills ALL woodworm and protects against further attack. Order RENTOKIL TIMBER FLUID and DRY ROT FLUID in 5-gall. RENTOPAILS, the multi-purpose containers. From Ironmongers and Builders' Merchants everywhere.

Free technical advice :

RENTOKIL WOODWORM & DRY ROT CENTRE (AJ)
23, Bedford Sq., London, W.C.1. 'Phone LANgham 5455

CLASSIFIED ADVERTISEMENTS

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

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

Public and Official Announcements

25s. per inch; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment is exempted from the provisions of the Notification of Vacancies Order, 1952.

HAYES AND HAMLINGTON URBAN DISTRICT COUNCIL.

Applications are invited for:—
(a) ARCHITECTURAL ASSISTANT (PERMANENT), Grade A.P.T. II, i.e., £595-£675 p.a.;
(b) SENIOR ARCHITECTURAL ASSISTANT (TEMPORARY), Grade A.P.T. IV, i.e., £710-£885 p.a., plus London weighting in both cases, 21-25 years £20 p.a., 26 years and over £30 p.a. Candidates for (a) must have passed the R.I.B.A. Inter. Exam., good experience of housing work with a local authority; (b) must be a Registered Architect, have good general experience in design and construction in relation to municipal housing and other works, and capable of supervising large building contracts. The Council is unable to provide housing accommodation for either of these appointments. Further particulars and form of application available from the undersigned, which when completed must be returned as soon as possible.

GEORGE HOOPER, Clerk and Solicitor.

Town Hall, Hayes, Middx. 3712

THE LONDON HOSPITAL, Whitechapel, E.1, requires JUNIOR ARCHITECTURAL ASSISTANT, salary £440 to £550 p.a. according to experience, plus London weighting. Post superannuable. Applications, stating age, present salary and brief particulars of experience, to be sent to the House Governor. Accommodation is available in Kensington if successful candidate is a woman. 9156

ARCHITECT TO THE LONDON COUNTY COUNCIL.

Applications are invited for appointment from October 1956 as ARCHITECT TO THE LONDON COUNTY COUNCIL, at a salary of £4,500 a year. The position is permanent and pensionable. The Architect to the Council is responsible for the design, erection and maintenance of most of the architectural work required by the Council and also advises the Council on town planning matters. Full particulars and application forms (which must be returned by Friday, 20th April, 1956) are obtainable from the Clerk of the Council (CL/G) County Hall, Westminster Bridge, S.E.1. (3994) 9436

CITY OF CANTEBURY

Applications are invited for the following additional appointments:—

- (a) SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (£710-£885).
- (b) ARCHITECTURAL ASSISTANTS, Grade A.P.T. II (£595-£675).

Candidates for position (a) must be Associates of the R.I.B.A., be competent designers with a contemporary outlook and have some experience of School building.

The successful candidate will be engaged on the design and erection of a New Technical College.

Applicants for positions (b) must have passed the R.I.B.A. Inter. Examination and will also be engaged on school building projects.

The commencing salary for all positions will be fixed within the Grades according to ability and experience.

Applications, together with names of two referees, must reach the City Architect and Planning Officer, Mr. L. Hugh Wilson, O.B.E., A.R.I.B.A., Dist.T.P., A.M.T.P.I., not later than the 19th April, 1956.

Canvassing will disqualify. J. BOYLE, Town Clerk.

Municipal Buildings, Canterbury. 9422

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

Applications are invited for appointment in the grades shown below, the salary ranges of which are:

- A.P.T. III (£640-£765). Special (£690-£840).
- A.P.T. IV (£710-£885).
- A.P.T. V (£795-£970).
- A.P.T. VI (£890-£1,080).

Applicants for these posts should be Registered Architects and Associate Members of the Royal Institute of British Architects, and have had good training and experience in the design and construction of modern buildings.

Extensive and interesting programme of first-class architectural work, with opportunities for taking responsibility and supervising work in progress.

HUBERT BENNETT, F.R.I.B.A., County Architect's Office, Bishopcote, Wakefield. 9453

CITY AND COUNTY OF THE CITY OF EXETER

Applications are invited for the appointment of SENIOR ASSISTANT ARCHITECT on the establishment of the City Architect's Department; salary range between £690 and £885 per annum, according to experience.

Applicants must be Associate Members of the R.I.B.A. or hold equivalent qualifications, and preference will be given to those experienced in the design and construction of schools and civic buildings.

The appointment will be subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Acts, 1937-1953. The successful applicant will be required to pass a medical examination.

Canvassing will disqualify, and applicants must disclose whether, to their knowledge, they are related to any member of the Council or to the holder of any senior office under the Council.

Applications, stating age, qualifications, previous and present appointments and salaries, full details of experience and the earliest possible date when available, should be sent to H. R. Rowe, F.R.I.B.A., A.M.I.Struct.E., City Architect, Municipal Offices, Exeter, within 14 days of the publication of this advertisement.

C. J. NEWMAN, Town Clerk.

Exeter. March, 1956. 9469

SURREY COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT
Applications are invited for permanent appointments for ARCHITECTS and QUANTITY SURVEYORS:

- (a) A.P.T. IV-VI. Minimum £710, maximum £1,080, plus £30 London allowance, per annum.
- (b) A.P.T. I-III. Minimum £530, maximum £765, plus London allowance £20-£30, according to age.

Salary range of appointment and commencing salary will depend on experience and qualifications.

Applications, with two testimonials, to the County Architect, Surrey County Council, County Hall, Kingston-on-Thames, as soon as possible. 9446

WELWYN GARDEN CITY AND HATFIELD DEVELOPMENT CORPORATIONS

ASSISTANT QUANTITY SURVEYOR
Applications are invited for the appointment of Assistant Quantity Surveyor, at the grade £835x£650x£25-£750 per annum.

Applicants should be experienced in taking off quantities and in the preparation of Bills of Materials, Estimates, Certificate Valuations, and Final Accounts for all types of buildings.

Preference will be given to Members of the Royal Institution of Chartered Surveyors.

The appointment is superannuable and terminable by one month's notice on either side.

The successful applicant will be assisted in obtaining housing accommodation, if required.

Applications, giving age, qualifications, and full details of present and past experience, salaries and appointments held, together with the names and addresses of three persons to whom reference may be made, should be addressed to the General Manager, at 4, Wigmore South, Welwyn Garden City, Herts, and received not later than 1st May, 1956. 9462

HUNTINGDONSHIRE COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

- (a) SENIOR ARCHITECTURAL ASSISTANT, A.P.T. VI (£880-£1,080).
- (b) SENIOR ARCHITECTURAL ASSISTANT, A.P.T. IV-V (£710-£970).
- (c) SENIOR ARCHITECTURAL ASSISTANT, A.P.T. IV (£710-£885).
- (d) ARCHITECTURAL ASSISTANT, A.P.T. II-III (£595-£765).

Appointments must be made within these grades subject to qualifications and experience.

Further details and application forms may be obtained from The County Architect, County Buildings, Huntingdon. Completed application forms should be forwarded by Wednesday, 25th April, 1956, to the undersigned.

A. C. AYWARD, Clerk of the County Council.

County Buildings, Huntingdon. 9542

LINDSEY (LINCOLNSHIRE) COUNTY COUNCIL

(a) TWO ASSISTANT ARCHITECTS, Grade A.P.T. V and VI (£795-£1,080), to work on major projects. Must be A.R.I.B.A. or Registered Architect.

(b) TWO ARCHITECTURAL ASSISTANTS, Grade A.P.T. II (£595-£675), Inter. R.I.B.A.

(c) ONE ELECTRICAL ENGINEERING ASSISTANT, Grade A.P.T. III (£640-£765). Should be capable of preparing drawings in connection with Electrical Installations in Schools. Higher National Certificate required.

In special circumstances consideration will be given to starting salary not more than two steps up the grade.

N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether to their knowledge they are related to any member or senior officer of the Council.

Applications, giving age, qualifications, experience, present salary, and the names of at least two persons to whom reference can be made, to be sent not later than 24th April, 1956, to the County Architect, County Offices, Lincoln. 9561

CITY OF LEICESTER
CITY ENGINEER'S AND SURVEYOR'S DEPT.
MAINTENANCE SECTION

Applications are invited for the appointment of MAINTENANCE ASSISTANTS in the City Surveyor's Department, in Grade A.P.T. III to V, according to experience and qualifications.

The appointments will be subject to the provision of the Local Government Superannuation Act, 1937.

Applicants should have a good knowledge and be fully experienced in the maintenance of public buildings, preparation of plans, specifications, estimating and schedules, etc. Previous Local Government experience would be an advantage.

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

Applications, stating age, qualifications, training and experience, together with the names of not less than two persons to whom reference may be made, should reach the undersigned not later than Saturday, 5th May, 1956.

The Council are unable to assist with housing accommodation.

JOHN L. BECKETT, M.Inst.C.E.,
M.Inst.Mech.E., M.Inst.Mun.E.,
City Surveyor.

Town Hall, Leicester. 9553

COUNTY BOROUGH OF BIRKENHEAD
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited from suitably qualified persons for the following posts:—

- (a) THREE ARCHITECTURAL ASSISTANTS, Grade A.P.T. IV (£710-£885).
- (b) ONE JUNIOR QUANTITY SURVEYING ASSISTANT, Grade General Division (£180-£420)/Higher General Division (£180-£500) according to qualifications.

The above appointments are superannuable, subject to satisfactory medical examination and to one month's notice on either side.

Forms of Application and further particulars obtainable from Borough Architect, No. 1 Conway Street, Birkenhead.

Closing date for applications—23rd April, 1956.

DONALD P. HEATH, Town Clerk. 9556

TOWN HALL, BIRKENHEAD.

NATIONAL COAL BOARD
NORTH-EASTERN DIVISION

Applications are invited for the following appointments in the Department of the Divisional Chief Architect, situated at Conisbrough, near Doncaster:—

ARCHITECTS AND QUANTITY SURVEYORS, Grade II.

(Salary scale: £700x£30 to £1,000 per annum.)

Qualifications: A.R.I.B.A. and A.R.I.C.S.

ARCHITECTURAL AND QUANTITY SURVEYING ASSISTANTS, Grade I.

(Salary scale: £625x£25 to £750 per annum (and up to £900 per annum in special circumstances).)

Qualifications: Intermediate R.I.B.A. and Intermediate R.I.C.S.

ARCHITECTURAL AND QUANTITY SURVEYING ASSISTANTS, Grade II.

(Salary scale: £520x£20 to £615 per annum.)

Qualifications: Preferably as above, or studying for such examinations.

JUNIOR ARCHITECTURAL ASSISTANTS.

(Salary scale—according to age: £4 5s. per week at 18 to £3 15s. at 25.)

Full details and application forms obtainable from J. A. Dempster, F.R.I.B.A., Chief Architect, P.O. Box No. 4, Denaby, near Doncaster. 9559

WESTMINSTER CITY COUNCIL requires

JUNIOR ARCHITECTURAL ASSISTANT (M.A.E.).

Starting salary according to age and qualifications, not less than £350 at age 20, rising to maximum £675 per annum (plus London weighting, max. £30 p.a.).

Duties include surveys, drawings and specifications for building alteration works. Applicants must have passed or be studying for the examination of either R.I.C.S. (Building) or R.I.B.A.

Applications, detailing experience, etc., with copy testimonial, to Town Clerk, City Hall, Charing Cross Road, W.C.2, by 25th April, 1956. 9554

WEST SUFFOLK COUNTY COUNCIL

COUNTY PLANNING DEPARTMENT

AREA PLANNING OFFICER for Bury St. Edmunds Area, required. Salary within A.P.T. Grade IV (£710x£5-£885). Applicants should have passed the Final Examination of the Town Planning Institute or hold a Diploma of a recognised school. N.J.C. service conditions; car allowance; post pensionable; medical examination.

Application forms obtainable from J. M. Gorst, M.T.P.I., A.M.I.Mech.E., County Planning Officer, Shire Hall, Bury St. Edmunds, to be returned by 28th April, 1956.

ALAN F. SKINNER, Clerk of the County Council. 9560

UNIVERSITY OF OXFORD

Applications are invited for the following appointment:—

ARCHITECTURAL ASSISTANTS, of about Intermediate standard, with some knowledge of modern building construction. Salary £530.

Varied and interesting work. Generous leave. Apply for further particulars, stating age, experience and training, to the Surveyor to the University, 5, South Parks Road, Oxford. 9366

**TEMA DEVELOPMENT CORPORATION,
GOLD COAST**

The Corporation, established by Ordinance and charged with the development of a new town for 80,000 inhabitants, invites applications for the post of **EXECUTIVE ARCHITECT** from Architects who must be Associates of the R.I.B.A. or have equivalent qualification, and not less than 6 years' post-graduate experience. Applicants must be at least 32 years of age and have experience in the organisation and control of large scale building contracts.

Duties: Successful candidate will be required to assist the Chief Architect and Town Planner, and expected to assume special responsibility under the Chief Architect and Town Planner for (a) programming of work, (b) advice on working drawings, specifications, contracts, and supervision of work, (c) general administration.

Terms of Appointment: Contract for two tours of 12/24 months, depending on age. Salary in range £1,600-£2,000, according to experience, plus gratuity at rate of £12 10s. for each month's service, including leave or Contributory Pension Scheme now under consideration. Leave at end of each tour 7 days' full pay for each month's residential service. Free passages on appointment and leave for officer, wife and up to three children under 15 years of age. Other details at interview. Apply to The Secretary for Recruitment, Gold Coast Office, 13, Belgrave Square, London, S.W.1, for a form of application. 9567

COUNTY OF CORNWALL

APPOINTMENT OF PLANNING ASSISTANT
Applications are invited for this appointment in the Western Area Planning Office, Penzance, with salary within A.P.T. III (£640-£765).

Candidates must have passed the Intermediate Examination of one of the Professional Institutes, and preference will be given to candidates with Inter. T.P.I. They must also have a thorough knowledge of the Town and Country Planning Acts and Regulations thereunder, and be well experienced in development control.

The customary service conditions of the Local Government service will apply, and the successful candidate will be required to pass a medical examination.

Applications, together with the names and addresses of three referees, should be addressed to the County Planning Officer, County Hall, Truro, to reach him not later than 28th April, 1956. (No application forms are being issued.)

E. T. VERGER,

Clerk of the County Council.

County Hall, Truro. 4th April, 1956. 9568

SPALDING RURAL DISTRICT COUNCIL.
ARCHITECTURAL ASSISTANT required. Salary A.P.T. Division II of National Scale (commencing £595 p.a. and rising to £675 p.a.). Medical examination. Superannuation. Canvassing will disqualify. Council house in the rural district available for letting. Applications with names of three referees to the Clerk to the Spalding R.D.C., Priory Road, Spalding. 9574

COUNTY BOROUGH OF SUNDERLAND

Applications are invited for:—
CHIEF ASSISTANT QUANTITY SURVEYORS, A.P.T. Grade VI (£380-£1,080).

SENIOR ASSISTANT QUANTITY SURVEYORS, A.P.T. Grade V (£795-£970).

SENIOR ASSISTANT ARCHITECTS, A.P.T. Grade V (£795-£970).

ASSISTANT ARCHITECTS, A.P.T. Grade IV (£710-£885).

Commencing salaries will be fixed according to experience.

Particulars of the respective appointments may be obtained from the Borough Architect, Grange House, Stockton Road, Sunderland.

Applications must be addressed to me and received at my office, Town Hall, not later than 25th April, 1956.

Canvassing will disqualify.

G. S. MCINTIRE,

Town Clerk.

9573

UNIVERSITY OF HONG KONG

Applications are invited for the following posts:—

(a) **SENIOR LECTURESHIP IN ARCHITECTURE.** Salary (superannuable) £2,000-£75-£2,300 (man) or £1,500-£60-£1,740 (woman) a year, together with an expatriation allowance of £225 a year if applicable.

(b) **LECTURESHIP IN ARCHITECTURE.** Salary (superannuable) £1,575-£50-£2,175 (man) or £1,200-£40-£1,680 (woman) a year, together with an expatriation allowance of £225 a year if applicable.

The equivalent of income tax in the Colony is comparatively low.

Applicants must be qualified Architects, and should have had practical and teaching experience.

First-class sea passages are provided for expatriate staff and their families on first appointment and leaves.

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.

The closing date for the receipt of applications, in Hong Kong and London, is 30th April, 1956. 9524

BOROUGH OF TWICKENHAM

Applications are invited for the following positions:—

(a) **ENGINEERING ASSISTANT,** Special Classes (£690-£840), or A.P.T. (£640-£765).

(b) **ARCHITECTURAL ASSISTANT,** Special Classes (£690-£840), or A.P.T. (£640-£765).

(c) **JUNIOR ENGINEERING ASSISTANT,** A.P.T. II (£595-£675).

(d) **TWO DRAUGHTSMEN,** H.G.D. (£350-£500).

All plus London weighting allowance. The salary grade for (a) and (b) will be according to qualifications. Candidates for (c) should have passed the Inter. Examination of an appropriate Engineering Body, and for (d) previous experience is essential. Applications, stating qualifications, experience, age, etc., and giving the names of two referees, must be received by the Borough Engineer, Municipal Offices, Twickenham, by 28th April, 1956. N.J.C. conditions will apply, and superannuation payable. Canvassing will disqualify.

An applicant who is related to a member of the Corporation or to a senior officer must disclose the fact in the application.

W. H. JONES,

Town Clerk.

Municipal Offices, Twickenham.

29th February, 1956. 9570

CITY OF LANCASTER

ASSISTANT QUANTITY SURVEYOR required. Varied programme of work. Housing accommodation, if required. A.R.I.C.S. (Q.S. Section). Permanent pensionable post. Salary, Grade V (£795-£970).

Applications to reach L. Lyons, B.Sc., City Engineer, Town Hall, Lancaster, by Monday, 30th April, 1956, stating age, qualifications, experience, etc., and names of two referees.

J. D. WADDELL,

Town Clerk.

Town Hall, Lancaster.

4th April, 1956. 9546

BOROUGH OF SOLIHULL

CLERK OF WORKS, A.P.T. GRADE II (£595-£720-£675).

Applications are invited for the above appointment in the Architect's Section of the Borough Engineer and Surveyor's Department, where an additional Clerk of Works is needed for the supervision of the erection of new schools.

Applicants should have been apprenticed in the building trade and have had considerable experience as craftsmen and general foremen.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, the National Scheme of Conditions of Service, and one month's notice on either side.

Housing accommodation may be made available to the successful applicant if married.

Applications, giving full details as to age, present position and salary, qualifications and experience, together with the names and addresses of two referees, should be delivered to the Borough Engineer and Surveyor at the above address not later than Tuesday, 17th April, 1956.

W. MAURICE MELL,

Town Clerk.

9505

**NORTH-WEST METROPOLITAN REGIONAL
HOSPITAL BOARD**

ASSISTANT QUANTITY SURVEYOR required. Applicants should be Associate Members of the R.I.C.S. and be thoroughly experienced in taking-off, abstracting and billing of quantities, measurement of work in progress, and settlement of final accounts.

Salary scale: £640 + £25 (4) + £30 (4) + £35 (2) - £930, plus £20-£40 London weighting. Salary above minimum may be paid according to appropriate experience since obtaining qualification. Applications, stating age, qualifications (with dates) and experience, together with names of two referees, to Secretary, North-West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, within 14 days of appearance of this advertisement. 9511

DURHAM COUNTY COUNCIL**PLANNING DEPARTMENT**

LANDSCAPE ARCHITECT. Salary £880 to £1,080. Must be Associate of the I.L.A. and have had considerable experience since qualifying. The successful candidate will be in charge of all landscape work of the Department, including planting of pit heaps, reclamation of derelict land, landscape schemes for housing, parks, roads, etc.

LANDSCAPE ASSISTANT. Salary £710 to £885. Must be Associate of the I.L.A.

ASSISTANT AREA PLANNING OFFICERS (SIX). Salary £795 to £970. Must be Associate Members of the T.P.I. and have had at least 3 years' experience since qualifying in all aspects of development control work, and preferably some experience of Town Maps. A degree in Planning or an additional professional qualification will be an advantage.

ARCHITECTURAL ASSISTANT. Salary £710 to £885. Must be Associate of the R.I.B.A. Successful applicant will be engaged on housing layouts, town centre layouts and control of elevations.

DRAUGHTSMEN (male or female). Salary £530 to £610. Forms and particulars from County Planning Officer, 10, Church Street, Durham. Closing date 18th April, 1956.

J. K. HOPE,

Clerk of the County Council.

9518

**BASILDON DEVELOPMENT CORPORATION
DEPARTMENT OF ARCHITECTURE AND
PLANNING**

Applications invited for following superannuable posts:—

(a) **LANDSCAPE ARCHITECT,** Grade IVA (£715-£845 p.a.).

(b) **LANDSCAPE ASSISTANT,** Grade VB (£580-£650 p.a.).

(c) **LANDSCAPE ASSISTANT,** Grade VB (£580-£650 p.a.).

Post (a) candidates must be A.R.I.B.A. and have passed Intermediate examination of Institute of Landscape Architects or be A.L.A. They will be required to supervise contracts, and work on plans for landscape projects. Applicants must also be good draughtsmen with some site experience.

Post (b) candidates must have good experience landscape contract procedure, estimating for landscape projects, site supervision, and competent take charge this type contract.

Applicants post (c) must have some knowledge landscaping, be good draughtsmen, and will work on plans for landscape projects.

Persons appointed will work in collaboration with the Landscape Consultant, Miss Sylvia Crowe, F.I.L.A.

Applications on special form (obtainable from Chief Architect) must be made to General Manager, Basildon Development Corporation, Gifford House, Basildon, Essex, within 14 days of appearance this advertisement, envelope being endorsed with relevant appointment. 9520

**WARWICKSHIRE COUNTY COUNCIL
ARCHITECT'S DEPARTMENT**

Applications are invited for the following appointments:—

(a) **SENIOR ASSISTANT ARCHITECTS,** Grade A.P.T. V (£795-£970). Applicants must be competent designers, having a knowledge of modern methods of construction and be capable of handling large building projects from sketch plan stage to completion.

(b) **ARCHITECTS,** Grade A.P.T. IV (£710-£885). Applicants must be competent designers having a good knowledge of construction and be capable of handling medium sized contracts.

(c) **ASSISTANT ARCHITECTS,** scale £590-£840. The successful applicants will work in teams on large projects, but opportunity will be given to men with enthusiasm and ability to design and carry out smaller projects under the group Architect.

(d) **LAND SURVEYOR,** Grade A.P.T. IV (£710-£885). Preference will be given to applicants who have had experience in the acquisition of land for building purposes, and the person appointed will be required to devote most of his time to this type of work. Applicants should also be capable of surveying land and buildings and be neat and accurate draughtsmen.

(e) **QUANTITY SURVEYING ASSISTANTS,** Grade A.P.T. IV (£710-£885). Applicants should have had a thorough training and be competent to deal with "taking off," abstracting, billing, interim valuations, and settlement of final accounts.

The commencing salaries can be within the grades according to the ability and experience. All appointments are on the established staff and subject to the Scheme and Conditions of Service of the National Joint Council for Local Authorities and the Local Government Superannuation Acts, 1937-1953. Successful candidates will be required to pass a medical examination.

The Council is unable to offer successful candidates housing accommodation.

Applications are to be on forms which can be obtained from G. B. Barnsley, F.R.I.B.A., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall, Warwick.

March, 1956. 9504

HOLLAND COUNTY COUNCIL**COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited for the appointment of **QUANTITY SURVEYOR,** A.P.T. Grade V (£795 to £970). Applicants should be Members of the R.I.C.S. (Quantity Surveying Sub-Division).

Application forms may be obtained from L. Barlow, Esq., A.R.I.B.A., County Architect, County Hall, Boston, Lincolnshire, and should be returned to the Clerk of the County Council not later than 28th May, 1956. 9526

**NORTH-WEST METROPOLITAN REGIONAL
HOSPITAL BOARD**

SURVEYING ASSISTANT required in the Architect's Department. Salary within the scale £480 to £670, plus £20-£30 London weighting. Candidates should have passed the Intermediate examination of the R.I.C.S. (IIB) and be competent specification writers and able to prepare working drawings for alteration works. The work is varied and interesting, and the Board operates a scheme of financial assistance to students studying for professional examinations.

Apply, stating age, qualifications and experience, and giving names of two referees, to Secretary, North-West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, within 14 days of appearance of this advertisement. 9502

ARCHITECT'S DEPARTMENT

JUNIOR DRAUGHTSMEN required for Housing, Schools and General Divisions. Commencing rate of pay according to age and experience. Further particulars and application forms obtainable from the Architect, County Hall, S.E.1, quoting AR/BK/AD/L. (335) 9431

INVERNESS COUNTY COUNCIL

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

- (a) SENIOR ARCHITECTURAL ASSISTANTS. Salary £1,000 per annum.
- (b) SENIOR ARCHITECTURAL ASSISTANT. Salary A.P.T. VIII, with placing on maximum at £915 per annum.
- (c) ARCHITECTURAL ASSISTANT. Salary A.P.T. V, with placing on maximum at £715 per annum.

Applicants for all appointments must be Associate Members of the Royal Institute of British Architects.

For appointments (a) applicants must also be Associate Members of the Town Planning Institute, and for (b) preference will be given to candidates who are similarly qualified.

Housing accommodation may be made available, if required.

Applications, stating age, experience and qualifications, together with the names of three persons to whom reference should be made, should be lodged with the undersigned not later than 14 days after the publication of this advertisement.

R. WALLACE, *County Clerk.*
Inverness. 9482

**CITY OF GLOUCESTER
CITY ENGINEER AND SURVEYOR'S
DEPARTMENT**

The Corporation invite applications for the appointment of JUNIOR PLANNING ASSISTANT, in Salary Grade A.P.T. I (£530-£610), or A.P.T. II (£595-£675); or in other salary grades according to training and experience.

The appointment is subject to the Local Government Superannuation Acts, and the successful candidate will be required to pass a medical examination.

Applicants should preferably have had three years' training and some additional experience in planning work, with the qualification of the Intermediate Examination of the Town Planning Institute for Grade II. They should have completed or be exempt from National Service.

Applications, stating age, qualifications and experience, accompanied by two recent testimonials or the names of two referees, and endorsed "Junior Planning Assistant," to be delivered to the undersigned not later than 10 a.m. on Saturday, 21st April, 1956.

A. G. W. BOGGO, *Town Clerk.*
Guildhall, Gloucester. 9547

**BOROUGH OF FINCHLEY
HOUSING AND TOWN PLANNING
DEPARTMENT
APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT ON THE PERMANENT STAFF**

Salary A.P.T. Grade VI (£880-£1,080), plus London weighting.

Applicants must be fully experienced Registered Architects, with a thorough knowledge of practical office work in housing and general architecture, and be used to control of staff and site supervision of contracts. Experience in design of multi-storey flats is highly desirable.

The National Scheme of Conditions of Service and the Local Government Superannuation Acts apply, and medical examination required.

Applications, giving full particulars and accompanied by copies of two testimonials (or the names of two referees), to the Borough Housing and Town Planning Officer, The Avenue, Finchley, N.3, by 23rd April, 1956.

R. M. FRANKLIN, *Town Clerk.*
Municipal Offices, Finchley, N.3. 9550

**BIRMINGHAM REGIONAL HOSPITAL BOARD
ARCHITECTURAL STAFF APPOINTMENTS**

(Donald A. Goldfinch, E.R.D., F.R.I.B.A., Dip.T.P., Architect to the Board.)

(a) SENIOR ASSISTANT ENGINEER (Heating and Ventilation), £920-£930 (5) + £25 (1)—£1,095. Duties include design, preparation of plans, specifications and technical reports, supervision of new installations of heating and ventilation, boiler house plants and other hospital services. A.M.I.Mech.E. essential, A.M.I.H. and V.E. desirable.

(b) ASSISTANT ARCHITECTS (TWO), £640-£650 (4) + £30 (4) + £35 (2)—£930, according to age and experience. Applicants must be registered architects, having passed requisite examinations. Experience of hospital planning and construction an advantage. Sound knowledge specifications essential.

(c) ASSISTANT ENGINEERS (TWO), £640-£650 (4) + £30 (4) + £35 (2)—£930, according to age and experience. A.M.I.H.V.E. desirable.

(d) ARCHITECTURAL ASSISTANTS (TWO) (required for large new hospital project), £480-£520 (7) + £25 (2)—£670. Point of entry according to experience, maximum £560. Inter. R.I.B.A. essential.

(e) JUNIORS (two Architectural and one Engineering): Male, £170 (aged 16), maximum £400 (aged 25); female, £165 (aged 16), maximum £330 (aged 25) (salary under revision equal pay to be implemented). Successful candidates expected to study for professional examinations.

All appointments supernumerary. Apply, naming three referees, to Secretary, 10, Augustus Road, Birmingham, 15, by 10th May. 9490

URBAN DISTRICT COUNCIL OF EAST BARNET

Applications are invited for the following permanent appointments:—

- (a) SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (£710 to £885 per annum).
- (b) ASSISTANT ARCHITECT, Grade A.P.T. III (£640 to £765 per annum).
- (c) ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£595 to £675 per annum).
- (d) DRAUGHTSMAN (ARCHITECTURAL), Grade A.P.T. I (£550 to £610 per annum).

All salaries will be increased by London weighting of £20 to £30 per annum, according to age. Housing accommodation will be provided for appointments (a) and (b) if necessary.

Conditions of Appointment and Forms of Application, returnable by 7th May, 1956, may be obtained from the Engineer and Surveyor, Town Hall, Station Road, New Barnet, Hertfordshire. 9503

**BOROUGH OF FINCHLEY
HOUSING AND TOWN PLANNING
DEPARTMENT**

JUNIOR ARCHITECTURAL ASSISTANT
Salary A.P.T. Grade I (£530-£610), plus London weighting.

Subject to satisfactory service the duration of the post will be approximately two years.

Preference will be given to those who have passed the R.I.B.A. Intermediate, and who have had practical office experience in housing work.

The National Scheme of Conditions of Service and the Local Government Superannuation Acts apply and medical examination required.

Applications, stating age and full particulars of qualifications and experience, with names of two referees, to the Borough Housing and Town Planning Officer, The Avenue, Finchley, N.3, by 23rd April, 1956.

R. M. FRANKLIN, *Town Clerk.*
Municipal Offices, Finchley, N.3. 9551

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

Applications are invited from suitably qualified and experienced Architects and Architect-Planners for vacancies on the permanent establishment, as under:—

- (a) SENIOR ASSISTANT ARCHITECTS, V (£795-£835-£970).
- (b) SENIOR ASSISTANT ARCHITECTS, IV (£710-£735-£885).
- (c) ARCHITECTURAL ASSISTANT, I/II (£530-£620-£675).
- (d) SENIOR ASSISTANT (PLANNING), V (£795-£835-£970).
- (e) SENIOR ASSISTANT (PLANNING), IV (£710-£735-£885).
- (f) PLANNING ASSISTANT, I/II (£530-£620-£675).

London allowance in addition.

The County Borough has an extensive reconstruction and slum clearance programme, and offers interesting work to Architects and Planners. Application forms and details from the Borough Architect and Planning Officer, Thomas E. North, O.B.E., F.R.I.B.A., Dist.T.P., M.T.P.I., 70, West Ham Lane, Stratford, E.15 (returnable by 21st April, 1956). 9492

CWMBRAN DEVELOPMENT CORPORATION

ASSISTANT ARCHITECT (£965-£1,050-£1,165).

Applications are invited for the above superannuable post in my department. The commencing salary within the scale will be in accordance with the qualifications and experience of the successful candidate.

The position is primarily in connection with the construction of the Town Centre of the New Town, and applicants must be Associates of the R.I.B.A. and have had experience in design, construction and layout of Shops, Offices and Commercial premises.

Housing accommodation will be made available in suitable cases or otherwise lodging expenses will be paid to married men for a limited period.

Applications, stating age, experience, details of present and former employment (together with applicable salaries), and the names and addresses of two referees, must reach the undersigned by first post on 5th May, 1956. 9489

**CITY OF SHEFFIELD
CITY ENGINEER AND SURVEYOR'S
DEPARTMENT**

SENIOR PLANNING ASSISTANT, GRADE A.P.T. IV

Applications are invited for the position of Senior Planning Assistant, Grade A.P.T. IV (£710-£885), on the staff of the City Engineer and Surveyor and Town Planning Officer (H. Foster, M.I.C.E., M.I.Mun.E.).

Qualifications: A.M.T.P.I. or A.M.I.C.E., or A.R.I.B.A., or A.R.I.C.S., or Engineering Degree, or A.M.I.Mun.E. Preference would be given to candidates with Planning and Architectural experience.

Superannuable post, N.J.C. conditions of service, medical examination.

Applications, stating age, education and training, qualifications, experience, present and past appointments (with dates and salaries), and quoting the names of two referees, should be submitted to the undersigned within 7 days of the insertion of this advertisement.

JOHN HEYS, *Town Clerk.*
Town Hall, Sheffield, 1. 9479

**COUNTY BOROUGH OF BARROW-IN-FURNESS
BOROUGH ENGINEER AND SURVEYOR'S
DEPT.**

SENIOR ARCHITECT

Applications are invited for the permanent post of Senior Architect on Grade V (£795-£970). The commencing salary will be fixed according to the qualifications and experience of the successful applicant. Candidates must be Associates of the Royal Institute of British Architects.

It is possible that the Council will allocate a Corporation house for the post, subject to the merits of the case being satisfactory to the interviewing Committee.

The Department works a 5-day week. Further details and forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Barrow-in-Furness, to whom applications must be returned not later than 30th April, 1956.

LAWRENCE ALLEN, *Town Clerk.*
Town Hall, Barrow-in-Furness. 9478

**COUNTY BOROUGH OF CROYDON
QUANTITY SURVEYING ASSISTANT**

Applications are invited for the established appointment in the School Architect's Section (School Architect, C. T. Ayerst, A.R.I.B.A.). Salary commencing according to experience and qualifications, rising to a maximum of £870 per annum inclusive.

Application forms and conditions obtainable from the Chief Education Officer, 19, Katharine Street, Croydon. Closing date 14 days after publication of this advertisement. 9500

**COUNTY OF LONDON
BUILDING BY-LAWS**

LONDON BUILDING ACTS, 1930-1939

The London County Council gives notice, in accordance with Section 8(a) of the London Building Act (Amendment) Act, 1935, that it proposes, not less than two months from the date of this notice, to make by-laws being an amendment of the London Building (Construction) By-Laws, 1952, made under the above-mentioned Acts with respect to

- (i) the external and internal cladding of buildings, being an addition to Part III (Materials of Construction) of the said By-laws,
- (ii) the protection of structural steelwork, being the substitution of a by-law for By-law 6.02 of Part VI (The Structural Use of Steel) of the said By-laws, and
- (iii) matters incidental thereto.

Any authority, body or person desirous of objecting to any proposed by-law may do so within six weeks after the publication of this notice by a letter addressed to the Minister of Housing and Local Government, Whitehall, London, S.W.1, setting out the grounds on which objection is made.

Copies of the proposed by-laws are deposited at the County Hall (Room 311A), Westminster Bridge, S.E.1, and are open to public inspection without payment on any week-day during the usual office hours.

Copies may be obtained from the Clerk of the Council (T/B/L) by sending a stamped addressed envelope.

W. O. HART,

Clerk of the London County Council.
The County Hall, S.E.1. (634)
28th March, 1956. 9578

**BRISTOL EDUCATION COMMITTEE
COLLEGE OF TECHNOLOGY**

Principal: G. H. Moore, M.Sc., F.P.S., F.R.I.C. Applications invited for three new posts in DEPARTMENT OF BUILDING from 1st September, 1956.

- (1) LECTURER in Structural Engineering to teach "structures" to final levels for A.M.I.Struct.E., R.I.B.A. and R.I.C.S. Qualifications A.M.I.Struct.E. and/or A.M.I.C.E.
- (2) ASSISTANT GRADE B in Plastering to teach and co-ordinate Plastering Technology to final and post-final City and Guilds. Teaching experience essential.
- (3) ASSISTANT GRADE B in Carpentry and Joinery to assist with City and Guilds courses to third year.

Full Technological Certificate minimum qualification for (2) and (3). Burnham Technical salaries with full allowances where appropriate. Application forms and particulars (S.A.E.) from Registrar, College of Technology, Unity Street, Bristol, 1.

G. H. SYLVESTER, *Chief Education Officer.*
9587

ARGYLL COUNTY COUNCIL

Applications are invited for the appointment of a QUANTITY SURVEYING ASSISTANT for the County Architect's Department. Salary scale A.P.T. I-III (£515-£630), with placing according to experience and qualifications. The post is superannuable. Applicants must have completed a 5 years' apprenticeship and be capable of taking off, preparing bills of quantities, and measuring all trades.

Apply, giving details of qualifications and experience, along with copies of two recent testimonials, to County Architect, County Offices, Dunoon, within 7 days of publication.

A. D. JACKSON, *County Clerk.*
9528

CARDIFF RURAL DISTRICT COUNCIL. APPOINTMENT OF ASSISTANT ARCHITECT.

Applications are invited for the appointment of Assistant Architect in my Department.

Applicants should be Associates of the R.I.B.A. and must have had experience with multi-storey flats from a design stage to completion of the works. The successful candidate will be engaged primarily on works of this character. The appointment is superannuable and is subject to—

- (a) National Conditions of Service.
- (b) One month's notice on either side.
- (c) Satisfactory medical examination.

Housing accommodation will be made available if required. Applications giving details of age, qualifications, experience, present and past appointments and indicating the salary required by the applicant and giving the names of two referees, must reach the undersigned not later than Friday, 27th April, 1956.

S. P. YOULDON,
Engineer and Surveyor.

"Park House,"
28, Park Place,
Cardiff.

28th February, 1956.

9576

THE NORTH WESTERN ELECTRICITY BOARD

APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR (FOURTH ASSISTANT ENGINEER) CONSTRUCTION SECTION—CHIEF ENGINEER'S DEPARTMENT AREA BOARD HEADQUARTERS, MANCHESTER, 8

The duties will consist of general assistance in the preparation of Bills of Quantities, and particularly in abstracting, billing and site measurements, and in taking off and preparing final accounts.

Preference will be given to applicants who have passed or are about to enter for the Intermediate Examination of the R.I.C.S. or A.I.A.S.

Salary scale: £600 × £25—£725 × £80—£805 p.a., AX/EX.6. N.J.B. conditions. Applications to Establishment Officer, The North Western Electricity Board, Cheetwood Road, Manchester, 8, by 21st April, 1956.

BOROUGH OF BRENTFORD AND CHISWICK APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department at a salary according to A.P.T. I (£530—£610 p.a.), plus London weighting allowance.

Applicants should be competent draughtsmen. The appointment offers excellent opportunities for gaining architectural training and experience.

A MODERN FLAT CAN BE RENTED BY THE SUCCESSFUL APPLICANT.

Form of application, which is to be returned not later than the 23rd April 1956, can be obtained from the Borough Engineer and Surveyor, Town Hall, Chiswick.

W. F. J. CHURCH,
Town Clerk.

Town Hall, Chiswick, W.4.

9536

NATIONAL COAL BOARD—WEST MIDLANDS DIVISION

Applications are invited for the post of ARCHITECT, Grade II, at Himley Hall, Dudley, Worcs. Salary range £700 × £30—£1,000.

Applicants should be A.R.I.B.A. and have experience in preparation of sketch designs and working drawings. Work is of an interesting character embracing both industrial and welfare buildings.

Applications to the Divisional Establishment Officer, National Coal Board, Himley Hall, Dudley, Worcs.

COUNTY BOROUGH OF SOUTHAMPTON requires under N.J.C. conditions of service:—

ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£595—£675). Must have passed the Intermediate Examination of the R.I.B.A. or its equivalent at one of the recognised schools of architecture, and have had subsequent experience, preferably in local government housing. Apply with copies of two testimonials to the Borough Engineer and Surveyor, Civic Centre, Southampton, by Monday, 23rd April, 1956.

9527

WORTLEY RURAL DISTRICT COUNCIL (Population 45,200. Rateable value £456,720)

Applications are invited for this appointment at a salary in accordance with the Special Grade £690, rising by annual increments of £30 to £840 per annum.

Housing accommodation available. Applications, giving full details of qualifications and experience and names of two referees, should be delivered to the undersigned not later than Friday, 27th April, 1956.

ADRIAN M. KELLY,
Clerk of the Council.

Council Offices, Grenoside, Sheffield.

9537

THE METROPOLITAN BOROUGH OF HAMPSHIRE require in the Housing Architect's Section of the Borough Engineer's Department a CHIEF ARCHITECTURAL ASSISTANT, Grade A.P.T. V-VI (£795—£1,080, plus London weighting). He should be an Associate Member of the R.I.B.A. Medical examination required. No housing provided. Applications, suitably endorsed, giving names of three referees, to the Town Clerk, Town Hall, Haverstock Hill, N.W.3, by Thursday, 26th April, 1956.

9535

CORPORATION OF LONDON CITY SURVEYOR'S DEPARTMENT

require ASSISTANT, R.I.B.A. or R.I.C.S. (Building), Intermediate standard. Good draughtsmanship essential, with sound knowledge of general construction and specification writing, including repairs, alterations and maintenance of existing buildings. Salary up to £728, according to qualifications and ability. Applications, in writing, to City Surveyor, 55/61, Moorgate, E.C.2.

9532

MANCHESTER REGIONAL HOSPITAL BOARD invite applications from suitably qualified persons for the separate appointments of REGIONAL ARCHITECT and REGIONAL ENGINEER, at a salary in each case commencing at £1,695 a year and rising to £2,115 a year. Further particulars of the duties of these posts and application forms may be obtained from the Secretary of the Board at Cheetwood Road, Manchester, 8. Closing date for applications, 21st April, 1956.

9530

Architectural Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

ARCHITECTURAL ASSISTANT required, up to Intermediate standard. Westminster office. Pension and Bonus Schemes. Five-day week. Write, stating experience, age, and salary required, to Box 9271.

COVELL & MATTHEWS urgently require ARCHITECTURAL ASSISTANTS. Salary range £600—£750. Work is varied and interesting, including Hospitals, Churches, Housing, 5-day week. Apply in writing to 34, Sackville Street, Piccadilly, W.1.

9333

ARCHITECTS' CO-PARTNERSHIP require unmarried, qualified, experienced ASSISTANT in their Lagos office. Maximum tour 14 months. Flat provided. Write 44, Charlotte Street, London, W.1, or telephone Langham 5791.

3874

CO-OPERATIVE WHOLESALE SOCIETY, LTD. ARCHITECT'S DEPARTMENT, MANCHESTER.

Applications are invited for the following appointments:—

(a) SENIOR ASSISTANT ARCHITECTS, with experience of work on commercial and industrial projects.

(Salary range £820 to £975 per annum.) (b) ASSISTANT ARCHITECTS, capable of preparing working drawings from preliminary details.

(Salary range £550 to £820 per annum.) There is a five-day week in operation, and both appointments offer prospects of upgrading.

Applications, stating age, experience, qualifications and salary required, to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4.

3871

CO-OPERATIVE WHOLESALE SOCIETY, LTD. ARCHITECT'S DEPARTMENT, LONDON.

ASSISTANT ARCHITECTS, WORKER-UP, AND SHOP FITTING DRAUGHTSMAN. Applications are invited from suitably qualified persons. Salary on a scale £485—£945 inclusive of L.W., with placing according to age, qualifications and experience. The posts are superannuable, subject to medical examination. Five-day week in operation. Applications, stating age, experience, qualifications and salary required, to—W. J. Reed, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, E.1.

2824

CO-OPERATIVE WHOLESALE SOCIETY, LTD. ARCHITECT'S DEPARTMENT, BIRMINGHAM.

Applications are invited for the following appointments in a newly formed Branch Office. Interesting and varied commercial and industrial projects.

(a) SENIOR ASSISTANT ARCHITECT, with experience in Store and Shop Design.

(Salary range £820 to £975 per annum.) (b) ASSISTANT ARCHITECTS, capable of preparing working drawings and details from preliminary sketches.

(Salary range £550 to £820 per annum.) Both appointments offer prospects of upgrading.

Applications, stating age, experience, qualifications and salary required, to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4.

3872

ADAMS, HOLDEN & PEARSON require ARCHITECTURAL ASSISTANTS immediately. Write giving particulars of experience and salary required, to 38, Gordon Square, W.C.1. 9340

ARCHITECTURAL ASSISTANTS urgently required at Welwyn Garden City, to work on a variety of industrial, commercial and housing projects. Applicants are requested to state whether or not housing accommodation is required. Please apply with full details of age, training and architectural experience, to Chas. W. Fox, F.R.I.B.A., 22, Parkway, Welwyn Garden City, Herts.

9336

GOLLINS, MELVIN, WARD & PARTNERS, 15, Manchester Square, W.1, have vacancies for ARCHITECTURAL ASSISTANTS at Intermediate Standard or recently qualified, keen to work on a varied programme. Good working drawings essential, five-day week, quarterly bonuses. Apply by writing or telephone Welbeck 9991.

9316

SENIOR ARCHITECTURAL ASSISTANT required by United Dairies Ltd. Applicants to state age and experience in the preparation of surveys, sketch plans and working drawings, and be able to supervise work in progress. Apply in writing, stating qualifications and salary required, to Chief Architect, United Dairies Ltd., 31 St. Petersburg Place, W.2.

9060

ARCHITECTURAL ASSISTANT (male or female) required in Architect's Department of London Brewery Company. Must be good draughtsman. Write stating age, experience, salary required. Box 9581.

ARCHITECTURAL ASSISTANTS required for St. Albans office for work on School, Commercial and Housing projects. Should be good draughtsman with contemporary outlook. Good Salaries. Write to Box 9579.

ARCHITECTURAL ASSISTANTS required for small West End Office. Good salaries. Write to Box 9580.

EDWARD D. MILLS & PARTNERS require additional Intermediate Standard ASSISTANTS for interesting and varied contemporary work. Sound knowledge of building construction and good draughtsmanship essential. Apply in writing to 15, Carlisle Street, Soho Square, London, W.1.

9315

HELLBERG & HARRIS, ASSISTANT ARCHITECTS wanted for responsible positions on School, Industrial and Commercial Work. Salary according to qualifications and experience. Staff pension scheme. Apply 13, Queen Victoria Road, Coventry.

9314

ARCHITECTURAL ASSISTANT required in busy London office with varied practice. Good salary and prospects for suitable applicant. 5-day week. Write, giving particulars of age, qualifications, experience, etc., to Box 775, c/o 7, Coptic Street, W.C.1.

9313

"THE ARCHITECTS' JOURNAL" requires a full-time DRAUGHTSMAN to assist in the preparation of Information Sheets and Working Details. First class draughtsmanship, knowledge of building construction and a keen interest in the compilation of technical information. Write to the Editor (Information Sheets), 9, Queen Anne's Gate, S.W.1, stating age, architectural training, and experience.

9313

EXPERIENCED ARCHITECTURAL ASSISTANTS required for contemporary office. Salary according to experience. C. H. Bism, 10, Lower Grosvenor Place, S.W.1. VIC. 4304.

9318

ARCHITECTURAL ASSISTANT required for busy and progressive office on East African Coast in hot but pleasant climate in holiday area of Kenya. Work includes offices, warehouses, flats, etc. Salary £900—£1,450 p.a. according to experience. Apply K. S. King, A.R.I.B.A., 16, Hans Road, London, S.W.3.

9317

CORNWALL, Geoffrey Bazeley & Barbary require ASSISTANTS for their Penzance and St. Austell Offices, preferably able to take charge of small jobs, but any application considered. Write, indicating age, qualifications, experience and salary required, to Geoffrey Bazeley & Barbary, F.R.I.B.A., 15/16, Alverton, Penzance. 9307

LONDON Consultants require immediately ASSISTANTS of both Inter. and Final R.I.B.A. standard for varied and interesting contemporary industrial projects. Responsibility given to applicants with good design sense and constructional ability. Apply, giving full particulars and salary required, to Box No. 401, Glovers Advertising Ltd., 351, Oxford Street, London, W.1.

9341

DOWTY GROUP OF CHELTENHAM have a vacancy for an ARCHITECTURAL ASSISTANT to deal with general expansion work throughout the Group. Applicants need not necessarily yet be qualified, but the starting salary, a maximum of £850, will depend on ability and experience. A Superannuation Scheme is in operation, and assistance can, if necessary, be given with housing. Write, preferably in tabulated form, giving details of education, qualifications and career, mentioning age, to Personnel Manager, Dowty Equipment, Ltd., Arle Court, Cheltenham.

9344

ARCHITECTURAL ASSISTANT and DRAUGHTSMAN required in West End office of Percy Bilton, Ltd. Salary £400—£550, according to qualifications and experience. Work would entail preparation of drawings, detailing, specifications for housing and estates work. Apply Percy Bilton, Ltd., 113, Park Street, W.1. Telephone MAYfair 8240.

9347

ARCHITECTURAL ASSISTANT required for busy office. Good conditions, interesting commercial and industrial work. Apply, stating age, experience and salary, and enclosing copies of testimonials to Mr. G. Yarwood, F.R.I.B.A., The Barnsley British Co-operative Society, Ltd., Twibell Street, Barnsley.

9350

EXPERIENCED QUALIFIED ARCHITECTURAL ASSISTANTS required in Sheffield office. Apply by letter, giving full particulars, to Box 9558.

SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS required immediately in busy office. Apply, stating age, experience and salary required, to Kitching & Co., 21, Albert Road, Middlebrough. 9355

ARCHITECTURAL ASSISTANT required in N.W. London area, with minimum qualification of Intermediate R.I.B.A. Preference will be given to applicants having some experience in the design of industrial buildings and housing. Salary between £500 and £800 p.a., according to qualifications and experience. Box A.C.17329, Samson Clarke, 57-61, Mortimer Street, W.1. 9409

RUISLIP area (Middlesex) office of London Consultants require **ASSISTANTS**, age 20-30, in Architectural Section, for extensive and varied programme of work: industrial, domestic, medical and airfield projects. 5-day week. Please telephone WAXlow 4311, ext. 110 9396

ASSISTANT, Intermediate standard, required. Wimpey, Simpson & Fyfe, 61, South Molton Street, W.1. Mayfair 1277. 9397

ARCHITECTURAL ASSISTANT required. West End. Must be first-class constructional draughtsman. Box 9413. 9397

SENIOR ASSISTANT required in West End office; very busy in interesting commercial work. Must be prepared to take responsibility. Please write, giving details of experience, etc. Box 9401. 9403

SENIOR ASSISTANTS required in busy London Architects' office. Capable of taking full responsibility on schemes up to £100,000. Also **JUNIOR ASSISTANT** required. Phone Covent Garden 2629. 9403

ARCHITECTURAL ASSISTANT required for West End office, capable of preparing Working Drawings from sketch plans, etc. Write, stating age, qualifications and experience, and salary required, to Box 9404. 9404

ARCHITECTURAL ASSISTANTS, Senior and Junior required, preferably with London practice experience, office and factory buildings. Write, giving particulars of experience, etc., to Messrs. Bates & Sinning, 89, Chancery Lane, W.C.2. 2508

ARCHITECTS' Department of a large multiple retail concern, with office in London, require **ARCHITECTURAL ASSISTANTS** (Intermediate standard). There is a pension scheme and a 5-day week in operation. Dining room available for the use of staff. Applicants should write giving particulars of age, experience, and salary required. Box 9405. 9405

HASTIE, WINCH & KELLY require **ARCHITECTURAL ASSISTANT**, able to take charge of medium-sized jobs, including Churches, Hostels, Factories, etc. Telephone for an appointment, WEL 8863, or write with particulars to 1, Bentinck Street, W.1. 6043

NAIROBI. Small but growing firm require first-class **SENIOR ASSISTANT**, qualified man with good education, able to deal with clients, good experience and with ideas of his own. Salary in region of £1,500 p.a. Free passage, leave, bonus, etc. Further details, quoting ONS.70/3, from O.T.S., 5, Welldon Crescent, Harrow, Middlesex. 9565

ARCHITECTURAL ASSISTANTS required in Essex office (within 10 miles London). Salary £600 to £750 per annum.—Apply Box 9564. 9564

ESTABLISHED firm of Canadian Architects with offices throughout the Dominion, has a vacancy in its Winnipeg office for a qualified **ARCHITECT** with outstanding design ability, capable of carrying through a complete project from preliminary discussion with clients to its completion.—Write, giving full particulars of education and professional experience and starting salary required, to Box 9662. 9662

JAMES & BYWATERS urgently require **ASSISTANT** of Intermediate standard or higher, for detailing various types of buildings. Salary according to experience and qualifications. Apply in writing to 5, Bloomsbury Street, W.C.1, or telephone Museum 9952. 9567

RONALD FIELDING, A.R.I.B.A., requires **SENIOR and JUNIOR ASSISTANTS**. Please apply with details of experience, age and salary required, to Aldwych House, London, W.C.2. Chancery 3532/3. 9372

NORMAN & DAWBARN invite applications from **ARCHITECTURAL ASSISTANTS** of Inter. or higher standard. Interesting and varied programme of U.K. and overseas work.—Write to 5, Gower Street, London, W.C.1, or phone Langham 5341. 9571

ARCHITECTURAL ASSISTANTS required by West End office with varied practice. Not less than Inter. standard and three years' office experience. 5-day week. Bonus scheme.—Write Welch & Lander, 38, Gloucester Place, Portman Square, W.1. 9545

ARCHITECTURAL ASSISTANT, Intermediate standard, required for preparation of detailed drawings on large projects in Architect's Department of Consultants' Mayfair office. 5-day week. Salary £650.—Apply Box 9552. 9552

LEADING MOTOR MANUFACTURER has a vacancy for an **ARCHITECTURAL ASSISTANT** for work in connection with the layout of dealer premises, home and overseas. This is a permanent post for the man who is prepared to use initiative, particularly in respect of economy of floor space. Write in confidence, state details of experience and salary required, to Box V.435, c/o Streets, 110, Old Broad Street, E.C.2. 9541

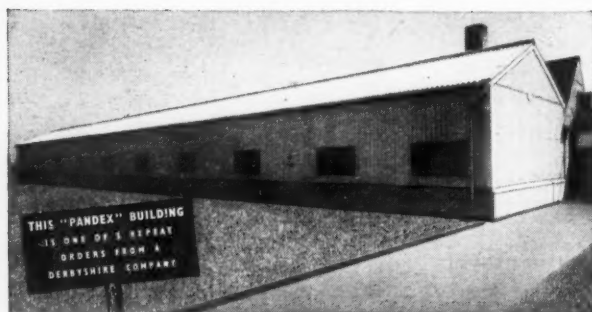
LOYDS BANK have the following vacancies in the offices of their Staff Architects—**JUNIOR ARCHITECTURAL ASSISTANTS** aged between 16 and 25 in London, Birmingham, Bristol, Exeter and Leeds. Applicants selected will be required to study to become Registered Architects, and gratuities and rises are obtainable on passing technical examinations. **DRAUGHTSWOMAN** aged between 16 and 25 in Birmingham. Progressive salary scale according to age and qualification. Permanent, pensionable positions attainable by selected applicants after preliminary trial. Apply in writing, giving particulars of age, education, experience, salary required, and if available for interview at one of the places named, to Chief Staff Architect, Lloyds Bank Limited, 71, Lombard Street, E.C.3. 9543

ARCHITECTURAL DRAUGHTSMEN required at Watford technical offices in connection with private development and Local Council domestic housing on the "Trustee" system of construction. Apply by telephone or letter to Trustee Corporation (Universal) Ltd., Heath Road, Oxhey, Watford, Herts. Telephone Watford 6256. 9544

ARCHITECTS' ASSISTANT wanted in busy office. Apply, stating experience, age and salary required, to Quick & Lee, Chartered Architects, 116, Dale End, Birmingham. 4. 9548

KEEN ARCHITECTURAL ASSISTANTS, up to Final standard, required for work on a number of interesting schemes. Practical knowledge, sense of responsibility and good draughtsmanship essential. Salary by arrangement.—Apply A. R. Dannatt & Son, F.R.I.B.A., Prudential Buildings, 65a, Duke Street, Chelmsford, Essex. 9549

ARCHITECTURAL ASSISTANT required for the Birmingham branch office of a large industrial concern. Applicants should be of Intermediate standard, and capable of carrying out work on the design and remodeling of service stations. Pension and Life Assurance Scheme. Luncheon Vouchers, generous sickness benefits, social club. Write, giving full details of age, experience, and salary required, to Box 9411, quoting ref. AA70. 9411



LOW-COST Permanent INDUSTRIAL BUILDINGS

Standardised production techniques rather than standardised component sizes now enable every "Pandex" Building to be an individual structure designed and fabricated to suit both your needs and your budget.

Building No. 4155 erected in MANCHESTER. Complete building "shell" including sliding doors and rooflights. 7,440 sq. ft. at £3,131 os. od.

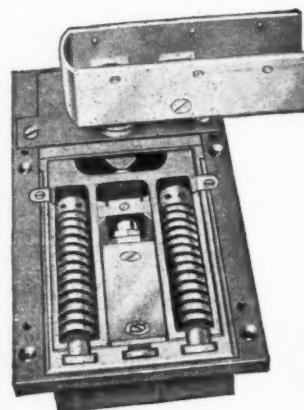
Please write or telephone our Sales Department for Brochure CS/56 or ask for our Area Manager to call and advise you.

PANDEX

Telephone: Leamington Spa 9394 (P.B.X.)

welded steel-framed PERMANENT INDUSTRIAL BUILDINGS

A. J. LUDWELL & CO. LTD., Queensway, LEAMINGTON SPA



ALSO

- WINDOW GEARING AND FANLIGHT OPENERS
- 'X-IT' PANIC BOLTS
- LOCKS
- DOOR FURNITURE
- CASEMENT FITTINGS
- SPRING SASH BALANCES

"VICTOR" fittings are specified by all leading Architects.

ROBERT ADAMS (VICTOR) LTD
139 STAINES ROAD, HOUNSLOW, MIDDXX
Telephone: Hounslow 5714

DOORS NEED NOT S-L-A-M

—specify

"Victor" DOOR SPRINGS

An essential fitting with self-contained check for Public Buildings, Housing Schemes, Office Blocks, etc. In shallow and watertight floor patterns. Overhead types to suit every purpose.

ARCHITECTS

COURTAULDS LIMITED has vacancies in Coventry for young qualified ARCHITECTS capable of taking charge of small jobs or working as members of a team on larger projects. Candidates should write for a detailed form of application to the Director of Personnel, Courtaulds Limited, 16, St. Martins-le-Grand, London, E.C.1, quoting reference number B.33. 9597

ARCHITECTURAL ASSISTANTS. Intermediate to Final Standard, required for preparation of working drawings, details and specifications. Good working conditions, canteen and sports facilities, non-contributory pension scheme. Apply in writing to the Personnel Manager, Albert E. Reed & Co. Ltd., Aylesford Paper Mills, Larkfield, Nr. Maidstone, Kent. 9507

ARCHITECTURAL ASSISTANT required in small, general office, good salary offered, summer holiday guaranteed.—Apply in writing to Booth & Booth, Leighton House, Potters Bar, Middlesex. 9514

ARCHITECTURAL ASSISTANT. Vacancy exists for gentleman who has passed Intermediate examination R.I.B.A., interested in ecclesiastical, public school, mediaeval and domestic architecture. Five-day week. Friendly staff, pleasant offices, commencing salary £520.—Full particulars in handwriting, Maurice W. Jones, 1, College Yard, Worcester. 9534

ARCHITECTURAL DRAFTSMEN required for work on school and hospital buildings; new system of prefabrication in timber. Permanency. Superannuation scheme available. Write or telephone, stating age, experience, salary required, J. Thorn & Sons Ltd., Brampton Road, Bexleyheath, Kent. 'Phone 305. 9521

LONDON TRANSPORT require temporary ARCHITECTURAL ASSISTANTS to prepare under supervision, schemes and working drawings for transport premises. Applicants must have good background of architectural training and office experience. Salary range £750-£900; commencing salary according to qualifications and experience. Free travel; medical examination.—Applications to Recruitment and Training Officer (R/EV 552), London Transport, 55, Broadway, S.W.1. For acknowledgment enclose addressed envelope. 9508

RICHARD COSTAIN LTD. have vacancies in their Architect's Department for ARCHITECTS with Final R.I.B.A., and ARCHITECTURAL ASSISTANTS of Intermediate and up to Final R.I.B.A. standard. Salaries offered will be in proportion to age and experience, and applications should be sent to H. S. Smith Esq., R.I.B.A., 111, Westminster Bridge Road, London, S.E.1. 9523

CHIEF ASSISTANT required, capable of running jobs and producing all the necessary drawings on own initiative and running office in absence of Principal. Possibility of partnership in years to come to right man. Age 30 to 35. Salary around £1,000 according to experience.—Apply in writing to Taylor, Son & Bracken, 20, London Road, St. Albans. 9510

WALES & MONMOUTHSHIRE INDUSTRIAL ESTATES LTD.
APPOINTMENT OF DEPUTY ARCHITECT

APPLICATIONS are invited for the appointment of Deputy Architect in the Architect's Department at the Company's headquarters at Treforest Industrial Estates, Pontypridd, Glam. The salary scale will be £355 x £50-£1,170 p.a. Commencing salary will depend on the experience of the successful applicant. The Company has a contributory superannuation scheme. Candidates must be A.R.I.B.A. and have had experience in the design of industrial buildings.

Applications, giving age and details of professional training, experience and National Service, together with the names of two referees, to be in the hands of the undersigned by 21st April, 1956.

C. E. Harrison,
Secretary,
Treforest Industrial Estates,
Pontypridd, Glam. 9522

GEORGE WIMPEY & CO., LIMITED
THE Architects' Department seek ARCHITECTURAL STAFF enthusiastic to apply their knowledge to new construction techniques covering Houses, Multi-Storey Flats, Offices, Schools and Industrial Buildings for contracts in the U.K. and Overseas.

Appointments range from ARCHITECTS to DRAFTSMEN with special interest to those of ability, recognising the value of the designer and technician as an integral part of the production team.

Appointments are on a permanent basis with a 5-day week at Head Office, Hammersmith.

For applicants interested in work in the Midlands our Regional Office at Birmingham has appointments to offer for ARCHITECTURAL STAFF on a similar basis (excepting 5-day week).

Salaries will be according to qualifications and experience and, subject to satisfactory service, there is a Pension scheme for those wishing to make a career with the firm.

Applicants should write, giving brief particulars, to E. V. Collins, A.R.I.B.A., Chief Architect, George Wimpey & Co., Limited, 27, Hammersmith Grove, London, W.6. 9519

S. MORRISON AND PARTNERS require ASSISTANT ARCHITECTS of all grades for interesting and responsible work in various spheres. 5-day week. Please state experience and salary required.—St. Alkmund's House, Belper Road, Derby. 9531

LONDON office with contemporary ideas requires several ASSISTANTS of Inter. standard. Good salaries for keenness and ability. Experience of interior design an asset.—Box 9517.

ARCHITECTURAL ASSISTANTS, all grades. Small, expanding practice with opportunities for capability.—Knappott & Deane, 6 Martin Lane, E.C.4. Mansion House 6281. 9516

ARCHITECT'S ASSISTANT required in Exeter office. Write, giving experience and salary required, Box 9513.

RESIDENT ARCHITECT required by British Railways, Eastern Region, to supervise contract work in the London area and Home Counties. Applicants should preferably be qualified with experience of site supervision. Salary range £770-£835. Five-day week. Concessionary rail travel, permanency with membership of superannuation scheme after probationary period.—Apply in writing, giving particulars of age, experience and any qualifications possessed, to Chief Civil Engineer, Eastern Region, British Railways, King's Cross Station, London, N.1, quoting S.Post 1281. 9501

EXPERIENCED JUNIOR ASSISTANT required. Innate design sense essential, with office experience and capable draughtsmanship. Varied work. Responsibility and salary according to ability.—Write David Stern, 24, Gloucester Place, London, W.1. 9480

ARCHITECTURAL ASSISTANTS and DRAFTSMEN required to work in Wimbledon Office and in Central London. Commencing salary £600 to £750 p.a., according to age and experience. Five-day week, pension scheme, luncheon vouchers. Telephone LIB 1189 for appointment. 9481

LONDON ARCHITECTS require two SENIOR ASSISTANTS, wide experience working drawings, salary £1,000 plus. Also two ASSISTANTS, £600 plus, for working drawings, and two PLANNING ASSISTANTS in £600 plus range. Box 9484.

TWO ARCHITECTURAL ASSISTANTS required of Intermediate R.I.B.A. standard for work on contemporary industrial buildings. Good salary and plenty of opportunity for initiative. London Office. Write giving details of salary, experience, to: Howard, Souster & Fairbairn, 81, Piccadilly, W.1. 9424

FLOOR MAINTENANCE

a service to Architects

Our job is to keep floors in the pink of condition with the minimum cost in labour and materials. Every floor has different characteristics, is used for different purposes, and has to cope with different types of traffic, that is why our individual and personal attention is proving so valuable to Architects, Local Authorities, Education Committees, Hospital Boards, etc. We advise over 22,000 schools. Our representatives are placed strategically throughout the country and can give immediate advice on any flooring problem.

FLOOR TREATMENTS LTD. 14 Easton Street, High Wycombe, Bucks. Telephone: High Wycombe 1617 (2 lines)

Clients include:—

Royal Festival Hall

D. H. Evans Ltd.

Selfridges

J. Players & Sons, Nottingham

New Premises, Bank of England

Stock Exchange, London

Austin Motors

London Hospital

ESTD. S.W. 1898

IRON STAIRCASES
STEELWORK

FARMER
& SON LIMITED

BALUSTRADING
FENCING

FABRICATORS IN STEEL

STAIRWAY HOUSE, COURTHILL ROAD, LEWISHAM LONDON S.E.13. PHONE: LEE GREEN 4334-9.

ASSISTANT, preferably qualified with some office experience, for important work in London. Salary £700-£1,000 according to age and experience.—Box 94.5

ASSISTANT ARCHITECTS required in Central London office. Knowledge of store construction an asset but not essential, providing the applicant has good all-round experience. Possibilities of future partnership not entirely ruled out for the right type of man.—Write Box 9487, stating age, experience and salary required.

ARCHITECTS, preferably with some experience in hospital planning and construction, are invited to apply to Pite, Son & Fairweather, 6, Queen Anne's Gate, Westminster, S.W.1, for a senior appointment carrying considerable responsibility in design and administration. 9488

ARCHITECTS. SENIOR ARCHITECTURAL ASSISTANTS required immediately for a wide variety of work. Salary range £700-£975 per annum. Superannuation scheme. Application should be made in writing to Kenneth F. Masson, A.R.I.B.A., Chief Architect, S.C.W.S. Ltd., 76, Morrison Street, Glasgow, C.5. 9491

GENERAL ARCHITECTURAL ASSISTANT required for nationally large scale housing development. Duties will include preparation of full working drawings and preference will be given to applicants who have had similar previous experience. Application should be addressed to Personnel Department, Taylor Woodrow Ltd., Ruislip Road, Southall, Middlesex. 9495

£550 (£600 commencing salary, according to ability) for competent and fully experienced **ARCHITECT'S ASSISTANTS**. Schools, Churches, Industrial and Commercial projects. Alternate Saturdays off. Apply, Jennings, Homer & Lynch, 3 and 5, Church Street, Brierley Hill, Staffs. Phone Brierley Hill 7545/6. 9496

SENIOR ASSISTANT required in well-established Birmingham office. Interesting work and pensions scheme. Apply, stating age and salary required, to Box 9497.

ASSISTANTS of Intermediate Standard with practical experience required by small City office. Write, giving full details and salary required. Box 9499.

ASSISTANT ARCHITECTS required for interesting work on modular, prefabricated structures of varied types. A contemporary outlook is preferred, and applicants should be Associates or approaching qualifications. Please write stating salary required, age, and details of experience, to Box 9406.

VACANCY in office in the West Riding of Yorkshire for a qualified **SENIOR ARCHITECTURAL ASSISTANT**. The work is mainly industrial. Box 9420.

ASSISTANT REQUIRED. Must be accurate draughtsman and sound knowledge of construction. Minimum 4-5 years' office experience. Details, age, when free, salary required, to Donati & Partners, 13, The Parade, Minehead, Somerset. 9356

ARCHITECTS' ASSISTANTS required. Opportunities for responsibility in varied general practice. Apply Imrie, Portier & Wakefield, 35, Market Place, Warminster, Wiltshire. 9555

ASSISTANT wanted. Write brief details to Eric Lyons, Mill House, Bridge Road, Hampton Court, Surrey. 9311

MISHA BLACK requires **ARCHITECTURAL ASSISTANT** to join Design Research Unit. Work would include the design of buildings, interiors, exhibitions. Salary £550 to £750. Apply in writing to Design Research Unit, 37, Park Street, W.1. 9310

WATES LTD. have a vacancy for a qualified **ARCHITECT**, experienced in multi-storey housing, to reside in Birmingham and to take charge of the Company's architectural work in that area, after an initial period in London. A permanent and interesting post with good pay, pension scheme and five-day week. Write stating age, education, qualifications and experience, to the Architect, Wates Ltd., 1258/60, London Road, Northbury, S.W.16. 9325

ARCHITECTURAL ASSISTANTS required. Intermediate standard. Scope for use of own initiative, and varied experience in practice including hospital, ecclesiastical, industrial, domestic and general work. Good draughtsmanship essential. Housing accommodation may be available. Apply, giving full details including salary required, to—H. Anthony Clark, F. C. Roberts & Partners, Chartered Architects, 41, Regent Street, Wrexham. 9452

ARCHITECTURAL ASSISTANTS required; a varied work. Write, stating age, training, experience, present salary, all interview expenses paid, G. de C. Fraser, Son & Gearey, Chartered Architects, 27, Dale Street, Liverpool. 9362

ARCHITECTURAL ASSISTANT required Intermediate standard for busy West End practice. Opportunity for young man wishing to obtain good general experience and use of initiative. Salary according to experience. Apply Eric H. Davie, F.R.I.B.A., A.M.P.T.I., Staff Architect, Hillier Parker May & Rowden, 77, Grosvenor Street, W.1. 9454

RONALD WARD & PARTNERS require several **ARCHITECTURAL ASSISTANTS** with contemporary outlook and willing to use own initiative. Salary range £500 to £800. Interesting and varied work, home and abroad. Congenial working conditions. Apply 39, Chesham Place, Belgrave Square, S.W.1. Telephone Belgrave 3361. 9189

H. A. HICKSON & SON, F.R.I.B.A., require quire competent **ARCHITECTURAL ASSISTANT**, intermediate standard sufficient, to work for maximum commencing salary of £600 in contemporary minded office at 51, Hall Gate, Doncaster. 9360

SENIOR ASSISTANT to take charge of contracts, also Intermediate Standard **ASSISTANT**, required for varied and interesting contemporary projects. Apply John H. D. Madin, Dip.Arch.Birm.A.R.I.B.A., 85/85, Hagley Road, Edgbaston, Birmingham, 16. 9323

ARCHITECTURAL ASSISTANT required of Inter. Standard, first-class draughtsmanship and office experience essential, mainly for domestic schemes in small, busy practice. Please apply in writing, stating salary and full particulars, to R. Jelinek-Karl, F.R.I.B.A., 22, Chancery Lane, W.C.2. 9321

SENIOR ASSISTANT ARCHITECTS and **INTERMEDIATE ASSISTANTS** required in busy West End Office. Senior Assistants should be capable of taking complete charge of jobs. Practice is varied and includes Housing Schemes, Office Blocks, Private Houses and miscellaneous schemes. Write, stating training, experience and salary, to Thomas Sibthorp, F.R.I.B.A., A.R.I.C.S., A.M.T.P.I., 40, Manchester Square, London, W.1. 9370

LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON have vacancies in their London and Welwyn Garden City offices for **SENIOR** and **JUNIOR ARCHITECTURAL** staff. The work is varied and covers Ecclesiastical, Schools, Offices and Housing (Cottages and Flats). Write, stating age, salary and experience, to Louis de Soissons, Peacock, Hodges & Robertson, 3, Park Square Mews, Upper Harley Street, London, N.W.1. 9376

CO-OPERATIVE WHOLESALE SOCIETY, LTD., Architect's Department, London, (a) **TAKER-OFF**; (b) **WORKER-UP**. Applications are invited from suitably qualified persons. Salary on the scales: (a) £850-£1,005; (b) £380-£560, both inclusive of L.W., with placing according to age, qualifications and experience. The posts are superannuable, subject to medical examinations, 5-day week in operation. Applications, stating age, experience, qualifications and salary required, to W. J. Reed, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, E.1. 9383

CANADA
AN unusual opportunity is offered to **ARCHITECT-PLANNERS** interested in progressive design, good housing layout and research in the rapidly expanding housing and planning fields in Canada.

Central Mortgage and Housing Corporation (the Crown Corporation which administers the National Housing Act of Canada) requires experienced architect-planners in its reorganized Architectural Department at Head Office in Ottawa to meet the requirements of the recently created Development Division and its new programme for improving the quality of planning and housing in Canada.

Applicants should possess a university degree or equivalent in architecture with experience in physical planning. Special consideration will be given to those who have experience in the New Towns, the London County Council or a progressive office working on good housing.

The initial salary will be from \$4,000 to \$4,800 per annum, depending on qualifications and experience. Salaries are reviewed annually and advancement is based on merit.

Travel assistance grants to help defray the cost of moving to Canada will be given on the following scale: Married \$500, Single \$200.

Applications, stating age, marital status, qualifications and details of experience, together with the names and addresses of three referees, are to be addressed to Supervisor, Personnel Department, Central Mortgage and Housing Corporation, Head Office, Ottawa. 9460

R. J. BESWICK & SON, F.R.I.B.A., 10, Victoria Road, Swindon, Wiltshire, have vacancies for **ARCHITECTURAL ASSISTANTS**. Salaries in accordance with qualifications and experience. Apply in writing or telephone Swindon 2857. 9386

Architectural Appointments Wanted

4 lines or under, 7s. 6d.; each additional line, 2s.

A.R.I.B.A., Public School and University Education, six years' London experience, including control of contracts, requires senior post in Brighton area, commencing August. Salary by arrangement.—Box 9566.

EXPERIENCED ARCHITECTURAL ASSISTANT (26), £750 p.a. London area.—Box 9512.

B. ARCH. (Liverpool) desires senior position with prospects, preferably in the Liverpool-Chester area. City and country experience. Present senior assistant in small private office with salary of £820 and expenses. Car owner.—Box 9540.

STRUCTURAL ENGINEER (41), mainly R.C. design experience, is considering change to an Architect's office where he would have some outside activity such as site work.—Box 9534.

A.R.I.B.A., 41, wide experience, seeks position of responsibility. Salary £1,200-£1,500 p.a. Car owner.—Box 9465.

A.R.I.B.A. (34) seeks an appointment in Rhodesia, West Indies or Channel Isles. Seven years' experience, full responsibility.—Box 9569.

SENIOR ASSISTANT (30), 14 years' varied experience. Capable of "down to earth" work at respectable speed on most types of work. £1,200 p.a. Box 9582.

A.R.I.B.A. (30) requires change. Experienced mainly in office, industrial, licensed and aerodrome work. London or S. England. Salary £950. Box 9584.

Other Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

CHIEF DRAUGHTSMAN required to take charge of Drawing Office dealing with design of houses, shops, factories, etc., and estate layouts. As main work at present is housing development on a large scale, experience in that sphere is essential. Pension scheme in operation. Apply H. C. Jones Ltd., Builders, 183, High Town Road, Luton, Beds. 9348

THE ACME FLOORING & PAVING CO. (1904) LTD., River Road, Barking, Essex, Wood Flooring Contractors and Timber and Plywood Importers, are open to engage an Executive Sales Representative for Birmingham and radius of about 100 miles. The post is an important one and will carry remuneration commensurate with experience and results. Replies should be addressed to the Managing Director. 9312

LONDON Flooring Contractors (Light and Heavy Duty Specialists) require Agents in Midlands areas.—Box 9515.

WILLIAM MALLINSON & SONS LTD., **TECHNICAL REPRESENTATIVES**, also **DEVELOPMENT ENGINEER**, required for important new building products. Applicants should have **ENGINEERING, ARCHITECTURAL** or **SCIENTIFIC** training and experience. State qualifications. Salary £300 p.a. or according to ability, with good prospects. Write in confidence, giving full particulars, to the Secretary, 130-150, Hackney Road, London, E.2. 9625

STRUCTURAL ENGINEERS for leading firm in SALISBURY, S. RHODESIA, four senior vacancies for qualified Engineers with first-class experience of R.C. or steel design for multi-storied buildings. Top salaries paid, pension, health insurance, bonuses, etc.—Fuller details, quoting OSS.100, from O.T.S., 5, Weldon Crescent, Harrow, Middlesex. 9566

QUANTITY SURVEYOR required for large Building Contract in the Birmingham area. Capable of working on own initiative on site with head office supervision.—Write, stating age, experience and salary required, to Box 9563.

SCORES OF DOORS TO CHOOSE FROM

Send for our illustrated literature and choose your doors from the largest and most varied stock in the trade. Over 40 designs and 172 items.

BRYCE WHITE & Co. Ltd.

LANGLEY 233 SOUTHALL 2231
St. Mary's Road, Langley, Bucks. Also at
London, Bristol, Southampton.



212 OAK



EXTERNAL FLUSH


19


350


26


111


510


No. 4 OAK

IMPERIAL CHEMICAL INDUSTRIES LTD.
Dyestuffs Division, requires an ARCHITECTURAL DRAUGHTSMAN of Intermediate R.I.B.A. standard, possessing a sound knowledge of building construction, together with experience in the preparation of working drawings and details for industrial and commercial buildings. Knowledge of structural framework design an advantage. Applications, with brief details of experience, should be sent to Staff Department, Hexagon House, Backley, Manchester, 9. 9575

OPPORTUNITY

TOPLINE DESIGNER/DRAUGHTSMAN

LEADING SHOPFITTING ORGANISATION
EXCELLENT prospects with unlimited scope offered by nationally-known London Shopfitters to man of creative ideas with genuine enthusiasm for contemporary store design. Permanent, progressive post with exemplary working conditions. Non-contributory pension scheme. Five-day week. Staff restaurant. Box 9177.

Other Appointments Wanted

A. M.I.H.V.E. Young ENGINEER with excellent consulting experience, seeks post as STAFF CONSULTANT with Architect in South or S.W. Provinces. Box 9494.

Services Offered

4 lines or under, 7s. 6d.; each additional line, 2s.

THE SITE SURVEY COMPANY, BLACKHEATH, S.E.3. Specialists in all types of Architectural and Engineering Surveys, grid and contour lay-outs. Telephone LEE Green 7444-5. 6018

GOOD LETTERING is essential for Commemorative Wall Tablets, Foundation Stones, etc. Designs prepared and estimates given for the finished work in any suitable material. Renowned as a Centre for Lettering since 1934. Sculptured Memorials, 67, Ebury Street, S.W.1. 9170

SURVEYS, levels and detailed drawings for new or alteration projects, reports, specifications for repairs, etc. L1V 1839. 2865

STUDENT (Finals) will assist with working drawings, perspectives, models, etc., for offices between Southampton and Brighton. Quick and reliable. Fees by arrangement. Phone Chichester 4065. 9068

ARCHITECTURAL MODELS—Highest workmanship guaranteed from my team of expert modellers. Send plans for quotations to W. Roberts, 13, Campden Grove, W.8. 9262

TYPEWRITING/DUPLICATING.—Specifications, etc., undertaken by experts. Reasonable charges. Stone's Secretarial Services, 446, Strand, Tem. 5984. 9081

WE are always converting. Can we convert for you? Phone TUL. 3052 for estimate by next Thursday. 9410

SECRETARY (Lady) interested in modern developments offers services. University trained. Comprehensive experience. Well recommended. Good working conditions desired. Box 9372.

ARCHITECT with own office and staff offers services in preparation of drawings on fee basis. Box 9539

ARCHITECTURAL MODELS by experienced model maker. Prompt service. Satisfaction guaranteed. Send details of model required for quotation. Box 9493.

SCHOOL trained Graduates prepared to undertake any architectural work in evenings and week-ends. London surrounding districts. Box 9586.

A.R.I.B.A. with reputation, offers any form of ASSISTANCE to other architects or PART-TIME in their office, to supplement own practice. London & Surrey. Equipped office and car. Box 9585.

STRUCTURAL DESIGN in steel, reinforced concrete, timber, trusses, slabs, lintels, beams, etc. No job too small. Details for building bye-laws. Box 9583.

SENIOR ARCHITECTURAL ASSISTANT offers spare time assistance, resident in Surrey. Box 9577.

For Sale & Wanted

4 lines or under, 7s. 6d.; each additional line, 2s.
RECONDITIONED Ex-Army Huts and Manufactured Buildings. Timber, Asbestos, Nissen Type, Hall Type, etc. All sizes and prices. Write, call or telephone: Universal Supplies (Belvedere) Ltd., Crabtree Manorway, Belvedere, Kent. Tel.: R11th 2048 1474

EXCEPTIONAL offer 3rd floor at 94, New Bond St., W.1. 1,300 sq. ft. £950 p.a. Long lease available, perfect natural lighting suitable for drawing office. Tel. GRO. 6601. 8231

FROM MANSION DEMOLITION, 21 in. Seasoned Oak 12 panel moulded doors. York stone window mullions, transoms, etc.—F. J. French & Sons, Willington, Eastbourne. Phone Hampden Park 81. 9483

Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s.

A. J. BINNS, LTD., Specialists in the supply and fixing of all types of Fencing, Gates and Cloakroom Equipment. Harvest Works, 95/107, St. Paul's Road, N.1. Canonbury 2061.

Educational Announcements

4 lines or under, 7s. 6d.; each additional line, 2s.

R.I.B.A. and T.P.I. EXAMS—Stuart Stanley (Ex. Tutor Sch. of Arch., Lon. Univ.) and G. A. Crockett, M.A./R.B.A., F.F.R.I.B.A., M.A.M.T.P.I. (Prof. Sir Patrick Abercrombie in assoc.), prepare Students by correspondence, 10 Adelaide Street, Strand W.C.2. TEM 1603/4

WELL qualified LECTURER will coach students in Design. Personal or postal tuition. Write Box No. 9426.

COURSES for all R.I.B.A. EXAMS.

Postal tuition in History, Testimonies, Design, Calculations, Materials, Construction, Structures, Hygiene, Specifications, Professional Practice, etc. Also in general educational subjects.

ELLIS SCHOOL OF ARCHITECTURE

Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A., 103B OLD BROMPTON RD., LONDON, S.W.7
Phone: KEN 4477 and at Worcester

MODELS

First class Architectural models made to Architect's drawings and specification. Photographs and quotations supplied on request. Architectural background.

ARCHITECTURAL MODELS, 114, Buckingham Rd., Heaton Moor, STOCKPORT.

Tel. HEA. 2094.

ARCHITECTURAL — contemporary

SIGN LETTERS

IN A VARIETY OF METALS
& FINISHES

WARD AND COMPANY

128 CHELTENHAM ROAD, BRISTOL 6
TELEPHONE 21536

THE WORLD'S GREATEST BOOKSHOP

FOYLES * FOR BOOKS *

FAMED CENTRE FOR

Books on Art & Architecture

Depts. for Gramophone Records, Music, Magazine Subscriptions, Foreign Stamps

119-125 CHARING CROSS ROAD WC2
Gerrard 5660 (16 lines) ★ Open 9-6 (incl. Sats.)
Two minutes from Tottenham Court Rd. Stn.

ARCHITECTURAL FOR MODELS

Completed Schemes, Planning Stage Models, Structural Design, Display Designers Mockups, etc.

CONSULT

LYNCH & BAKER LTD.

DISPLAY & MODELMAKING SERVICES

23 Oakleigh Court, Burnt Oak, Edgware, Middlesex. Colindale 1339

OURS ALONE ?

YES, FACE IT:
FOR 5 MINUTES !

We must fight the Fire Fiend ALONE before the Fire Brigade gets here. Please send details of NU-SWIFT rapid and reliable Fire Extinguishers—BEFORE IT IS TOO LATE !

Name.....
Address.....
Post NOW to Nu-Swift Ltd. 25 Piccadilly W.1.

In Every Ship of the Royal Navy

People come



from everywhere

for a complete office
furnishing service from

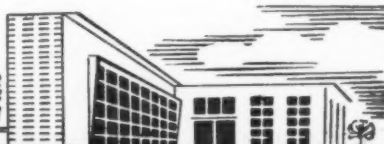
OFFICE EQUIPMENT CO.

113, High Holborn, London, W.C.1. HOL 8235
Write, phone or call for 54-page catalogue.

HATHERNWARE

The toughest FAIENCE made

HATHERNWARE LIMITED, LOUGHBOROUGH, LEICESTERSHIRE



dmlB

PAQZ
xetx
xetx
xx
vi, vii
ei
xxxvii
xxxviii
xxix
lxxxix
lxxxix
xxvi
xci
xxlii
ii
xi
lii
lxxxix
xlii
xxxix

xv
xxv
lxxi

xe
xci
lxxxvii
lxxxvi
l
lxxxli
lxxxvi

xliv
lxxxv
lxxx

lx
xxlv
xlvi
lxxxvii
lvi
xxix
xcix
xli
xlii
ii
lxi

C

PAGE
xclx
xclx
x
vi, vii
cl
xxviii
xxviii
xvii
lxxxix
lxxxix
xxvi
xci
xxiii
ii
xi
lii
lxxxix
xlii
xxxix

xv
xxv
lxxi

x
li
lxxviii
lxxvi
i
lxxxii
lxxxvi

xlii
lxxxv
lxx

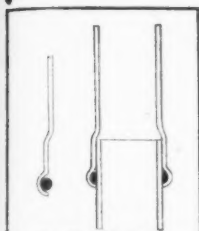
lx
xxiv
xlviii
lxxxvii
lvi
xxix
xcix
xlii
lii
lxxii

cts



lines)
York

COPPER Traps
every time
for me!



The **TRAPEZE** Patent
SLIP-IN JOINT

For B.S.S. 659 Copper
Tube. Simply wet and
push into joint. Perma-
nent and leakproof.
Tested to 600 lbs. per
sq. inch. The cheapest
most efficient joint.



Here's why:

Copper Traps are the modern way—
more sanitary and hygienic, due to the
smoothness of the bore.

They provide the easiest way for con-
nection to piping of Copper, Lead or
Iron.

They are **CHEAPER, LIGHTER** and
easier to handle and store.

They **NEVER LEAK** and are resistant
to all climatic conditions.

They are in use by many leading authori-
ties, municipalities and county councils.

★ Obtainable solely from leading Top Manufacturers
through the normal merchant channels



**LISTER STREET,
BIRMINGHAM 7, ENGLAND**

Telephone: ASTon Cross 3771-2
Telegrams: "TRAPPED, Birmingham 7"

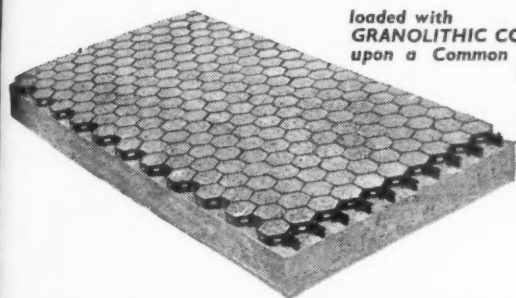
See our exhibit at the Building Centre, 26, Store St., W.C.1.

ADAMANT FACTORY FLOORS

JOINTLESS, HEAT AND WEAR RESISTING

provided by:-

"CAUSEWAY" STEEL ARMOUR



loaded with
GRANULITHIC CONCRETE
upon a Common Concrete
Subgrade.

FOR RETOPPING WORN CONCRETE FLOORS,
RAISING LEVEL ONE INCH ONLY AND
WITHOUT BREAKING UP EXISTING SURFACES

Floors so laid and armoured will resist the worst of
Steelworks or Foundry or Coke Oven conditions.
CAUSEWAY HEXMETAL can be loaded with
refractory cements to give a combination of
resistance to both extremely high temperatures
and attrition.

CAUSEWAY REINFORCEMENT LIMITED

66 VICTORIA STREET, LONDON, S.W.1.

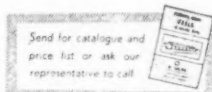
TELEPHONE: VICTORIA 8648 & 1873



Accommodation Problems?
ask PEELS

These handsome, sturdy buildings—one is a library, the other an
estate office—are fine examples of Peel's craftsmanship. Designed
with the accent on accuracy and constructed from highest quality
materials, Peel's buildings can be erected with the minimum of time
and labour. In addition to the wide range of standard designs, Peel's
will design and construct buildings to individual specifications.

Free delivery within 200 mile radius



DEPT. AJ, H. PEEL LTD., MEARCLOUGH WORKS, SOWERBY BRIDGE, YORKS.
TELEPHONE: HALIFAX 81211.

601/PEL



**STRENGTH
IN TIMBER**

BOWSTRING

LAMINATED TIMBER ROOF TRUSSES

WRITE
FOR
BROCHURE

Pre-formed on modern scientific principles,
immensely strong, quickly erected, the 'Bowstring'
Roof Truss has set a new standard. Erected complete,
or delivered to site ready for erection.

Write for full details.

DELIVERY THREE TO SIX WEEKS!

WILLIAM KAY (BOLTON) LTD

BARK STREET, BOLTON, LANCASHIRE

TEL: BOLTON 3925/6

CW2342/116

...you've
got
to
hand
it
to
MILLS

FOR SAFETY, SERVICE AND SATISFACTION

MILLS SCAFFOLD CO. LTD., (A Subsidiary of Guest, Keen & Nettlefolds Ltd.)
Head Office: TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON W.6 • RIVERSIDE 3011 (TEN LINES)

Agents and Depots: BELFAST • BIRMINGHAM • BOURNEMOUTH • BRADFORD • BRIGHTON • BRISTOL • CANTERBURY • CARDIFF • COVENTRY • CROYDON • DUBLIN • GLASGOW • HULL • ILFORD
LIVERPOOL • LOWESTOFT • MANCHESTER • MIDDLESBROUGH • NEWCASTLE • NORWICH • PLYMOUTH • PORTSMOUTH • PRESTON • READING • SHIPLEY • SOUTHAMPTON • SWANSEA • YARMOUTH

ON

(ES)

FORD
OUTH