the
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NEW YEAR ISSUE

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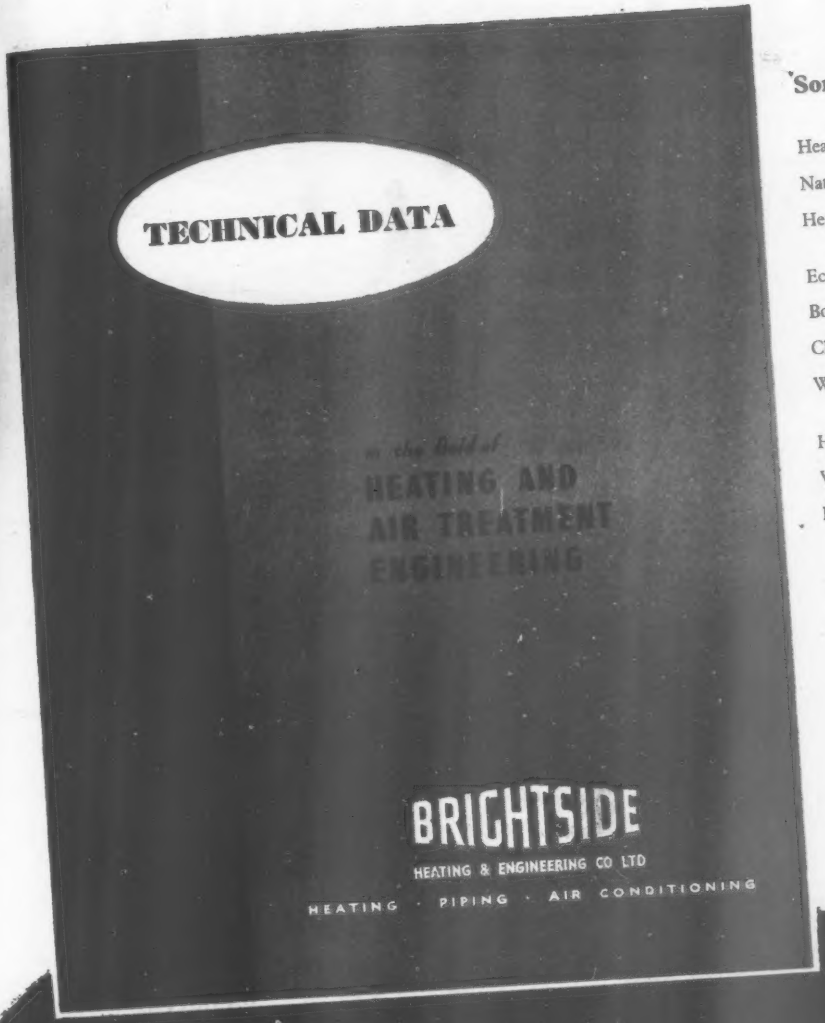
FOR YOUR INFORMATION-



Some of the contents:

Heat transfer coefficients . . .

Natural air change rates . . .

Heat requirements of typical buildings . . .

Economics of building insulation . . .

Boilerhouse dimensions . . .

Chimney dimensions . . .

Water density—Variation with temperature . . .

Hot water service . . .

Velocity head for airflow . . .

Resistance to airflow in circular metal ducts.

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BP104

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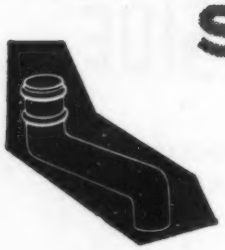

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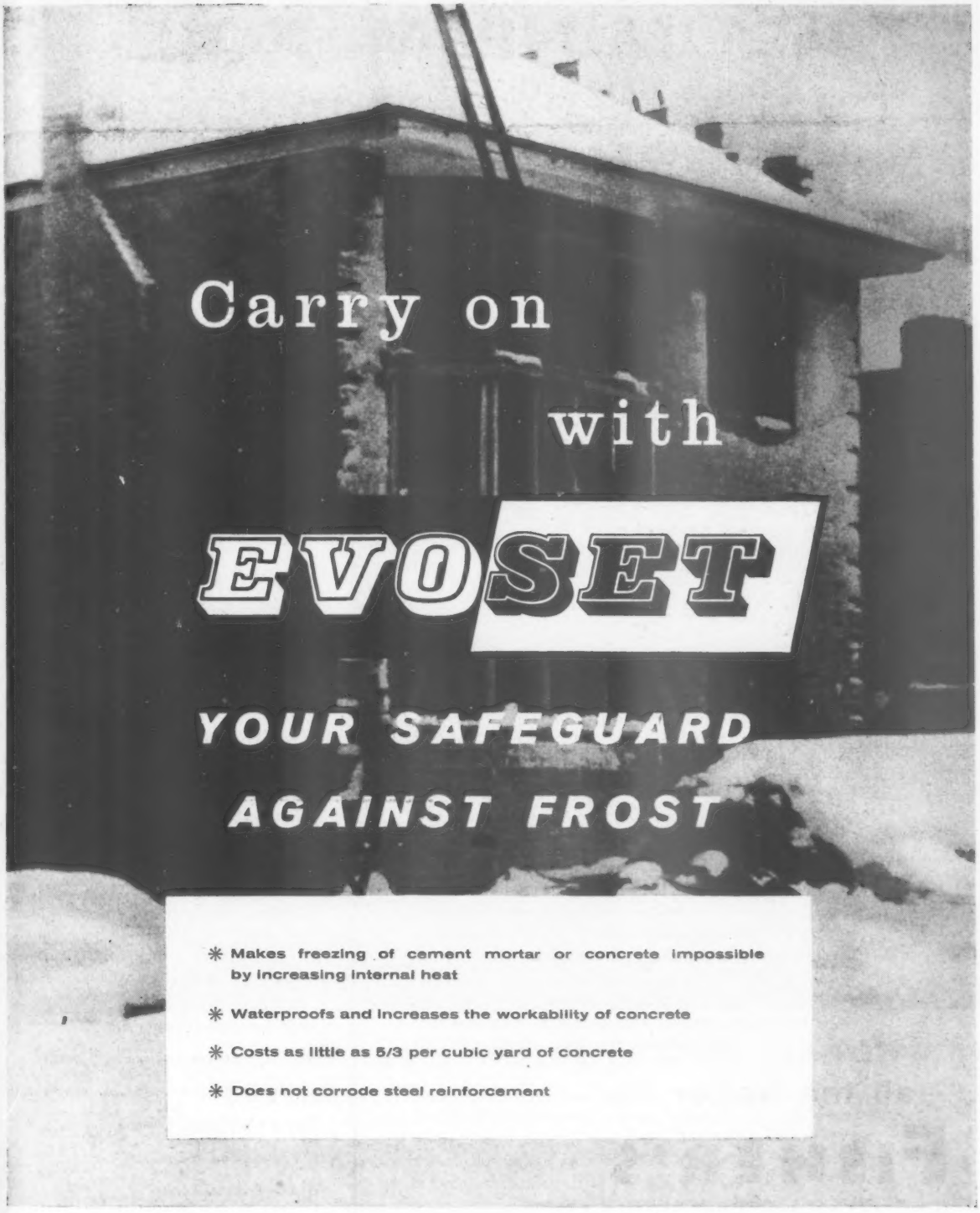
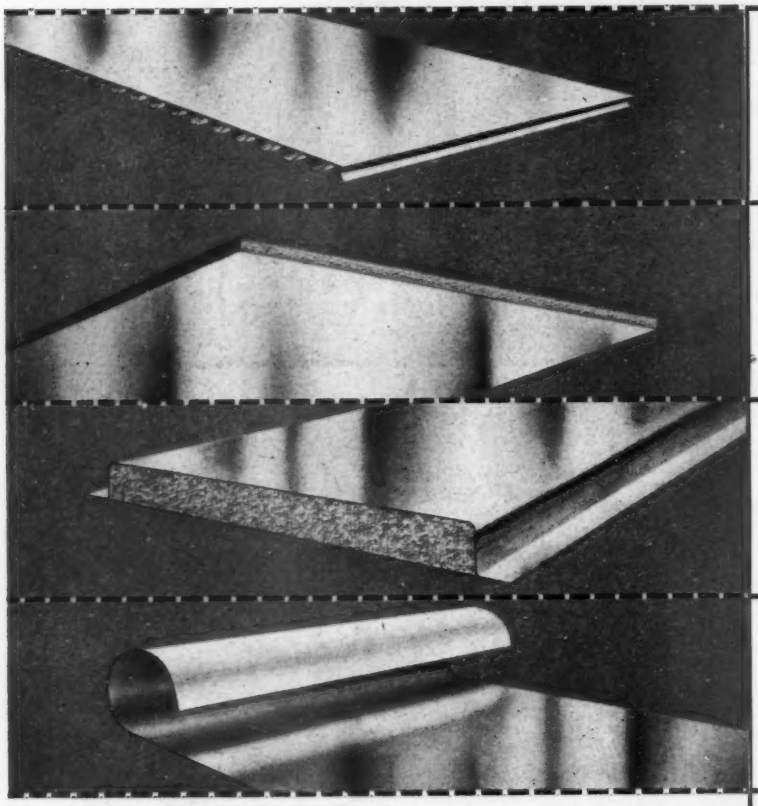


ALUMINIUM FOIL

Four well-proven methods of THERMAL INSULATION



FOIL METHOD

Air spaces formed by heat-reflecting surfaces of Aluminium Foil.

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Aluminium Foil laminated with strong paper.

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The most efficient forms of Thermal Insulation now incorporate Fisher's Foils. Their heat-reflecting properties afford an increased barrier against the passage of heat. Under normal conditions, the thermal insulating properties of Aluminium Foil can be expected to last indefinitely. Its extremely light weight renders unnecessary additional supporting structure. Aluminium Foil reduces the fire hazard.

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A well known City Chairman once complained to us that intense traffic noise below his windows and excessive audibility between adjacent offices and his own was affecting his efficiency, his privacy and his peace of mind.

We therefore designed and built for him, under a WRITTEN GUARANTEE to solve his problems, sound-proof doors and windows like those illustrated here.

Numerous tests on site and careful laboratory analysis proved that we must reduce the existing sound pressure level of 80 decibels to 35 decibels to achieve the comfort he desired.

So, to fulfil our undertaking, it was necessary to construct each door and window, not only to acceptable dimensions and a high standard of design, but to provide a MINIMUM sound transmission loss of 45 decibels—no less, in fact, than that of a SOLID 4½" BRICK WALL.

Which we very successfully did!

Photo by Courtesy of The Metal Box Co. Ltd.

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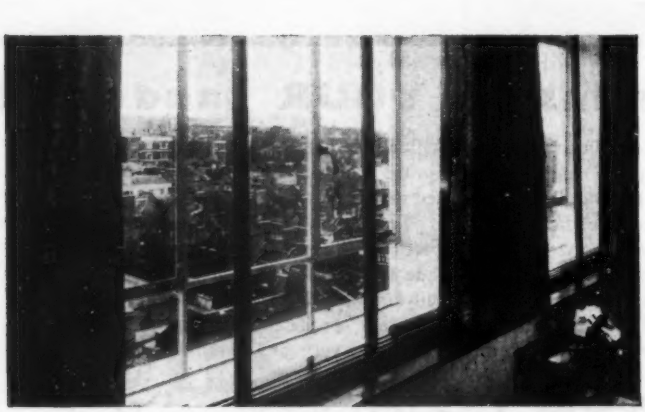

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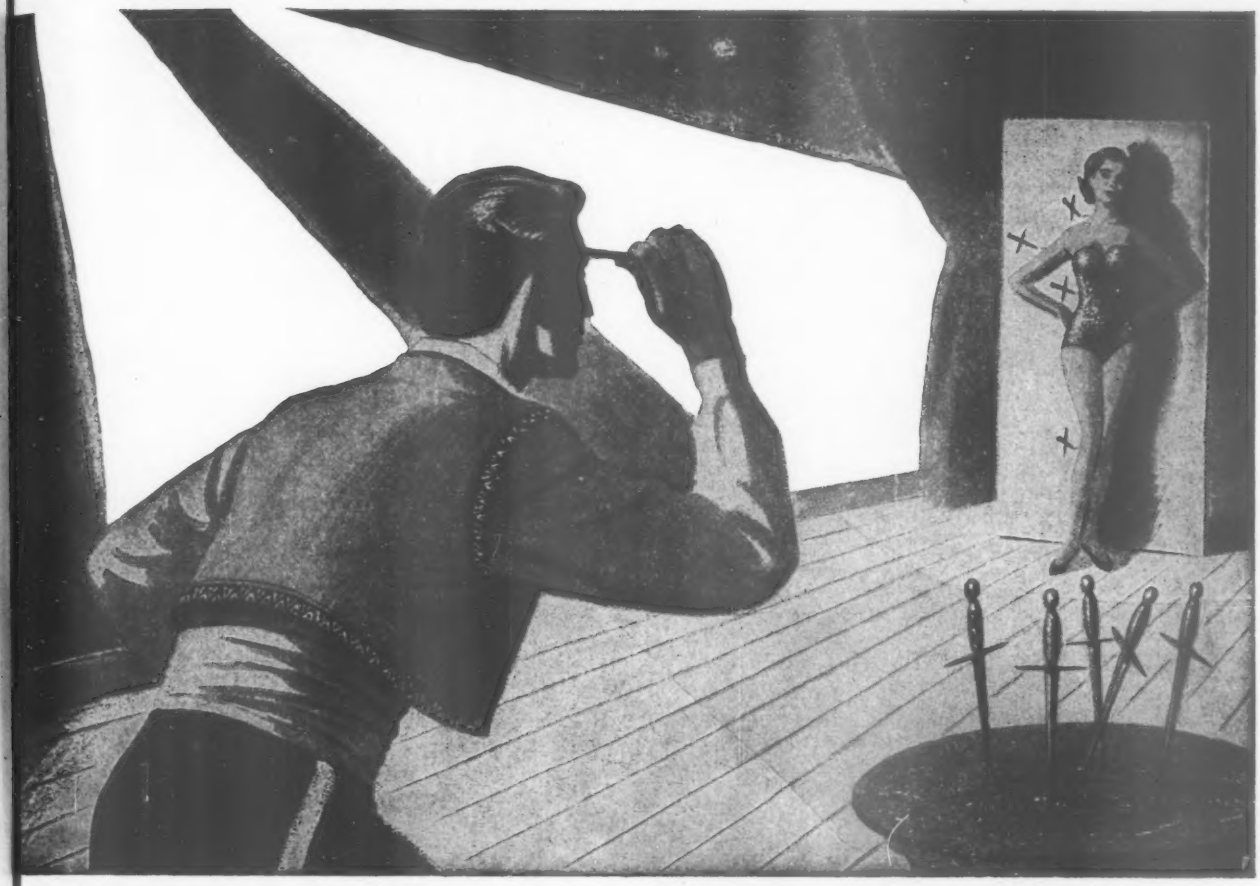

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the basis of the artists superb performance . . . the essential when you are specifying materials or PAINT for that new important assignment.

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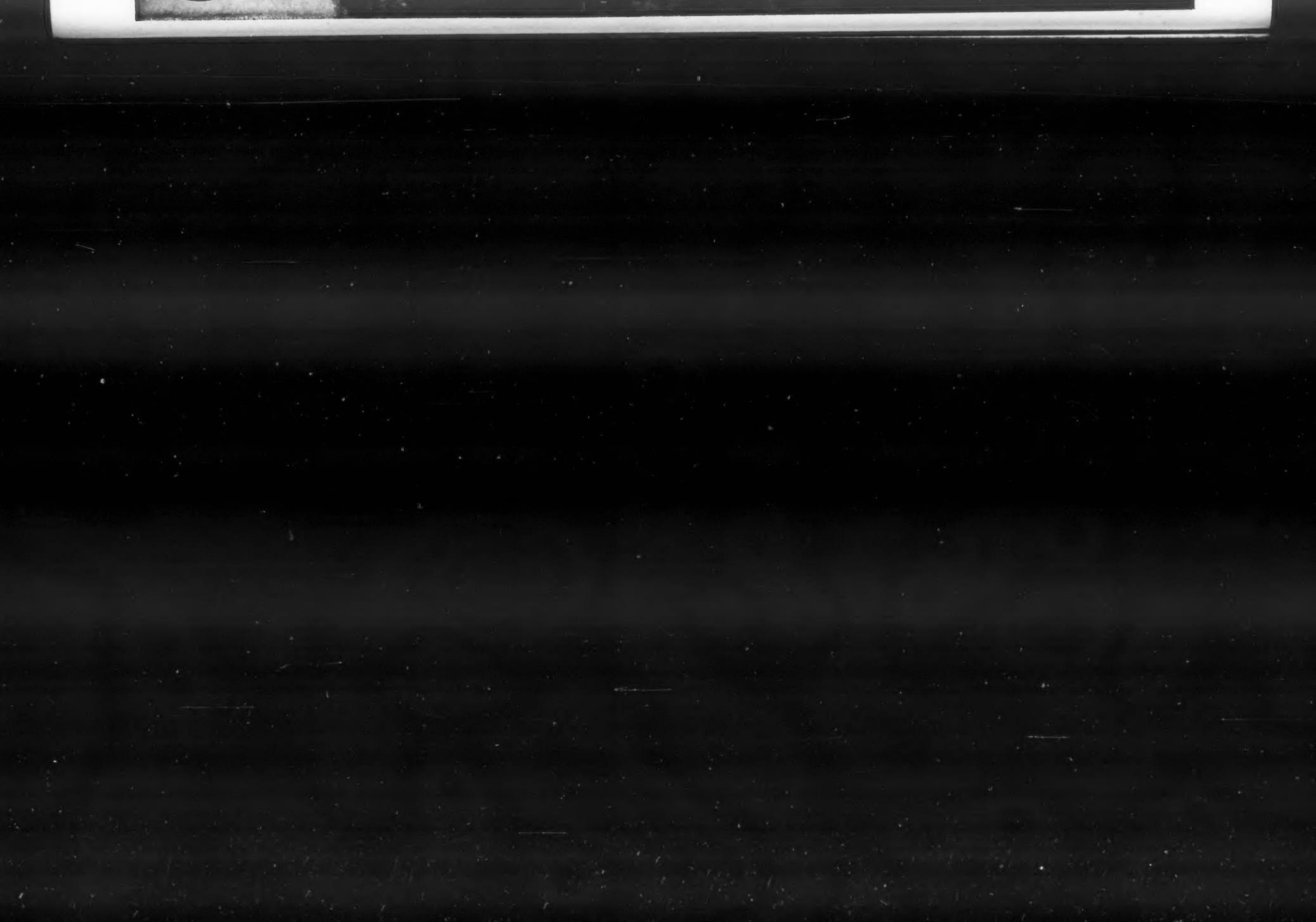

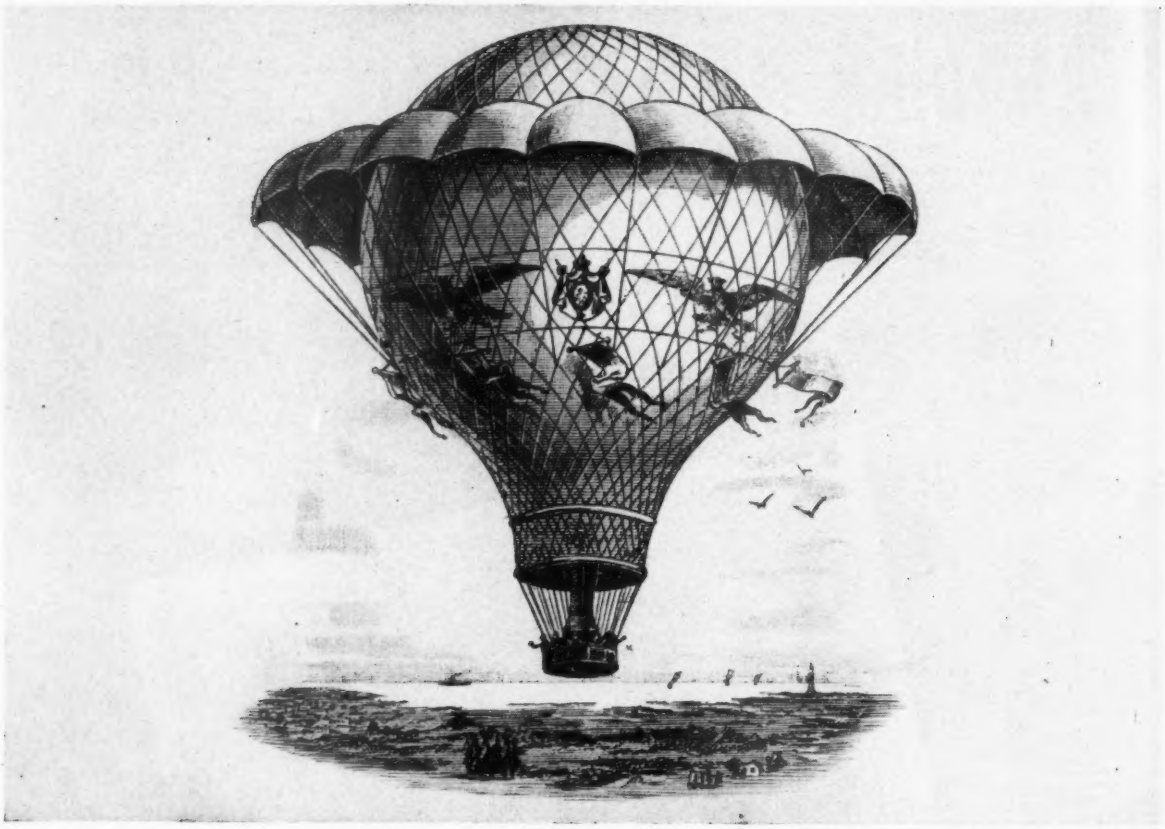

Hot air balloon 1864: Eugene Godard Hulton Picture Library

WHAT GOES UP...

MUST COME DOWN!

that is why so many lighting installations incorporate L.E.F. Raising and Lowering Gear

L.E.F. Raising and Lowering gear is the perfect answer to every problem posed by interior lighting installations in which the fitting must of necessity be out of reach and, consequently, tricky to service.

This gear enables maintenance staff to bring lighting fittings down to floor level so that they can be dealt with quickly and conveniently. It out-dates cumbersome methods and is most economical in time and labour.

When you have a lighting problem, remember that it is most important to discuss your needs with L.E.F. at the planning stage; first to specify your technical requirements and secondly, to ensure suitable delivery.

NEW INNER TEMPLE

This beautiful hall is lighted by ten heavy chandeliers which are serviced by means of L.E.F. Raising and Lowering Gear. L.E.F. were consulted at an early stage during building by the Architects (Sir Hubert Worthington, R.A., and T. W. Sutcliffe Esq., A.R.I.B.A.,) and the Contractors (Bower Engineering Works Ltd.) with the result that they were able to supply equipment "built in" to the ceiling.

LONDON ELECTRIC FIRM LTD. South Croydon, Surrey. Telephone: Uplands 4871

Tib.119

"I WAS A SNEAK"

—Master H. W. Pipe owns up

I was always in hot water—or rather hot water was always in me—when I left the boiler-room. But then I wandered about the school, improperly dressed. I used to dissipate my heat in draughty corridors. By the time I reached the dorm' radiators, I was as tepid as school tea!

But now I'm the blue-eyed boy: From outlet to delivery, I'm clad in Fibreglass Rigid Sections. So delightfully light, so superbly trim—no bagging at the knees and no losing degrees! My behaviour as a saver of fuel and a deliverer of hot water is earning A-plus Reports from all. But I'm *not* expecting a prize for Good Conduct. Because my Fibreglass jacket is about the world's poorest Conductor—of heat anyway!

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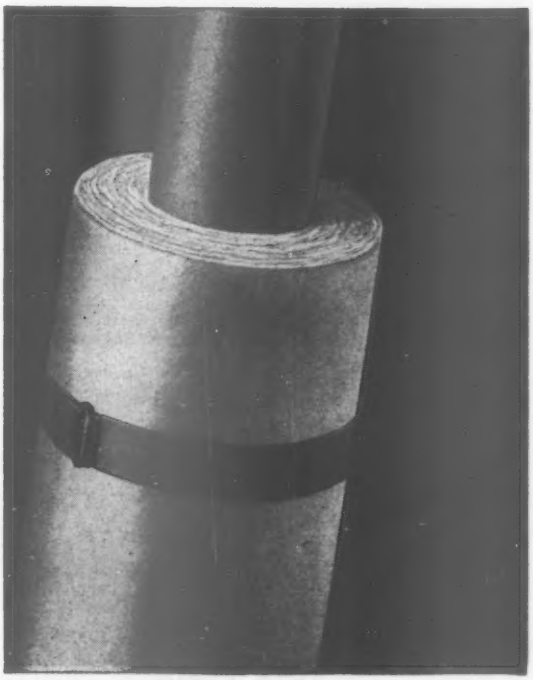

"RIGID SECTIONS HAVE PUT ME ON TOP OF MY FORM!"

MASTER H. W. PIPE WRITES HOME

For the whole story, please write to:

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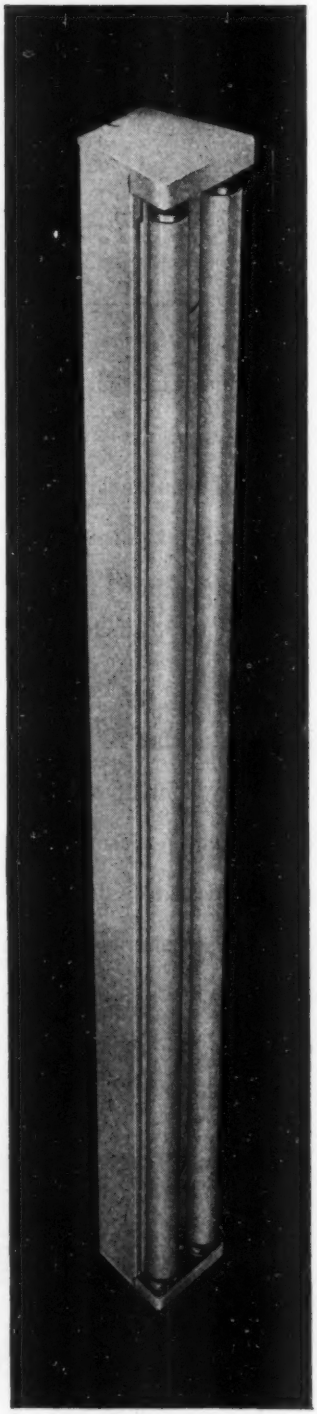
FALKS Introduce

the new adaptable "SUMMIT" Range

(SERIES I INDUSTRIAL FITTINGS)



In introducing the "Summit" range of fluorescent lighting fittings, Falks have made *adaptability* the keynote of their design. Adaptability is achieved by using one basic channel, with provision for altering not only the appearance but also the lamping, the control gear and the suspension of the fitting. The ideal lighting fitting indeed!

SPECIFICATION

Basic Channel Special Section 20 s.w.g. *zinc-coated steel*; provides for cover plate and reflector fixings and embodies internal and external wiring channels.

Cover Plate Secured by *quick release fasteners*; Provision for easy access to starter switches without removing cover plate.

End Plates Die-cast aluminium alloy secured by threaded studs.

Lampholder Brackets Two sizes, single and twin lamp; triple lamp.

GENERAL FEATURES

Lamping Generally, all models are available for 5 ft., 4 ft. and 2 ft. lamp lengths in single, twin and triple lamp arrangements.

Control Gear Starter or quickstart.

Material & Finish *Zinc-coated sheet steel throughout; etch primed and finished stove enamelled egg shell off-white.* (Reflectors glossy white).

Suspension— Variable centres, for ½", ¾" or ¾" diam. conduit. Keyhole slots are provided for direct ceiling fixing.

Interchangeability By using all the combinations of number and size of lamps together with type of fitting, over 70 different assemblies can be achieved in this series, each with starter or quickstart control gear.

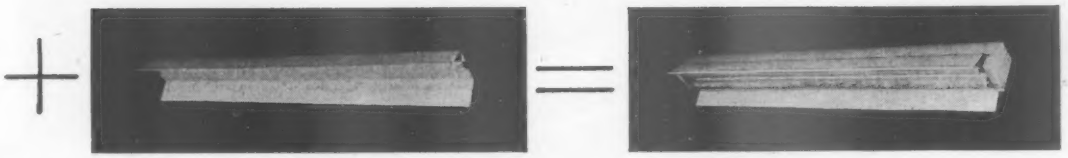
Erection Whether by direct fixing or chain or rod suspension, erection is effected in the simplest way possible.

FALKS SUMMIT RANGE

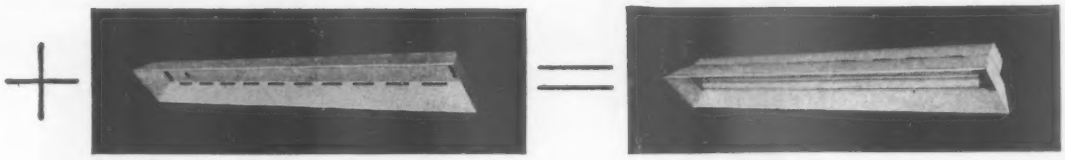
was shown at the

1958 Electrical Engineers (A.S.E.E.) Exhibition

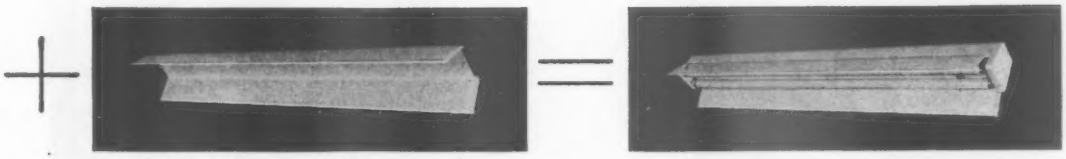
at Earls Court



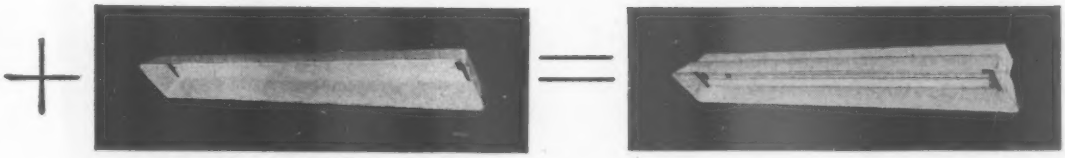
Metal Reflector, open ended — CHILTERN



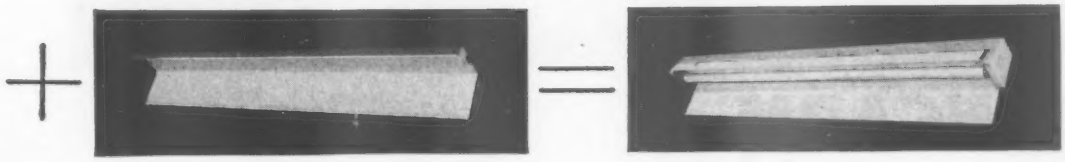
Metal Reflector, closed ended — COTSWOLD



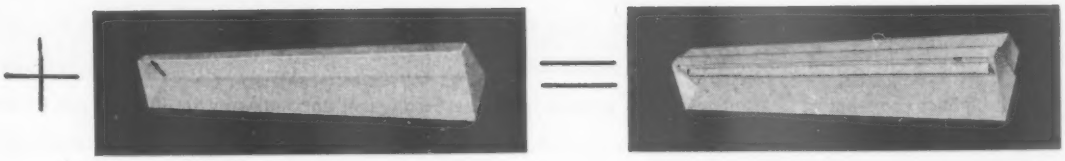
Perspex Reflector, open ended — CHEVIOT



Perspex Reflector, closed ended — MENDIP



BLACKBOARD I
(Open-ended)



BLACKBOARD II
(Closed-ended)

Write for full details and price list

Designed by R. F. Steward, L.S.I.A. of Falks.

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Catalogue 813

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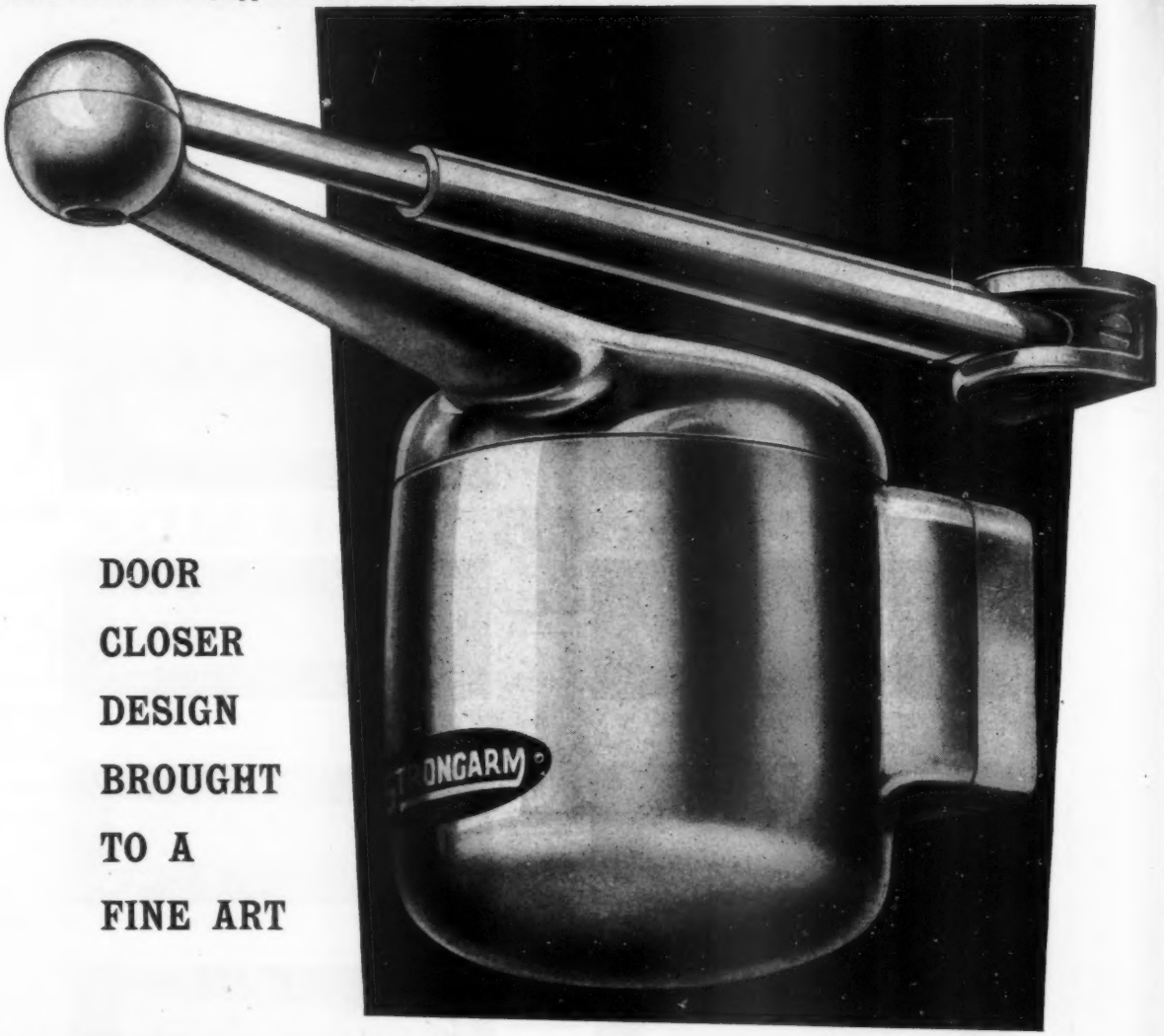

DOOR CLOSER DESIGN BROUGHT TO A FINE ART

STRONGARM HYDRAULIC DOOR CLOSER

The selective eyes of architects are taking a long look at the Strongarm new look Door Closer. For the first time in the world door closer design, in making a bold break with its rather ugly past, has reached the highest concepts of present taste and preferences. The Strongarm encompasses an efficient mechanism of watch-like precision in its beautiful, compact shape. The quiet perfection of its operation is accountable to the skill, ingenuity and knowledge pooled by some of Britain's foremost hydraulic engineers. Fresh, current thinking has blown away the cobwebs of antiquated design and produced the clean, simple, dustfree lines of the Strongarm. It is the most advanced Door Closer design in Europe or the U.S.A.

We suggest you write soon for substantiating data. Sales Leaflet APL. 42/A.

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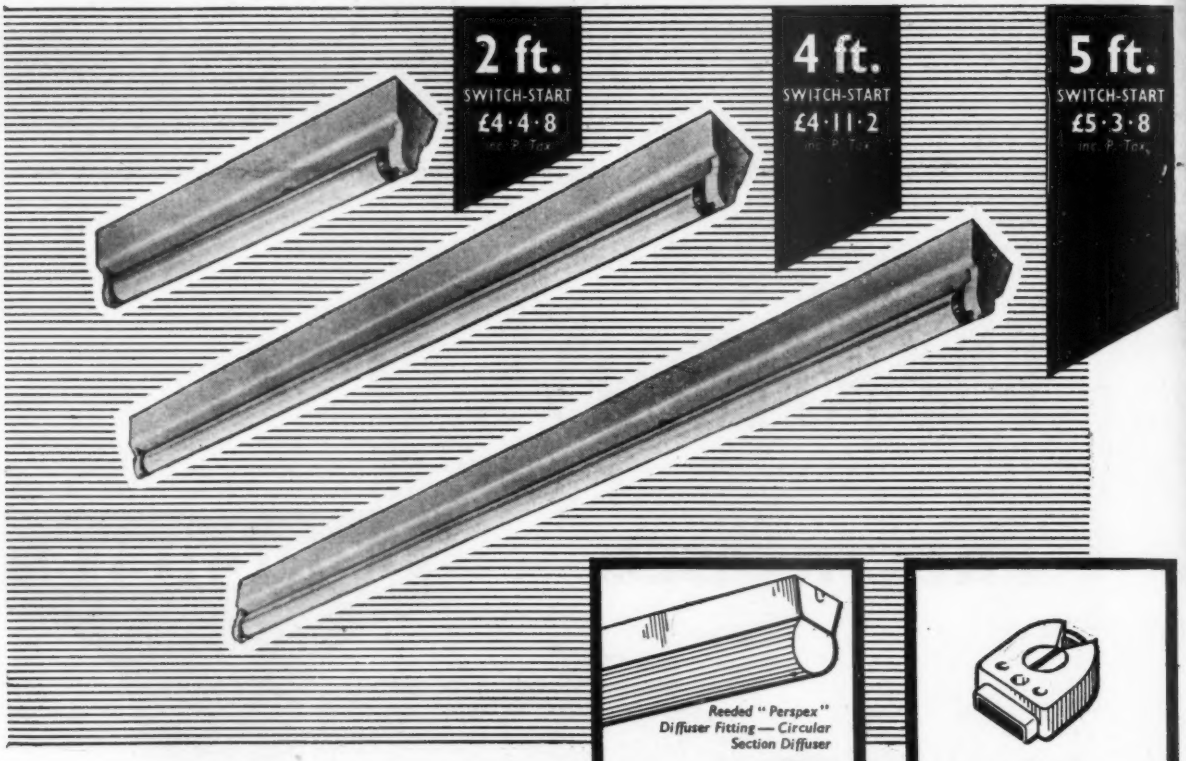

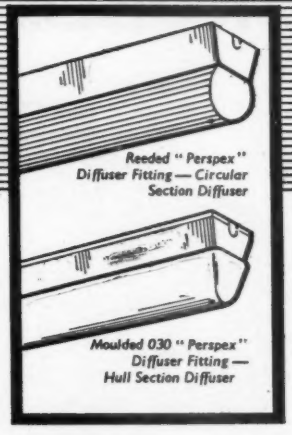

Reeded "Perspex" Diffuser Fitting — Circular Section Diffuser

Moulded 030 "Perspex" Diffuser Fitting — Hull Section Diffuser

Philips exclusive spring loaded rotor type Bi-pin Lampholder — simplifies lamp installation and removal

NEW low cost lighting!

Philips present another important new lighting development! Available in 2 ft., 4 ft., and 5 ft. sizes, each of these new TME units consists of a specially designed and robust batten fitting, complete with a Philips double-coated Warm White de Luxe tube and with all electrical components entirely enclosed. In addition, two types of perspex diffusers are available: reeded or moulded. And look at the other exclusive features listed on right.

- ✳ *Simpler one-man fixing—and the lamp can be inserted with one hand only.*
- ✳ *Unique Philips spring-loaded rotor type Bi-pin lampholders.*
- ✳ *Supplied complete with Philips double-coated Warm White de Luxe tubes. (Bi-pin Capped.)*
- ✳ *Incorporates the new Philips Polyester-filled ballast—smaller, lighter in weight, silent.*

PHILIPS series TME Bi-pin units

PHILIPS

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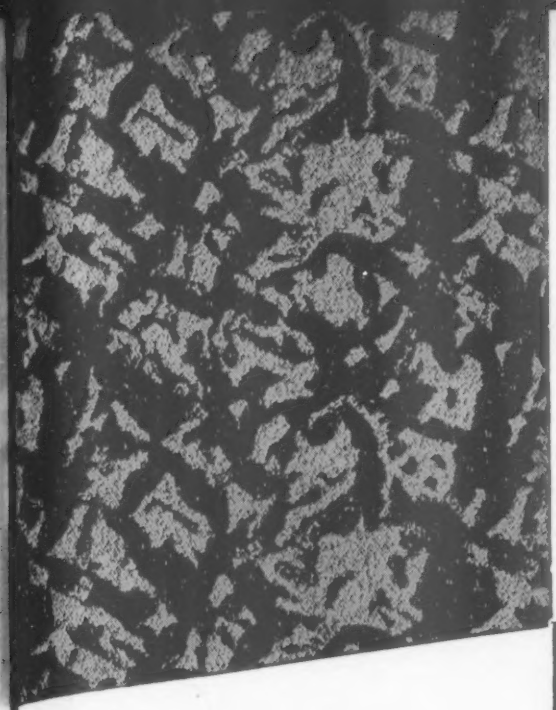
(LD3118)



TIBOR

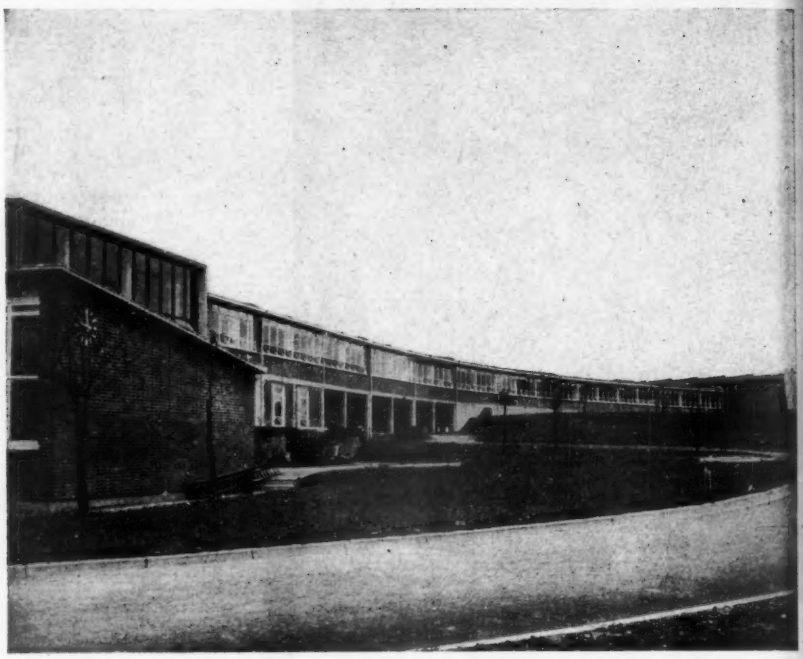
MANTUA FOTEXURDRAPE—a curtain fabric available in rich, deep colours of Golden Grey, Venetian Red, Spanish Flame, Peacock Blue, and Turquoise Blue. You can obtain this beautiful deep texture at approx. £1 per yd. from your leading Store. "Mantua" is designed by Tibor Reich, F.S.I.A., manufactured by Tibor Ltd., Clifford Mill, Stratford-on-Avon.

VESPER

Model 478 Versatile easy chair. Upholstered back is hair-filled and fitted to curved wooden frame. Loose cushion seat of latex is suspended on Rotex Rubber webbing. Designed by Andrew Milne F.S.I.A. and manufactured by Gimson & Slater Ltd., Walton Street, Long Eaton.

STOCKWELL

TANGIER (Regd.) A pleasing overall pattern created by Tibor Reich F.S.I.A. for the Equerry (Regd.) range of Wilton Filling. Produced by S. J. Stockwell & Co. (Carpets) Ltd., 16 Grafton Street, W.1. and guaranteed mothproof for life.



PUTTY & *mastics*

Manufactured by the largest exclusive manufacturers of Putty and similar compositions in Great Britain.

Blurton County Secondary Modern School, Blurton, Stoke-on-Trent.
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Contractors: The Public Works Department, Stoke-on-Trent.
Glaziers: Messrs. Weirs Glass Ltd., Hanley, Stoke-on-Trent.

SEALON metal casement PUTTY

A ready mixed putty, soft and easy to work, for glazing into metal frames. Sealon will adhere to glass, painted metal, etched galvanised steel or pre-treated aluminium.

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We estimate the following amounts of Sealon are required per running foot of glazing.

Domestic Frames.....3½ ozs per running foot.
Industrial Frames.....4 ozs per running foot.
Public Buildings.....3½ ozs. per running foot.

Obtainable through glass, Builders and Plumbers Merchants. Despatch can be made within 24 hours.

Sealon and all Sealanco products are manufactured under strict laboratory control. Our Technical Department is available for consultation on fixing problems.

Specification and Glazing Procedure Leaflets for Sealon Metal Casement Putty forwarded on request.

SEALANCO (ST. HELENS) LTD. TEL.: 2432-7782. **ST. HELENS, LANCS.**

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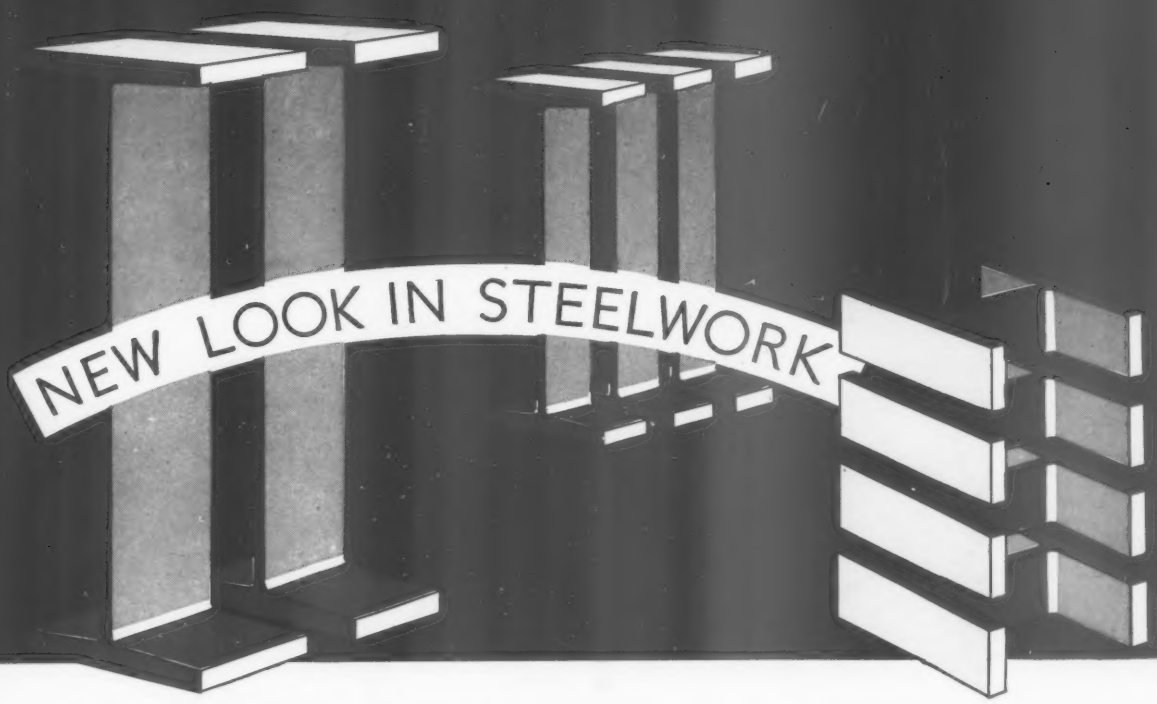


'UNIVERSAL' SIMPLIFICATION

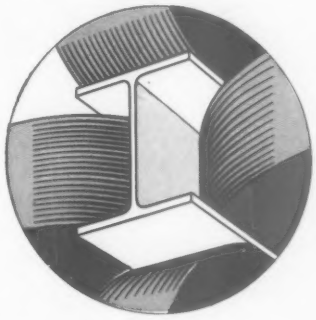
Our new Universal Beam mill is now at work rolling beam sections in a wide range from 36 in. by 16½ in. down to 8 in. by 5¼ in. In planning this new range, the needs of the designer have been studied closely, and each section is available in different weights to suit the loads to be carried.

Designers are already reaping the benefit of simplification —for many of the beams are far larger than any hitherto rolled in Europe. They can be used, direct from the mill, for bridge spans which have previously needed expensive fabrication.

We also roll 'H' sections for columns (ranging from 6 in. by 6 in. up to 14 in. by 16 in.) in related 'families' of different weights, so that the increased column-loading at the lower storeys of tall buildings may be met by simple sections without riveted-on flange plates.

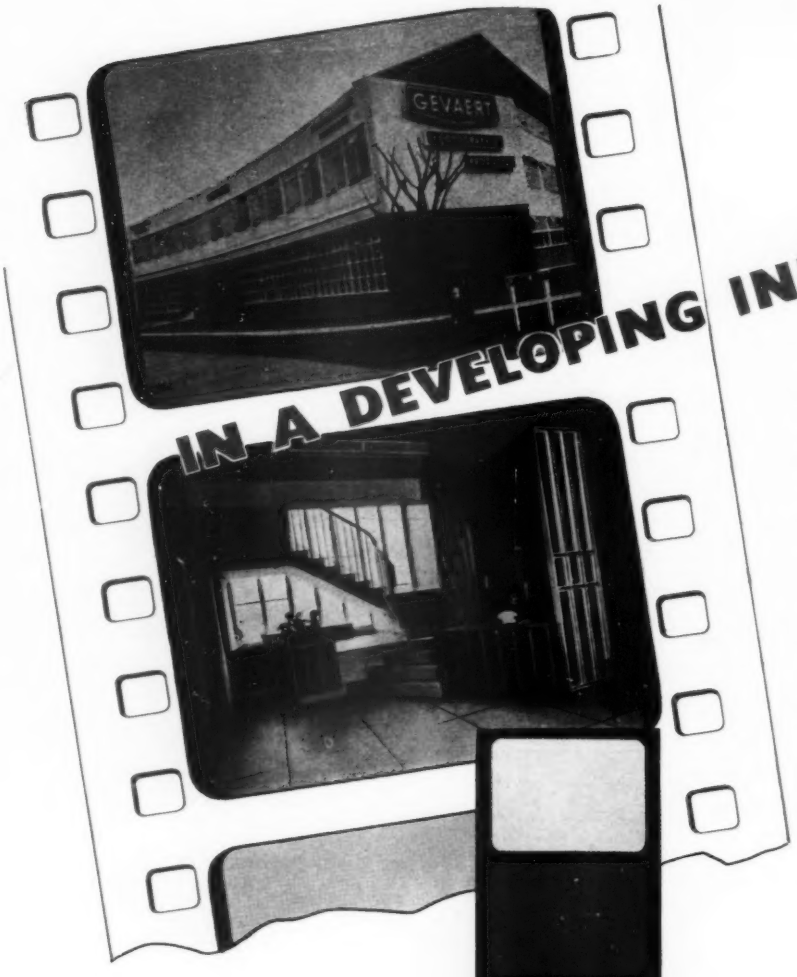
The range of British Standard beams, channels and angles continues to be available.

Diagram showing the arrangement of the rolls, which are adjustable to control the flange and web thickness. The adjustment does not appreciably alter the surfaces shown in blue in the upper illustration.



EARLY DELIVERY OF THE FULL RANGE OF SECTIONS

DORMAN LONG



IN A DEVELOPING INDUSTRY

To a progressive concern, quality matters a lot. Small wonder, then, that Gevaert Ltd. the leading photographic specialists, have made extensive use of International paints — Interlux Gloss Paint and Flat Finish — for their administrative building in Brentford. Successful schemes, such as this, using well-known International paints like Interlux, Interlight Emulsion Paint or Policrome wall finish, find their counterpart throughout the country. Frequently the painting scheme is planned in collaboration with International's technical representatives — please remember that their services are at your disposal too.

Architects: Douglas & J. D. Wood in association with Georges Lust
Contractors: Gee, Walker & Slater Ltd.

International Paints Ltd.

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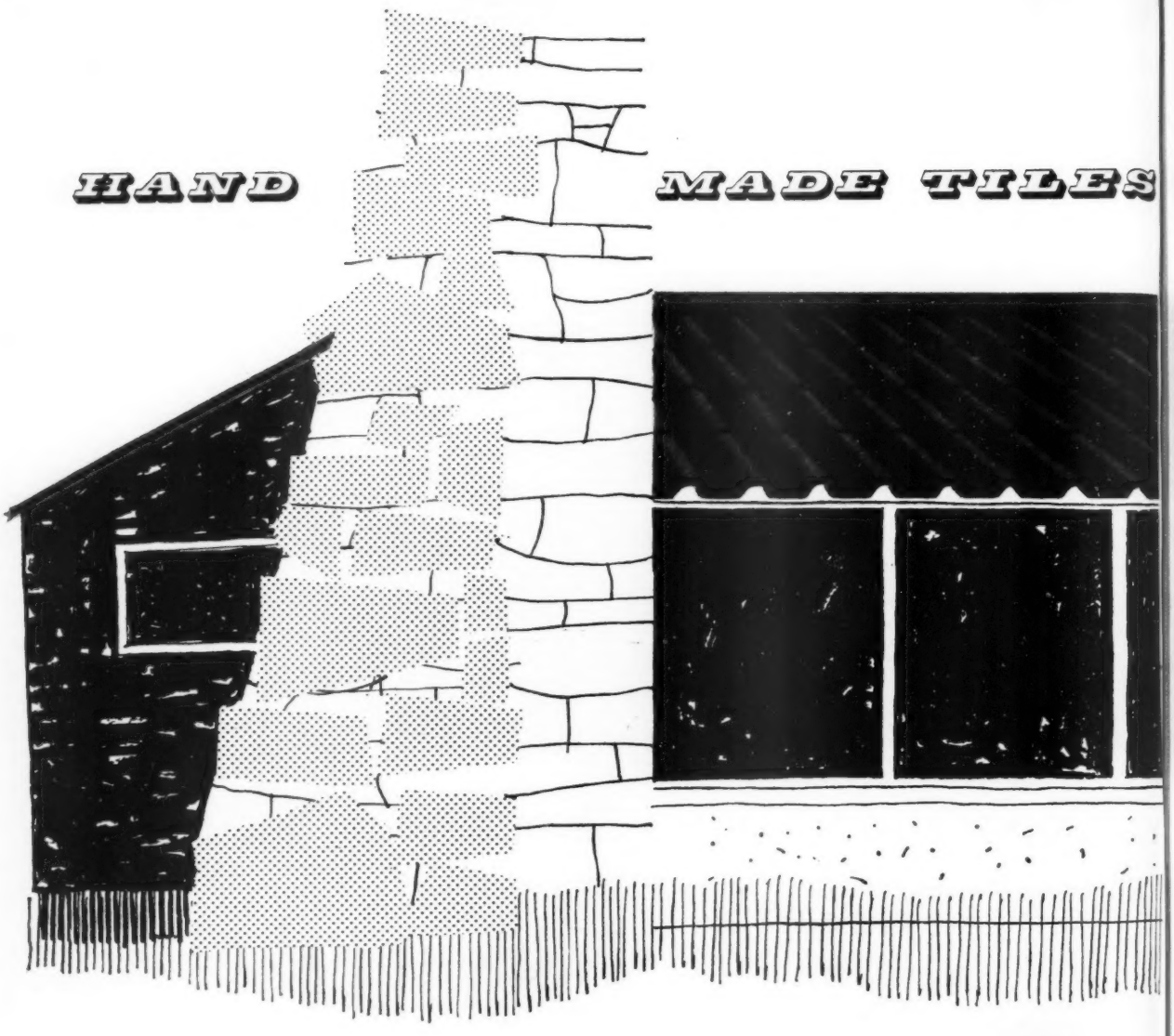
HAND MADE TILES



Made from the well-known Bridgwater non-ferrous clays, these tiles cost little to maintain, have a long life, and are, of course, traditionally famous for their fine appearance.

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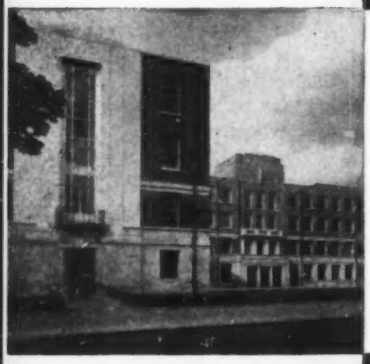

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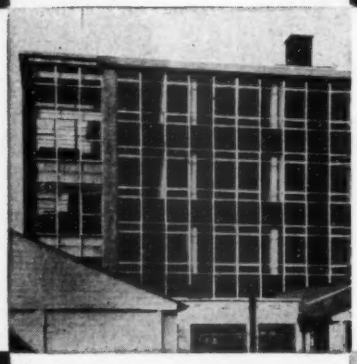

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Architects:
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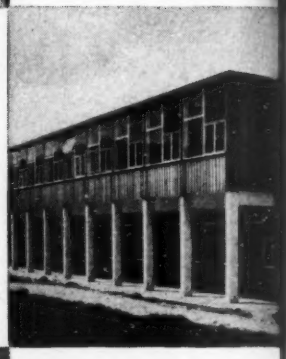

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Architect:
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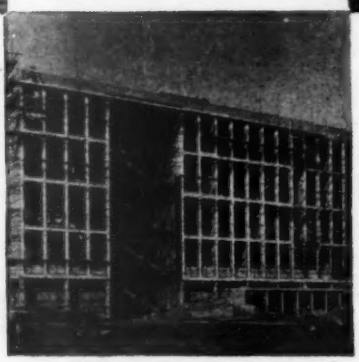

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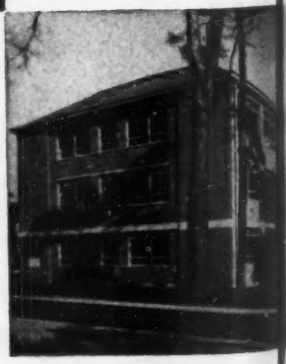

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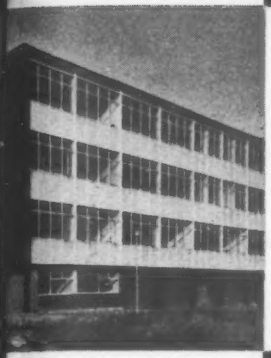

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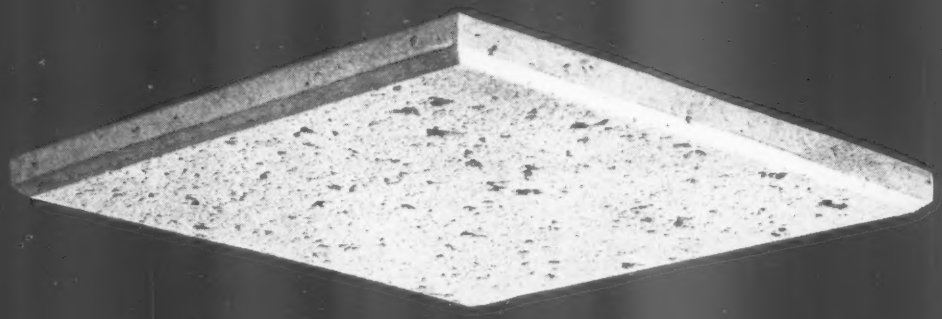

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FIRE PROTECTION	TOTALLY INCOMBUSTIBLE: Surface Spread of Flame CLASS 1					
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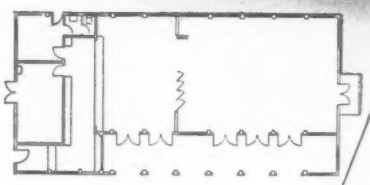

SPECIFICATION

A building 80' x 40' x 10'9" to eaves, including verandah, plus porch at one end size 10' x 5', to partitions and folding doors, lining, ceiling to verandah, tile flooring and granolithic flooring.

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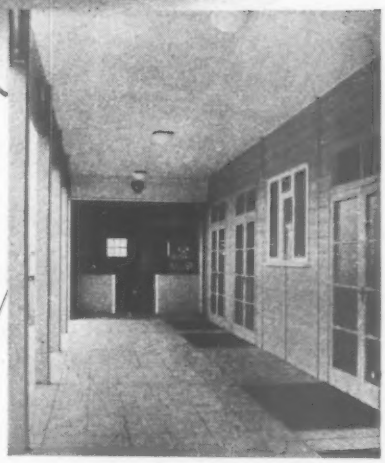

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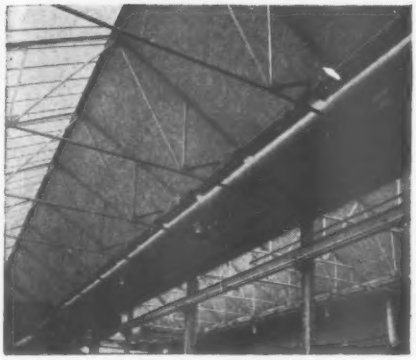

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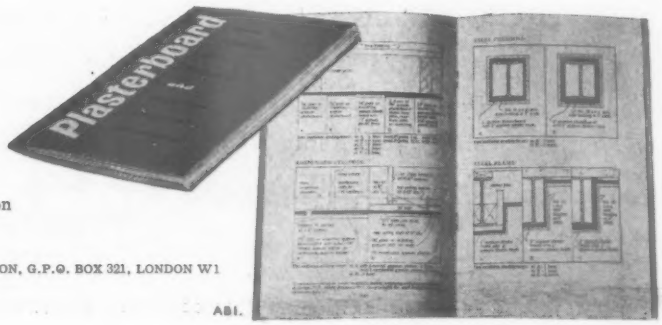

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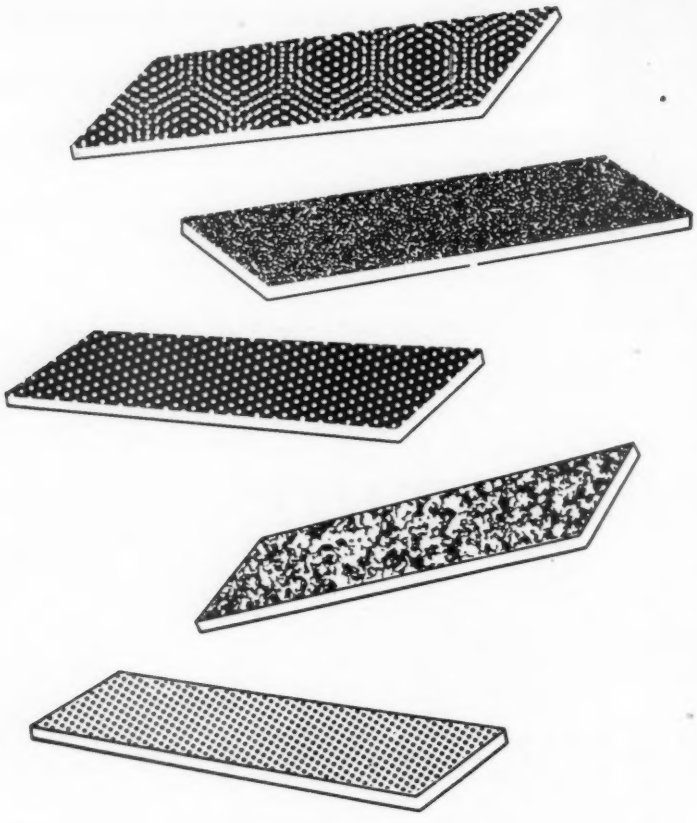

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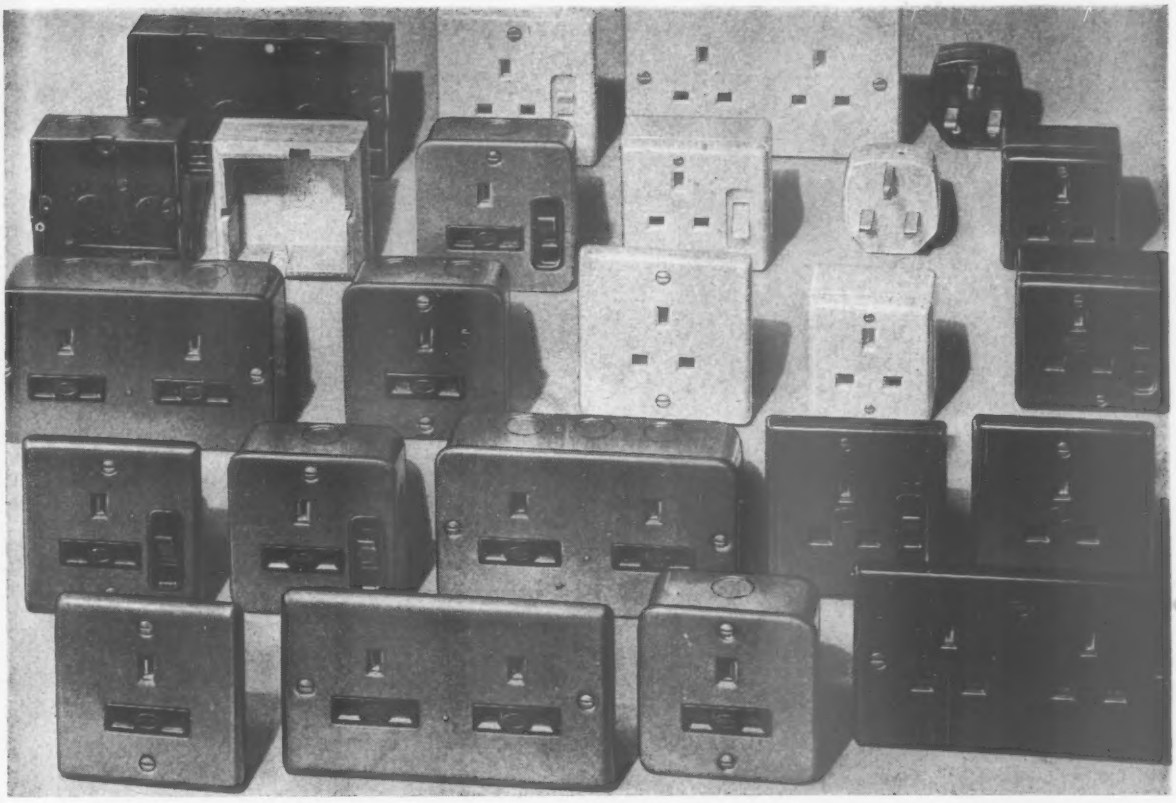

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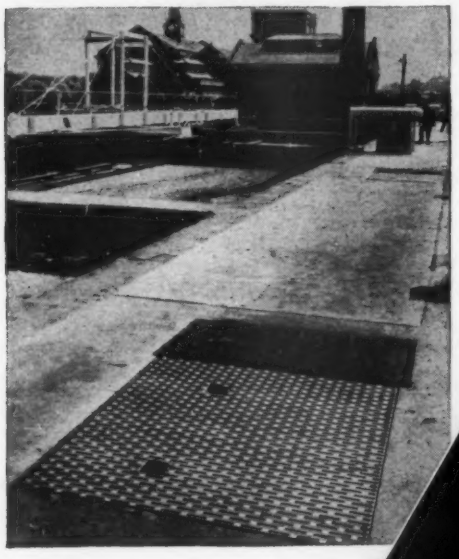

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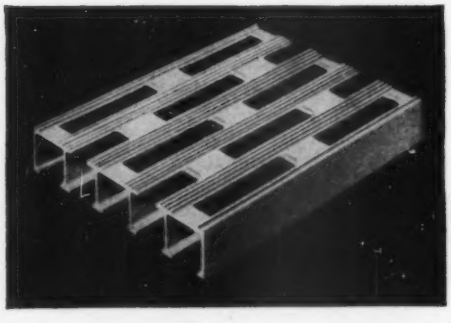

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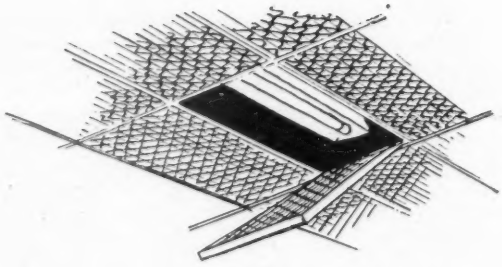

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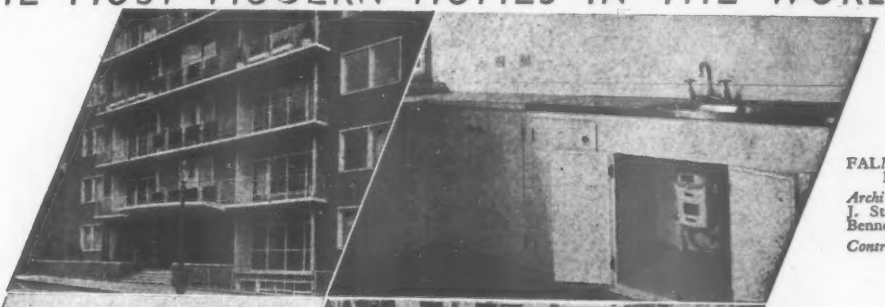

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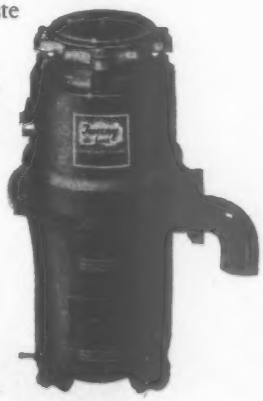

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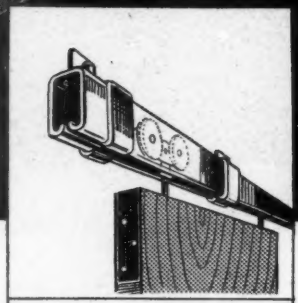

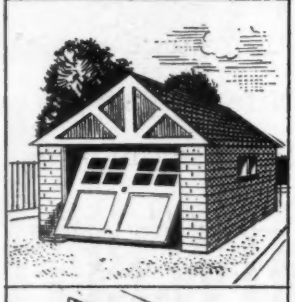

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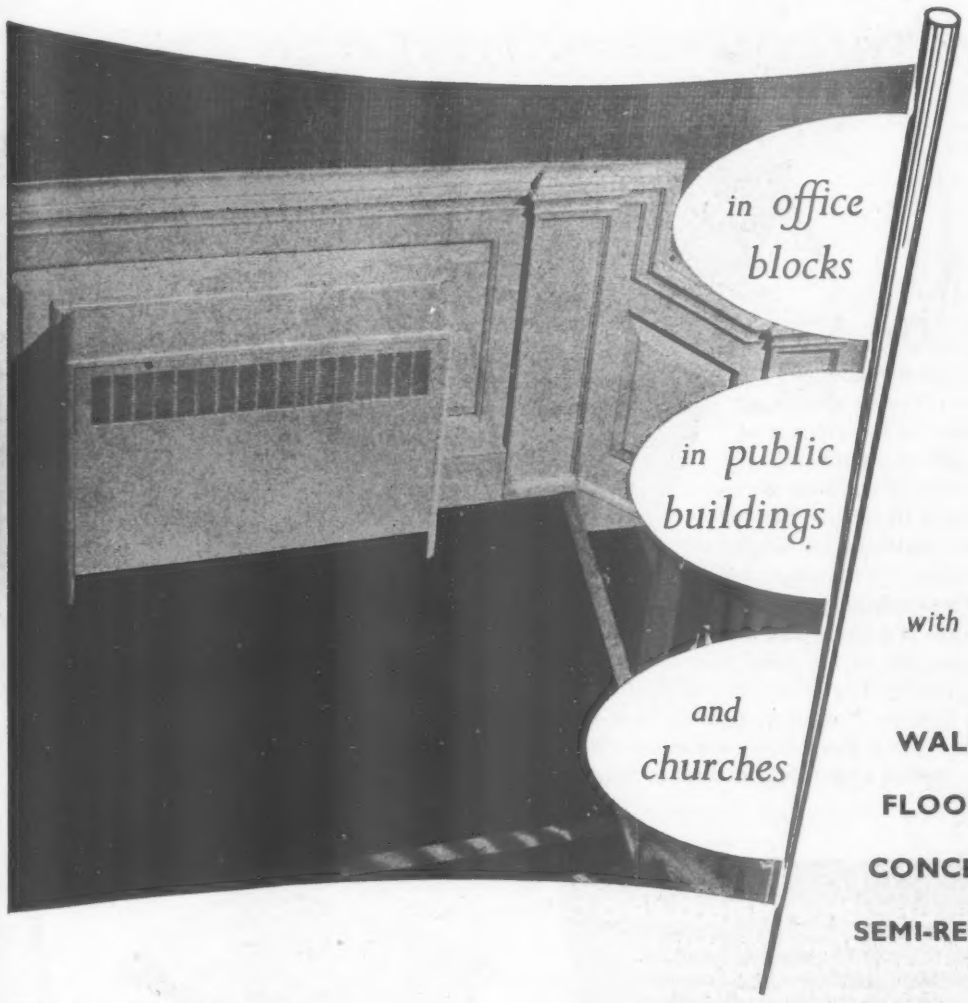

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When the planning reaches the heating stage remember Biddle "Vectairs". "Vectair" Convectors are simple to install, will operate from any existing steam or hot water system, and once fitted can be forgotten. They just go on, year after year—providing a clean comfortable atmosphere to live or work in, and the only "maintenance" they ask is an occasional wipe over with a damp cloth. They are as good to look at as they are to use and do credit to any surrounding decor wherever it may be. Of simple but sturdy construction, and made from only the finest basic materials, each "Vectair" contains the famous Biddle heating coil.

VECTAIR

CONVECTOR

"IT'S THE COIL THAT COUNTS"

Write for full particulars

F.H. BIDDLE LIMITED

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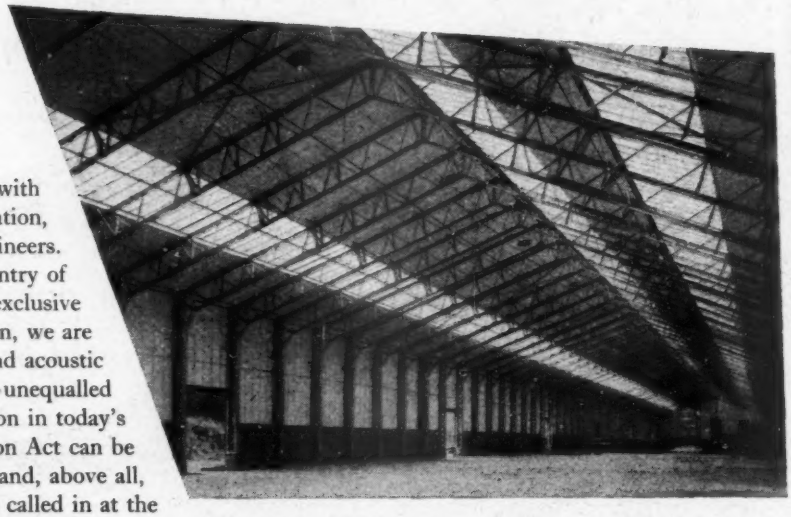
Telephone: HYDe Park 0532 (9 lines).
Cables: Efbiddle-Audley-London.

The Factory Insulation Act

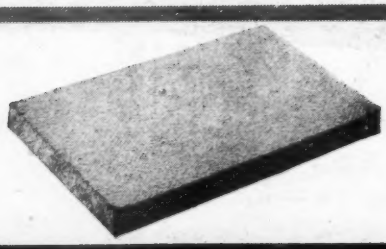
—HOW TO COMPLY WITH IT AT MINIMUM COST!

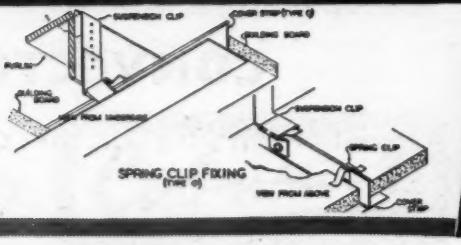


When you are next faced with the problem of factory insulation, seek the help of Tentest engineers. We are the *pioneers* in this country of metal fixing devices which are exclusive Tentest patents. In addition, we are manufacturers of thermal and acoustic boards and tiles and have an unequalled knowledge of their application in today's problems. The Factory Insulation Act can be complied with effectively and, above all, economically, provided we are called in at the beginning. The accompanying illustration shows a fibreboard lining fixed by Tentest Aluminium Sections to roof and walls of the new Assembly Shop at the Rover Co. Limited, Solihull. Area 7,118 sq. yds. A Tentest Spring Clip fixing method, as illustrated below, was used on this contract.

FLAME-CHECK FINNBOARD

A high quality fibre board which has been classified Class 1 following B.S. 476 Surface Spread of Flame Test. This board does not require decoration and is available in standard $\frac{1}{4}$" thickness.





PATENTED SPRING CLIP FIXING (TYPE O)

Used for ceiling, roof slope, and wall linings. Tentest Spring Clips ensure a vibration proof and commercially dust proof joint. No drilling or special fabrication is necessary.

TENTEST TRADE MARK

TENTEST FIBRE BOARD CO. LTD.

FIBOARD HOUSE, OAKLEIGH GARDENS, LONDON, N.20 *Telephone: Hillside 8801*

You live and learn

BUILDER "Do you know, this is the best cement colouring compound I have ever used?"

ARCHITECT "Which confirms that if a product complies with British Standard, it must be good."

BUILDER "And yet, to get this strong brick-red shade, I am only using 3 lbs. of this Febtone colour per cwt. of cement."

ARCHITECT "Yes, what a difference to the colouring compound I previously specified. That needed 10 lbs. of colour per cwt. of cement to form the same shade."

BUILDER "Ah! but that colouring compound didn't conform with British Standard 1014-1942 Type A."

ARCHITECT "Yes, there's the difference. To conform with British Standard, the cement colouring material must be free from impurities and extenders."

BUILDER "Which gives the answer—the colouring matter of Febtone is obviously pure, unadulterated pigment and so a little goes a long way."

ARCHITECT "Which makes you wonder what is in some of the other cement colouring compounds."

BUILDER "Well, there's no wondering with Febtone and in addition, the product also hardens and plasticises which is a great help to the Builder."

You can rely on

FEBTONE SUPER PERMANENT COLOURS FOR CEMENT

(PATENT NUMBER 72728)

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by far the finest 8 ft. range in the country

The brilliantly successful G.E.C. 101 range of fluorescent fittings offers a wide choice of designs for every lighting requirement. The 8 ft. fittings are available in many variations. All use the G.E.C. Basic Channel with Osram Guaranteed Tubes with recessed double contact caps. Tube replacement is made easier as it can be carried out by one person from one ladder position. For full information send for publication F 4068.

101 range

stove enamelled, vitreous enamelled and Perspex reflectors.

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The General Electric Company Limited,
Magnet House, Kingsway, London, W.C.2.

Maximum output with minimum input

Riley Oil Burning Equipment

—is designed for consistent high-combustion efficiencies

Riley pressure jet oil burners exploit higher air and oil pressures than generally obtain in present day practice. They are factory set to give high CO_2, thus dispensing with the need for site adjustment.

There are Riley Oil Burners with throughputs ranging up to 700 lbs. per hour.

Type HL Burner

HIGH/LOW/OFF OPERATION

For capacities above 10 gallons per hour using 220 secs and 950 secs oil. Gives clean combustion and 13% CO_2 at variable firing loads. Incorporates one small and one large air register, each with its own atomiser. On low load only the small burner is alight, at high load both are working at optimum efficiency. Large burner has tip shut off, arranged for hot oil circulation to start and self cooling on shut down.

Type F Burner

ON/OFF OPERATION

Available in capacities from 20 lbs. to 90 lbs. per hour, using 220 secs oil. Air/Oil ratios and pressures are factory set to give suspended intense flame with 13% CO_2, and do not require further adjustment on site.

Type G Burner

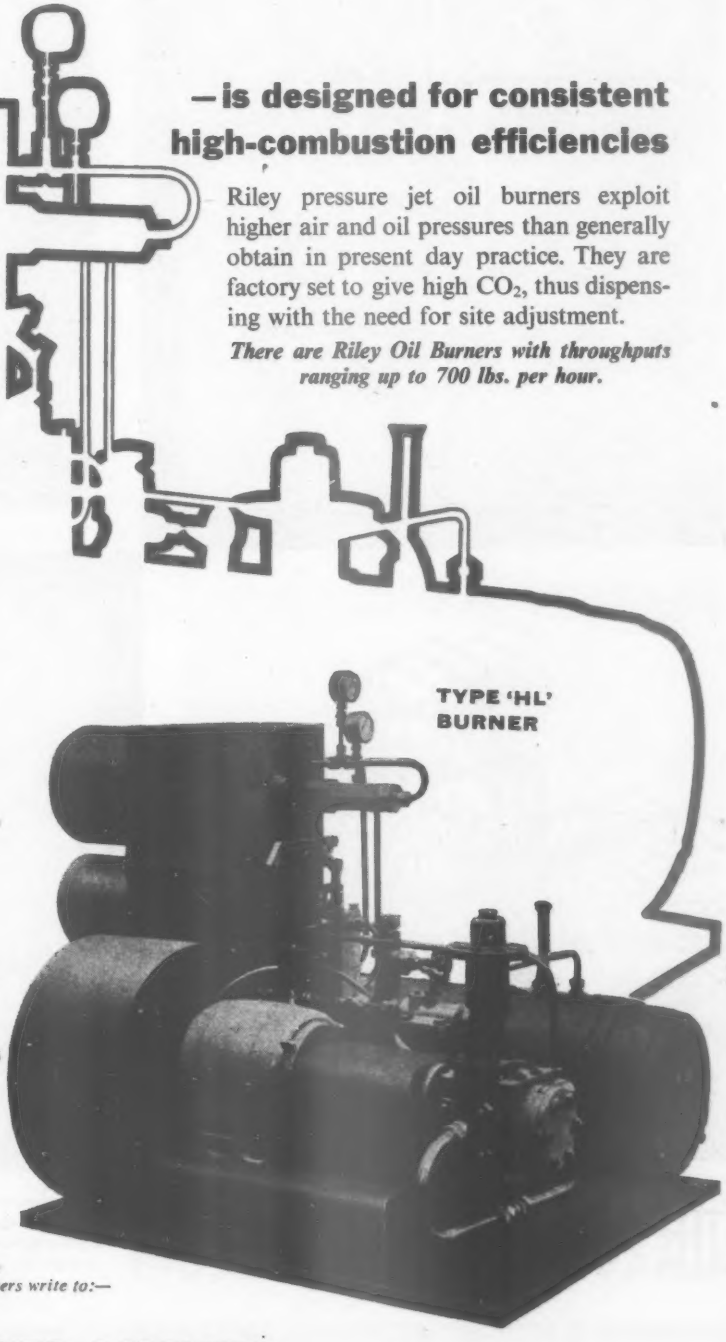
ON/OFF OPERATION

Generally similar to type F burner, but designed for use with 40 secs oil.

Type M Burner

FOR HORIZONTAL SHELL BOILERS

Spill return type atomiser with output range of 3 to 1. Specially developed air register to give clean narrow flame without impingement. Hot oil circulation to start and self cooling on shut down. Suitable for light and heavy fuel oils.



TYPE 'HL' BURNER

For booklets giving full details of these burners, also Riley Oil Fired Combustion Chambers and Air Heaters write to:—

RILEY (IC) PRODUCTS LIMITED

A Member of the International Combustion Group of Companies.

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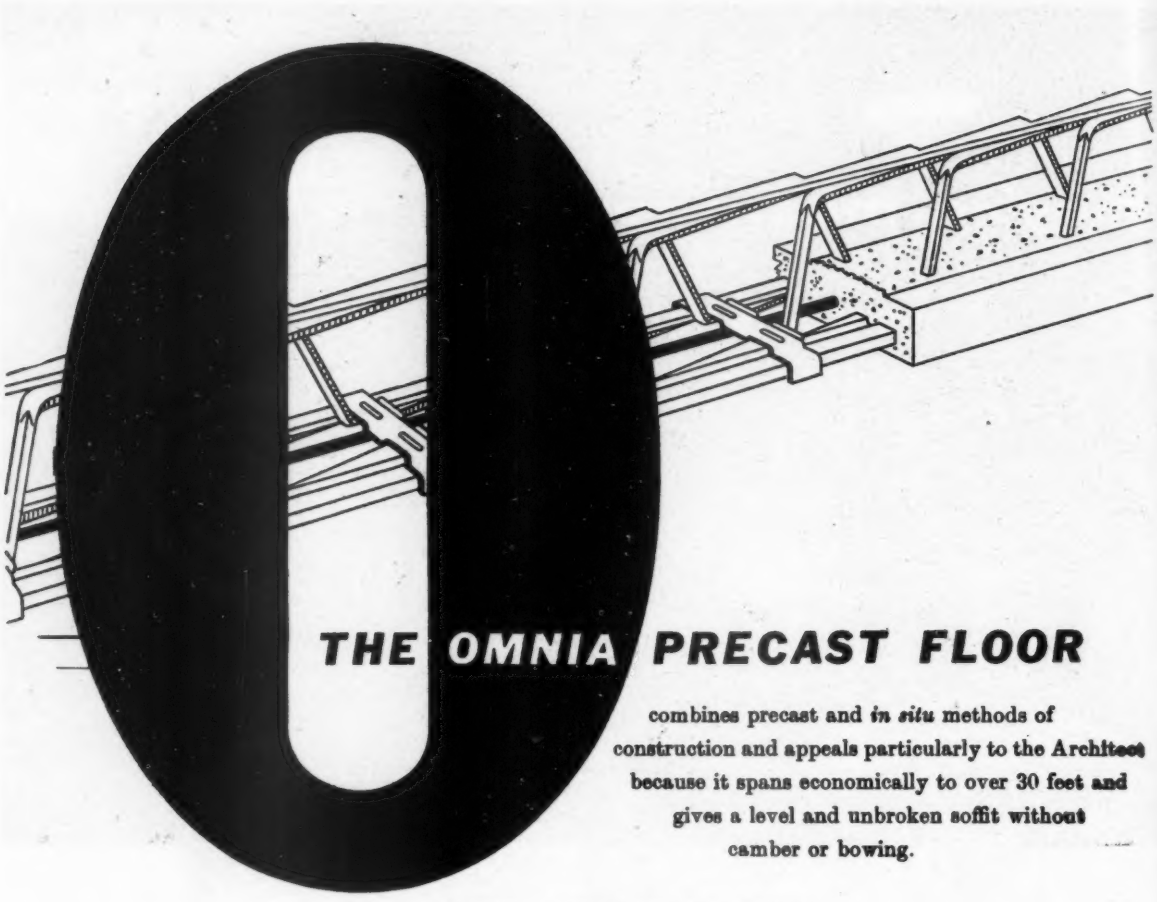

THE OMNIA PRECAST FLOOR

combines precast and *in situ* methods of construction and appeals particularly to the Architect because it spans economically to over 30 feet and gives a level and unbroken soffit without camber or bowing.

In addition it has the following advantages

Highly competitive
Monolithic yet flexible
Very low selfweight
Easily manhandled
Cheaply transported
Quickly erected
Requires no shuttering
Adaptable for services
Available everywhere

OMNIA CONSTRUCTIONS LIMITED
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OMNIA

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specially for use in chipboard

If you work with chipboard, you will know how it tends to burst when a screw is inserted. You will know also that different types of board vary considerably in screw holding power.

GKN Chipboard Screws have been produced to overcome both difficulties. Their large helix angle makes bursting far less likely and provides greater holding power than any other screw.

GKN Chipboard Screws are specially pointed for easy starting—with pilot holes or without—and their double start thread makes driving faster. For quicker, more reliable fastenings in chipboard, these are the screws you need.

GKN CHIPBOARD SCREWS

PACK	1 gross
HEAD STYLES	Phillips Recess Countersunk or Slotted Countersunk
SIZES	Lengths—$\frac{3}{8}$" to 2" Diameters—4 s.g. to 8 s.g.
MATERIAL	Steel

Other sizes, head styles and materials can be supplied, quantity permitting.

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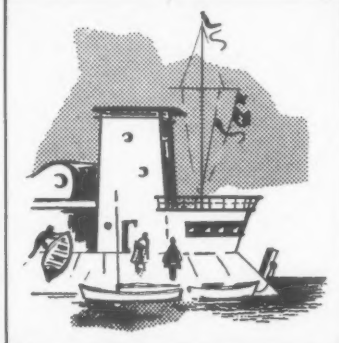
S/CB/3901

NEW!

RUBEROID

COPPER ROOFING



Traditional roofing with important extras

Copper gives to roofs a special character; its use is almost traditional. Now, the introduction of Ruberoid Copper Roofing provides a method of roofing in copper which reveals new horizons for the building designer. These additional features as well as the best characteristics of copper are secured when you specify Ruberoid Copper Roofing:

* Copper, bitumen and glass fibre laminated into a single sheet gives a bonus in weather protection.
* All seams and laps are completely sealed.
* There is a choice of traditional seams, batten rolls or flat laps.
* The indented surface allows for expansion and contraction.
* No work-hardening of copper during fixing.
* Elimination of wind drumming.

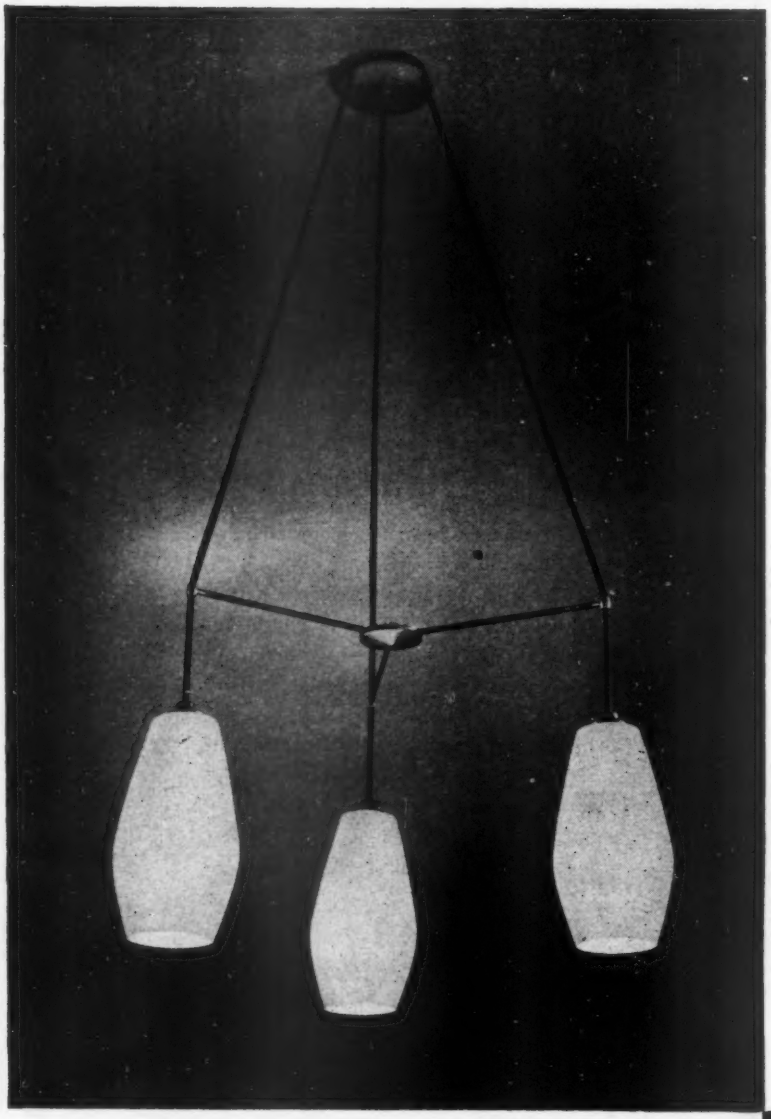
Ruberoid Copper Roofing consists of copper sheet with an indented surface, laminated with glass fibre based bitumen sheeting. It is employed always with Ruberoid Reinforced Glass Fibre Based Underlay to which it is bonded with bitumen compound. Technical literature available on request.

THE RUBEROID COMPANY LIMITED

647 Commonwealth House, 1-19 New Oxford St., London WC1
Telephone: Holborn 8797 (10 lines) and 9501 (5 lines)
Branches: Belfast, Birmingham, Bristol, Edinburgh, Glasgow, Manchester, Newcastle-on-Tyne, Nottingham

Satina fittings

win a Design Centre 1958 award



The Satina range of fittings, like all A.E.I. lighting equipment, was developed by the company's design staff in collaboration with a leading industrial design consultant.

Extract from the judges' comments, published in *Design*

'The judges have chosen this range of pendant fittings and this particular shade (though others almost as good are available in the range) for these fine points—the quality of the satin-finished opal glassware, which is attractive both lit and unlit; the delicacy of the bracket arms; the unostentatious use of brass in combination with black rods; and the general elegance of the range in all sizes.'

A·E·I
Lamp and Lighting Co. Ltd

Head Office,
Melton Road, Leicester.

M4788A

"Where's Joe?"

"Has Joe gone to the fire without his hat or boots?"
"Not likely. He's next door ducking under the luxurious Leonard thermostatic showers."
Luxury for him and his mates. Saving of fuel and water for the Corporation.

Leonard thermostatic mixing valves are used all over the world wherever showers or basins are used for group washing. Send for further details in pamphlet No. ZG/2.

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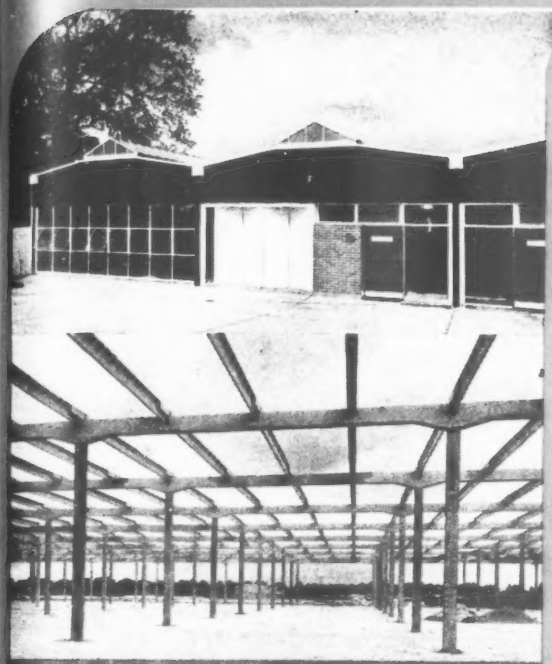

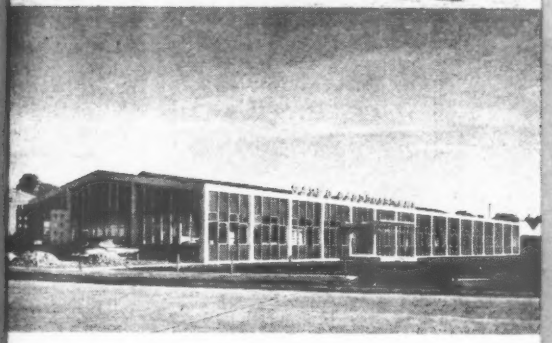

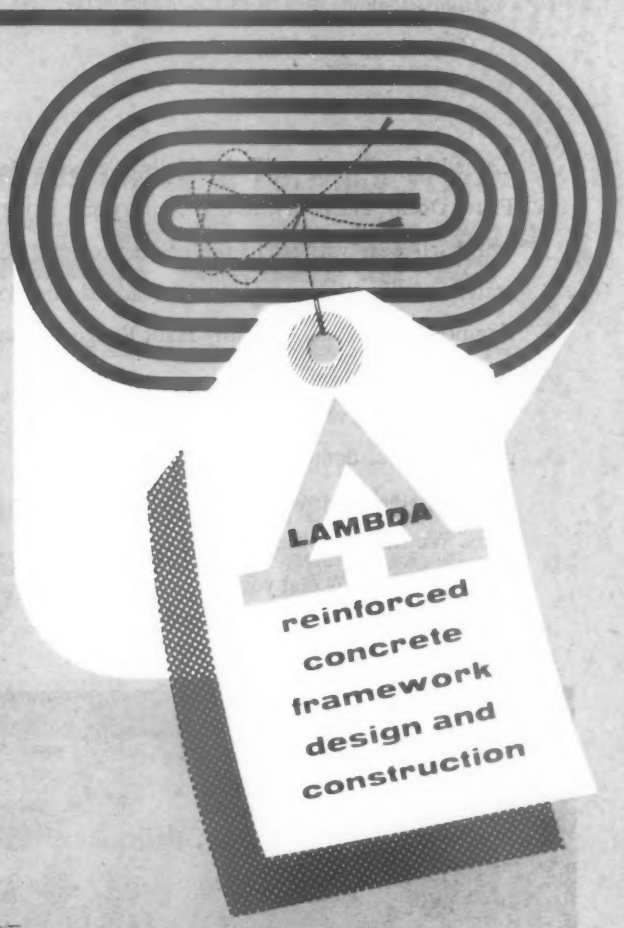

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As an alternative to structural steel our precast framework is clean in design, competitive in price. Maintenance is virtually eliminated and fire risks reduced.

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As all our work is individually designed we do not print a catalogue. Further information is best obtained by sending us a sketch of your requirements or by direct personal contact with our technical staff.

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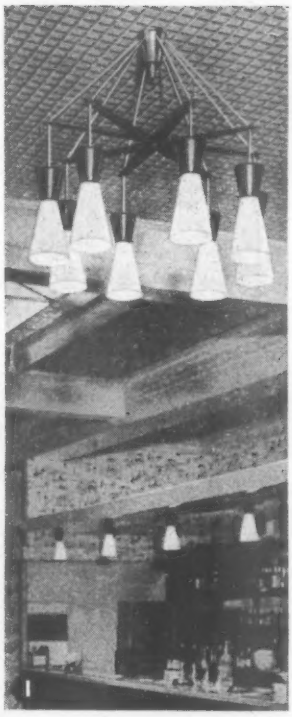
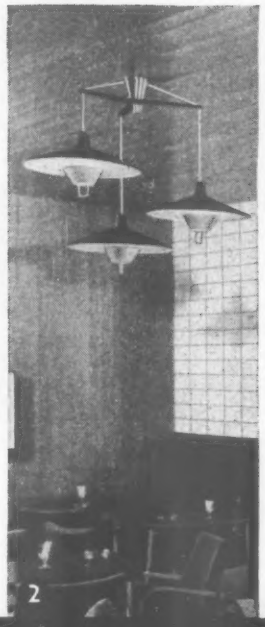
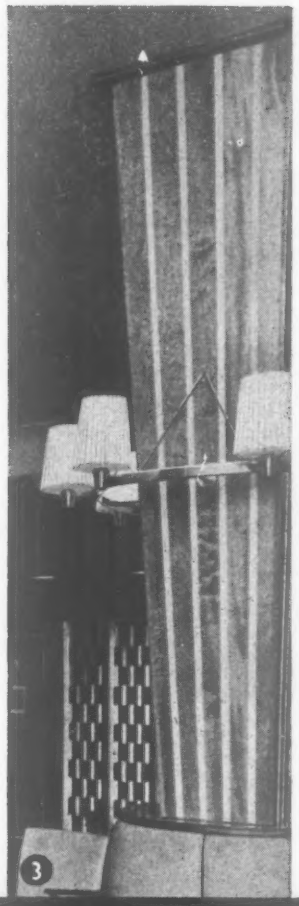


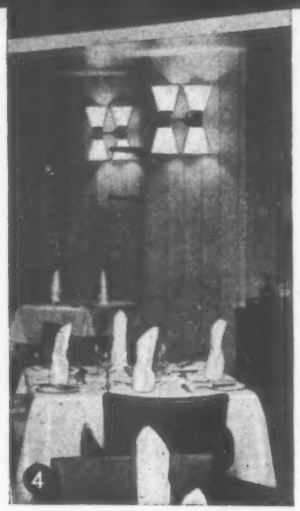




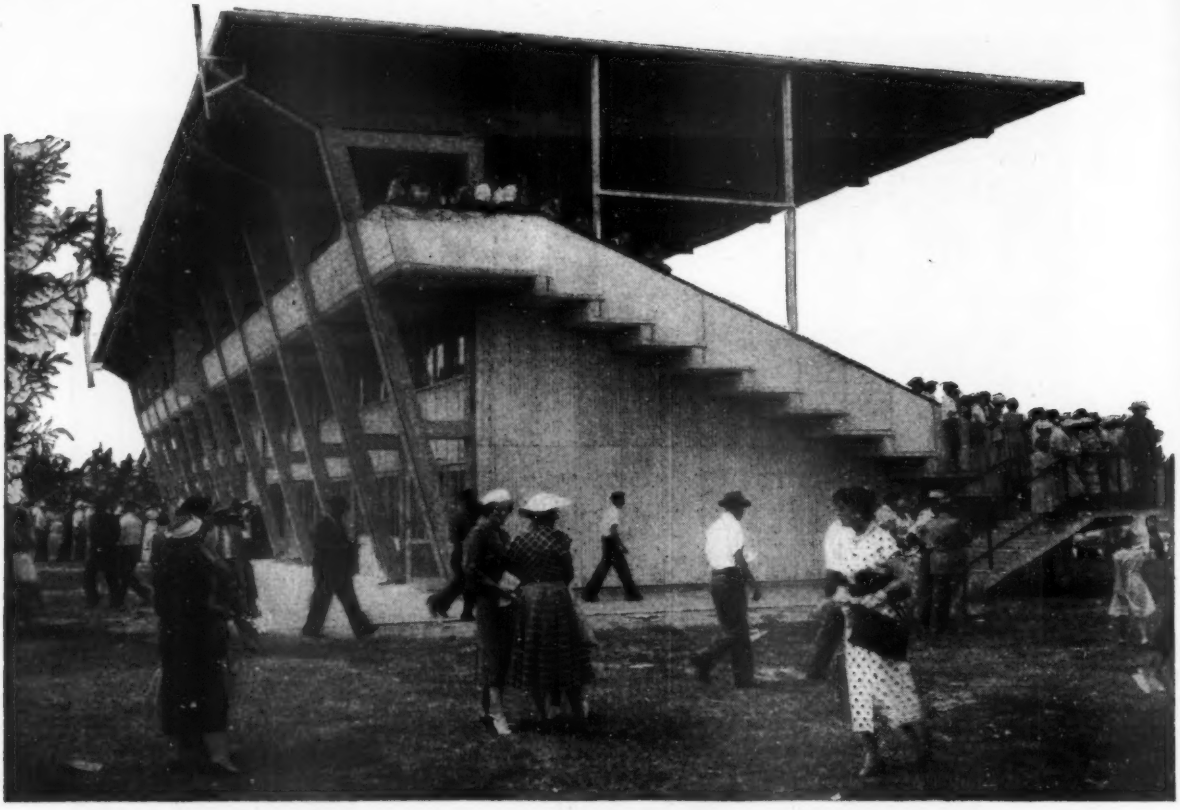
1 *"The Castle", Tooting, London.*

2 *"The White Knight", Crawley, Sussex. Architects: Messrs. Musman & Cousens, F./A.R.I.B.A.*

3 *"The Red Lion", Watling Street, London. Architect: Sidney C. Clark, A.R.I.B.A.*



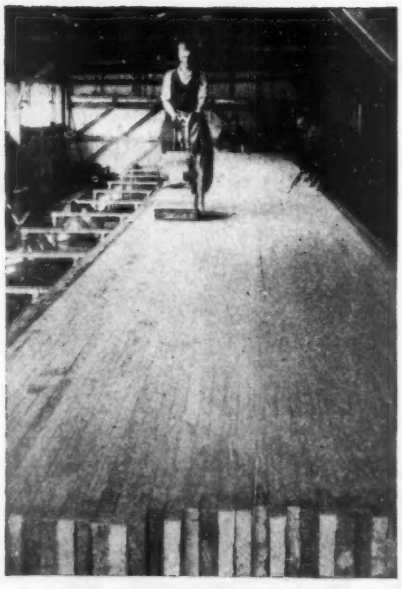
4 *"The Red Lion", Watling Street, London. Architect: Sidney C. Clark, A.R.I.B.A.*



The grandstand at the Matamata racecourse.
Architects: Messrs. Jones, Adams, Kingston & Reynolds.
Contractors: V. Edmonds Ltd.

UP OVER DOWN UNDER

The new grandstand of the Matamata (New Zealand) Racing Club is notable for its cantilever timber roof, using laminated beams of radiata pine, constructed by the Lamwood Division of the Fletcher Timber Co. Ltd. at Auckland. These beams each measure 46 ft long, 12½ in. wide and taper from 43 in. to 16 in. deep. Each pair of beams was cut from a block of laminated wood weighing over four tons, and containing 5,000 super ft of timber. The radiata pine was kiln dried to a specific moisture content, which was kept constant by special 'black heat' tubes. Aerodux 185 resorcinol resin glue was used throughout, because of its unequalled durability, resistance to all weathers and stability in the event of moisture changes occurring in the wood.



Cleaning the surface of one of the 4-ton laminated blocks by means of a floor sander.

Gentlemen, be seated...

is always a welcome invitation, particularly when sitting down into the luxury of the 'Steel Style' TT8 — a comfortable and elegant armchair styled to harmonise with any decor.

Strongly built, the 'Steel Style' TT8 Armchair has a tapered steel frame, bonderised and finished in two coats of best quality stove enamel. The deep latex foam contoured seat and back are upholstered in a wide variety of luxury coverings. It is easy to move and clean, and its adaptability enables it to be used as a twin-arm chair, a single-arm chair (right or left arm), and as a settee formed by two or more units.

The 'Steel Style' TT8 is ideal for executive and reception offices, board rooms, showrooms, airport and hotel lounges. We suggest you phone or write for a representative to call and show you this outstanding armchair.

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New Equipment Ltd (manufacturers of 'Steel Style' furniture) will be pleased to advise on all furnishing problems, as a solution can probably be found in the comprehensive 'Steel Style' range.

'Steel Style' Furniture is used by many well-known organisations including: THE MARLEY TILE CO. LTD., REED PAPER GROUP LTD., SHELL-MEX & B.P. LTD., C. A. PARSONS LTD., BRINTONS CARPETS LTD., THE PLESSEY CO. LTD., GLAXO LABORATORIES LTD., BRITISH OXYGEN GASES LTD., Y.M.C.A., UNITED GLASS BOTTLE CO. LTD., RENOLD CHAINS LTD., INTERNATIONAL PAINTS LTD., HEAD WRIGHTSON & CO. LTD., LONDON COUNTY COUNCIL.

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Tables and Chairs for every purpose

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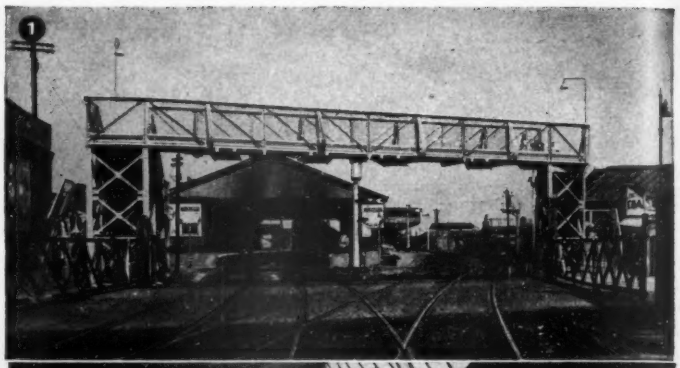
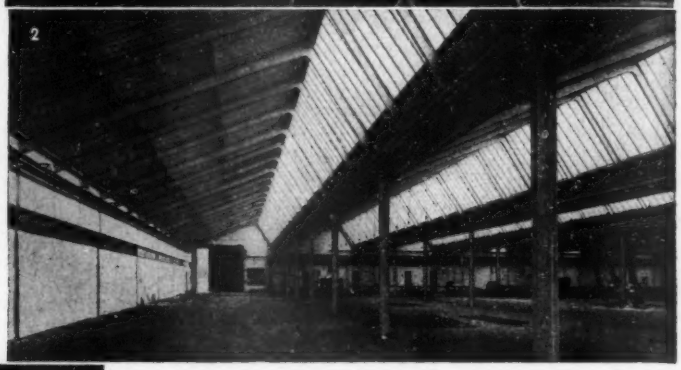
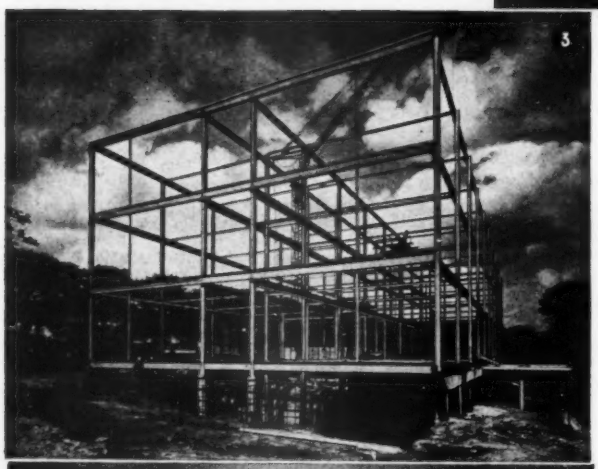
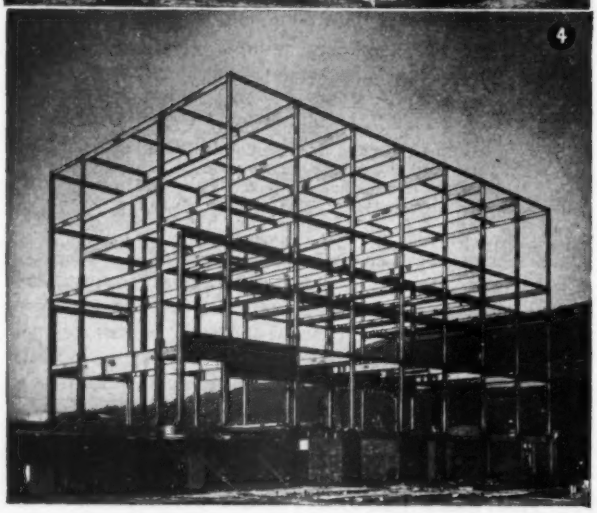
1. Footbridge for Level Crossing in Grimsby.
2. Interior view of factory for Messrs. Brook Motors Ltd., Barnsley.
3. Sowerby Bridge Secondary School.
4. Control Room, Services and Welfare Block, Elland Power Station.

STRUCTURAL STEELWORK









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JAMES AUSTIN AND SONS (DEWSBURY) LIMITED

Thornhill Iron & Steel Works, Dewsbury, Yorkshire
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a revolutionary advance in industrial lighting

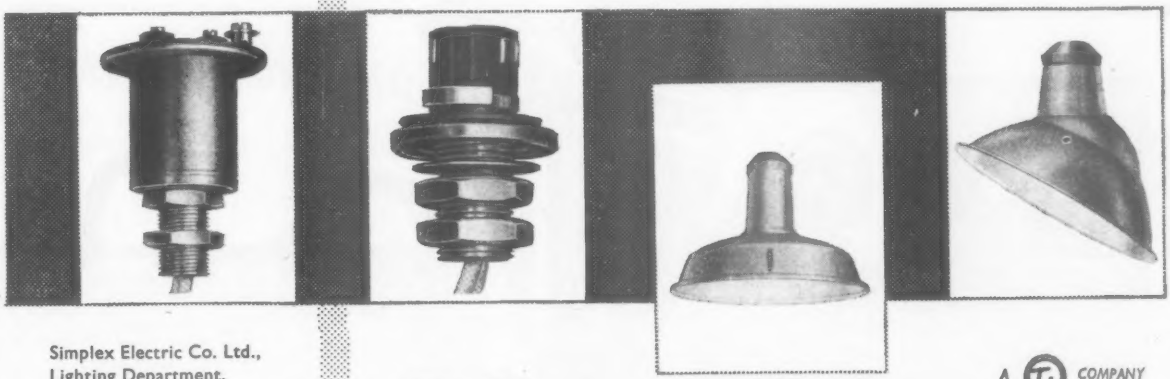
With the Discon it is as easy to remove and replace the entire light assembly as to remove or replace a bulb. Slacken a locknut and off comes the reflector, bulb and lampholder with wiring intact, tighten the nut again and they are firmly fixed to the conduit system. The Discon is remarkable value for 15/-, made for a lifetime of heavy service in high corrosion-resistant aluminium alloy of exceptional strength, with silverplated plug contacts suitable for 15 amps. It is electrically finger safe, too, with colour coded connections. Ask Simplex for literature on this latest Simplex contribution to industry.

Here is the complete fitting as supplied, consisting of eight component parts.

Illustrated below is the part of the Discon which is fitted to the reflector.

Simplex 'Arvit' Reflector of the dispersive type, suitable for use with the Discon lighting accessory.

Simplex 'Arvit' Reflector of the Parabolic Angle type, also ideal for use with the revolutionary Discon.



Simplex Electric Co. Ltd.,
Lighting Department,
Blythe Bridge,
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Represented in all principal cities of the United Kingdom and in most parts of the World.

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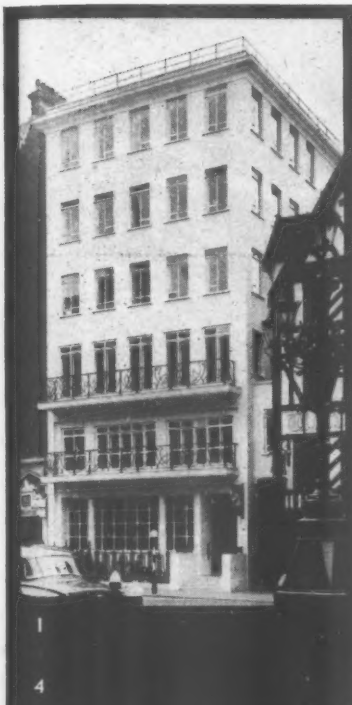
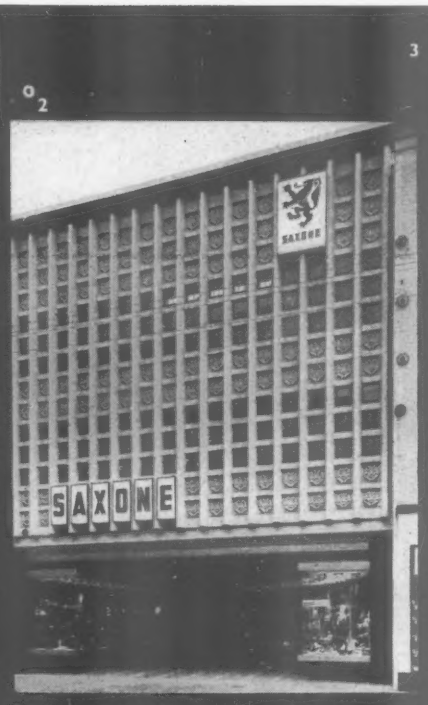
Simplex





1 **Law Accident Insurance Society Ltd., 215 Strand, London, W.C.2.**
Architect: R. Theodore Beck, F.R.I.B.A.

2 **Saxone, Leicester**
Architects: Symington Prince & Pike, F.F.R.I.B.A. Michael H. Egan, F.R.I.B.A.

3 **Decca House, Albert Embankment, London, S.E.11**
Architects: Grace & Farmer, F.R.I.B.A.

4 **Tattersalls, Knightsbridge, London, S.W.1.**
Architects: Stone, Toms & Partners, F.R.I.B.A.

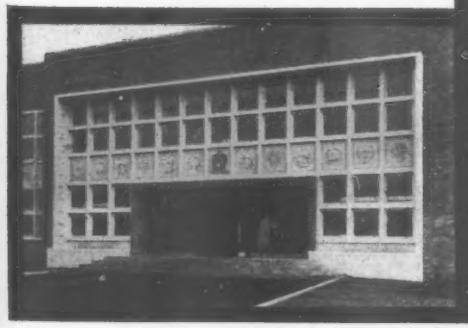
5 **72 Dean Street, London, W.1.**
Architect: T. P. H. & E. Braddock, F/A.R.I.B.A.

6 **Austin Motors Co. Ltd., Exhibition Hall, Longbridge**
Architects: Harry W. Weedon, F.R.I.B.A. & Partner

7 **Swansea University, Natural Sciences Building**
Architects: Sir Percy Thomas & Son, PP.R.I.B.A., A.R.I.B.A.

EMPIRE STONE

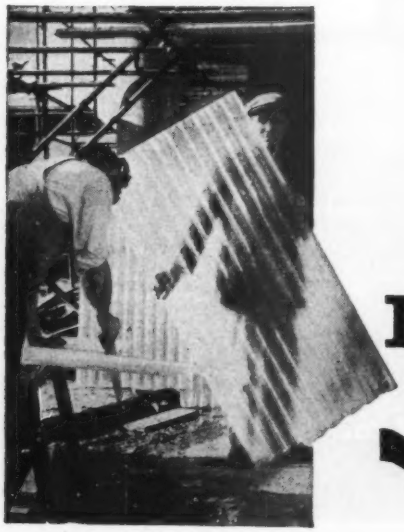
was used in these buildings



Empire Stone Co. Ltd.

Thanet House, 231 Strand, London, W.C.2
Berkeley House, Birmingham 16
Narborough, Nr. Leicester
26 Greek Street, Stockport

Uniformly strong at every point, because of its uniform thickness throughout the sheet—that's FILON; all this because FILON polyester/glass fibre/nylon structural sheeting is produced by a continuous process. FILON is non-corrodible, and needs little maintenance or protection throughout a long life. It is shatterproof, and weight-for-weight is stronger than steel. FILON is economical to install because it is light, and therefore easily handled. It is worked with ordinary carpenter's tools, and fixed by conventional methods.



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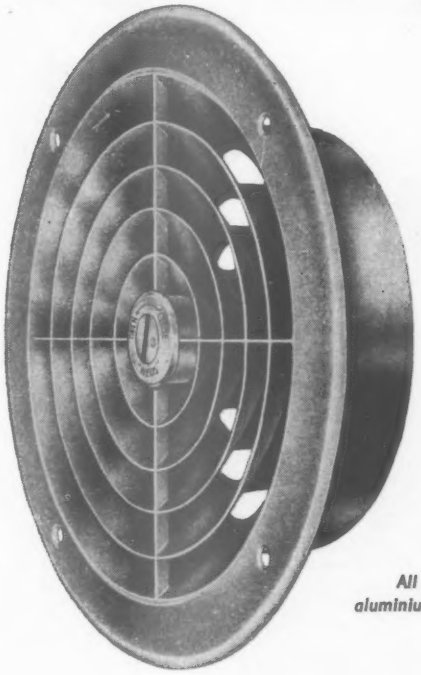

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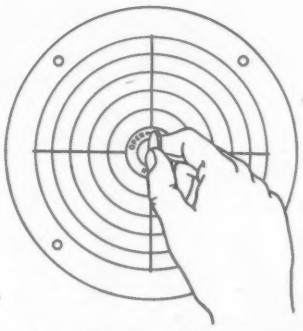

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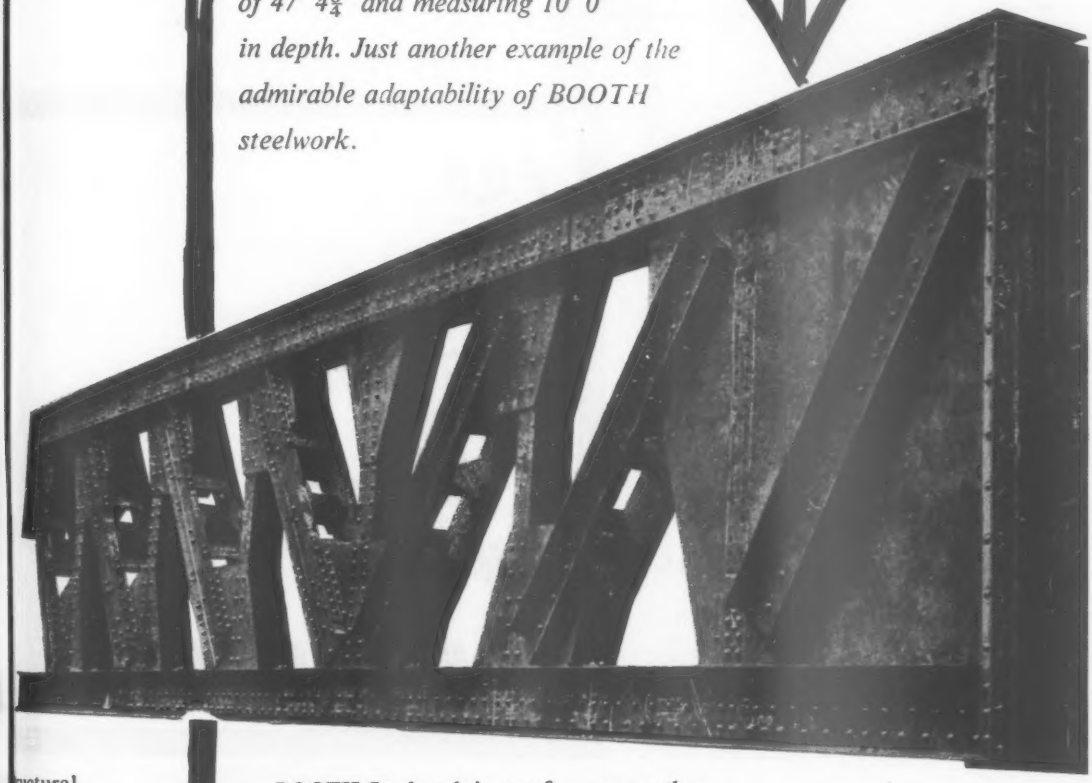

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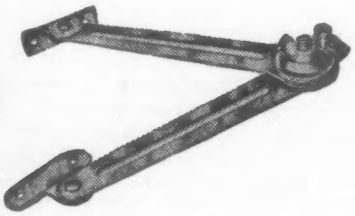

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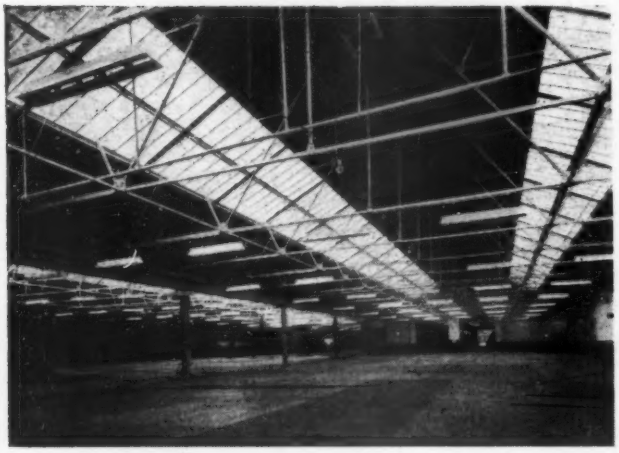

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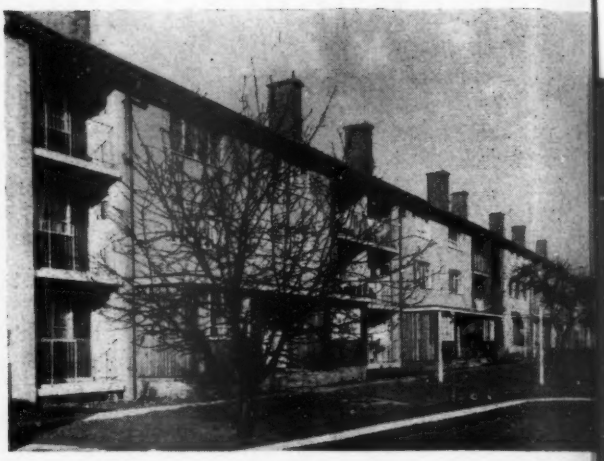

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2. Flats at Pawsons Road, Croydon, for Croydon Borough Council.
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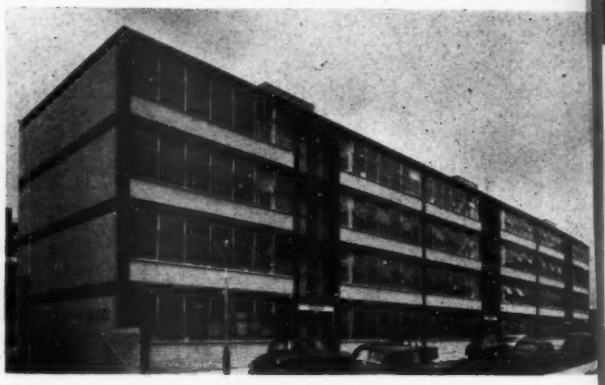

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3. Unit Workshops, Long Street, Shoreditch, E.2.
Architect: Hubert Bennett, F.R.I.B.A., Architect to the L.C.C.

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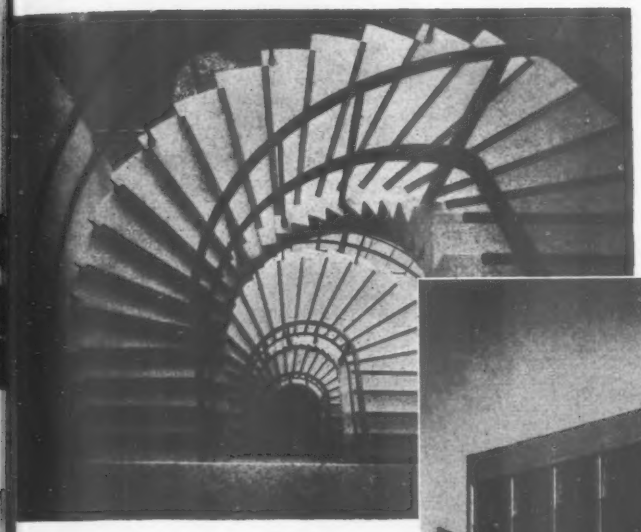

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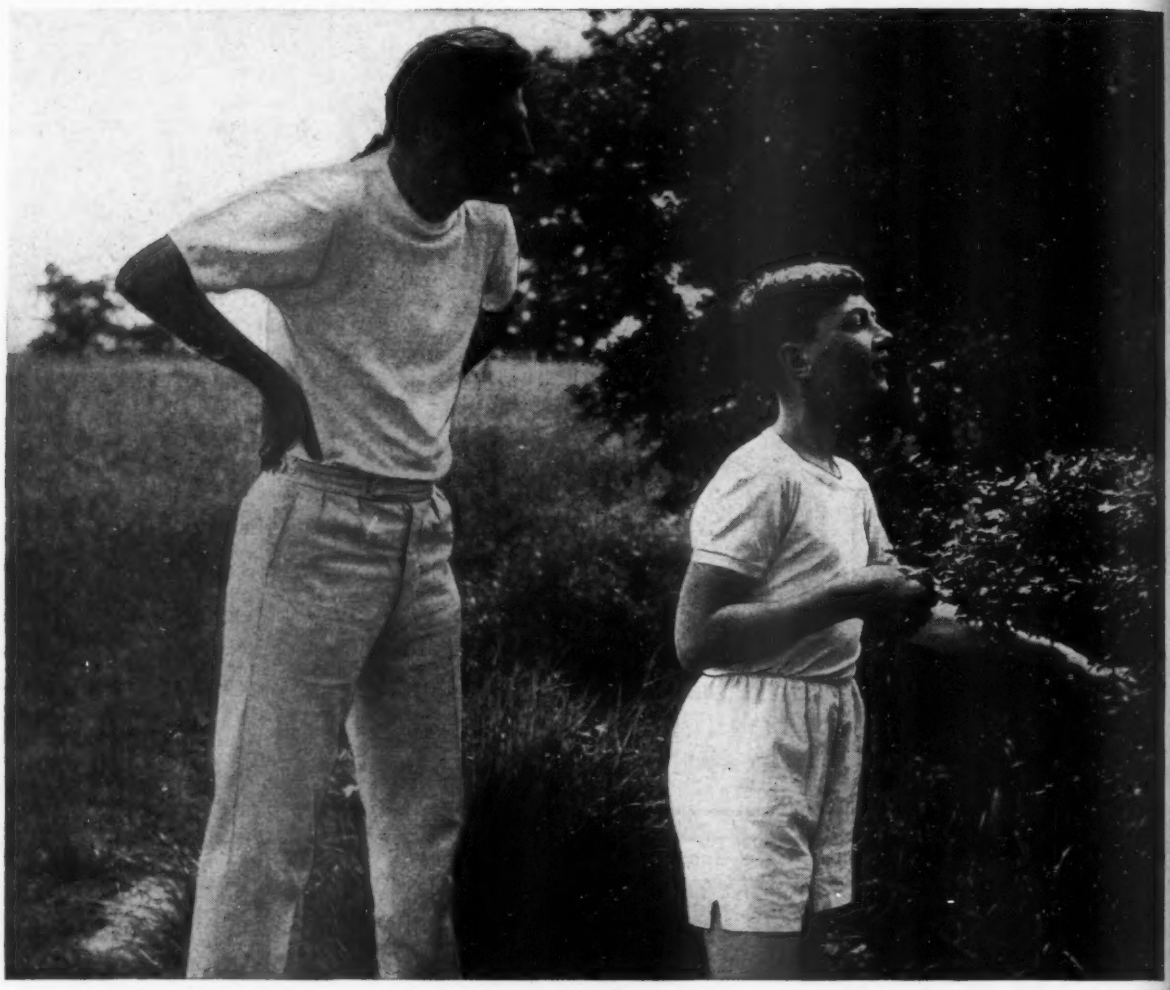

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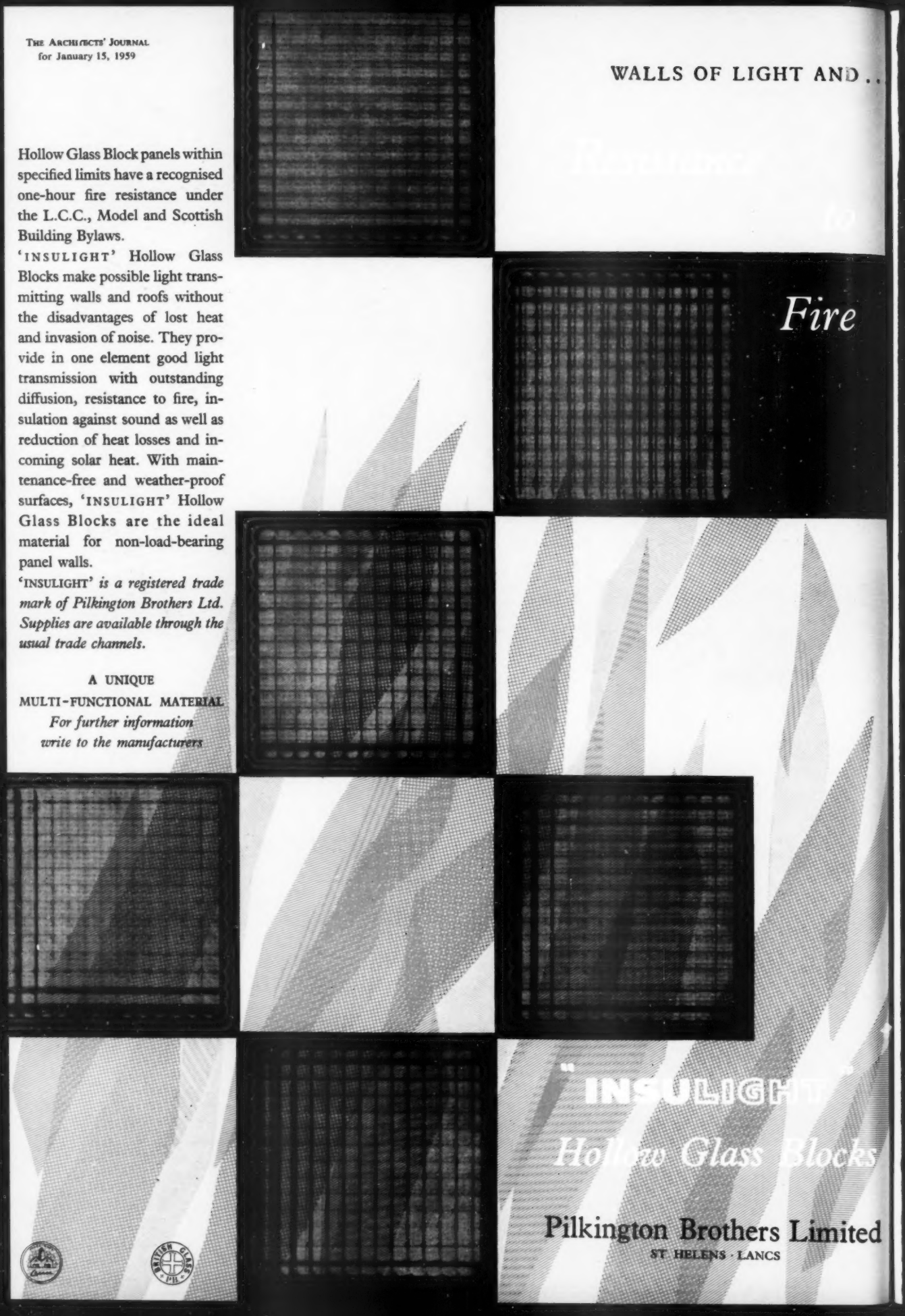

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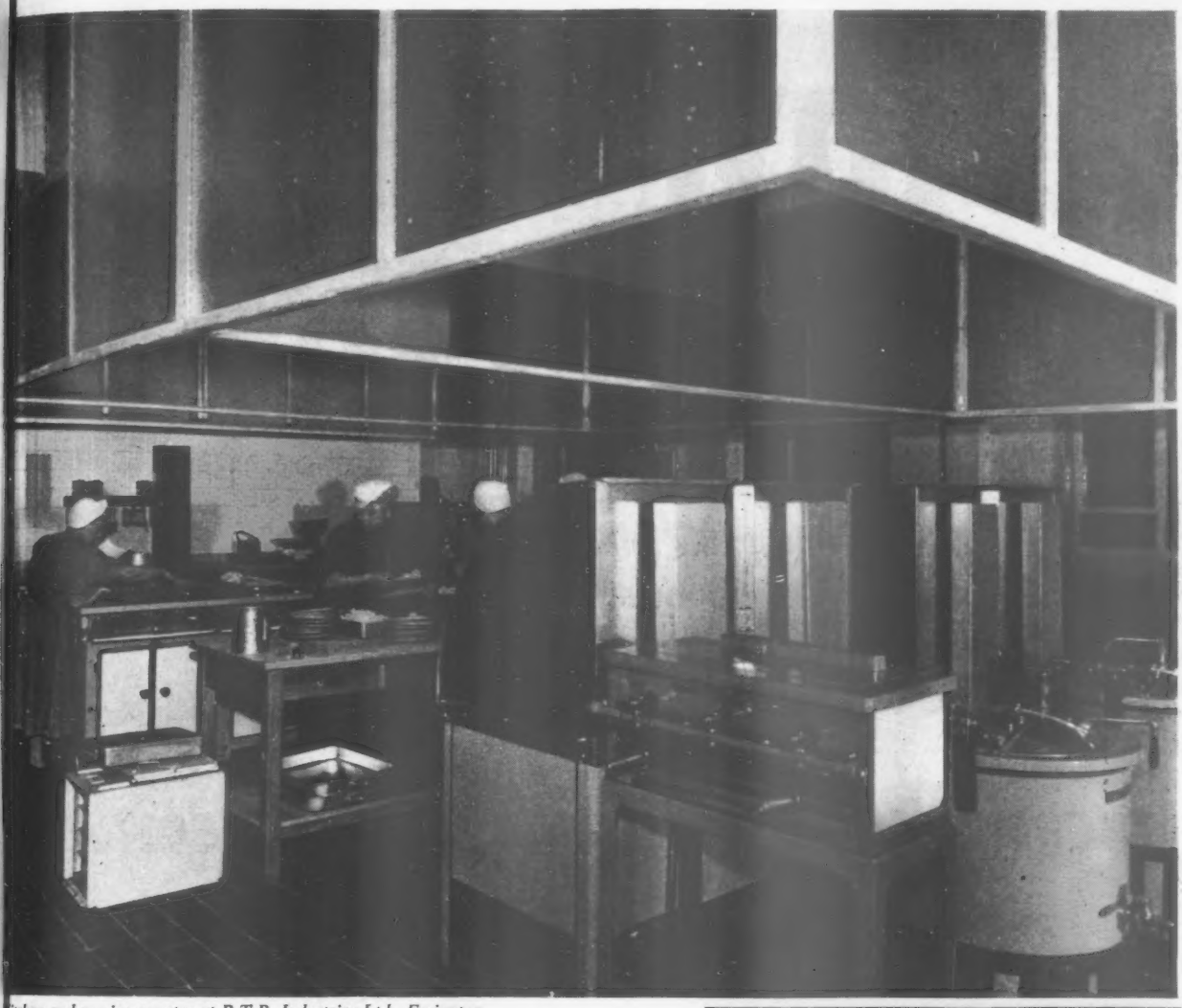

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The Architects' Journal

No 3333. Vol 129. January 15, 1959

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NEW YEAR ISSUE

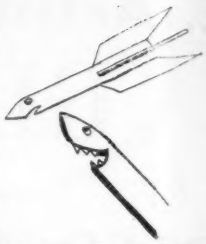
CONTENTS PAGE

ASTRAGAL'S REVIEW OF 1958

JANUARY

The year began with a few shocks on the Honours List. Sir Billy Cotton, Dame Jeanne Heal, Earl Pickles. . . . Why, the British public wondered, were these names missing? After all, more impossible things were happening all the time. In Hong Kong the retiring Governor heard massed choirs of schoolchildren singing a Chinese translation of "Will ye no' come back again." In Vatican City there was talk of a "patron saint for television throughout the world." And in London the *Daily Mirror* guaranteed that its reporters would not intrude excessively on privacy. More astonishing still was the news from Scotland, where the assessor of an architectural competition (Sir Leslie Martin) had written a long and constructive report. The year hadn't gone far when AJ readers had a nasty moment. They got half-way through an article labelled "ASTRAGAL'S review for 1958" before they realized that 1957 was, in fact, the subject of the review. Who could blame them for turning with more interest to the *Daily Mail*, which was holding a competition "to predict the news in 1958"? This, of course, was child's play. Most of us could guess that among the things to happen would be Russians, German generals, obscene literature, fog, smog, crises, riots, strikes, neo-Georgian architecture and witty remarks in the House about the content of the sausage. And you didn't have to be very bright to predict that before long there would be (*a*) objections to Basil Spence's scheme for Queens' College, Cambridge; (*b*) another true story about an architect forgetting to put in a staircase, and (*c*) a talk by Eric de Maré about Puritanism, Industrialism and Social Credit. Both (*a*) and (*b*) happened during the month and were quickly followed by (*c*), an AA appearance by Mr. de Maré, who said, in effect, that you couldn't clear up Subtopia until you had tidied up the Common Man's soul and his monetary system. At this the RIBA gave a guilty start and revealed its financial position. Horror-struck members refused to be cheered even by the news that flashed from the *Central Statistical Offices Economic Trends*. "The very high figure for investments in vehicles, ships and aircraft," said this publication, "was the result of higher investment in ships and aircraft as well as in road vehicles."

FEBRUARY



"Squares Come Back to Life," said a newspaper heading, and old ASTRAGAL was already ferreting about in the attic for his Charleston boots before he was taken on one side and made to read about the war damage repairs in Gray's Inn. A sign that appeared in the Strand at this time, reading "Economic Drainage Co. Ltd.," was not, as you might have supposed, the work of an over-modest firm of quantity surveyors—although Eric Lyons *had* just told the AA that "there is no possibility of cost control" with such men. This was the month when Lord Chief Justice Goddard made yet another eminently quotable remark which this columnist is going to make news by not quoting. A less quotable remark is worth quoting, if only to annoy those who hate jokes about Russians. "Siberia," said Vladimir Semenov, "is not a bad place to live in now." This didn't seem so silly to those of us who happened to be in East Anglia (reading the Unesco manual on the protection of buildings in thermo-nuclear war) when that county was racked by a two-second earthquake. And it probably didn't seem so bad to the Texas airman who had spent a space-conditioning week in a steel box and had emerged unable (poor devil!) to whistle. It was cheering at this time to hear of Britain's work on anti-missile-missiles. But it was even more cheering to visit the RIBA's soothing exhibition of castles in Spain. And it was highly diverting to consider the implications of a statement made by Dr. Naide, of Philadelphia. "Girdles," he said, "and other tight garments should be removed before prolonged television viewing." How, one wondered, would this affect the police, who were busy watching traffic offences on closed circuit television? We were reminded of Sir William Holford's recent remark: "We know terribly little about the problems of living together in cities." Never mind; gold reserves zoomed; the Queen decided not to open the Ideal Home Exhibition; Mr. Eisenhower's latest open letter asked Marshal Bulganin to stop sending open letters, and when Basil Spence spoke for the profession by declaring "We specialize in non-specialization," he was rapidly followed by Danny Kaye, who claimed "I can speak with absolutely no authority on anything."

MARCH

In a month when an Abott can sue a Costello almost anything might happen. Unfortunately it didn't, unless, of course, you count Mrs. Legge's bedroom at Olympia, Sir John Wolfenden's report on architects at the RIBA or the newspaper which referred to the Burleigh House ceiling paintings by saying "more sex on display than at most of the stately homes." Come to think of it, there was also something Abott-Sues-Costello-ish in Anthony Royle's contention that "Krushchev is watching Torrington." But

elsewhere the comfortingly obvious was being said quite often. John Dulles didn't think nuclear weapons "would ever be a very nice thing to be hit by"; our Under-Secretary of State for Foreign Affairs said "We are not nobody," and *The Times* produced the headline of the month—"Stealer of Motor Cars Well Behaved When At Sea." Of course, a lot of you clever chaps were going around saying that Sir Hugh Casson's listening room at Olympia had a low-fidelity sofa to match the high-fidelity acoustics. But for some of us older boys it was good to hear Max Fry reaffirming sober truths about architecture dealing in unities and creating by intuition. We often felt rather like the man in Cannes, who stayed in his apartment although the hotel was being demolished all around him. It was good to grasp the few stable things of life—to note that Henry Brooke was opening a converted old building with a converted old speech; to marvel once again at the Tories' attitude to art (as they cut the Tate's purchasing grant), and to hear something of the fine spirit of the old country in the words of Lady Dorothy Macmillan. The Prime Minister, she explained, "couldn't possibly slap a London policeman on the back."

APRIL

"April," as the poet said, "with its . . ." But there was no time for that sort of thing. Most of us were wishing we could catch up with the duller but more significant news items. If only, we thought, someone would just put us in the picture about Tunisia and Malta and the Kikuyu and de Gaulle and Damascus and Cabas (which had just acquired architect T. E. North as its president) . . . . But nobody did. And although we knew we ought to be trying to understand who Dr. Nkrumah was trying to arrange a rapprochement between, and what it was that Stan Musial of the St. Louis Cardinals had done, we were fascinated instead by the censure motion against the RIBA at its AGM, horrified by Enzo Venturelli's "nuclear architecture" and amused by the *News Chronicle's* description of the British pavilion at Brussels as "an aesthetic aberration." Public architects among you were mulling over the goods news that you could now deduct professional expenses under schedule E. Unless of course you were worrying about Mr. Marples's comments on that ubiquitous public building, the post office. "Its design," said Mr. Marples, "should have more original sin and less respectability." And then, with a boyish cry he launched his highly-respectable, Zodiac-strewn greeting telegram—a poor thing in comparison with America's new telephone gadget, called a "One Moment Please." This plays soft music as "the new diplomatic way to cover conversation pauses." Equally diplomatic was the American decision, reported in the *Daily Telegraph*: "US Does Not Intend to Drop Piloted Planes." Good news, of course, and easy to understand—but most of us were still wishing we could think who it was who had become High Commissioner for Basutoland, and what Ike had said something disarming about (disarming?). Which of you, I wonder, decided to concentrate hard on the news for once and to follow up the story of the protection that was being given to the inhabitants of the Farne Islands? And how long did it take you to find that they were only grey seals?

MAY

Makarios, Mintoff, Heuss, and then the worst of all, Pfil . . . , Plimf . . . . , Pflimlin (got it!). Admittedly it became Plum overnight, but this simply confused things, and the public bar hadn't been in such trouble since Hammarskjold first stuck in the throat. Just for a change an American with an easy name, but a difficult job, flew—to flog a phrase—in. Mr. Buckminster Fuller told us he was the champion of anticipatory design science, an exploratory prober. But I'm only kidding; you all know very well that he's a dome designer with the best possible line in mind-boggling phrases. And very well he does it too. Though many people would agree that the British Medical Association did almost as well this month when they announced that fish and chips were "at least as good as lobster thermidor." Perishing food, if you will forgive the phrase, was dumped overboard at this time because of the dock strike, and London busmen felt they had been out of work long enough to justify asking for double strike pay. Foot-slogging city girls were rightly annoyed when they read in the *Star* that foreigners thought they walked "shockingly badly," and for a time it seemed that the American 1958 beauty look wouldn't catch on over here. It was called "the laughing mouth," a style that the busless London girl could surely acquire only on holiday—though even then she might not have much to grin about. Was it justifiable caution that made Bournemouth get hold of Sir Edmund Hillary's Snocat to lead its road-safety pageant? And was it this month that *The Times* published that thoughtful letter, suggesting that in the interests of the morale of the British people there should be no more weather forecasts on television or wireless? Talking of morale, how did you all feel when Mr. Sandys said the world should get rid of its armaments in one go? Perhaps you were too busy speculating about the speculative housing symposium at the RIBA, or wondering whether to take your holiday in Cambridge or Gloucester because Gordon Fraser Ltd. were featuring them in an attempt to brighten up wish-you-were-here postcards. Maybe you had already gone to one of the obscene postcard centres, encouraged by the words of an American psychological team. "Delinquent behaviour," they had said, "is *lessened* by bad reading."

JUNE

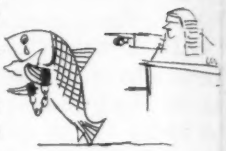
Eighty-two degrees in the shade, and the *News Chronicle* chose a time like this to tell us that "The Duke of Kent is developing a taste for fudge." There were turbine explosions at Calder Hall, Russians at Henley and 20 days of rain. A mouse prepared to go into outer space and every chair-

climbing woman in the country complained. Mr. Krushchev said " It is not natural for a pig to look up at the sky," the Bishop of the Arctic admitted he had never been to the North Pole and Henry Brooke was sure there would be no slums in 20 years time. Gatwick airport was opened, John Summerson was knighted, and Mr. Brooke spoke again—this time saying some pleasant things about architects to the County Councils' Association. June was hot, cold, wet, dry, windy, and calm, and there was too much milk. A flash from America brought the reassuring news that artificial kidneys may become as familiar as hearing aids. And " Mr. John Hare," in the words of the *Daily Express,* " rejected the advice of the *Daily Express.*" The best literary work of the month appeared in a tennis report in *The Times.* " The packed gallery," said the fidgety-minded reporter, " once more sat in the wings, their noses pressed against the swift-moving scene, applauding the more telling and acid passages of the monologue." If that doesn't stimulate your imagination, let me remind you that a two-year old Manchester boy was bitten by an escaped mink, and that the BBC Television weatherman opened a church fete at Hayes. " Pirie," said the *Daily Mail,* " will skip the 3 miles."

JULY

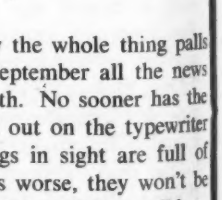
It is too easy, when you are looking back at a year, to poke fun at the obvious things—the drooling of psychiatrists, the gutterness of the Press, the whims of fashion kings, the typicality of the Russians, the naïveté of wise and religious men, the doings of scientists, the inanities of television. It is, as I say, too easy. But who ever minded anything being easy? Anyway, this was a month that had all the corny old funny topics dressed up in new ways—everything from the unfortunate dress with the " mushroom line " to the statement that " children should *not* feel 100 per cent. understood." It was the month when a pathetic-looking architect appeared on the posters as a Top Person of tomorrow, with the comforting slogan that *The Times* made him mentally bigger than his job. It was also the month when a distinguished architect fell for the wife of his consulting engineer, simply because she thought he was " integrated." This little drama took place in a television play, but there was no fiction about Krushchev's remark that " treaties, like marriages, can be dissolved." And there was something horribly true about the miracles-of-modern-science story from a Dorset town where parishioners could help themselves to a sermon by dialling " O " on the church telephone. The real sermon of the month was the Bishop of Rochester's statement that " there is no difference in principle between bows and arrows, gunpowder or the hydrogen bomb." But architects were too busy searching their consciences to listen to sermons. Hadn't they just heard that more claims were being made than ever before against architects guilty of professional negligence? More than one wistful thought went out to the Italian architect, Pier-Francesca Borghese, who was not only a prince and the owner of a castle in Tuscany, but the husband of a strawberry blonde called Ella Fudge.

AUGUST



This month produced an extraordinary crop of remarks about marriage which, in the words of the actor George Sanders, " is a most unnatural relationship." Zsa Zsa Gabor said that she would like to marry, " but who could afford me? " Diana Dors, on the other hand, protested " I don't want to marry anybody. Anyway I'm still married." Edna Ferber was thinking on unoriginal lines when she said " It's time women took over running the world," and those who were about to take over in their small way found they couldn't have confetti flung at them because of the new anti-litter laws. A not irrelevant plea was sent out at this time by the Group Captain of a guided missile base: " The real problem here," he said, " is the lack of baby sitters." Before we could really bring our minds to bear on this new problem, the nation was rocked by a headline in *The Times.* This newspaper was thought by some to be taking advantage of the recent rumpus about " Wickie," the moon-rocket mouse, when it printed the bald and terrible statement, " Fish May Be Sent To Prison." Elsewhere some pretty hard things were being said about architects, and it was no consolation that Patience Strong had spread the design gospel by telling her readers (*sick?*) about Subtopia. The first really nasty crack came in the BBC television series, *Does Class Matter?* when an interviewer balanced his chip carefully on his shoulder and said, " Even if you're an architect you're thought to be better than other people." But what really upset us—at a time when we were feeling pretty bad anyway, what with the threatened demolition of Kings Cross station and the news that the dear old NAAFI was in the red—was the advertising campaign for Southern television. A genuine architect was photographed, though admittedly from the back, and described as an average listener.

SEPTEMBER



September was the time when we all. . . . But wait a moment. Before I go any further; has it occurred to you that all this harking back through the year is done not with a nice bright memory but in a room piled high with newspapers and magazines? If it *has* occurred to you, then your imagination will have told you how the whole thing palls towards the end of the year. By September all the news seems to slip away to the next month. No sooner has the heading " September " been tapped out on the typewriter than all the newspapers and cuttings in sight are full of fascinating October events. What is worse, they won't be there when they are wanted. Nevertheless, it is possible to tell you about the American starlet, Diana Queasi, who said " I love your plumbing and your poodles; they are so remote and sensible." And there is always the odd chatty item, like the formation of SPACK, the silver jubilee of IEESI and the remark by the visiting architect, Zenk:

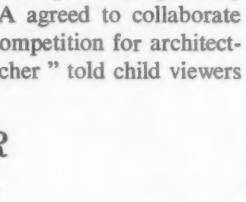
"The trouble with your architecture is that it does not deal in unities or create by intuition." And then I could tell you about the stately home where a government-surplus submarine periscoped around the lake; the new ruling that young architects should not design houses for relations, and the Prime Minister's belief that " there is no harm in thatch as such." All this may or may not interest you. It certainly isn't true. If you *must* have the skim from the cream of the month, let me remind you that the Archers celebrated their 2,000th performance, Reg Butler said that " one of the most exciting things in the world is a girl " and the *Sunday Times* published a cold little careers article which would only attract the truly dedicated into the architectural profession. The cheerful news of the month came from America, where it had been announced that in the event of a nuclear attack we could obtain a little immunity simply by nipping out and asking for an Amino-ethylisotthiuronium Bromide Hydro-Bromide pill.

OCTOBER

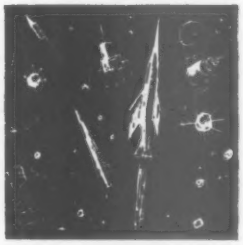
The headline of the month was in the *News Chronicle*: " Prince Pleads; Stop Dawn." Nobody did, of course, and the sun continued to rise, though at this time it rose more often on the impossible. The RIBA president had a Press conference; Hatfield planned a pub that would also be a health clinic; somebody started a Secretary's Day and Randolph Churchill said " We are a major Power again." What could be the justification for this claim? Was it simply that we had gracefully accepted £5,000 from President Heuss for the Coventry Cathedral Reconstruction Fund, as well as an intermediate range ballistic missile from America? Was it, perhaps, something to do with the two-hour extension of the Third Programme on Sundays, or the generous proposal to send the Lord Mayor's banquet to America, complete with turtle soup, pikemen and trumpeters? Or was it the news that American hatters were running a campaign to popularize that British symbol of top-gentmanship, the bowler? Whatever it was that pleased Randolph Churchill about Britain, it was clear that other countries were not doing too badly. The West German army had 172,000 men, Formosa had a visit from Mr. Dulles and Scotland got news for the first time on the front page of the *Glasgow Herald*. Nearer home, Liverpool celebrated the Augustan Age, the LCC published planning proposals for Piccadilly, the RIBA agreed to collaborate with *Ideal Home* magazine on a competition for architect-designed houses and an ITV " teacher " told child viewers all about " Les Corbusier."

NOVEMBER

On November 1 the control over price and distribution of iron and steel scrap ended. A grateful nation sighed, smiled and went on working with its accustomed phlegm. It had only a few days to wait before there was additional cause for quiet joy. Sir Ian Jacobs said that BBC television had no intention of being " purely highbrow." This seemed too good to be true, but so—to some people—did the news that Britain had " fewer than five hydrogen bombs." As Mr. Gaitskell pointed out, " No nation can blast or bomb its way to greatness." Something rather useful was said at this time by an organization called the Oxford Committee on the UNESCO Major Project for the Mutual Appreciation of Eastern and Western Cultural Values; though what it said I no longer have room to tell you. Talking of culture, you will remember the Pasternak trouble, the threat of a gift sample of Soviet architectural history from Stalingrad to Coventry, and the *Sunday Times's* announcement of a competition for the design of a National Gallery extension. An attempt to bring culture to the breakfast table was suppressed, when a cereal manufacturer found that purchase tax would be involved for gramophone records printed on cartons. And the culture we already take on the breakfast table, in tabloid form, remained untouched after the fifth annual report of the Press Council had given it a clean record. A more gallant Council would surely have rebuked the *Daily Express* for its slimming diet, designed for women " with no will power."



DECEMBER



The Christmas spirit started early. The Attorney General is said to have stopped the chimes of St. Clement Danes because they interrupted his work; the *Daily Mail* produced a symposium of the " Ten Most Unbeautiful Men," and the Anti-Uglies, from the Royal College of Art, marched round London cocking snooks at their unfavourite new buildings. What else? Yeomen Warders, probably conscious of their off-season loss in value, threatened to strike. Readers of the *Observer's* shop guide were delighted to see that an American had asked Harrods to send a skunk to his ex-wife. And the *News Chronicle* digested the latest population estimate and frightened us with "202,000 more people in England and Wales to buy presents for this Christmas." Presents available included not only space gun containers for practically everything you could think of, but toy Presley guitars for telly-tied tots and even " Dolls' Trousseaux." As Christmas Day loomed, and the Press got down to its annual job of preaching the gospel of death and mutilation we staggered home with our plastic-packed turkeys, determined to fight off two subjects of fireside conversation —" My Fair Lady " and Urban Renewal, both of which had become very popular during the past 12 months. Did you get my Christmas greetings in the Personal Column of *The Times*? This had become a Top thing to do. Incidentally, it is said that some Top readers managed to keep perfectly straight faces when *The Times* announced publication of " The Night Sky in 1959."

Below is ASTRAGAL's *choice of the Men of the Year, all of whom have been photographed and interviewed by Sam Lambert. There are, in addition, others to whom* ASTRAGAL *doffs a respectful hat. These are: Basil Spence and Richard Sheppard, new RIBA President and Hon. Sec., for bringing new brooms to the RIBA; Anthony Cox, for helping Cleeve Barr bell the cat at the RIBA's last AGM; the architects of the British exhibit at Brussels for stoicism under fire; Donald Gibson, for undertaking to put architecture in the Army's Works; Hubert Bennett, for encouraging the LCC architects to think again about the Elephant and Castle; Yorke, Rosenberg and Mardall for Gatwick airport, the best building of the year; Sir John Summerson, whose knighthood shows that learned thought, as well as solid structure, is recognized for architectural honours; John Smith, for a lightning tour of architectural education; the Boston Manor architects (Chamberlin, Powell, Bon, Shankland, Gregory Jones), for emphasizing urban renewal; and Donne Avenell, lively editor of* Architecture and Building, *for sponsoring both ventures; Colin Buchanan, the first architect to study the problem of motor cars; Douglas Jones, for teaching teachers; and Huw Weldon, for so imaginatively introducing the BBC's TV audience to architecture.*

MEN OF THE YEAR

RICKETTS, Gordon. For his brilliant and efficient work as a backroom boy at Portland Place, culminating in his appointment as successor to C. D. Spragg as Secretary, RIBA.

TRENCH, Peter. For capping a meteoric career in the building industry by becoming the new Director of the National Federation of Building Trades Employers.

DAWBARN, Graham. Senior partner of one of the largest and most successful practices in the country. For retiring from the partnership in order to deploy his talents more widely.

LYTTELTON, Humphrey (client) and **VOELCKER, John** (architect). For typifying the determined client with faith in his architect, and the architect with conviction, who were prepared to fight against repressive planning control.

ERITH, Raymond. For receiving 1958's largest restoration job: 10 Downing Street.

THOMAS, Mark Hartland. For having designed and erected the first "modular assembly," a major achievement in his work as Secretary to the Modular Society.

BARR, Cleeve. For his endeavours, through his resolution at the last AGM of the RIBA, and as a new member of the RIBA Council and committees, to make the Council more democratic and the Royal Institute more efficient.

HILL, Richard Towning, MOXLEY, Raymond, and **COLLINS, John.** For capping their achievement of organising England's first provincial Building Centre by forming the first provincial Design Centre.

MATTHEW, Robert. For being the first professor of architecture to organise large-scale post-graduate research, the first programme being on the neglected field of housing.

Gordon Ricketts

GORDON RANDOLPH RICKETTS, *aged 40, became first ever (and probably only) secretary for professional relations at the RIBA two years ago: will move up to Spragg's job as secretary (and leather-bound office) sometime in July. Presently occupies a second floor office (cream) in the new extension, facing Portland Place, with ARCUK below and ABS above. Born at Ryde, Isle of Wight, father was director of music, Royal Marines. At one time seriously considered going into the church. During war piloted flying boats, was on loan to US navy, saw service in Gulf of Mexico. Later became chief flying instructor and lecturer, Oxford University Air Squadron. Read English language and literature at Keble and when he came down nearly went to teach the sixth form at Lancing, aschool he had buzzed in his flying days. Became regiona l FBI secretary at Cambridge and after fifteen months moved to London to become personal assistant to FBI director-general Sir NormanKipping. With undiminished interes t in education took post as appointments secretary Nottingham University in 1951, also lectured and tutored. Had job ticking the way he wanted it after three years, but could not bear thought of next thirty years there. Felt he was too young to put his feet up and therefore came to RIBA (with zero knowledge of architecture). Manages to spend one evening a week with wife (a jolly good pianist), sons, Alastair 9, Anthony 6, daughter Diana 2, in their once-white pebble-dash, 1912 house at Gerrards Cross (domestic taste verges on "bastard modernity"). Interests include music (Mozart and Brahms played on ancient gramophone), singing (hopes to join a London choir soon as low baritone), simple (moral) philosopy, as expounded by Russell and Lipman, 1949 Rover, watching rugger (deep misery is that RIBA council meeting will always clash with inter-varsity match), playing tennis and squash.*

The power behind the profession

Gordon Ricketts writes:

What do architects expect from the Royal Institute? As there are 18,000 or so of them, there are perhaps half as many different opinions; so that even a layman

already knee-deep in indiscretions does not readily attempt a comprehensive definition. However, if one were to invite the social survey pundits to delve, and to reduce to essentials the answers they got, something like the following might emerge:

(*i*) An architect wants both for himself and for architecture a proper standing in society. Partly this consists in earning an income and standard of living not less than comparable professional men. Therefore, if he is a principal in private practice, he wants the fees to be right; if he is salaried, he wants his bargaining position to be right; and he does not want there to be too many architects.

Partly, also, a proper status among laymen stems from a reputation for putting professional ethics above personal gain. Thus he wants other architects to refrain from supplanting and undercutting one another; from bringing the profession into disrepute; and from giving building owners less than the maximum value of service for money.

(*ii*) Since he has agreed not to sell his services individually, an architect needs someone to sell the profession as a whole to the public; to teach them to care about architecture; make them understand what architects are for and what they do; and get them to employ architects universally.

(*iii*) An architect needs, as background to his work, a favourable set of laws, whether these are beyond the direct control of the profession (bye-laws; planning regulations) or more susceptible to negotiation (forms of contract).

(*iv*) An architect needs a flow of well-classified information to help him maintain his all-round proficiency from the point of graduation onwards. This may be administrative (job management; office organization; legal), technical (user requirements; guides to technical literature), financial (cost analysis and control) or academic.

(*v*) An architect wants the best available material to be recruited into the profession and to be trained to reach the highest possible level on graduation. He also wants to see recognized true merit (*e.g., via* competitions) and high architectural achievement (medals).

(*vi*) An architect wants his profession to understand, lead and work in harmony with other component members of the building team.

(*vii*) Finally, the discerning architect wants someone to watch the many factors affecting the health of the profession which do not bear acutely upon him in his daily preoccupations. Mostly, for instance, he will not feel deeply aware or personally involved if the educational structure is at fault, the quality of intake too low, the statistical evidence too slight, the application of research too slow, nor may he immediately notice impending developments in the building world such as may demand firm guidance and vigorous leadership from architects. But he will expect his Institute to care very much about these things, and to prescribe accordingly.

If this guess at the architect's brief to the Institute is anywhere near the mark, it poses some old and perennial problems at Portland Place. Our resources are not nearly enough to meet all requirements to everyone's complete satisfaction; yet the issues above are all inter-related, and to neglect a part may be to prejudice the whole. Do we then try to do something of everything and face the hazard of doing nothing well? Or are there undoubted priorities, so clamant that other activities can be safely sacrificed?

A clear, uncompromising answer would be refreshing. The right answer, alas, is often tepid, equivocating, maddeningly balanced. It may be, therefore, that we shall:

(*a*) Attempt indeed something of everything; warding off the obvious hazard by concentrating on essentials and persuading trusted agents to do under our guidance whatever is very desirable but less essential.

(*b*) Strive for flexibility, nevertheless—not hesitating to switch attention and resources to one sector as events dictate.

(*c*) Streamline the resources we have so that every penny of subscription income tells.

Peter Trench

PETER EDWARD TRENCH, O.B.E. (*for work with H.Q. 21 Army Group*), *aged 40, becomes director of the eighty year old NFBTE on April 1, having spent last seven years as managing director of the 2,000-man strong Bovis contracting firm (parting gifts, a tea trolley which works, silver cigarette box, two decanters). Joined NFBTE on January 1 as director designate, will take over from Stanley Hearder, who is retiring. Trench was born in London, father was an American chemical engineer (textiles), educated in UK, Switzerland, Austria and France, read modern languages at Neuchatel, economics at London University, continuing at Cambridge. Accepted for Malaya Civil Service but on outbreak of war joined Queen's Royal Regiment. Graduated from staff college as brigade major, joined Mountbatten's staff as military planner, later Monty as assistant adjutant-general. After war became a trainee at Bovis, working on sites, rose to contract manager in 1948, director 1949, managing director 1951. Is an honorary member of the AA (lunches there often) and is on committee of the Building Research Board, BC, IOB and Royal Society for the Prevention of Accidents. Has just moved home with wife, son David 16, daughter Sally 14, to quiet backwater of St. Johns Wood (little more than a good six away from Lords). House has pine panelling in the living room, studio, tiny garden. If he were to build would choose Eric Lyons to do the design. Although NFBTE provides car he prefers to walk to the New Cavendish Street office. Spare-time occupations include reading (political and military biographies), writing (articles for the* Financial Times), *painting (last one a bullfight scene). Favourite sport is ski-ing, consequently always takes a winter holiday. Likes travelling. Has recently returned from a between-jobs now-or-never holiday lasting three months: visited Rome (Nervi's stadium came in for critical scrutiny, thinks scaffolding horrible, pouring rates slower—after check with head office), Natal (to visit father), Kenya (for Land Rover safari, shooting crocodiles), St. Moritz (ski-ing).*

The packaged contract

Peter Trench writes:

I am writing this on the shores of Lake Baringo, a few miles from the equator and some three hours' drive by Land Rover from Nakuru in Kenya. I write in the shelter of a native *rondavel*—essentially a "packaged contract" of mud and thorn bush designed, erected and owned by the same black gentleman! In fact on this particular trip I have been dogged by the "packaged contract." Peter Leigh-Hunt, a friend of mine and this year's President of the South African Chapter of Quantity Surveyors, referred to it at the Summer School in Bloemfontein, and on the advice of John Ward Perkins, Director of the British School at Rome, I spent some time watching the construction of the new Olympic Stadium in the Via Flaminia—engineered by Nervi, architected by Nervi, and built by Nervi and Bartoli (I even had visions of Pier Luigi triumphing in the 10,000 metres!). So it would appear that the "all-in service" is a popular theme in at least four countries of the world—but possibly for different reasons. In Italy the architect-cum-engineer had little confidence that a building firm could adequately carry out his intentions; in South Africa there are business-men who have more confidence in the builder's sense of economics than the architect's; in Kenya there are building owners (admittedly native) who have confi-dence in neither architect nor builder! In the UK—who knows?—the RIBA has produced an admirable report to which I for one would wholeheartedly subscribe.

Frankly at the moment I consider we should be con-centrating on co-ordination rather than consolidation and that we should be examining our respective divisions of responsibility and having agreed on them —carry them out. The architect who, by inadequate drawings, provisional sums, or by throwing numerous builders of differing qualities and capacities into com-petition, shirks his true responsibility, has only himself to blame if the "packaged builder" takes his bread and butter. By the same token if, by inefficiency, deceit or neglect of quality control, the builder shirks his responsibility, then no one can blame the architect or engineer for taking over some of them. And if they both fail, then good luck to the wretched building owner who, like the owner of this mud hut, does the work himself. Confidence is an important ingredient of public relations.

To my mind the most sensible article ever written on this subject was by George Grenfell Baines and pub-lished last summer in a *Financial Times* supplement on the Building Industry. In this he said: ". . . if we can be allowed the necessary time to fulfil our design responsibilities completely and prepare in full the necessary production drawings and documents, then quality and rate of progress should be the responsi-bility of the main contractor and he should be the sole director of production operations in workshop and on site." I carry this extract on my travels. It keeps me cool.

Graham Dawbarn

GRAHAM RICHARDS DAWBARN, *aged 65, was, until last September, senior partner of Norman and Dawbarn, architects and consulting engineers, now classifies himself as advisor. Gave up partnership in order to return to designing and writing, leaving inevitable business of finance and administration to five younger partners (" Time they had a free hand "). Hopes to continue creative work until 70. Next few years will still be dominated by three large projects the University College of the West Indies in Jamaica (now in third phase), BBC Television Centre at White City (for which he is still architect with the consulting civil engineer to the BBC), " island site " Imperial College development between Albert Hall and Science Museum (which allows the Collcutt Tower to stand). Norman and Dawbarn presently*

employ 185 with main office across the street from the BBC's Portland Place " Ship." Branch offices in Kingston and Montego Bay, Jamaica and in Kampala. Dawbarn was born in Putney, family came from Wisbech, father was a consulting electrical engineer and crossed the equator twenty-six times in the early days of power stations and trams, grandfather a solicitor. Even at prep schools adored the smell of things being built, planned houses for which he sought long-suffering parents' approval. Did Maths at school and in his first year at Cambridge but then switched to budding architectural department. (" We wisely did little design—its frightful that young students at architectural schools are told to design opera houses "). After war service—infantry Lance Corporal in France and pilot's certificate in RFC—worked for a year with Arthur Keen and Ernest Newton at Gray's Inn (no salary), sailed for public works department, Hong Kong, in order to get more responsibility. Returned after one and a half years to get married, found himself jobless after honeymoon and entered for competition for design of Raffles College, Singapore, with Cyril Farey (end of 1923); half-share of £300 premium kept him going for some time; won a further competition for the Constantine Technical College, Middlesbrough (1925) and was able to carry on in private practice. At end of 1929 met Nigel Norman, who was Chairman of Airwork which had started developing Heston aerodrome on a shoestring. Co-operation at Heston led them to make 8,000 mile trip round North America in a loaned Puss Moth (studying design and construction of civil airports on proceeds of 1931 Godwin bursary) and to partnership soon afterwards. Norman, who had read Mechanical Sciences at Cambridge, and Dawbarn became known as experts in ground requirements for civil aviation (" It was easy—no competition "), produced numerous site surveys, and aerodrome schemes, many of which were put into effect although the most important, a major field for City of London, at Fairlop, Essex (" It had fingers ") was abandoned at outbreak of war. World War II found Norman in Command of 601 Squadron A.A.F.; he was killed in 1943. The firm's most significant war contribution, the blister hangar in three sizes, thousands were built. Lives with his wife in a flat in Upper Harley Street. Daughter Jill was called to the bar, married a barrister; daughter Patricia became an architect (AA), married a chartered accountant; both now fully occupied as wives and mothers. Regards himself tastewise as a typical product of his period and environment. Likes Houses of Parliament (" damn good ") also the Lever building in New York. Brought up on Messiah and Mikado. Finds pleasure in occasional visits to Twickenham or Lords; in arriving somewhere new by air; in small dinner parties, the countryside (when empty) or an old country town; in a catholic variety of books and pictures. Admires above all " quality " (key word) in any form: the Epstein Madonna in Cavendish Square, Sena Jurinac in Mozart, G.K. Chesterton, Stephen Spurrier, Margery Allingham, Eric Linklater, John Piper, the beauty of John Singer Sargent and the brutality of Ruskin Spear. Pays tribute to the abiding influence of Nigel Norman and of Dame Ethel Locke King—who with her husband started Brooklands fifty years ago.

The private architect and his future

Graham Dawbarn writes:

In this article I mean by " Architect " one who carries a project through every stage including working drawings and supervision: I exclude those who specialise in teaching, writing, drawing perspectives or maintaining old buildings, and those mainly concerned with initiation and advice.

Before the war only about 10 per cent. of all building work was designed by qualified architects. The private architect did most of the worth-while jobs and the official architect tended, by and large, to be rather despised. In 1945 the emphasis changed from the " private owner " who paid for his own buildings to the " public owner " whose buildings were financed by taxes and rates. The responsibility was thrown on the Ministries and Municipalities who built up their architectural departments. The official architect became an important person with assured continuity of vital work. The private architect lost practically all his private work and became dependent on the " leavings " of his official brother. So two things happened: first, a far higher percentage of all building work became designed by architects and secondly, many good architects sought public appointment.

The " leavings " have become less but, in compensation, an infinite variety of private and semi-public work is now reaching the private architect because the proportion of building work designed by architects remains high.

But, whilst the lot of the official architect is assured, the private architect is facing aggravated hazards. Building requirements and procedure have become very complicated, overheads have risen, high taxation makes it virtually impossible to build up working capital. There is ample scope for the private architect.

But if he is to survive, the *three continuities* must somehow be achieved.

The first continuity is within a particular job. Most larger jobs have a building user who occupies the building and a building owner who pays. The architect must obtain his brief: the requirements of the user as accepted by the owner. This brief may hang around for months; or it may get altered in the middle of working drawings; or, worst of all, the owner may stop the project in mid-air. In every case the architect must draw red lines through his budget and his staff charts and either face financial loss or raise the unhappy question of extra payment. A good, clear, unalterable brief is pure gold.

The second continuity concerns sequence of jobs. You have several big jobs, you take on more people and, to house them, lease larger offices. If nothing comparable comes along, you must reduce. That is a natural hazard but is aggravated by high taxation and tight finance. Some guarantee of job continuity might be worth sacrifices in other directions.

The third continuity concerns the architect and his senior staff. Every dog has his day; if you would be immortal, you must surround yourself with people of like calibre who, in turn, take over and do the same. In the old days a sun dawned, waxed and waned, and that was that. But now the architect is less concerned with exploiting his own ego than with establishing an organisation that will produce not perhaps individual masterpieces but a steady output of comely and efficient buildings.

And so back to tax. Profits vary from year to year and each year is separately taxed. Little is left from a good year to pay for a bad one. A revival of the old three-year average would help; the ability to leave some untaxed profits from a good year to cover a bad year would help very much more.

The joys of the private architect lie in the unknown variety of his work with endless new problems and new ideas, and in serving different clients with each of whom he works on a common aim. I was recently asked what was the most important attribute for a boy who wanted to be an architect; I said it was being an extrovert: having a natural optimism, enjoying all sorts of human contacts and appreciating the hopes and needs of other people.

Humphrey Lyttelton & John Voelcker

Client (and household jazz personality) HUMPHREY "*Humph*" LYTTELTON, *aged 37, plays trumpet at his own club in Oxford Street basement, Wednesdays and Saturdays in mainstream style, sells up to 450,000 records a year. Is also radio jazz critic, TV personality and sometime cartoonist (Trog for "Daily Mail"). Has rated "Observer" profile and victim of TV's "This is Your Life." American blurb describes him as ". . . a combination of Bennett Cerf, Louis Armstrong, and George Sanders . . . a six-feet-three-inch, lean, handsome ex-officer of Britain's crack Brigade of Guards playing the hottest jazz trumpet in Europe . . . an old Etonian aristocrat who turned his back on the debutantes of Mayfair's drawing rooms to live among the Bohemian jazz set. . . ." Born at Eton where father was a master. Played truant from the 1937 Eton-Harrow match to buy first trumpet. Picked up some architectural gleanings in two years at Camberwell Art School. Moved into present habitat with old George Webb band, 1947, year later was playing with Armstrong at Nice jazz festival and formed his own band. Waxed first label in 1950 and wrote autobiography in 1954. Decided to move from his Hampstead maisonette and looked at many existing houses before deciding to build on site at Arkley, Hertfordshire. Did not necessarily want modern house Asked Ian Bradbury (clear-cut contemporary work) to recommend an architect, who would be up to date without being freakish By way of education was taken by Voelker to see Highpoint, and one or two modern houses, went to see Arup's Hampstead house because mother called it a monstrosity. Plans to spend £7,000 on his U-shaped home (described as cow shed by local authority); it will include wedge-shaped "trumpet" room, living room with three focal points (fire, blank wall, TV), kitchen with playroom supervision and quiet bedroom wing. Did not foresee many difficulties but would do it again. Hopes to move in end of March with wife Jill, Stephen 3, David 6 months.*

The client's reflex action

Humphrey Lyttelton writes:

What do I think of architects? It's an odd question—and the oddest thing about it is that it should be asked at all. I should not expect to be asked what I think of plumbers, for instance, or dustmen or chimney sweeps. They are simply the specialists whom I call upon, in the normal course of events, when I require their services. Their function is not called into question. If I tell my friends that my pipes have burst and my living-room is awash, they don't bother to ask "Are you going to send for the plumber?" They assume, quite rightly, that, at the first sinister drip-drip, I shall be on the phone to him screaming for help. What's so different about architects? No sooner did I start putting it about that I was building my own house than people asked "Are you having an architect?" Frankly, I had never thought about it. Once I had decided to build, it was almost a reflex action to engage an architect. To this day, I'm not quite sure what the alternative is, short of designing the house myself and having it collapse about my ears within a week as a result. Clearly there *is* an alternative—and one looked upon with favour by that department of bumbledom concerned with the erection of houses. For as soon as I entered into the necessary negotiations with the local council about building my house, it became clear to me that I had seriously handicapped myself by engaging an architect at all. Elaborate machinery was set in motion for the sole purpose, as far as I could see, of thwarting him. His plans were not only rejected, but criticized and openly derided on practical grounds by people with less qualifications to judge them than me, since they were not proposing to live in the house. At a public hearing to appeal against the decision of the council, men of supreme insignificance were enabled with impunity to cast doubt upon his professional ability, notwithstanding the fact that he possesses all the necessary qualifications of his profession. And even the Minister of Housing's findings, reversing the council's decision in our favour, were couched in terms of condescension, as though the

Centre, Humphrey Lyttelton, amidst his controversial house, under construction, with his builder, A. E. Pollard, left, and his architect, John Voelcker, right.

Ministry was reluctantly unable to find good cause to stop the building. I doubt if the fertile imagination of Beachcomber could devise a more richly farcical situation. Architects are trained in every up-to-date facet of their work—design, function, materials and so on. Once they are qualified, their professional work is handed over for judgment to persons of no comparable qualification, whose ignorance is matched only by their prejudice. As a result, Britain is still, in the main, an architectural wasteland. So what do I think of architects? As a creative artist myself, I hold them corporately in the deepest respect for becoming architects in the first place, and thenceforth for retaining their sanity. Under the conditions in which John Voelcker, my architect, has had to work, I should long since have been ushered gently away by men in white, leaving a trail of mutilated borough councillors in my wake. I hope I have not been instrumental in adding to his difficulties. As a client, my attitude to my architect is much the same as my attitude to my dentist. Having chosen a dentist because I believe he will do the job well, I lie back, open my mouth and leave the rest to him. So it is with my architect—except that, when in doubt, I keep my mouth shut.

JOHN HAROLD WESTGARTH VOELCKER, *aged* 31, *is an architect with private practice at Staplehurst, Kent. Works at home with help of architect wife Ann (mornings) Stenorette, good typewriter (Olivetti) and five-draw filing cabinet. Bread and butter of practice is improvement grant work for seven local RDCs, farm buildings, agricultural workshops, etc. (very often direct-labour jobs, where architect*

acts as contractor, orders materials, shows how to lay blocks). For vitally needed contrast tutors fourth year at AA eight sessions (afternoons) a term, does certain amount of journalism, is writing RIBA textbook on heating small buildings. Takes active interest in CIAM and with Smithsons and Howell formed action group Team Ten after Aix-en-Provence conference. Thinks Lyttelton a model client who gives completely free hand; he is understanding and contributive. Born at Preston, father is an electrical engineer. Corbusier has been a god since age of 13. Met Ann while both were studying at AA (they married while students). Both took time off to work four months with BBPR, Milan (messing about with odd bits of furniture). After qualifying he worked with Farmer and Dark on Marchwood power station, but got fed up (" can't stick large, high-pressure offices "). Set up in private practice 1953 on basis of commission for house, which fell through because of inability to control costs. Taught Medway college art part-time between 1954 and 1956. They have two children, Adam 6, Thomas 4, third on way. Live in half of vernacular-Georgian dower house with traces dating back to sixteenth century. Grows roses and vines. When working week is over plays darts and poker dice at King's Head, Staplehurst.

The small country practice

John Voelcker writes :

The choice of how to work as an architect must lie somewhere between the extremes of a large public office in a city where a routine develops from the building programme, and the minute individual do-it-yourself (typewriter, stenorette, car, Cowley level, gum boots) outfit where no routine is ever possible because there are perhaps thirty completely different jobs running at once with an average duration of three months from first instructions to completion. In the large office an architect's work is fairly clearly defined and his hours can be regular, in the do-it-yourself outfit he is expected to do a variety of jobs at any time. I have been taken for a plumber and an antiquarian among other things and, some would say unwisely, acted on the deceit.

Sometimes, like last week, I spend the days floundering in waterlogged wealden clay, scratching details on sodden fibreboards, or, with more enthusiasm than experience, demonstrating how concrete blocks can be laid to stay one on top of the other. Other times I become enmeshed in the city, writing articles as a means of keeping up to date technically, teaching as a way of keeping alive intellectually (students are of fundamental importance to the development of architecture), and just seeing people for one reason or another. Best times, I have the balance of both, using the city, working and living in the country.

In the past I have often felt that the significant problems for architects were those of the city and that the country architect, who must necessarily work alone because he depends on personal contacts, was an anachronism. For the time being I believe that there is a real need for country architects because agriculture is becoming mechanised, even industrialised, quietly, but at a pace which already puts the building industry to shame. Have you looked into a primitive pile of concrete blocks and asbestos sheets to see the latest hop-picking machine working? Have you heard the click of the time-study stop-watches from behind a dozen half-hecked doors?

In the sparse populations of country areas the effects of these trends are rapidly felt and seen, the whole fabric of rural living is changing. People are mobile; moving in cars, moving from farms into the agricultural subcontracting and servicing industries, moving into the towns and cities. New buildings and groups of buildings are needed urgently to transform and replace the outworn and worn-out forms of farmstead and village. One can envisage continuous belts of agricultural dwellings and service industries, ribbon development (sic), stretching between the market towns and immediately accessible to the farmsteads on either side of them.

In the country it is still possible for an architect to become involved in all kinds of building. He is not a high level tech-man nor is he a luxury, his clients include stockmen, gypsies, greengrocers, farmers and bricklayers. I believe that this involvement is essential for architecture and that much of it, I suppose necessarily, has been lost to those who work in the cities.

For those who think that architecture is a function of living and not merely a means of expression I can recommend a spell of country practice. I shall try the cities again someday.

Raymond Erith

RAYMOND CHARLES ERITH, *aged 56, is an architect in private practice with partner and four assistants at Dedham, Essex. Office was one-time village shop. Does mainly domestic work and will shortly commence £400,000 restoration job at 10, 11 and 12 Downing Street; minor alterations to No. 10 (a nice house inside, which has a civilizing effect on prime ministers, messy basement, floors a bit whippy) major part of work to rebuild No. 12 the top of which was burnt off in 1879. Regular exhibitor at Royal Academy. Work also includes new library for Lady Margaret Hall, Oxford; design was going to match Sir Reginald Blomfield's buildings, but has become a bit more functional. Describes himself as a sort of specialist who does traditional architecture (" with cornices and things "). Quite used to working in styles, has designed pair of lodges in " sort of Tudor," did many pre-war houses in Cotswold style, has even had one of his houses mistakenly listed for historic preservation. Considers his work best when it passes unnoticed. Raymond Erith was born in Hackney. His father was a mechanical engineer. Wanted to become an architect early on, interest sparked by working drawings. Youthfully designed in a speculative builder's style. Went to AA in 1921 (under Atkinson and Robertson) qualified in two terms under par, then went to work for Verner O. Rees, who had previously taught him (School of Tropical Hygiene). After three years started own practice in London, doing " washing " (ghosting for other architects), competitions, rather accurate surveys (" didn't make any money "). Joined by Bertram Hume; they remained partners until after the war when Erith moved to Ipswich. Married and has four daughters. Has lived in Dedham since 1936, in present house (1825, architect might have been Laing) since 1945. Farms a mixed 80 acres, with a few bullocks, corn, cabbage and peas. Not much relaxation, no hobbies. One-time interest in Bentleys (owned three after the war) waned, now runs practical pair of Volkswagens.*

The essential qualities of architecture

Raymond Erith writes:

My aim has always been to recapture the essential quality of architecture, by which I mean the quality which began to disappear sometime during the 18th century and which had practically vanished before 1850. Although I think there may be some deep-seated cause for its disappearance I have never been able to find an explanation which really holds water. One may, for instance, put it down to a decay in Christian faith but, quite apart from the question of fact, the thing itself does not depend on faith in that sense: certainly I can find no evidence to suggest that the Christians did better than the others. Or one may be tempted to think that it started with the Abbé Laugier's *Essai sur l'Architecture* which was published in 1753. I cannot, however, convince myself that neo-classical theory, which was mainly concerned with function in structure, is intrinsically harmful to architecture. And so it is with every hypothesis I have tried. In the end, I have had to fall back on the idea that in the enthusiasms generated by war, discovery, invention and industrialization the means of producing real architecture was forgotten.

However that may be, the direct approach has been more profitable. The question is, what is this thing which I have vaguely called the essential quality and how is it achieved? I do not pretend to know the whole answer, but by studying old buildings I have managed to get a fairly clear view of the thing itself and I think I have found the method, or a method, by which it was produced. The quality cannot be explained, but I will say that it seems to be akin to the quality, or qualities, which we find likeable, admirable or lovable in a human being. It is also comparable with personality in that, in spite of its elusiveness, it is readily appreciated and generally recognized. Perhaps it is significant that writers who understood it did not waste time on it and gave it only one word. Sir Henry Wootton, for instance, called it delight, Vitruvius grace; and this is perhaps more sensible, because it cannot be described until it has been seen, and then only in the way that one can describe red as the colour of blood or green as the colour of grass. On the other hand the fact that it can only be described as "you know what," does not mean that it is so elusive that you cannot get it: if you want green you can get green, if you know how, and it is the same with architecture.

The way in which the architectural quality was got into the building was by succeeding in the apparently impossible job of pleasing everybody. In other words the architect must do more than provide what his client wants and what he wants himself; he must provide something for everyone else as well. The result will then be that, besides the pleasure in finding our particular needs satisfied, we shall also find the far more solid pleasure of seeing that everyone else is happy, too. Architecture, in a sense, is that: pleasure achieved. As to pleasing everybody, the intention is not democratic but universal. There is, however, a certain amusement in providing one man's meat in a form which is not recognizable as another man's poison, and sometimes satisfaction in showing that the poison is in fact pretty harmless: it is the things which are only bad, for instance, from incompetence or lack of foresight, that are the most toxic. The main difficulty is in finding out what gives pleasure, and here again I have found the direct approach the more profitable.

I believe there are a lot of people who *see* the thing which is architecture without being able to believe in its existence. With them I have a great deal of sympathy because for years I suffered myself from a conviction, which I could no doubt put down to a faulty education, that anything which I could not explain and nobody else could explain must be a sort of conjuring trick. There is, however, something right under the nose of every architect which I find has often provided a useful analogy and helped me to an explanation of those things which in a sense are not there. It is the immaterial existence of one's building, in the form of working drawings and specifications, before it is built. At the time when the drawings are finished one may not think very much about it, but I find that when I go on to the site and see the building taking on its material substance I can never help marvelling at the way in which it has really been there, in its exact position, for all those months while the quantity surveyor gave it yet another disembodied existence. And perhaps this is all I am trying to say: that in architecture there is a reality which you can see but not describe as well as one which you can describe but not see; and that without this reality there is not really architecture.

Mark Hartland Thomas

MARK HARTLAND THOMAS, *aged 53, is an architect who prefers to be inventor (first and only fire-resisting curtain wall in world) and consultant to the building industry (design and application of new building components and methods). Only does architectural GP work to remind himself how awful it is. Probably best known as secretary of the Modular Society, founded 1952. There are 500 members, ranging from ICI Ltd. to architectural students, half of them architects, one-third manufacturers: society runs on a shoe-string (subscription two guineas), employs a secretarial bureau which provides accommodation address. Society reads about six papers in the season, publishes quarterly journal and modular catalogue. Most significant achievement to date is construction of short-lived (October to December) two-storey Modular Assembly on Albert Embankment site. Components were provided by 35 manufacturers (two of them designed by Hartland Thomas). First fully modular building will be flats, designed by Sir William Holford, at Kensal. Hartland Thomas was born in Bristol, where father was architect and diocesan surveyor. Decided to be architect quite early on but before studying part time at the RWA School of Architecture, Bristol, got first class honours in classical tripos at Cambridge. While studying at Bristol worked in his father's office. First building designed was church hall (steel frame, cement on expanded metal walls with asbestos composite-sheet lining). Was deputy chief architect to United Dairies during war and spent next six years as chief industrial officer at COID with job of getting industry to be design conscious. His department was expanded to cope with Festival of Britain at which time he originated Design Index. In 1953 left to set up as consultant. Lives with wife, two cats and dog in Regency house, the one-time village bakery at Upchurch, Kent. House has been largely modernized by himself (mixing mortar to one's own specification is very educational). Son, Lewis, at Dublin University. Is a TV fan (Panorama), likes Beethoven and Brahms, dancing. Drives 1934 aluminium grey Daimler.*

Architectural prognosis of 1969

Mark Hartland Thomas writes:

Looking back, in 1969, from the secure condition of architecture today to how things were in the late 'fifties, one realizes what a close-run thing it was, though few people were aware of the danger at the time. The threat to architecture from standardization was mounting fast: the prison walls were closing in—literally "walls," for the standardized curtain-wall systems of a decade ago, rightly lauded at the time as the beginnings of a New Vernacular, were typical of what was happening on all sides. Once an architect had chosen one of the competing manufacturers' systems, the rest was in their hands, not his.

The inexorable laws of economics made the ever-increasing standardization of building components inevitable. It was useless for architects merely to present blind opposition to this process, as most of them did. Such action relegated the profession to the sidelines, whilst the game was played out between the manufacturers of the closed systems and standardized buildings, and the contractors offering the packaged deal. Architects found themselves either competing for an ever-diminishing number of expensive tailor-made buildings, or administering contracts for the erection of buildings designed as closed systems of construction in manufacturers' drawing offices. It was typical of architectural practice in those days that any job costing less than about £6,000 was a dead loss in an architect's office. This meant that the bulk of the nation's building still proceeded without benefit of architect.

Fortunately there were some who were not content to play a passive role in this situation. Among them were some of the best architects of the day: men like Holford, Yorke, Sheppard, Dark, and the Architects' Co-Partnership, among private practitioners; and public offices like those of Hertfordshire, Nottinghamshire and Somerset counties, and the Ministry of Education. These architects, and others of like capacity, joined forces with some of the more far-seeing manufacturers (such as those who, later,

combined to sponsor the Modular Assembly) to found the Modular Society, early in the decade, dedicated to finding a better solution—better for manufacture as well as for architecture.

Among the manufacturers who helped to found the Modular Society, many were sponsors of the closed systems that constituted the greatest threat. They saw, however, that the closed system gave but an incomplete answer to manufacturing problems, though it was the only one open to them individually, failing any united policy. The Productivity Council used to prescribe three capital S's for efficient production: Standardization, Simplification and Specialization. The closed system gave them the first two, but put the third into reverse. A manufacturer of steel framework might be forced to go into the production of concrete cladding panels to be assured of sizes to fit his system, but it was an embarrassment.

The introduction of the 4-in. module gave a brilliantly simple answer to the manufacturer's problem and to the architect's at a single stroke. That was why its acceptance was so rapid, once its purport was understood. We date modern architectural practice from two events: the Modular Assembly, an experimental structure erected in London by members of the Modular Society at the end of 1958; and the issue of BS2900, establishing the 4-in. module and its function, by the British Standards Institution early in 1959. Nowadays an architect, with the Modular Catalogue beside him, has a wide variety of fully engineered and tested components, of known sizes and strict tolerances, at his command. He designs to 4-in. flexibility in three dimensions and knows that any manufacturer's components will fall exactly into place. He is in full control of the design of the building: the manufacturers gladly accept the strict limitations that enable them to concentrate upon perfecting their special products. The expense and frustrations of designing components for individual buildings do not nowadays overload architectural offices; and the closed systems, which dangerously inflated some manufacturing concerns, also belong to the past.

Such changes have, of course, had their effect upon architecture. The process of design, with modular components, tends now to be additive, where it used to be subdividing. We work much with the excellent scale models of components that manufacturers supply, trying them in different combinations, rather than sketching on paper. The structure of the profession has changed, too, with a larger proportion of architects working as consultants to manufacturers in the development of new components. By this means architectural influence is, through architect-designed components, far more widely effective than it used to be.

Cleeve Barr

ALBERT WILLIAM CLEEVE BARR, *aged 48, acting the role of tea-drinking civil servant, left, has been principal architect in charge of the development group at the MOE for the last year, with a staff of fifteen and additional temporaries recruited from Stillman and Eastwick-Field and ACP. Fifth-floor cream-walled office in the MOE's dismal Curzon Street block, overlooks courtyard used occasionally by swish Lansdowne Club for cocktail parties. Biggest building on design board is £600,000 technical college for Preston, Lancashire, which will employ maximum off-site fabrication. Biggest quantitative job is investigation into rehabilitation of existing school buildings, which will have to take place in 1960's. Just beginning pilot rehabilitation of grammar school in Yorkshire, and two small rural schools in Buckinghamshire and Lincolnshire. All absorbing spare-time passion is work on RIBA committees (executive, finance, science, constitutional). As chairman of constitutional committee is engaged on important task of reforming council to diminish number of nominated representatives. Previous passion, which lasted two years, resulted in publication, early last year of definitive telephone-directory-sized book on Public Authority Housing (Batsford, five guineas). Born near Crystal Palace, father was a soldier. Went straight from school to Bank of England (very good salary), spent next five years doing most menial tasks in striped trousers,* i.e. *sitting in the vaults watching workmen grease heavy strong-room doors, with other people watching you. Has loathed bowlers and umbrellas ever since. Wrote for evening papers on the side, went in for sport and camping. Desire for creative satisfaction led him to architecture and left Bank after he had saved up enough to see him through first year at Liverpool. Worked as junior with Paul Mauger on small houses, Charles Holden on London University Tower and Senate House. Secretary ABT (then AASTA) 1936-38. Spent war in RAF intelligence, acquired enough knowledge of Russian to conduct high-level committees in Berlin. After war qualified with minimum of time and inconvenience at Northern Polytechnic. Built timber house for brother at Dorking, one of the first with underfloor heating Spent next three years in schools section at Hertford (job architect for bronze medal-winning Templewood School), then moved to housing department LCC. Worked on Portsmouth Road scheme for*

two years (in charge of development group, producing type plans and designing range of components such as windows and baths). Later initiated and carried through Picton Street scheme. Was deputy housing architect during last 18 months with LCC. Joined MOE because he wanted a change. Married, has one daughter Rosalind 19, son Michael 15. Lives in Hampstead Garden Suburb cottage (jerry built) where he is installing his own central heating and knocking down walls to make bigger rooms. Finds 300 feet of privet hedge chief suburban snag. Would like to build at Highgate but cannot afford site. Has smaller (" but better ") collection of colour slides than Percy Johnson-Marshall, a near neighbour. Recently been converted to acceptability of TV by Monitor programme. Attended last year's IUA Moscow congress (" the Russian architectural profession is thoroughly archaic "). Prophesies there will be opportunities there for British architects before long.

Putting our house in order

Cleeve Barr writes:

Architects are unquestionably their own worst enemies. We blame planning officers, engineers, contractors, local authorities and the public—but we ourselves are as responsible as any for our failure to achieve that status in the eyes of the public which we think we deserve. With certain notable exceptions we have failed to give that leadership to the building industry which twentieth century conditions demand. We have failed so often to get rid of the mentality of the Victorian stylists even though we have swopped historical trimmings for contemporary clichés. We are still too obsessed with the design of buildings from the outside in—inadequately understanding the functions of buildings in terms of human needs, and of human environment, as well as in terms of scientific standards and the economics of design.

This is the main reason why it is so necessary now to achieve both a greater sense of unity within the profession and of service to the public, so that when we demand that only architects shall prepare working drawings or direct building operations or undertake town plans, the value to the public shall be self-evident.

This again is why it is so necessary to democratize the RIBA, not as an end in itself, but as a step towards transforming the RIBA into a more effective spearhead for the profession—to raise standards in planning and design, in architectural education, in the control of cost, and in the development of technology. Self-criticism in the profession hardly exists outside the schools. We are proud of our ambivalent natures—half-artists, half-businessmen—but when it comes to criticism we shelter behind our commercial and professional reputations. Let the RIBA transform its JOURNAL—first into a format worthy of the twentieth century (and that goes for the AJ too), secondly to give a lead in honest and critical discussion of the merits and demerits of major buildings of the day.

It is all very well for architects, like individualist small farmers to " plough their own furrows," content to be known by their works, but whether we like it or not, in contemporary society (east or west of the iron curtain), the significance of the professions *as professions* is growing all the time, and with that the importance of the major professional oarganizations as negotiating and representative bodies. Shades of Lutyens—the day of the artist in isolation—passed long since. Architecture now embraces industrial design, and building project management, and landscape and town and country planning—it is all these and more. The big problem for the profession is to put its own house in order, so that we can operate from a position of strength. There are encouraging signs that an increasing proportion of architects, though still a minority, realize this fact.

Richard Towning Hill, Raymond Moxley & John Collins

JOHN EDWARD COLLINS (*chairman, sitting right in the photograph*), RICHARD TOWNING HILL *and* RAYMOND JAMES MOXLEY (*directors, left and centre*), *form the council of management for the non-profit-making Bristol Building (and design) Centre (" we get a terrific kick out of it "); they are all practising architects. A six week pilot exhibition was held in July 1956. Collins, Hill and Moxley put up £150 to print brochures in 1957, opened the centre six months later. Occupies 6,400 square feet (ground, first and fifth floors) in downtown office block (post-war Morris de Metz) facing Giles Gilbert Scott's Electricity Building. There are over 100 exhibitors, staff of six, average of 600 visitors weekly. Additional features include coffee lounge, film shows, exhibitions, monthly bulletin with mailing list of 1,100; directors are always available (on phone if need be) to answer tricky questions. Bristol's centre has sparked enquiries from Nottingham, Cardiff, Portsmouth and Dublin. John Collins, aged 37, has been staff architect to E.S. and A. Robinson (giants in the paper converting and packaging business) since 1949. Born in Bristol, father was on the railway. Always wanted to be an architect but got side-tracked by influential neighbour and qualified as structural engineer in 1943. During war worked on structural design and specification of gun platforms, slipways for MTBs, parts of Mulberry harbour. Gave up engineering 1946 and qualified as architect after three years of part-time study. Lives with wife and two children in house he designed in 1955, near the Clifton Suspension Bridge (Somerset side); inherited swimming pool and monkey-puzzle tree with site. Interests include membership of various committees (recently active in management of delinquent boys' remand home), conversation at all levels in the local (the George), food and wine, cricket, squash (a viscous game in line with modern living). Hobby horses are apathy in building industry, small-time approach of planning authorities, kitten-like treatment of road modernisation.*

Richard Towning Hill, aged 36, is in private practice with partner Michael Hitchings. Born near Sydney, Australia, came over to study at AA on Australian

Government grant. During war served in India, Assam and Burma, commanding company of Indians and Ghurkas, learnt Hindustani. Toured Scandinavia 1946, qualified 1947, and toured Paris galleries with painter Adam Turyn in 1948. Started private practice in Bristol 1949 (very tough going) eventually converting derelict mews compound near city centre for office and home (separating housing, working and shopping areas is sure way of losing all the positive qualities inherent in city life). Feels problems of house building today are being solved by firms like Span, will work with Lyons on local project. Met wife, painter daughter of Swiss scientist, whilst on European trip; they have one small daughter. Likes reading, psychology and travelling.

Raymond Moxley, aged 35, has been in private practice since 1953. Born in Sheffield, father was a parson. At seventeen joined staff of large contractor, found himself checking dimensions for the quantity surveyor, left after three months. Studied architecture at Oxford under E. M. Rice and particularly remembers year master Arthur Korn. During war served with Horse Guards in West Africa and India. Struggled horribly after setting up practice. First job was to build his house at Abbotsleigh with his own hands.

Has lectured at Royal West of England Academy School of Architecture on mechanics, acoustics, electrics. Married Oxford architectural student.

Has one son, Mike, who would like him to buy Merlin Rocket to sail in Bristol Channel. Other interests include music (Bach), 1950 Sunbeam Talbot.

A chain of building centres

John Collins, Raymond Moxley and Towning Hill write :

Technical advances and the operation of " specialists " in the building industry today have made the whole mechanism of building more complex than ever. One of the major problems is that of communicating knowledge and technical data to all those who require it. So much information pours into architects' offices today that cannot be easily filed or properly assimilated, in a short space of time. One of the central ideas in establishing a building centre in the West Country, was to provide a channel through which information on building products would be imparted to all those asking for it.

There is nothing revolutionary in this appreciation of the situation, but it was a new idea to have such a centre of information in the West Country. The JOURNAL, when announcing the opening of a Building Centre in Bristol on December 6, last year, suggested that it would probably be the forerunner of other such ventures in the provinces, and it posed the question—" How many such centres should there be throughout the country? "

Several approaches have been made to us from other provincial centres, which is proof that the idea is a popular one. The first year of operations here has produced a rapid advancement in the affairs of the centre. One of the most notable is the use that is made of the facilities provided by almost every type of

organization or individual connected with the industry. During the year, in addition to the use of the space for permanent exhibits, there have been 17 temporary exhibitions, 50 lunch-time film shows and 23 evening lectures and discussions. More than 20,000 people have visited the centre and there have been nearly 7,000 technical enquiries.

With all this activity and increasing support from manufacturers it has been possible to increase the amount of accommodation available. A Design Exhibition was taken under the wing of the building centre in September, because it was felt that this was an automatic extension of the idea, in that it would give a lead in the equipment and furnishing of buildings, in addition to displaying other well-designed articles.

There is no doubt that the centre is rapidly becoming the established meeting place, and forum for discussion between all branches of the building industry. In addition to members of the architectural and allied professions, manufacturers and members of the public have joined in many meetings.

Our organization is run on a non-profit-making basis, financed entirely by rental from exhibitors, without any outside help at all. In view of the fact that it provides a service to the public it seems reasonable to suggest that organizations of this nature should be given some support, possibly by local authorities—even if it is only by a reduction in the rates payable on premises used (we believe one local authority in the country has already agreed to do this, if such a centre is started).

We hope that the continued success of the centre will eventually enable us to finance the establishment of a technical library, and also to found scholarships within the industry. It would also be possible, in the future to provide the centre with a building of its own.

While there is at the moment no official link, the parents of such an organization are obviously the Building Centre, and the Design Centre in London. We see this organization as complementary to, rather than in competition with, London. No one would suggest that the British Museum's presence in London rules out the necessity for other museums in the country. So, to return to the question, posed by the AJ, we think that in the very near future someone will have to give the lead in establishing the pattern for development in other parts of the country—who will it be? As the AJ has rightly pointed out, this development, if it is going to take place at all, should not be left entirely to chance.

Robert Matthew

PROFESSOR ROBERT HOGG MATTHEW, *aged 52, holds Chair of Architecture at Edinburgh (six other chairs in U.K.), smallest and newest such department in Britain with ten*

undergraduates, one lecturer. About to start first post-graduate architectural research department in Scotland; dozen or so students will concentrate on housing problems to begin with (in conjunction with live building project, being carried out by undergraduates, at Musselburgh). Matthew is also in private practice with partner Stirrat Johnson-Marshall, who joined him two years ago; practice has been developed in his spare time. Two offices, one in London, another in Edinburgh, both fine Regency houses, one with view of Regent's Park, other with view of Arthur's Seat. Apart from designing New Zealand House they are engaged also on work at Edinburgh, Dundee and Aberdeen universities, 17-storey flats for the Gorbals, and Commonwealth Institute at Holland Park. Matthew was born in Edinburgh, father was an architect in partnership with Sir Robert Lorimer. Has spent most of his life in Scotland. Studied at Edinburgh Art College and after two years' post-graduate work joined Scottish Department of Health rising to chief architect. Became architect to LCC in 1946. Had long wanted to go into education ("Chairs are not available every day"). Family lives in flat over London office. Son Aidan is in fourth year at AA, daughter Janet is studying interior decoration at Central, Jessie Ann Gordon is 6½. All his spare time is taken up preparing lectures, writing books, looking after his slides, travelling (apart from almost weekly inter-capital trip,) last year visited Moscow with IUA, Pakistan to judge competition, Hong Kong as examiner, with stop-offs on way back at Rangoon and Bangkok. Previously Man of the Year for his part in designing the Royal Festival Hall, he is the first to be twice nominated by AJ Editors as Man of the Year; due recognition of the fact that he is one of the few really dynamic, powerful and progressive personalities in the profession.

Providing a missing educational link

Robert H. Matthew writes:

The situation with regard to organized post-graduate studies in architecture is an extraordinary one: organized, that is, in the sense of attachment to an educational body. Most architects undertake some form of study for every building designed, but publication of the results of this kind of *ad hoc* study is the exception, and continuity, depending on the uncertainties of practise, is unlikely. The established schools, however, have little tradition in post-graduate work. Second University degrees are taken by relatively few, with predominantly literary or historical theses. The scientific laboratory with its professorial leadership providing a general theme of continuous study over a period of years for a hand-picked team of research workers, has no parallel in the architectural schools in this country.

The gap is a serious one. The missing link between undergraduate and practitioner is not only a negation in relation to the promotion of knowledge: it is also a negation in relation to the training of teachers, for there is no more fruitful source of those rare commodities, as most scientific, medical and engineering departments will testify, than the established research team. It is against this background that I am now in process of creating, at Edinburgh University, a post-graduate Department with a programme of study extending, in the first place, over five years.

Dr. Lea, in his brilliant paper to the recent Oxford education conference, defined the nature of architectural research mainly as a bridging operation between fundamental research on the one hand (for which BRS is outstandingly equipped), and the end-product of architecture, namely the production of buildings, on the other. The precise nature of this bridging operation may take many forms. Llewelyn Davies in the field of hospital design, has already established a discipline that may well be followed, for other categories of building, maybe, within University Departments. It is no accident that a substantial part of the funds necessary for my own post-graduate project is coming from the Nuffield Foundation.

The essentials for a useful programme of study seem to me to be as follows: first, an identifiable subject of social importance, for which sufficient fundamental research has already been done; second, satisfactory arrangements to enable full-scale buildings to be planned, built, and subsequently evalued; third, sufficient finance to pay the research team and all expenses, including publication; fourth, an adequate team of research workers. It has taken, in my case, over three years to secure the first three of these. The chosen field of study—Housing—I know well enough from experience to appreciate that, in spite of the vast housing effort in this country over the last thirty years, comparatively little opportunity has been available for objective study. Clinical material is, however, obviously abundantly in existence, both here and abroad, and the subject is, in many ways, ideal as a first study in a new Department.

Within the scheduled five years, two contrasting projects will be planned and built; high density at the new town of Cumbernauld, which as a whole, under the direction of Hugh Wilson, may well show considerable advances in planning technique, leap-frogging, so to speak, over those new towns earlier in the field; and low density, in the County of East Lothian (County Councils are housing authorities in Scotland) where the combination of agricultural and mining communities gives a unique opportunity to cover a wide range of rural requirements. My third essential, finance, is now assured, thanks to Nuffield, DSIR, Carnegie, and not least the University itself, for the first five years. Subsequent developments will obviously depend on a successful start. So far, therefore, all is satisfactory—but—the fourth essential, the creation of the research team, is by far the most difficult of the whole process. It is here that the lack of tradition in advance studies hits hard, and in view of the present dearth of talent, it will be necessary to budget for some training in logical method as the work proceeds. This will, it is hoped, show dividends later on for teaching; in any case, the student link will be strong, and should be mutually stimulating.

This is an experiment, not least for its educational value, and one which no doubt will be watched with critical interest. I am grateful to the JOURNAL for its own sustained interest in a subject that, for the most part, leaves architects unmoved, and particularly for this opportunity to write a brief note of my intentions.

BUILDING TRENDS IN 1958

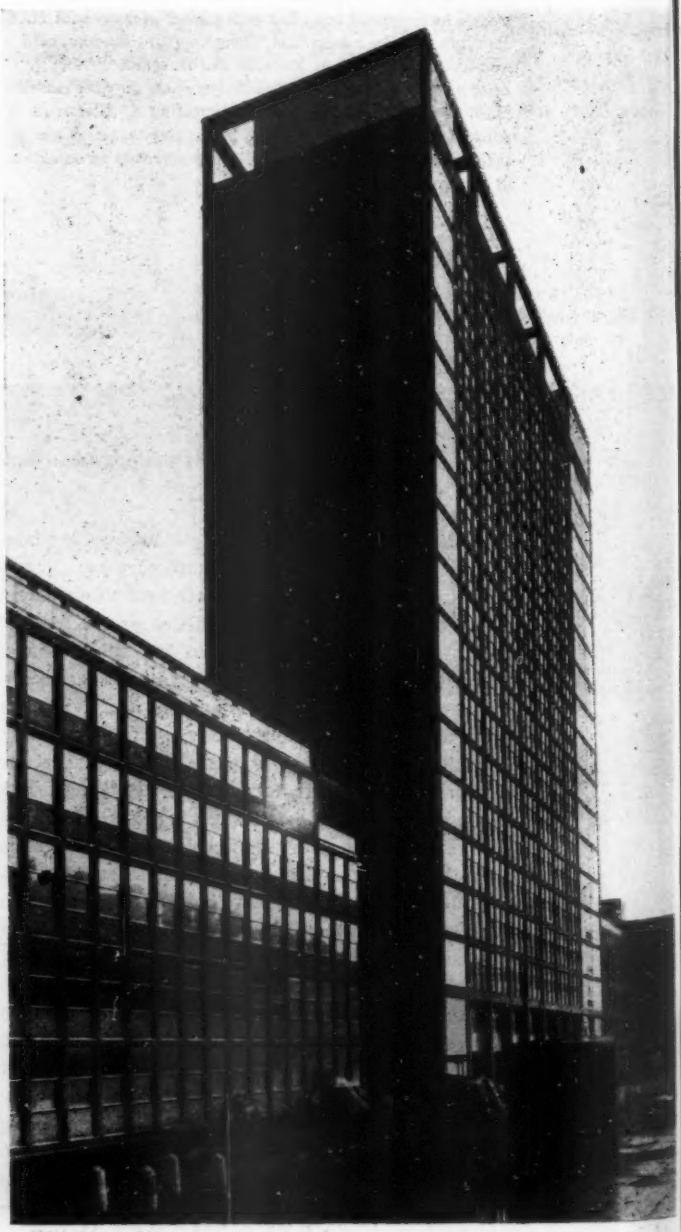
The customary survey of buildings is limited this year to three types: offices, housing, and church restoration (in this case, only Wren's). Most of the examples of new buildings shown are in London, which indicates, perhaps regrettably, the preponderance London has in architectural thought.

Offices

by Colin Boyne

If the visitor to America duly makes his pilgrimage to Rohe's and Johnson's Seagram building in New York, to which office building in England would he be directed? The modest English contribution to the modern office block is Cecil Elsom's Eastbourne Terrace, Paddington. An unfair comparison? Perhaps, but at one third the size, and a fraction of the cost this little bit of redevelopment is the best we can offer and is not to be despised. Seagram may be an architectural monument to its architects, whisky and private enterprise, but it can hardly be a pattern for other rank and file, developers to learn from and improve upon. Elsom's block, however, could be just that. One of the delights of Georgian development is the careful control that has been exercised over embellishment. It was not just economy, but a sense of design that caused the Georgian speculator to limit his architectural fireworks to key buildings in the townscape

Left, the Seagram building, New York, by Mies van der Rohe and Philip Johnson. Right, Eastbourne Terrace, Paddington, by Cecil H. Elsom and Partners.



He was helped, of course, by the fact that he was handling large estates. For the last hundred years or so these estates have been slowly and steadily broken up, so that streets are now owned by not one but dozens of potential redevelopers.

Of equal danger to a composed and civilized townscape is the architect, given the fact that a street under one ownership, to be redeveloped at one go, is as rare as a client like Seagram. There are supposed to be about 3,000 private firms of architects, all of whom would accept a commission to design an office block at the drop of a hat. And each firm, on average, would produce, say, four alternative designs. So for any one site there is an architectural potential of about 12,000 buildings. This is therefore an age when originality of design is a prerequisite of sensibility in design; when to be accused of copying, or of being derivative, is to cause feelings of guilt, shame or anger; when individuality of expression in design is bound indissolubly with integrity and self-esteem; is it to be wondered at, that, apart from the demands of the client for a blatant advertisement, every building in a street is different from its neighbours, and every office building by the same firm of architects is different too?

A member of the LCC's planning department, in a rare unguarded moment of joy, said: "At last these architects are beginning to understand what we want. There are signs that a contemporary idiom is being found for office buildings." The middle-aged are liable to wince slightly at the phrase "contemporary idiom," of course, because it is a "non-A" phrase, but if it is taken to mean (as it was meant) that the historical styles have been dropped, and that something indicative of the present day is taking their place, it is worth trying to discover roughly what it looks like and trying to assess how it should develop.

This survey is necessarily superficial, not only through lack of space, but because the technical background necessary properly to assess offices is not readily available. Office development is essentially, competitive, and "value for money" unascertainable as costs are secret. What a pity the Government did not take the opportunity with the Lessor office-building scheme to set the pace, economic and technical, in this field.

The office block, with or without shops below, is the dominant building now in city centres, and should be judged with two criteria in mind: the working conditions it provides for the occupants, and the effect it has in town planning terms on the environment. In London, and in most city centres, it means doing something positive to a street, either by infilling and conforming to neighbouring heights and maintaining the corridor street, or standing back and rising high, Seagram-style, in the hope that everyone will eventually realize the disadvantage of the corridor street in the motor age, or a compromise between the two: low peripheral development and set-back, high towers (Lever building, New Zealand offices). The man in the street looks for: an interesting skyline; or an elevational treatment which, however interesting it may be in itself, maintains the continuity and what Ian McCallum, in his admirable article (AR, October 1956) calls the *directional* emphasis of the street; and interesting detail. The citizen, if he wants to stay alive, and out of the hands of the police, can only see buildings, in modern traffic conditions, diagonally from a distance; from the opposite side of the street; and from the pavement, when only the lower storeys will be visible. This must be borne in mind when studying the offices illustrated here.

Let us start with Professor Sir Albert Richardson, whose admiration of the Georgian period as a golden age for design is known to all. It is evident that he has not appreciated, unbelievable as it may seem, their sense of seemliness in town planning. If he did, would he have designed as he did the extraordinary, aggressively-shaped *Financial Times* offices in Cannon Street, alongside St. Paul's? Here is an office block and works most lavishly executed, with fine craftsmanship, in brick, red stone dressings and bronze. The top floor has almost continuous glazing (unlike the more overshadowed floors below) and it is unfortunate that the partition walls do not always coincide with the columns (faced here with faceted glass lens) but butt up against the narrow glazing bars in a distressingly obvious way. The design is more eclectic Edwardian than Georgian, and in the late '50s something of a rarity. Sir Albert Richardson, while not, perhaps, quite coming into Goodhart-Rendel's category of Rogue-Architect, might be more coyly described as "roguish."

Sir Albert's architecture is certainly "different," but not all the offices completed, or nearly completed, last year have quite this degree of variety. There are, however, changes in design which are worth examining, and in this article the work of two or three firms who have made a substantial contribution to office building will be examined.

Perhaps the biggest development in 1958 in London, and indeed in England, was the completion of the redevelopment in Knightsbridge of two large blocks (started some years ago, of course): Caltex House (architects: Stone, Toms & Partners), and Bowater House (architects: Guy Morgan & Partners). Both buildings have relatively open planning and peripheral development is confined only to low blocks on street frontages. Both are "contemporary," both have vestigial elements of earlier styles: Caltex has a cornice

Financial Times *offices, Cannon Street, by Professor Sir Albert Richardson.*

and Bowater "solid" end walls. But Caltex earned the opprobrium of the Royal College of Art students, and Bowater their praise. At first sight this seems obvious. The two- and three-storey blocks on Brompton Road face south towards the shadowed front of five-storey blocks on the other side—a contrary situation in terms of sunlight—and, despite the textured surface and immaculate stonework, are not large enough to continue the line of the street. A hole has been punched into Brompton Road, and nothing adequate replaces the corridor street. To a certain extent the same criticism could be made of the Lever Building in New York, but the slab block is much larger, and one end does line up with the main street frontage. The chief criticism, of course, of Caltex House is the variety of shapes it presents to the onlooker, the variety of fenestration and wall surfaces, and detailing which is not only coarse but out of fashion. The plan is open, but at the cost of chamfered corners, too much change of plane, and so forth.

Bowater House, on the other hand, *is* fashionable, particularly on the south side. The twelve-storey eastern wing, well sited, and well proportioned (though a trifle squat when seen from Brompton Road) has a superficial Miesian touch which may attract until one realizes that the heavy black framing is structurally meaningless. Nevertheless this wing is preferable to the other, which unaccountably terminates in oddly angled brick walls about 150 ft. high. The great quality of this building is the standard of finishes. Three types of polished granite provide the infill panels and column cladding, and the entrances are lavishly detailed and finished in marble, terrazzo and bronze. Here no expense has been spared. The man on the pavement has more on which to feast his eye than he has outside Caltex House, but he must beware that he does not walk slap into the sideways opening lights of the low easterly block while he admires the curious side elevation, which this rebuilding reveals, of the Hyde Park Hotel. Two further things mar the design, and they mar it almost as effectively as they do Caltex House. There is too much variety of treatment to the façades (no less than five varieties can be seen in one photograph) and the tall block is not tall enough. This is no fault of the architect. It was the RFAC which wished to prevent the building standing above the trees when seen from Hyde Park. It now just overtops them, with a long skyline of 110 ft., and the end elevation of the west tower rising to 170 ft. A skyline of over 100 ft. high cliffs is depressingly high for the pedestrian whether at Knightsbridge or even near-perfect Pimlico. While a tower of 200 ft. or 300 ft. is only an attractive bit of variety to the skyline. Who complains of the dominance of the 300-ft. Victoria tower at the Palace of Westminster?

Glazed curtain walls, once regarded as a danger to the architectural profession by those who equated architecture with elevations, are now out. They have not disappeared entirely (a new one, all too strongly coloured, has just been revealed behind Selfridges), but having reached a degree of considerable competence in the hands of Gollins, Melvin, Ward & Partners on both sides of New Cavendish Street (the later, white-faced block, with less vertical emphasis, is best), this potentially effective way of producing a neutral background has, apparently, been abandoned.

The material which has successfully withstood the threat of being supplanted by glass is, of course, that eminently respectable material: Portland Stone. Not so hard and flashy as granite, or so vulnerable as other stones, Portland (the P goes with St. Paul's and Prosperity) is a word that charms clients and committees and planners. The tragedy is that it is so misused. Given rich pollution, and rain, Portland Stone goes black and white: white where the rain runs, black where it doesn't. Largely by coincidence, most classical buildings, with strong detailing, sharp edges and effective drips, were unharmed—indeed embellished—by this effect. Fashion removes the mouldings, but the stone remains the same. As a result, many buildings become, not black and white, but smeared. Typical of this is the otherwise unexceptionable Finland House (Haymarket, by K. Wakeford, Jerram and Harris). Time alone will tell whether this, presumably not fortuitous, effect will be considered enhancing or not. Otherwise this building fits reasonably well into the street, which we must assume that the planners intend to remain as basically a tall, corridor street. The ground floor and mezzanine, treated as one, seem out of scale with the rest of the block, particularly at the rear. The diagonal balustrading is unfortunate, but the pavement view of lush Finnish timber and goods is attractive enough.

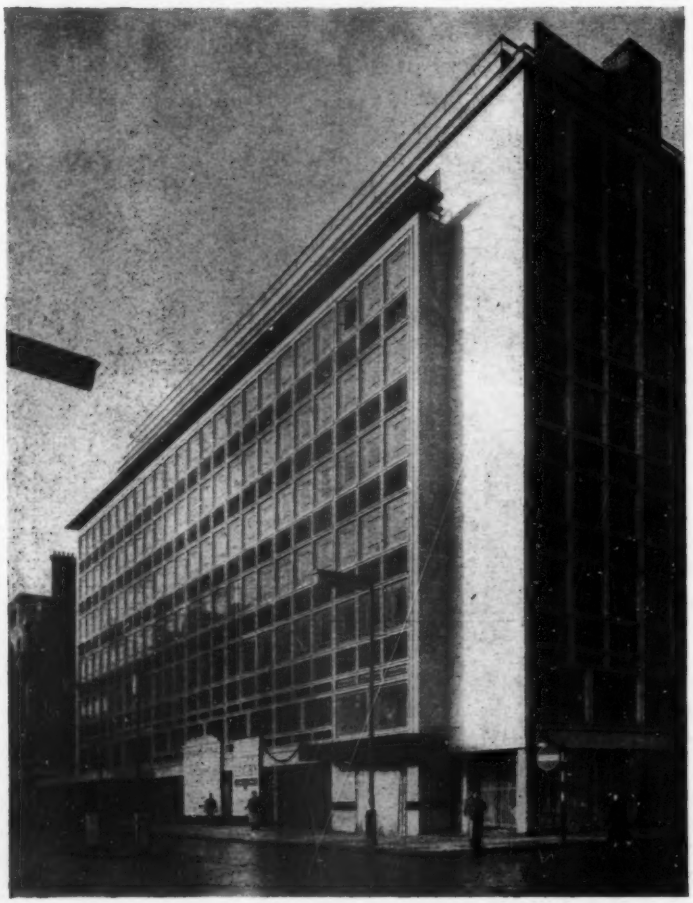
In offices in Blackfriars Road (architect R. Seifert & Partners), a gleaming white effect is achieved not with Portland Stone but by spraying a cement and spar finish direct on to the concrete frame. This is a T-shaped block, with columns at relatively close spacing (10 ft.) with the lower two floors recessed and the columns free-standing. The unusual feature is the "false beam," duplicating the floor beam, which, with the first-mentioned, contains a green, granite-aggregate faced panel. This effectively reduces the horizontal emphasis of the infilling. The entrance is masked by the unusual device of painting all three bays of windows above it brown. This building, unlike so many, has the same treatment on the rear façades as on the front. It is marred only by the vestigial "framing" of the elevation and an odd articulation to an unnecessary brick flank wall.

T. P. Bennett & Son's design for office in Southampton Row (AJ, October 4, 1956) was welcomed as a more marked advance towards a "contemporary idiom" than much of this firm's post-war work. Their design for the Metal Box Company's offices, while benefiting (unlike, for instance, their Atlantic House, Holborn Viaduct) from open planning, shows little advance and is a clumsy addition to Baker Street. The four projecting wings are too squat and too close together, and the extremely elaborate handling of the Portland Stone details does not produce an effect worthy of the effort that has gone into it. The raised central panels on each end elevation are particularly unnecessary, as the rear elevation shows. What the photograph of the rear elevation does not show fully, however, is the arbitrary change from Portland Stone to overpowering brick. The way the architect has attempted to articulate the wings over the two-storey

Top, Caltex House, Brompton Road, by Stone, Toms and Partners from the east, and, above, from the north. Top, right, Bowater House, by Guy Morgan and Partners from Knightsbridge, and, centre right, from Hyde Park. Below, Finland House, Haymarket, by Kenneth Wakeford, Jerram and Harris. Below right, offices in Blackfriars Road by R. Seifert and Partners.

Offices in Baker Street for the Metal Box Company, by T. P. Bennett and Son; above centre, from the south-west. Right, Monsanto House, Victoria Street, by Sir John Burnet, Tait and Partners. Far right, above, a detail of the facade.

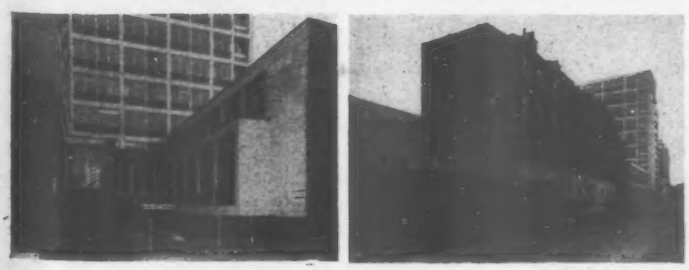
Below, Wingate House, offices of the Egg Marketing Board, designed by Sir John Burnet, Tait and Partners.



street frontage is interesting, but is not successful because of the clumsiness of the parapet walls and the fussiness of the detailing.

When Sir John Burnet, Tait & Partners designed Monsanto House, Victoria Street (completed 1956) it was one of the six best office blocks in London, for all that its rear did not match its front and that an opportunity was lost, in town planning terms, to redesign the whole Victoria Street - Tothill Street block. The structure is hard to read. Only small projecting blocks of stone at junctions of columns and beams differentiate columns from mullions concealing service ducts. Except, that is, at ground floor level. Here there is even the appearance of a first-floor beam (haunched) to collect the "loads" from these mullions. Nevertheless, by a subtle treatment of the stone cladding, including fluting of the columns, which reduces the

Above, offices in Wigmore Street by Cecil H. Elsom and Partners. Left, the Wigmore Street front; right, the rear. Below, Berk House, Baker Street by Cecil H. Elsom and Partners. Bottom left, the rear of the block; bottom right, Berk House from Adam Street.



vertical emphasis when the building is seen obliquely, a highly successful contribution to the street scene has been produced.

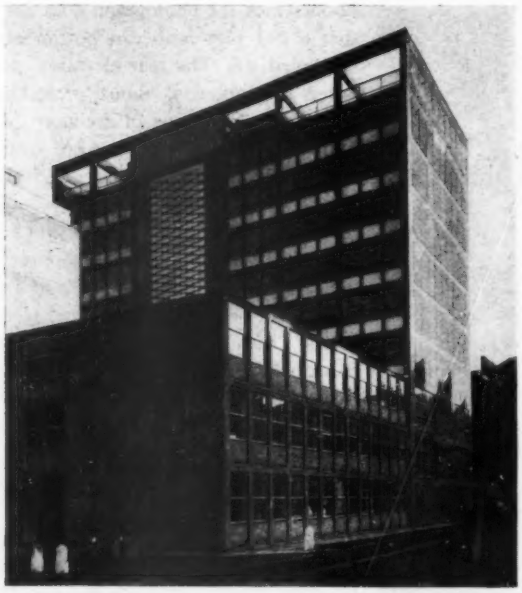
This firm's later building in Shaftesbury Avenue (Wingate House) unfortunately doesn't fulfil the promise of Monsanto House. Again, on town planning grounds (and quite out of the control of the architect) it is sad to see the chance of comprehensive development of the whole block lost. This T-shaped block embraces within its arms clusters of near-derelict four-storey buildings. Once again the column spacing is divided into three bays, but the two central mullions are slightly narrower than the columns, and to set doubt at rest the mullion rhythm is broken at first floor level, where only a central mullion is used. On this floor is the garage space, and this is indicated on the elevation. The pattern of unbonded brick panels reads more strongly than the quartzite aprons of Monsanto House, particularly as the columns are reduced in emphasis by having a single deep channel cut up the centre of them. The horizontal emphasis is not too strong from the oblique viewpoint, but the corner setback, the canopy, the framing of the fenestration with bands of Portland Stone, are all unfortunate. The building is really too massive for this site (there are two recessed floors which the photograph does not show) indicating that a 5:1 plot ratio can be too high for the small congested site. The rear elevation, perhaps because it is less pretentious, is almost preferable to the front.

The great white hope of architectural critics of office buildings is Cecil Elsom, who, with his imaginative client, appeared on the scene relatively late in the day. Too late, unfortunately, to have any effect on City offices, but in plenty of time to show developers in the West End that office workers appreciated good working conditions. Offices in Bruton Street, finished in 1956, were his first large job and one of his most successful, because of their simplicity. His later huge block in Wigmore Street was not so good. His differing treatment of the enormous façade is not happy, and the simple rear façade, once again, is the more promising. Basically this is peripheral development of a narrow site at 5:1 plot ratio, which leads to ten-storey buildings on narrow streets. It would be interesting to see what Cecil Elsom could have achieved if he had had this job *after* his Paddington scheme.

His next building, Berk House, nearby in Baker Street, is very much more accomplished. The elevations are a simple grid of Portland Stone, with alternating columns and mullions on an 8-ft. grid, which gives a reasonable minimum office size. The apron panels are of concrete, faced with green limestone chips. The end elevations are infilled with pocked roach-bed Portland; except for the eastern end of the T-shaped block, which is of brick. This relates the building with the neighbouring Georgian terraces and mews, which it would have been better to ignore. There is a slight clutter of outbuildings at the rear, and, as is always the case, the canopy-concealed, set-back, upper floors are not really satisfactory. Could not the equivalent floor area have been added on to the upright of the T? Taken as a whole, however, the block is on the way to being a model for the tranquil, unassertive buildings we require in a busy street, and the neatly detailed

bank and Bumpus' bookshop provide plenty of interest at pavement level, and railings and lamps are neat and trim.

One conundrum remains. The photograph from Adam Street shows Berk House in the distance with its two-storey wing, a short terrace of Georgian houses, and the site of another new office block. It is hard to



Above, Eastbourne Terrace, by Cecil H. Elsom and Partners, from the south. Below, the nine-storey block, from the car park on the west side.

imagine that this composition will ever be satisfactory in urban terms. This emphasizes the need for comprehensive development, and the necessity for larger-scale rebuilding.

Elsom's most recent buildings are in Eastbourne Terrace. Once again there is nothing strikingly clever or "look, no hands!" about them. But by scale and simplicity of treatment he has produced a solution satisfactory in both architectural and town planning terms. It is a very long way from being the final answer, but it has the appearance of being a system of building which is worth refining and developing. Columns are at 15-ft. centres on the high blocks, but on the façades of the low blocks they are at 5-ft. centres. Flat slab construction is used throughout. The floor edges are poured in shuttering formed from precast blocks faced with pink Aberdeen granite chips. Infilling panels are 2-in. yellow bricks in the low blocks, and a grey-pink brick on the end elevations of the tall blocks. The panels in the tall blocks are of white or turquoise mosaic. And white and olive green mosaic faces the panels and columns, respectively, of the lower recessed floors of the low blocks. There is a panel of black, white and turquoise tiles on the nine-storey block, and red and white panels mark the stairs on the west elevation of the 18-storey block.

The obvious criticism of the layout is that the tower block runs too nearly in the same plane as the low blocks. This is largely the fault of the long narrow site. It is a pity the site could not have been doubled in width, even at the cost of losing the stuccoed, shabby magnificence of Westbourne Terrace provided that the *whole* of the terrace was redeveloped uniformly.

These buildings should be visited by every planner, architect and developer who wants to become familiar with the scale of modern office buildings. The five-storey, long blocks are almost domestic in scale, being only 51 ft. high. So the 18-storey block gains by contrast. Even so, it is not the slightest bit oppressive or overpowering, even when one stands close beneath. It should serve to convince the nervous, and those who lightly bandy the word "skyscraper," that eighteen storeys is not high. But it is a minimum height for what we want if we are going to break away from canyon streets to an intelligent high-low urban scene.

Up to this point, all seems set for a happy ending to this article. Unfortunately this is not entirely so. Judging from Mr. Elsom's new Cartwright Estate development, which is nearing completion, he is not content merely to improve upon Eastbourne Terrace. Like 90 per cent. of the profession, and of developers, they are producing markedly different designs for their next project. And so the ceaseless, and in the end boring, search for originality, variety and change continues . . .

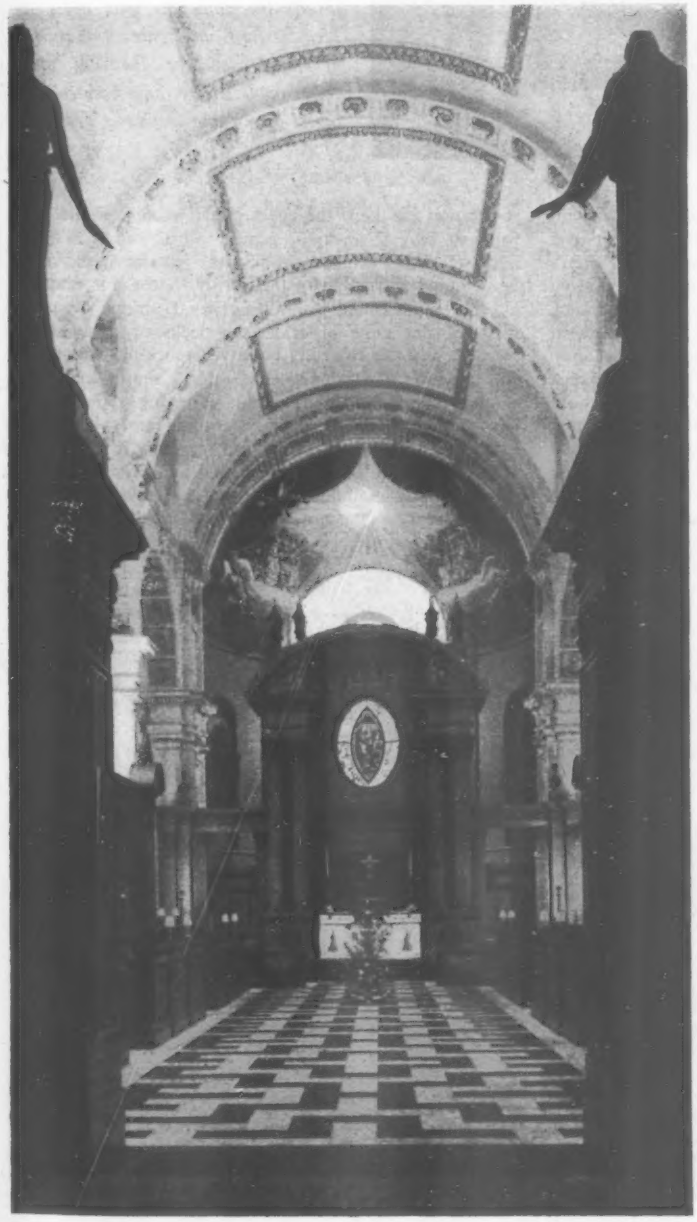
Will 1959 produce markedly better buildings than 1958? That is a lot to hope for. Development in office building has been slow, and the main accelerator of improvement—competition—is only now having effect. The architect is not usually designing for the users of the building, but for a speculating developer, so ideas for improving office conditions take longer to filter through the chain of command. In the search for better daylighting, blocks are tending to narrow from 50 ft. to 40. It has dawned on developers that the innermost 6 ft. of a room 22 ft. deep is not madly sought for, and cannot always be used just for storage. The alternative to narrowing blocks is, of course, the American idea of broadening them and producing entirely artificial conditions inside, factory-wise. It will be interesting to see whether office workers will accept this. Although the pendulum is still swinging towards greater centralization, and the office-developer's ideal is acres of uncluttered floor space, to be compartmented as the tenant wishes, with stairs and lavatories tucked away in a corner, there must be a growing number of workers to whom the soulless office block is anathema. At present there are plenty of "offices of character." But one day the new demand will arise and will have to be met, no doubt with interesting results.

BUILDING TRENDS IN 1958

Church restoration

by Ian Nairn

St. Bride's Fleet Street from the west end. The eye of the photographer has created what is not there in the flesh: a living dramatic relationship of fittings to the architectural space around them. *See comment on page 101.*



Six Wren churches. One blasted, one blown like an egg, four completely gutted. And here they are, 14 years later, spick and span and newly roofed. Why? What are we doing, performing this strange act of ancestor worship? What is the point of Wren to present-day architects—and of a Wren church enshrining a lucid and comprehensible 17th-century God to a present-day City congregation soldiering on with its less tangible and less responsive Deity?

Seven pages of the AJ's New Year issue is really no place to start looking at a problem like this. But these six churches between them do comprise most of the degrees of restoration and the attitudes to restoration, and they also span Wren's architectural achievement: from the creation of a slapdash and pedestrian background for beautifully carved fittings—St. Lawrence Jewry—to the sewing-machine precision of St. Stephen, Wallbrook, and St. James, Piccadilly, two of the most intellectually satisfying spatial problems ever set and solved by an architect. So perhaps a short look at them might be worthwhile—a look both at Wren's original achievement and at the way the restorers have treated it.

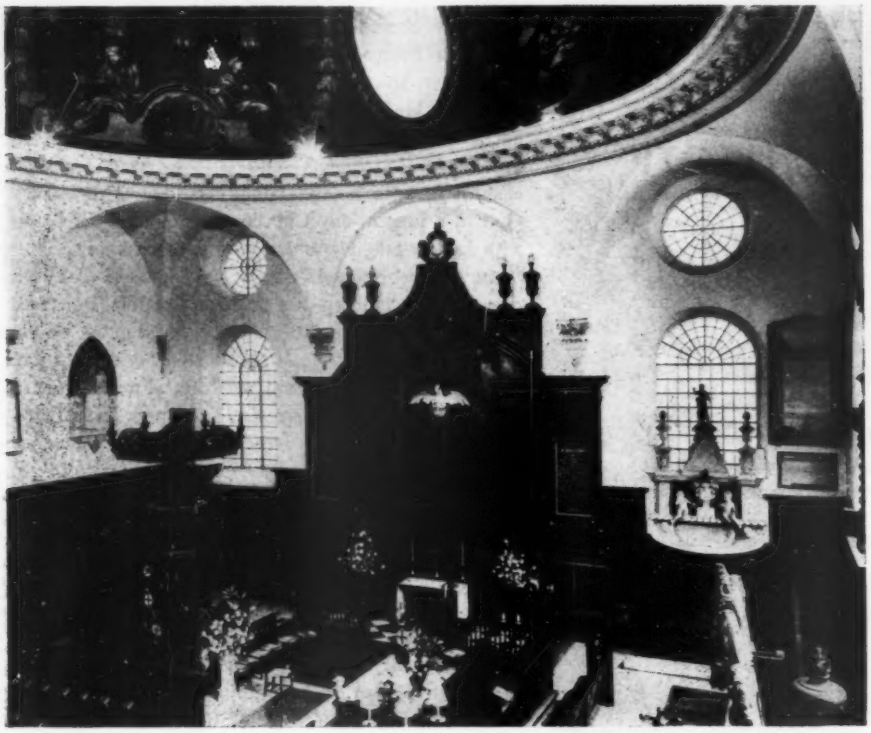
The key quality to assess is space—a trite thing, but one which cannot be said too often; the only thing one can really ask of a restoration is whether it represents the spatial experience as it was before, as far as we can judge. It is also worth asking incidentally whether the original spatial experience was worth having anyway, but this will appear later. "Spatial experience" sounds an over-refined æsthetic abstraction, and God knows there is enough of that brand of nonsense in architecture today without my adding to it. In fact the actual dimensions of the enclosing volumes are almost the least of it—if they weren't, Aston Webb would be as good as Bramante; colour, modelling, detail are all inseparable parts of the space. So is intensity of expression, so are even extraneous things like social comment and deliberate self-conscious allusions (Mannerist space like Giulio Romano's can only be understood together with a mind's-eye picture of the comparable High Renaissance space that it is trying to pervert). The only necessary condition is that the colour, detail, etc., are organized spatially, *i.e.*, not primarily for themselves but for the part they play in the building as a whole. A Grinling Gibbons swag could be ineptly carved as a piece of sculpture yet be exactly right in modelling and placing as part of a church interior.

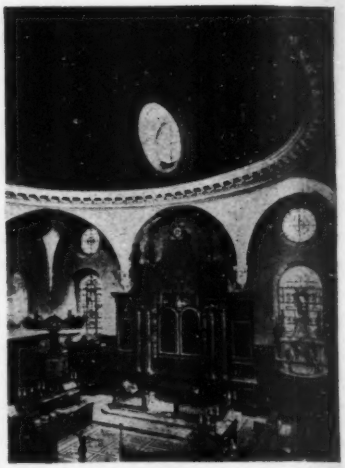
To keep this on a proper scientific footing for the comparison of results by other observers—architecture, of course, is a serious business—I am 6 ft. tall, have 6/6 vision in both eyes, no astigmatism and large ears.

St. Mary Abchurch

Restored by Lord Mottistone

The job here was fairly simple. Nothing had gone, although a good deal had been shaken up: the character had to be repaired, not replaced. Still, we have to live with enough botched jobs of this sort to be very thankful that a botch has not happened here. St. Mary Abchurch is a sweetie: perhaps the only one left now of Wren's





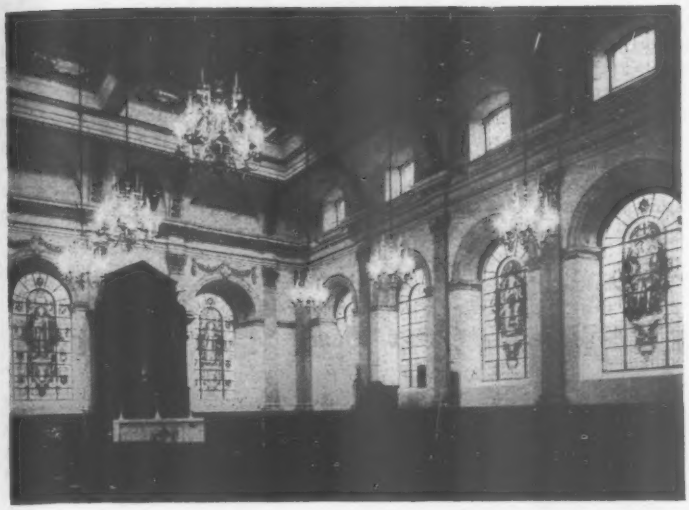
St. Mary Abchurch: The east end before the blitz (above) and after restoration (left). Though everything is superficially the same the total effect has been lessened and lightened by a series of minute touches: the side walls for example seem to have been coloured where they are now white. This is a pity.

City churches—the Victorians couldn't quite see the point of having a church so disconcertingly near in spirit to a lyric by Marvell or Lovelace. Three-quarters of Wren's churches were simply plain rooms quickly organized with some formal gesture, almost like a cabbalistic sign, an exorcism by the rational 17th century of the medieval witchcraft of asymmetrical sites and human singularity. Once organized, there is a neutral background against which the fittings, far from neutral, can play out relationships in space; remove the fittings and the result is often only a horrible plucked-chicken box. Most of these formal gestures were rough and careless: St. Mary Abchurch is completely disarming—simply an enormous shallow dome spanning from wall to wall of the square room, perhaps ten minutes' work on a table napkin (and none the worse for that) into which the fittings are fitted with a formal rightness and tightness which in the event is as spatially satisfying as St. Stephen, Walbrook. The dome was obscurely painted by Thornhill in dark browns and greys: underneath, the dark woodwork and gilding smoulders away (Thornhill, by the by, would like to have painted the fruit and flowers on the Gibbons reredos in naturalistic colours. You never know who you can trust, these days): here is the supreme case of a spatial experience depending more on colour than on anything else. The restoration has kept the effect intact when it would have been so easy to make it genteel or pi, but it is lucky that so much original woodwork remained—the thick new lamp standards with their frilly shades, for example, are no replacement for the original sharp spears of light, of the same order as the flecks of gold on the reredos; and the carefully contrived mock-old clear glass, with all sorts of strains worked into it, simply looks like a more refined kind of fake half-timbering: far better to have completely clear glass as in St. James, Piccadilly, and let it discolour naturally and unevenly if it wants to. (The small panes are not in question here. Using a spatial yardstick and nothing else, they are essential to the internal space—they are a kind of formal gesture over the outside world seen beyond, just as Wren's dome was a formal gesture over the space itself. Still, why quibble? this is one of the handful of places where you can still feel the real City of London spirit—the spirit parodied so grotesquely in all the post-war Neo-Georgian blocks—dignified but not pompous, adventurous but not coarse, respecting artistic quality as well as display. This is not a period thing: the best of the new office buildings in Munich and Zürich have this character too; but there is little enough in the City to show that it is living in the 20th century.

St. Lawrence Jewry

Restored by Cecil Brown

This one really was an offhand formal gesture—a big oblong room with pilasters wrapped around the walls made witty by the small aisle tacked on to the north side where the pilasters become columns for a while to exactly the same rhythm. The casket-like vestry was a different thing, but that went completely in the blitz and has not been rebuilt. All the fittings went too; they have been replaced by miscellaneous mock-Wren designs, not replicas. This seems pointless. There is something to be said for attempting to reproduce the old woodwork exactly, though in this case the result would have been barely worth the effort. There is more to be said for returning genuine



Wren fittings from the " duplicated " churches built out in the suburbs in the nineteenth century with the proceeds of the City sites (St. Dionis Backchurch went to Fulham, St. Antholin went to Peckham). The pulpits and screens could then be arranged in the rebuilt space as some sort of equivalent to Wren's original spatial effect. And introducing frankly modern fittings as the Germans have done at Cologne or in the Frauenkirche in Munich would have been better still: the underlying spatial intention could still have been respected without any kind of mental compromise. In fact, this would need a different standard of design as well as a different attitude of mind, for the only modern addition, the east window, is a fearful example in the weakest and most watery English mid-century style. But even so, the attempt should have been made, for the result inside St. Lawrence today—like so much inside the Church of England today—is not quite anything.

St. Lawrence Jewry was bare and Victorianized (p. 100, bottom), now it is just bare. The stained glass windows like those in the other fine churches, show English glass designing at its lowest ebb; but the technical achievement in reproducing a vault that had gone completely is first rate. The basic faults of this interior are Wren's.

St. Bride's Fleet Street

Restored by Godfrey Allen

This is a new church. Do not be misled by the talk of redoing Wren's original intentions: this is a thorough-going and partly successful neo-Wren essay which has happened to use the walls and arcades of a Wren church. What has happened is that the galleries have been left out and replaced by stalls arranged college-fashion; the east end has been completely rearranged with a big free-standing altar and a *trompe l'œil* painting on the flat wall behind (something of the kind was there originally). Spatially the stalls are nonsense, either on Wren's terms or considering St. Bride's as a new building. College stalls in a longitudinal church should surely augment and reiterate the eastward drive to the altar; these simply get in the way of the rhythm of the arcades with the heavy cornice and the heavier pediments sticking up just where they are least wanted. The east end is successful, and in a genuinely Baroque way—even the fact that the *trompe l'œil* is slightly gauche is English Baroque, too. But what a pity, having gone so far, that Wren's arcades were not

Looking east in St. Bride's in 1940 (left) and 1959; it is hardly the same building. The east end is undeniably effective as long as one takes no account of it being good in a seventeenth century way not a twentieth century one; equally the seating is a fearful spatial miscalculation. The lampshades are very ominous too.

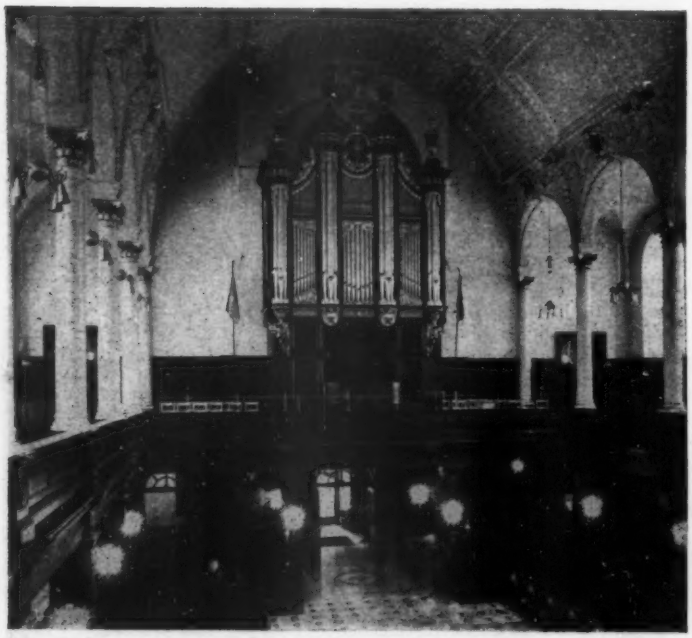
used as the basis of a completely new building with modern fittings and a modern roof, again the sort of partnership of old and new that the Germans have done so well, for example, at St. Columba's in Cologne. In fact, to be frank, Wren's St. Bride's does not seem to be much of a loss. I can only judge from pre-war photographs, but it looks to have been a pedestrian longitudinal essay with the spatial and emotional content of a hack Perpendicular church. That is no way to assess a building, and what seems to be the lumbering proportions of vault and galleries may actually have been as coherent as St. James, Piccadilly, and more deeply felt. There is certainly almost nothing to be got from the building now as a Wren church; the real tragedy is that here, without losing anything of value, there could have been a London church that is alive and convincingly twentieth century. It is worth a good deal of horrified thought that in the whole of the County of London there is only one Anglican church or part of a church that even tries to be modern—and that is *twenty-five* years old—St. Saviour out in the wilderness at Eltham. What advertisement is that for the nation's religious vitality?

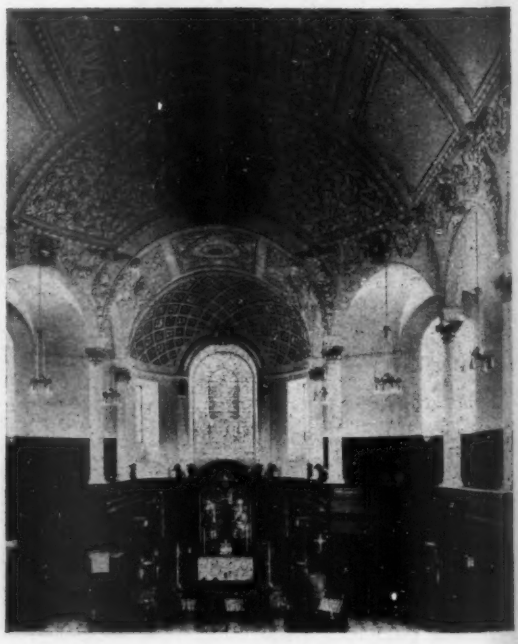
St. Clement Danes

Restored by W. A. Lloyd

St. Clement was completely gutted; it has been restored as the Royal Air Force church without any significant structural change. This was a worthwhile thing to do, because the building was, as far as we know, Wren's own spatial invention: a big central barrel-vaulted space, small subsidiary groin-vaulted aisles with galleries and a double order. Wren returned these aisles around the north-east and south-east corners of the nave to frame the apse and thus made the building into one spatial unit without sacrificing any of the longitudinal eastward drive (An academic comment? Well, how many times might a modern architect want to do just that in a big entrance hall or a council chamber or a school hall: *plus ça change, plus c'est le même chose*). Curiously, and very typically, although this is a Baroque idea Wren could not do other than give it a cool passionless classical expression: the opposing forces are balanced exactly. Anyone else would have made it into a three-dimensional conflict: this effect can in fact be seen at St. Nicholas, Great Yarmouth, where an almost literal cut-rate copy is transformed by a handful of touches into the sombre drama which is latent in St. Clement's but which Wren

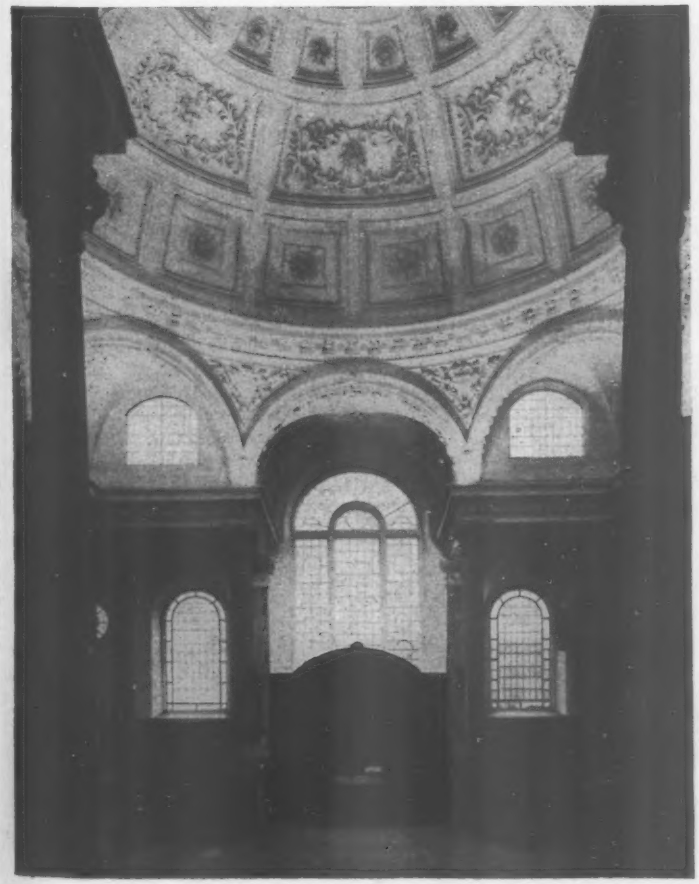
Today's west end (below) compared with a superb photograph of 1890 (above); in between it has been a shell for seventeen years. It is structurally identical yet not the same church; a deliberate process of lightening the upper half by multiple tiny touches—the columns whitened, less plasterwork on the west wall—has impaired the spatial unity in a remarkable way. As ours was a winter photograph with long exposures the results of people moving about in the nave are very queer indeed: One person appears three ghostly times. Below right, the returned galleries framing the apse Wren's superb sense of proportion never faltered for an instant, even with a problem as difficult as this.





could not see: St. Nicholas has half of the technical expertise but twice the emotional charge. The rebuilt church accentuates the coolness by reducing the colouring above gallery level in all sorts of small ways. This is a general feature of all the restorations and I am sure it is a mistake. From old photographs there was certainly far more gilding on the plasterwork, and the upper columns were usually coloured or marbled—the effect of doing this can be seen in the recent restoration of St. Giles-in-the-Fields. Wren's mathematical impassivity will come through in any case: there is no need to augment it. The whiteness of such City churches is not the metaphysical clarity of buildings like the Portuguese Synagogue in Amsterdam where everything is seen in level-headed clear light: it is simply a record of a breakdown of imagination.

Here Wren's spatial intention has clearly been preserved, so that the details become unimportant. There is an awful altarpiece and there are surprisingly good light fittings; the biggest alteration is that the central gangway is very wide—hence perhaps accentuating the embroidery effect of the heavy plasterwork above the narrow aisles—but it is in a good cause: the squadron badges let into it give the church a human *raison d'être* which the others have not got at the moment, yet without any sense of blowing an old and rather cracked British trumpet. St. Clement Danes means something to the visitors, and this has been done in terms of the building itself and without removing the Wren character—quite an achievement.



St. Stephen Walbrook

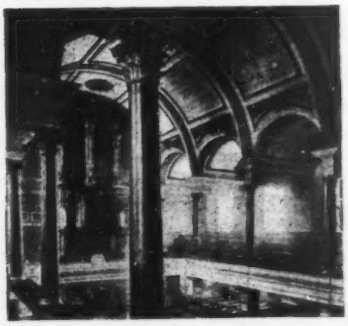
Restored by the late Gilbert Meadon

St. Stephen had its dome stove in: it has been put back so that one would never guess it had been missing for ten years. Technically this is the best of the restorations, though it was also one of the easiest, for what original fittings had escaped the Victorians were also spared by the bombs. The print of about 1750 shows no pews, but may be an idealized view: the church certainly had box pews by the late eighteenth century, and this would make a more satisfying space, both because the bases of the columns are now exposed and because all the spatial lines of force lead up into the dome and not across through to the E. end: to accentuate the floor is to beg Wren's ambiguity. There is not much point in describing St. Stephen because it has already been done superbly by Nikolaus Pevsner in the *Outline of European Architecture*: the basis of the design is that there are three churches existing simultaneously on the same ground plan—a central domed church, a Greek cross and a simple symmetrical arrangement of columns inside the walls: a double fugue in space. I can only add two things. One is that the polyphony is between eyes and mind, as well as between opposing architectural treatments: for the visitor can only see, spatially, the domed church, and has to infer the other two, cerebrally, from reading the ground plan. This refinement must have pleased Wren no end. The other thing is that by adding an extra bay at the W. end Wren has provided a place from which one can see the whole symmetrical space as symmetrical and yet feel part of it: one is inside and outside it at the same time. Hence, a paradox for any architect at any time: if you have a completely symmetrical space you can never really apprehend that it is symmetrical unless there is an annexe from which you can look in (if you stand in the middle you may know intellectually that the space is symmetrical: but to *apprehend* it you have to turn round and break the spatial experience). As at St. James Piccadilly, the proportions are incredibly good; and here also they seem to be approximate but not exact geometrical relationships.

An idealized wide-angle print of 1750 (*top*) *and today's east end* (*left*). *The sheer intellectual power of the design seems to have kept it safe from restorers and improvers and remains quite unimpaired today. As in* 1730—*when Burlington heard of the church for the first time when in Italy—so now: students may rush to Borromini's S. Ivo and S. Carlo in Rome without ever realizing that here is an exactly comparable masterpiece in English terms.*

St. James Piccadilly

Restored by Sir Albert Richardson



The west end seen from the south gallery (above, before restoration; below, after). The columns are no longer coloured—which is not very important here—but otherwise the church has been reproduced exactly and admirably . . .

Functionally, this was Wren's own favourite parish church. The nave roof was burnt but most of the fittings were saved and a good deal of the vaulting of the aisles also. Here reinstatement was practicable and worthwhile, because of the quality of the original design; and with one barely credible exception has been carried out impeccably. The design is, in fact, a classic of longitudinal proportion just as St. Stephen Walbrook is a classic working out of a central domed space. The idea is simple but fundamentally satisfying—a big central barrel-vaulted space counter-pointed by transverse barrel vaults over each bay of the aisles, the gallery problem solved to perfection, as Wren realised, with a double order, correct Corinthian above and a skimpy wood-panelled derivative of Doric below. All of this is in simple mathematical proportion, give or take a foot or two—and before someone constructs one more pure rigid aesthetic out of this, may one say that it is probably just those slight imprecisions which give the supremely mellow and humane as well as mathematically right proportions.

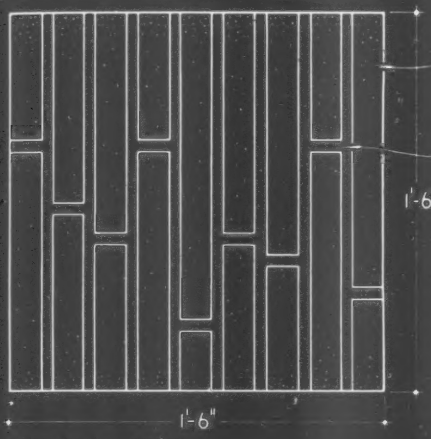
What it lacks is any emotional content, which is what Wren temperamentally could not provide. This does not make it better nor worse, but different: life has room for both types of architecture just as it has room for both types of person. St. James is as good as it could be of its kind; the qualities which were not Wren's to give are not things which could ever be added to produce an "ideal" St. James, Piccadilly: if the experiment were tried they would merely annihilate what is there already. The interior of Christchurch, Spitalfields, starting from almost the same spatial recipe, manages to dig deeper into the emotional charging-up of space than any church in London: but there is no way of combining the two. One is wide and the other is deep and that's all there is to it. Architecture does not change any more than man himself changes in a mere three hundred years: the same relationship is true almost word for word between the Lever Building—classically proportioned, humane, friendly, emotionally cool—and the uncouth intense torrent of the Seagram Building opposite.

However, back to Jermyn Street. St. James is back as it was, and looks more convincing than any of the other major repairs: again, the columns seem to have been coloured originally, but the whole composition is so mathematically exact that colour does not matter much. The east window is awful but is probably not the fault of the architect: the light fittings are a catastrophe and are undoubtedly nobody else's fault but the architect's. The criterion here again is purely spatial: Sir Albert is welcome to design in whatever style he wishes and the best of luck to him. But those fearsome mushroom stalks jut up into Wren's space in a way that comes very near to making nonsense of the whole design, destroying the very delicate and exact balance between the nave space and the spaces over and under the galleries. This lapse of sensibility seems quite inexplicable when contrasted with the care lavished on the rest of the restoration: whatever their architectural merits, Sir Albert's post-war buildings pose some of the thorniest psychological problems that architecture has produced in the last few decades.

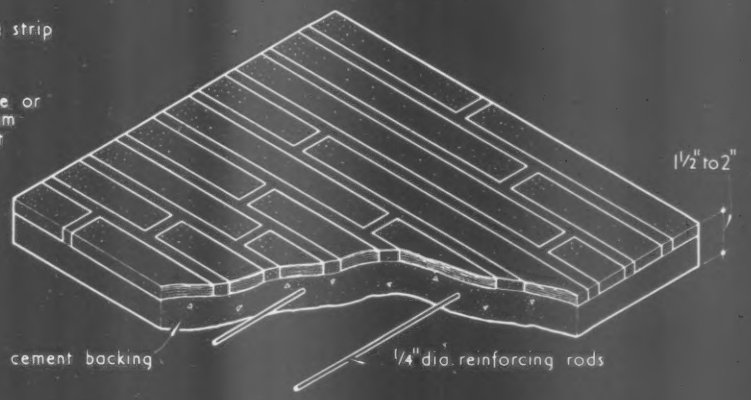
. . . except for the light fittings, as obtrusive as any of the concrete ones at Ampthill. Two shots show how some lampstandard or other interferes with almost every view: far left, looking towards the altar from one of the back pews, where the things seem to be marching all over you. Left, looking up at a bay of the gallery and seeing a bronze stalk where one expects sky—with two more thrown in in the foreground for good measure. With everything else so well done, this is very sad.

FLOOR UNITS SLATE

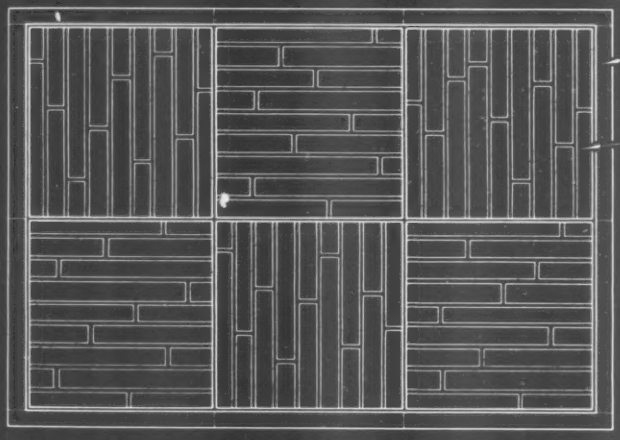
The Architects' Journal Library of Information Sheets 704. Editor: Cotterell Butler, A.R.I.B.A.



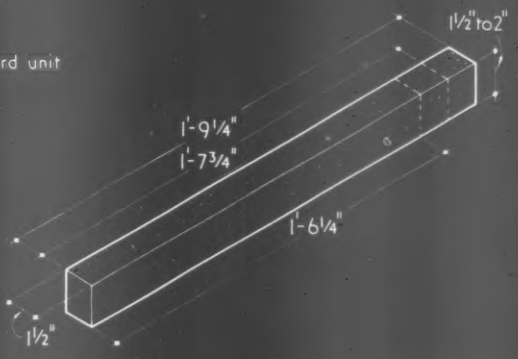
STANDARD UNIT.



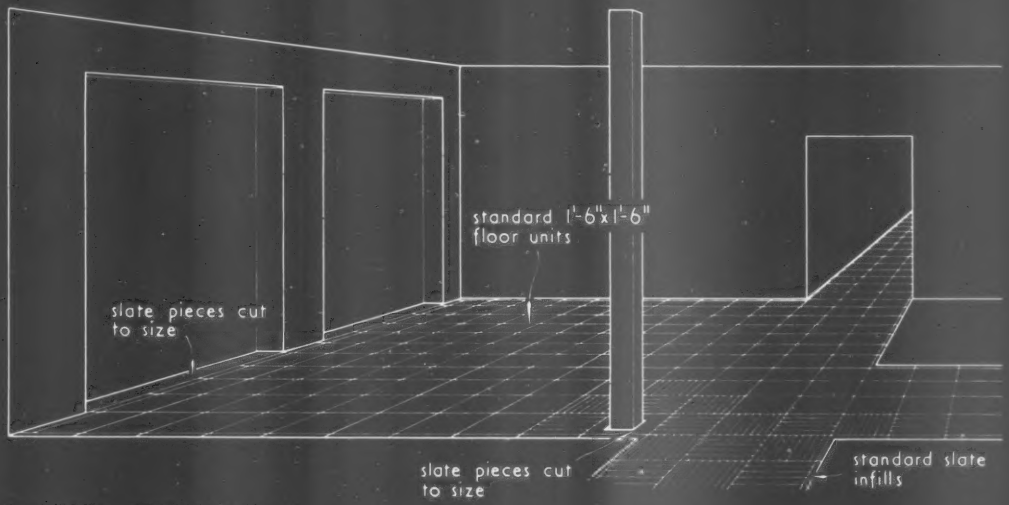
ISOMETRIC SKETCH SHOWING CONSTRUCTION OF UNIT.



TYPICAL ARRANGEMENT OF UNITS.



SLATE INFILL.



TYPICAL FLOORING APPLICATION.

WINCILATE NON-SLIP FLOORING AND PAVING. Manufacturer: Bow Slate and Enamel Company Limited

18.N1 ·WINCILATE· NON-SLIP FLOORING AND PAVING

This Sheet describes Wincilate non-slip flooring and paving units and slate infills. They are designed for all types of flooring, external and internal, especially where hard-wearing non-slip surfaces are essential. Slate window sills are described on Sheets 24.Z1 and 24.Z3, slate surrounds for windows on Sheet 24.Z2, slate copings and cappings on Sheet 5.B1 and slate facing on Sheet 5.B2.

General

The durability and other properties of natural slate have long recommended it as flooring material in churches, etc., but its tendency to become slippery, especially when wet, has limited its use in public buildings, schools and the like. Attempts have recently been made to overcome this disadvantage by grooving the surface of the solid slate and filling the grooves with non-slip material. These attempts have met with only partial success and have made the flooring very costly to manufacture.
Wincilate non-slip flooring and paving units have been developed to meet all these problems: it retains the advantage of natural slate, has a non-slip surface and is produced at an economic price.

Material

The standard unit consists of slate strips with hard-wearing, non-slip joints on a backing of reinforced cement. Slate is chemically inert, non-porous and does not warp, shrink or rot: it forms 75 per cent. of the surface of each unit. The jointing material is a specially-prepared concrete with suitable white or cream aggregates that will not powder or crack under normal conditions.

Construction

The unit is made up of narrow slate strips (approximately 1½ in. wide) in random lengths to make up the unit length. The backing is of 1-in. thick (minimum) rapid-hardening cement reinforced with three ¼-in. steel rods. The slate is prepared to key with the backing and the joints.
The infills are solid slate and combine with the units to produce any desired pattern (see *Applications*).

Sizes

The standard unit is 1 ft. 6 in. by 1 ft. 6 in. by 1½ to 2 in. thick. Special sizes can be supplied but it is recommended that these do not exceed 3 superficial feet or be less than 1 ft. 6 in. in width. The slate infills are normally supplied in lengths of 1 ft. 6¼ in., 1 ft. 7¾ in. and 1 ft. 9¼ in. to allow for a ¼-in. joint between units. They may, however, be supplied to suit a larger or smaller joint without extra charge. Slate infills are 1½ in. wide by 1½ to 2 in. deep, depending on the thickness of the units with which they are to be used. Where awkward corners, upstands or columns occur and notching or shaping may be necessary, it is recommended that plain Wincilate slate pieces be used; these pieces are supplied cut to size.

Weight

The standard 1 ft. 6 in. by 1 ft. 6 in. unit weighs approximately 50 lb. Slate infills each weigh approximately 4 lb.

Fixing

Units and infills are normally bedded on a concrete subfloor with a screed of Portland cement. An ordinary cement joint may be used between units or alternatively, as the edges of the units are true, bitumen or other adhesives may be used with close joints. During fixing, the surface of the units and infills should be kept as clean as possible and protected, if necessary, until other building work is completed, so that the polish on the units may be maintained.

Applications

The units may be arranged end-to-end or in the basket pattern shown in the drawing on the face of the Sheet. The infills may be used for edging or to split up the floor design in any way desired. The drawing on the lower face of the Sheet shows how the units may be used for corridors or circulation guides in factories, etc., as well as for larger floor areas.

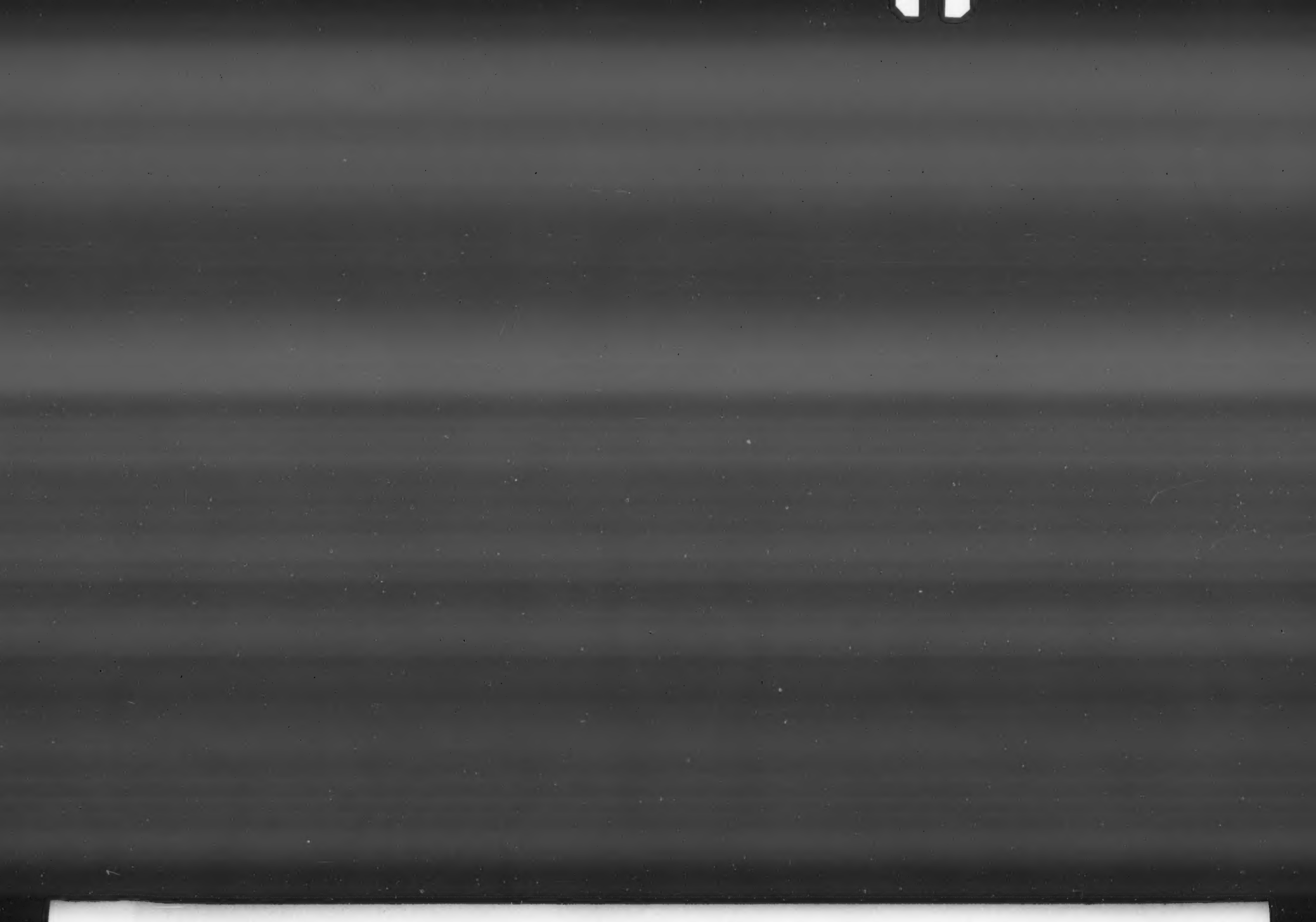
Colour and Finish

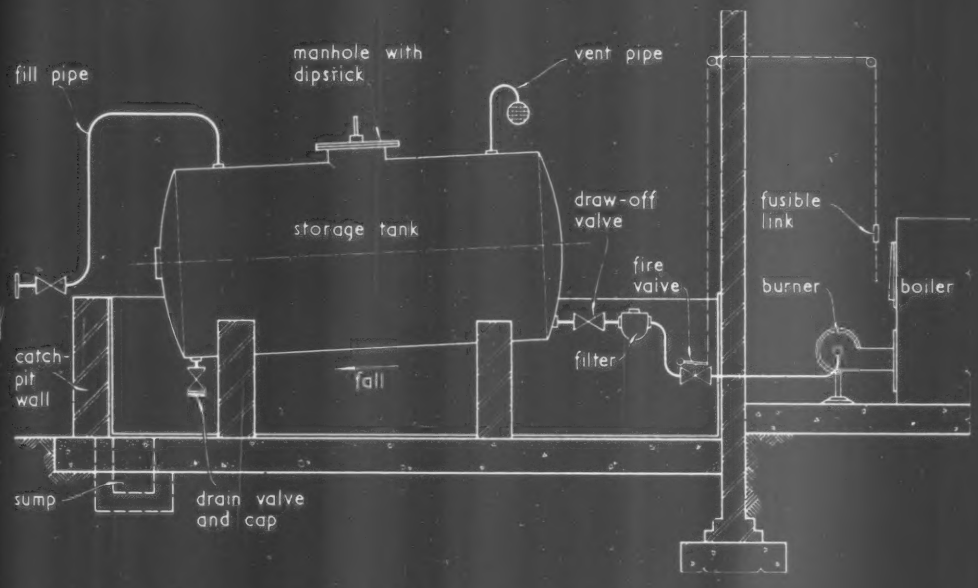
The slate strips and infills are blue-grey with white or cream joints. The face of the unit is polished smooth, the varying ratios of wearing surfaces of slate to joints giving a permanent non-slip finish.

Maintenance

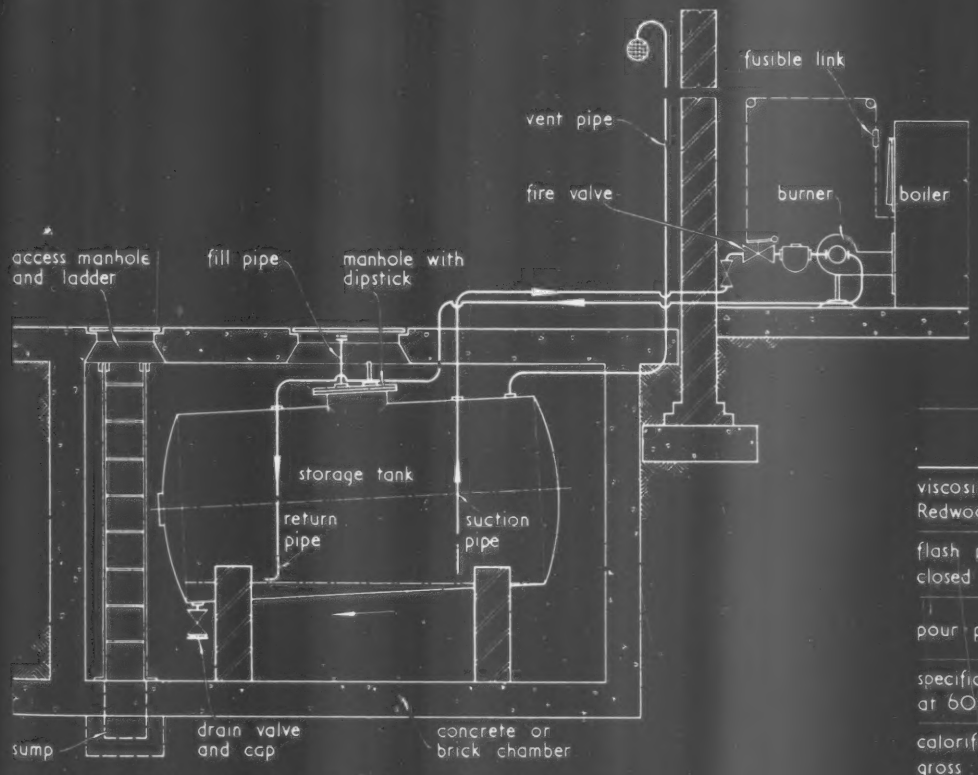
For external applications the units will weather excellently and normal sweeping and brushing is sufficient. Internally, the polished surface may be easily maintained by the use of normal floor polishes without destroying the non-slip texture of the surface.

Compiled from information supplied by:
Bow Slate and Enamel Company Limited.
Address: British Railways Bow Depot, Old Ford Road, Bow, London, E.3.
Telephone: Advance 2203–5.





DIAGRAMMATIC LAYOUT FOR STORAGE AT GROUND LEVEL.



DIAGRAMMATIC LAYOUT FOR STORAGE BELOW GROUND LEVEL.

test	distillate fuel oil
viscosity : seconds Redwood I at 100°F	35
flash point closed °F	170
pour point °F	5
specific gravity at 60°F	·832
calorific value gross B.t.u./lb	19,600

TYPICAL FUEL ANALYSIS

STORAGE OF DISTILLATE FUEL OILS. Compiled from information supplied by Esso Petroleum Co. Ltd.

29.A2 STORAGE OF DISTILLATE FUEL OILS

This Sheet describes the storage of distillate fuel oils for domestic and industrial heating systems. The recommendations given are in accordance with B.S.799 *Oil Burning Equipment.*

Delivery and Handling

Fuel oil products are supplied from the refinery via terminal and bulk plant. Methods of delivery are available to meet all requirements, e.g. barrels, road tank wagons, rail tank cars, dumb or powered barges, coastal or ocean tankers. The method of bulk delivery depends upon the location and accessibility of the site, but road tank wagon is usual.

Capacity of Storage Tank

Tank capacities vary between 160 and 12,000 gallons approx. The size selected should be adequate for the delivery load, with a margin for reserve, the quantities being based on the rate of consumption. Generally, provision for three weeks' storage at maximum consumption should be made. The minimum quantity for bulk delivery is 100 gallons.

Siting

Tanks should, wherever possible, be installed in the open above ground, contiguous to an outer wall, so positioned that any overflow or leaks will flow into a safe place. Where underground storage is unavoidable, the tank must be installed in a brick or concrete pit and anchored to prevent displacement. It is desirable to provide a reasonably oil-tight catchpit beneath any tank to retain overflowing or leaking oil: the capacity should be equal to the contents of the tank plus 10 per cent.

Storage tanks within inhabited buildings should be at the lowest practicable level, in a separate chamber with a catchpit. Walls and ceilings should have a fire resistance of at least one hour. Any door in the walls should have a resistance of half an hour. Where the tank is within the boiler house of an inhabited building, it should be provided with an oil-tight catchpit: walls, ceiling and any doors should have a fire resistance equal to that given above.

Tank chambers must be adequately ventilated direct to the open air. A tank should not be placed on or over a roof or in a roof space.

The L.C.C. has special requirements for buildings under its control which include all licensed premises and those exceeding a cubic content of 250,000 cu. ft. Application should be made to the L.C.C. Architects Department for the relevant code of practice.

Design and Construction of Tank

Cylindrical tanks are to be preferred, but other shapes may be used to suit site conditions. They should be of mild steel plate, welded construction, in accordance with Section 6 of B.S.799. Galvanised equipment should not be used in any circumstances.

Fill pipe: This should be as short as possible and free from sharp bends. A gate valve should be fitted where the fill pipe is not arranged to drain into the tank. The inlet of the fill pipe should be provided with a chained dust cap. For road tank delivery the fill pipe should be preferably 2-in. bore.

Vent pipe: A vent pipe should be fitted on the top of the tank, terminating in the open air. The diameter of the vent pipe should be equal to that of the fill pipe at least. It should have no sharp bends and terminate in a goose-neck connection with large-gauge wire cage protection. For high vent pipes special reference should be made to B.S. 799.

Drain valve: This should be constructed of mild steel or gunmetal and be provided at the lowest point on the outside of the tank and fitted with 1½ to 2 in. valve and cap.

Manhole: An accessible manhole must be provided not less than 1 ft. 6 in. by 1 ft. 4 in., if oval or rectangular, or 1 ft. 6 in. in diameter if circular. The cover should be bolted and jointed to ensure a gas-tight fitting in accordance with the Factories Act.

Oil-level indicator: Each tank must be provided with an oil-level indicator of one of the following types: float gauge, hydrostatic or pneumatic gauge, dipstick. A gauge glass must not be used.

Draw-off connection: This should be at the higher end of the tank, 3 in. minimum from the base. To enable the tank to be isolated, a gate valve should be fitted to the draw-off pipe, adjacent to the tank.

Fire valve: A fire valve must be provided in any pipe capable of conveying oil from the tank to the boiler house. It should be fitted as near as possible to the tank and normally held open by a wire in tension. Fusible links arranged to break at temperatures exceeding 155 deg. F. are incorporated in the wire adjacent to fire hazard points.

Filters: For distillate fuel oils, single stage filtration is required (120 mesh/linear inch).

Pipework for all oil lines should be carried out in accordance with best steam practice in mild steel or copper tubing to the appropriate B.S. specification. Galvanised metals, lead, zinc and brass should not be used. Welded joints are preferable but screwed joints are satisfactory.

Installation

Horizontal cylindrical tanks and rectangular tanks should be supported on brick, concrete or metal bases with foundations of sufficient strength to take the weight of the tank when full, plus the weight of the supports, with a suitable safety margin. Before installation, the underside of the tank, where in contact with the supports, should be painted in an anti-corrosive paint. To assist in draining, and for sludge accommodation, horizontal storage tanks should be set with a fall from the outlet end towards the drain valve of ¼ to ½ in. to a foot.

Relevant Publications

B.S. 799 : 1953 *Oil Burning Equipment.*

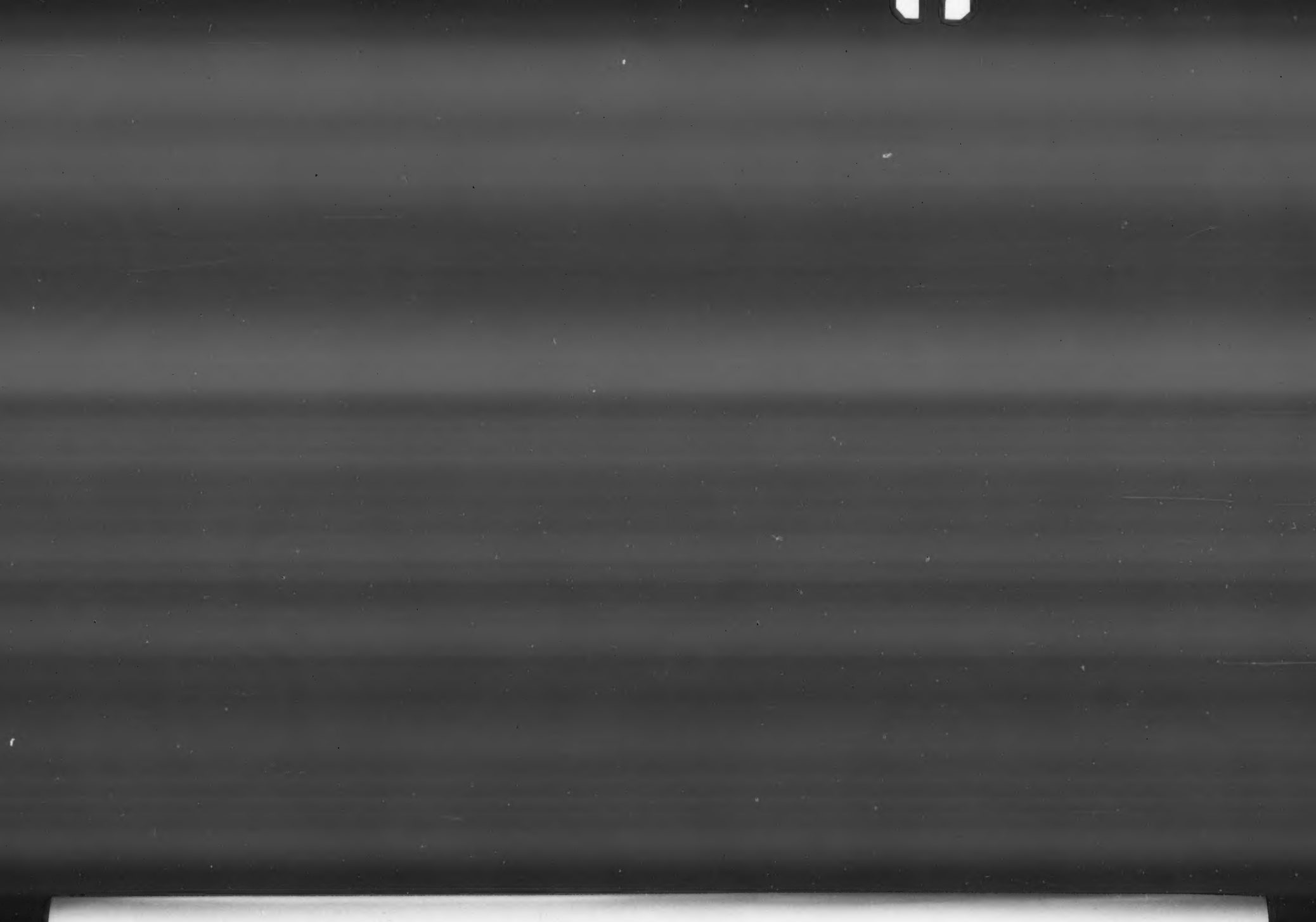
Fire Protection Association. London 1957. *Safety Recommendations.*

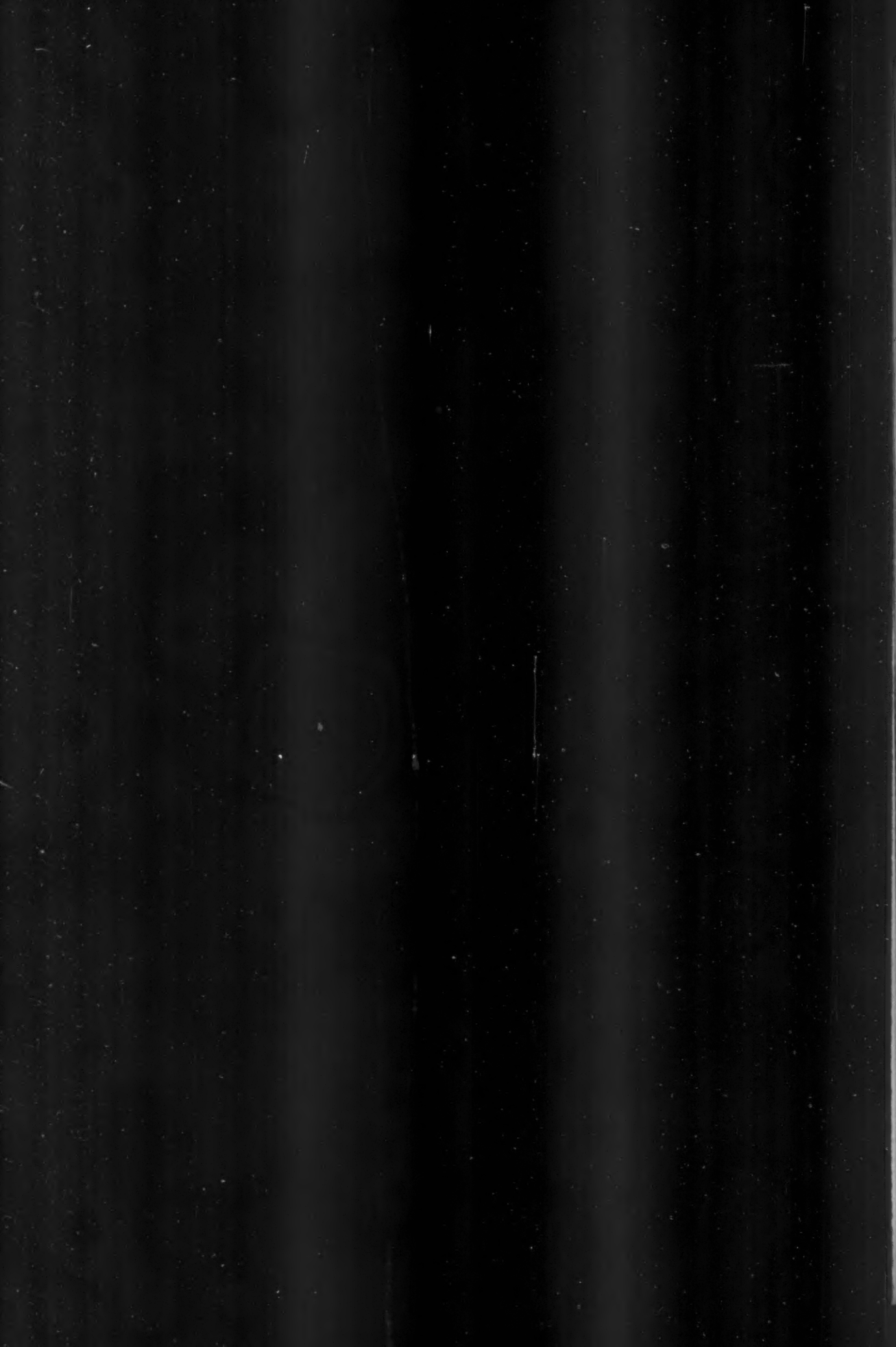
Compiled from information supplied by:

Esso Petroleum Co. Ltd.

Address : 36, Queen Anne's Gate, London, S.W.1.

Telephone : Whitehall 5151.





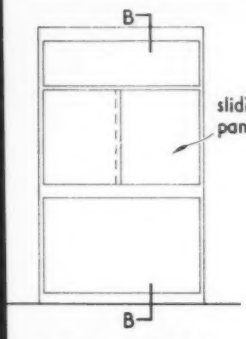
PORTER'S KIOSK : OFFICES IN LONDON, W.1.

Oliver Carey, architect

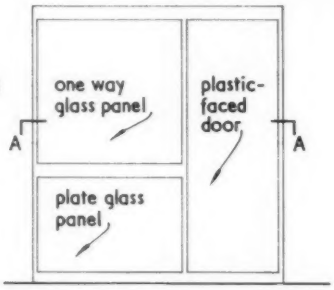
This detail shows an ingenious use of lacquered brass trim to produce those ideal junctions which theory requires. Note (on the drawing) the use of rectangular steel core sections in place of framing.

PORTER'S KIOSK : OFFICES IN LONDON, W.1.

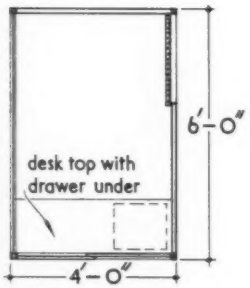
Oliver Carey, architect



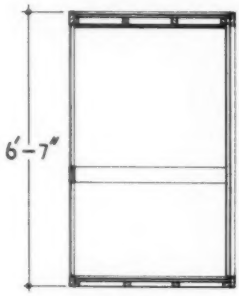
FRONT ELEVATION.



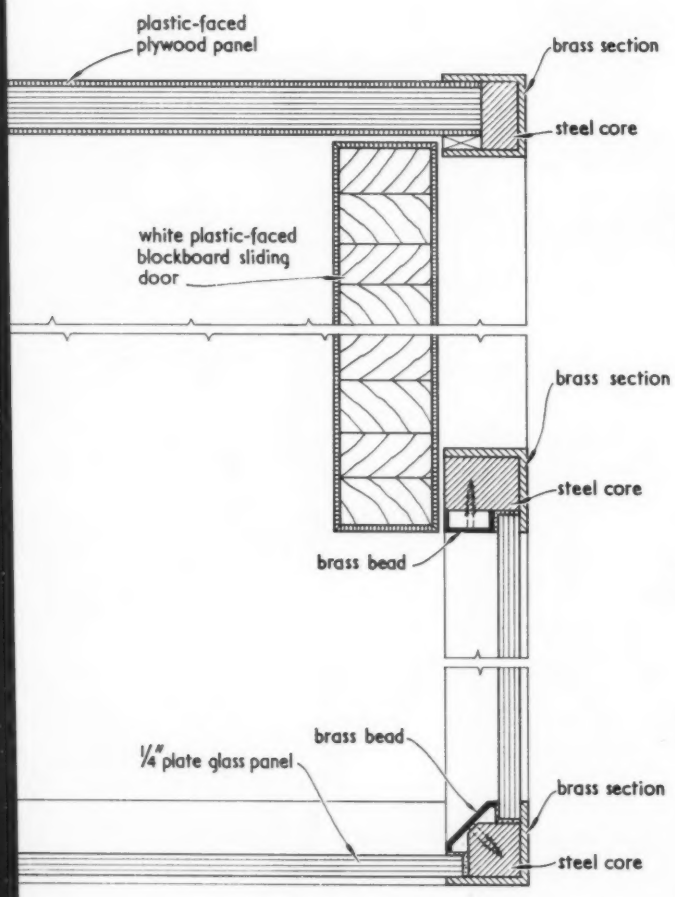
SIDE ELEVATION. scale ¼" = 1'–0"



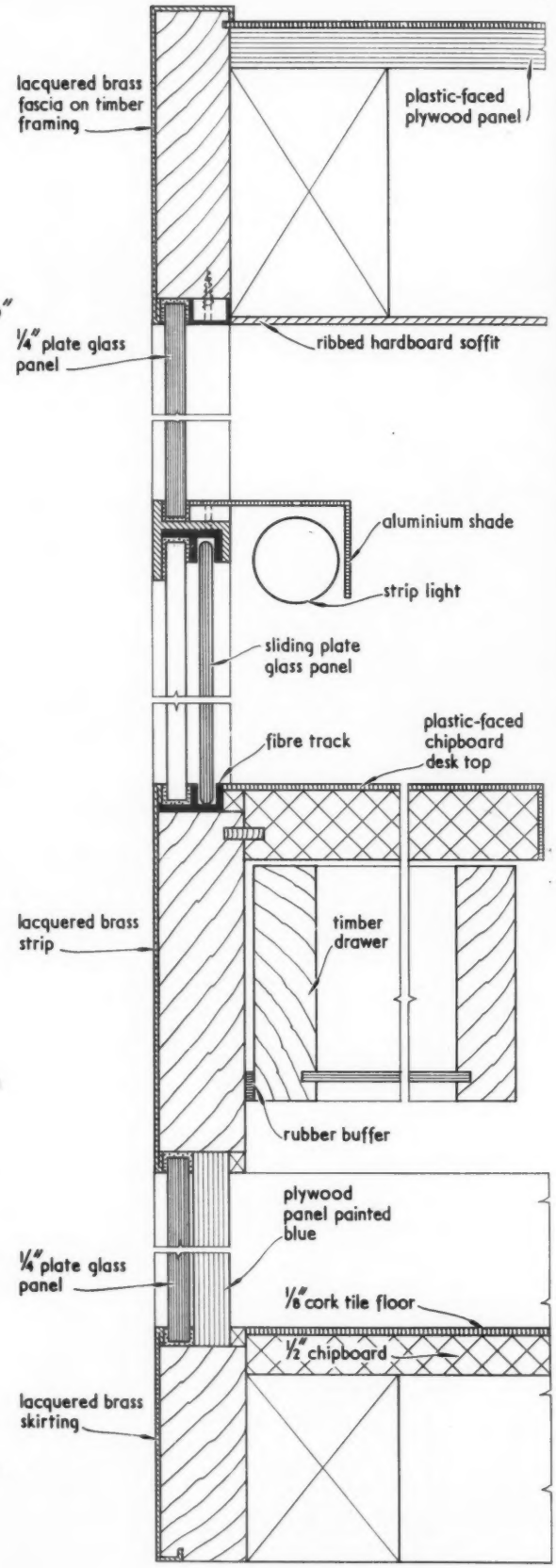
PLAN. scale ¼" = 1'–0"



SECTION



PLAN AT A–A. scale ½ full size



SECTION B – B. scale ½ full size

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BUILDING TRENDS IN 1958

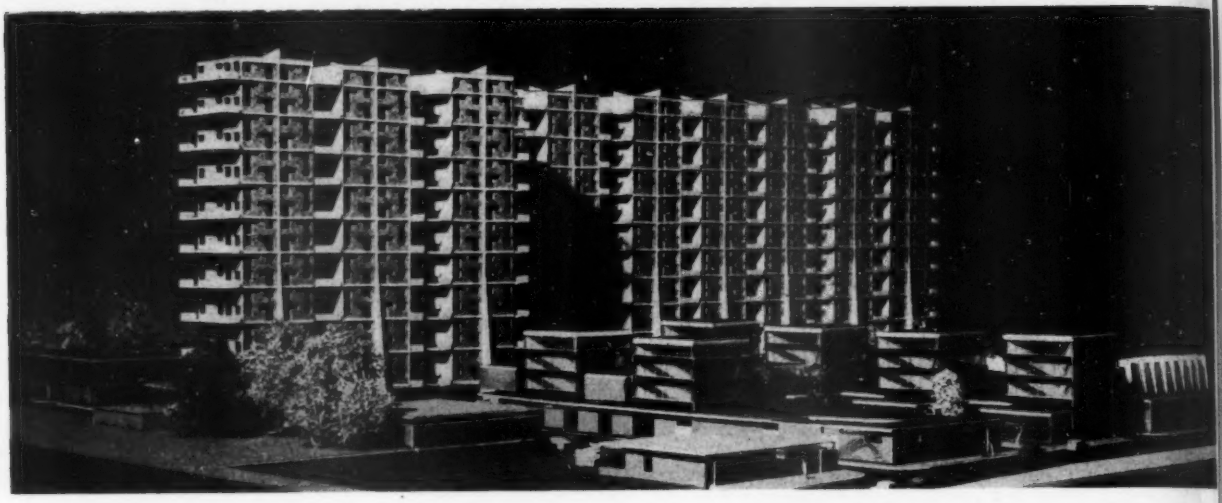
Housing

by Robert Purdew

Mr. Purdew is a member of the Architects' Department of the LCC, but the opinions and conclusions expressed in this article are, of course, entirely his own.

The fringe sites round cities, for housing estates, with their natural advantages of existing trees and landscape are now completed or nearing completion as here at the LCC's Roehampton Lane Estate, one of the most successful of this form of housing development. The problem of environment is now made more difficult by the concentration upon slum clearance.

The past year has been a significant year in Public Authority housing, for the schemes published during it show that a qualitative change has taken place. These schemes have all been designed subsequent to the revision of subsidies in the 1956 Housing Act, and it is this Act which is responsible for the change. To those not actively engaged in Public Authority housing it may seem strange that architecture can be so profoundly affected by an Act of Parliament. But it is important to appreciate that this form of housing is uneconomic in that the incomings from rent are less than the outgoings in interest on the capital loan charge, this deficiency being made good mainly by the government subsidy and sometimes partly by the local authority concerned. It is not surprising, therefore, that change in these subsidies effects a change in housing, or that housing development should follow closely the most advantageous subsidy rates. The intention of the new Act was to concentrate



The LCC is by no means the only authority building very tall blocks as this very interesting scheme in the Gorbals shows. The private balconies are large enough to sustain the description of gardens and go a long way towards providing the amenities of the house but in a vertical village. Architect: Basil Spence.

housing on slum clearance by abolishing the "general need" subsidy and granting subsidies mainly for slum clearance, a doubtful decision since although most authorities had filled the many sites created by war damage within urban areas and any other available sites on the fringe which could be zoned for housing purposes, it restricts development to small sites and largely prohibits comprehensive development of any kind.

The effect of slum clearance is to confine Public Authority housing to higher density zones to a greater extent than ever before. The new slum clearance subsidies differ from the old not only in intent but also in detail by relating the rate of subsidy to the height of blocks:

Type of Dwelling	Annual Subsidy
Houses or flats up to 3-storey	£22 1 0
Maisonettes or flats in 4-storey blocks	32 0 0
" " 5-storey "	38 0 0
" " 6-storey "	50 0 0

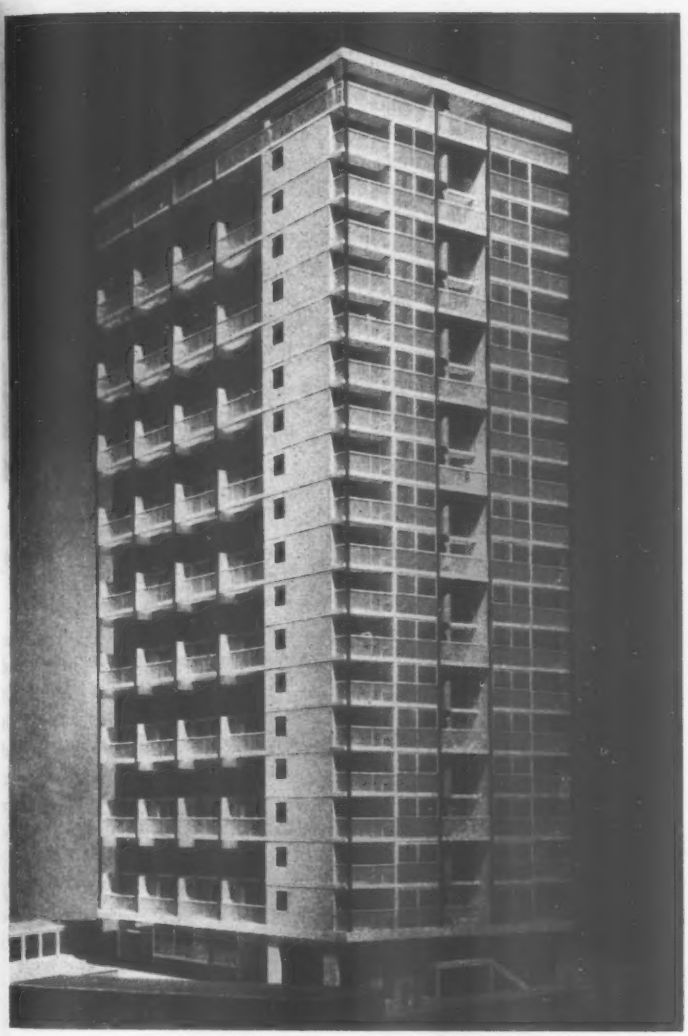
plus £1 15 0 for each storey over six

All subsidies are annual amounts payable per dwelling per annum for 60 years.

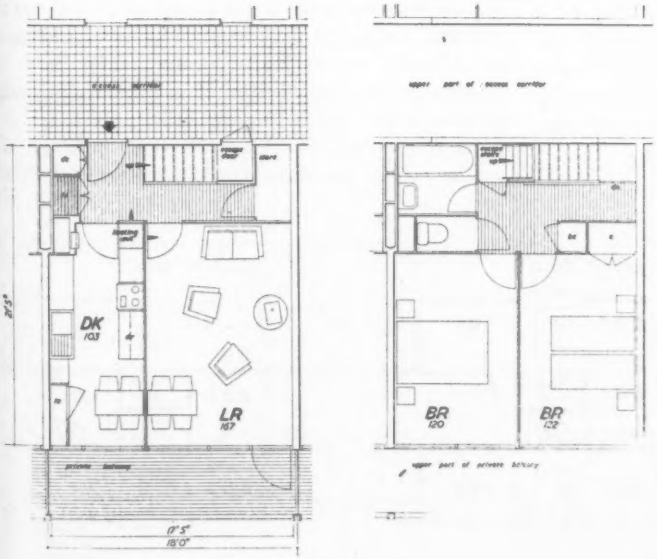
An additional "expensive sites" subsidy is also paid, but on an acreage basis.

It becomes immediately apparent from this table that the most favourable heights for blocks are now 4-storey and 6-storey, whereas in the 1946 subsidy they were 3-storey and 5-storey. Authorities have, therefore, switched to these heights. The change from 5-storey to 6-storey is of little importance and presents few problems, visual or technical. The limiting factors which determined the 5-storey height were the 42-ft. height means of escape regulations (this being the height an escape ladder will reach), and also the 9-in. brick cross wall construction generally employed on these blocks, and both have been "stretched" to cover the added storey height. The virtual outlawing of 3-storey height blocks in favour of 4-storey is of greater importance, for many authorities refuse to accept 4-storey walk-up flats, and 4-storey blocks in new layouts invariably contain maisonettes—a type of dwelling which is said to appeal to tenants because it is like a house and can have a garden. It is difficult to see why the 3-storey block should have been singled out for such a poor subsidy rate. It is one of the cheapest types to build, and since few authorities have ever felt the necessity in this case of giving the ground floor dwellings gardens, grassed areas could sweep up to the blocks. It is also more adaptable for housing smaller dwelling units, and has the advantage in use of a "clean" access face, that is, direct staircase access and no access galleries.

The tendency to greater and greater height is well illustrated here on the LCC Draper Street Scheme with its 27-storey block. The plan is largely similar to the Warwick Crescent block shown opposite.



This plan for the Warwick Crescent scheme is in use by the LCC in a number of schemes in blocks of varying height from 17 to 27 storeys. Four maisonettes are arranged on either side of a 2-storey central access corridor with 2 flats at the south end fenestrated mainly to the south to take the maximum advantage of aspect.



The most important difference in the new subsidies, however, is undoubtedly the introduction of the height subsidy of £1 15 0 per dwelling per storey above six storeys. This, it becomes evident, has been well calculated, offsetting the higher costs of tall blocks with disconcerting exactness, so that in the final financial result there is little difference between the deficiencies for a 4-storey block and a tall block after this subsidy has been included. This favourable subsidy rate, and the higher density sites, have been the two factors influencing the increase in the number of tall blocks appearing in new schemes.

It is not, however, the number of tall blocks appearing but their rapidly increasing height which has been the remarkable phenomenon. In retrospect it seems but a short time since the appearance of the first 11-storey point blocks of the magical 100-ft. height, and yet many blocks of 20-storeys and over have already been published in the design stage. There is the Basil Spence scheme for the Gorbals in Glasgow, and a number of 20-storey blocks, such as Warwick Crescent, by the LCC. One block, the LCC's Draper Street, at Elephant and Castle, even towers to 27-storeys. One is left to wonder only how tall the tallest block will eventually be, and what is the limiting factor that will finally call the halt.

All these new tall blocks display common trends. Most depart from the four flats per floor plan form of the original 11-storey point blocks in favour of a larger number of dwellings per floor. This is done to reduce the share in the various communal services which increase in cost disproportionately to the increase in height. The 110 ft. per minute lifts, for example, are inadequate to serve such high blocks, and 300 ft. per minute lifts must be used, almost doubling the cost of the installation in terms of cost per dwelling unit served.

The unit dwellings themselves are usually of the maisonette type, ranged on either side of a central access corridor. The central corridor affords a more civilised form of access than external galleries, giving greater privacy to dwellings and, more important still at these heights, protection from the elements. It also means that a clean and colourful floor finish can be provided, such as thermoplastic tiles, instead of the dreary asphalt finish of external galleries. Experience with enclosed lobbies on point blocks has shown that tenants take great care in polishing these floors, which, unlike, asphalt, give reward for labour expended. In many 11-story point blocks one is almost afraid to cross them for fear of spoiling their perfect polish. There is little fear of these corridors becoming smelly, for one of the requirements of the means of escape regulations is that they should be well ventilated. At these exposed heights the degree of ventilation demanded is likely to prove ample rather than inadequate.

The LCC Warwick Crescent block shows this type in its simplest form, with single aspect maisonettes on either side of a double-height central access corridor. This arrangement, although attractive in its simplicity, has the one main disadvantage of aspect. The block must be orientated with the corridor on a north/south axis, which limits the use of the site. Furthermore, a

LCC: Tidey Street. Yet another 20-storey housing block. This attempts to solve the problems of aspect and cross-ventilation in central access dwelling types with all living rooms facing in the same direction.

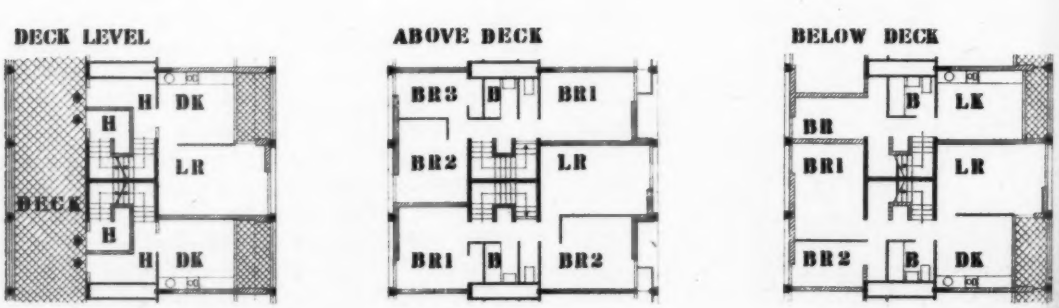
This very interesting scheme at Park Hill, Sheffield by J. L. Womersley, City Architect, now under construction has maisonette type dwellings of various size ingeniously planned into a long serpentine block which increases up to 16 storeys in height as it flows down the sloping site. This is one of the few schemes in England to incorporate the Garchey system of refuse disposal, the vast majority still being forced on cost grounds to use the chute and chamber system. The demand for higher standards and the increasing difficulty experienced by authorities in disposing of refuse may well necessitate the change in other areas.

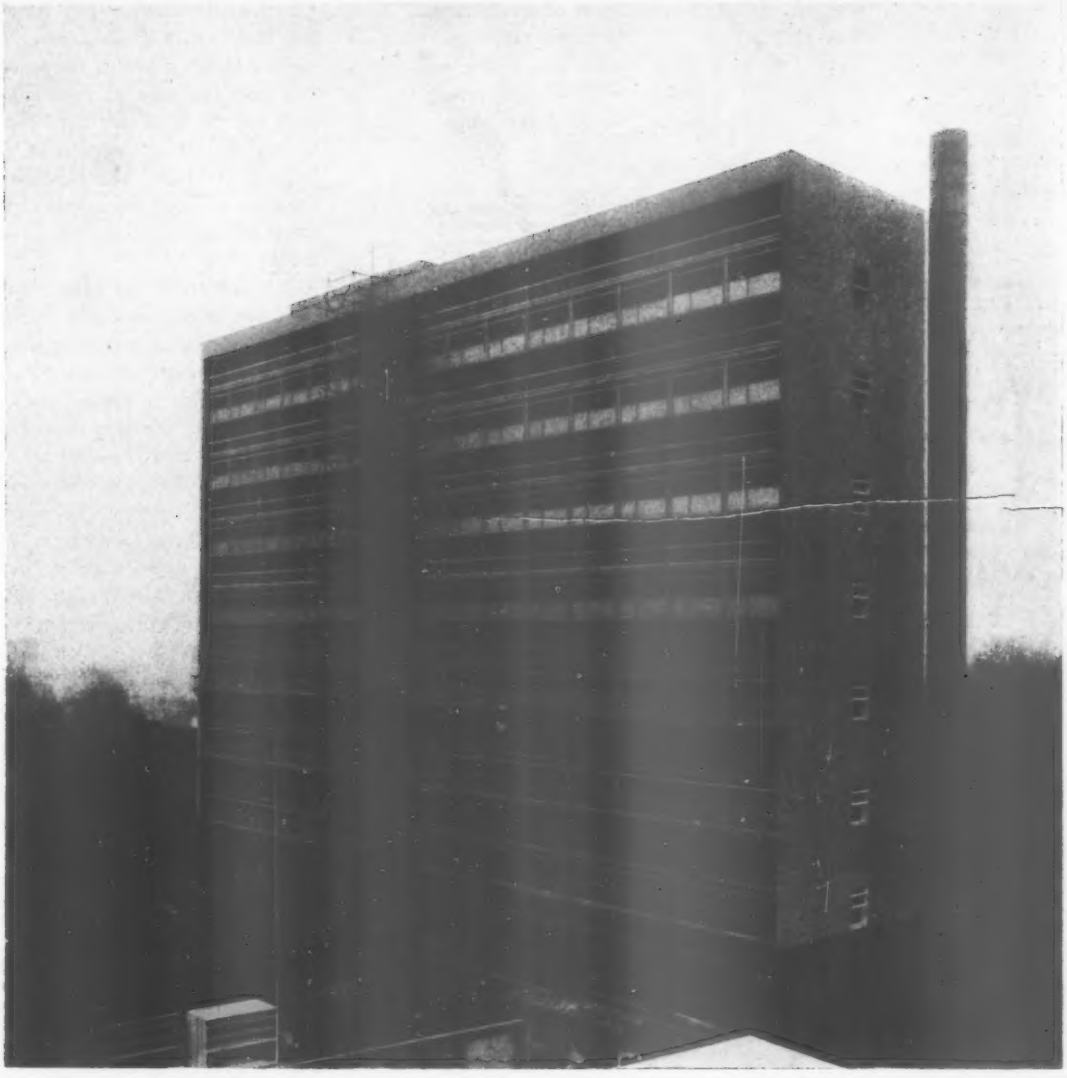
proportion of dwellings face only east. The attempt is made to resolve this last defect by incorporating flats on the south end, taking the best advantage of the most favourable aspect. Many may feel that these maisonettes are really back-to-back dwellings violating the regulations for cross-ventilation, but it should be borne in mind that these public health byelaws were framed at a time when a lower standard of hygiene and habit prevailed among tenants of public authority housing. It is probable that they are permitted by the regulating authorities since they are two storeys in height and by relying on the theory that there is circulation of air by convection between the two storeys, assisted by the mechanical extract ventilation to the internal bathrooms and w.c.'s.

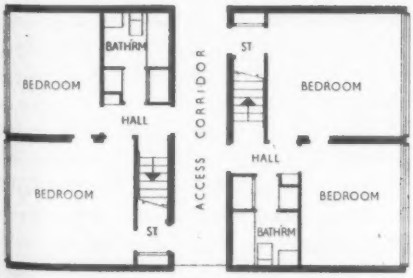
The attempt to solve these two problems of aspect and cross-ventilation with central access types will obviously receive considerable attention in the future, producing new and interesting dwelling forms. Some efforts in this direction have already been made, for example, in the LCC Tidey Street 20-storey block. This has cross-over maisonette units on either side of a single height central access corridor, and succeeds in both objects of cross-ventilation and of orientating living rooms on the same face. A further interesting type illustrated here for the first time is the Coopers Road scheme by the Camberwell Borough Council.

It is probable, however, that more satisfying plan types will be evolved than any of those so far seen, perhaps with different types and sizes of dwellings inter-related. The majority of tall blocks so far contain only one- and two-bedroom types of dwellings with the three-bedroom types in four-storey maisonettes and the four-bedroom types in houses. The advantage claimed for this arrangement is that the large families are housed closer to the ground and can be provided with gardens. The social isolation which this produces (by putting the various size family groups into separate blocks) is, however, anything but desirable.

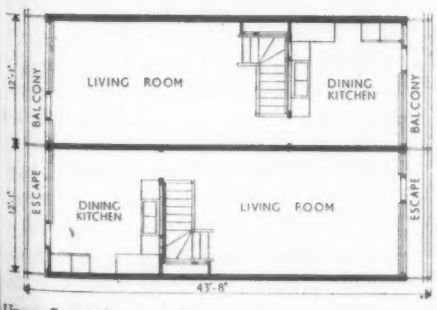
The reaction of small families to life in tall blocks has been very encouraging and there is no reason to suppose that large families might not react with equal favour. This would have been made even more certain had the early hopes been realized of incorporating communal facilities such as supervised play areas within the tall blocks at, say, mid-point. It is principally the limited size of tall blocks in their present form which makes such provisions uneconomic. When tall blocks increase in length as well as height, the central corridor will need to be lit







Lower floor plan of maisonettes



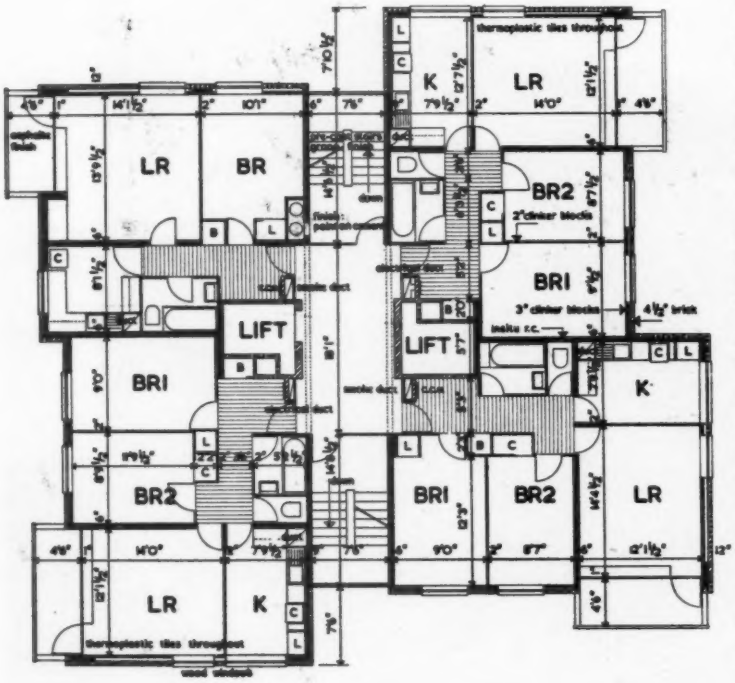
Upper floor plan

Camberwell Borough Council (Borough architect: F. O. Hayes) have two schemes with central access blocks, Camberwell Grove and Camberwell House, in construction. The plan of the Camberwell House block illustrated here is undoubtedly the better of the two, solving the "cross-over problem" neatly by employing an open staircase entered from the living room. Living rooms, however, face onto opposite sides of the block.

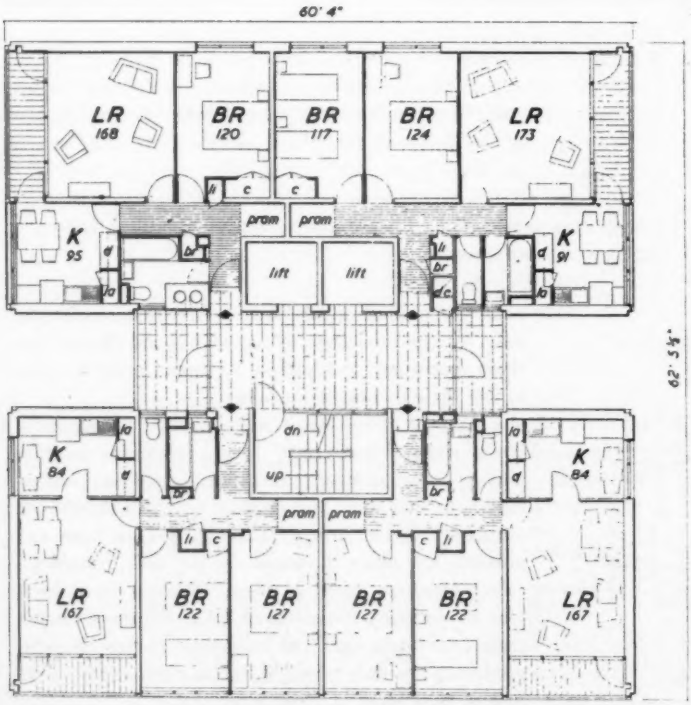
and ventilated at intermediate points along its length, say, by the omission of occasional dwellings, and these spaces may well supply the opportunity for providing these communal amenities.

We shall, of course, have to wait rather longer for a block which incorporates all the amenities such as play spaces, nurseries, recreational facilities, restaurants, etc., but there is no reason why this should not eventually occur. Already tall blocks have been responsible for many advances socially and technologically. Although most of these advances have been won by necessity rather than choice, tall blocks nonetheless provide a spur and inspiration to new thought, producing not only new plan forms but also the adoption of new ideas in other directions.

For example, different forms of space heating have had to be used. This currently takes the form of electric floor heating, which has a low installation cost and can be tenant-controlled. The system has the added attraction to the architect of requiring no special planning provisions. The only grounds for regret are that, whereas the central heating systems previously installed heated the whole dwelling to a high standard, the type of installation generally adopted with electric floor heating heats the living room to 65 deg. F. but is designed to give only background heating to halls and kitchens. This checks any thoughts of freer planning and increasing space standards by including circulation areas within the living space.



These two LCC plans show the different plan form evolved with one and two staircases as means of escape.



A few authorities are experimenting with other types of space heating, such as individual gas or central blown air systems, but these have the disadvantage of high capital costs which are passed on to the tenant in the heating charges. The other services have already raised problems in tall blocks, but little new has emerged from these as yet. Most servicing problems, such as the water services and the mechanical ventilation systems to the internal w.c.'s and bathrooms, have been resolved by sub-dividing the block into separate parts, rather as if it were a number of smaller height blocks one upon another. Booster pumps, water storage tanks and fan motors are housed within the blocks to serve these separate systems.

The difficulties of means of escape, the eternal nightmare of the housing architect, have been greatly eased by the acceptance of the single escape staircase by the legislating bodies. It is, incidentally, this single escape stair which has forced one of the few visible changes in blocks of 11-storey height during the past year. The first plans produced for 11-storey point block types employing single staircases lost much of the simplicity of the early four flat per floor types, adding complexity where none had existed.

Recently, however, the LCC have published a plan of an 11-storey point block which shows a marked improvement. Here the single staircase is placed internally, ventilated at top and ground floor levels to the open air, and approached from a ventilated lobby. This makes a small step towards the totally enclosed stair and lobbies with reliance on mechanical smoke extract ventilation as is permitted in Sweden. Positive mechanical ventilation, if automatic stand-by equipment is installed, would seem preferable in many cases to natural ventilation. This block is rather startling for another reason: it is a four flat per floor point block with naturally vented and lighted w.c.'s and bathrooms. Strange, indeed, that it comes from the office that launched mechanical ventilation on us all. With all this fierce activity on tall blocks, little change in the plan forms of lower height blocks has been apparent in work so far published, although it is surprising that many of the interesting plan types evolved for use in tall blocks have not been adapted for use in lower height blocks. The only change in lower blocks has been in appearance rather than plan form. There is a growing tendency for stronger and more virile treatment of these blocks with traditional materials used in a robust way. Panel external walls, which followed the introduction of cross wall construction, are now used more often for parts of the facade rather than the whole. Housing architecture, with its severe restrictions on cost, cannot afford the money for smooth expensive

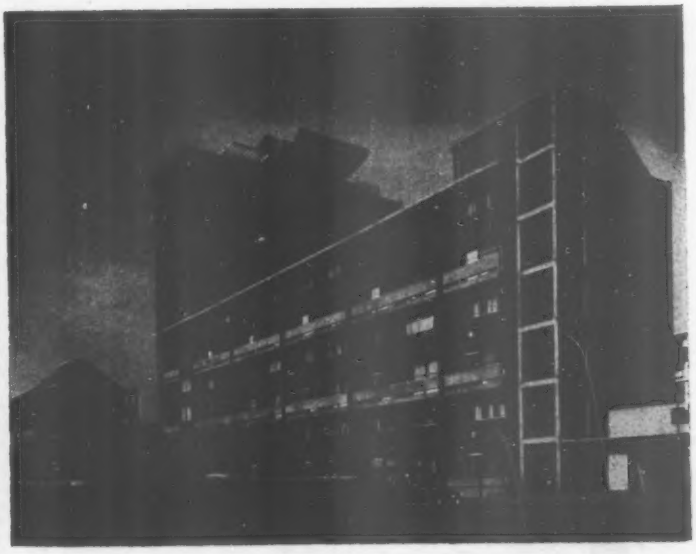
finishes as can other building categories. Neither can it support the high maintenance costs of the many new substitute materials. And it must therefore seek to express itself in a way compatible with the materials it can afford. To clad exposed concrete surfaces is expensive, to paint them is to invite added maintenance, and therefore self-finishes of an acceptable form must be developed.

Architecturally, the standards of housing have long been high, and the overall standard has never been higher than at the present time with even small authorities, despite the restricted resources at their disposal, producing work of a high calibre. It is in the layout of estates, the fashioning of environment, and not in the architecture of the individual units, that the chink in the armour lies. True, there have been tremendous strides forward, from the monotonous uniform developments of the pre-war and immediate post-war period, and culminating in the outstandingly successful mixed development schemes now nearing completion. But all the successful schemes have been in fringe areas, with existing landscape and mature trees, and none in high density urban areas. Housing developments appearing in 1958 often seek the same type of mixed development in these areas, the higher densities making the tall blocks taller and the open spaces smaller. Often these developments are linked up into the surrounding street pattern by the rehabilitation of existing properties. Yet during this year of 1958 one example, even if an expensive one, of good urban development—the Golden Lane estate by Chamberlin, Powell and Bon—was nearing completion. It is difficult to place the entire blame on the head of the architects for this state of affairs. Slum clearance sites are all too frequently small, awkward in shape, and may have roads, and always at least one public house, somewhere in their midst which must be retained. Little is usually known of where main road arteries are likely to pass, or even the probable future of the adjacent areas except in the case of the all too few redevelopment areas. It is not surprising, therefore, that redevelopment in urban areas resembles nothing so much as a patchwork quilt: one piece is torn off and replaced by a new piece, brighter and more attractive than the old, but with even less relationship to the neighbouring patch. When, and if, the time ever does come for this neighbouring patch to be replaced, it will be done by a different hand, and so the patchwork continues its existence. The isolation of each piece has so far resulted in little effect upon the environment of the urban area as a whole and it is only by comprehensive redevelopment and not pure slum clearance that this unfortunate state of affairs can be overcome.

Despite the despondency of this picture of the redevelopment of urban areas, it has been an interesting year in public authority housing. What then of the private enterprise field in housing?

This is almost the only source catering for general needs, and while the activities of the public authorities have been reduced by the concentration on slum clearance and the high rates of interest charged, private enterprise development has been expanding lustily, and during the past year was responsible for an equal share of the total number of erected dwelling units. This represents an amazing difference from five years ago, when public authorities erected 250,000 dwellings while private enterprise managed a mere 60,000. The vast majority of these private enterprise houses are single- and two-storey dwellings, mainly of traditional construction and appearance. Although the red-skinned eyesores still hold sway, some private enterprise developers, noticeably the larger ones, are raising their architectural standards surely if slowly. The undoubted commercial success of the architecturally meritorious Span schemes by Eric Lyons cannot have escaped notice and will, let us hope, serve as a standard towards which others will strive.

Flats at Ham Common by James Stirling and James Gowan. The recessed mortar joints to the brickwork and the untreated concrete surfaces together with the recession in plane between one dwelling unit and another gives these blocks a rich sculptural quality and illustrates well the use of simple and cheap materials in housing.



Golden Lane. Chamberlin, Powell and Bon. Part of the success of this estate, and there is little doubt that it is successful, is due to the controversial nature of the layout and the treatment of the many levels in the groundscape. The 15-storey block was one of the first over 100 ft. high blocks to be erected in the London area.

JUSTICE AND THE ARCHITECT

by Walter Segal; drawings by Kenneth Browne

If you practice in the Model By-law areas, where the letter of the word governs the realm, you have to comply or you are sunk —for your design is not protected against the by-law. As you know the Goddess Justitia is blindfolded and while she is cunning as you, poor architect, have so often experienced, she is also clumsy and her attitude towards the English language is sadistic. How often do you get caught because you have overlooked trivial variations or failed to grasp the meaning of the wording in the local book of words. The smallest room of the house must have "adequate" ventilation in some Model By-law areas, and you may be puzzled what that means; in other areas they are of a sterner disposition and you must make your clients expose the tenderest parts of their bodies to the rigours of the climate because they say you must provide "permanent" ventilation, that is, an airbrick which your clients in self-protection against the law will seal off later on . . . Do you ponder the sense of all this, do you wonder why there are so many small variations, do you get confused by "adequate" and "permanent" and the other linguistic beauties of the local law-givers? Are you a helpless victim or an anarchist? If your approach to construction is unorthodox, if you have a new idea there is so often the *by-law* to frustrate you. And, as you know, there is no defence against it, that is, no defence which is of any use to you. It is true the Minister has set up some machinery which permits you to ask him to mediate between the Local Authority and yourself in the matter of a vent pipe which does not protrude far enough above the roof to satisfy the local Building Inspector; but do you know how long this takes and what your chances are? Weeks if not months you have to add to building time and if you have the temerity of building in summer there are the holidays to consider. There is no defence against the local by-law.

And yet there is often a measure of sympathy and understanding on the other side and I venture to say that the number of watchdogs of the law who have to seal off their own airbricks, because their women won't tolerate this legal attack on their health, is not small. These poor men are the servants of a Goddess that cannot see or understand: she herself talks far too much to be able to listen. One day, however, the Minister may succeed in silencing her for a while and improve her English; then there may be fewer and less arbitrary by-laws. For that we all pray, and may it come soon.

If you practice in the LCC area you are much better off. For there you can apply for modifications of old and new by-laws; and your initiative as a designer is not thwarted. In County Hall you will find individuals appreciative of your efforts and anxious to assist. You can take your problems to them; you can apply and your suggestions are put up to committee. And if there is good technical sense in what you want you have an excellent chance to get it approved. But the TIME it takes!

Naturally, you do not know your London Building Acts and the Amendment Acts. Who does, lawyers excepted? I defy anyone. Years ago in the bad times of immediate post-war building when licences were far between and few I added a new porch to a war-damaged house, and the District Surveyor duly passed it. Some years later I built a house and added a porch of practically the same design and the same District Surveyor's assistant came with the 1935 London Building Act and found that the sections of the timber framing were ¼ in. too small. So discerning was his eye, and so great his knowledge.

. . . the number of watchdogs of the law who have to seal off their own airbricks . . .

And he asked me to apply for a modification of the respective by-law and I said to him he would now have to issue a Notice of Irregularity in respect of the former sin which, however, he did not do. So embarrassing is the law sometimes.

Once I wanted to use a steel channel pillar capable of carrying nearly three times the load assigned to it. The District Surveyor spotted this and said I would have to protect this poor pillar with 4 in. concrete all round, and advised me to use a brick pier 9 in. square instead, In answer I produced by means of permitted calculation a reinforced concrete post 4½ in. by 6 in. with only 1 in. protection for the steel reinforcement instead of 4 in. as required by the Act for the steel pillar, and it was duly approved and built. So perplexing is the law sometimes.

Recently a District Surveyor's assistant told me of a new by-law which somebody had managed to slip into the Amendment Act whereby the head of a window would henceforth have to be not less than 7 ft. above the floor level of the room. Since normal rooms are 8 ft. high nowadays and since engineers love to make lintels drop 1 ft. 3 in. below the ceiling (he said) architects in their innocence often contravene this by-law by three inches. And he was sick and tired of it, he added. Naturally I had fallen a victim to this myself, but I got a waiver all right. Now was that a useful by-law to make?

Under the reign of Edward III a by-law was made compelling every householder in a town to keep a static water supply on the premises for use in case of seige. And the Metropolitan Water Board still demands this precautionary by-law to be observed. Why? In the wettest country of Europe! A cut-off cold water cistern means no trouble in winter and the number of disconnected cisterns I came across during my war-damage practice immediately after the war was quite respectable. As the Metropolitan Water Board is innocent of the practice of granting waivers this is presumably a matter of self-defence on the part of the impecunious . . . So hard it can be to own an old house.

. . . read and re-read the London Building Acts.

Naturally you read and re-read the London Building Acts. And your head swims; for lawyers seem by conspiracy to replace the King's English with their own. The technician's language is made unintelligible for him; yet he is supposed to divine the meaning of these strange sentences and act upon them. So dark are the words of the Goddess . . .

And even if you have the gift of unravelling the contents of these carefully contrived sentences, what would you do nowadays without the right of applying for modifications of these very by-laws, without the help of the officers in County Hall who, enmeshed like yourself in this legislation, try to find a way out for you? A London contract involves frequently the application for a dozen or more waivers, or else you must design down to levels of yore.

Eight weeks to wait for the modification of a by-law! Which building contract can stand this? Admittedly some waiver applications can be made in the early stages of a contract; others, however, and mostly those dealing with details do not arise till later. So, Mr. Architect, you have often to take quite undue risks and carry on with the work hoping for an approval of your application to arrive after the job has been completed Now why should you be exposed to this danger?

And on the other side, in County Hall, the solicitors are anxiously on the lookout lest the six months' period be not exceeded during which the Council may prosecute in the case of a pending application being refused. In the departments harassed by the flood of applications sometimes the hourglass threatens to run out . . .

I am in the habit of visiting District Surveyors personally before the start of a contract and on one occasion that kindly man, a shining example, went with me through all the details of the scheme drawing my attention to the waiver applications I should be required to make. And he added that I could not be expected to know these cumbrous Acts and that he would, himself, have to reserve the right to make me apply later on for those waivers he had omitted to notice. And he did. In fact, the last application was granted three months after completion of the building, myself taking the risk.

. . . in County Hall the solicitors are anxiously on the lookout . . .

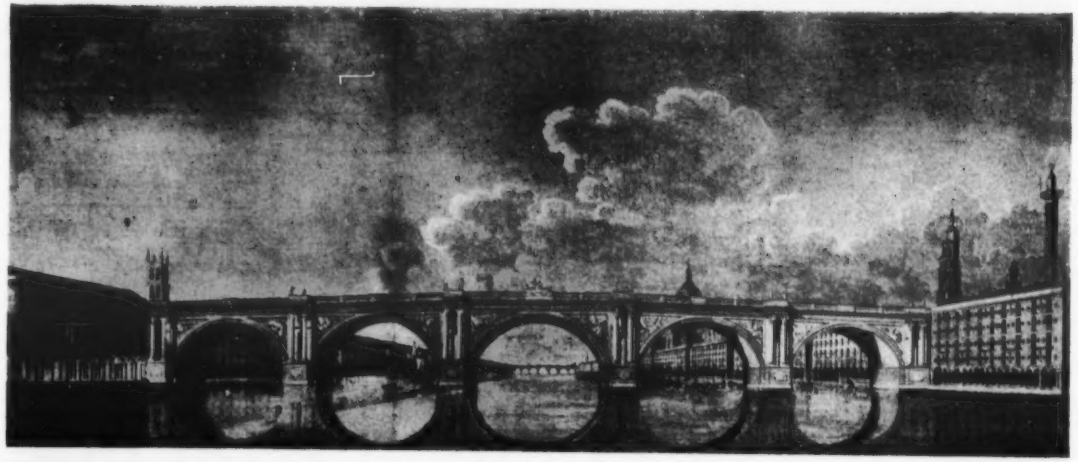
We cannot any longer build without waivers. And we cannot wait eight weeks for decisions. And we should not be expected to take risks.

I am aware it takes ages to repeal a redundant law though I shall never understand why that should be so. No learned explanation will satisfy me and I shall always take this as part of the general legal conspiracy against the interests of the community. Once a squire claimed a Derby winner, that had been reared in stables leased from him, on the basis of an old law which gave the freeholder the right of the best beast in his leaseholder's possession. To and fro the legal battle went till the House of Lords repealed the Act. As in Imperial China. . .

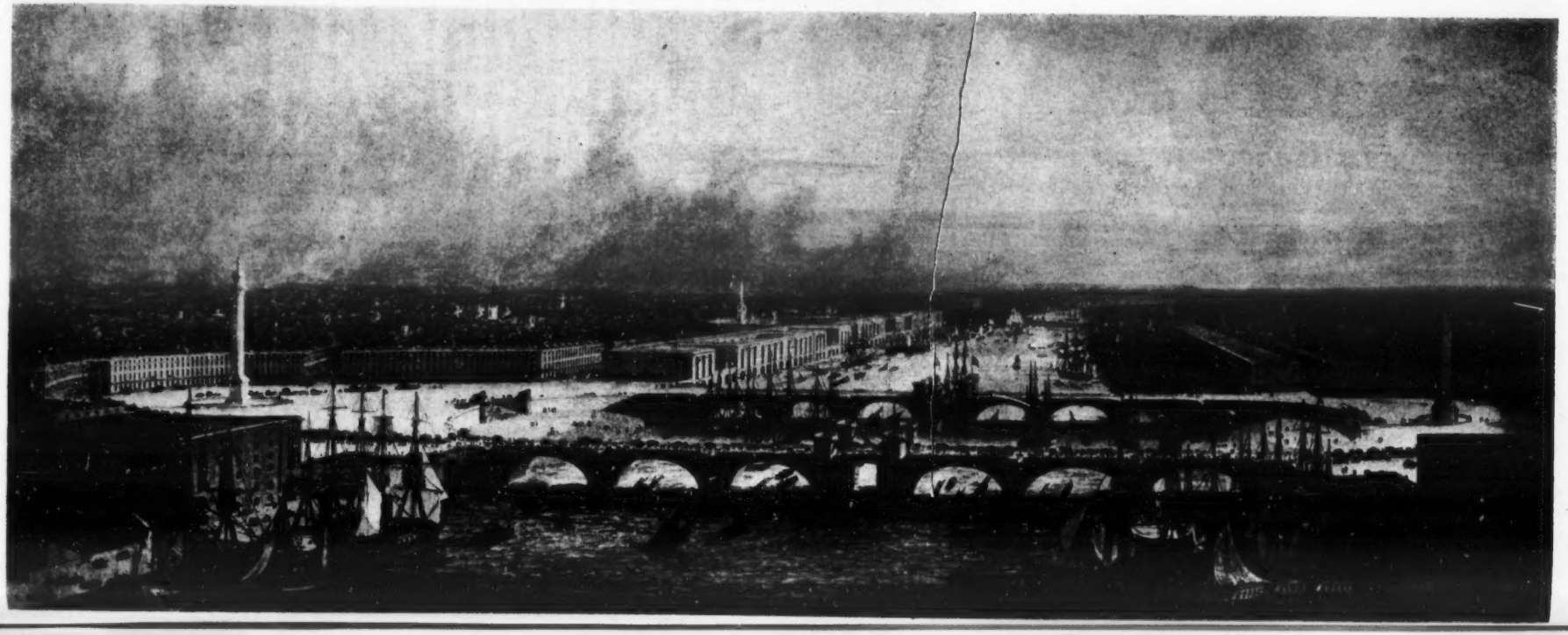
I am aware it will take a lifetime till a workable Building Act makes its appearance. But what in the meantime? It should become possible to discuss the substance of a waiver application with a responsible person in County Hall who should be empowered to make decisions and to confirm them directly to the applicant by return of post. Rather the risk of battling unsecurely with an individual than wait eight weeks for the democratic decision of a committee. Many applications deal with relatively small matters. Is it necessary to hold these in suspense for such an eternity? The LCC is one of the most progressive local authorities in the world; it should be able to overcome these cumbrous legal impedimenta to its building policy and alleviate its shortcomings during the present transitional period.

As to the Model By-law areas I am sure only God and the Minister know the solution.

LONDON AS IT MIGHT HAVE BEEN: SOME IDEAS FOR JAZZING UP THE RIVER



Instead of a preview we offer a backview of London as it might have been, with pictures from the LCC archives of some of the more imaginative schemes from the past that were never carried out. It is hard to believe that the two pictures on this page show rival schemes for improving the same place at almost the same time. On the left is R. Dod's 1799 design for a new London Bridge in which he made the central arch high enough to take fairly large sailing ships by elevating the roadway to the height of the 5-storey warehouses that line the river with classical grandeur. He shows the river without commerce—perhaps on a Sunday at the end of a 12-months' strike. William Daniel's 1802 engraving, below, shows a cunning scheme for two bridges, each with an opening drawbridge, so that one of them would always be open for road traffic. He proposed



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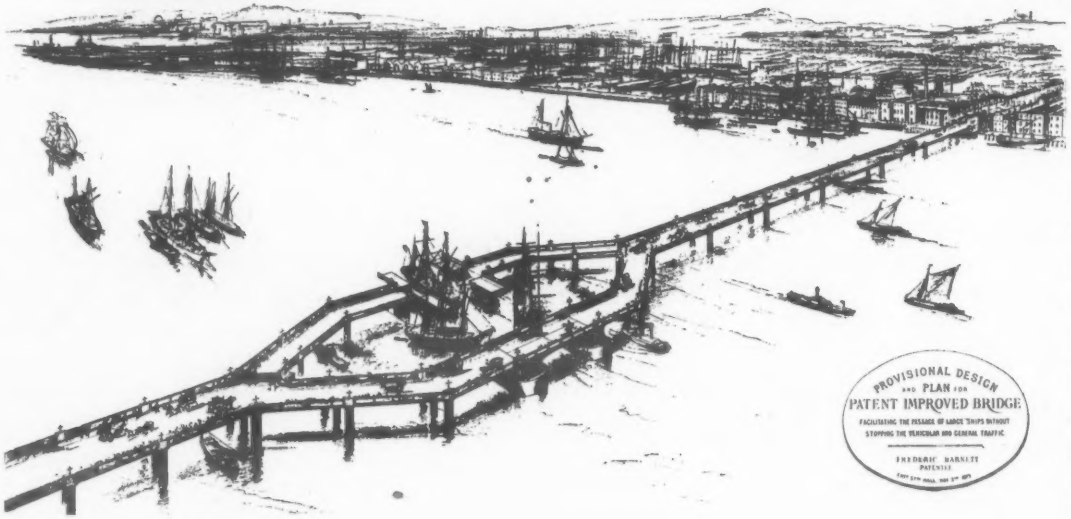
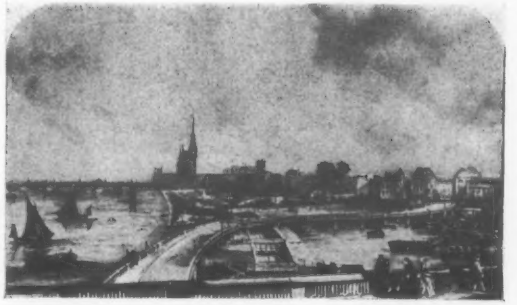
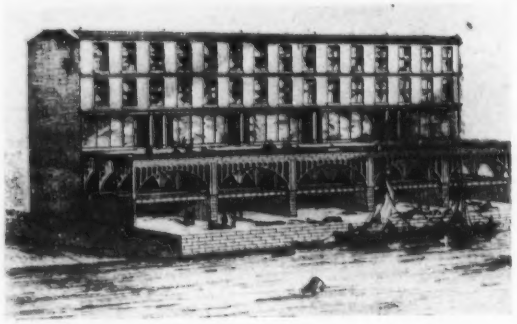
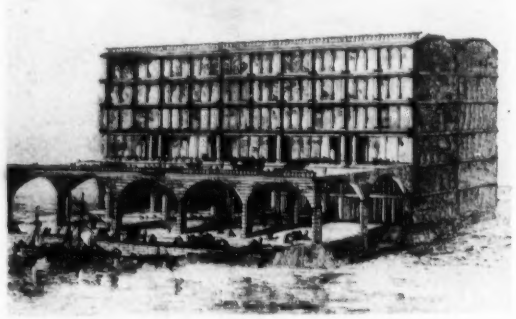


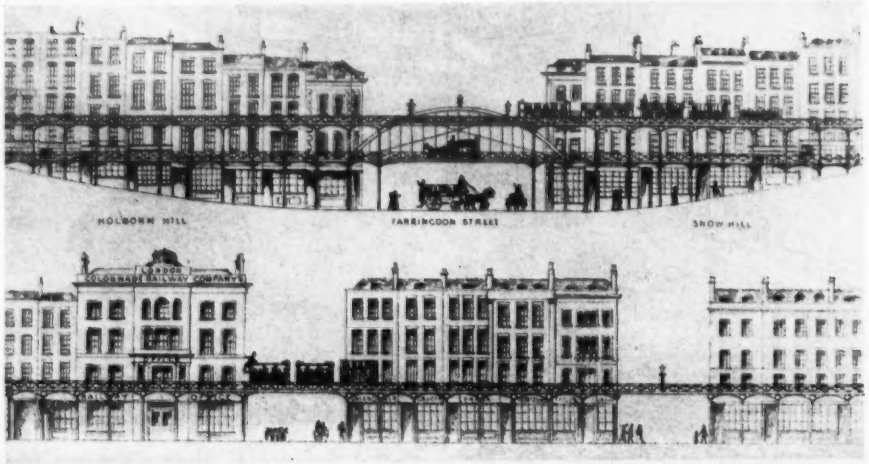


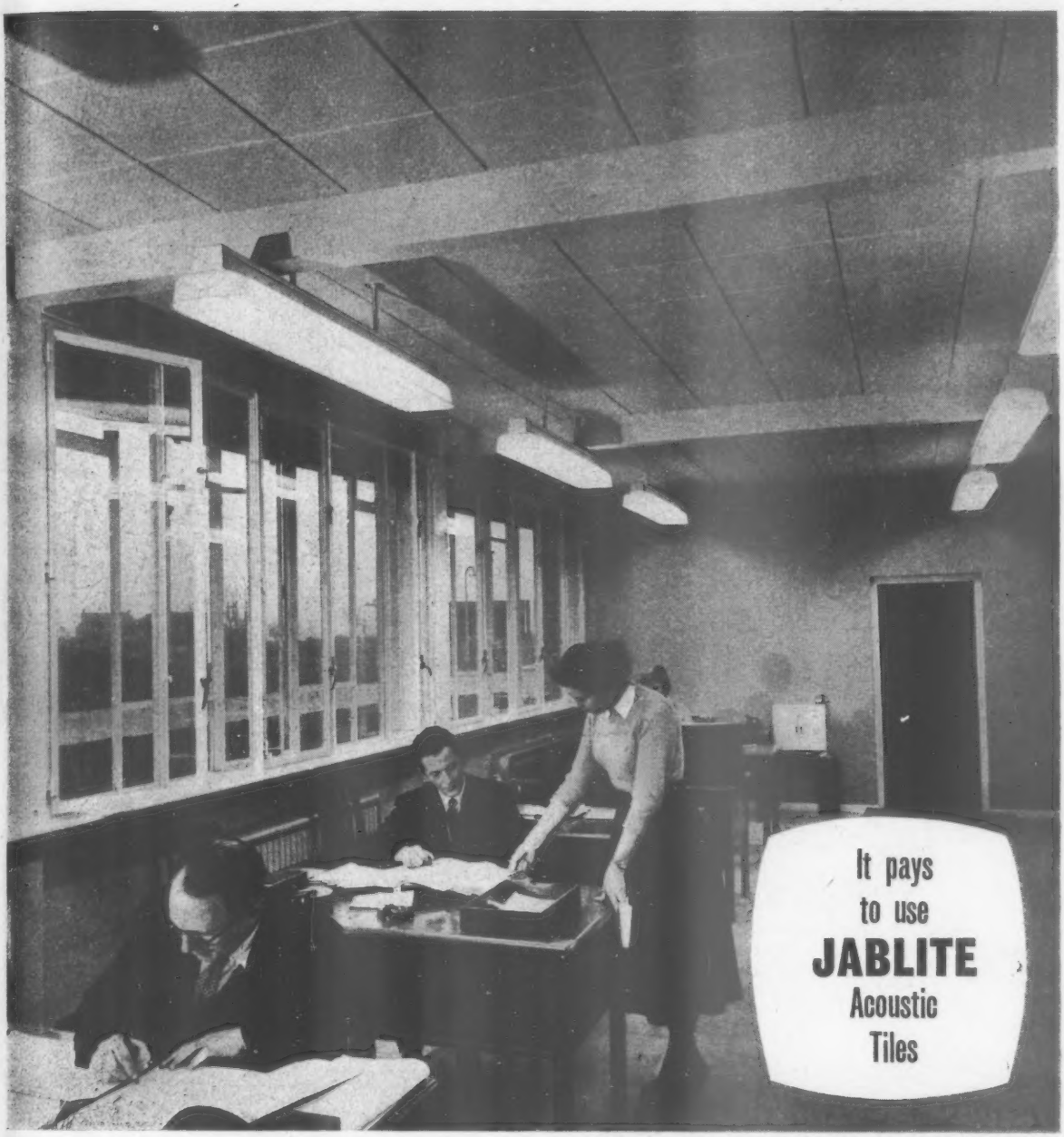
"an extensive amphitheatrical area" on either side lined with warehouses, with the Monument as the focal point on the north side, and new embankments. Daniel's basic idea was taken up by Frederic Barnett with his plan for a Patent Improved Bridge in 1875, *left, though it looks too flimsy to have withstood the first collision. The water colours above and below, by an unknown artist of about* 1860, *show that someone was thinking big. His roadway over the Westminster section of the Thames ante-dates the* Evening News *riverside drive scheme by nearly a century.*





Bringing the railway into the town streets was a regular pre-occupation of Victorian engineers. F. J. Wieland's plan (about 1864) for a River Thames Esplanade and Railway incorporated three levels and a railway on the plebeian, or Surrey, side (top left), but the Westminster side (lower left) was spared the railway. Webb's Colonnade Railways (below) would have been as noisy as the New York elevated but also envisaged the use of three levels. The Perspective View of the London Railway (right, about 1842, James Clephan, architect and W. J. Curtis, engineer) would have been even noisier, as the trains seem to have been about 4 ft. from the windows of the houses.





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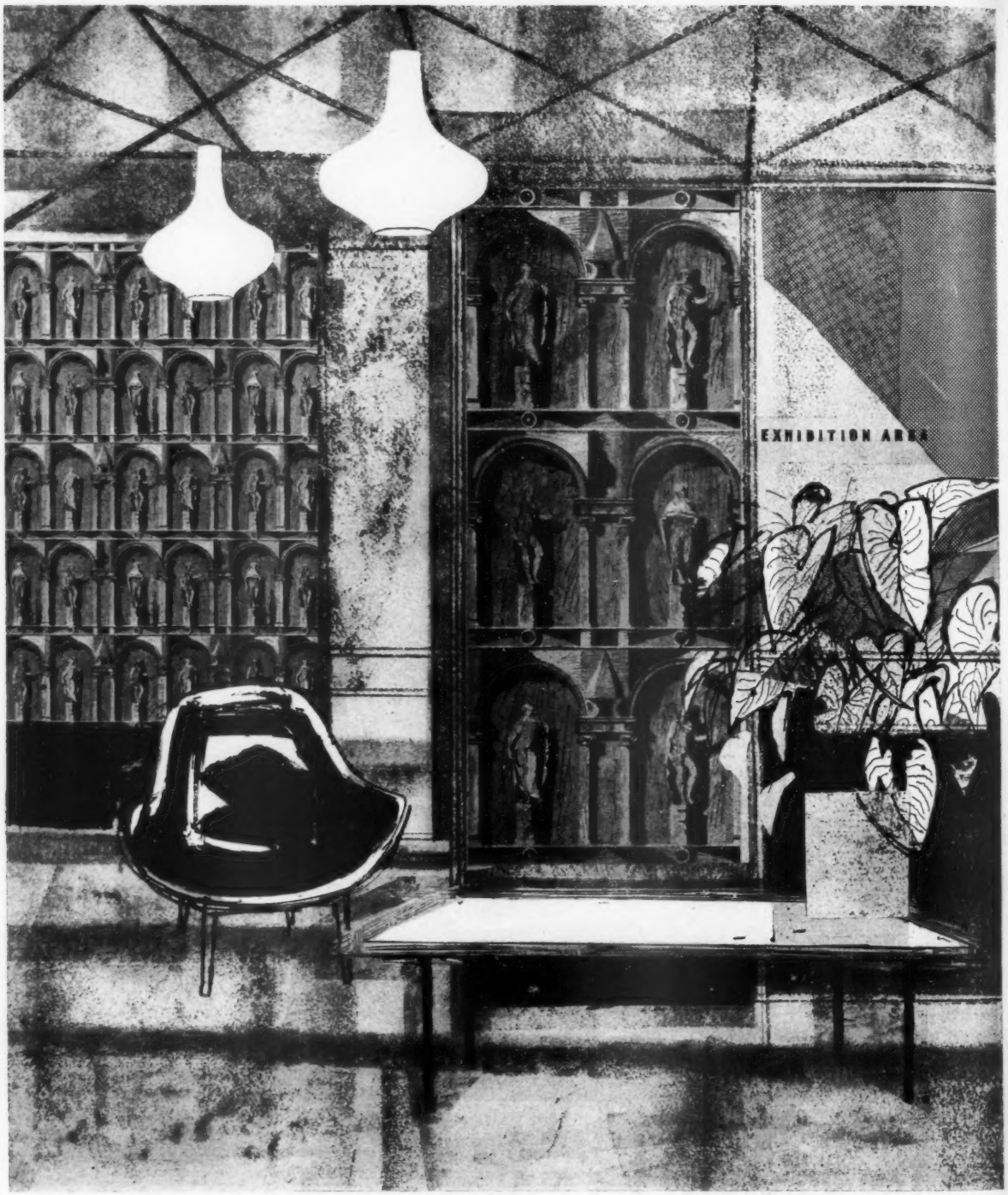

WPM MORTIMER STREET

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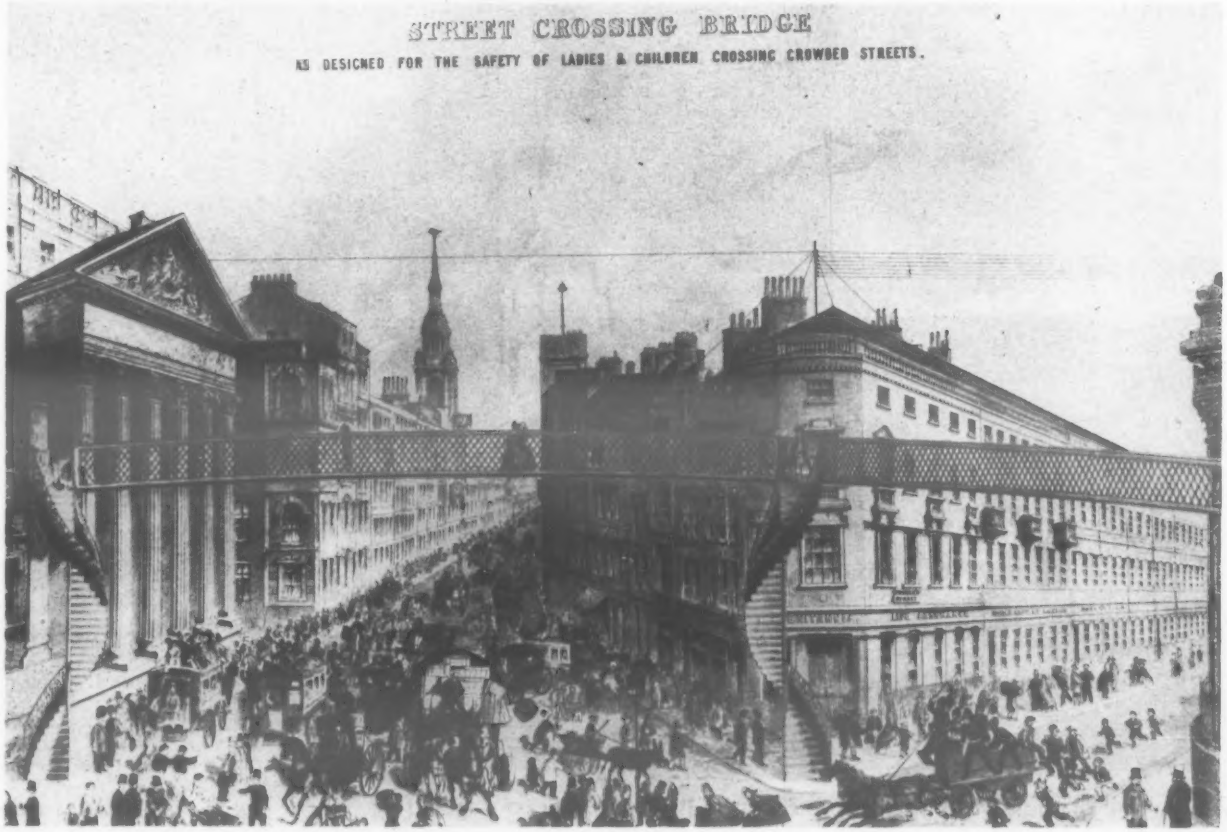
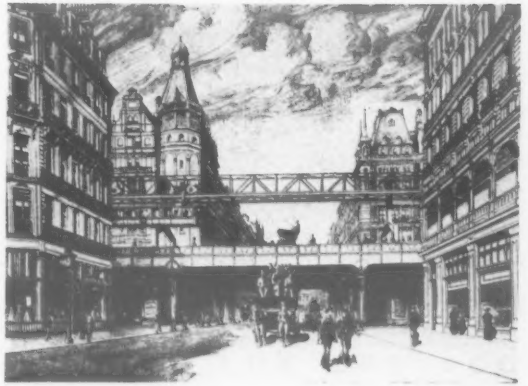
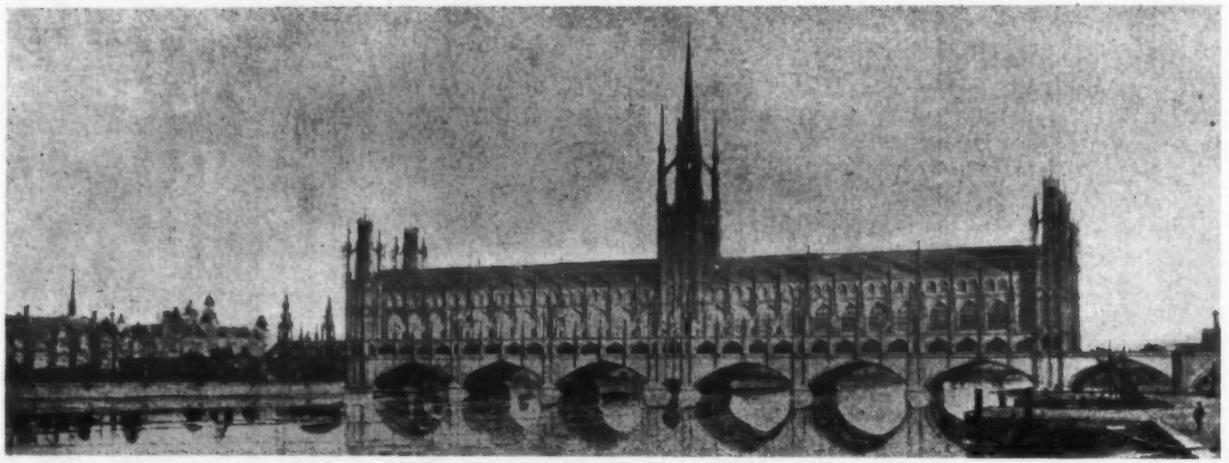
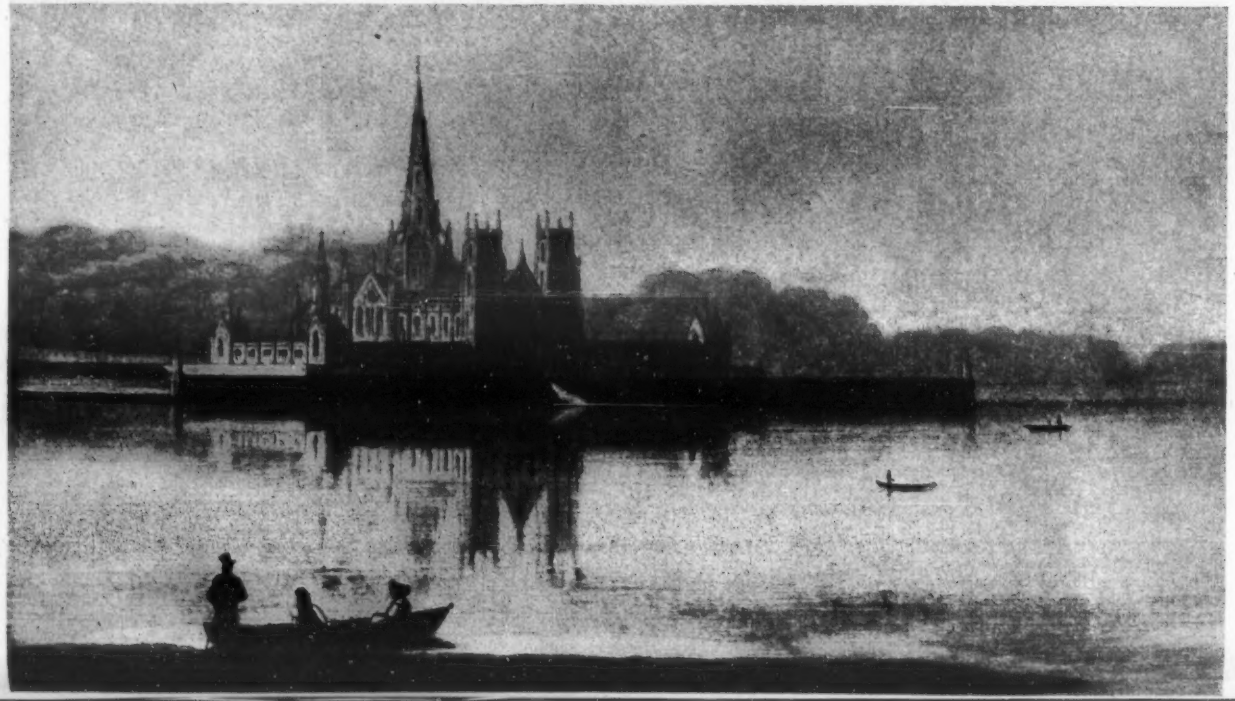
There's certainly nothing new in the idea of multi-level circulation. The scheme on the left for Metropolitan Traffic Relief is more than a hundred years old, and shows a most practical flyover crossing. Alex Galloway was the engineer and W. M. Higgins the architect for the viaduct at Hatton Garden, right, which has echoes of the new Brussels flyovers. The much later scheme by C. S. Meik and Walter Beer, below right, uses three levels, the top one for an overhead railway. The street crossing bridge, below, dates from 1851. *It is a romantic structure, inspired by railway footbridges;*

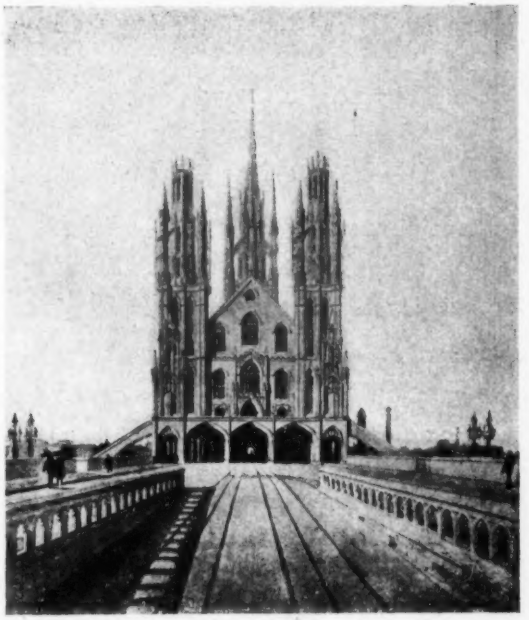


but how safe would the ladies and children be on those stairs—if they ever used them?









While the engineers (one presumes it was the engineers) were thinking up functional solutions to traffic problems, the Gothic revivalists were far from overlooking them. Alfred Rosling Bennett's 1904 proposals for a new bridge to take the increased traffic expected from the formation of Kingsway and Aldwych provided a tramway, road and foot passageways, and a new County Hall on top. He hoped to save £1,500,000 in site costs (one-third of the cost of the scheme), but where would the LCC have put the new extension? Sydney Smyrke, in his proposed National Mausoleum in Hyde Park for the remains of eminent men (1834), chose the Gothic style for its intrinsic beauty and grandeur, as well as its ecclesiastical associations (left).

intrinsic beauty and grandeur, as well as its ecclesiastical associations (left).

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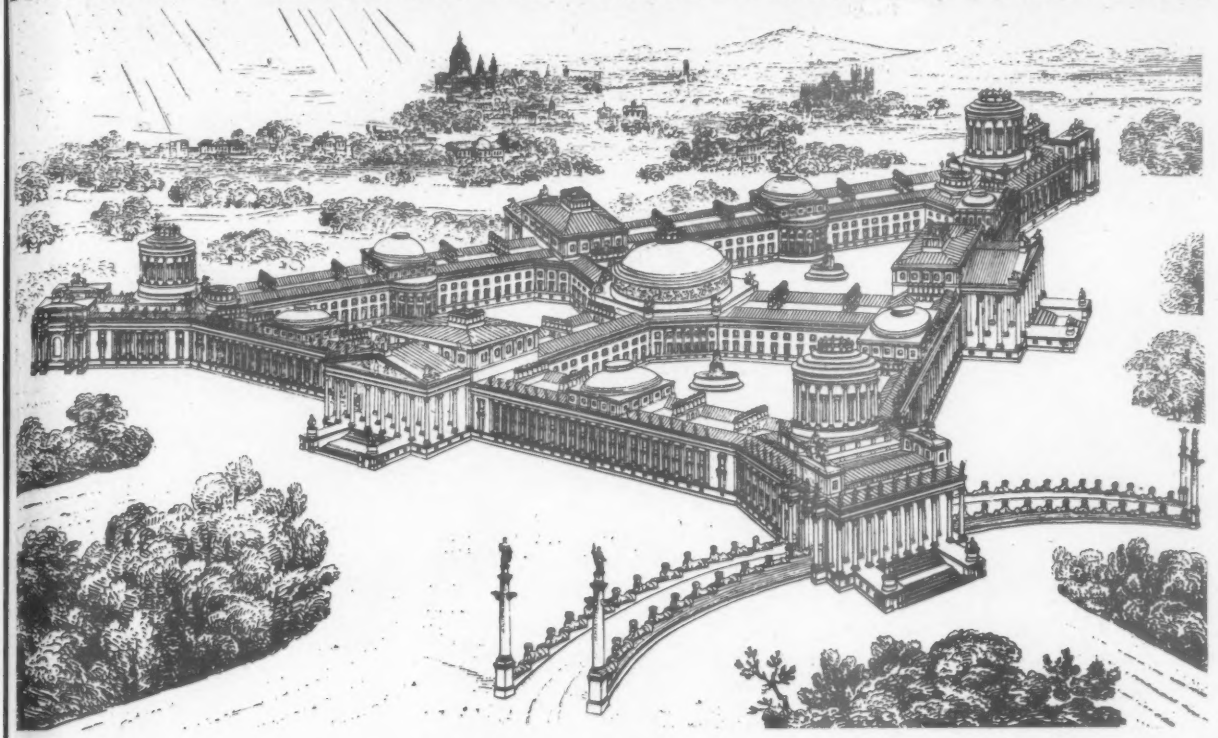
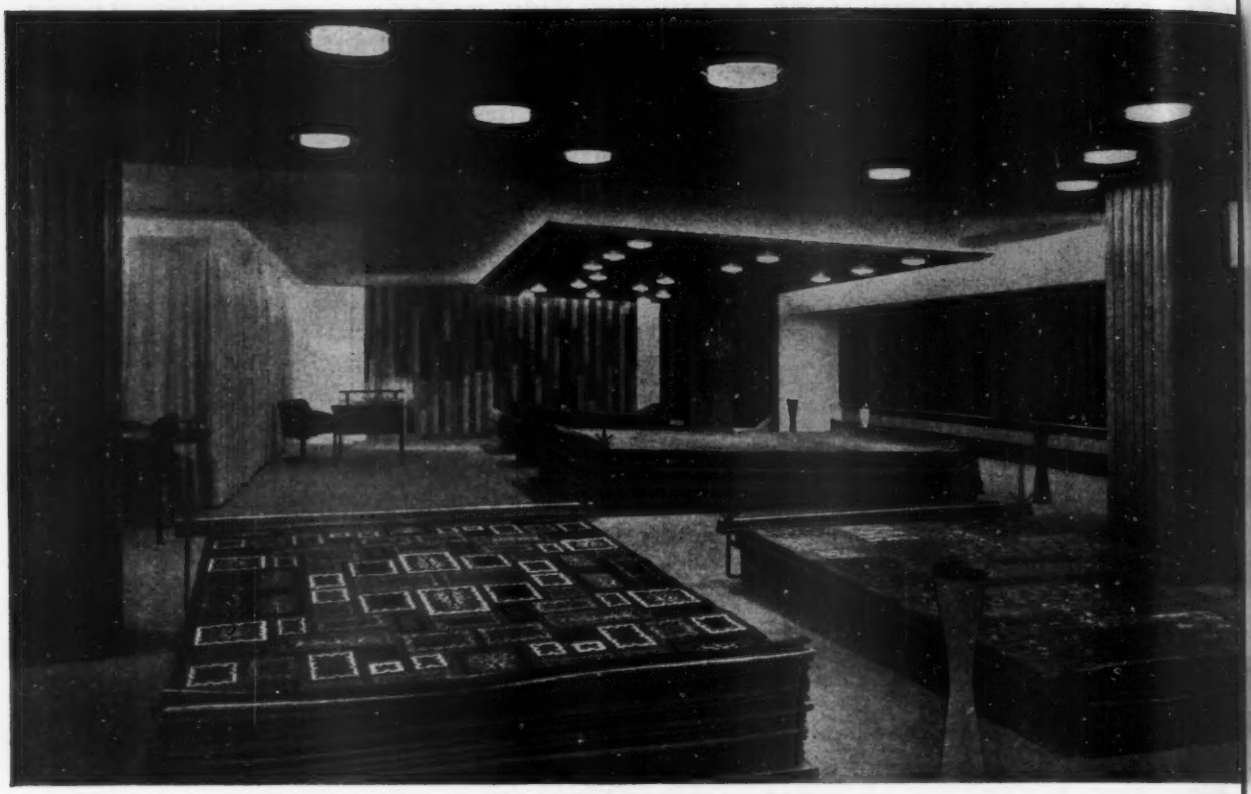
LONDON AS IT MIGHT HAVE BEEN: SOANE'S PALACE AND SENATE HOUSE



Sir John Soane let his fancy run riot in swirls of arcades and domes of varying patterns in his 1779 designs illustrated here for a palace and a senate house. His later designs (1822), though still elaborate, are more sober. The triangular plan building above is the palace. The senate house, below, seems to stand roughly on the site of the present Houses of Parliament, and to be connected with the south bank by a bridge surmounted by another building in the classical style; was this another idea for saving site costs?



Heal's Contracts throw new light on a subject

The subject in this case was the many-hued range of carpets in the new BMK London showrooms. The problem: to avoid the vagaries of natural daylight so that prospective buyers could select a carpet under the same kind of lighting the carpet would be seen in after it was bought. The raw material: two floors in a newly erected block (in its primary "shell" state).

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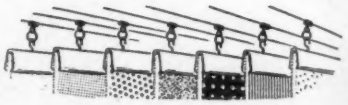

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It is not our custom to publish long obituary notices in the JOURNAL, *but we have made an exception in the case of the late Cadwallader McGroynbeam. As a friend and admirer who writes the following appreciation would affirm, McGroynbeam represents the attitude to life and architecture of a rapidly passing generation, or so some would like to think.*

We shall not see his like again

Those who remember him in his hey-day, always a focus of curiosity at social functions, always a centre of controversy in Bedford Square, Portland Place and Queen Anne's Gate, may find it hard to believe that Cadwallader (Curly) McGroynbeam is really dead at last. What conflicting emotions will stir in their breasts when they learn that this short, balding "go-getter" died as he would have wished to die, defying established authority, in congenial company from many lands, in a powerful motor-car. Perhaps they read the headline INTERNATIONAL CROOKS DIE IN 100-MPH POLICE CHASE, and didn't realize that this was the idol of their impressionable youth revealing yet another aspect of that many sided personality that justly earned him the title of *Uomo Utilizzabile*.

His death has robbed English architecture of a non-conformist whom the RIBA never saw fit to admit to its ranks, though he consoled himself with the reflection that it must have shown equally narrow-minded hostility to Sir Christopher Wren, who also was never able to put A.R.I.B.A. after his name. Like many independent spirits of our time, he seems to have been largely self-taught, but when he came up from the provinces, he quickly made his way into the AA, where his devotion to the only master broad-minded enough to accept him was soon so patent that he was for many years known as "Ching's Boy." His educational progress was not the sort that leaves behind a trail of medals and awards, and was of necessity marked by long periods of "Office practice" in Devonshire and the Isle of Wight, though in both places he acquired a store of curious knowledge, and a roster of acquaintances who were to stand him in good stead later in life.

His childhood background was one of extensive travel; he knew the roads and hedgerows, fields and commons of his native land as if they were his home, and slept often under the open stars. Nevertheless, he was never sentimental about what he used to call "out in the sticks," and became a confirmed lover of London Town. But those early travelling days had one crucial influence on his developing personality, and he never lost the consequent interest in mechanical transport and its associated techniques. "There isn't a heap in town," he would boast, "that I can't drive away, ignition key or no ignition key." His habit of putting this boast into practice, late at night in Theatreland car-parks, led to many a good-humoured encounter with the Boys in Blue, and an amusing meeting with Frank Lloyd Wright, on whom he made a deep impression. "Young Man," said the Sage of Taliesin, as he picked himself up, "you are going up a one-way street to a dead-end!" The truth of these words was so manifest that he never forgot them, and he always used that end of Curzon Street as what he called "a bolt-hole to dump the jalopy in, then nip up the steps smartish, and you can make off two different ways, choice of Lansdowne Row or Fitzmaurice Place."

The keen appreciation of Mayfair topography shown here, was part of a general interest in the pedestrian net-work of the West End. "What we need," he told the CIAM congress at Bridgewater "is a lot of places where the ordinary footpad can be free from the menace of the motor car—aspecially black Wolseleys," and he was an early admirer of the famous pedestrian areas of the continent. "You can pick up a lot in the little old Galleria," he would say, when showing visitors his unique collection of foreign passports, all inscribed with his own name, and a faraway look would come into his eyes when he recalled "them birds in the Piazzetta"—a remark often followed by convincing demonstrations of his almost Latin command of expressive gesture.

Unfortunately, circumstances did not permit him to put these humane and urbane concepts to work as he might have wished. His clients may have been men after his own heart, sharing his keen interest in value for money and his contempt for the restrictive operation of building codes, but they tended to see the function of town-planning waivers in a different light to his. "Right up to the building line all round, schmoo," his most dependable client used to insist, and straight up fifteen storeys if you can get away with it. Daylight angles? Schmoolight wangles! What for was electricity invented—we aren't still living in the Middle Ages, already? Underground car-parking? Why for should I buy a new Rolls—and such a beautiful machine—and hide it in the basement, when there is a street outside?"

Such appeals to his modernism and his love of cars never fell on deaf ears, especially when backed by boxes of cigars, writs, crates of champagne, bolts of cloth, turkeys, salmon, grouse. Generous to a fault, he saw to it that these good things sped on their way to others less fortunate than himself, and many a poor town-planning

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committee-member or struggling borough surveyor enjoyed a brighter, better Christmas as a result. The ensuing close collaboration between client, architect, contractor and planner, often conducted with an easy informality that the watertight codes of Portland Place would have made unworkable, produced a style as recognizable as it is expressive of the society that commissioned it, with scholarly, but not merely accurate, Doric, Ionic, Baroque or Gothic detailing, sympathetic use of local materials like brick, and local vernacular usages such as the wooden sash-window, often ranged in endless ranks that extracted the maximum effect from "the æsthetic of repetition," with starkly functional tile-lined light wells, and honestly exposed structure in all work spaces but the entrance halls and executive suites, where, as he said, "a spot of the old de luxe, you know, panelling and such, can't do any harm, and besides, it helps to keep old crafts alive, like ripping it out of old country houses."

Much of this work perished in the blitz, of course, but when peace returned it was soon seen that his example had not gone unheeded, a "school" existed, as the Lessor-scheme blocks amply testify. It was a proud moment.

How was it, then, that a man of his parts never received the recognition he deserved as a native pioneer of mid-century architecture. The answer, apart from distrust, suspicion, hostility and unwillingness to accept counterfeit money, must have been his irrepressible youth. Ever, in his own words, a bit of a lad, he did not grow old and respectable as other architects did. They only came to understand new movements when their significance was past, but Curly was always in at the beginning. Long before preferred dimensions became the order of the day, he could cite his own preferred dimensions at the drop of a glove. "Ornament & Crime," he joked, after reading Adolf Loos, "that's me on both counts, architecture and private life."

Long before the Brutalists began to hymn the praises of materials "as found" he had been using no other kind of materials and observed, after reading an article on the movement, "The only difference between them boys and me is they are interested in how stuff comes *on* the site, and I'm interested in how to get it *off* the site." Similarly with the New Empiricism, he, too, made use of whatever came to hand "and not just stylistically," he would laugh. As for Buckminster Fuller's ideas on expendability in buildings he would say, "When I put up a building, you use it once, and then you might just as well chuck it away—that's real Kleenex architecture."

Even in the very early Twenties, visitors to his flat could usually find the most recent issue of *L'Esprit Nouveau*, tucked in those piles of periodicals dealing with Paris Life and German Nature-worship that made him the favourite host of large sections of the architectural student body of the time. Indeed, that flat was the epitome of the man, situated just across the road from Savile Row police-station, it breathed an air of slightly *risqué* smartness that fitted him like a glove, and—as he often said—"The locale is real handy for some of my best friends." And his taste in friends was catholic and unconventional. The place seemed always full of police officers who had dropped in for a drink while on patrol (hypocritical newspapers did not always insist on the narrow-minded view of police morality demanded nowadays), men he had known at his "alma mater" who had dropped in for a loan while on parole, architects who needed the signature of an MP on some document, students who needed a set of thesis drawings (to both of these classes of friends his skill with the pen was a legend), runaway couples who needed a matched pair of identity cards for the night (Curly was a confirmed romantic, and regretted that the ending of Emergency legislation rendered this little service unnecessary), men with silver and antiques to sell, who preferred to sell quietly without the noise and publicity of the sale-room—through this connection he built up a remarkable collection which included at one time the Davis, Calcutta and FA Cups but he never fulfilled his great sporting ambition of, as he phrased it, bringing back that little old America's Cup single-handed.

This then was the many-sided and adventurous figure that he was, the sort of figure not often produced by the cautious and convention-bound architectural profession in England. Successive Presidents of the RIBA denounced him as a thorn in the flesh of the profession, a running sore, or "nearly as bad as that dago feller, whasisname, Crowboozler?" but he went on his way undeterred. "Unprofessional conduct?" he sneered in a rare moment of ill-humour on returning to London from a stay in Lancaster Castle, "As an architect I ain't done nothing a doctor wouldn't do, nor *vice versa*. What did she expect for seventy-five nicker, in six monthly instalments at a measly one-twenty per cent.?" Brave, honest words; how different the profession would have been with more men of his stamp in it! But McGroynbeam is dead and has left behind no true followers, in spite of the many young men and women who called him father. We shall never know his like again, and many of us will find ourselves poorer, and life harder, as a consequence.

McGroynbeam at the Reykjavik CIAM congress of 1942, *where he contributed a paper on the need for more "open" prison design.*

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ROYAL GOLD MEDAL

For Mies van der Rohe

The Queen, on the recommendation of the RIBA, has awarded the Royal Gold Medal for Architecture to Professor Mies van der Rohe. The Gold Medal will be presented to Professor van der Rohe at a General Meeting of the RIBA on May 26.

MOHLG - MOH

Two Chief Architects to be Appointed

The Ministry of Housing and Local Government and the Ministry of Health both announced last week that they are seeking Chief Architects. The MOHLG is to reorganize its architectural work, and is seeking a new Chief Architect (salary £3,750) to carry this through. The Ministry say that they want to give their architects more opportunities for constructive work and for developing new ideas. A housing development group will be established which will demonstrate the result of its researches into housing design and constructional techniques by building houses and flats, as well as by publications. J. H. Forshaw, the present Chief Architect, will remain with the Ministry as Architectural Consultant to advise on particular design problems.

At present the architectural work of the Ministry of Health, which examines the building schemes of health authorities, is carried out by the MOHLG. Because the amount of hospital building is increasing the Ministry is to have its own architects' department with a staff of about 15. The Chief Architect's salary will be £3,400.

COMPETITION RESULTS

Door Lever Handles

The assessors, Anthony Cox, Peter Chamberlin and Richard Planck, report:

This competition for a lever door handle suitable for use in public buildings was open to architects, designers and students: all competitors were required to submit a full sized model. Only six of the 67 entries received were from architects, the majority being from architectural and industrial design students. Many entrants submitted more than one design.

The general standard of design was disappointingly low. A large number of entries being quite unacceptable on grounds of comfort, mechanics or appearance. A surprising number of the designs were over or

Continued on page 123, *col.* 3

The Special General Meeting of the RIBA last week expressed itself almost unanimously by show of hands in support of the recommendations of the Constitutional Committee. It opposed a recommendation that the Architectural Association should retain its right to be directly represented on the Council. Only about 30 *members voted to retain the exclusive rights of Fellows to hold certain offices, and not more than a dozen opposed the basic principle of a Council democratically elected in part nationally and in part regionally. Questions on the financial report elicited the information that the* RIBA JOURNAL's *advertisement agent, Mr. O'Shaughnessy, receives a commission of* 25 *per cent. and a gross income of* £10,000 *to* £15,000 *a year. Mr. Spence said that a committee was already considering the position.*

RIBA SPECIAL GENERAL MEETING

Strong Support for Constitutional Changes

The Special General Meeting of the RIBA, although it lacked the heat and indignation of last year's AGM, was in many ways more encouraging. The atmosphere of crisis and the resentment of higher subscriptions were no longer there to spur apathetic members into action. Yet, on a dirty January night, there was hardly a vacant seat in the hall. Propositions that were not seriously entertained a few years ago, or dismissed as being far too advanced—such as the elimination of all ex-officio or non-elected members from Council, or the opening of all offices except the Presidency to Associates or Licentiates—passed through with hardly a flicker of opposition. The antagonism between the platform and the membership, which characterized last year's AGM, was replaced by something like unanimity, and one of the reasons for this was indicated by Cleeve Barr, whose translation from the rôle of critic at the rostrum to spokesman for the Council symbolized a wider transformation. The Council, he said, had dealt seriously with the criticisms, and the Constitutional Committee (whose report he presented, as chairman) had tried to get down to first principles. Those who had anticipated a procedural shambles at the Special AGM were confounded: Basil Spence presided with good humour but also with decision over an orderly and business-like assembly.

Financial report

Before coming to the main course, the meeting took as *hors d'œuvres* a statement by Jefferiss Mathews, the Hon. Treasurer, who summarized the report and recommendations of the Finance and House Committee. As nobody asked any questions or made any protest about the increased subscriptions, the meeting must be presumed to have accepted the explanation that they were unavoidable. Mr. Mathews did say, however, that the right place to discuss finance was at the AGM, so that aggrieved members (if there are still any) have one more chance. D. H. McMorran questioned the morality of making a profit of about £16,000 a year on examinations, and received a twofold answer from Mr. Mathews: the first, that the profit was not really as big as it seemed, because it did not include the cost of running the exams or the Board of Architectural Education; second, that it was a long-standing Council policy to derive an income from this source. Those who paid the fees, he said, knew what it cost, and if they didn't like it they didn't need to become architects; the fees were in the nature of a premium for becoming a member of the Institute. This statement evidently shocked, or surprised, some members who drew audible gasps of astonishment.

Eric Ambrose asked whether the *RIBA Journal* really made a profit, and was told that it only appeared to run at a loss as a result of the peculiarities of accountancy. If postage, the issue of the library bulletin, the annual report and the BRS digests were excluded, it did not run at a loss. Mr. Ambrose also asked if it was true that the RIBA paid 25 per cent. of the gross advertisement receipts to the advertisement manager. He understood that the amount paid to Mr. O'Shaughnessy was between £10,000 and £15,000 a year—a very large amount and not, he thought, very realistic.

Mr. Mathews confirmed that Mr. O'Shaughnessy was paid 25 per cent. commission on the net revenue of the advertisements, and that £10,000 to £15,000 was "probably approximately correct." In explanation he added, first, that out of this Mr. O'Shaughnessy paid staff, printing, postage, travelling, normal business expenses and entertainment, and second, that while it was easy to criticize the arrangement now, when the *Journal* was a success, before Mr. O'Shaughnessy was appointed in 1933 the *Journal* really was a loss and as dead as a doornail. The then Council decided to revive it by appointing a high powered man in the advertising world, and it was not surprising that Mr. O'Shaughnessy was not prepared to come at terms any less than were offered. The Council had certain obligations to Mr. O'Shaughnessy, who had made a success of it, but the matter was under review by the Council. Mr. Ambrose pointed out that if £15,000 was paid in commission the *Journal* must be a property worth more than the RIBA building, and sought to move that a committee be set up to consider the question. Mr. Spence said, however, that this was unnecessary, as a committee had been set up already.

Constitutional changes

After Anthony Cox, who seconded Cleeve Barr's motion last year, had recreated the honeymoon atmosphere by expressing his welcome for the financial proposals, Cleeve Barr presented the report of the Constitutional Committee, whose recommendations, he said, could not be effective, at the earliest, before the 1961 elections. Initially Basil Spence ruled that the meeting could only make suggestions, not pass resolutions, but he deferred to the wish of the meeting and allowed it to express its feeling about the various recommendations in a series of shows of hands.

Cleeve Barr presented the recommendations in groups. The first group, recommendations 1, 2 and 3, provide for the election of Council members in part nationally and in part regionally through the Allied Societies, and for automatic membership of the Allied Societies by all RIBA members. On a show of hands all but 6 members appeared to be "generally in favour" of these proposals, but some important questions were raised in the debate.

The Allied Societies

The first of these was the question of automatic membership. Cleeve Barr announced that already the Constitutional Committee was having second thoughts on this, because it implied that the RIBA would have to make good the loss of local subscriptions to the allied societies. It might be necessary, he suggested, to allocate members to electoral rolls based on allied society areas, while the societies continued with separate subscriptions. Edmund Wilford, Leicester, secretary of a small allied society, said that the additional rebate from automatic membership would not make up for the loss of his members' guinea subscriptions; they would have to curtail their activities. On the other hand another Leicester member, Stephen George, thought that automatic membership was vital, because the payment of extra subscriptions was depriving allied societies of the vigour of the younger members. Arthur Ling considered that the Constitutional Committee, of which he was a member, had not given enough attention to the branches and chapters in the smaller towns and urban areas. Members often had to travel long distance to get to meetings of the allied societies, but could get quickly to the local meetings. Ultimately Cleeve Barr indicated that, if automatic membership was thought necessary, the money might have to be found—a remark that seemed to cause Mr. Mathew some surprise.

Regional elections

Perhaps the most important question, however, was whether the Council should be elected part nationally and part regionally. Cleeve Barr stated the Committee's view that if all members were elected regionally the Council might be dominated by parochial views, and that the "best chaps" were not necessarily distributed on a geographical basis. The Committee, he added, had for the time being pigeon-holed the problems of London, Scotland and Ireland. Opposition to a national election came most vigorously from Duncan Scott, who supported the principle of democratic election, but contended that the nationally elected members of Council were generally those in the headlines of the architectural press, or heads of large architectural staffs, good fellows, but unknown to the electorate for their potentialities in running the affairs of the Institute. Their election was a "complete gamble," and they represented only themselves. But Allied Society representatives were responsible to their councils, who were responsible to their members through the chapters. The South Eastern Society, he said, felt that the Council should be entirely elected on a regional basis so that there could be a two-way means of communication between the Council man and the individual member. He was supported by Arthur Harris, Northampton, who thought a national election would preserve dead wood. Some change in the views of the South Eastern Society was announced by R. A. Cooksey, however, who said that it now considered that the Council should be "largely," instead of "wholly" elected by the Allied Societies.

The dual system, part regional and part national, was strongly supported by G. A. Atkinson, Brighton, who felt the idea of an all-regional Council was as fallacious as an all-national one. The person who lived in the provinces could find representation through the people he knew locally, but also had a right to vote for the national figures. There were also many architects who had no ties with any particular region, but moved about and were known all over the country. Thomas Sibthorp, London, favoured the dual system, too, but wanted something like five allied societies for London members, as London was too big for one.

Bob Foster, Essex, president of an allied society and a member of the Constitutional Committee, said that when members of his allied society were put up for council he sometimes felt he would rather not vote for them, but would vote for somebody else outside his region if he felt he was the right man. Council members, he thought, should be like MPs—free to use their own initiative and intelligence, but liable to be chucked out at the next election.

Election by classes

On the next recommendation (the first part of recommendation 4) that there should be no differentiation by classes of membership, Cleeve Barr said that the Committee felt that if Fellows, by their experience and merit, were the best chaps, they would be elected in an open system of election. There was no discussion, and on a show of hands only three members were seen to raise their hands against—but even they only flapped their hands rather half-heartedly just above shoulder height. Nor was there much discussion on the second part of this recommendation (no differentiation by categories of employment or occupation). Cleeve Barr said that the Committee had considerable sympathy with the idea of special representation for salaried employees, but turned it down because it was difficult to ensure that assistants who were elected were really representative. They should be able to get elected in a democratic election. But the main objection was that once sectional representation was allowed it was very difficult to refuse other sections. The vote for this recommendation was again almost unanimous.

Honorary Officers

In the next group of recommendations (5, 6 and 7, covering the size of the council, postal ballot, three year terms and a six year limit on continuous service) Cleeve Barr said that the Committee felt if the Council had slightly fewer members it would be more convenient. It looked as if each allied society would have one representative regardless of size. The voting was almost unanimous for the recommendations.

Recommendations 8-12 concerned the honorary officers, recommendation 12 providing that only the President must be a Fellow. There was virtually no discussion on the principle, but one member said that the attraction and authority of the class of Fellows had very largely been removed. It was a serious situation when many Associates had no ambition to be Fellows, and the Council, he urged, should consider what ought to be done to reinstate the class of Fellows, so that all members would wish to attain it. Basil Spence said that this was very much before the Council. Recommendations 8 to 11 were carried nem. con., and recommendation 12 with only about 30 dissentients—a result on which the President commented *sotto voce* "that's interesting."

AA and ABT

The last controversial question was the representation of the AA and ABT. Cleeve Barr said that the Committee had justified the exception to logic in favour of the AA "largely on sentimental grounds," but was opposed to representation of the ABT on the ground that co-operation with it could best be done by *ad hoc* or liaison committees. Leo De Syllas expressed the strong view of the AA Council that the AA should not be included on the RIBA on sentimental grounds. The AA had some experience to contribute, but could only accept representation on practical grounds. K. J. Campbell, ABT representative on Council, argued that while ABT would not object to thorough democratisation of the Council, it was illogical to make an exception for the AA and not for ABT. Therefore, if there was to be outside representation, ABT should be included. N. F. Watson said that if somebody was to represent salaried architects the Local Government Architects Society should be considered, but Thurston Williams, chairman of the LGAS provisional executive, announced that its members were being recommended not to seek representation on the RIBA Council. He hoped that both the AA and the ABT would do likewise, and so resolve this issue. His society believed there was a case for special salaried member representation, but as salaried members and not as representatives of a particular organisation. Basil Spence asked the meeting to vote "for or against no representation at all," and the result was overwhelmingly against any representation, only eight or nine members voting for it.

The democratic principle was carried a stage further on the one exception (recommendation 16) to ex officio representation. This recommends that the chairmen of the Board of Architectural Education and the RIBA Registration Committee be members of Council ex officio and that the former must be a Fellow—because he is chairman of the committee that admits Fellows. After it had been suggested that no ex officio appointments would be required if both these officers were appointed from the elected members of Council, recommendations 15 and 17 were carried nem. con., but 16 was rejected with only a couple of dissentients.

After another vote, nem. con., for the new proposals allowing overseas members to participate in the elections, and a vote of thanks to Basil Spence moved by K. J. Campbell, the meeting ended. L. L.

Competition results continued from page 122

undersized; the assessors take the view that the sizes of hands and doors are relatively constant, so that variations in handle size cannot be great. Except in a few cases little attention had been given to the methods of fixing, and plates and roses were often ill-considered or omitted altogether. There were a few purely "hand form" sculptural designs, which were gross in the extreme, and quite unacceptable both for production and use.

The assessors considered that although no design was of sufficient merit to deserve the award of the first prize of £100, eight of the designs reached the quality worthy of special mention, and in consequence it was decided to divide the whole of the prize money between three groups as follows:

Group 1—prize of £45 each: Eric Delf, Leeds College of Art, Vernon Street, Leeds. Peter F. Ralph, 92, Gloucester Terrace, W.2. Roger C. Edmunson, 18A. Mill Street, Bridgnorth, Salop.

Group 2—prize of £30 each: R. F. Gray, 20, Eton Road, Datchet, Berks. F. Belsky, 12, Pembroke Studios, Pembroke Gardens, W.8. J. E. Heritage, 71, Thurleigh Road, Balham, S.W.12.

Group 3—prize of £10 each: Kenneth G. Sadler, 85, Granville Road, S.W.18. A. Butowsky, 2/6, Northwood Hall, Hornsey Lane, Highgate, N.6.

Hamburg Exhibition

The result of the international competition for the International Horticultural Exhibition, Hamburg, 1963, is: First, Gunther Schulze; Second, Heinrch Radershcal; Third, Claus-Peter Kading. H. F. Clark, of Watlington, England, was among those who received an Award.

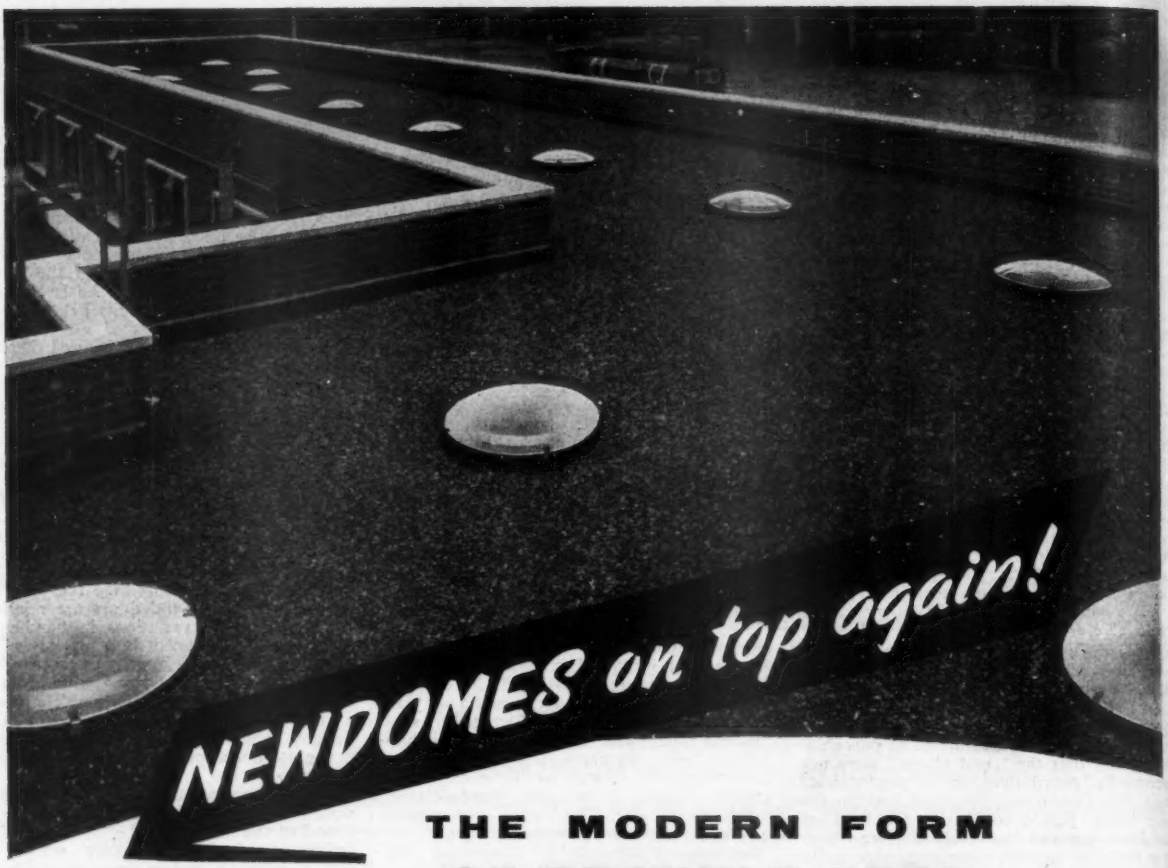
DIARY

Joint meeting of the ICE and the RIBA. At 1, Gt. George Street, S.W.1. Papers by E. D. Jefferiss Mathews and Ove Arup. 5.30 p.m. JANUARY 20

Glass in Recent European Architecture. Talk by Sven Sternfeldt at the AA, 34/36, Bedford Square, W.C.1. 6.15 p.m. JANUARY 21

Architects' Christian Union. A reception in the Henry Jarvis Hall, RIBA, 66, Portland Place, W.1. Guest speaker, John Henderson. 7-8.30 p.m. JANUARY 22

Milan's Rôle in the Italian Avant Garde. Talk at the ICA, 17/18, Dover Street, W.1. 8.15 p.m. JANUARY 22



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GLASS BENDERS FOR OVER A CENTURY

technical section

THE INDUSTRY

This week Brian Grant describes an oil-fired boiler, a tile mural, a primed hardboard, fluorescent light fittings, a friction hinge for windows and a ducted warm-air heating system.

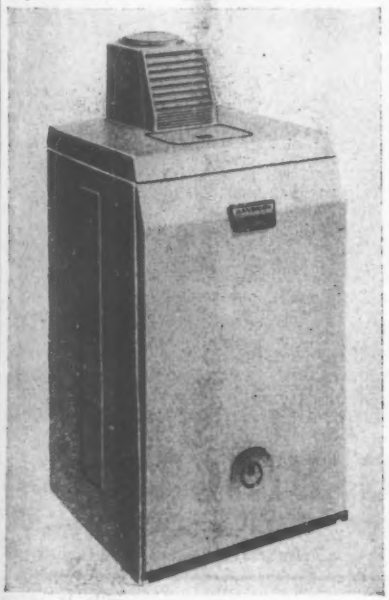
New oil-fired boiler

The illustration below shows the new Rayburn Major oil-fired boiler, which has an output of 30,000 B.Th.Us per hour and costs £80 exclusive of storage tanks and installation. The output is enough for the usual 30-gallon hot water cylinder plus up to 140 sq. ft. of radiating surface. Water temperature control is, of course, by thermostat, and there should be no particular difficulties of installation, as it will work with almost any flue not suffering from downdraught. Fuel is commercial grade kerosene, and there should be a gravity flow from the storage tank to the boiler. The tank should be as large as possible in order to take advantage of lower costs per gallon. It is interesting to note that the boiler, tank and all installation costs can, if required, be had on hire purchase terms spread over five years. (*Allied Ironfounders Ltd.*, 28, *Brook Street, London, W.*1.)

New Carter tiles

The photograph on the right shows part of a mural made from the new range of Carter tiles which has been designed by Ivor Kamlish of the Carter Design Unit. The tiles have a textured surface and measure 9 in. × 9 in. Cost, fixed, is about 25s. a square foot. It is a permanent exhibit at the Building Centre. (*Carter & Co. Ltd., Poole, Dorset.*)

The Rayburn Major oil-fired boiler made by Allied Ironfounders Ltd.



Hardboard ready for painting

Most types of hardboard need a priming or sealing coat before painting, and since the majority of hardboard used is decorated in some way, a number of firms are producing special priming agents. Celotex have now introduced a Sealcoat hardboard which has been sealed ready for painting during the manufacturing process, and which needs only one coat of most standard paints or distempers to provide a good finish, though some lightly pigmented paints will need two coats. This new hardboard is available in widths of 4 ft. and in lengths from 6 ft. to 12 ft. with thicknesses of $\frac{1}{4}$ in. and $\frac{3}{16}$ in. (*Celotex Ltd., North Circular Road, Stonebridge Park, London, N.W.*10.)

The Atlas KB Series industrial reflector fitting, from the new Popular range.

Lighting fittings

Some time ago Atlas introduced a range of packaged fluorescent fittings which were complete with tubes and all ready for connection. This "Popular" range has now been extended by a further four models which are intended for industrial and commercial use, and which vary in price from £7 12s. for a single tube fitting to £17 3s. 10d. for a twin 5 ft. model. All fittings are suitable for voltages between 200 and 250. (*Thorn Electrical Industries Ltd.*, 105/9 *Judd Street, London, W.C.*1.)

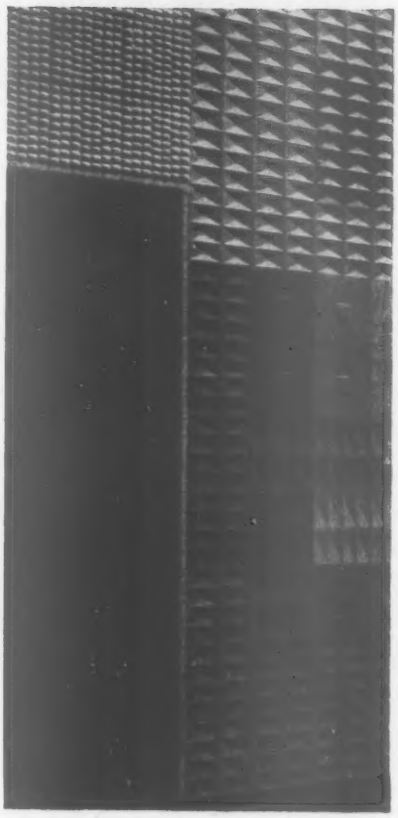
New Crittall friction hinge

All Crittall standard hot dip galvanized windows can now be supplied at no extra cost with a new easy clean friction hinge as an alternative to the peg stay. Both leaves of the hinges are of sheet steel welded to the frames, and pressure for friction is provided by a galvanized bolt and nut, prevented from rotating by the clevis and composite washer, both of stainless steel, which provide a smooth movement for the window. (*The Crittall Manufacturing Co. Ltd., Braintree, Essex.*)

Warm air heating by gas

Pottertons have just introduced a ducted warm air heating system which will provide full heating in the sitting room and background heating elsewhere in houses and bungalows of 850 to 1,000 sq. ft., the figure depending, of course, on the amount of insulation already in the structure. The warm air unit is mounted in the roof space and the copper tube heat exchanger has flow and return pipes to the boiler. An electrically driven fan circulates the warmed air through 4-in. diameter ducts in the roof space to grilles in individual rooms, and extracts it for re-circulation through an intake and filter which is often most conveniently placed in a hall or upper landing. As a general rule the extract is in the ceiling if the outlet grilles are at floor level, and vice versa.

Two sizes of unit are made, with heat outputs of 17,000 and 25,000 B.Th.U. per hour at 200 and 300 cubic feet of air a minute. Apart from the obvious desirability of placing the unit as centrally as possible on plan



Part of the tile mural in the courtyard of the Building Centre, designed by Ivor Kamlish of Carter Design Unit, showing the range of Carter's textured tiles.

Crittall's galvanized window fitted with a friction hinge.

technical section

Potterton warm air unit showing ducts: ceiling not insulated.

there are no particular installation snags, the only proviso being that flexible duct lengths should not exceed 30 ft. including allowances for bends. The smaller unit has four duct outlets and the larger one has six; ducts, unit and ceilings must, of course, be insulated. Control of the fan is by thermostat, and the fan is rubber mounted for silence, and for the same reason the water connections are made with rubber hose. The units can be used with any type of boiler, adding say 15,000 B.Th.U. to the capacity for providing domestic hot water. Pottertons rather naturally recommend their Diplomat type 30 or 44 boilers. The price of the units is £60 or £97, plus ducting and fittings. Filter units are replaceable, but can be cleaned by blowing through them in reverse with a vacuum cleaner.

Pottertons are now also producing a "small bore unit" containing a boiler (30,000 or 44,000 B.Th.U.) plus a Sigmund Thermopak circulator and an electric time switch. This is intended to provide domestic hot water through a 35 gallon cylinder with a limited input of 12,000 B.Th.U. plus 100 or 180 sq. ft. of radiating surface according to boiler size. All the components are enclosed (and ready wired), in a neat sheet steel case finished in a choice of colours. The boiler thermostat controls the water temperature and the time switch shuts the boiler off at night and turns it on in the morning, plus weekend selective devices if required. The circulator is controlled by a separate thermostat. Prices are £107 and £116.

Both units were shown earlier this month and I feel that a reference to Gas Boards with "promotionary tariffs" should not go unrecorded. I take it to mean Gas Boards which actually want to sell gas. (*Thomas Potterton Ltd., Buckhold Road, London, S.W.*18.)

MOISTOP

TRADE MARK

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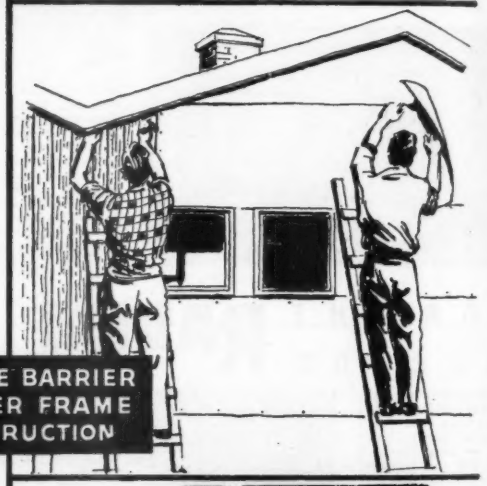
SARKING UNDER TILES AND SLATES

MOISTOP — is a SISALKRAFT product reinforced with unspun sisal fibres in the longitudinal and cross directions. The fibres are totally enclosed by two layers of high grade bitumen, which in turn are faced with tough, kraft paper, and one surface is coated with a layer of POLYTHENE.

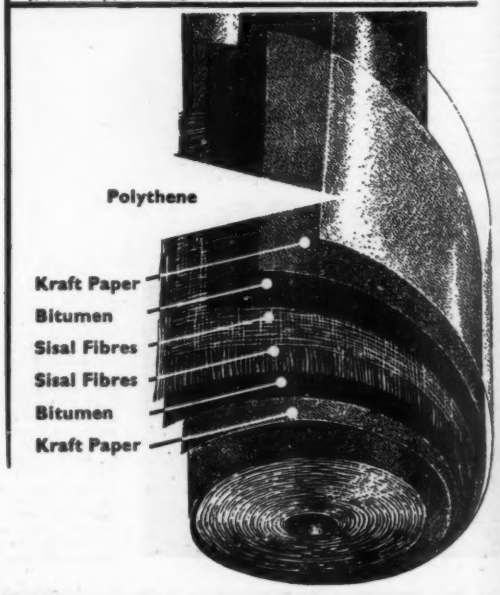
The result of this combination is an effective MOISTURE VAPOUR BARRIER that combines the strength of SISALKRAFT with the virtues of POLYTHENE.



MOISTURE BARRIER IN TIMBER FRAME CONSTRUCTION

APPLICATIONS

Sarking under tiles and slates
Moisture barrier in timber frame construction
Under timber floors
Moisture and air stop in walls
Underlay to concrete
Separation layer between concrete
Curing concrete
Form lining
Protection from frost
Temporary tarpaulin



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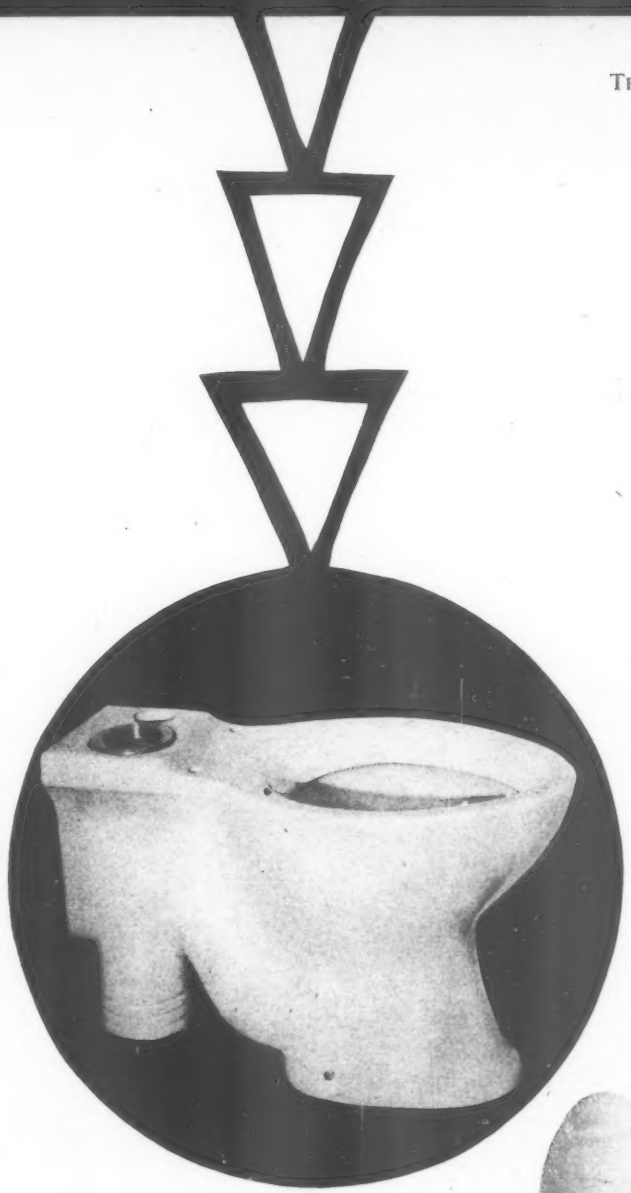
THE ARCHITECTS' JOURNAL
for January 15, 1959

400,000 square feet of POLISHED GRANITE

THE ARCHITECTS' JOURNAL
for January 15, 1959

at Bowater House, Knightsbridge, London. Architects: Guy Morgan and Partners F/FRIBA. General Contractors: Taylor Woodrow Construction Ltd.

GLAZING



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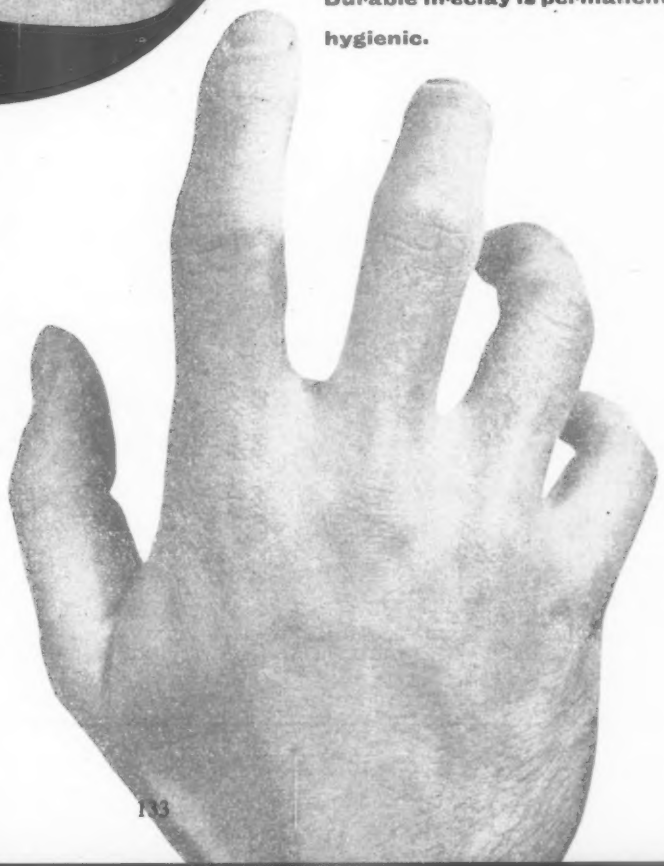
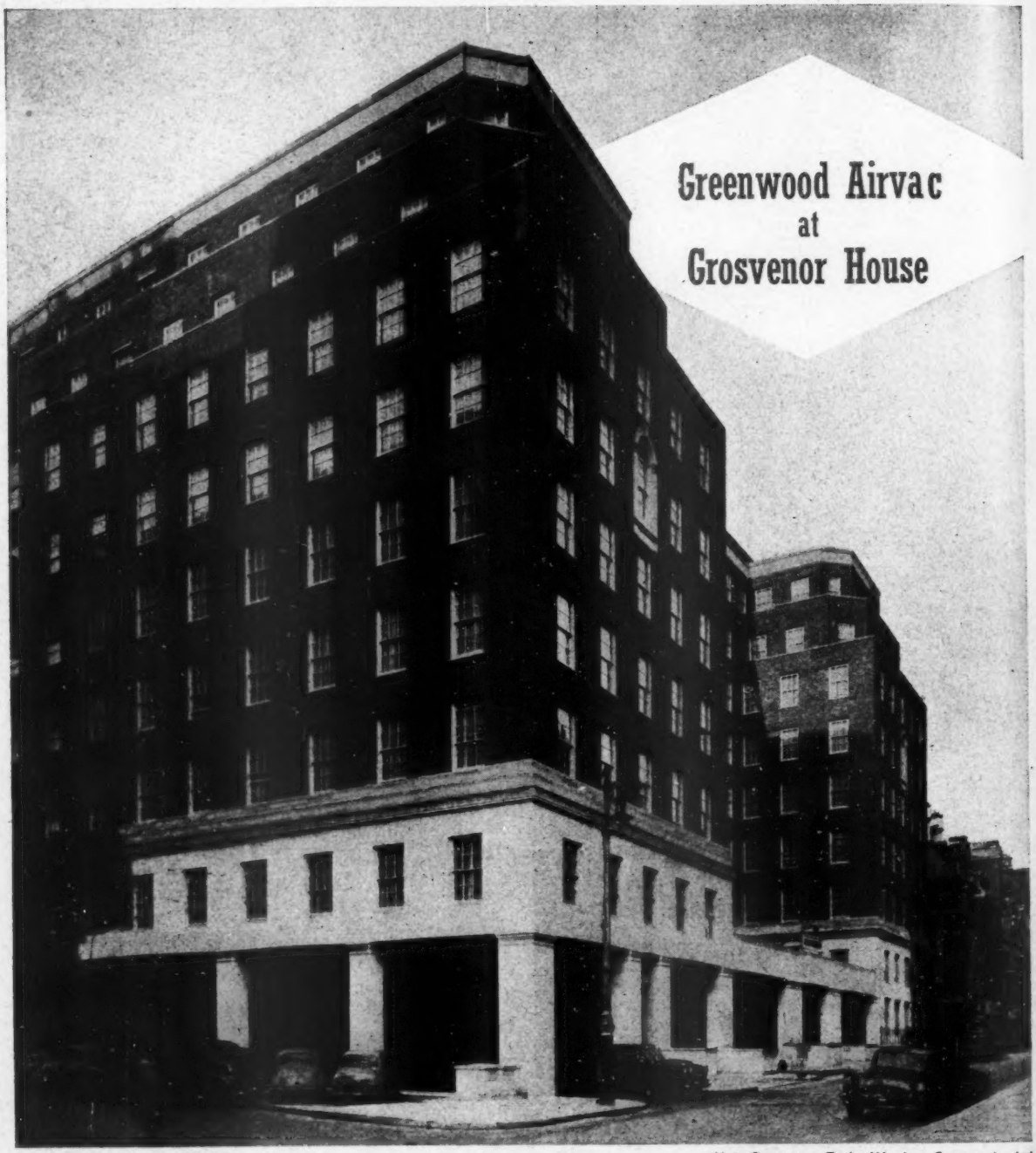
fireclay

sanitary ware

Sturdy and tough, it cuts maintenance costs and eliminates replacements.
Durable fireclay is permanently hygienic.





Greenwood Airvac at Grosvenor House

Architect: Gordon Jeeves, F.R.I.B.A.
Consulting Engineers: Winton, Thorpe, Tunnadine & Partners.

Main Contractor: Taylor Woodrow Construction Ltd.
Electrical Contractors: Troughton & Young Ltd.

The Greenwood Airvac Underfloor Conduit System is installed throughout Grosvenor House Extension carrying services to every room. They include television, telephones, power, lighting and signals. Each group is segregated by the Greenwood Airvac Crossover unit fitted in each junction box.

If you would like more details of Greenwood Airvac Conduit Systems, call to see the demonstration layout at Carlisle House or write to us.

We'll be glad to send full information.

Greenwood Airvac Conduits Ltd

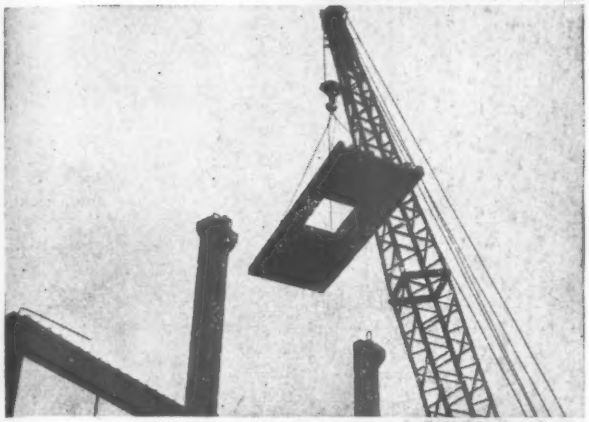
Patentees, Designers and Manufacturers of Electrical Conduit Systems

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

March 20th, 1958
Fire gutted a major part of the building.

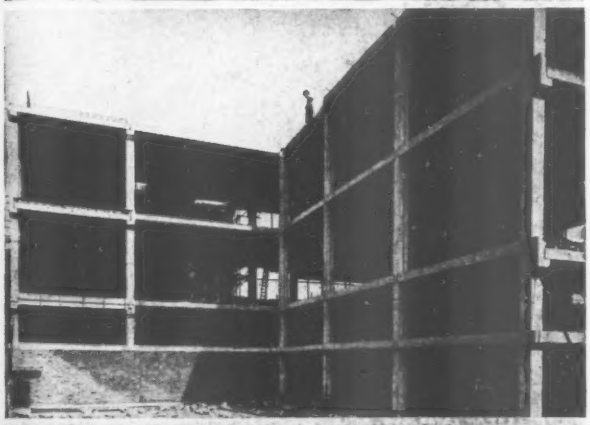
3 MONTHS METAMORPHOSIS

at an engineering works at Swindon ✱



May

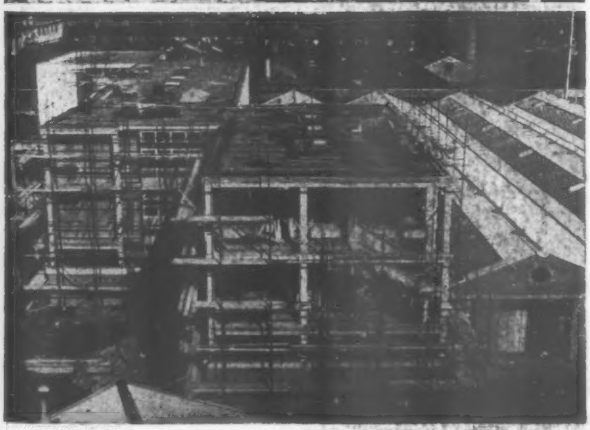
As the frame went up Bison Wide Slab units filled in the floors.
Illustration shows a Wide Slab roof light unit being hoisted into position.



June

Construction continued.

Note low level cill beams on metal brackets bolted to columns and eccentric beams in position on haunches.



July 7th

Frame, floors and roof complete.

General view of Despatch Blocks showing work of reconstruction consisting of three-storey frame building and approximately 24,800 sq. ft. of flooring and roofing.
Bison Wide Slab units were used throughout because of the additional speed of erection which they permit.

✱ Garrard Engineering Works, Swindon.
Architects: R. J. Beswick & Son, F.R.I.B.A., Swindon
Contractors: E. W. Beard Ltd.

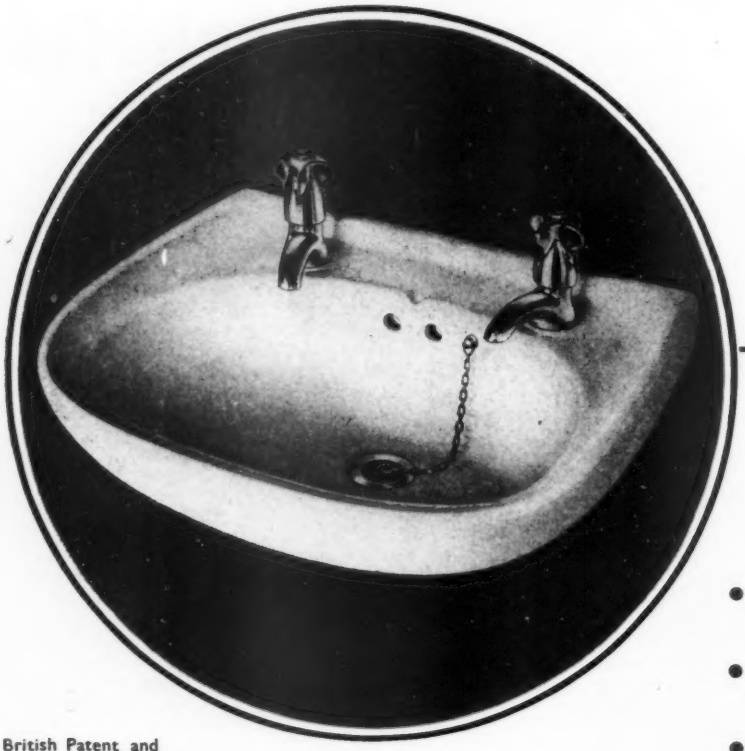
TWYFORDS "SOLA"

Lavatory

in

"CERAMANT"

Vitreous China

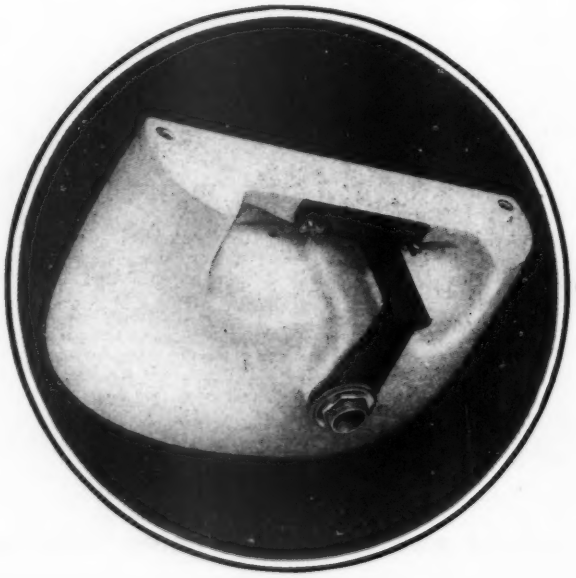


British Patent and
Reg'd Design applied for

"SOLA" Lavatory No. 2662

20" × 16"
15" × 13"

- Maximum size bowl with anti-splash rim at front.
- Securely fixed on semi-concealed centre bracket.
- Supplied with one or two tap-holes and centre soap.
- Shape of bowl on underside ensures easy cleaning.
- Supplied in white and seven colours.



Supporting bracket No. 1655

Cantilever pattern for building into wall—No. 1657

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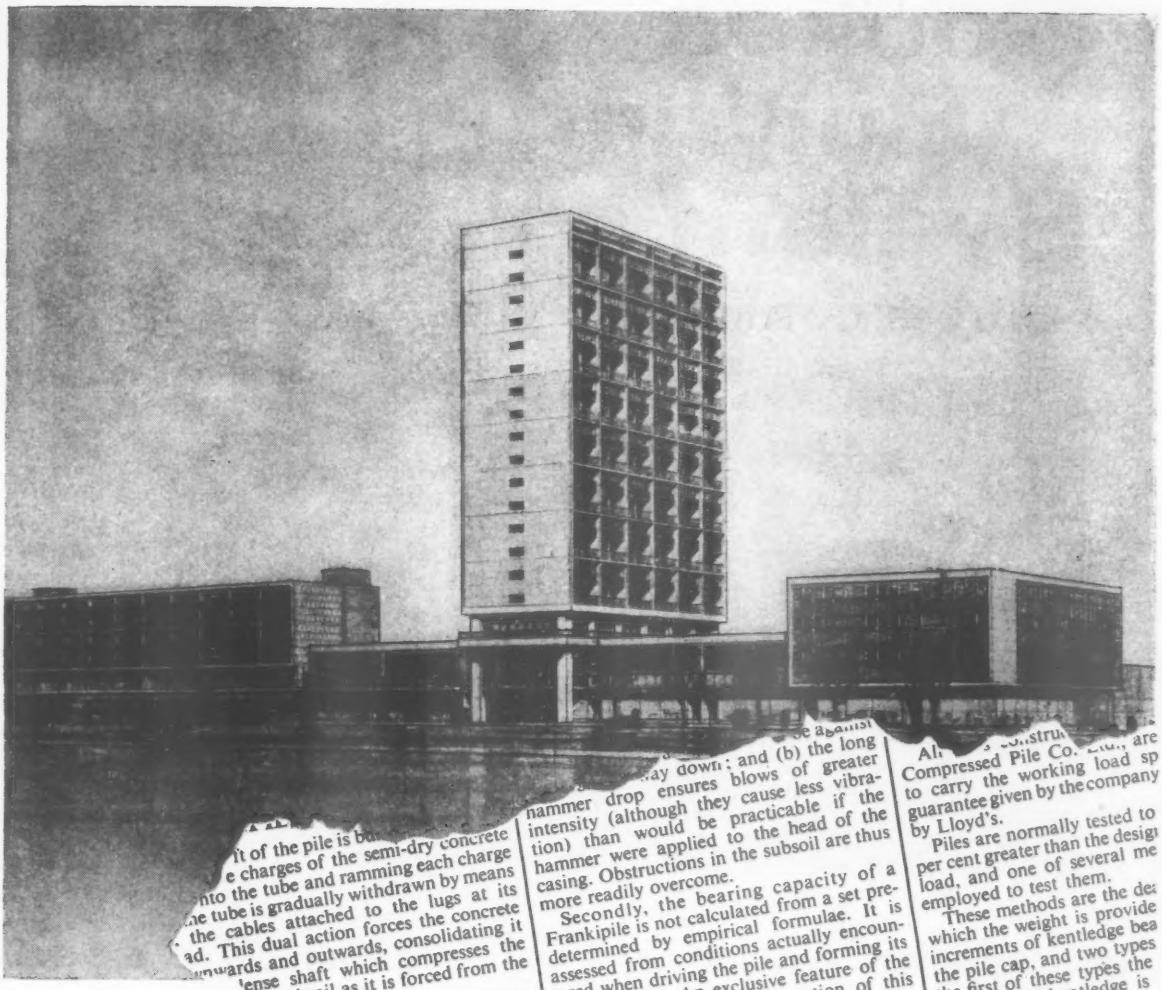


ARCHITECTS:
Cotton, Ballard and Blow

CONSULTING STRUCTURAL ENGINEERS:
W. V. Zinn and Associates

CONTRACTORS:
Tersons Limited

...it of the pile is b... e charges of the semi-dry concrete ...nto the tube and ramming each charge ...he tube is gradually withdrawn by means ... the cables attached to the lugs at its ...ad. This dual action forces the concrete ...rwards and outwards, consolidating it ...ense shaft which compresses the ...ng subsoil as it is forced from the ... the tube.

... is thus greater in diameter than ...e tube, providing adequate ...teel reinforcement and at ...suring the maximum skin ...ts rough corrugated sur... il which has already been ... driving process and is ...ain by the greater girth

...nation of the pile shaft a ...ammer cable serves (in the ... when the tube was driven) to ...e head of concrete necessary to ... the entry of water or any other matter. Should water accidentally ...he tube the heavy hammer jams in the ...oncrete and the pile has to be re-driven. ...s offers the practical assurance that a ...crete of low water-cement ratio is always ... the pile. In fact this ratio is lower ... system of in-situ piling.

...NG THE PILE

... the shaft can be stopped at ...low ground level, always provided the shaft has attained the adequate minimum length for stability. Except in special circumstances no in-situ piles can be formed above the ground level from which they are installed.

... is normal practice to finish off the ... foot above the required ...ther greater

...ay down; and (b) the long hammer drop ensures blows of greater intensity (although they cause less vibration) than would be practicable if the hammer were applied to the head of the casing. Obstructions in the subsoil are thus more readily overcome.

Secondly, the bearing capacity of a Frankipile is not calculated from a set predetermined by empirical formulae. It is assessed from conditions actually encountered when driving the pile and forming its bulbous base. An exclusive feature of the Franki system is the compaction of this base (like the rest of the pile) by direct mechanical action.

LATE NEWS

REBUILDING AT NOTTING HILL GATE

Work has commenced on the redevelopment of this important London area. The contract for piling the foundations of Scheme 'A' has been placed with the Franki Compressed Pile Company Limited of 39, Victoria Street, London, S.W.1. Just over 1,000 piles will be installed to depths up to 45 feet, each pile carrying approximately 60 tons, and this piling contract is scheduled to take less than four months. The Franki Company offers a free 95-page book on piling to Architects and Engineers.

Al... Compressed Pile Co. ... are to carry the working load sp... guarantee given by the company by Lloyd's.

Piles are normally tested to ... per cent greater than the desig... load, and one of several me... employed to test them.

These methods are the de... which the weight is provide... increments of kentledge bea... the pile cap, and two types ... the first of these types the ... test load of kentledge is ... ferred on to the pile by m... in the second, the jack op... kentledge but against th... from adjacent piles.

These methods can be ... equally accurate results, ... them generally dependin... and the type of kentledg...

Whichever method is ... taken at agreed stages ... incremental loading u... ing the full test load. ... allowed to remain on ... mined period, which ...

After the recordi... which may have occu... the load is gradual... ings being taken at ... way as when the loa... increased.

When the pile is ... final reading is take... this and the readi... is recorded as the ...

Piles are norma... also be tested in ...

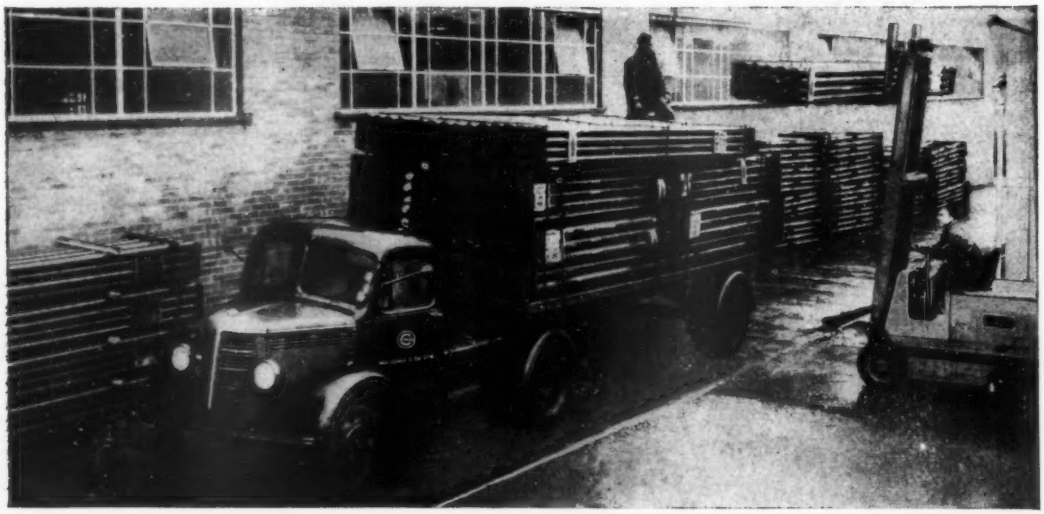
T...

THE ...

The efficienc...

Cookes Building *System

* REDUCES COMPLETION TIME AND COSTS

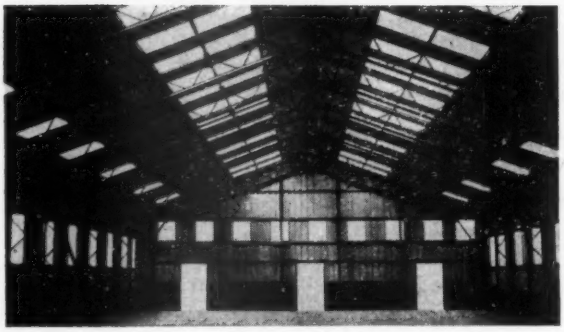


A recently completed contract being loaded at our Rotherham works, prior to delivery to the Docks.

A packaged building OR a complete service

You can have STEEL FRAMED BUILDINGS just the size and shape you want from standard units on a modular system. Cooke's STEEL FRAMED BUILDINGS, manufactured exclusively by William Cooke & Co. Ltd., Rotherham, offer you a comprehensive and reliable service which can save you TIME and MONEY.

If all you want is a building, or just the framing, or even some components, then it is certain that you will find what you want within Cooke's range. Drawings and calculations will also be provided, if required, in a form to suit your planning authority, and any supplementary information will be made available to you or your architect to assist your contractor or your own labour to complete the structure.

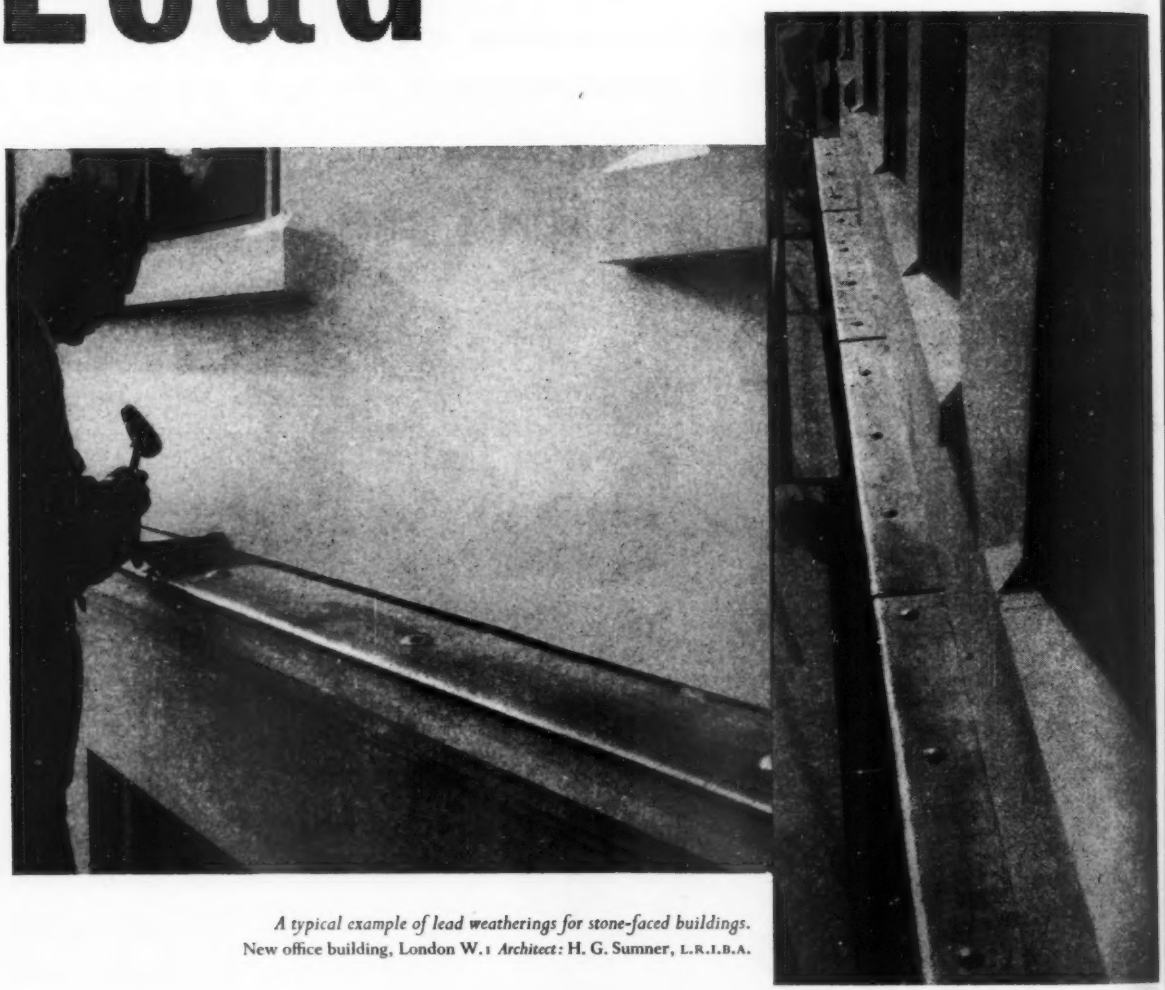


If on the other hand you would prefer Cookes to take the whole of the responsibility, then our organisation is equipped to deal with any project from the first site survey to completion, including the provision of the essential services such as Drainage, Plumbing, Lighting, Power, Heating, Ventilation and Insulation.

For further particulars write to:

WILLIAM COOKE & COMPANY LIMITED, BUILDING DEVELOPMENTS DEPARTMENT
ENGINEERING DIVISION, EASTWOOD, ROTHERHAM
Telephone: ROTHERHAM 5404/6

Lead weatherings...



A typical example of lead weatherings for stone-faced buildings.
New office building, London W.1 *Architect:* H. G. Sumner, L.R.I.B.A.

A FAMILIAR JOB to the plumber is fixing lead weatherings to cover cornices and similar projections of stone-faced buildings.

Lead is extensively used for such weatherings, because experience proves it to be the best material for the purpose—it does not stain adjoining masonry—it gives

permanent protection

h

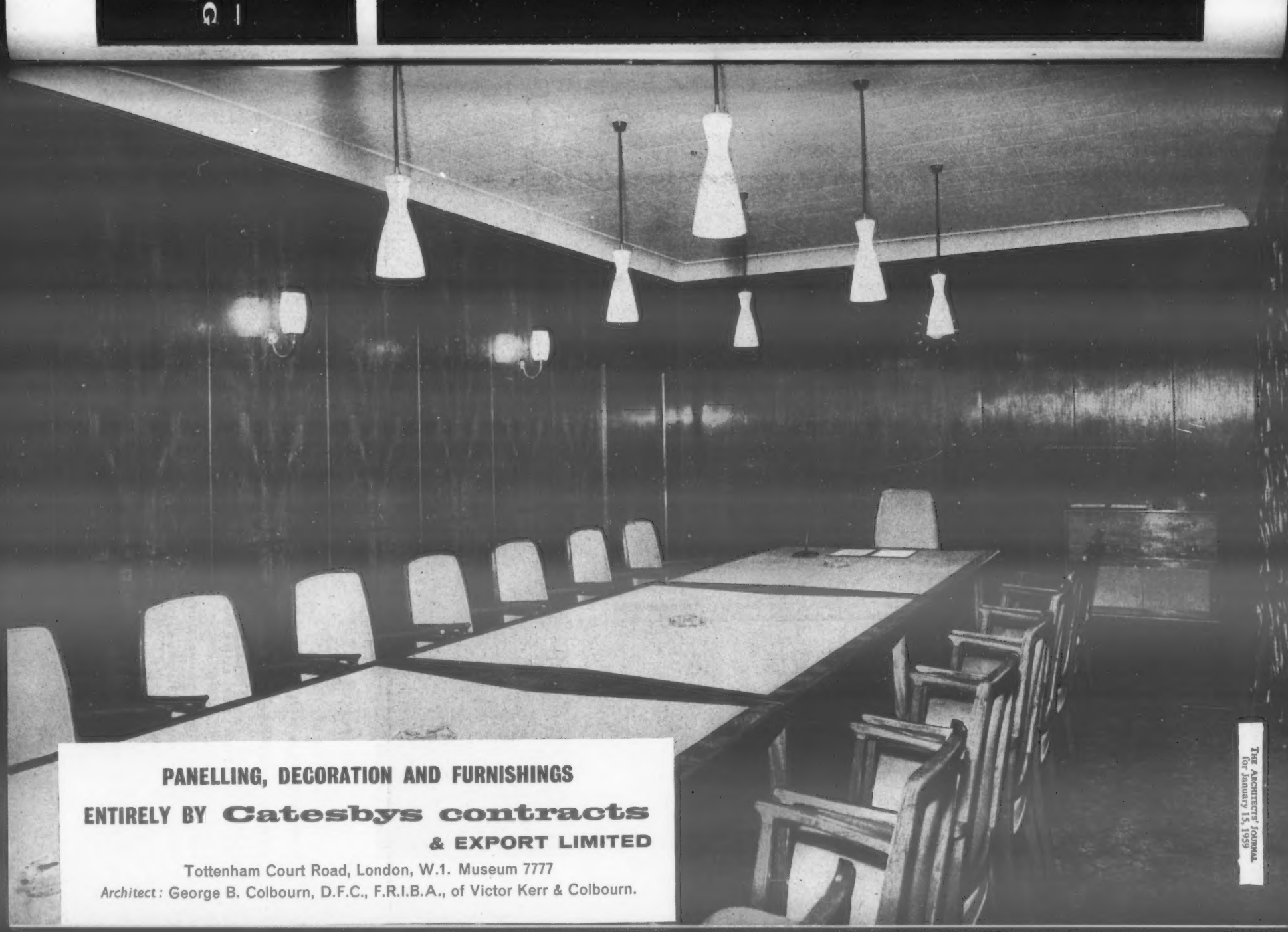
LEAD LASTS

The Association's Technical Information Bureau will gladly help with problems on the use of Lead Sheet and Pipe in building work. Details of the main uses are given in a series of information sheets and bulletins, which can be obtained by applying to the Association.

LEAD DEVELOPMENT ASSOCIATION 18, ADAM STREET, LONDON, W.C.2

Telegrams: Leadevep, Rand, London *Telephone:* Whitehall 6175

B. 193



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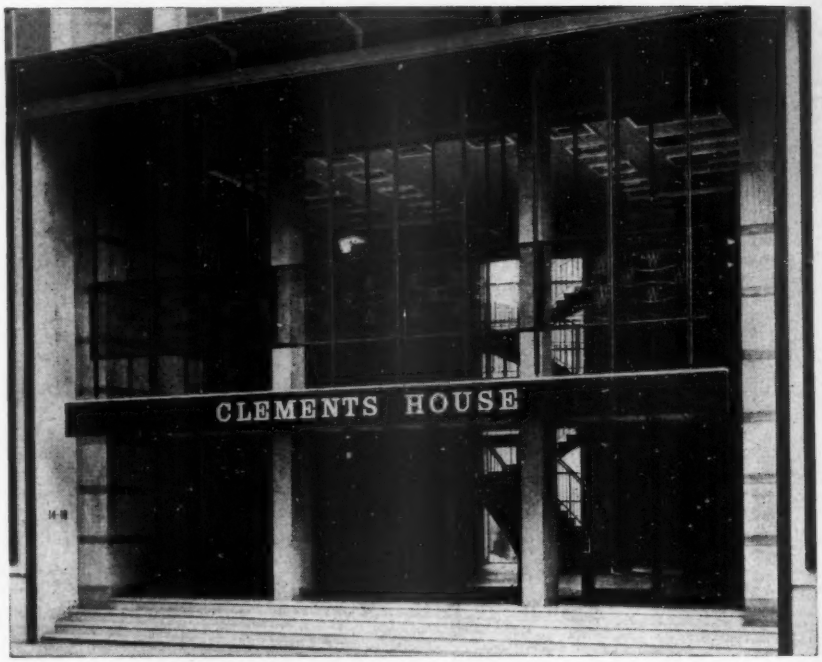
Architect: George B. Colbourn, D.F.C., F.R.I.B.A., of Victor Kerr & Colbourn.

THE ARCHITECTS' JOURNAL for January 15, 1959

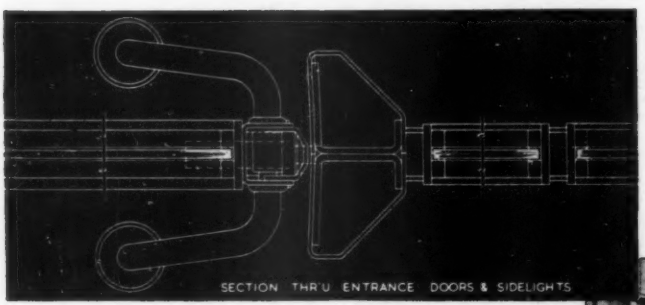
Architectural Metalwork

by MORRIS SINGER

Pressed steel Entrance Framing and Doors, cellulosed sprayed two colours, for 'Clements House,' Gresham Street, London, E.C.2. In front of the main screen between soffit and canopy, ten vertical tubes support decorative glass panels in a break press formed glazing frame.



Architects:
Trehearne & Norman, Preston & Partners



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SPECIFICATION 1959

***Editor*, F.R.S. YORKE, F.R.I.B.A.**

THE 1959 EDITION of this unique complete guide to the writing of building specifications, long acclaimed as the standard work covering all sections of the building industry, has been scrupulously revised throughout and now runs to 1,458 pages (1,404 pages in 1958, 1,334 in 1956). Model specification clauses are included in many of the sections, and the general arrangement is that laid down by the British Standards Specification for the sequence of trade headings in specifications.

This year the biggest revision is in *Carpenter and Joiner:* a new sub-section, 'Timber Engineering,' is contributed by D. W. Cooper, B.SC., A.M.I.STRUCT.E., F.INST.W.SC. Types of plywood are more fully described by I. D. G. Lee, B.SC. (ENG.), A.INST.W.SC., and a T.D.A. table of the main types of plywood, blockboard and laminated board is included. John Stillman and John Eastwick-Field, A./A.R.I.B.A., have re-arranged the specification clauses and re-written the matter about timber seasoning, and F. D. Silvester of T.D.A. has revised the introduction. The *Curtain Walling* section is extended to include some systems of timber construction and new steel and aluminium systems. *Plumber, Sanitary Engineer and Water Supply* is enlarged and more fully illustrated. Other sections substantially altered and enlarged include: *Roofer; Preliminaries; Electrical Engineer; Piling; Shop Equipment;* and *Building Equipment*, which is now more appropriately re-named *Specialist Work*.

In each of its 39 sections will be found not only full details of the established methods of building construction but also the latest information about the constantly changing and ever-increasing number of proprietary systems and materials.

You are urged to place your order now for the 1959 edition. Price 35s. net, postage 3s. 3d. inland (6s. 4d. abroad).

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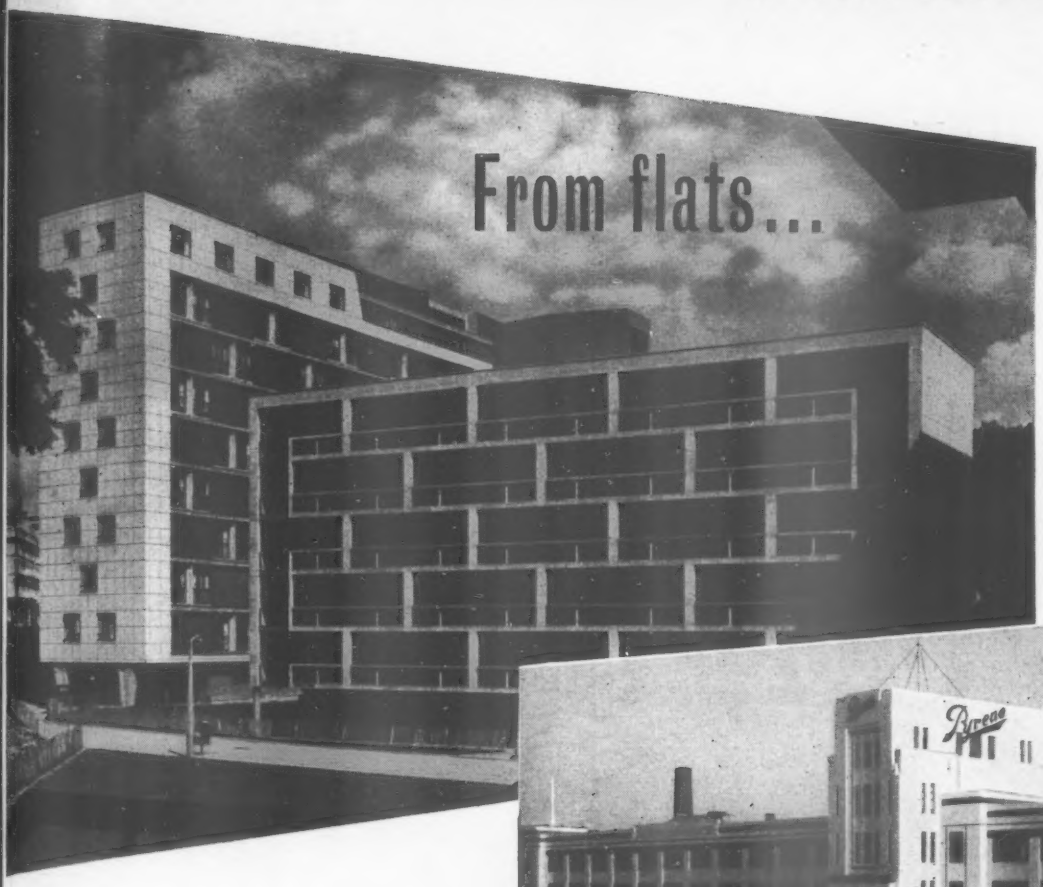

to factories...

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Through the ever-growing demands of this high powered age, buildings rise and spread yet they are not obtrusive. Their clean-cut beauty adds much to an old city or large industrial estate and with the introduction of a colourful exterior decor, these buildings are a beauty to the eye and a credit to our country. Give credit to LEYLAC too, already lending its durability and unsurpassed beauty to an infinity of decorative schemes.

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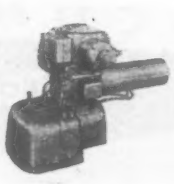

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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

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

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METROPOLITAN BOROUGH OF LAMBETH
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Applications are invited from architects to assist in large programme of conversion and improvement of dwelling houses. Duties: Surveys of existing properties, preparation working drawings and specifications and supervision of works in progress, etc. Appointment will be on a temporary basis for possibly two or three years. Applications will be considered from older members of the Profession with suitable experience. Salary: according to qualifications and experience within the range £875/£1,055 p.a.

Full details of experience and qualifications should be forwarded to the Town Clerk, Lambeth Town Hall, London, S.W.2.

24th January. 2456

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Starting pay according to age, qualifications and experience. Good prospects of promotion with salaries of £1,015 p.a. and above.

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Interviews at Regional Offices where possible. Applicants should be of Intermediate R.I.B.A. standard. State age, training and experience to Chief Architect, Ministry of Works, Room 435, Abell House, John Islip Street, S.W.1. 2444

KENT COUNTY COUNCIL

The following staff are required for work on the Council's extensive building programme which includes schools, colleges, old people's and children's homes, clinics, ambulance, fire and police stations and other public buildings:—

ARCHITECTS.

Candidates should be capable of accepting responsibility and displaying initiative, within a group system, in the design and control of building projects, and possess experience and ability in current problems of design and control of costs. Salaries within scale £750—£1,030 a year.

QUANTITY SURVEYORS.

Candidates should have had experience in the preparation of estimates, bills of quantities and final accounts for building projects. Salaries within scale £750—£1,030 or £575—£725 a year. Applicants for appointment to the higher scale should have passed the Final Examination of the Royal Institution of Chartered Surveyors (Quantity Surveying Section) and be familiar with recent developments in cost analysis and cost planning. Other applicants should have passed the Intermediate Examination of the Institution.

Commencing salaries according to qualifications and experience. N.J.C. Conditions of Service. Further details and application forms from County Architect, Springfield, Maidstone. Closing date 27th January, 1959. 2477

BOROUGH OF SCUNTHORPE
BOROUGH SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments:—

(a) ASSISTANT ARCHITECT, Special Grade (£750 × £40—£1,030 p.a.) or A.P.T. III (£845 × £35—£1,025 p.a.).

(b) ASSISTANT ARCHITECT, A.P.T. II (£725 × £30—£845 p.a.).

The commencing salary of each post will be fixed according to qualifications and experience.

The work will be of an interesting and varied character in an expanding town with a population of 60,000.

Housing accommodation will be available if required.

Applications, giving particulars of age, experience, qualifications and appointments, together with the names of two referees, should be submitted to the undersigned not later than 24th January, 1959.

T. M. LISTER,
Town Clerk.

Municipal Offices,
34, High Street,
Scunthorpe.
30th December, 1958. 2468

BOROUGH OF ACTON
BOROUGH ENGINEER'S DEPARTMENT

a. ENGINEERING ASSISTANT
b. ARCHITECTURAL ASSISTANT

Applications are invited for these permanent appointments on Grade A.P.T. I (£575—£725 per annum plus London Allowance (maximum £30).

Possession of parts of appropriate professional examinations will be an advantage.

Applications including age, qualifications, experience and the names of two referees must be sent to the Borough Engineer, Town Hall, Acton, W.3, by January 24th, 1959. 2551

CITY OF LEICESTER
CITY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of an ASSISTANT ARCHITECT. Salary within Special Grade £750/£1,030 per annum, who would be engaged on Educational Buildings.

Applicants must have passed Parts I and II of the Final Examination of the R.I.B.A.

Applications, with the names of two referees, should be sent to the undersigned not later than Saturday, 24th January, 1959.

J. H. LLOYD OWEN,
City Architect.

10 Loseby Lane,
Leicester. 2547

CITY AND COUNTY OF THE CITY OF EXETER

Applications are invited for the following appointments in the City Architect's Department:

(a) SENIOR ASSISTANT ARCHITECT on the established staff. Salary within Special Grade (£750 to £1,030 per annum). Applicants must be Associate Members of the Royal Institute of British Architects and preference will be given to those with experience in the design and construction of civic buildings.

(b) JUNIOR ARCHITECTURAL ASSISTANT on the temporary staff. Salary A.P.T. Grade I (£575 to £725 per annum). Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects.

The appointments will be subject to one month's notice on either side and the senior appointment will be subject to the provisions of the Local Government Superannuation Acts, 1937 and 1953. The successful applicants 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. B. Rowe, F.R.I.B.A., A.M.I.Struct.E., City Architect, Municipal Offices, Exeter, not later than 24th January, 1959.

C. J. NEWMAN,
Town Clerk.

Exeter.
January, 1959. 2495

BOROUGH OF SHREWSBURY
BOROUGH SURVEYOR'S DEPARTMENT
ARCHITECTURAL ASSISTANT

Applications are invited for the post of Architectural Assistant, Special Grade, £750 × £40—£1,030.

Housing accommodation will be provided if required and removal expenses paid.

Applications stating age, qualifications and experience with the names of two persons to whom reference can be made, should be submitted to the Borough Surveyor, Guildhall, Shrewsbury, by the 26th January, 1959.

S. R. H. LOXTON,
Town Clerk.

Guildhall,
Shrewsbury. 2582

CHERTSEY URBAN DISTRICT COUNCIL
ASSISTANT ARCHITECT

Applications are invited for the above position in the department of the Engineer and Surveyor at a salary in accordance with Grade IV of the A.P.T. Division of the National Scales (£1,025 × £50—£1,175 per annum).

Applicants must be Registered Architects. Preference will be given to those qualified as Associates of the Royal Institute of British Architects, with experience in local government.

Forms of application can be obtained from the undersigned to whom they should be returned not later than the 21st January, 1959.

A. REX HERBERT,
Clerk of the Council.

Council Offices,
Chertsey, Surrey. 2465

SURVEYING ASSISTANT required in Architect's Department. Salary within scale £525 to £730 plus £20—£30 London Weighting. Candidates should have passed the Intermediate examination of the R.I.C.S. (IIIB).

The work is varied and interesting and entails preparation of surveys, working drawings and specifications under supervision of works of a minor character. The Board operates a scheme of financial assistance to students studying for professional examinations.

Applications, stating age, qualifications and experience, and giving names of two referees to Secretary, North West Metropolitan Regional Hospital Board, 40, Eastbourne Terrace, W.2, by 22nd January, quoting ref. 593. 2579

KINGSTON UPON HULL EDUCATION COMMITTEE
REGIONAL COLLEGE OF ART AND CRAFTS
Principal: S. I. HEMMING, A.R.C.A.(Lond.), F.R.S.A.

SCHOOL OF ARCHITECTURE

Applications are invited for the post of SENIOR LECTURER in the School of Architecture, which conducts a five-year full-time Diploma course in Architecture and a part-time course in Town Planning. Candidates should have had some years of professional experience and possess a degree or diploma of a recognised School of Architecture.

Salary: Burnham Technical Scale: £1,350 × £50—£1,550.

Application forms, to be returned as soon as possible, will be supplied by the Chief Education Officer, Guildhall, Kingston upon Hull. 2624

COUNTY BOROUGH OF BIRKENHEAD
BOROUGH ARCHITECT'S DEPARTMENT
(RE-ADVERTISED)

Applications for TWO PRINCIPAL ASSISTANTS, A.P.T. Grade IV (£1,025—£1,175) are invited from appropriately qualified and experienced persons to take charge as Section Leaders in design and administration of major contracts. Applicants must be Associates of the R.I.B.A. or hold equivalent qualifications. Salaries commensurate on qualifications and experience. The appointments are superannuable and subject to one month's notice on either side. Form of application and further particulars obtainable from the Borough Architect's Department, 3 Conway Street, Birkenhead. Closing date for applications—22nd January, 1959. 2557

NORTH THAMES GAS BOARD

An ARCHITECTURAL DESIGNER (Male or Female) is required for work in connection with the design of new showrooms and the remodelling of existing showrooms and shopfitting, furniture, etc. Candidates should be capable of carrying out sketch designs, working and detail drawings with the minimum of supervision.

Preference will be given to candidates who have completed part or whole of the qualifications for A.R.I.B.A.

The appointment will be permanent and pensionable and the starting salary for a male would be in the region of £845 per annum according to age and experience.

Applications, stating age and giving full details of experience, should be sent to the Staff Controller, North Thames Gas Board, 30, Kensington Church Street, W.8, quoting reference AJ/661. 2556

ASHFORD URBAN DISTRICT COUNCIL
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Architectural Assistant required in Surveyor's Department. N.J.C. Conditions apply. Salary: Grade A.P.T. I (£575—£725) or Grade A.P.T. II (£725—£845) according to qualifications.

Candidates should have passed R.I.B.A. Intermediate Examination.

Assistance with housing accommodation can be given.

Applications, stating age, training, qualifications and experience and names of two referees to: The Surveyor, 1, Elwick Road, Ashford, Kent, by the 27th January, 1959. Envelopes endorsed "Architectural Assistant."

G. H. REDFERN,
Clerk of the Council.

Council Offices,
Church Road,
Ashford, Kent.
5th January, 1959. 2600

THURROCK U.D.C. (Engineer and Surveyor's Dept.) require ARCHITECTURAL ASSISTANT under Architect to the Council. Salary: A.P.T. I/II, £575—£845 p.a. Good architectural experience is necessary. Applicants must be capable of preparing working drawings in all categories and should have passed the Intermediate Examination of the R.I.B.A. The Council have interesting projects in hand, including the Indoor Swimming Bath. Appointment pensionable. Applications, stating age, qualifications, and experience, and quoting three referees, to the Clerk of the Council, Council Offices, Grays, Essex, by 27th January, 1959. Canvassing disqualifies. Relationship with Members or Senior Officers of the Council must be disclosed. 2596

SOUTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD

Applications are invited for the appointment of an ASSISTANT QUANTITY SURVEYOR on the permanent staff of the Board's Regional Architect generally in accordance with Whitley Council conditions of service. Applicants for the post must be Corporate Members of the Royal Institute of Chartered Surveyors (Quantity Surveying Branch) and have had sound practical experience in working up and taking off of quantities for contracts, checking contractors' accounts, estimating and analysing prices.

The commencing salary for the post will be within the scale £700 × £25 (3) × £30 (1) × £35 (6)—£1,015 p.a., plus London Weighting Allowance. Application forms may be obtained from the undersigned at 40, Eastbourne Terrace, W.2, and must be completed and returned by not later than 19th January.

E. G. BRAITHWAITE,
Secretary.
2595

BOROUGH OF CROSBY
CAPITAL WORKS PROGRAMME
ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT in the Borough Engineer's Department at a salary within the range A.P.T. I to A.P.T. II (£575 by £30 to £845) according to qualifications and experience.

The successful applicant will be engaged mainly upon works of a Capital nature, including the construction of a new Swimming Bath, and some experience in such work will be an advantage.

Housing accommodation will be made available upon satisfactory proof of need.

Applications on forms obtainable from the Borough Engineer at the address below must be received, suitably endorsed, as soon as possible.

Canvassing directly or indirectly will disqualify.

HAROLD O. ROBERTS,
Town Clerk.

Town Hall,
Waterloo,
Liverpool, 22. 2610

BENTLEY-WITH-ARKSEY URBAN DISTRICT COUNCIL

APPOINTMENT OF ASSISTANT ARCHITECT

Applications are invited for the position of Assistant Architect at a salary in accordance with Grade IV (£1,025—£1,175 per annum).

Applicants must have passed the Final examination of an appropriate professional body or be University graduates, and have considerable experience of municipal housing and other municipal work.

Applications, stating age, qualifications and experience, particulars of present and previous appointments, together with copies of three recent testimonials and endorsed "Assistant Architect," must be delivered to the undersigned not later than noon on Monday, 2nd February, 1959.

The successful candidate will be provided, if necessary, with housing accommodation.

The appointment will be subject to (1) the provisions of the Local Government Superannuation Act, 1953; (2) the National Scheme of Conditions of Service; (3) the satisfactory passing of a medical examination and (4) termination by one month's notice on either side.

W. H. CARLILE,
Clerk to the Council.

Council Offices,
Cooke Street,
Bentley,
Nr. Doncaster. 2616

COUNTY BOROUGH OF SOUTHEND-ON-SEA
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following posts:—

(a) ASSISTANT ARCHITECT. Salary scales £750 by annual increments of £40 to £1,030.
(b) ASSISTANT QUANTITY SURVEYOR. Salary scales £750 by annual increments of £40 to £1,030.
(c) TECHNICAL ASSISTANT (ARCHITECTURAL), £575 by annual increments of £30 to £725.

Candidates must be suitably qualified and experienced.

The appointments will be subject to the provisions of the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service so far as adopted by the Council. Medical examination.

Applications, stating age, qualifications and experience, with the names of two referees, should be submitted to the Borough Architect, 30, Alexandra Street, Southend-on-Sea, forthwith.

Canvassing will disqualify. Any candidate who is related to member or officer of the Council is required to disclose the fact.

ARCHIBALD GLENN,
Town Clerk.
2615

HORNCHURCH URBAN DISTRICT COUNCIL
ENGINEER AND SURVEYOR'S DEPARTMENT
ARCHITECTURAL ASSISTANT
Grade A.P.T. II (£725—£845)

Applications are invited for the above permanent appointment at a salary in accordance with Grade A.P.T. II (£725—£845). In addition, an amount equivalent to that of London weighting will be paid.

Candidates should be good draughtsmen with a special knowledge of construction and experience in the preparation of working drawings. They must have passed the R.I.B.A. Intermediate examination and be studying for the Final.

The appointment will be subject to the Local Government Superannuation Acts, the National Scheme of Conditions of Service and the passing of a medical examination.

Housing accommodation will be available, if required.

Application forms may be obtained from and must be returned to the undersigned not later than Saturday, 24th January, 1959.

P. L. COX,
Clerk of the Council.

Council Offices,
Billet Lane,
Hornchurch,
Essex. 2602

NEWTON-LE-WILLOWS URBAN DISTRICT COUNCIL

APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment. Salary Grade A.P.T. II. The National Scheme of Conditions of Service and the Local Government Superannuation Acts will apply. Provision of housing accommodation considered.

Preference will be given to applicants who have had experience in municipal housing.

Applications, stating age, qualifications and experience, together with the names of two referees, to be received by the Clerk of the Council, Town Hall, Market Street, Newton-le-Willows, Lancashire, not later than 30th January, 1959. 2628

AIR MINISTRY WORKS Design Branch requires in LONDON and PROVINCES ARCHITECTURAL ASSISTANTS experienced in planning/preparation of working drawings and details for permanent and semi-permanent buildings. Salaries in LONDON up to £1,015 for men and £925 p.a. for women. Somewhat lower in PROVINCES. Starting pay dependent on age, qualifications and experience. Long-term possibilities with promotion and pensionable prospects. Five-day week. 3 weeks 3 days leave a year. Liability for overseas service. Normally natural born British subjects. Write stating age, qualifications, employment details including type of work done to any Employment Exchange quoting Order No. Borough 100. 2633

BOROUGH OF ENFIELD
BOROUGH ENGINEER'S DEPARTMENT
(Population: 109,200. Area: 12,401 acres)

Applications are invited for established posts within the Grades shown:—

(a) SENIOR ARCHITECTURAL ASSISTANT A.P.T. IV (£1,025—£1,175 per annum).
(b) MAINTENANCE ASSISTANT (Architectural Section) A.P.T. I (£575—£725 per annum).
(c) JUNIOR ASSISTANT (Architectural Section) Higher General Division (£230—£560 per annum).

A London Weighting Allowance of £10—£30 per annum according to age will be paid in addition to the above salaries.

The Extended Higher General Division Scale applies to post (c) above.

Consideration will be given to the provision of housing accommodation for post (a) above, or for a loan to enable the successful candidate to purchase a house if required.

Saturday mornings are normally free of duty.

Application forms, returnable by 3rd FEBRUARY, 1959, from H. Deryck Peake, M.Sc. (Eng.),, M.I.C.E., Borough Engineer & Surveyor, "Percy House," 7 Little Park Gardens, Enfield, Middlesex.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Public Offices,
Enfield, Middx. 2530

CITY OF ST. ALBANS
ARCHITECTURAL ASSISTANT

Applications are invited from persons who have passed the Intermediate R.I.B.A. examination, or equivalent. Salary within A.P.T. I (£575 × £30—£725) or A.P.T. II (£725 × £30—£845) according to experience and qualifications. The post is unestablished but is likely to be for a period of at least two years.

Housing available.

Applications stating age, qualifications experience and names of two referees, should reach the undersigned by 26th January, 1959.

W. B. MURGATROYD,
Town Clerk.

38, St. Peter's Street,
St. Albans. 2633

BOROUGH OF POOLE
APPOINTMENT OF THREE ASSISTANT ARCHITECTS
Special Grade £750—£1,030

Applications are invited for the above appointments to the Borough Engineer's staff. Candidates should have passed the appropriate professional examinations. Starting salary will depend upon age and experience.

These are new appointments to deal with an expanded Capital Programme, including Schools, Multi-Storey Flats, etc.

Application forms from the Borough Engineer & Surveyor, Municipal Buildings, Poole, to be returned to the undersigned by Friday the 30th January.

J. G. HILLIER,
Town Clerk.

Poole.
January, 1959. 2634

BOROUGH OF HENDON
SENIOR ASSISTANT ARCHITECT—GRADE APT. V
SENIOR ASSISTANT ARCHITECT—GRADE APT. IV

Applications are invited for the above appointments in the Architects Section of the Borough Engineer and Surveyor's Department at a commencing salary, according to experience, within the grades APT. V (£1,175 to £1,325) and APT. IV (£1,025 to £1,175) as applicable, plus London weighting. Candidates must be Associate Members of the Royal Institute of British Architects.

The posts are pensionable, subject to National Scheme and medical examination. The Council is prepared to consider assisting suitable applicants with housing accommodation.

Applications with full details, together with names and addresses of two referees, must reach the Borough Engineer and Surveyor by Monday, 26th January, 1959. Canvassing will disqualify.

R. H. WILLIAMS,
Town Clerk.

Town Hall,
Hendon,
N.W.4. 2532

CITY OF LIVERPOOL
ARCHITECTURAL AND HOUSING DEPARTMENT

Applications are invited for the appointment of ASSISTANT ARCHITECTS. Salary, £750—£1,030 p.a. (N.J.C. Scale).

Applicants should be Associates of the Royal Institute of British Architects, or hold equivalent qualifications. Commencing salaries will depend on qualifications and experience.

Vacancies exist in General, Housing and Redevelopment Architectural Sections and applicants expressing a preference for a particular type of work will be considered for that type of work. The work involved is interesting and includes building for the Education programme of the City, together with other public buildings; the housing programme includes multi-storey blocks of flats and slum clearance work.

Application forms (returnable by 31st January, 1959) are obtainable from the City Architect and Director of Housing, Blackburn Chambers, Dale Street, Liverpool, 2. Appointments are superannuable and subject to the Standing Orders of the City Council. Canvassing disqualifies.

THOMAS ALKER,
Town Clerk.

(J.5452) 2589

CITY OF LEEDS
CITY ARCHITECT'S DEPARTMENT

(a) ASSISTANT ARCHITECTS, Grade A.P.T. III. Scale £845—£1,025.
(b) ARCHITECTURAL ASSISTANTS, A.P.T. I, £575—£725.
(c) TRACER (Male Scale), H.G.D. salary according to age with maximum of £560 p.a.
(d) ASSISTANT QUANTITY SURVEYOR, A.P.T. III, £845—£1,025.
(e) ASSISTANT QUANTITY SURVEYOR, A.P.T. I, £575—£725.
(f) ASSISTANT SURVEYOR (Land), A.P.T. I, £575—£725.

Applicants are asked to clearly indicate the post for which they wish to be considered.

The commencing salary may be at any point within the salary scale indicated except in the case of Post (c).

Superannuation payable. Medical examination.

Application forms may be obtained from the City Architect, Priestley House, Quarry Hill, Leeds, 9, to whom they should be returned together with copies of three recent testimonials, by 12 noon on Wednesday, 28th January, 1959.

Canvassing disqualifies.

R. A. H. LIVETT,
City Architect.

Priestley House,
Quarry Hill,
Leeds 9.
2nd January, 1959. 2631

CAMBRIDGESHIRE COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT

Applications are invited for the appointment of a PLANNING OFFICER on the Special Grade (£750 × £40 (7)—£1,030).

The vacancy is in the Development Control Section and the successful applicant will probably be responsible for a rural area.

The appointment is subject to the provisions of the Local Government Superannuation Acts, the Council's conditions of service and a satisfactory medical examination.

Applicants should be Corporate Members of the Town Planning Institute, should have wide experience in a Planning Office and be able to drive a car.

Applications, stating age, past and present appointments, qualifications, experience and present salary together with the names of two referees should be sent to the County Planning Officer, Gloucester Street, Castle Hill, Cambridge, not later than the 26th January, 1959.

CHARLES PHYTHIAN,
Clerk of the County Council.

Shire Hall,
Cambridge. 2583

SURREY COUNTY COUNCIL

Applications invited for following appointments:—

1. ASSISTANT ARCHITECT, Special Grade, £750—£1,030 p.a. plus £30 p.a. London Allowance. Must be A.R.I.B.A.

2. ASSISTANT QUANTITY SURVEYOR, Grade IV, £1,025—£1,175 p.a. plus £30 p.a. London Allowance. Must be Chartered Quantity surveyor with experience of estimating, taking off, valuing works in progress and final accounts for large public buildings, including all Specialist Works.

3. ASSISTANT QUANTITY SURVEYOR, Grade I, £575—£725 p.a. plus London Allowance of up to £30 p.a. according to age. Must have passed First Examination R.I.C.S. and had several years' experience in an approved office.

4. ASSISTANT STRUCTURAL ENGINEER, Special Grade, £750—£1,030 plus London Allowance of £30 p.a. Qualified Civil or Structural Engineer, experienced in design and detailing in steel and/or reinforced concrete.

5. ASSISTANT STRUCTURAL ENGINEER, Grade I, £575—£725 plus London Allowance of up to £30 p.a. Knowledge of detail and some design in steel or concrete.

Full details, present salary and three copy testimonials to County Architect, County Hall, Kingston, as soon as possible. 2633

CWMBRAN DEVELOPMENT CORPORATION

Applications are invited for posts as ASSISTANT ARCHITECTS in the Salary Grade A.P.T. IV/V (£753—£1,029) with a commencing salary according to qualifications and experience.

Candidates should preferably be Associates of the R.I.B.A. with suitable office experience and should have had good experience in House design, Construction and Layout. The post is superannuable and housing accommodation will be provided in suitable cases, or otherwise lodging allowance will be paid to married men for a limited period.

Applications stating age, qualifications, experience, present and former employment (together with applicable salaries) and the names and addresses of two referees should reach the undersigned by first post on Monday, 2nd February, 1959.

J. C. P. WEST, A.R.I.B.A., M.T.P.I.
Victoria Street,
Cwmbran,
Mon. 2617

LANCASHIRE COUNTY COUNCIL

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructional methods, to work on a large and varied programme.

The posts, which are permanent, are within the salary range of £750—£1,030; starting point according to experience.

Application Forms from the County Architect, P.O. Box 26, County Hall, Preston. Reference A/AJ. 2599

CITY OF BIRMINGHAM

ASSISTANT ARCHITECTS and ARCHITECTURAL ASSISTANTS are required in the City Architect's Department for the design of new Civic Buildings, Schools, Technical Colleges, etc., and Housing Schemes (including tall blocks of flats), Shopping centres, etc.

Commencing salaries will be within the following scales according to capabilities and experience:—

(a) ASSISTANT ARCHITECTS. Special scale, £750 × £40—£1,030.

(b) ARCHITECTURAL ASSISTANTS. Special Classes, Grade A.P.T. I, £595 × £30—£745.

Applicants should have passed Parts I and II Final R.I.B.A. for posts (a) and Intermediate R.I.B.A. for posts (b) or hold equivalent qualifications.

Five-day week. Medical examination.

Applications, stating age, present position and salary, qualifications, experience and two referees to the undersigned by 30th January, 1959.

A. G. SHEPPARD FIDLER,
City Architect.

Civic Centre,
Birmingham 1. 2619

BOROUGH OF LEYTON
BOROUGH ENGINEER'S DEPARTMENT
ARCHITECTURAL SECTION

ASSISTANT ARCHITECTS—Salary within Special Grade—£780—£1,060 per annum including London weighting.

ARCHITECTURAL ASSISTANT—Salary within Grade A.P.T. I—£575—£725 per annum plus London weighting.

Housing accommodation available.

Applications to Borough Engineer, Town Hall, Leyton, E.10, stating appointment and names of two referees, not later than 23rd January, 1959.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10. 2541

COUNTY BOROUGH OF WEST BROMWICH

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

(a) SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,025 × £50—£1,175).

(b) ASSISTANT ARCHITECT, Grade A.P.T. II (£725—£845).

Appointments will be appropriate to professional experience and qualifications but applicants for (a) should be Associate R.I.B.A.

The selected applicants will be required to pass a medical examination for the purpose of the Superannuation Scheme.

Applications stating age, qualifications, experience, together with copies of two recent testimonials should be addressed to the undersigned not later than 2nd February, 1959.

W. H. GREENWOOD,
Borough Surveyor.

Town Hall,
West Bromwich. 2625

COUNTY BOROUGH OF
BARROW-IN-FURNESS
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT
ASSISTANT ARCHITECT
Special Grade (£750—£1,030 p.a.)

Applications are invited for a post of ASSISTANT ARCHITECT on Special Grade (£750—£1,030 p.a.). The commencing salary will be fixed according to the qualifications and experience of the successful applicant. Candidates must have passed Parts I and II of the R.I.B.A. Final examination.

Housing accommodation may be provided if required.

The Department works a five-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 Monday, 2nd February, 1959.

LAWRENCE ALLEN,
Town Clerk.

Town Hall,
Barrow-in-Furness. 2607

NATIONAL COAL BOARD
EAST MIDLANDS DIVISION
S.V. 969. ARCHITECTURAL ASSISTANT
GRADE I—Salary scale £715 × £25—£850
(exceptionally £1,000)

Applications are invited for the above post in the Divisional Architects' Department, 69, Lower Parliament Street, Nottingham.

Qualifications: Preferably Intermediate R.I.B.A. Although regard will be paid to good practical experience.

The architectural work of the department covers the design of colliery surface buildings of all types, including workshops, stores, power plants, offices, pithead baths, canteens, medical centre and recreation buildings.

The point of entry into the salary scale will depend on qualifications and experience. The post is superannuable and superannuation rights under Local Authority and certain other schemes are transferable.

Applications giving age, present salary and full details of education, qualifications and present appointment should be addressed within 14 days to Divisional Chief Staff Officer, N.C.B. East Midlands Division, Sherwood Lodge, Nr. Arnold, Nottingham. Please quote S.V. 969. 2593

CITY OF CANTERBURY

Applications are invited from persons who have passed the R.I.B.A. Intermediate Examination for the temporary appointments of ARCHITECTURAL ASSISTANTS, Grades A.P.T. I (£575—£725) and A.P.T. II (£725—£845).

The successful candidates will be engaged on the design and construction of School and Housing projects. The work includes a new Technical College and all aspects of housing.

The appointments offer considerable scope for initiative and experience and are likely to extend over a number of years. Opportunities occur from time to time for promotion within the Department.

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

Applications, together with the names of two referees, must reach the City Architect & Planning Officer, Mr. J. L. Berbiers, F.R.I.B.A., A.M.T.P.I., not later than Monday, 26th January, 1959. Canvassing will disqualify.

J. BOYLE,
Town Clerk.

Municipal Buildings,
Canterbury. 2591

CITY OF CARDIFF
CITY ARCHITECT'S DEPARTMENT
APPOINTMENT OF SENIOR ASSISTANT QUANTITY SURVEYORS

Applications are invited from qualified and experienced Quantity Surveyors for the appointment of Senior Assistant Quantity Surveyors A.P.T. Grade IV, £1,025—£1,175 per annum.

General Conditions of Appointment may be obtained from the undersigned.

Applications, accompanied by the names and addresses of three referees, and endorsed "Senior Assistant Quantity Surveyor—A.P.T. Grade IV," must be delivered to me not later than the 19th January, 1959.

S. TAPPER-JONES,
Town Clerk.

City Hall,
Cardiff.
January, 1959. 2637

COUNTY BOROUGH OF SOUTHPORT

Applications are invited for the appointment of an ASSISTANT QUANTITY SURVEYOR (Special Scale £750—£1,030) in the Borough Architect and Town Planning Officer's Department.

Candidates must have passed the Final Examination of the R.I.C.S. (Quantities Division).

Consideration will be given to the provision of housing accommodation if required.

Application forms obtainable from the Borough Architect and Town Planning Officer, 99/105, Lord Street, to be returned by 24th January, 1959.

R. EDGAR PERRINS,
Town Clerk.

2614

NOTTINGHAMSHIRE COUNTY COUNCIL
APPOINTMENT OF ASSISTANT DIRECTOR OF PLANNING

Applications are invited for the appointment of ASSISTANT DIRECTOR OF PLANNING on J.N.C. Grade C, salary at present £1,295—£1,515. Applicants should be qualified Architects and have passed the Final Examination of the Town Planning Institute, or possess equivalent qualifications.

The appointment will have effect from 1st April, 1959. The successful candidate will rank third in the County Planning Department and his duties will include the initiation and design of Town Maps and detailed schemes as components of the County Development Plan, such as Central Area Redevelopment Schemes and consultation thereon with County District Councils; co-ordination of the work of the Development Plan Section and of the Architectural Section in all aspects of their work and co-ordination between these sections and Development Control sections.

Further particulars may be obtained from the County Director of Planning, Shire Hall, Nottingham, to whom applications should be submitted by 31st January 1959.

A. R. DAVIS,
Clerk of the County Council.

2601

URBAN DISTRICT COUNCIL OF BASILDON
(Population 75,000—27,000 acres; rapidly developing district)
SENIOR ASSISTANT ARCHITECT
(Established)
Within A.P.T. IV (£1,025—£1,175 p.a.)

Applicants for this appointment must be fully qualified and experienced Architects.

Housing accommodation will be considered and a 10 h.p. car allowance is payable.

Full particulars and application forms from, and the latter returnable to, Mr. S. A. Wadsworth, A.M.I.C.E., A.M.I.Mun.E., Engineer & Surveyor, Council Offices, High Street, Billericay, Essex. Closing date 28th January. 2594

EAST ANGLIAN REGIONAL HOSPITAL BOARD

ARCHITECTURAL ASSISTANTS for work in connection with development and design of large new hospital at Peterborough and general hospital work throughout the Region. Candidates must have passed Intermediate examination of R.I.B.A. or equivalent. Salary £525 (at 21 or over)—£730 per annum; entry point may be fixed above minimum but will not exceed £605.

Applications stating age, qualifications, experience and details of present position with names of three referees to Secretary of Board, 117 Chesterton Road, Cambridge, by 31st January, 1959. 2632

BIRMINGHAM REGIONAL HOSPITAL BOARD

PRINCIPAL ASSISTANT ARCHITECTS (2)

Salary £1,150 to £1,420. Applicants must be registered architects having passed the requisite examinations. Successful candidates will be responsible under the Regional Architect for work in (a) the Mental Health Section and (b) the north of the region, respectively (working from Board Headquarters). Some work carried out in the department, the remainder in conjunction with private architects. Knowledge of hospital design desirable. Superannuable. Apply naming three referees to Secretary, 10, Augustus Road, Birmingham, 15, by 31st January, 1959. 2635

CUMBERLAND COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of two ASSISTANT ARCHITECTS with Special Grade (£750 × £40—£1,030), commencing salary according to experience.

Applicants must be A.R.I.B.A., preferably with experience of handling large Contracts. Post pensionable, and subject to medical examination. N.J.C. Service conditions.

Application forms and further particulars obtainable from John H. Haughan, F.R.I.B.A., County Architect, 15, Portland Square, Carlisle, to whom completed applications should be returned not later than Friday, 6th February, 1959.

G. N. C. SWIFT,
Clerk of the County Council.

2621

ADMINISTRATIVE COUNTY OF LEICESTER

ASSISTANT ARCHITECT, £750 × £40—£1,030, according to experience.

Candidates must have passed Parts I and II of the R.I.B.A. Final and have had some office experience, preferably on large contracts. Lodging allowance and removal expenses may be paid to a married man. Apply by 30th January on form obtainable from County Architect, 123 London Road, Leicester. 2618

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

Vacancies for ARCHITECTURAL ASSISTANTS, starting salary up to £860. Full and interesting programmes of houses, flats, schools and general buildings.

Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/52/58), County Hall, S.E.1. (2168.) 1949

WORCESTERSHIRE COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

SENIOR ASSISTANT ARCHITECT required. A.P.T. Grade IV (£1,025—£1,175). Applicants should be A.R.I.B.A. and preference will be given to one with experience in School design. Application forms should be obtained from L. C. Lomas, F.R.I.B.A., County Architect, 14, Castle Street, Worcester, not later than January 24, 1959. (L5.) 2545

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Particulars and application form, returnable by 26th January, 1959, from County Architect, 97, Heavitree Road, Exeter. 2478

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TWO ARCHITECTURAL ASSISTANTS

Applications for these posts are invited from suitably qualified persons not later than 26th January, 1959.

Salary Special Grade £750—£1,030. Housing accommodation may be provided.

Particulars of the appointments can be obtained from me.

A. A. CRABTREE,
Town Clerk.

The Council House,
Nuneaton. 2542

Architectural Appointments Vacant

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A COMPETENT ASSISTANT, with several years' experience and capable of working with little supervision, required in Branch Office, Birmingham, engaged on a varied and interesting programme of commercial projects. Applications, giving full particulars and salary required, to: G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 1874

ASSISTANT required in busy West End Office. About Intermediate level. Write stating age, experience and salary desired. Box 2081.

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OPPORTUNITY for ASSISTANT of Intermediate to Final standard to handle complete jobs—houses, schoolwork, church halls and alteration work—with minimum supervision. Very pleasant (Worcester) office, young staff, contemporary outlook. Salary according to ability. Box 2412.

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ARCHITECTURAL ASSISTANTS required for several large projects. Excellent opportunities to suitable applicants. Five-day week. Please write giving full particulars of experience and salary required to Johns, Slater & Haward, F./A.R.I.B.A., 32, Foundation Street, Ipswich. 2531

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TREHEARNE & NORMAN, PRESTON & PARTNERS have vacancies for SENIOR ASSISTANTS. Salary according to experience and qualifications. Apply: 83, Kingsway, W.C.2 (HOL. 4071). 2439

ARCHITECTURAL ASSISTANT required, R.I.B.A. Intermediate to Final standard. All-round experience and initiative essential. Apply with full particulars of age, past employment and salary required to Geoffrey Bazeley & Barbary, F./F.R.I.B.A., 5, Portland Square, Plymouth. 2529

ARCHITECTURAL ASSISTANT required from about Intermediate standard to recently Qualified, for interesting and varied work in practice mainly concerned with commercial projects. Five-day week. Congenial working conditions. Salary by arrangement. Apply in writing, giving full particulars, age, to J. Anfed Harpet & Son, Union Chambers, 63, Temple Row, Birmingham. 2447

ARCHITECTURAL ASSISTANT with experience required for busy Dartford office. Applicant must be experienced in handling contracts and taking responsibility under minimum supervision. Write giving full particulars of experience and salary required to Box 2536.

ARCHITECTURAL ASSISTANTS, aged 28-40, required by London firm of architects with large and varied practice. Apply stating age, experience and salary required to Box 2537.

ENTHUSIASTIC ASSISTANT required immediately for modern practice. Write to Messrs. Goodsmark & Miller-Williams, 37a Tudwell Row, Darlington. 2497

CHIEF ASSISTANT required for Architect's Practice in St. Albans. Possibility of working partnership subject to satisfactory service. Write giving particulars to Box 2520.

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ARCHITECTURAL ASSISTANT required in West End Office. Preferably qualified, with minimum of two years' experience, to work on industrial buildings. Salary according to age and experience. Box 2574.

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FREDERICK GIBBERD's London office requires ARCHITECTURAL ASSISTANTS of both Intermediate and Final standard, for varied and interesting work. Salary £600—£800 according to experience. Apply in writing giving full particulars, to 8, Percy Street, London, W.1. 2480

TRIPE & WAKEHAM, Chartered Architects, require ASSISTANTS with approximately three years' office experience. Telephone Welbeck 7744 or write 16 Fitzhardinge Street, W.1, for an appointment. 2466

EXPERIENCED ARCHITECTURAL ASSISTANTS required with a good sense of design and a sound knowledge of building construction. All applications in writing please with full details. C. H. Elsom & Partners, 10 Lower Grosvenor Place, S.W.1. 2474

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JUNIOR ARCHITECTURAL ASSISTANT (Intermediate standard) required in small West End Architect's office. Must be interested in modern design and capable of preparing working drawings from sketch designs. Salary scale £550—£650. Box 2005.

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JUNIOR ASSISTANT required in busy West End practice. Good opportunities for obtaining all round experience. Write giving age, salary required, etc. Box 2581.

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