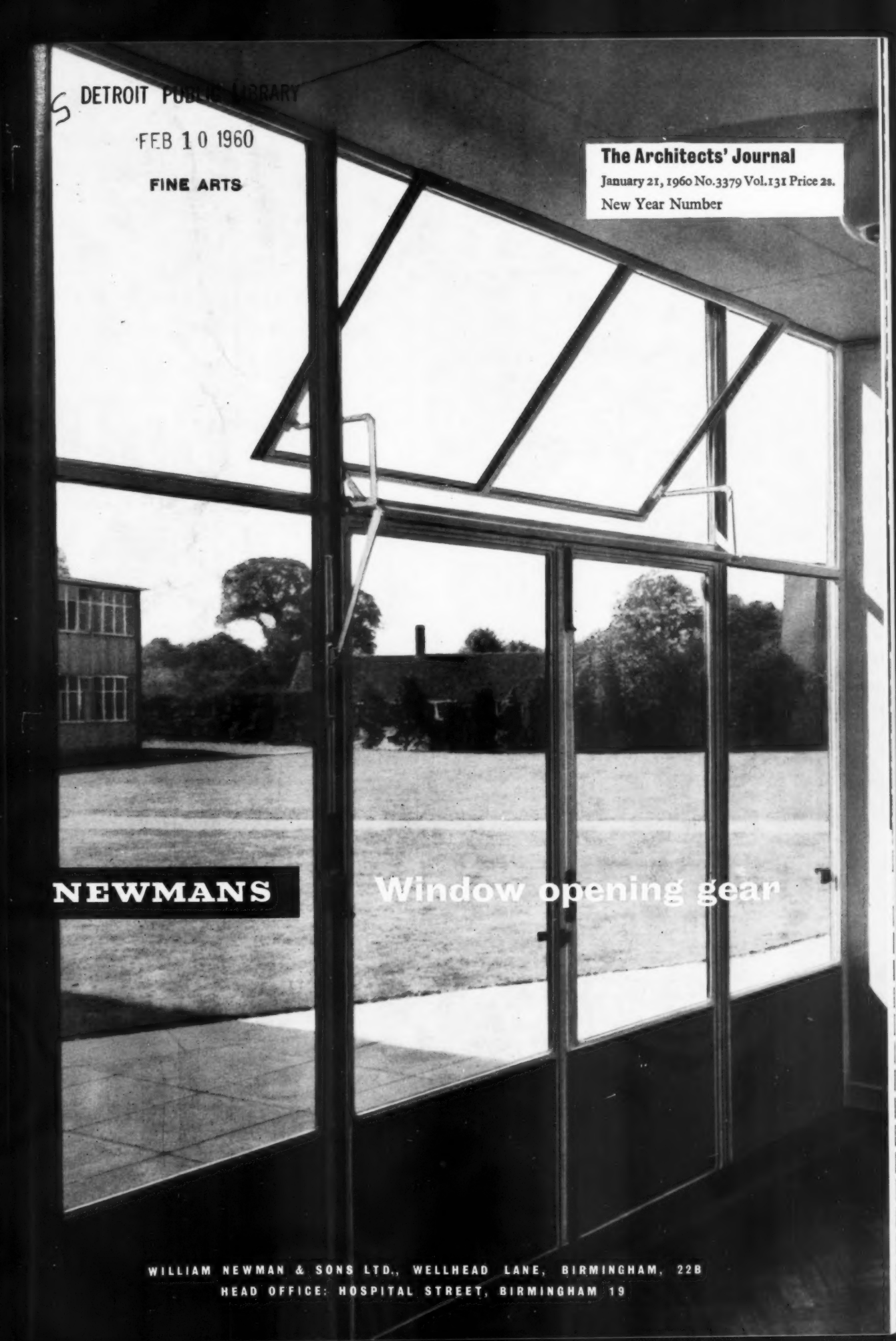
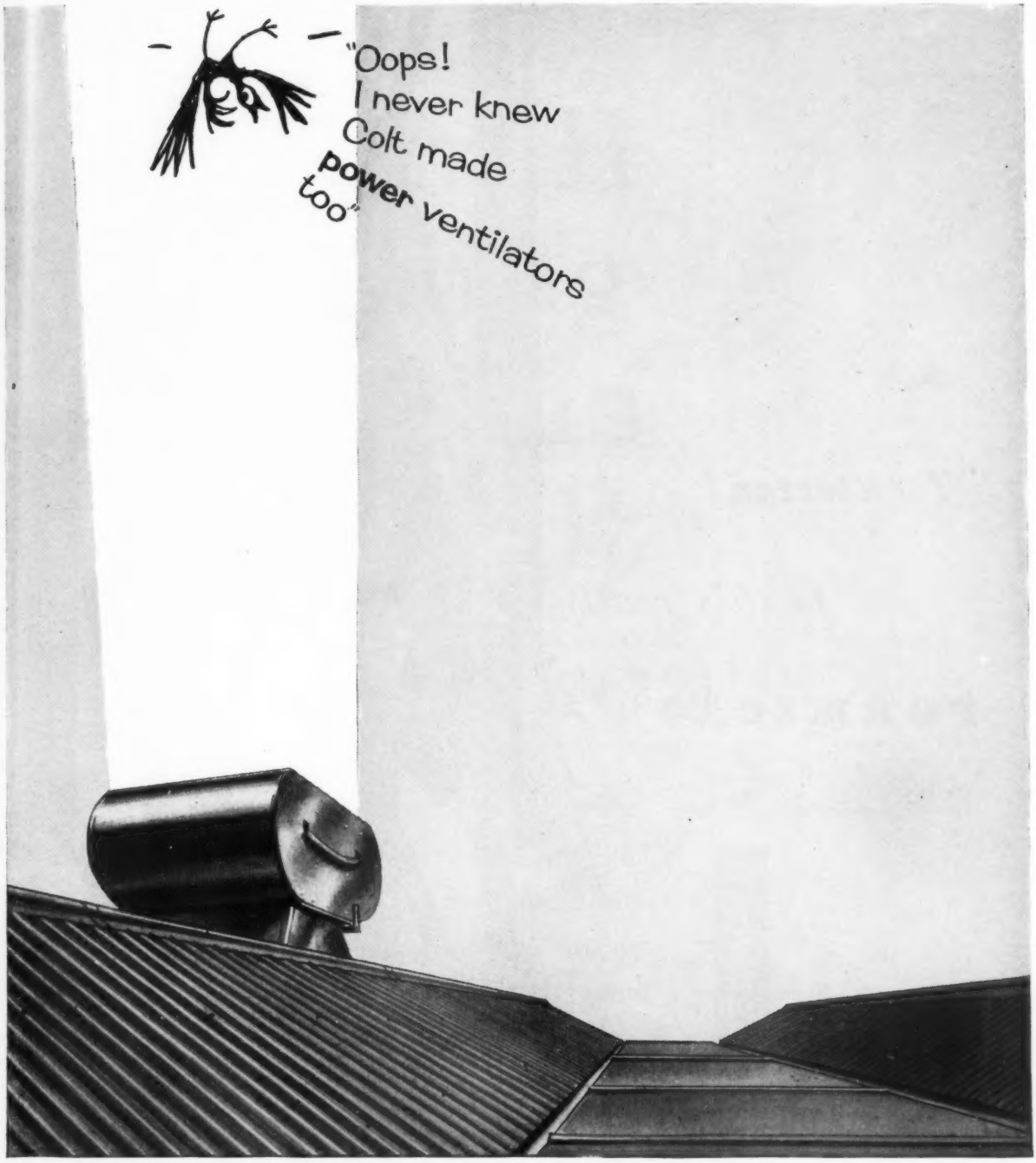
The Architects' Journal
January 21, 1960 No.3379 Vol.131 Price 2s.
New Year Number





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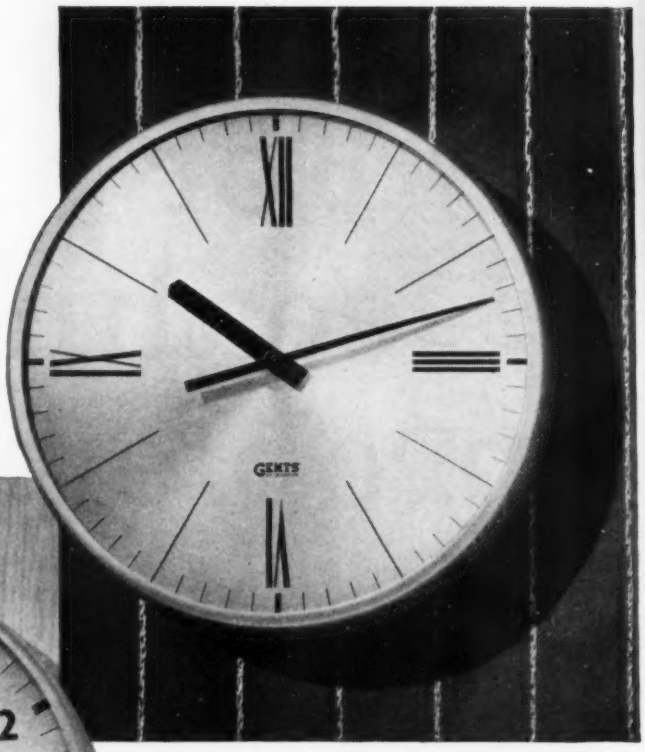

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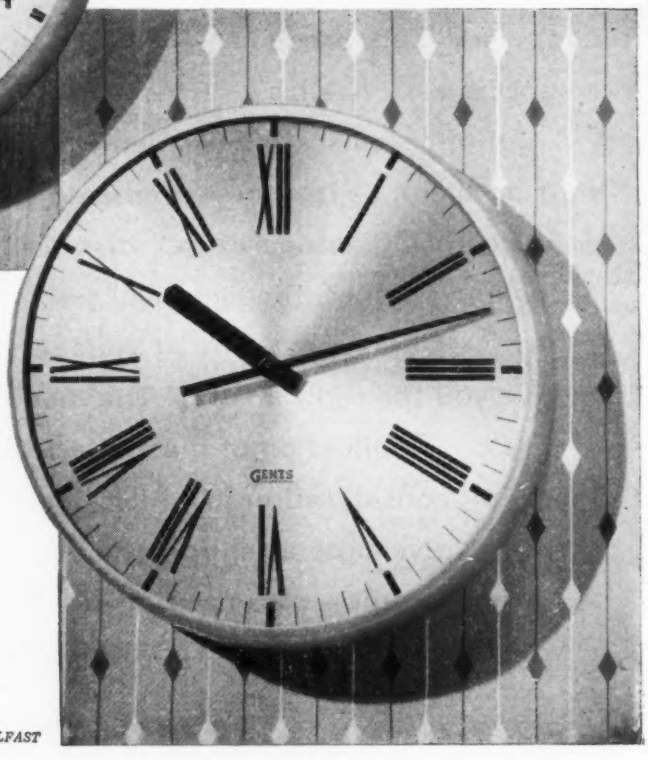

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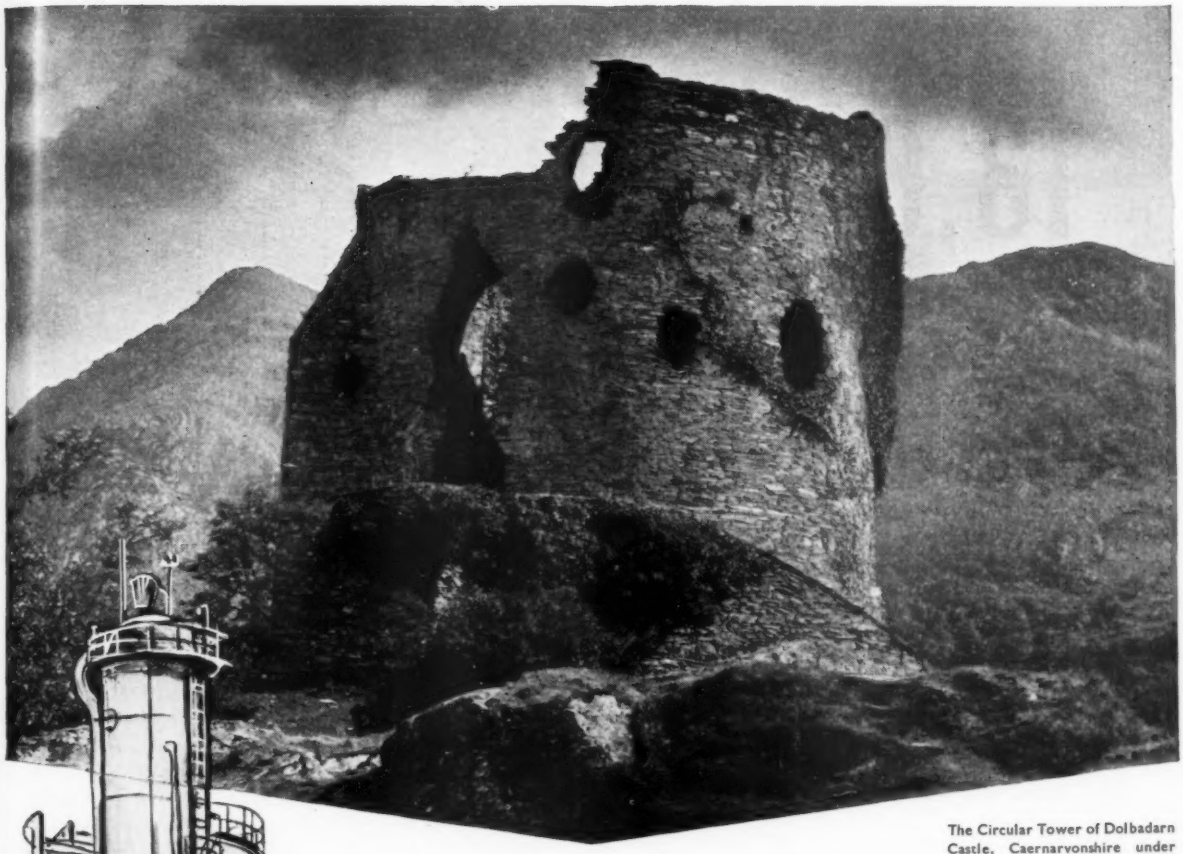
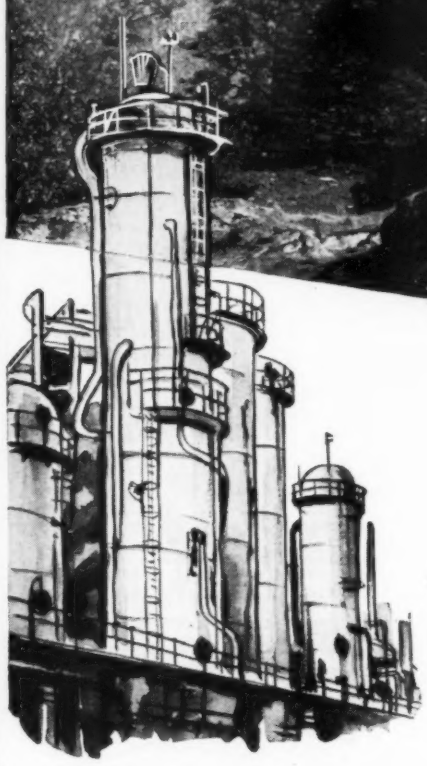


The Circular Tower of Dolbadarn Castle, Caernarvonshire under the shadow of the Snowdon Peaks



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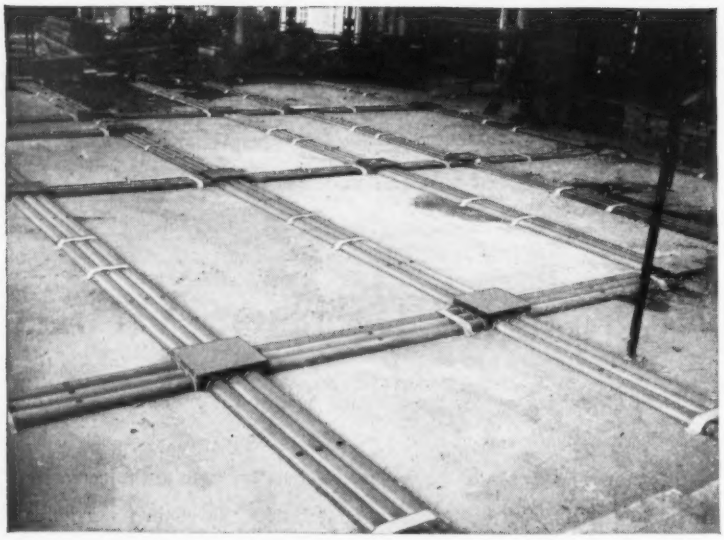

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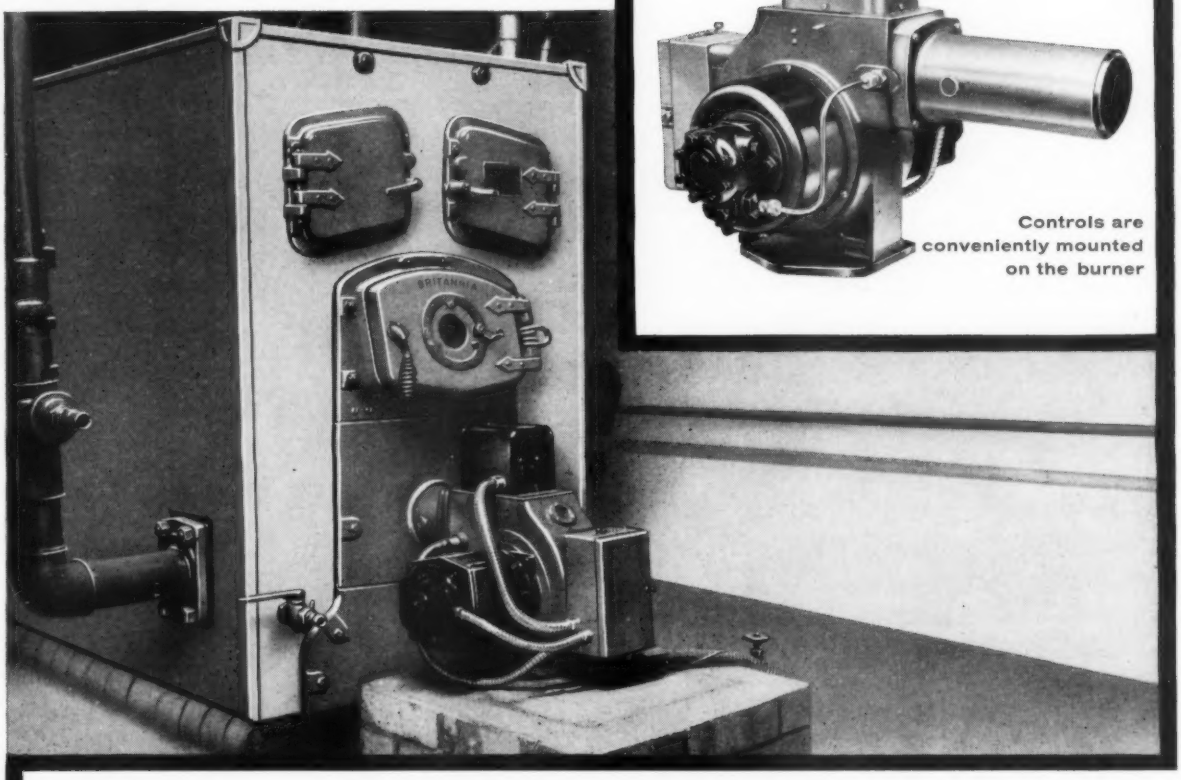

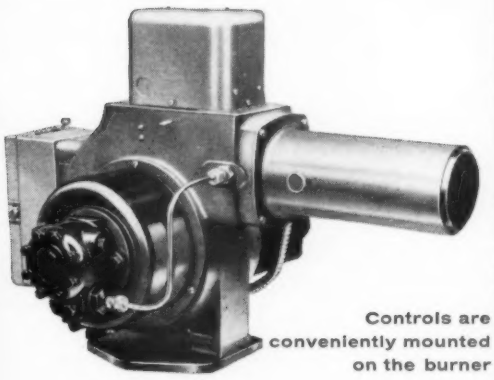

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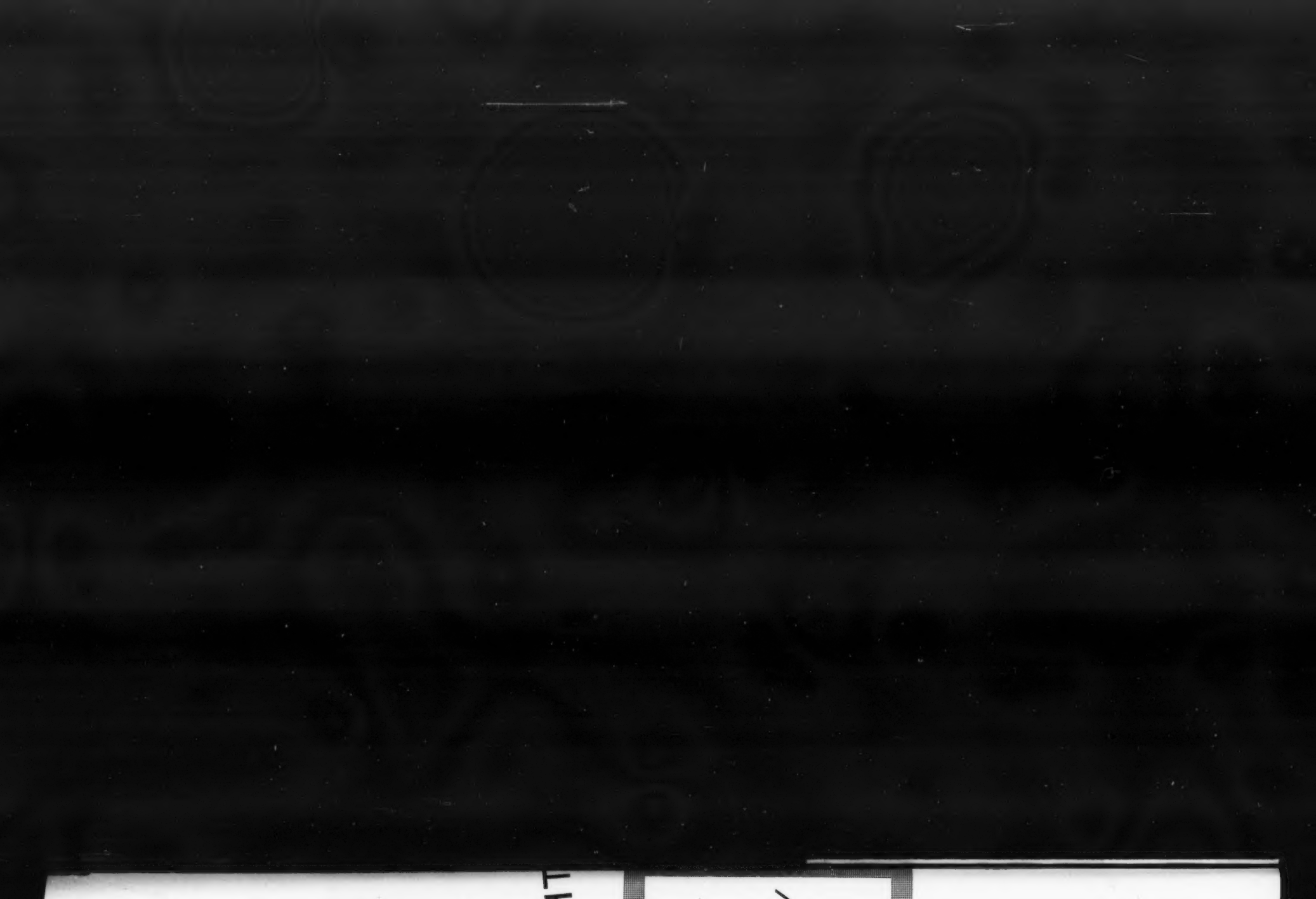
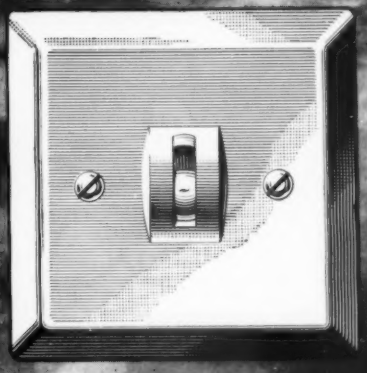


Lighting-up time . . .



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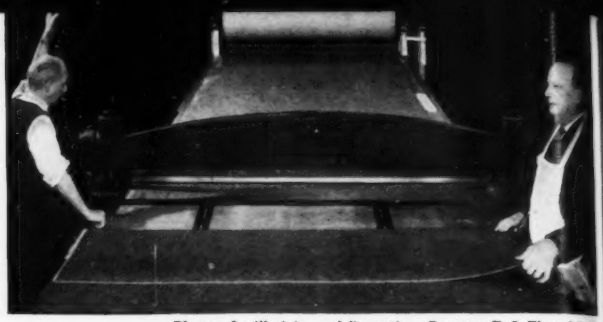
This is the second in a series of articles designed to interest and inform architects on the techniques and scope of linoleum opportunities open to them with modern linoleum floorcoverings.

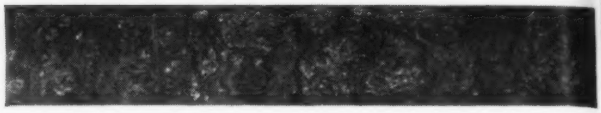
linoleum contractors' techniques

To an increasing extent in the last few years, flooring contractors have cut linoleum into tiles instead of laying it in the form of sheet; some of them say that they use tiles for 90% of their work. This article explains some of the reasons for the change and suggests ways in which the architect can turn this new flexibility to advantage.

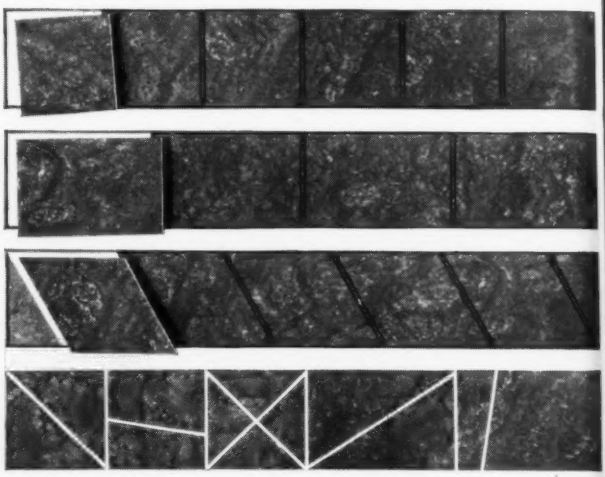
Linoleum in sheet form is still cheaper to lay when large unobstructed areas are to be covered; but when faced with complex outlines and central pillars, especially in cramped areas, flooring contractors have found that they can install tiles with very little waste of material, and at costs that are competitive with sheet linoleum. It is here that some knowledge of the contractors' techniques and working methods can help the architect to design interesting floors and still keep down costs.



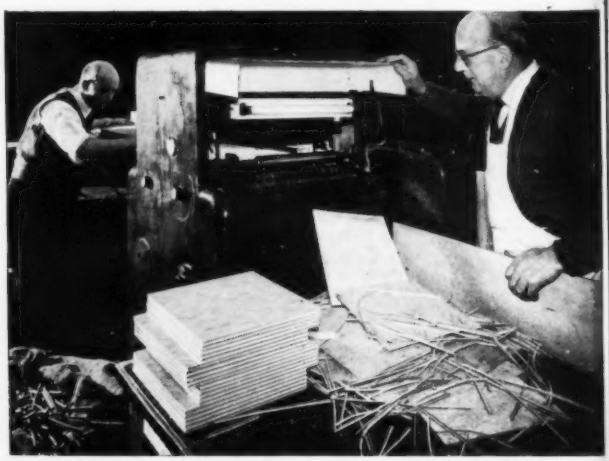
Photos of guillotining and die-cutting: Courtesy E. J. Elgood Ltd.



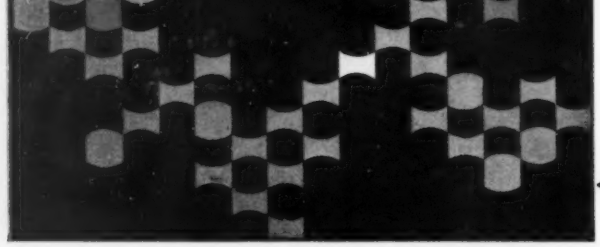
Cutting tiles The contractor uses a guillotine to cut 'slabs' of linoleum across the roll, wide enough to allow a small margin for trimming the tile later. The tiles themselves can be hand-cut by knife—a slow and expensive process—guillotined, or die-cut.

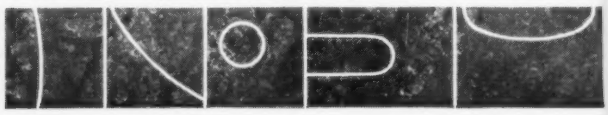


Guillotining Hand-operated or power-driven guillotines can cut squares, oblongs and triangles almost equally economically.



Die-cutting Some contractors have semi-automatic machines that cut tiles up to 18″ square in one movement. These machines also accept special dies to cut other shapes—such as those below—simultaneously with the rectangular tile. (Both parts of the tile should be used in the design to minimise waste.) The design of such shapes should avoid running the shaped cutter into the corner of the tile, where it would create strong side pressures during cutting.



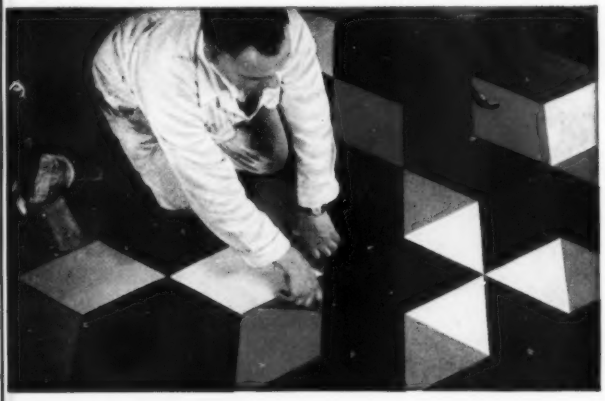


Strip cutting Lacing strips and border strips, in widths ranging from ½-inch to 18 inches, are used to form decorative effects or borders. (For use as borders, they are cut slightly wide to allow for fitting to irregularities of the wall line.) The cutting machine slices almost through the thickness of the linoleum to make the strips, which are then finally separated as required by the layer on site.

Economical tile sizes Since linoleum is delivered in rolls 72 inches wide, contractors find the following sizes the most economical to cut:

NOMINAL: * 9 inches, 12 inches, 18 inches, 24 inches, 36 inches.

Actual sizes are approximately ¼-inch less than the nominal sizes of all purpose-cut tiles.

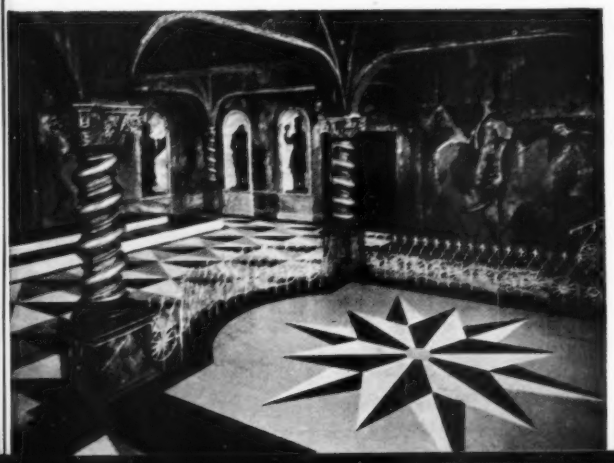


THE USES OF SHEET LINOLEUM

This article does not, of course, set out to show that tiles have entirely replaced the traditional way of laying linoleum in sheet form—even where the architect wants to introduce designs in his floor. Below are three ways of using sheet linoleum in individual situations:—

Hand-cut designs Linoleum is easier than most floor coverings to cut into individual designs, and cutting by hand offers the designer the greatest possible freedom of treatment in producing a spectacular floor like the one shown below. At such a focal point—it was, in fact, John Piper's 'Baroque Room' in *The Observer's* Film Festival—the extra cost would be amply justified.

Courtesy Design magazine



IH SYMBOL DESIGNED BY RAYMOND LOEWY
Courtesy International Harvester Company of Great Britain Limited

Architects: *Albert W. Moore & Son*
Flooring Contractors: *The Lino-Tile Co. Ltd*

Hand-cut motifs Most contractors employ craftsmen who will enjoy reproducing in linoleum a motif like this one, laid in the entrance hall of International Harvester's offices in City Road, London.

Repeated motifs hand-cut by template For special purposes, the contractor can make a hardboard or metal template to cut out several motifs—and the corresponding spaces for them in the background.

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A full-colour book illustrating new directions in floor design will soon be available to all interested architects. If you would like to receive a free copy immediately upon publication, please write to: Michael Nairn & Company Limited, P.O. Box 1, Kirkcaldy, Scotland.

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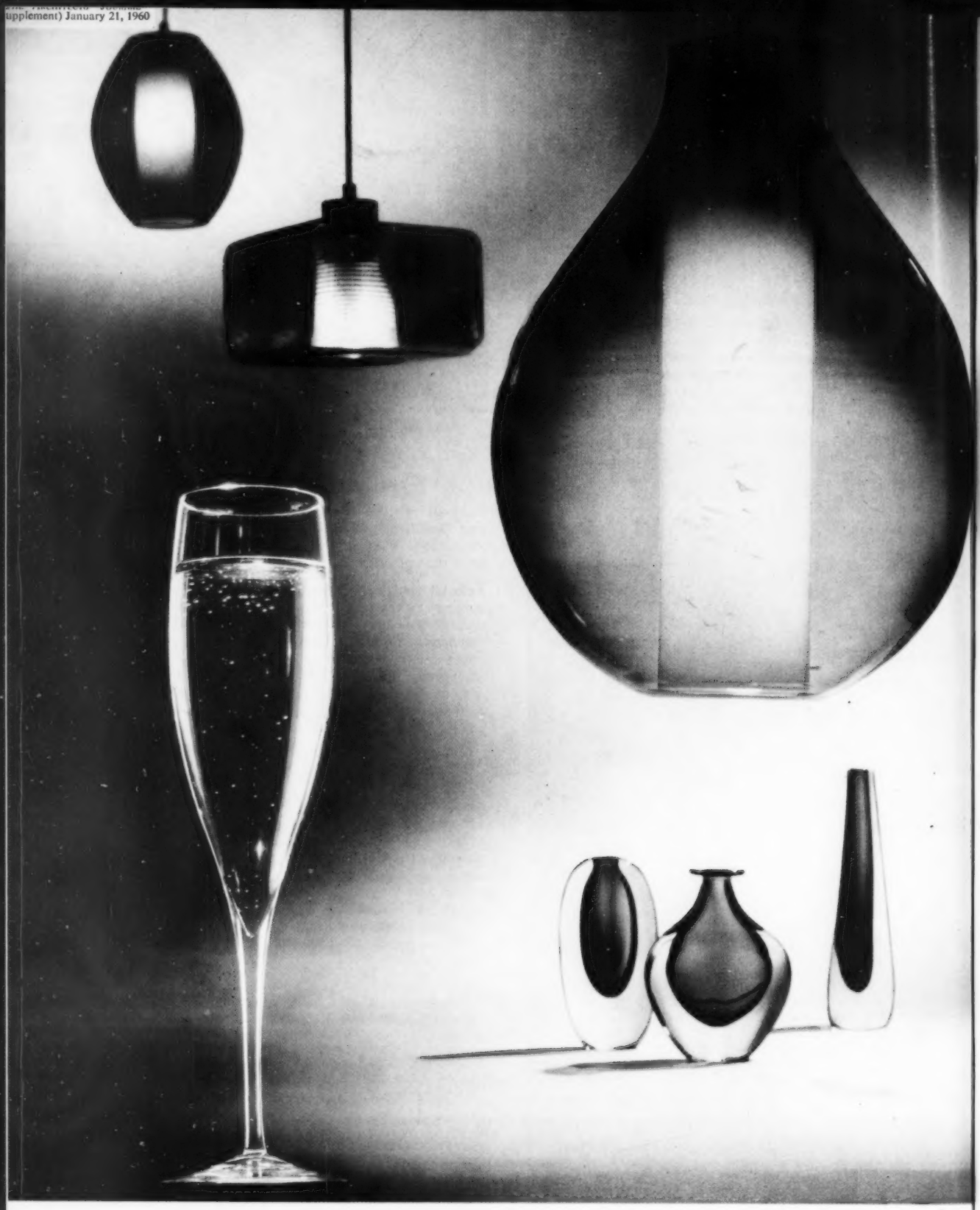

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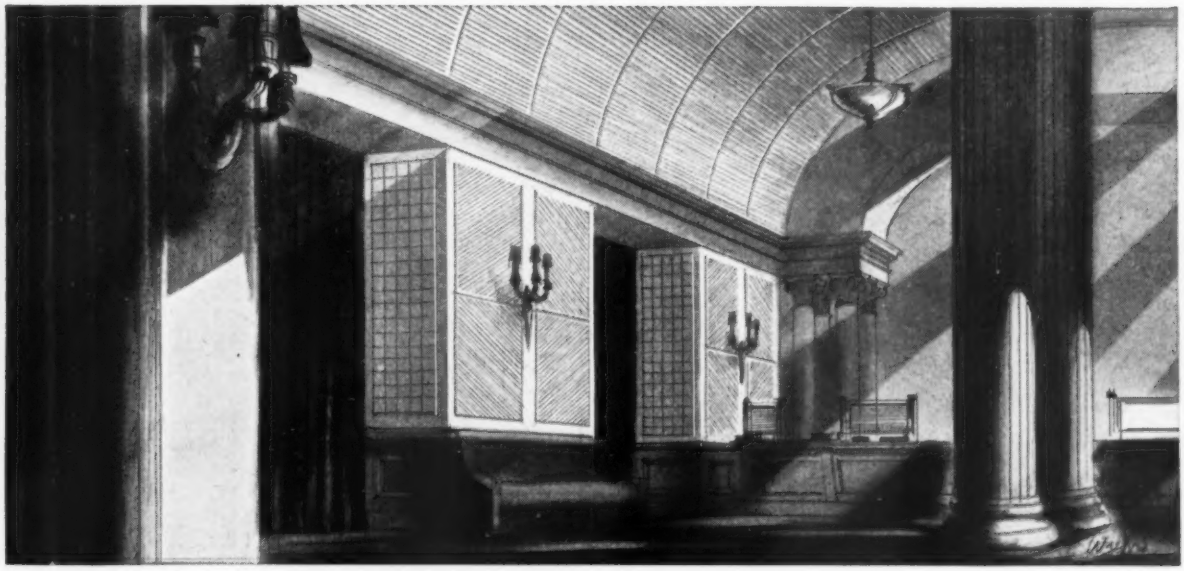

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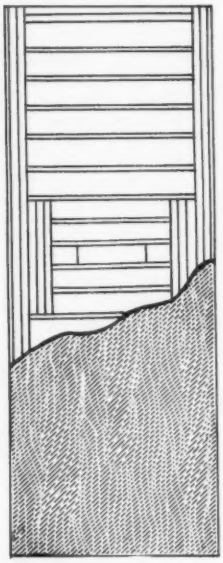

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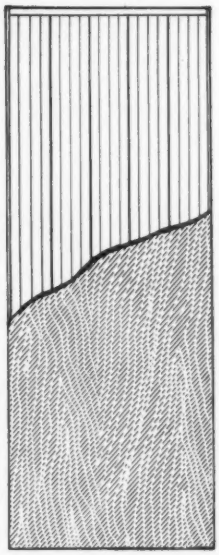
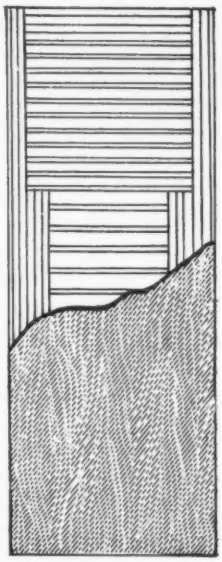


THE GOLDHANGER



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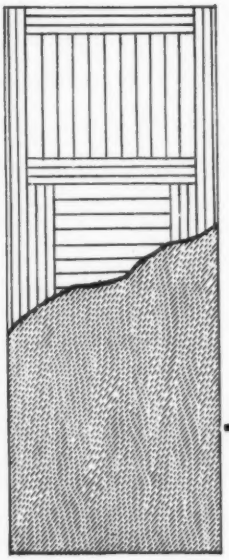

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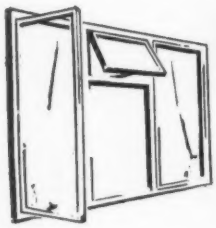

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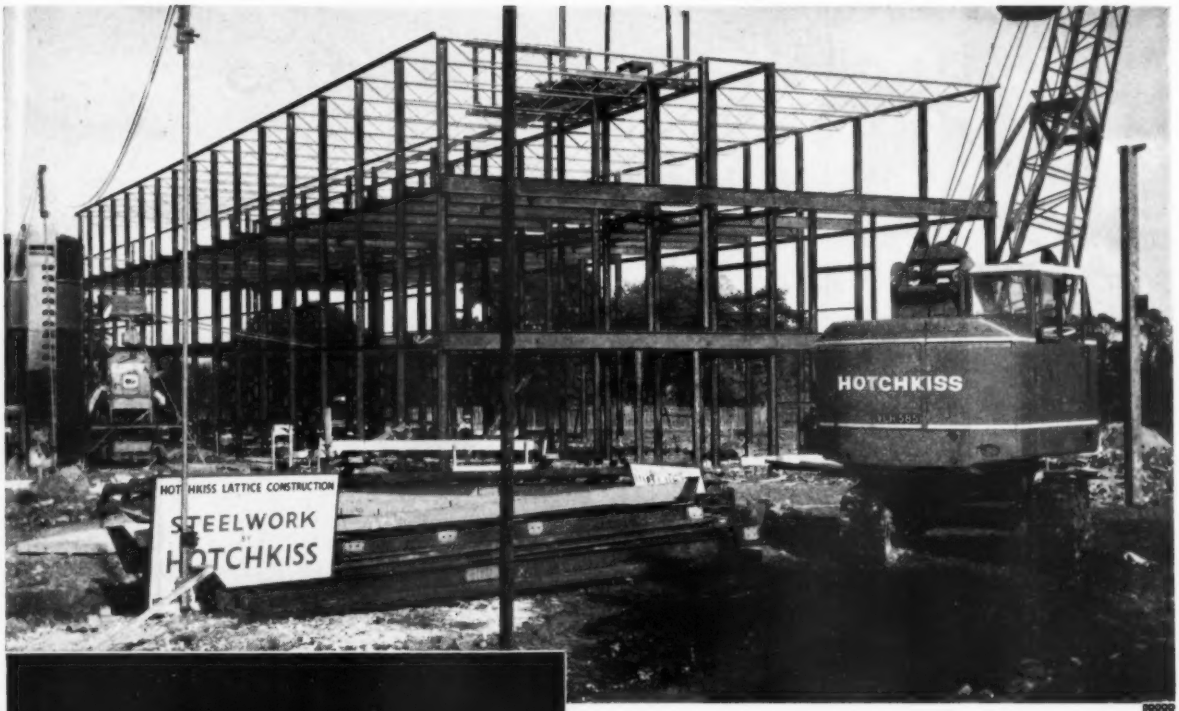

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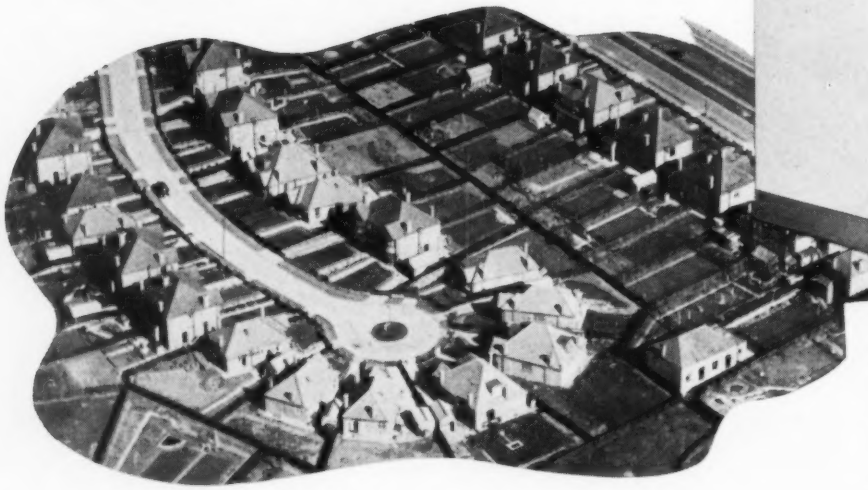

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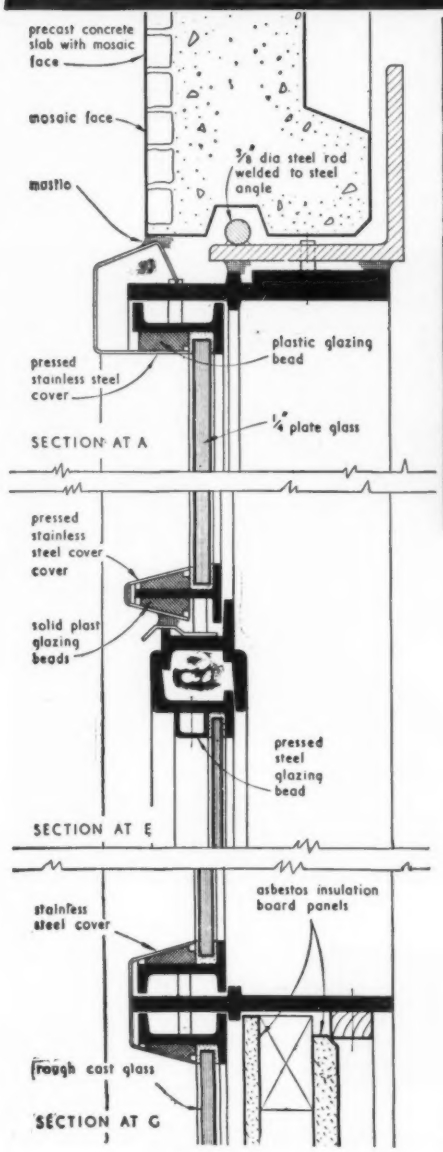

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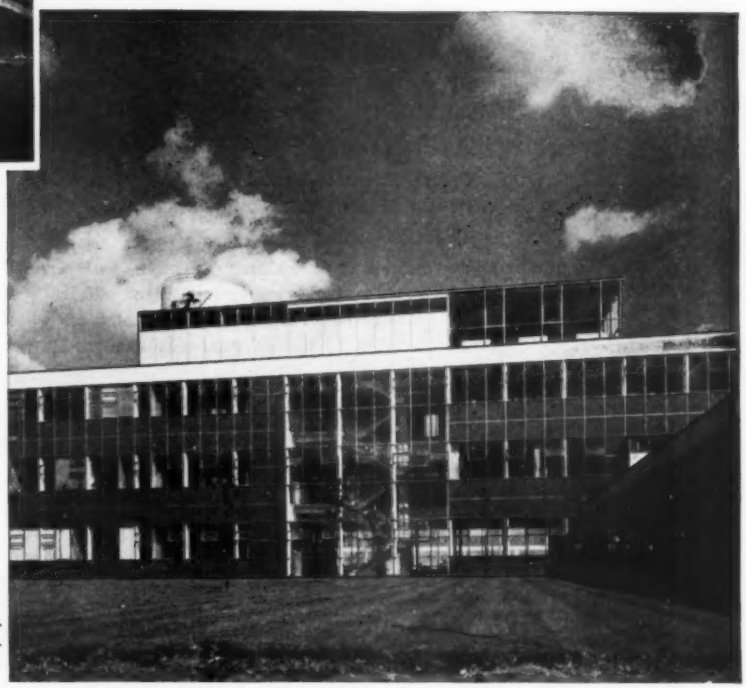

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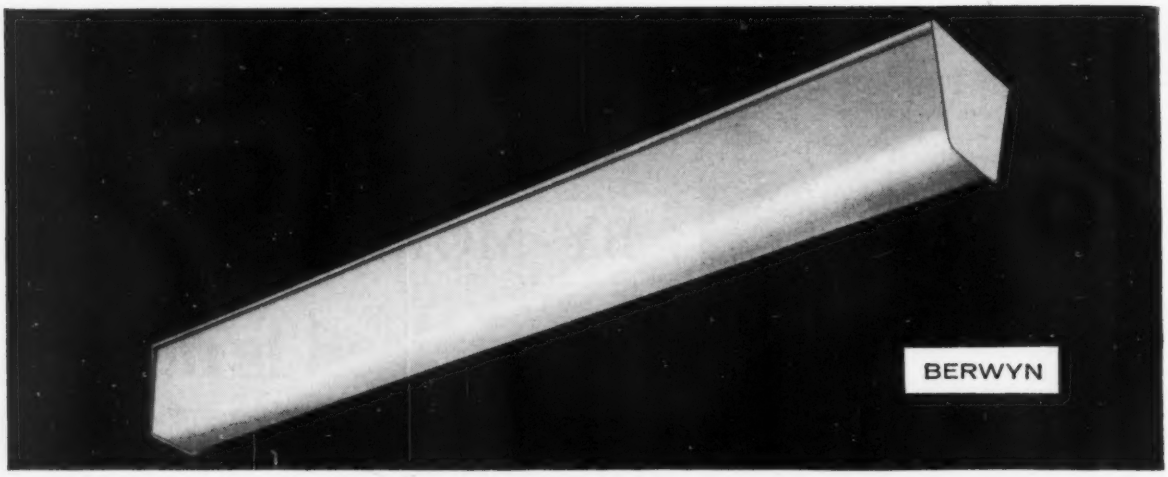

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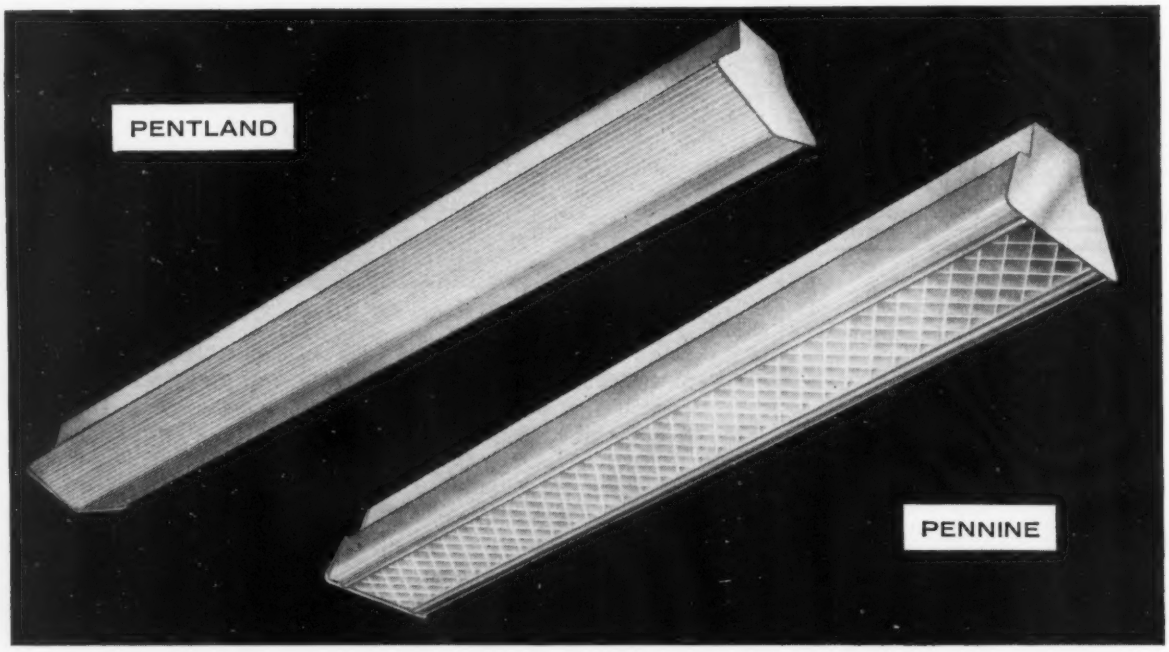

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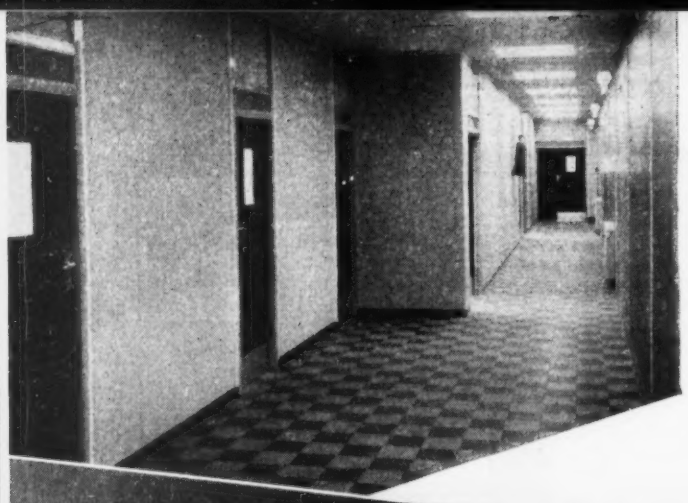

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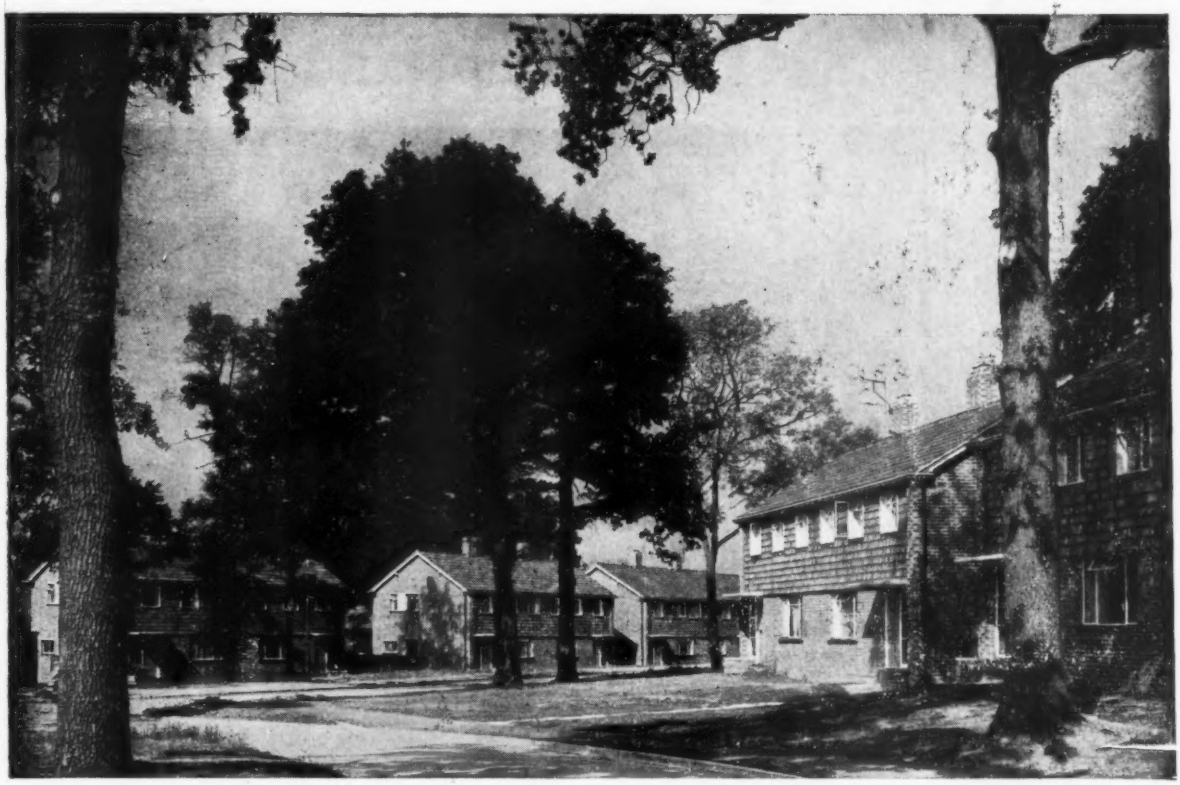

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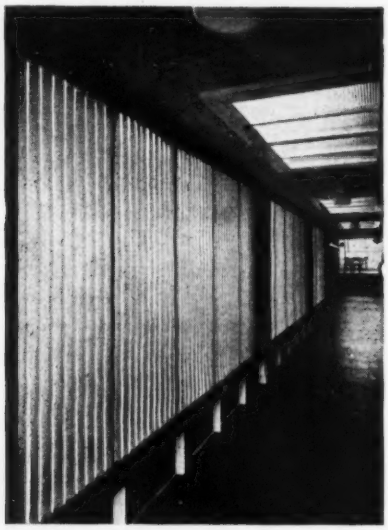
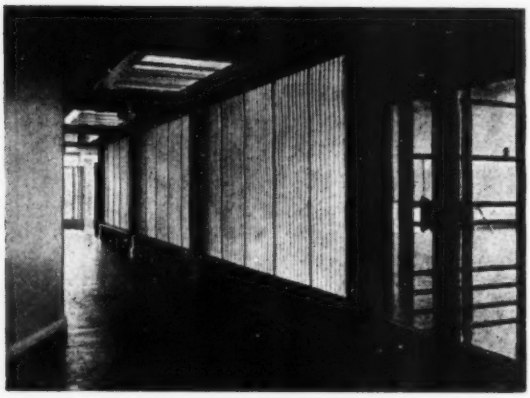


introducing

Decorated Corroglaze sheets used to provide a corridor in a school.

Where extra height is required and where traffic has to be allowed for, a simple wooden base to the partition should be used.



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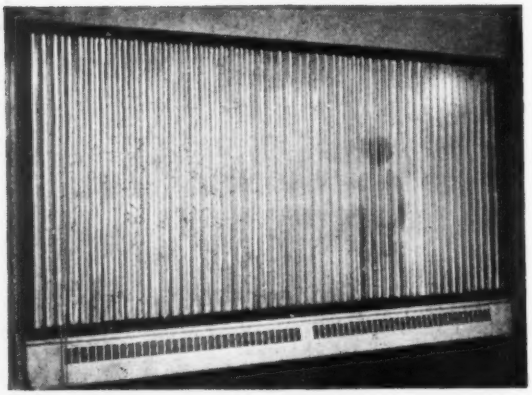
is 100% pure glass



Note how Corroglaze provides for both illumination and privacy in this office.

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corroglaze

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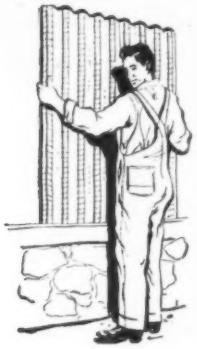

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internal partitioning

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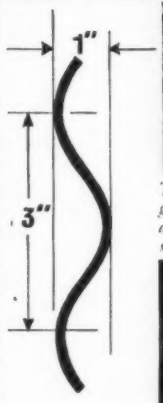
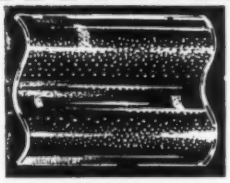
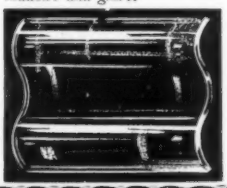
A centre supporting rail, suitably cushioned, to help resist heavy wind pressure is recommended,

can be used externally without restriction





The smooth and stippled corrugated surfaces transmit and diffuse light, eliminating shadows and glare.



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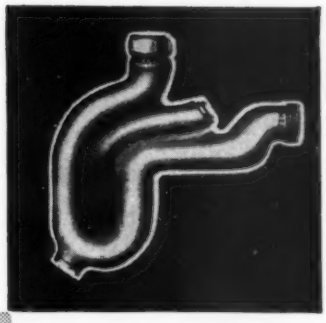

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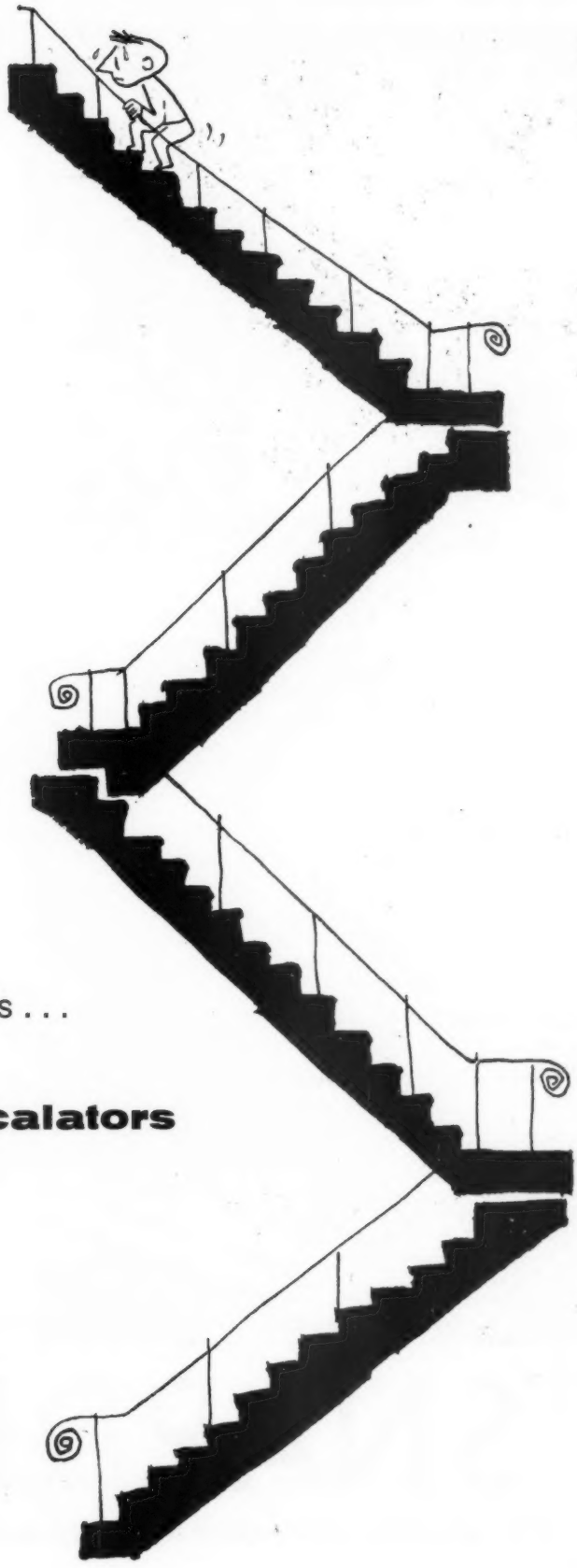

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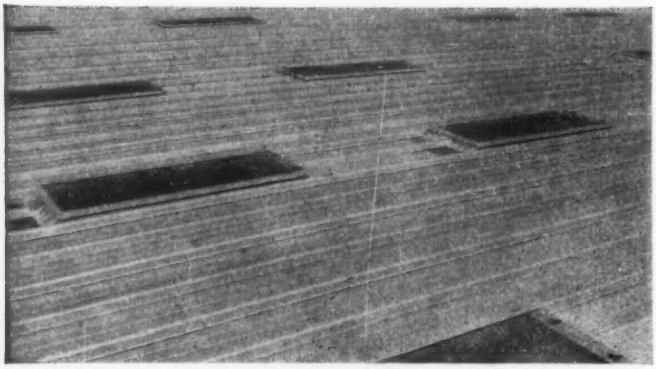

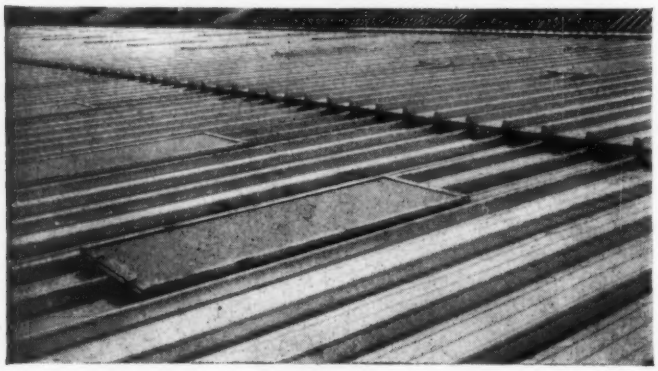

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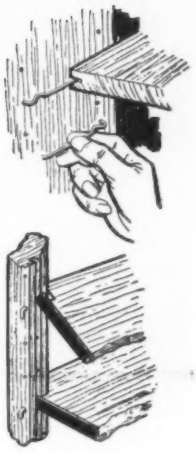

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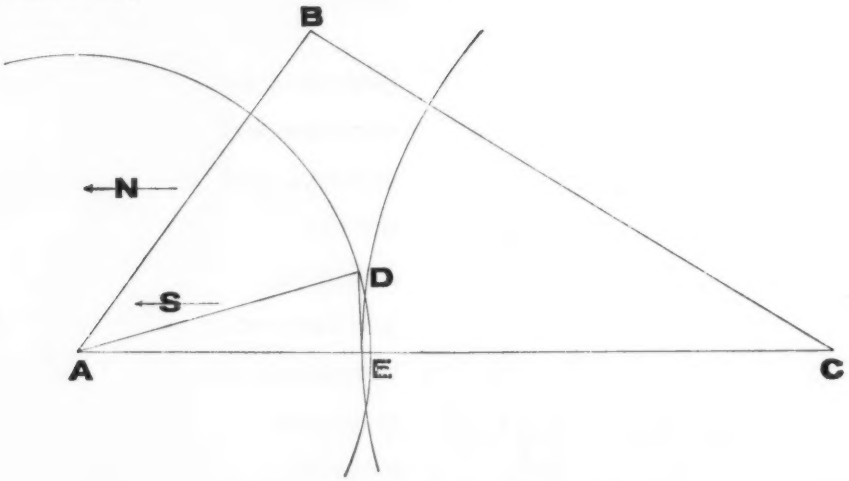

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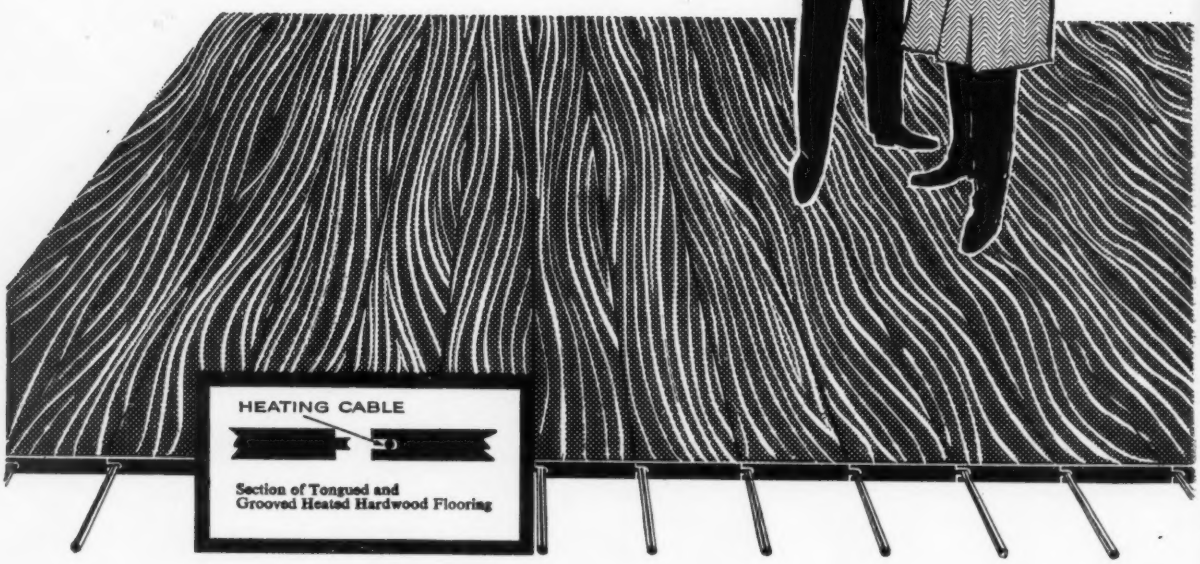

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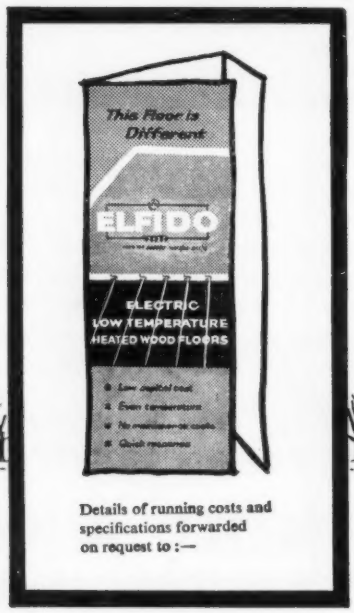

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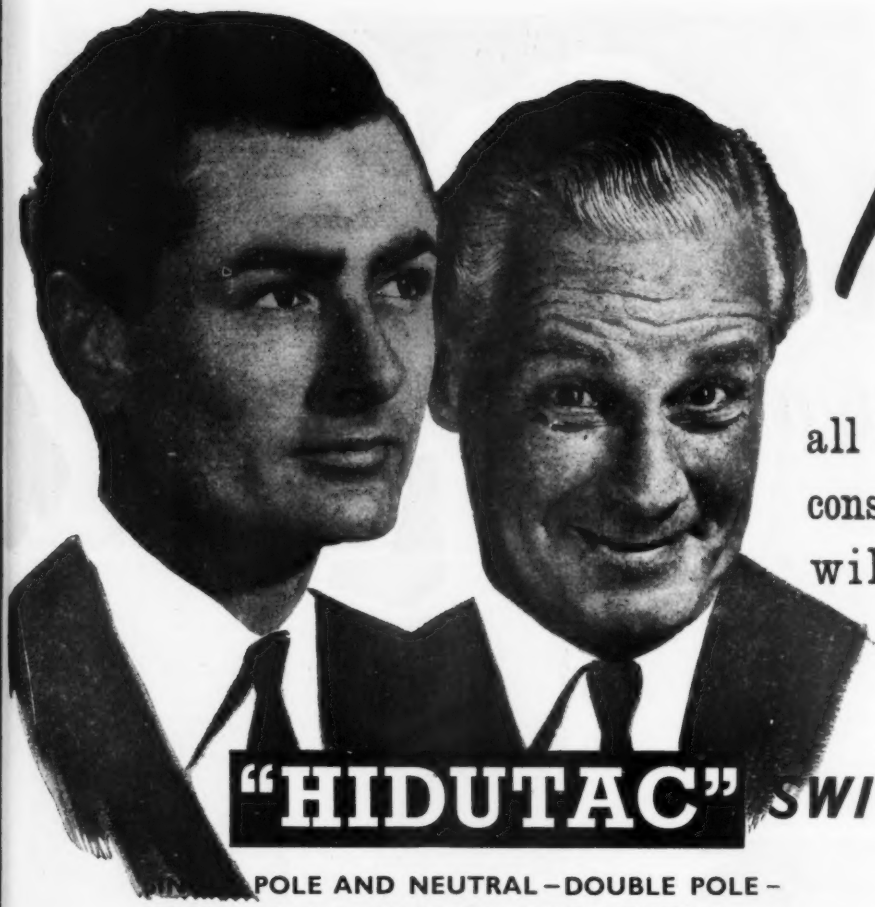

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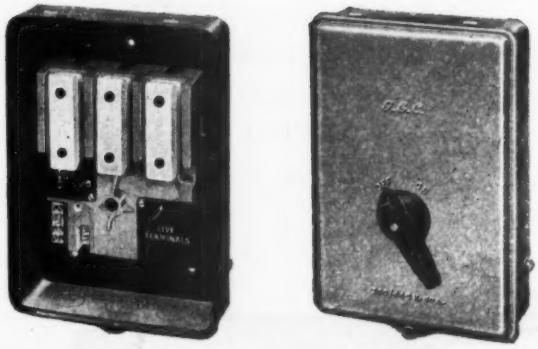

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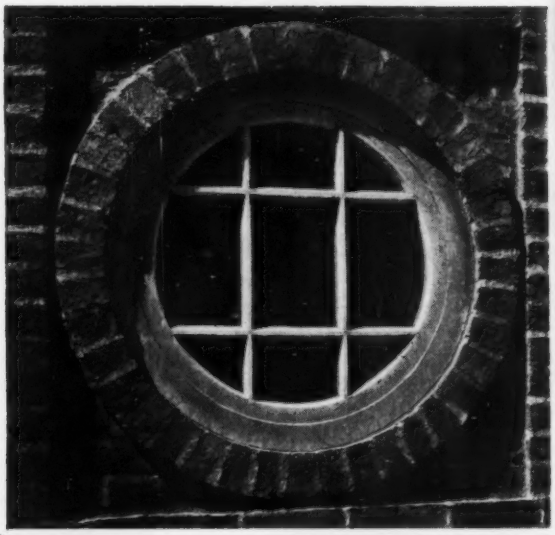

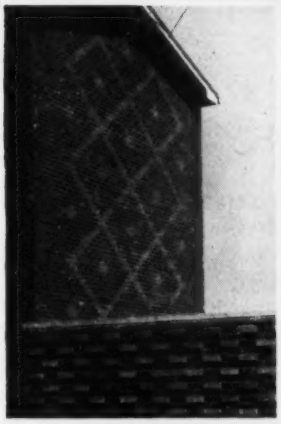

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is so Versatile

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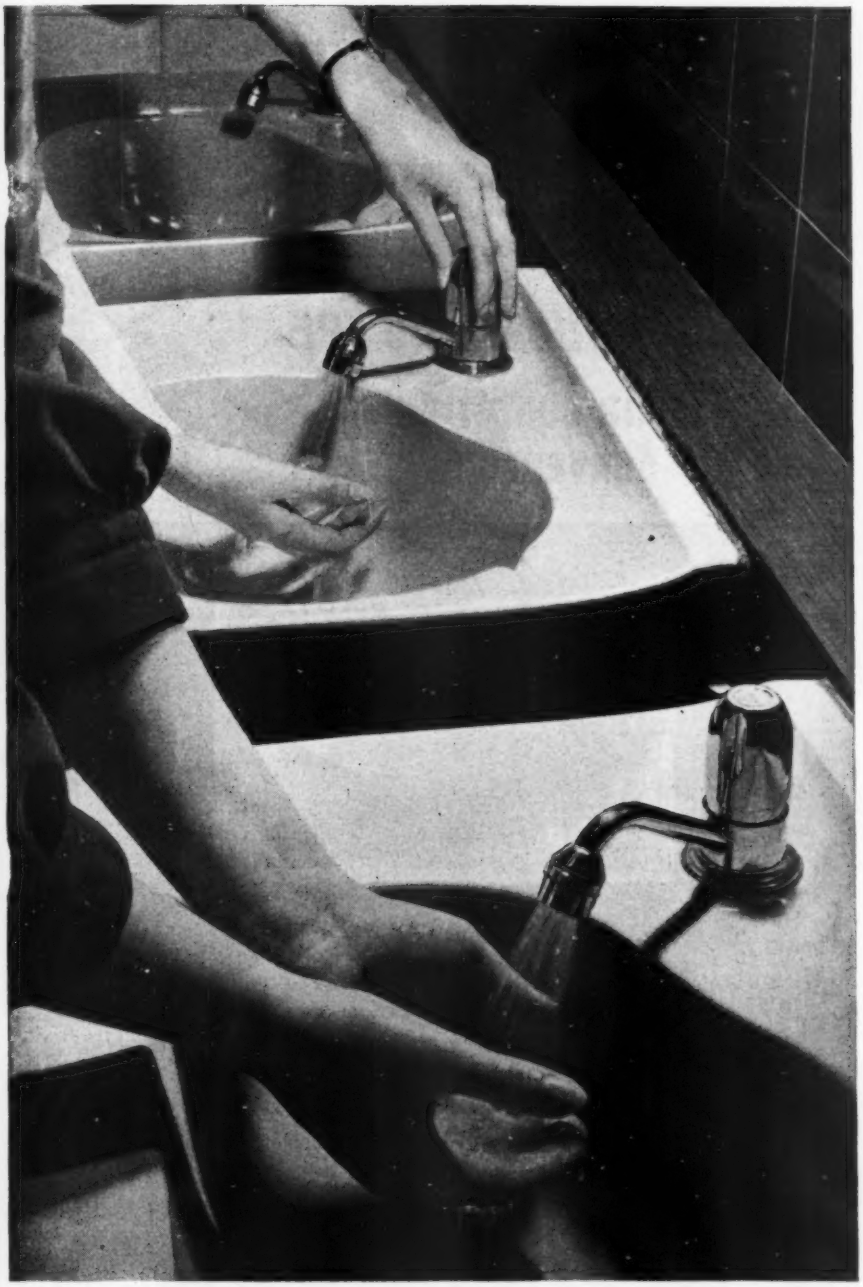


How much water — hot water — can you afford to waste?

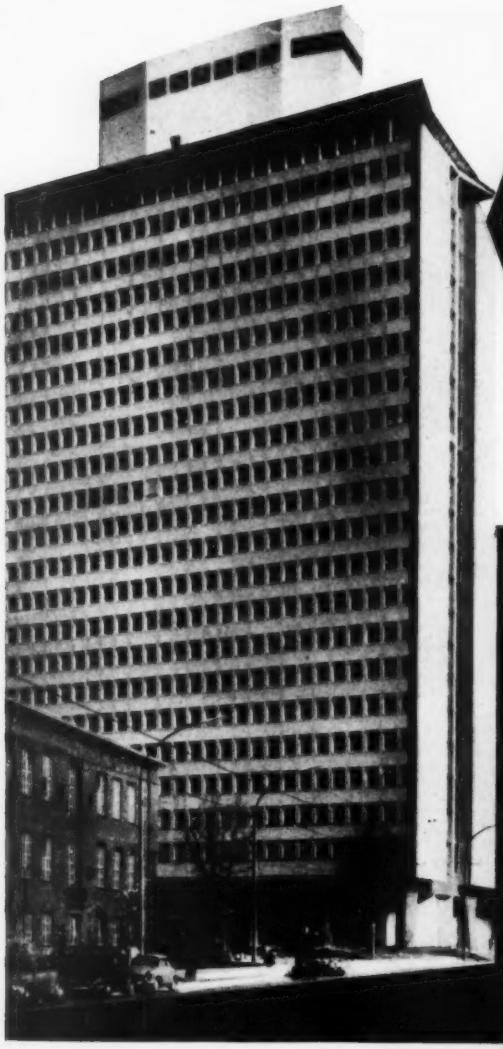
We waste too much water, and mainly hot water. We fiddle with the taps until the basin is a hot reservoir.

Contrast this with two recent cases. In the first, a branch of an institution was using in an ordinary week five hundred gallons hot and cold. This is now fifty-four gallons a week! The second is a London office block which for years used in a month six thousand gallons of hot and one thousand, six hundred and fifteen of cold. They have reduced this to one thousand, four hundred and fifty hot and eight hundred and fifty cold—a sixty-nine per cent total saving of water, seventy-five per cent of which (repeat: seventy-five per cent) was hot!

Unataps do this. A single mixing-tap, an exhilarating, fine spray, a more hygienic wash—and a saving. You really cannot afford to be without Unataps.

Write for Leaflet No. UJ/2.

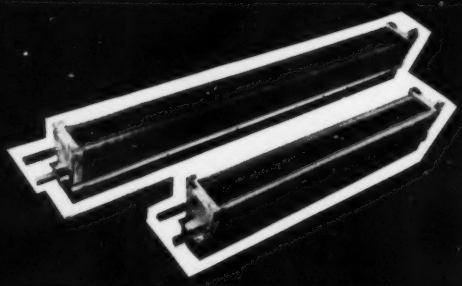
WALKER CROSWELLER & Co. Ltd., Cheltenham. Phone: Cheltenham 56317 or HOLborn 2986 (London)



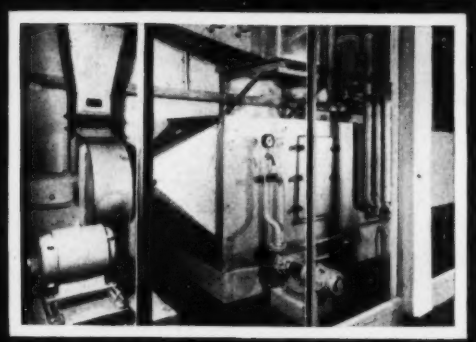
AIR CONDITIONING with SULZER

INDUCTION TYPE AIR CONDITIONING CONVECTORS

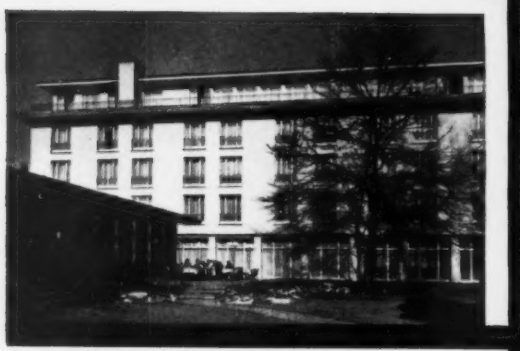
Reduces diameters of air ducts by 70%



Low level convectors require minimum space



Requires air treatment plant half the size of conventional plant



Illustrated above is a multi-story office block and a hotel equipped with Sulzer air conditioning convectors

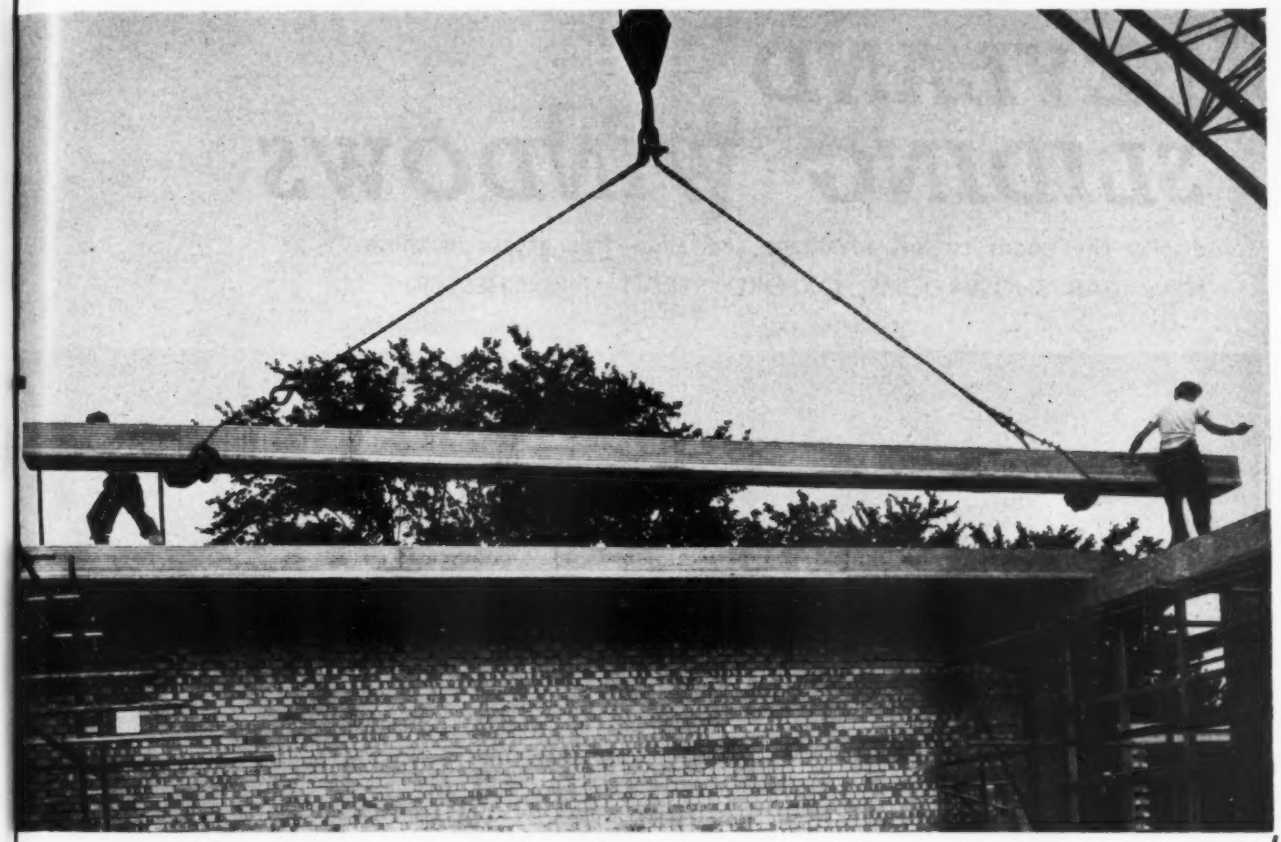
Further advantages:-

Convectors work as normal radiators in off periods.
Sulzer convector system is practically noiseless in operation.
Ideal for individual regulation of sections or single rooms.

Write for information to:-

SULZER BROS. (LONDON) LTD.
12 Dyott Street, London, W.C.1.

Telephone: MUSeum 7890



40 ft. Prestressed Hollow Beams 12 in. deep. New telephone exchange Werrington (M.O.W.)

DOWSETT

PRECAST PRESTRESSED

HOLLOW BEAMS

★ STANDARD TO 50 FEET SPAN
★ LOAD-SPAN TABLES AVAILABLE
★ ERECTED OR DELIVERED ONLY
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PRESTRESSED CONCRETE

PILES	CONCRETE BUILDINGS	FENCING
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LEYLAND SLIDING WINDOWS

display the goods to full advantage and allow free access in these
NEW CAR SHOWROOMS, OXFORD STREET, MANCHESTER.

YOUNG & PURVES ARCHITECTS & ENGINEERS

THIS INSTALLATION GIVES THREE-QUARTERS CLEAR OPENING

OUR FULL LENGTH WINDOWS ARE MADE WITH PLATE GLASS $\frac{3}{8}$" OR $\frac{1}{2}$" THICK

Smooth gliding on heavy tracks and ballbearings
Smaller windows supplied in $\frac{1}{4}$" and $\frac{3}{8}$" glass

Rustproof and watertight. Fitted locks
No glazing bars or distortion of view

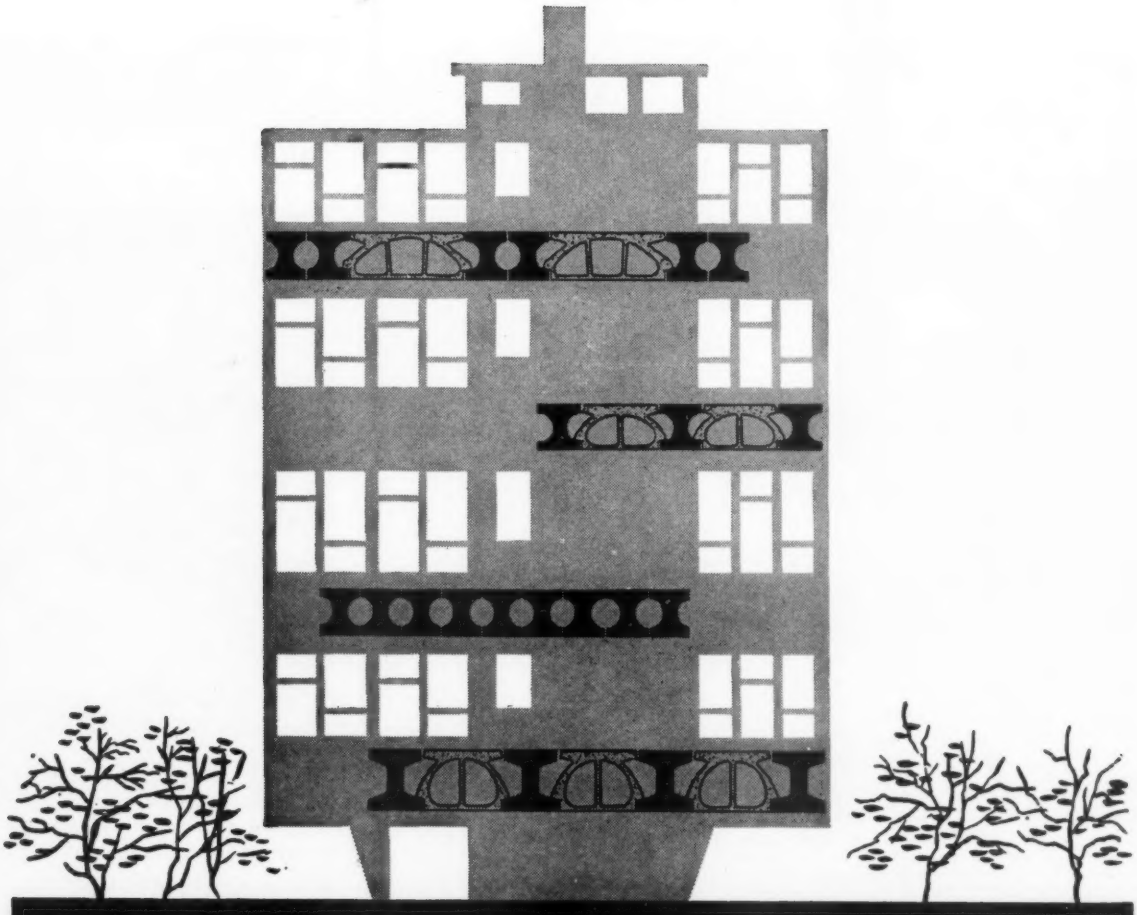
SEE OUR PERMANENT EXHIBITS AT THE BUILDING CENTRE, STORE ST., LONDON, W.C.1

Full particulars on request from the manufacturers

LEYLAND & SONS LTD.

TALBOT RD., STRETFORD MANCHESTER &
YORK RD., COLWYN BAY, NORTH WALES
Phones : Longford 3233 Colwyn Bay 2075

Pierhead



prestressed concrete floor construction...

Grenfell Baines & Hargreaves have used Pierhead floor construction in Schools at Manchester, Leeds, Wigan, Scarborough and Rochdale because it proved to be the most economical form of floor construction and provided planning flexibility. Our Engineers are available for discussion at any stage of the contract. Full details of Pierhead Floor Construction forwarded on application.

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Speke Boulevard, Liverpool, 24.
Telephone : Hunts X 1311-2-3.

Midlands
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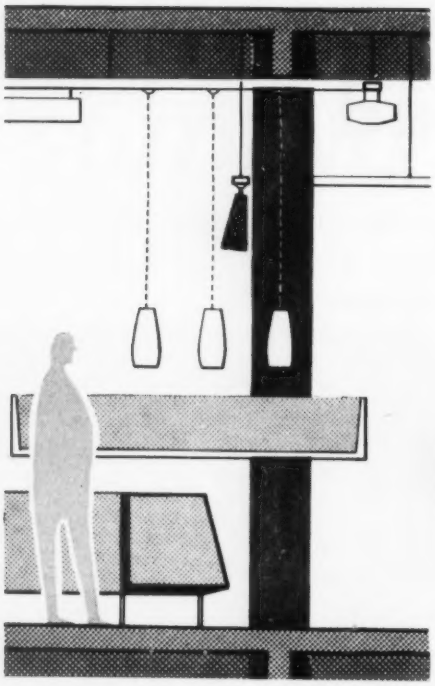
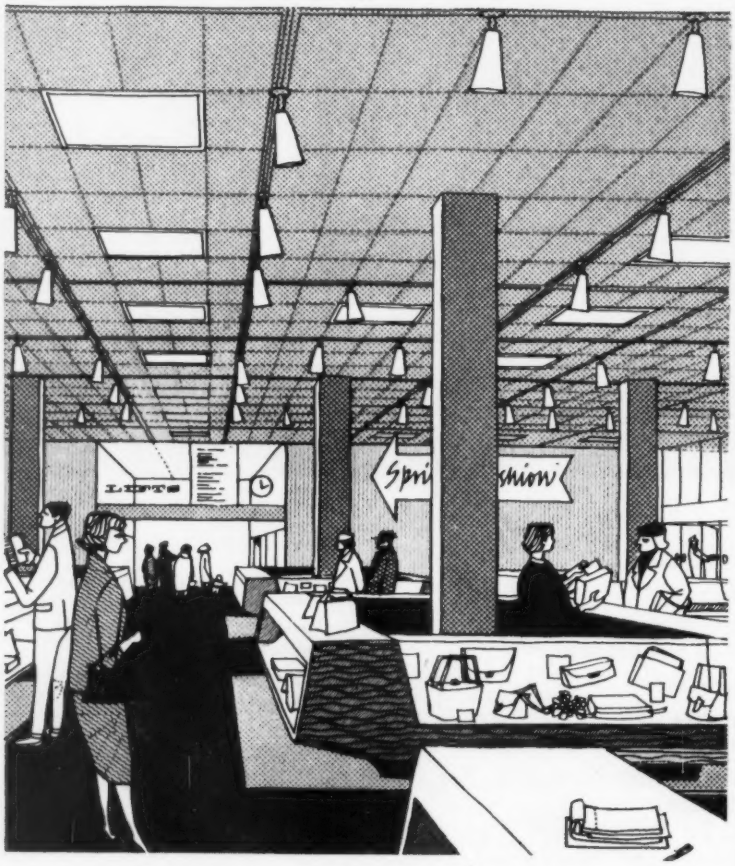
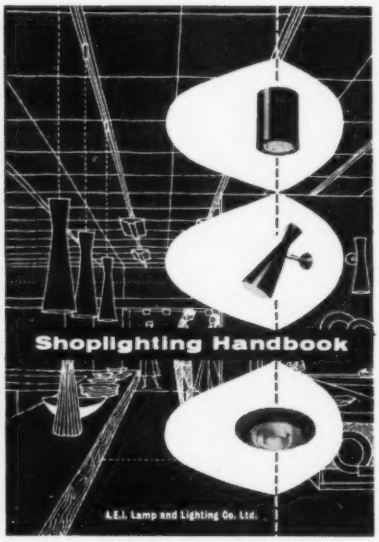
South
PIERHEAD LTD.
Faggs Lane, Feltham, Middlesex.
Telephone : Feltham 6591/4





A new practical Shoplighting Handbook



The A.E.I. Shoplighting Handbook has been designed to meet the needs of all who require an intelligent guide to current shoplighting techniques.

Window lighting of all kinds, shop interior lighting and lighting equipment are all dealt with fully in text and illustration.

Tables show the type of window lighting best suited to various trades, and analyse the lighting arrangements for a number of typical windows.

The A.E.I. Shoplighting Handbook is an invaluable aid to lighting planning. Write for a copy today.

AEI
Lamp and Lighting Co Ltd

Head Office, Melton Road, Leicester

Mazda *lamps stay brighter longer*

SNOWCRETE

Its strength—equal to that of the finest grey cement; its durability—proved in every climate and latitude—and its reasonable cost, provide three of the reasons why it has achieved such an overwhelming success throughout the world. Structural concrete, cast-stone, terrazzo and renderings show how architects, engineers and contractors have exploited to the full the many effective possibilities of form and style, and interesting finishes based on this long established British White Portland Cement. Snowcrete complies with all the requirements of B.S.12, 1958. Available in 112 lb. and 56 lb. bags.

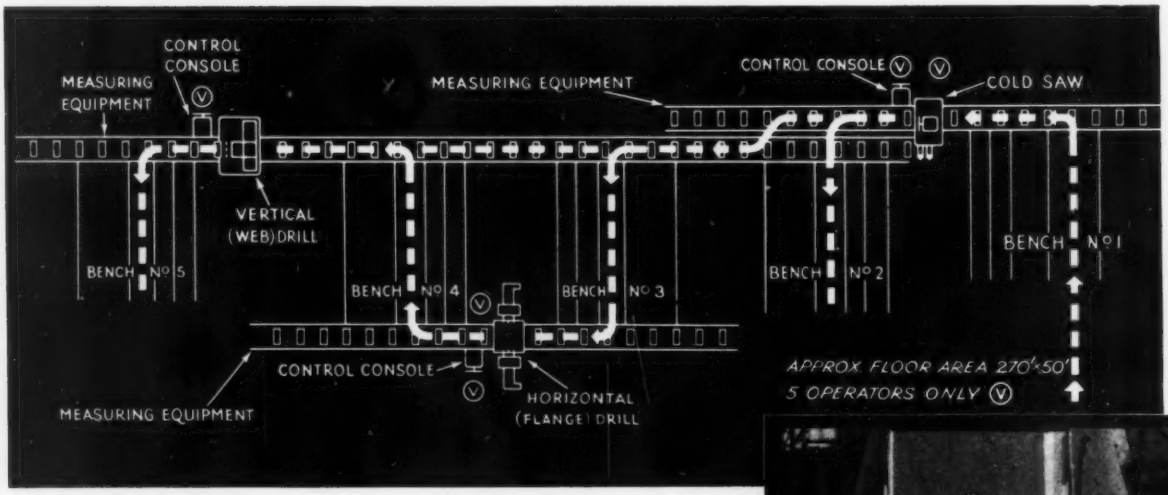
A BLUE CIRCLE PRODUCT

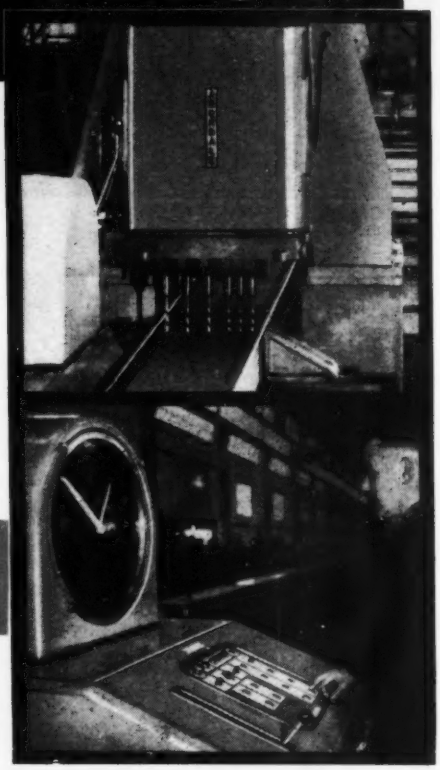
Supplied by

THE CEMENT MARKETING COMPANY LTD · PORTLAND HOUSE, TOTHILL STREET, LONDON, S.W.1.
G. & T. EARLE LTD., HULL · THE SOUTH WALES PORTLAND CEMENT & LIME CO. LTD., PENARTH, GLAM.

Our new automatic fabrication plant

One of the largest of its kind in the world





This installation combines speed, accuracy and economy. Allied with the immediate availability of comprehensive stocks of steel, this automation development enables us to quote even lower prices and to deliver even more quickly

Banister, Walton build in steel

BANISTER, WALTON & CO. LTD.
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MANCHESTER · LONDON · BIRMINGHAM

The GREENWOOD-AIRVAC Skirting Duct System

accommodates Post Office and internal telephone cables, power and lighting wiring

- Supplied in 6 ft. lengths complete with requisite Tee-sections and 90° angle bends for inner or outer access
- *Can be cut on site. Extra self-tapping screws supplied for cover plate fixing*
- Electrical continuity throughout
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Please write or phone for prices and further details and the descriptive leaflet on the Greenwood-Airvac Underfloor Conduit System

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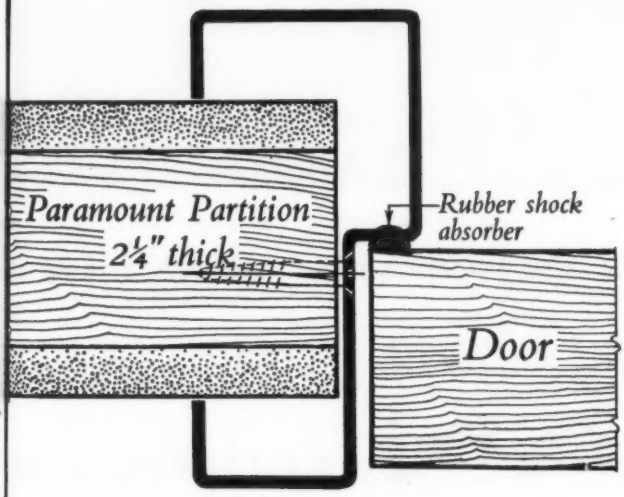
CARLISLE HOUSE, 8 SOUTHAMPTON ROW, LONDON, W.C.1. CHAncery 9377 (3 lines) 'Grams: Aircon, Westcent, London

BEACON STEEL DOOR FRAMES

NEW STANDARD PROFILE P FOR 2¼" PARAMOUNT PARTITION



Write for details

Profile P is an addition to our standard range already made in profile A, B and C listed in our Door Frame Catalogue

Beacon Steel Door Frames are manufactured from zinc—coated mild steel sheet of 18 BG and painted one coat of grey calcium plumbate rust-inhibiting primer before despatch. Each door frame is provided with the following:

6 *csk. wood screws.*

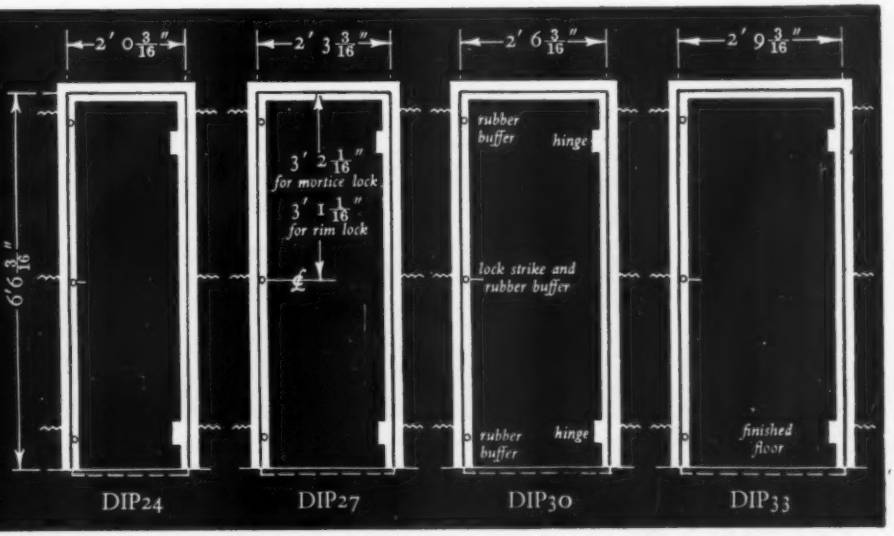
2 *zinc-plated 5-knuckle steel hinges, one leaf welded into the frame and the other assembled with loose sherardized pin.*

1 *hot-dip galvanized adjustable lock-strike plate with mortar guard.*

3 *rubber buffers (shock absorbers) inserted in rebate of the lock jamb.*

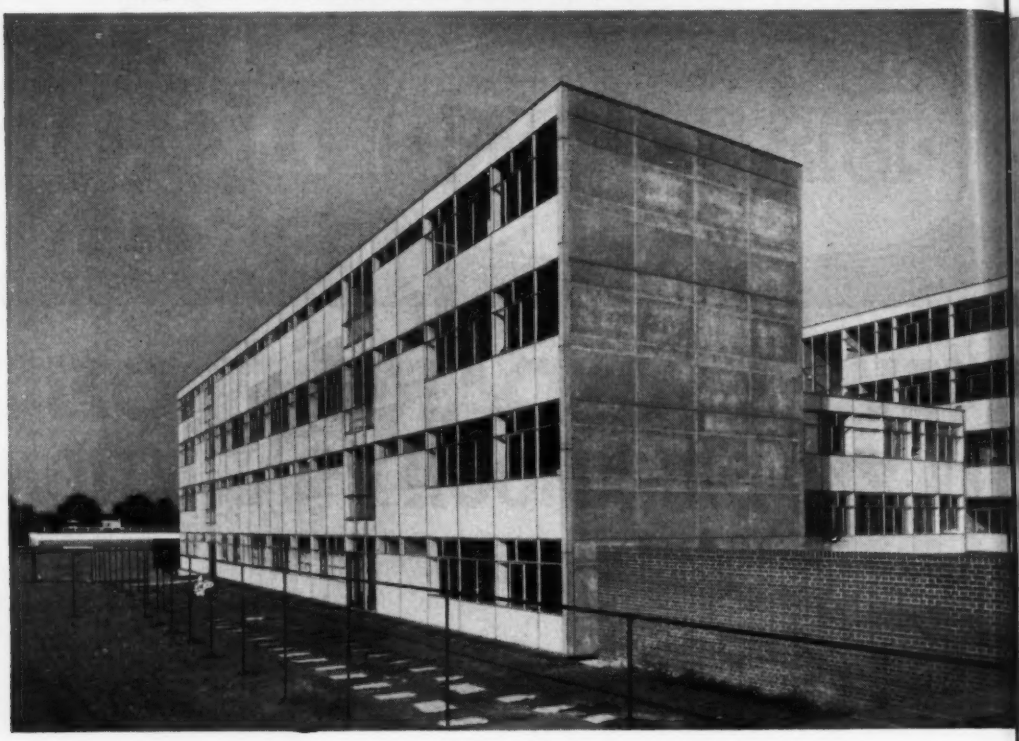
Base-ties are of heavy corrugated steel and are adjusted before despatch to set frame to level of finished floor. Floor mixing plates are provided at bottom of each jamb.

STANDARD TYPES AND SIZES NOW BEING MADE IN THE NEW PROFILE P



JOHN THOMPSON BEACON WINDOWS LTD · WOLVERHAMPTON

New Technical College for the Hertfordshire County Council at Letchworth, with aluminium curtain walling by GARDINER, SONS & CO. LTD. *No back-up wall is used and mullions have been dispensed with by use of interlocking framework. County Architect: G. C. Fardell,* M.B.E., A.R.I.B.A. *Former County Architect: The late C. H. Aslin,* C.B.E.

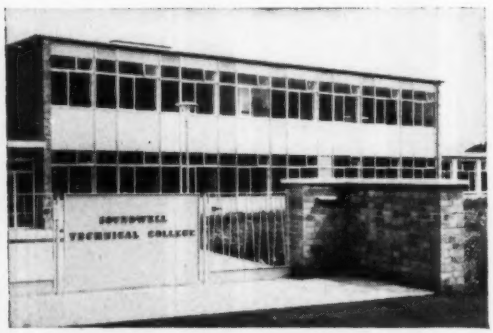


TOMORROW'S **CURTAIN WALLING**

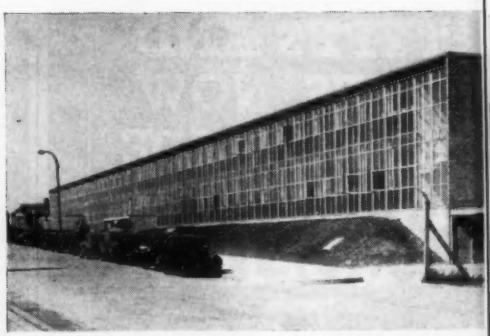
—already taking shape with

ALCAN ALUMINIUM

Lighter, stronger, and more quickly erected than conventional wall structures, the curtain walling and windows of today and tomorrow made of ALCAN aluminium are better than ever before. In its natural clean finish, or colourfully anodised, aluminium presents no problems of rust and lessens the cost of maintenance.



This view of the Soundwell Technical College, Kingswood, Bristol, shows the aluminium Panelgard curtain walling supplied by GARDINERS. *Architect: R. F. Fairhurst, Dipl: Arch. (L'pool),* A.R.I.B.A., A.M.T.P.I.



I.C.T. factory at Castlereagh with aluminium curtain walling construction. One extruded section was used to frame the curtain wall at head, sill and jambs.
Architects: Smyth & Cowser, F/F.R.I.B.A.

ALCAN
ALUMINIUM LIMITED OF CANADA

Aldridge 4 F.E. Grammar Technical School—another example of the use of 'Alwil' anodised curtain walling which is made by ALLAN H. WILLIAMS LTD. *of Coventry. Architect: A. C. H. Stillman,* F.R.I.B.A.

To the architect and designer

ALCAN aluminium means:

- *Freedom to create with no raw material limitations*
- *An opportunity to demand hollow or solid sections to conform with the most intricate designs*
- *Thinner, lighter, permanent walls, with a wide range of architectural expression*
- *Speedy erection*

To the building owner or occupier

ALCAN aluminium means:

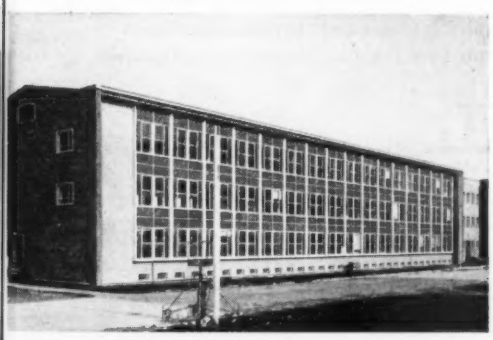
- *More floor space due to thinner wall construction*
- *Lower fuel costs through more efficient insulation*
- *Light weight—cutting erection time and foundation costs*
- *No unsightly rusting or flaking, no painting necessary—and therefore lower maintenance costs throughout the life of the building*

The advantages of aluminium are at their greatest with ALCAN aluminium. ALCAN, one of the world's largest producers, are specialists in the ingot field.

To manufacturers, ALCAN specialisation means a constant, reliable source of aluminium in alloy forms, exactly – *consistently* – suited to precise needs.

To architects and designers ALCAN specialisation makes available a vast store of technical knowledge and experience ready to be applied to any project, backed up by years of fabricating technique.

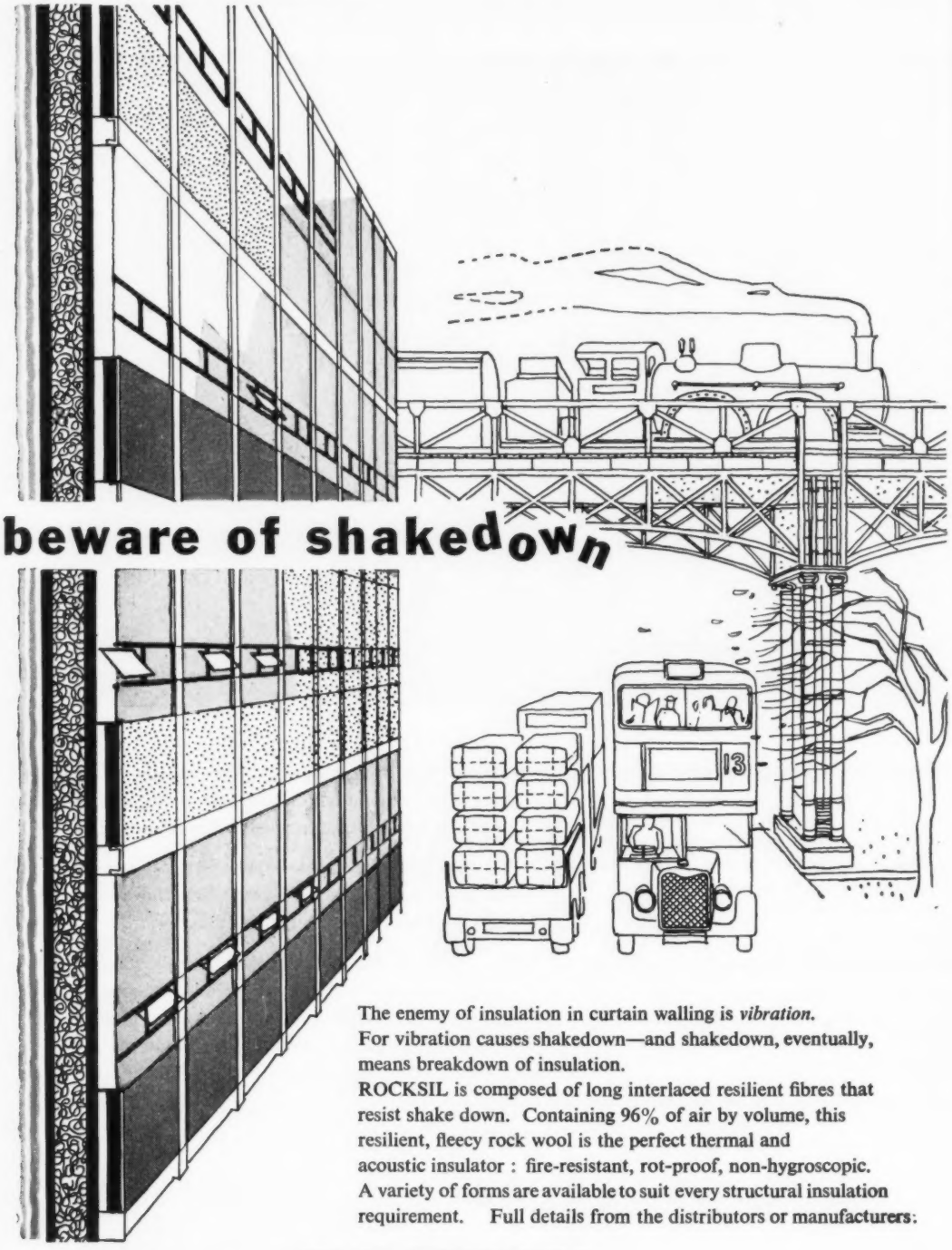
To the user of every aluminium product ALCAN specialisation means a certainty of quality and the best value that money can buy.



'Alwil' aluminium curtain walling, manufactured by ALLAN H. WILLIAMS LTD. *of Coventry, was used for the administrative block of the A.E.I. Turbine Generator Division's Larne factory on an exposed site on the coast.*

ALLAN H. WILLIAMS' *'Alwil' curtain walling, colourfully anodised, with stove enamelled aluminium glazing beads, was specified for Aldridge County Secondary Modern School, Staffs. Architect: A. C. H. Stillman,* F.R.I.B.A.

ALCAN (U.K.) LIMITED · Aluminium Canada House · 30 Berkeley Square · London W1



beware of shakedown

The enemy of insulation in curtain walling is *vibration.*
For vibration causes shakedown—and shakedown, eventually, means breakdown of insulation.
ROCKSIL is composed of long interlaced resilient fibres that resist shake down. Containing 96% of air by volume, this resilient, fleecy rock wool is the perfect thermal and acoustic insulator : fire-resistant, rot-proof, non-hygroscopic.
A variety of forms are available to suit every structural insulation requirement. Full details from the distributors or manufacturers:

Resilient ROCKSIL

ROCK WOOL INSULATION

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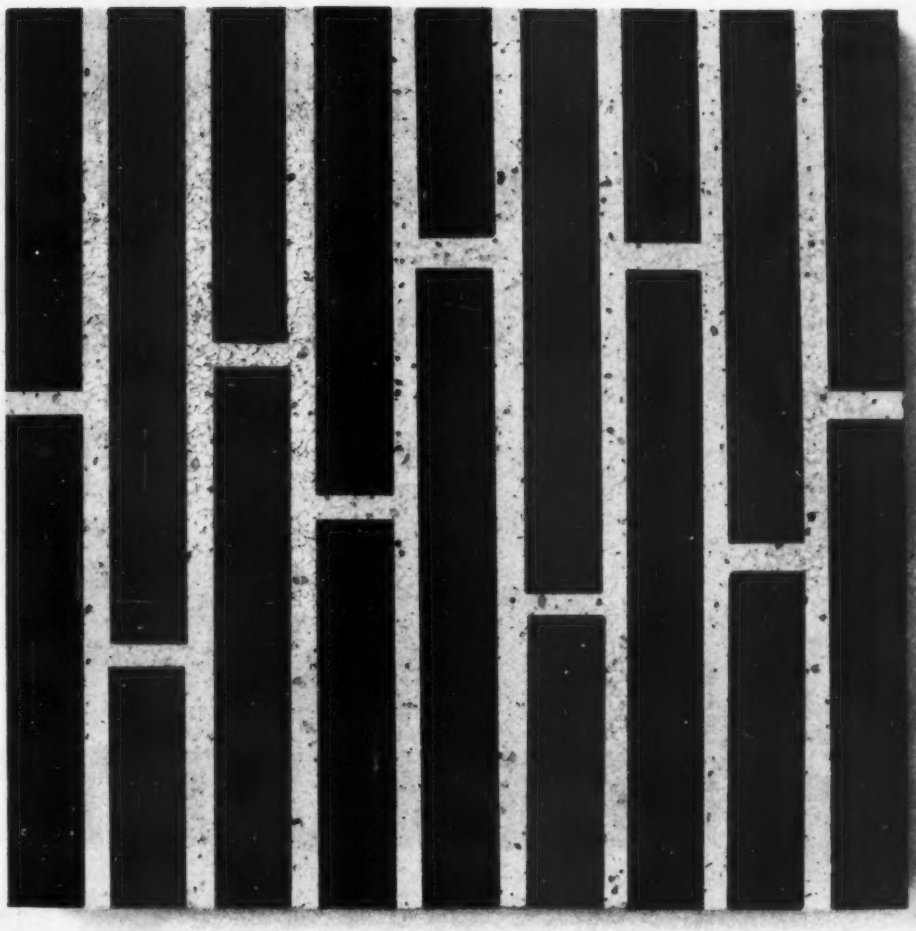
Dukinfield Cheshire
Ashton-under-Lyne 1614/7 & 3673/6

Cape Building Products Limited
Cowley Bridge Works Uxbridge Middlesex
Uxbridge 4313

Manufactured by

THE CAPE ASBESTOS COMPANY LIMITED 114 & 116 PARK STREET LONDON W1



NEW NON-SLIP SLATE FLOORING

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

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

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

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

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

THE WINCILATE GROUP

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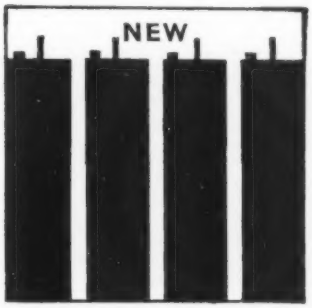
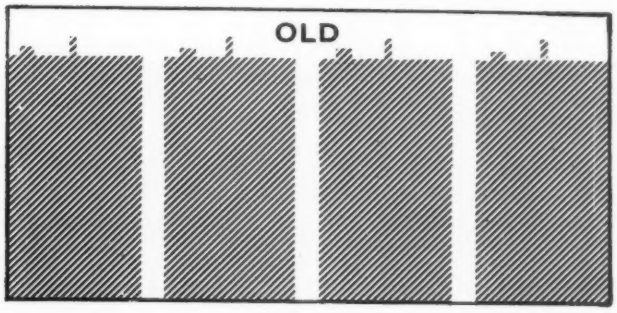
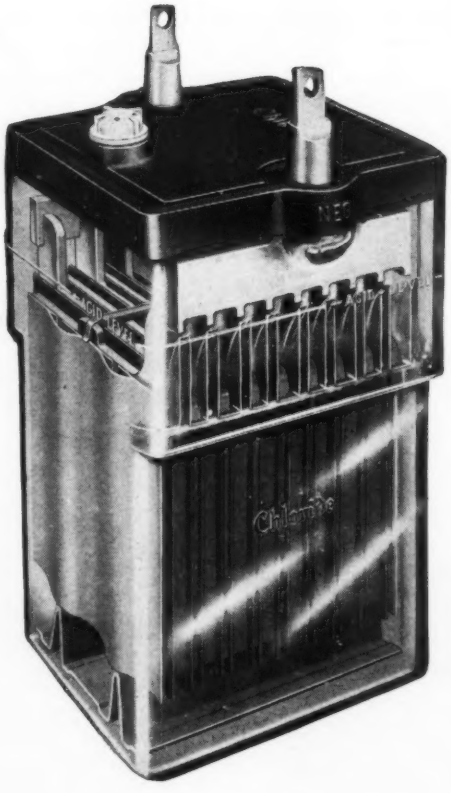
Stand-by power in half the space→



from the new CHLORIDE stationary cell





This new cell is specially designed for standby duties entailing discharge rates between, say, the 3-hour and the very high rates demanded for switch-closing purposes. With its Plante positive and pasted negative plates, Porvic microporous separators and many other improvements in material and in design, this light, robust cell will perform its duties with greater efficiency, with complete reliability and with a saving in battery space of approximately 50%. It is ideal for trickle-charge operation and has all the remarkable length of life associated with the Plante type of construction.

The field in which the new cell is designed to replace current Plante types is a very wide one. Emergency lighting*, switch operation and emergency supply in hospitals, theatres, cinemas and other public buildings, both nuclear and conventional power stations, all rely on trickle-charged batteries. In Great Britain today such batteries occupy millions of cubic feet of valuable space. The new Chloride cell could free almost half of it.

* *The new cell will from now onwards be fitted in all Keepalite units —the Chloride Company's automatic emergency lighting system.*

By the makers of Exide Batteries

A PRODUCT OF CHLORIDE BATTERIES LIMITED · BACKED BY WORLD-WIDE SERVICE

Enquiries to: London, Elgar 7991; Bristol 64086; West Bromwich 2361; Leeds 20248; Glasgow, Bridgeton 3734; Manchester, Blackfriars 1158; Belfast 27953

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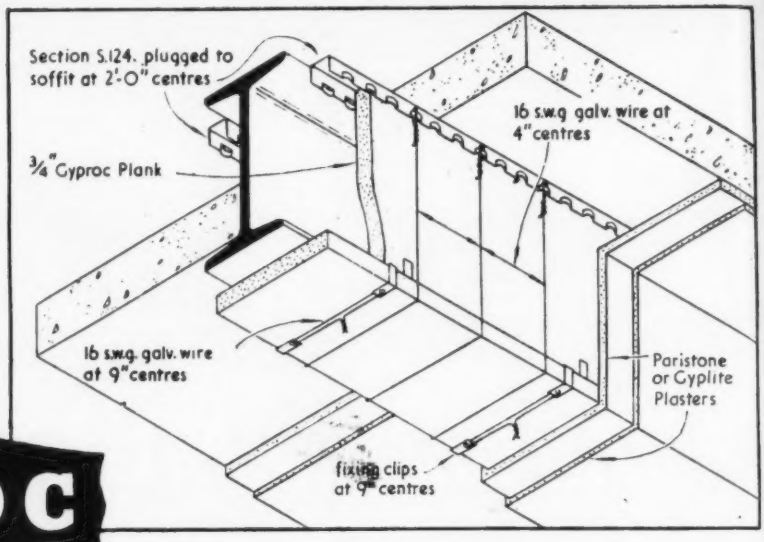

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A new and improved system of lightweight protective encasement for steelwork

with fire resistance ratings

from ½ hour to 4 hours

Bear in mind that although steelwork is incombustible, it is an extremely vulnerable part of the structure during a fire unless suitably protected. For example a steel column under design load will fail in about eleven minutes when tested for fire resistance in accordance with B.S.476.

GYPROC products include:

GYPROC WALLBOARD
GYPROC PLANK
GYPROC LATH
GYPROC SARKING BOARD
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GYPROC PLASTERS

Paristone Browning Plasters
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UNIT CONSTRUCTION PRODUCTS
Gypunit Partition System and Wall Linings
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Gypklith Acoustic Tiles
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Gyproc Insulating Wallboard and Lath
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Literature is readily available on any or all of these products.

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Head Office: Singlewell Road, Gravesend, Kent. *Gravesend 4251/4*
Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow S.W.1. *Govan 2141/3*
Midland Office: 11 Musters Road, West Bridgford, Nottingham. *Nottingham 82101*
London Office: Bath House, 82 Piccadilly, London W.1. *Grosvenor 4617/9*

'GYPROC' IS THE REGISTERED TRADE MARK OF GYPROC PRODUCTS LIMITED

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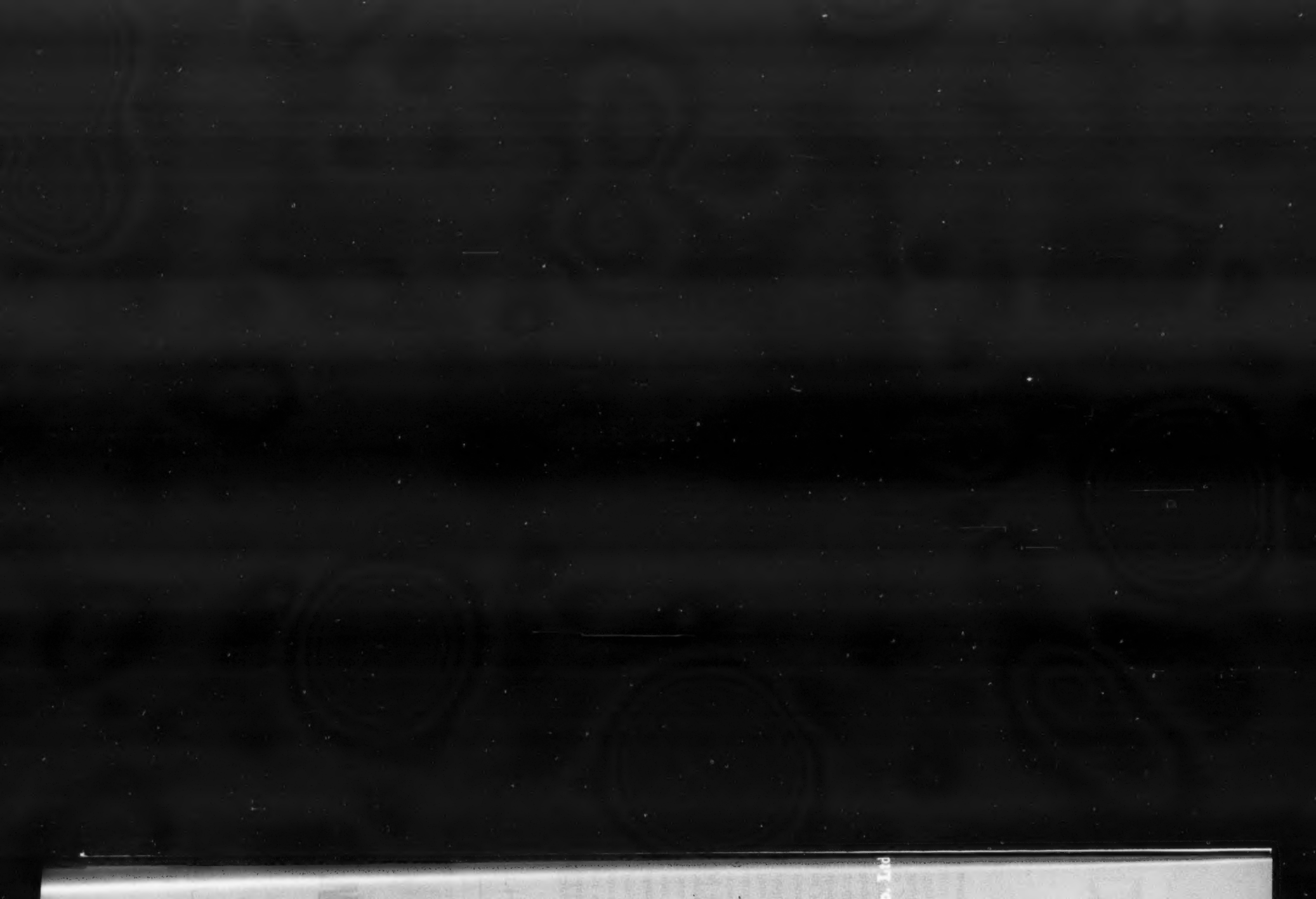
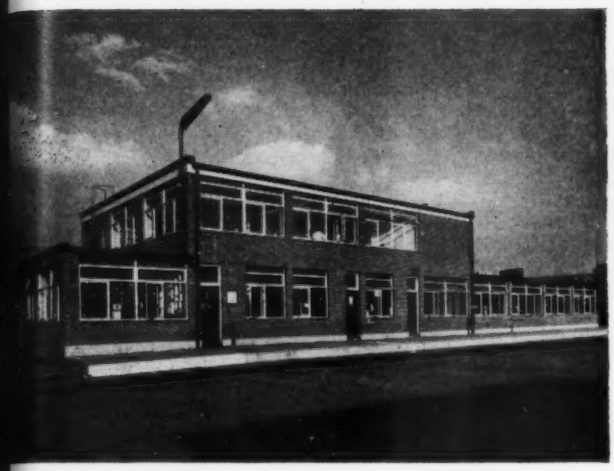


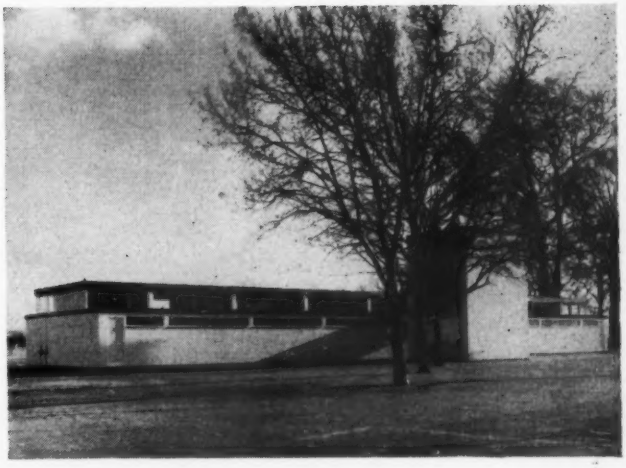


2

1. New Office Buildings and Canteen for British Road Services at Brentford.
Architect: A. H. Roberts, L.R.I.B.A., Architect to B.R.S.

2. Midland Bank premises at Ealing showing Bank fittings made in our own shops.
Architects: Messrs. Whinney, Son & Austen Hall.

3. New changing units for London County Council at Barnes.
Architect: Hubert Bennett, F.R.I.B.A., Architect to the L.C.C.



3

THE ARCHITECTS' JOURNAL
for January 21, 1960

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THE ARCHITECTS' JOURNAL
January 21, 1960

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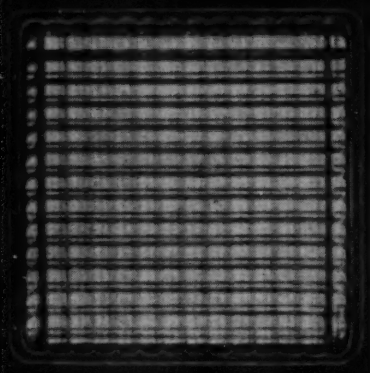

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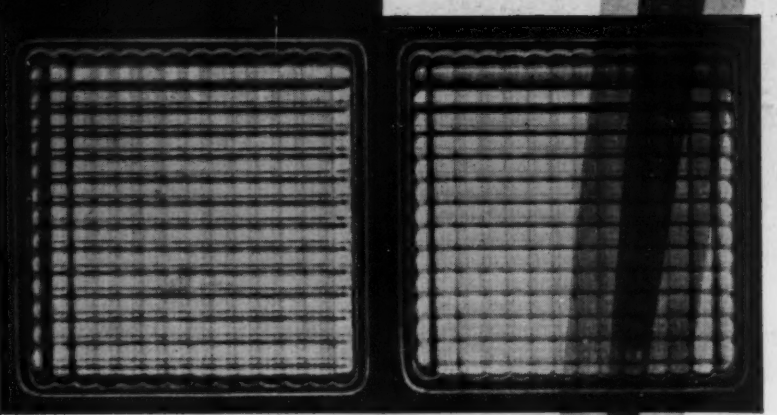

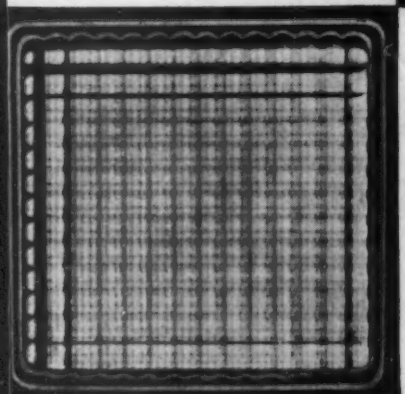

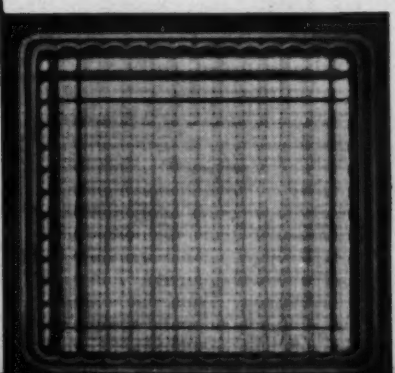

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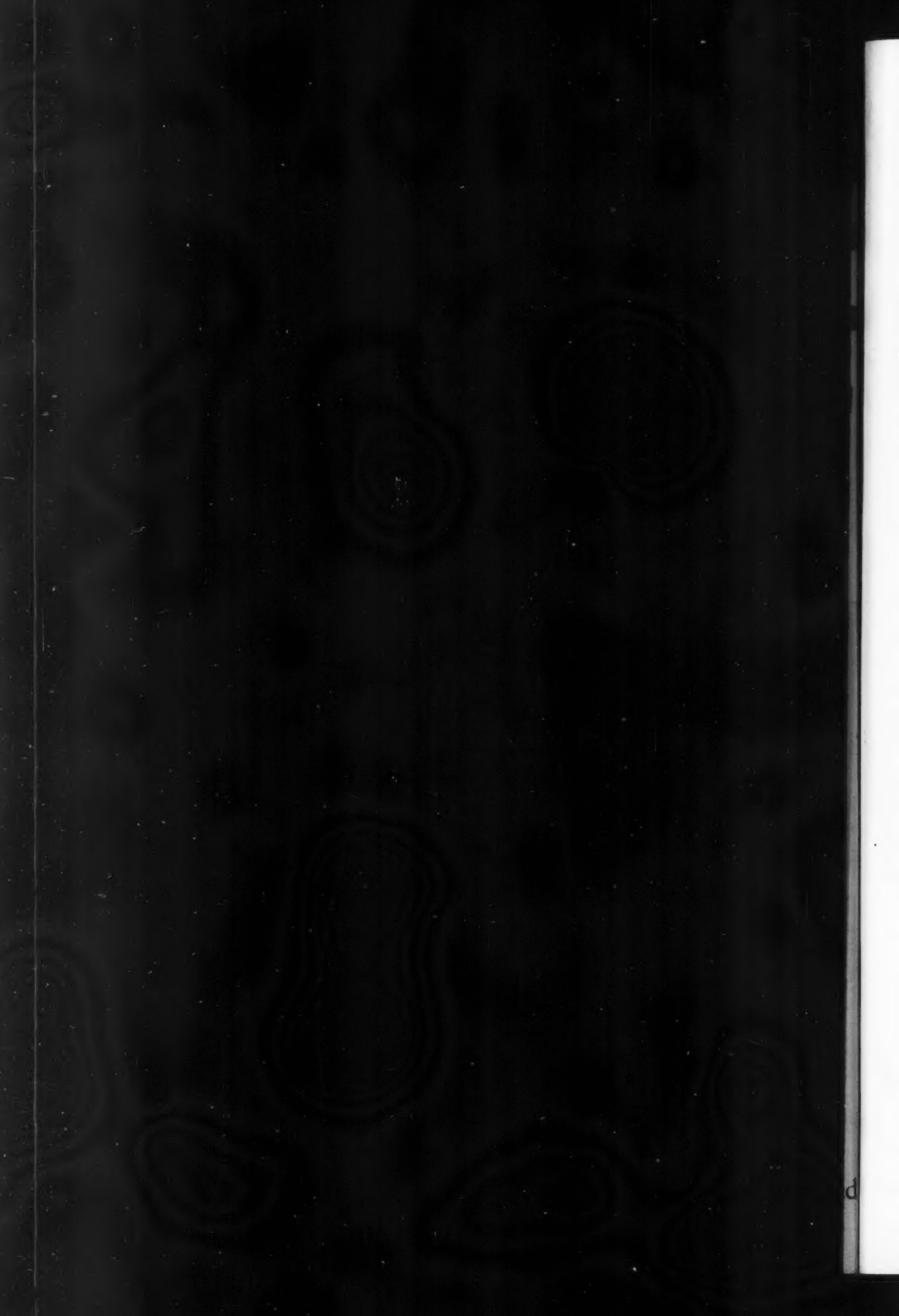

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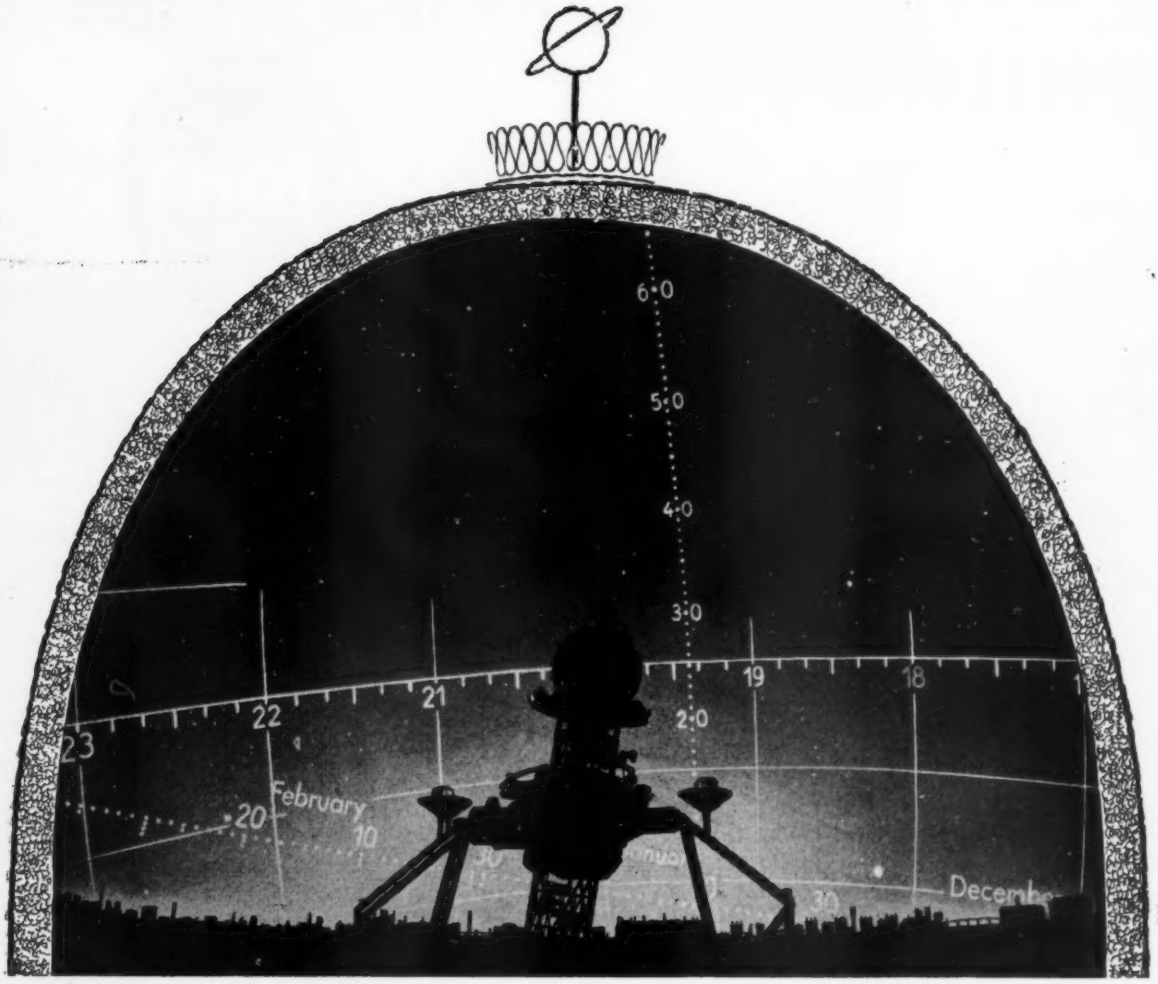

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P.2389

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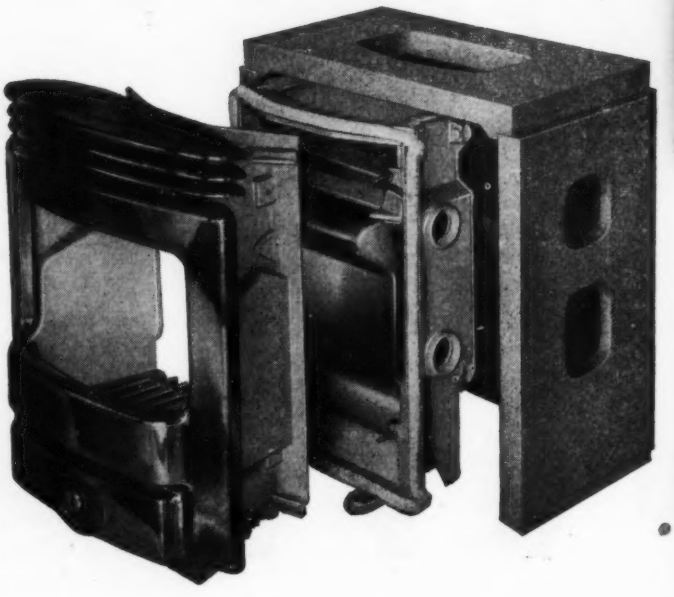

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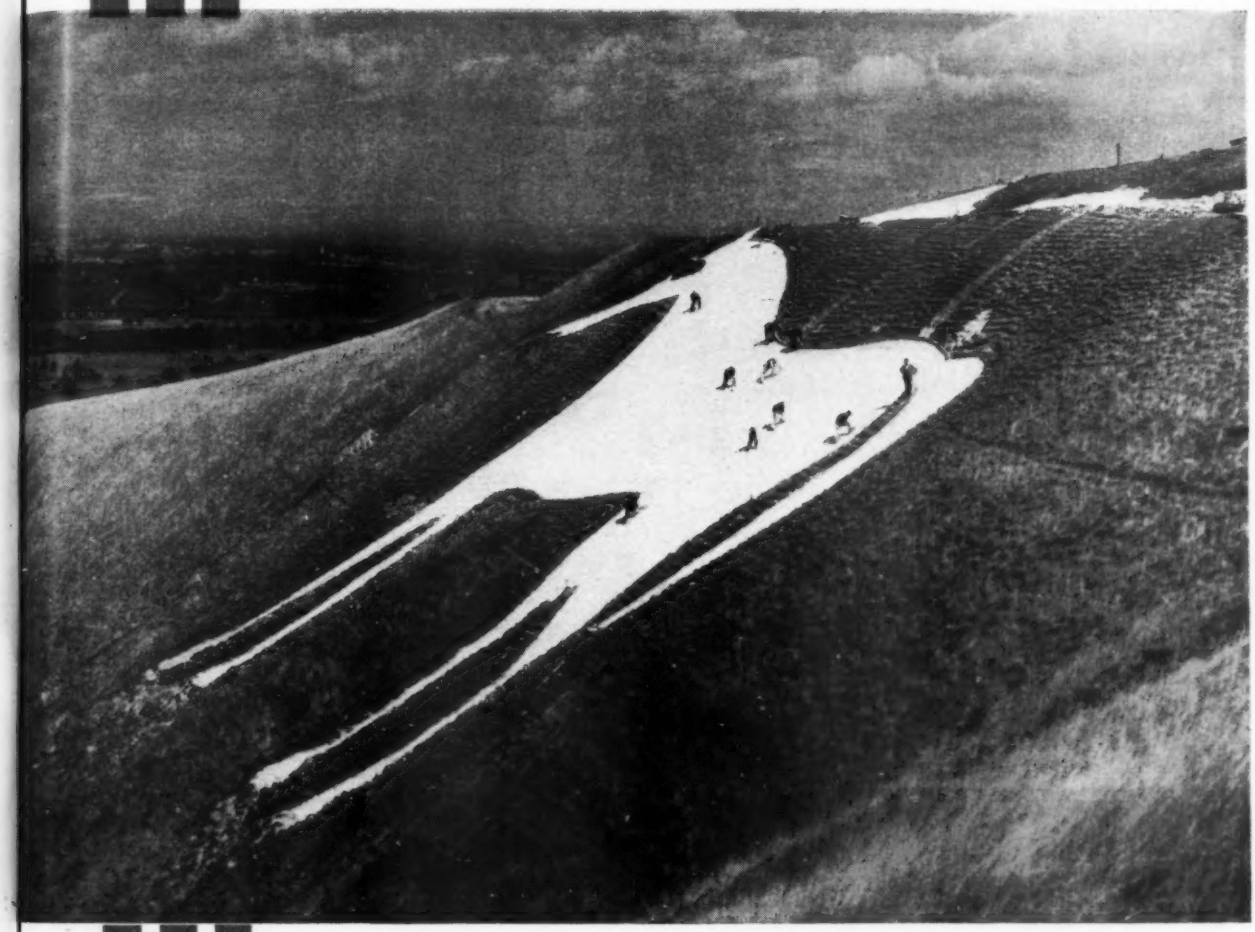
The White Horse of Westbury*



* When the Ministry of Works recently decided to re-surface the famous White Horse of Westbury, Tunnel White Portland Cement was used. This monument, which commemorates the victory of Alfred the Great over the Danes at Ethandune in the year 878, is now permanently white. The periodic re-cutting of the chalk is no longer necessary.

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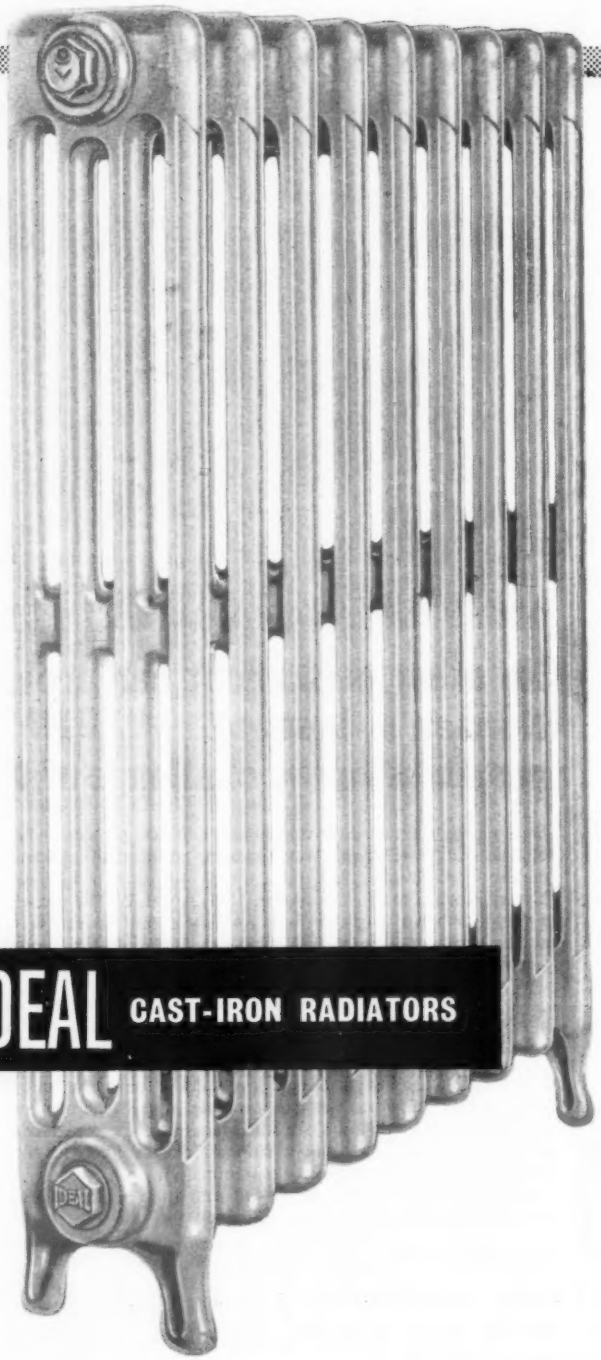

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The Architects' Journal

No. 3379 Vol. 131. January 21, 1960

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NEW YEAR NUMBER

CONTENTS PAGE

Astragal's Review of 1959

JANUARY

"When," said Sir Winston, as the year began, "am I going to hear the sloppity-slop of poured concrete?" He was referring, of course, to the Churchill College to be dedicated to him at Cambridge. What he *actually* said* was, "When am I going to hear the sound of chisel on stone?" But New Brutalists—and there were several of them among the chosen competitors for the building, quickly rephrased the question in case it influenced the assessors. Meanwhile Basil Spence had been promised the brutally frank modelling of Epstein—a commission which was to bring the RIBA not only a three-dimensional souvenir of its lively president, but also the privilege of owning one of the sculptor's last works. At this time Sir William Holford had the privilege of answering a 64,000 dollar TV Brains Trust question in front of the nation. "If you hadn't any money for repair and maintenance, would you rather live in an 18th century house or a new and efficient one without any architectural merit." With commendable restraint Sir William refrained from answering "Yes: and have you stopped beating your wife?" Other distinguished architects not involved in parlous games were finding the world equally tiresome. Neville Conder was being told he ought to have the word "Telephone" written on his newly-designed kiosk; Edward Stone was writing to the JOURNAL to say he was disgusted by it, and architects with Park Lane clients up their sleeves were dismayed by the RFAC's recommendations that there should be a height limit to buildings around London's parks. But we were all cheered by further signs of a brighter RIBA when it announced the award of the Gold Medal to Mies van der Rohe—the third year it had gone to a foreign architect. At this rate, we calculated, it would never go to our old fuddy-duddy, you-know-who. Just at that moment he was probably sympathising with the villain of *Room at the Top* (film version) who had been translated into a hater of modern architecture. Or maybe he was at Burlington House which had turned the clock back even further than it does every summer, and was staging an exhibition of Russian paintings.

FEBRUARY

The saying of the month came from a Birmingham town councillor. Birmingham, he said, would one day be one of the most beautiful cities in Europe. This joke appeared in a Civic Trust film which showed the sort of thing being built in that city today. The film was one of a series made for BBC television, a series that was good in intention, bad in production but useful to have—even if it did include accidental criticism of modern architects. This was the month when there was intensive criticism of inefficient architects (Kenneth Mellanby in *The Spectator*), neo-classical architects (Anti Uglies at Cambridge) and non-architects (Basil Spence, attacking spec builder-designers, on commercial television). It was this month too that J. M. Richards complained about the work done by dead architects—that is to say, firms which kept dead names in their titles. Reyner Banham, who seldom misses a trick, reported the belated arrival of Brutalism in Italy; and all the architectural papers reported the belated and overrated arrival of Corb's exhibition at the Building Centre. When an early Corb building, the Villa Savoye, was threatened with demolition, there was great alarm throughout the country—at least, I remember seeing a paragraph somewhere.

MARCH

At last! The Minister of Transport said he welcomed the co-operation of architects on road construction. "I welcome," he said, "the co-operation of architects on road construction." Or something very much like that. It doesn't matter what the exact words were, because whatever they were the Minister didn't do anything about it, and our ugly arterial roads and motorways went on being clumsy and crude—with disastrous effects on what is often spoken of as our ancient heritage. But this was March, the month of the Ideal Home Exhibition, when there is enough ancient heritage in Olympia to provide a special issue of the magazine of the British Travel and Holidays Association. This time we had the lot—thatched cottages, ceremonial regalia, Elgar and Annigoni. It was neatly summed up in the catalogue where it was said that Britain's inventions "range from gas lighting to cement, and include the Boy Scouts, the Salvation Army and the Co-operative Movement." Other British inventions like Nash terraces and Piccadilly Circus were in the news; the first was to be preserved, the second to be mutilated by *that* building. And that dear old institution, the London Zoo, was to be given a face-lift by Sir Hugh Casson. As we pictured the inimitable sketches of camels leaning—like Casson people—on the wind, the BBC interviewed Corb with conspicuous failure, the British Architectural Students' Association was given space in the AJ to show that it knew most, if not all, about something not clearly defined, and architects on the Aldermaston march began to wonder—as they were engulfed by Chiswick, the Great West Road and Slough—what the hell.

* If, in fact, he said anything at all.

APRIL

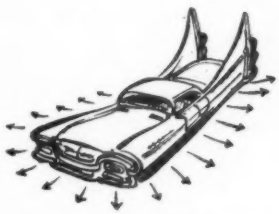
Strange-looking young men with fanatical eyes were seen taking notes in the Architecture Room of the Royal Academy. Proud exhibitors nodded amiably at this evidence of youthful zeal for learning until they realized. . . . By then it was too late to tear down their drawings: the Anti-Uglies had made their reconnaissance and were already planning their campaign against the yet-to-be horrors. In Swansea the local Anti-Uglies demonstrated against a Tudorbethan building put up by a business man who was upset by this reception of his benevolence. ("I could have enjoyed myself instead by going on luxury cruises, trips to the Continent . . . ".) The local newspaper was on his side. "A half timbered petrol station is an absurdity. But . . . a hosier's shop is as appropriate in the Tudor style as any other, and there is nothing inappropriate about an insurance office in the Georgian style." Never mind: April brought us a new look for the RIBAs annual report, the reprieve of the Villa Savoye, the appointment of Arne Jacobsen as architect for St. Catherine's, Oxford and good news for all architects everywhere. "The supervision of construction," said Richard Neutra, "isn't the architect's job at all." After years of doing the improbable, Frank Lloyd Wright did the impossible. He died.

MAY

"I'm simpler than you think," said Mies van der Rohe, after graciously accepting the Gold Medal with a quotation or two from St. Thomas Aquinas—in Latin. At the Chelsea Show the fuchsia was longer and slimmer than usual, and in Moscow the rubber plant was being driven out, together with other philistine foibles, by the Anti-Uglyskis. Penguins produced a baroque Pelican, Max Fry said we were making too many motor cars and Basil Spence said we ought to plan for the future. This, he said, was something our predecessors hadn't done. At Norwich the work of our recent predecessors was demolished, revised and replaced by the Civic Trust in the first of its anti-Subtopia exercises. In London Prince Philip made the first award of his Prize for Elegant Design to the designer of a refrigerator, irreverently known in some quarters as the Duke box. And in Coventry the architect's department produced a neat booklet with the title *Good Design Saves Time*. A nice slogan, but one that caused a lot of private architects to smile cynically as they made their umpteenth attempt to get good design passed by moronic planning committees.

JUNE

After a quick visit by the prince of the paraboloid, Felix Candela, we read that we were to have five hyperbolic paraboloids in London—as part of Matthew and Johnson Marshall's designs for the new Commonwealth Institute in Holland Park. Architects with less complicated roof structures in mind eagerly grabbed the new BRS Digest to see how to stop mono-pitch roofing from blowing away, but found they were still a little in doubt. The *Sunday Times* published the winning designs in its competition for a National Gallery extension, but presented them so badly that no layman could have understood them very well, let alone liked them. There was the usual muttering in the profession about winners ignoring conditions and the JOURNAL suggested that competition conditions should be divided into two parts—those that shouldn't be disregarded and those that could be ignored if they got in the way of good ideas. Another competition was announced, this time by the Roads Campaign Council —an organization that was now finding a lot of support for its concern about the muddled road policy. Architectural journalists and speakers continued to ask for architect co-operation on road programmes, but the general attitude towards our profession was summed up in an article in the *Evening News*. It advised people wanting housing grants to get plans drawn up by "an architect, a builder or a plumber."



JULY

Printing strike. No JOURNALS this month, so the Silly Season began without going on record. Something must have happened, though I can't remember quite what. In fact, the only reason I'm mentioning the month is that the drawing shown above was commissioned to illustrate the sort of thing predicted in July for the hovercar of the future—and the drawing would have looked pretty silly without words beneath it.

AUGUST

What were the Russians up to now? Why had they asked Sweden to plan a new town south of Moscow? America retaliated by sending her secret weapon, Buckminster Fuller, to tell Muscovites about "anticipatory design science." That, we thought, ought to set them back a month or two with their confounded moon rockets. Were there any Soviet missiles this month? Was there *any* month without them? Anyway, New Yorkers were worrying about a new danger as they read some of the last published words of Frank Lloyd Wright. His Guggenheim Museum, a concrete spiral, would not be easy to destroy, he had said. An atom bomb might blow it a few miles into the air, but when it came down it would bounce. Back home we heard the alarming news that a designer had produced a stethoscope that would enable four doctors to listen in at the same time. Our hearts were all beating a little faster this month: an American architect had

said the best way of getting stimulating ideas was to sit among the flowers in our gardens, nip across to Chartres and watch the sunrise through the stained glass or look into the eyes of the women we loved. This got us nicely in the mood for the Romantic Exhibition (why no architecture?) at the Tate, and we found it a bit of an anti-climax to learn that a young surveyor had won a hundred guineas for saying what was wrong with architecture today. Any of us could have won the prize with one word: "surveyors."

SEPTEMBER

As the Silly Season came to an end some of us found it difficult to get down to work again, until we read yet another alarming epigram by Edward Stone. "Architects," he said, "are ambulance chasers." Was this true? Were we always on the spot just in time to chase the damage and try to put it right? No wonder the RIBA was trying to find us a chief information officer. Anyway we needed such a man to stop the Conservatives repeating their television election film. In this the Tory hero was a feeble young architect with an appalling taste for dwarf walls and mediocre housing. A much better interpretation of the Architect in Society appeared at Blackheath—Keith Godwin's crushed bronze figure. This sculpture was, of course, commissioned by Span Ltd., who were still fighting planning committees in an attempt to build good modern housing. The battle for good housing was joined by *Ideal Home* magazine and the RIBA, who published the results of their small house competition. All this happened against a background of twenty-year nostalgia about the war, which threw up the useful information that young people who were eighteen before the war were twenty-one today. That made me approximately . . . but there wasn't time to work it out in a month which brought us slab lifting, the hovercraft, the Chiswick flyover, Motopia and the invention of a take-it-with-you parking meter. And so we came to the end of what the British Waterways Association described as "possibly the driest summer ever recorded."

OCTOBER

I'm sorry to have to bring this up again, but the *RIBA Journal* had used the word "cuppa" and naturally enough the Institute's President called attention to this in his presidential address. As he did so, Anti-Uglies demonstrated outside the building against an institutional fustiness which—as we all knew—no longer existed. They would have been better occupied at the Earls Court Caravan Show, protesting against tomorrow's wheeled suburbs, or at Staines where the dead bridge design of a dead architect, Lutyens, was to be built to speed up the traffic. Or was it? Could *anything* ease our road situation? *The Times* had the bright idea that we needed more cars. The JOURNAL had the less revolutionary idea (in *Motropolis*) that we needed more and better roads. The Noise Abatement Society, who had their first meeting, wanted quieter car engines. A box number in *The Times* wanted ("desperately") back numbers of *La Vie Parisienne*. And Peter Smithson wanted us all to have "a more crumbly æsthetic." What else? Oh yes; Mies van der Rohe offered his interviewer a cigar on the Third Programme. And there was a General Election.

NOVEMBER

Everyone said the Building Exhibition was better than ever, though it was such a disordered mess I can't think how they knew. It was certainly bigger, and this time it had such items of light relief as a Daliesque tree of lavatory seats, and an automatic ball boy for your private tennis court. We all felt rather sorry for the new Minister of Works, Lord John Hope, who said that opening the exhibition was one of the most pleasant duties a minister ever had to perform. But after this touch of pathos he said all the right things—about the need for research and new techniques in the industry. Elsewhere the Minister of Housing was also saying the right things. Indeed he was so impressed to find himself opening a tall office block at Kew Bridge that he hoped this would give impetus to a trend with far reaching consequences. A *Times* leader writer did a quick translation and told Mr. Brooke he was wrong to want offices decentralized. This seems a good place to mention that the City Literary Institute has started a course on Clear Thinking, something that hadn't been studied by many of the people connected with the proposal for the Monico building in Piccadilly. Lord Conesford, speaking and thinking very clearly, said this building was something to be ashamed of which no civilized country would allow in the centre of a capital. Maybe, we reflected, we were like the Americans who—according to *Fortune*—knew they ought to have good taste but didn't know quite what it was.

DECEMBER

After twenty-one years of waiting for volume two of Fitzmaurice's *Principles of Modern Building* we were disappointed to get nothing better than a revision of volume one. It was just as well we hadn't all been sitting around doing nothing while we waited, especially as the ABS had just told us it couldn't fork out more than £65 a year if we weren't working. How, we wondered, as we looked at our office budgets, could Heinz cut its working week by half an hour and still produce fifty-seven varieties? An expensive month became doubly expensive as we took taxis across London to retrieve cars towed away from the pink zone, and lost valuable man hours by nipping across to the entertaining and farcical Piccadilly building inquiry. After half a day listening to some of our top architects we were asking, with Charles Eames (who gave his Lethaby Doubletalks to the RCA): "Where are the wise men of today?" Meantime the wise men of the LCC had been dropping garbage from the top of the Shot Tower. I've forgotten why.

Lord John Hope, Minister of Works, studying drawings by Raymond Erith of the restoration of 10, 11, 12 Downing Street at Abell House. Specially photographed for the JOURNAL *by Sam Lambert.*

A MESSAGE FROM THE MINISTER OF WORKS

I welcome the opportunity of sending a message to the readers of the Architects' Journal which has been a consistent advocate of a number of interesting ideas. You will not expect me, certainly not so soon after taking office, to commit myself on all these ideas! But in two of them, the need for the closest attention to cost in the design and construction of buildings and the importance to architects and the industry of a first-class information service, I have found the keenest interest in the Ministry of Works.

The former no doubt can be tackled from many angles, but what can be achieved by concentrated effort on particular problems has been demonstrated recently in the Ministry of Works by the work of a Joint Post Office/Ministry of Works Research and Development Group where the combined efforts of professional and other representatives of the two Departments has made possible major economies in the design of a Telephone Exchange and a Head Post Office. This is but one example taken from a wide and varied range of buildings designed by the Ministry to show what can be done by concerted and co-operative attack on the cost of building.

As regards the need for a comprehensive information service I intend to pursue vigorously the discussions initiated by my predecessor Hugh Molson with the industry and associated professions. Your journal has performed a most useful service in keeping this problem before the attention of architects and has also contributed valuable detailed proposals for dealing with some aspects of the subject. Complicated problems of organization and finance are involved but when the need is so great I am optimistic that solutions can and will be found.

1959 has been a year of greatly expanded activity in the building and civil engineering industries. A further substantial and perhaps even greater advance in 1960 is possible. To achieve this, while at the same time maintaining the virtually stable prices of the past two years, will make great calls on the skill of all concerned in the industry—and on none more than the architects who occupy such a key position. I wish them every success in what promises to be for them, as for me, a most active and interesting New Year.

John Hope

MEN OF THE YEAR

Spence, Basil. For combining one of the busiest practices in Britain with energetic and outspoken leadership of the RIBA in its critical years, and presiding with benign dignity over its proceedings.

Anti-Ugly Action. For cocking several snooks against ugliness in architecture; and for prodding its elders into action over Piccadilly.

Jacobsen, Arne, and Bullock, Alan, respectively, for being the first foreign architect to design an Oxford College and for taking immense pains to study modern architecture before helping to choose an architect.

Crowe, Sylvia. For the notable part part she has played as President of the Institute of Landscape Architects in putting landscape not only on the map but in the heads of Ministers, administrators, businessmen and architects.

The Northern Architectural Association's Traffic Study Group. For successfully opposing, with a better design of its own, the traffic plans of the City Engineer; and for showing other Allied Societies how to make the public aware of the value of employing architects.

Tati, Jacques. For a brilliant architectural satire exposing the barrenness and inhumanity of bastard modern architecture.

British Architectural Students' Association. For organizing the students to look after the interests of future architects; and for expressing student views when architectural education is in the melting pot.

Above is ASTRAGAL's choice of the Men of the Year, all of whom (with the exception of the Northern Architectural Association Study Group) have been photographed and interviewed by Sam Lambert. There are also others to whom ASTRAGAL, as always, lifts a respectful hat. These are Richard Sheppard for winning, with his partners and assistants, the first prize in the Churchill College Competition in the second year of his capable secretaryship at the RIBA; Howell, Killick and Partridge, for being told by so many critics that they really should have won, and Powell and Moya for having the strength of mind, and quantity of work, to decline to enter for it; The Bristol Architects' Forum, for showing the city fathers what a plan for the centre of their city ought to be; W. E. Tatton-Brown for being appointed Chief Architect, Ministry of Health, to take over the enlarged hospital building programme; T. H. Cadbury-Brown, for leading a unanimous Architectural Association Council into the battle of Piccadilly Circus; Chamberlin, Powell and Bon, the LCC Planning Division, and the City of London Corporation, for the Barbican—the most advanced design to segregate pedestrians from vehicles; Hon. Ernest Marples, Minister of Transport, for reading the ARCHITECTS' JOURNAL and commending what it says; Dargan Bullivant, for his part in the introduction of the new, internationally recognized, method of classifying building information which will make life better for the architect. The Civic Trust, for showing how Norwich (and other towns) can be cleaned up, and for leading the fight for comprehensive development at Piccadilly. Mies van der Rohe, for coming to England at last and collecting the RIBA Royal Gold Medal. All the Architects in Britain, for not having designed the Monico site building. Dr. R. Hopkinson and J. D. Longmore for establishing the method for calculating permanent artificial supplementary lighting. The architects at the MOE and Nottinghamshire for persuading the Government to put British architecture on show for the first time at the thirteenth Triennale.

BASIL SPENCE

BASIL URWIN SPENCE, O.B.E., A.R.A., A.R.S.A., *became the the 48th president of the RIBA in July,* 1958 (" *it's very exciting*"). *Spence has flourishing private practice, staff of* 115 (" *it's too big* "), *three offices in two capitals. Personal HQ in one-time town house of the Marquess of Northampton in Canonbury, built* 1780 (" *peace to think as it's out of the maelstrom* ") *and small staff of ten. Large West End office supervised by partner Andrew Renton, Scottish office in charge of senior partner J. Hardie Glover and third partner Peter S. Ferguson. Work on hand includes Coventry Cathedral, ten other churches (Coventry, Edinburgh, Leicester, Manchester, Sheffield), architectural or consulting work at eight universities (Durham, Edinburgh, Exeter, Glasgow, Liverpool, Nottingham, Southampton, Sussex), housing (Basildon, Hatfield), town hall (Slough), civic centre (Hampstead), cavalry barracks (Knightsbridge), atomic power station (Trawsfynydd). Can get by on five hours of sleep per night, still finds time to render drawings. Admires architectural giants Mies, Corbusier, FLW. Born* 1907 *in India, father in Indian Civil Service. Had aptitude for maths and physics, art master wanted him to become artist (only allowed to attend draped life classes because of youth), so trained at Edinburgh College of Architecture with aid of much needed maintenance scholarship, later at atelier of London University (under the Bartlett). First building: a church offertory house near Edinburgh (ashamed of it now), worked for Lutyens, later in partnership with Kininmonth; also Tommy Tait (designed large country houses) and started Scottish school of Art and Industry at Kilsyth, a dreich part of Stirlingshire, half completed before war broke out, which was intended to serve as model example of school building. Post-war period occupied as architect for a number of exhibitions, Britain Can Make It* 1946, *Enterprise Scotland* 1947, *ICI stand in British Section at Copenhagen* 1948, *Scottish Industries* 1949, *Heavy Industries for Festival of Britain and Sea and Ships Pavilion for South Bank* 1951. *After Coventry Cathedral competition suffered a very lean period* (" *people thought it would not be built, nothing will ever replace it as an experience, a portrayal of faith* "). *Won Saltire award with fishermen's houses at Dunbar,* 1952. *Lives on the upper floors of his Canonbury house with wife Joan. Daughter Susan, recently married to architect on his staff in the crypt of Coventry Cathedral, son John is studying architecture at the Regent Street Polytechnic. Likes sailing, but has no time for it now, owns three boats one of which he designed and built himself. Also likes painting and listening to music (current favourite, third act from* La Traviata). *Drives Citroen DS*19 *pale blue-grey (it gives a deep sigh if you do something wrong).*

Stirring times

Basil Spence writes :

To take on the Presidency of the Royal Institute of British Architects when one's own practice is on the up-grade is asking for trouble.

We all know that we are living through stirring times when events occur in rapid succession, and the profession itself reflects this characteristic. Changes happen daily at our headquarters in 66, Portland Place; in fact the dear old lady of Portland Place has had to pick up her skirts and run, and for refreshment the sedate cup of tea, or " cuppa," has been replaced by the stimulus of a large gin and tonic.

I don't wish to go into details about our problems in the last few years, problems which were being tackled when I took over. The new constitution; motor-ways; the Oxford Conference and its far reaching implication on education; the duty of the Institute to find means whereby our young members have an opportunity to try their strength on building schemes that offer architectural possibilities; the acceptance of the architect as a matter of course by the average member of the public; the misconception that the Council can direct matters of taste in design; and the necessity for closer collaboration with our sister institutions and our members overseas; the role of the architect in planning. All these are important problems which have to be solved, and our members are well acquainted with them. Suffice it to say that these questions are being tackled with energy and enthusiasm by the Council and Committees.

There are two questions, however, that I would like to elaborate slightly. First, competitions, and secondly, the question of taste in design and the RIBA.

The architectural competition has fallen into disrepute. This is a bad thing, as it is the only acceptable system whereby a young unknown architect can prove himself to be at least as good or better than his more experienced elders. I want to appeal for greater support for this system from the profession.

In the past, criticism of the result of some competitions has led to a lack of enthusiasm; this is most unfortunate and there are two main factors which are fundamental—the assessor and the conditions. The President nominates the assessor whose draft conditions are scrutinised with very great care by the permanent staff, and an enormous amount of time is being given to this question by members of the Competition Committee and especially the Chairman who must be experienced in this matter.

But in the end it all boils down to good and fair judging, and I am certain that the current competitions should yield most interesting results, as the assessors have been chosen with great care and the conditions scrutinized. I appeal to the young member to support the competition, to develop the habit, and to experience the thrill of the chase. For my part I can only say I never lose an opportunity to press the idea of a competition when the occasion arises.

It is true to say that by the choice of an assessor the general trend of architectural development can be detected, as the assessor's own taste as to what constitutes good or bad architecture will play a vital part.

This leads me to the second point. Should the RIBA Council take sides on matters of taste in architectural design? I am convinced that we are not empowered to do so as there is nothing in our code to encourage the Council to praise or condemn what they, the current members, consider is good or bad design. Our Council is a democratic instrument and I consider that one of its greatest trusts is the freedom of the individual in matters of design. It is only in this way that architecture can develop and flourish.

But what about the President's own practice when the RIBA takes up three or four, and sometimes more, days a week? I count myself lucky as I can put on blinkers and an urgent problem fills the horizon for the time being; but as my life *is* architecture, it is natural that part of my home is given over to studios where some of the projects in their formative stages develop, and after a whole day at the RIBA I can go round the boards when all is quiet and see how things are going. I still draw and I try to reserve the week-ends to this; in fact if I had not been asked to write these few words I would be on my drawing board.

ANTI-UGLY ACTION

ANTI-UGLY ACTION *is run by a group of some* 35 *London students (no membership, no dues), who believe, as their early marching banner proclaimed "* UGLY BUILDINGS ARE A SIN." *They hope that the movement will cause everyone to become an individual militant anti-ugly. Meetings are held in the stained glass department of the Royal College of Art, Kensington. Expenditure for posters, leaflets and pamphlets has so far been met by studio TV appearances and helping to make a TV film on the subject. AUA was born on a Monday evening in November,* 1958, *in the saloon bar of the Zetland Arms, South Kensington, first demonstration was held that December, when* 50 *students marched from Agriculture House to Caltex House, with banner, trumpet, drum and unasked-for police escort (requested at later demonstrations). Were greeted by having water thrown on them at Caltex House. Next night made first TV appearance on culture conscious "Tonight."* 1959 *diary reads as follows: January, march to Barclays Bank, Lombard Street, in City, where the owners were laying the foundation stone, a small well-organized demonstration, everyone dressed in mourning, deliver full-size cardboard coffin (later removed), receive lot of good publicity in the papers. February, march round the buildings in the St. Paul's area, but City not considered to be a good place for demonstrations (usually held Wednesday afternoon), they don't like music. This meeting mainly for purpose of filming bad buildings for ITV. March, meeting at new Kensington Public Library, record attendance of some* 350, *town crier (one of the group) reads out to public virtues of building as described by the architect; soon after, public meeting at Kensington Town Hall, with such partisan speakers as J. M. Richards, Ian Nairn, Christopher Gotch. May, trip to Cambridge for demonstration against additions to Emmanuel College. June, trip to demonstrate against suburban sprawl at Peacehaven, difficult time had with individual proud houseowners. November, demonstration outside what is thought to be stick-in-the-mud RIBA; meeting between three leaders and Spence a week later clarifies RIBA difficulties.*

AUA organizes a meeting at the House of Commons, between some 35 M.P.s and leading architectural critics in order to plan campaign against Monico site development. Minister calls in design before group of M.P.s has chance to see him, but they put over their point anyway. December, Kenneth Baynes and William Wilkins (chairman and treasurer) stand by at County Hall public inquiry and in association with the Civic Trust ask awkward questions. Most frequent comment by victim is that AUA group look pretty ugly themselves.

Left to right, top row: Peter White (AA schools); William Wilkins, treasurer (RCA Stained Glass Dept.); Michael Adams (RCA Engraving Dept.); Janet Allen (RCA Engraving Dept.). Centre row: Brian Newman, secretary (RCA Stained Glass Dept.); Ken Baynes, chairman (RCA Post-graduate Year Stained Glass Dept.); Tim Street-Porter (Regent Street Poly); Pat Briggs (ex-RCA School of Sculpture); Pleasance Broad (RCA School of Graphic Design); Pauline Baty (RCA Dept. of Stained Glass). Bottom row: Rodney Mace (Regent Street Poly); Michael Kullman (RCA tutor in General Studies); Barry Kirk (ex-RCA Engraving and TV Depts.).

Where do we go from here, boys?

Ken Baynes, Chairman of Anti-Ugly Action, writes

Perhaps the most interesting thing about Anti-Ugly Action has been its success, and I mean this in no spirit of boasting or false pride, in its own terms of attempting to interest the public in architecture it *has* been effective. In this high-old philistine-old country the man in the street has just heard of Anti-Ugly Action even though he has not heard of the RIBA, or even the Civic Trust—even though he occasionally seems to think that AUA is *against* modern architecture (this calumny has appeared in print a number

of times, and highlights just one of the difficulties). There are those who think that to get the public interested would be a dangerous thing, and with them we could not agree less. A genuine and informed interest would be ideal but that cannot be achieved without starting somewhere; and *nothing* could be more dangerous than the present situation, with the public dozing away quietly while the architects and developers heap rubbish on its head.

There are now the first signs that the people of this country are going to start taking an interest in their surroundings, and of course Piccadilly is the key example of this. As I write there is no knowing which way the Minister's decision will go, but whatever happens now, persuading him to call in the scheme himself was a triumph of just that public concern about architecture that we have been trying to foster. AUA was involved, itself, with the M.P.s and is involved in the Inquiry, but it would have had a very tough time trying to persuade the Mother of Parliaments to get alarmed if the public had not been very clearly and vocally concerned.

Why this success then? Frankly I have no idea, except that AUA seems to have itself been part of a general awakening of interest in the environment, a growing sense that something valuable was being lost, and that AUA formed a useful focus for feeling. It is not amazing, in an age of Aldermaston marches, that it should have been the young people who formed AUA —in some ways we are both more realistic and more idealistic than our elders. In this context it is interesting that the Action that has been most unfavourably received, was our attack on the RIBA for its multifarious sins. We were called unrealistic and old fashioned—"look," they said, "at what the RIBA is doing." And when we went to see the President he kindly told us the same thing, "we *are* doing something," he said. Well, maybe, but the buildings still go up—what's more we are too much realists to believe in the hogwash about professionalism, just as the Nuclear Disarmers are too realistic to believe the hogwash about deterrent. In both cases those of us under thirty feel that there is too much at stake to be superficially "reasonable." AUA wants an environment that is worth saving from the Bomb, and sees (realistically) that professionalism is a lesser matter.

What are we going to do next? First we are going to try to ensure Anti-Uglies' continuance in the Colleges. That won't be us, it'll be a new bunch of irritating, idealistic, realistic youngsters who see clearly that Utopia is only just sufficient, and less intolerable. And in about fifty years, if we fall down on our jobs, perhaps the public will have been interested enough to tell us so, and throw us out—and serve us right. But it cuts both ways, AUA is a sort of selfish protest too, for if the public is interested in art and architecture then things will be that much better for artists and architects. What we should like to see now, would be "every man his own Anti-Ugly." We should like to bequeath our precedent, and even our name if it's any use, to students, housewives, bricklayers and businessmen all over this rickety, traffic-filled, dull, beautiful island of ours.

ALAN LOUIS CHARLES BULLOCK, *censor of St. Catherine's Society at Oxford, was asked in* 1952 *to take over the problem of the non-collegiate student kept out of college by poverty (he thinks there is no justification for the non-collegiate student as a separate form of animal). Has since been responsible for raising* £1½ *million to found new college, also for picking Arne Jacobsen to design it (after a six-month shopping trip that took him round England, the States and north Europe—where they know how to deal with the problem of rain). Previously had thought it a good idea to see as much modern building as possible in order to get his eye in, as this was the only large building he would ever have a large share in creating. Finds Jacobsen enormously sympathetic, like a tough retired Viking sea captain—but very sensitive to other people's feelings. Likes work of Corbusier (securing a splendid niche in the history of architecture), also Howell's design for Churchill College. Bullock was born* 1914 *in Wiltshire, father was a Unitarian minister. Family moved to a Lancashire mining town, later to Bradford where he went to school ("a great advantage to be brought up in an industrial town, then you are on easy terms with the larger part of the population"). Won scholarship to Oxford, read classics at Wadham, later history, gained firsts in both. Spent war years in European service of BBC, has lately acted as diplomatic correspondent for them and made frequent appearances on Brains Trust. Between* 1945 *and* 1952 *was fellow, dean and tutor in modern history at New College. Has written several books,* Hitler, A Study in Tyranny, 1952, The Liberal Tradition, 1956, *and just completed first volume of two on life of Ernest Bevin, is co-editor of* Oxford History of Modern Europe, *also trustee of the* Observer. *Married with four children, eldest boy is reading modern languages at Cambridge, would like him to be an architect, in spite of thinking it a difficult profession. Longs to live in a modern house. No time for exercise now, but used to enjoy walking. Likes reading nineteenth century historical works and old novels. Enjoys a rum and Ribena, smokes Three Nuns.*

ALAN BULLOCK AND ARNE JACOBSEN

On being a client

Alan Bullock writes

How clients choose their architects is a subject which would repay some careful research. For, although too few clients realize it, this is by far the most important decision they ever have to make. Perhaps it would be more accurate to say that most clients realize it in the end, but only when it is too late to do anything about it.

The decision to engage Arne Jacobsen as the architect of Oxford's new college was controversial. I wish I could claim the sole responsibility for it, but the recommendation was made by a committee of four, all of whom travelled to Denmark to see his buildings, and argued out on a succession of university committees.

The easy way was to hold a competition. We came back to this several times but finally turned it down because we thought this was only to get rid of the responsibility without any guarantee that the result would be satisfactory. As one of those most directly concerned with building the college I was a good deal influenced by the belief that a competition would prevent any close co-operation with the architect in the creative period before his ideas had hardened. This still seems to me one of the greatest drawbacks of a competition from the client's point of view.

For several years I had taken every opportunity I could to see modern buildings in this country and abroad. In 1957 I had the chance to make two visits to the USA and on the second occasion I passed six weeks in the company of American architects looking at the best modern architecture America has to show not only in the East and the Middle West but on the West coast as well. I was not looking for an American architect, but trying to educate myself and get my eye in.

In the summer and autumn of 1958 we spent a lot of time studying photographs of the work of twenty-five architectural firms in this country and followed this up by several days looking at the buildings themselves. Whatever may be thought of our final decision, it was arrived at the hard way, not by recommendation, hearsay or interview, but by using our eyes and going to look for ourselves.

We followed the same procedure in Denmark. Before we met Arne Jacobsen at all, we had seen all his most important building projects, with the exception of the town hall at Søllerad, and had seen them in the worst possible conditions under grey November skies and in driving rain. Only when we were convinced that this was the man we wanted did we invite him to Oxford, and then gave him several days to look round before we finally sat down to discuss the problems that would have to be overcome and ask him whether he believed he could solve them.

By comparison with this original decision, it seems to me that nothing else the client is called upon to do matters one-tenth as much. And, having once made up our minds, we have given Professor Jacobsen the freest possible hand, inviting him not only to design the buildings but to lay out the gardens and design the furniture and fittings for the principal rooms of the college.

In return, he has produced proposals which have delighted us and, hardly less important, is devoting his undivided attention to the project. We have been told that this is impracticable in modern conditions. I can only reply that from a client's point of view nothing is more reassuring than to feel that his is not just one of a dozen or more major jobs with which a large and busy office is concerned, but the individual responsibility of the architect himself.

Whether the result will justify our expectations remains to be seen. I have no doubts; but if we are wrong, at least we shall have no one to blame but ourselves, and this is as high as any client should allow his ambitions to rise.

ARNE JACOBSEN, *eminent Danish architect, landscapist and industrial designer (his furniture, lighting fittings and cutlery, but not textiles or carpets, on sale in this country) in private practice, works at Klampenborg, a seaside suburb, six miles out of Copenhagen. Has ten assistants (a large office for Denmark, which has 4½ million inhabitants and round about 4,000 architects). Biggest job on hand is the 22-storey SAS terminal, hotel (above the fifth floor) and office block in Copenhagen,*

Arne Jacobsen, left, with Alan Bullock.

due to open in the summer. Jacobsen makes it a rule to work on only one large project at a time. Will send his own assistant architect to supervise construction of St. Catherine's College, Oxford. Looks forward to using English trees such as juniper, cedar and holm oak on seven-acre site, which do not grow well in Denmark. Jacobsen was born in 1902, in Copenhagen, father a business man. Decided to become a painter but was persuaded by his father to become architect. Trained five years at Copenhagen Technical College spending summers as architectural assistant and apprentice bricklayer. Moved to Academy of Arts in 1924, where a romantic style was taught. Built his first house during this period. A student's trip to the south of France gave him a broader outlook and design project for a museum, made while studying at the Academy, was more Asplund than Abildgaard (after whom the romantic style was named). Graduated 1927, worked next two years in City Architect's office, designing shelters and a bandstand. Won first prize for design "House of the Future" (with Flemming Lassen) in 1929, design included private heliport and motor boat parking. Personal architectural landmarks before the war include his own house at Ordrup Krat, 1929, whitewashed brick and steel windows; the Bellavista housing estate at Bellevue, north of Copenhagen in 1934, flats with large windows and balconies: the Bellevue theatre, with sliding roof: Mattsson's riding school in 1930, and Aarhus Town Hall, designed with Erik Moller 1939, a prizewinning design, with tower added as result of public opinion pressure. Jacobsen also won first prize for design of Sollerod Town Hall during early war years (with Flemming Lassen) and built saw-tooth housing at Gentofte in 1943. Sudden anti-Jewish pogrom at end of year forced him to escape to Sweden in open boat, where he stayed for rest of war designing textiles for his wife who printed them. Post-war architectural landmarks include the Soholm housing estate 1950, more variations on the saw-tooth layout; the Massey-Harris tractor showroom and store 1952; Rodovre Town Hall 1955; the Atrium house at the Berlin Interbau exhibition in 1957 and the Carl Christiansen factory at Aarborg 1957. Has been designing chairs for commercial production by Fritz Hansens since 1952 and cutlery for A. Michelsen since 1957. Honourd by RIBA in a one man show early last year.

Qualitative integrity

Arne Jacobsen writes:

The honour of being selected as "Man of the Year," calls, as I understand from the ARCHITECTS' JOURNAL, for a brief discourse on an architectural subject with which the person concerned has been associated.

Unfortunately, I have never been inclined towards writing or architectural philosophy as I lack ability in these respects, so important to an architect. I have always preferred my drawing board; it has always kept me busy. Even the smallest task assumes, when it comes to working out the details, a major importance, and if the result is to be of an integral character, architectural work becomes a full-time job that does not leave time for much else.

All structural details, pieces of furniture, curtains and other details are items for which a solution must be found. Once this is done, there is a chance of attaining the qualitative integrity which is the architect's aim. There are many architects who believe that work on what is nowadays known as "industrial design" calls for special abilities. It is a matter for regret that, because of this belief, so many refrain from such work which is interesting and provides a welcome change from the ordinary run of architectural work—and the ability required for it is, after all, no different.

Speaking of ability: in my capacity as an Academy teacher, I am often asked by puzzled parents whether I think that their son or daughter has sufficient talent to become an architect. It is, of course, difficult to give a reply if all one can go by are a few sketches made by a young person of 17 or 18 years. But some reply must be given, and since our commercialized world is so fond of talking in percentages, I usually console them with the answer that 10 per cent talent and 90 per cent plodding can make a good and useful architect.

As to those very great talents—those few to whom the inverse percentage applies, those who inspire us without us really becoming conscious of that fact—much could be written about them. But there is no need for that; they and others have done it, and have thus helped us to become what we are today. Some of these few regard architecture as a variety of the fine arts. Whether this is right or wrong may be a matter of opinion; but their works are not always comfortable to live in. All of us, however, who have learned from their talents must, in deep gratitude, forgo judgment and, in thanking them, make allowance for the margin of imperfection to which they are absolutely entitled.

In contrast, the main group of architects holds the opinion that architecture should be a fusion of functional, structural and aesthetic considerations, and continues to regard architecture as an art bound by rules. Owing allegiance to this school of thought, one is bound to watch with some misgivings certain sporadic developments which prompt some of the very best people to break with rational architecture so that they may try their hands at a kind of monumental romanticism. To my mind, these people are afraid that they have become locked in the cage of functionalism—a cage of steel, concrete and glass, or, rather, curtain walls.

This kind of architecture with all its technical or aesthetic snags, *e.g.*, its glass frontages which are sometimes too warm and sometimes too cold, or its somewhat restrictive and slavishly followed module schemes, etc., has made things a bit difficult for us all. Even so, I believe that there is still a wealth of untried possibilities which will, as before, follow the technical development and find aesthetic expression through the new materials and their formative design. Construction will follow suit, and will thereby inspire renewed architectural development. It will not be a rapid process, but there is no reason to regret a slow pace of development; to have sufficient time to digest is a healthy thing. Being so terribly new and modern does not matter so much, at least not in architecture.

I am quite aware that, nowadays, everything should preferably have a touch of showmanship and novelty. Nevertheless, we must still be able to see and enjoy good architecture without having a sexy photographic model blended into the picture. I do hope that we shall be able, in future, to avoid this cramped modernism which nearly always falls into the trap of formalism. Such a period has come upon us almost every decade. Fortunately, it has always faded fairly quickly; but it has nearly always led to stagnation, and sometimes even retrogression. We must not forget that Mies van der Rohe created his first very beautiful and equally

famous house in 1928, and his latest just as beautiful and famous house, developed on the same lines, in 1959. He has shown how far it is possible to progress in overall design as well as in details if one remains loyal to oneself and to one's faith. It is, *inter alia*, this strength of character on which everything depends.

The somewhat weaker souls are too easily tempted to resort to the quasi-romantic pencil in order to please the public, scornfully (in self-defence) calling the genuine functional and constructional architecture "international and americanized." Why the word international should be disparaging in this connection, I fail to understand. Once an art has become international, always provided that this has come about by a natural development and without fashion-dictated formalism, there is, to my mind, nothing disparaging in this fact—on the contrary.

One the other hand, a deliberate internationalism is, in my opinion, just as unfortunate as an exaggerated nationalism. Good architecture will always be subject to regional influences, and will be greatly affected by the local climate, traditions and topographical conditions—all that goes to make up the genuine milieu. If the first works of a young architect have a markedly international flavour, one becomes just as doubtful as with a painter or sculptor whose first works are abstract. To my mind, a naturalistic background is necessary—one must, after all, be able to abstract from something. In the case of architecture, the part of "naturalism" is played by the functional element in the construction as well as in the practical user of a building, and this task should be tackled honestly without toying with fashion or deliberately original elaborations.

Through honest work with architecture, simplification will become more and more predominant, and the choice of proportions, materials and colours more and more pure. One thing, at least, we all seem to be agreed upon: May modern architecture progress as far as that of the Greeks in the Ancient World.

SYLVIA CROWE

SYLVIA CROWE *was, until last June, the eleventh president of the 190-member Institute of Landscape Architects, constituted in 1929 (she became an associate in 1934) with headquarters in Nash House, facing Regent's Park ("very suitable"). There is only one full-time course in landscape architecture, at Reading University (four years), post graduate courses, after architecture or horticulture, at Durham (one year) and London (two years) and soon Edinburgh. Shares office, assistant and secretary with fellow landscape architect, Brenda Colvin, in Gloucester Place (also accepts occasional pupils). Is at present landscape consultant for new towns of Harlow and Basildon, atomic power station at Trawsfynydd in North Wales (problem is to minimise urbanising effect in national park). Also engaged writing* Landscape of Roads *for AP with* Tomorrow's Landscape, Landscape of Power *and* Garden Design *already to her credit. Born at Banbury in 1901, father was a motor car engineer and occasional inventor ("always doing something about carburettors"). Grew up on Sussex fruit farm, with a liking for gardening, especially wild gardens; first felt the urge for present career at age of eleven. However as no one had heard of a landscape architect in those days she was sent for general training to Swanley Agricultural College (with career*

as fruit farmer in mind), later spent all too short a time as pupil to Edward White, Senior, one of the few landscape architects existing at that time, who specialised in gardens for large country houses. Then became professional designer to Cutbushes Nursery, Barnet. Spent war firstly as ambulance and ATS driver, rose to sergeant mechanic, rushing out on a motor-cycle to do running repairs along the Kent coast. Within two months of demob had jobs designing gardens for houses in Dorset and North Wales. Lives in a Notting Hill basement flat with direct access to two acres of communal garden. Likes absorbing landscape by tramping across it rather than observing from car window. Prefers picture galleries to music. Favourite flora includes beech, iris, primrose. Dislikes blue conifer and red salvia. Favourite environment, Lake District, without too many people; favourite London view, St. James's Park from bridge.

Remaking a landscape

Sylvia Crowe writes:

What is landscape architecture, and why has there been a sudden access of interest in it?

The answer to both questions is the same: landscape architecture is the art and science of finding the common denominator between artifice and nature. There is interest in it today because of the contribution it can make to the problem of finding a balance between science and the humanities, between power and poetry, or, still better, of finding that these are two facets of the same truth. In this search, landscape has its part to play as one of the most scientific of the arts or poetic of the sciences, a claim it can make because its design material is organic nature, its basic discipline ecology and its creative expression a visual art.

The unifying role of landscape design has been evident since its early days. The gardens of the Italian renaissance were the connecting link between architecture and the landscape, between men and nature and in their composition they expressed the arts of painting, sculpture and music.

Now we see that the same principles must be applied in a new form and on a far wider scale. Our machines and structures are so thick upon the ground that they can no longer be treated as separate prima donnas content with their separate gardens. If they are, they will fight as surely as a chrous of prima donnas would do.

Individual buildings and urban centres are no longer separated from each other by unbroken stretches of a countryside where nature and the farmer have come to terms in producing a peaceful background. The background is now punctured by a surfeit of constructions which must be combined into a new landscape, whole, harmonious and habitable. This is the landscape architect's job. No longer confined to designing the individual oases of private gardens he must also concern himself with power stations and pylons, slag-heaps and sewage farms, and the whole gamut of civilized (and not so civilized) life; the spaces between buildings, the places for play and for work; and not least, the places where other species besides the human can survive and enjoy life.

Kent "leapt the fence and found all England was a garden." If he leapt it today he would find most of England a backyard. The re-making of a landscape worth leaping for is the *raison d'être* of the landscape architecture.

Left to right: Raymond Ash, John Coxon, Peter Elphick, Ian Blance, Malcolm Estell, Henry Wood, Ken Kennedy, Geoffrey Price, Charles Holmes, Jim Spooner, Geoffrey Turner and Jack Napper.

THE NAA TRAFFIC STUDY GROUP

The road traffic study group of the NORTHERN ARCHITECTURAL ASSOCIATION *made a notable contribution to the life of Newcastle-upon-Tyne by its intervention in the dispute about the Pilgrim Street Roundabout. Of six schemes submitted to a public inquiry its multi-level interchange was singled out by the Inspector as the best. Newcastle City Council is now looking at the whole problem again. Moving spirit behind the study group is Jack Napper, a Professor of Architecture at King's College, president of the NAA 1958-1960, chief witness for the study group at the Inquiry. Chairman of the group is Raymond J. Ash, 42, a Birmingham trained architect who spent 4 years on central area redevelopment in Coventry, now in local government office on Tyneside; secretary is Geoffrey Turner, 33, spent*

1½ years on Festival Hall, now working on schools and technical colleges in local government office. Most of the other members of the group are young, some in private others in public offices: Charles Derek Holmes, 33, designs houses; Kenneth Kennedy, 32, former RAF pilot now in private practice; Bill Butler, an architect planner, says he is "middle-aged, stocky and partly bald": John Dudley Coxon, 29, private practice; James Corking Spooner, 50, vice-president NAA and an architect for the Coal Board who believes in extensive refresher course for architects and closer working with other building professions; P. G. Elphick, architect and town planning consultant in private practice now preparing a master plan for a private enterprise new town in Northumberland; Henry Wood, architect-planner, lecturer in Architecture at King's since 1950, private practice has involved special study of car parking and central area development; Malcolm Estelle, 29, private practice; Ian K. Blance, 26, studying architecture (King's), working in county planning department; Geoffrey Langford Price, 53, is in private practice, doubling membership of the Pedestrians' Association with motoring.

Allied Societies

J. H. Napper writes:

Actual changes during the last few years at the RIBA and those proposed reflect the change from an amateur organization for people in a profession into a fully professional organization of many interests. This is no criterion of the old organization: it is simply a description of change to conform with those in society. The future promises, if anything, even more change. This may be a challenge and a tremendous stimulus provided architects in all parts of the country are aware of what is happening. They should not be taken too much by surprise when the Council of the Institute does in fact make a lead. To move together it might be necessary to think together rather than accept ready-formed opinion in the Press, or the office. Effective discussion (so that opinions from many

sources are better understood) can only be held regularly within the organization of the Allied Societies. How this can be arranged is the problem of the individual society but several methods are possible—*ad hoc* committees (with co-opted members), ordinary general meetings (it is hoped the visiting lecturer will be spared), special general meetings (cumbersome but sometimes necessary) and in study or special discussion groups.

It might help, to begin with, to assume that the fuddy-duddy and the party-liner are both extinct, at least until their existence is proved beyond reasonable doubt. There are tremendous possibilities in energy and ideas just waiting for a method of releasing them. Like so many things which seem to work, the idea of the Study Group was put forward at a quiet lunch. The suggestion certainly came from Raymond Ash when the President and Henry Wood met him to discuss the 1958-59 lecture programme in July, 1958. The addressses at the May, 1958, RIBA Conference by Sir William Holford, and Professor Matthew had their part in this too.

Once the idea was accepted the machinery was established within the Northern Architectural Association. The President's inaugural address, and notes on the monthly circulars for meetings soon brought together the group which met in the NAA rooms in Newcastle. Raymond Ash was Chairman, and Geoffery Turner Secretary, but the official link with the NAA was through the Town and Country Planning Committee under R. Norman MacKellar's excellent chairmanship, with Geoffrey Price as Secretary. The NAA Public Relations Committee (Chairman, W. S. Butler) also played a vital part later in a hundred ways—especially as the Inquiry occurred during the printing stoppage. Members attended the group from Durham and Gateshead as well as from Newcastle.

The first few meetings saw a lot of discussion on programming, and a great deal of work was done in collecting data on all aspects of city re-development and on traffic. Study was planned with the lectures for that session. Lecturers included C. D. Buchanan, Dr. Thomas Sharp, Mr. Duff, Dr. Williams, and Mr. Stephenson.

As the Compulsory Purchase Order for the Roundabout scheme was issued in December, 1958, the work plan of the Group was disrupted by the need to concentrate on this special subject. In many ways it was unfortunate as it tended to take interest away from the more systematic studies to the one which had tremendous local interest. However, the decision was made to prepare a scheme as an alternative to the Roundabout on which the CPO was based, and the NAA lodged its official objection. NAA Council made an allocation of £20 for prints and model materials, and the Civic Trust promised to pay solicitors' fees. The total expenses incurred by the NAA eventually amounted to slightly over £40, purely for materials and photographs. The NAA's honorary solicitors advised in the preparation of evidence and presented it at the Inquiry. Certainly it was due to the way in which it was presented that the NAA case was heard at all. The President represented the NAA at the Inquiry.

JACQUES TATI

JAQUES TATI, *star and producer of hilarious French film* Mon Oncle (*he was also responsible for scenario, adaptation and script*) *which received the rare accolade* (*for a European film*) *of a general release last year, in which he expounded his dislike for modern clinical conformity. Between films he may be found in the office of Specta* (*short for spectacle*) *Films, of which he is chief associate and where plans are being laid for a new and unspecified production. Office located in a thinly disguised flat four floors above the fashionable Paris shopping street of Faubourg St. Honoré, with assorted period furniture and few concessions to modernity such as an electric radiator on wheels* (*the floors creak abominably*), *an assistant and two secretaries and numerous diplomas won at film festivals held anywhere between Czechoslovakia and Mexico, also castor oil plant, given by Henriette, Christiane and Micheline. Tati was born at Pecq, near Paris in* 1908. *His father was a picture framer of Russian descent with a shop near the Madelaine, in which young Tati served for a time. However, a fondness for sport, especially rugby, and a flair for mimicry led him to make the music hall his career in* 1931 (*sporting skits*). *Hawked his "turn" for two years before making the big-time at a celebration* (*in honour of the SS* Normandie's *newly acquired Blue Riband*). *After successful music hall appearances and parts in small films* (*also* Le Diable au Corps) *put all his money into making a one-reeler,* School for Postmen, *which was followed shortly by the full length* Jour de Fête. *This film did not become a success with the distributors until it proved a riot as a sneak addition at a suburban showing. The next film,* Monsieur Hulot's Holiday, *had similar recognition difficulties, but finally received a similar simultaneous showing*

at the same four Champs Elysees cinemas as Jour de Féte. *A bad motor accident in* 1955 *delayed further plans but* Mon Oncle *was begun in* 1956 *and received a first showing at the Eleventh Cannes Festival in May,* 1958. *Tati is married, has two children and is converting a house in the fashionable suburb of St. Germain (direction of Versailles) for future habitation.*

Make it human

Jacques Tati writes:

I am not against modern architecture—but I do not like the mass production way of life. Life is becoming inhuman in all spheres. Take a garage. In the old days you used to take your car to a garage and ask for Mr. P. You explained to him what was wrong with your car. Mr. P had his personal screwdriver and listened to the motor ticking over like a doctor. He arranged the carburettor and the engine ran smoothly. That was the personality of Mr. P and people respected his knowledge. Today what is it like? You drive into the garage. It is not Mr. P who will see your car. It is " Mr. Esso " in a uniform. Your car is just one of many to be serviced. Mr. P's personality has been replaced by electronics.

Of course mass production means more goods for more people. We are all tied to this progress, but it means we are surrounded by the same kind of person, watching the same TV show, eating the same Italian spaghetti, drinking the same French wine, wearing the same clothes. Mass production makes Milan look like a German town and Munich like an Italian town. You do not know where you are any more. Where is the fun in all this? Where is the laughter? When I come to London I want to see it as a friend, not an international acquaintance. I like London just as much for its bad points as the good ones. I do not wish to see the same airport as at Orly, or sit in the same chair. It is not my position as a film maker to be against modern architecture. I have no qualifications for that. But *Mon Oncle* was made as a protest. The *quartier* in that picture had life, it had character. I like people. In the *quartier* you can see human nature in the personality of the inhabitants. Monsieur Arpel's house was not exactly a satire, because after all it is not the first time since houses have been built that we have seen big windows to let in the oxygen. Even in antiquity houses had big windows. The point of the satire was that today we are sacrificing personality for practicality. Today people think a lot about comfort and convenience but nothing to cater for " *l'Esprit.*" To see the same chair in a church and

a restaurant makes me feel sad. I also like natural materials more than artificial ones. If I come to your house and you say "I will make you a wonderful Christmas pudding—or an English breakfast" and you serve it to me on a wooden table I will be happy to be in your house, but if the materials you use in your kitchen make it look like an operating theatre I will not be happy, even though the food tastes good. Houses today seem to be made to receive a relationship of forms—not friends. There is no warmth. I am going to live in a Louis XIV house at St. Germain. It is an old house but it can easily be adapted to a modern standard of living. Why pull down old houses? I do not say all modern architecture is unsympathetic. You can have all the lines you want, but make it blend with the landscape, make it human, don't make a kitchen look like part of a hospital.

BRITISH ARCHITECTURAL STUDENTS ASSOCIATION

BRITISH ARCHITECTURAL STUDENTS ASSOCIATION, *founded April 1957 at Liverpool by Jeremy Mackay Lewis, Hilary Chambers and Tony Penfold, was formed to satisfy pressing need of bringing together architectural students in a forum where they could exchange ideas and act on concerted student opinion (since the war, only contact between schools was at infrequent rugger matches, and such like). Received initial backing of £25 from Liverpool University Architectural Society, now developed into an association of over 1,500 members representing some 22 schools, from Plymouth to Aberdeen. Has already held four conferences. During conferences at Liverpool (1957) and Brentwood (1958), established organization (adopted constitution and appointed permanent secretary with headquarters at the Building Centre). At Leicester (1958), examined teaching systems in the schools against an exhibition "back-drop" of students' work, and elected present executive; president, Jeremy Mackay Lewis (Liverpool), secretary, Tony Monk (Bartlett), treasurer, Jeremy Hodson (Brighton), George Kassaboff (A.A.), Ken Claxton (Portsmouth), and Paul Powers (Regent St. Poly.). At Cambridge (1959), studied the "Architect in Practice" as a necessary prelude to the conference held this month at Bristol on future of architectural education in relation to the demands of the profession and business (is considering RIBA Oxford Committee recommendations again, having had some thoughts on this subject from one of its committees, during the Leicester conference). Hopes to get some of its ideas over to the profession through the RIBA Board of Education, by developing closer co-operation between architectural societies and local students, and by encouraging staff-student committees in the schools. To ease students' immediate material problems, is conscious that it has to keep one foot firmly on the ground. To this end, is affiliated to the National Union of Students to express views on grants, allowances, welfare, etc. Is investigating reciprocal membership with similar societies overseas to assist vacation work and travel arrangements of interest to architects. Has decided to ask the schools to volunteer to take over some of these tasks (previously done by the executive) so that constituent members can gain a real sense of participation (Plymouth has already taken on the task of investigating appropriate lecturers). Proposes to invite practising architects this year to become associate members as heartened in the past by the interest and assistance of some of the profession. Has found the RIBA and Civic Trust sympathetic and is grateful for their help during some difficult periods. Balance sheet in the clear (remarkable for a student organization), hopes an expected increase in membership, plus the experience of last year's management, will obviate embarrassing interviews with the bank manager towards year's end.*

An eye on the profession

Jeremy Mackay Lewis writes:

Some people have mentioned that BASA is really a little too serious in its approach—that it is a student society: that it should be more high spirited, "Ra-Ra," extrovert, call-it-what-you-will. But BASA is not quite so young in fact as you may think, if you like to include its ancestors, ARCH. S.A. and the Northern Architectural Students Society, which takes us back to 1933. BASA is not a new idea; it is the revival of an old movement which somehow was dashed on the rocks soon after the war, just when it was really getting under way on a national scale. Why must some people think of students as being overgrown school children when they have more right to be serious about matters than their elders who have reached their goals and can afford to relax? Why should we not examine with an active eye the profession we are about to enter? Why—OK, I'll calm down—OK, OK, I'll just sit down and take things easy. I suppose we have high spirits after all, but it is just that we happen to express them one way when you want us to express them another. But some of us do feel deeply about aspects of our student training. We see our education from a point of view at a point of time that is closed to every member of the graduate profession, whether practising or teaching. And I think, as do my peers, that our point of view is a valuable one, and that we can make a real contribution to the changing pattern of architectural education in Britain if a helpful spirit of co-operation is allowed to develop at all levels between BASA and the profession. This development seems to be taking shape, but with the consequence that, in some ways, it makes our responsibility more serious; for the strength and permanence of any bridge between the profession and us will depend to a considerable extent on the worth and sincerity of the observations and ideas which are made to cross it.

There is much to do. There is the large question of the conflict between the end-product images of the model architect—the "whole" man or the specialist—for instance, during the student's training. Already, some graduates find that professional life in the big bad world is a little more complicated than they thought; and that their architectural education, in some instances, is inadequate for them to grasp, and therefore control, the significant factors in the environment, economic, political and physical.

And even more fundamental, is the training in the schools adequate to ensure the student can carry out a process of reasoned thinking? Time and again, the architect is faced with his design problems. Some struggle, or muddle, through to find a solution of some sort; while others, perhaps with the advantage of a systematic approach to problems in another discipline, can apply these lessons in their design work. With the scale of building projects still on the increase, systematic consideration of the problem is necessary if the solution is to be found fairly rapidly, and thoroughly and possess progressive ideas. Muddled thinking only leads to reaction, prejudice and eventual chaos.

Two years as President has brought me in touch with many of BASA's members, and many of their aspira-

tions. We have all found there is a lot we wanted to do but could not, but I am sure if we can keep the society going, make it permanent, it will not lack ideas and will always render service and be a credit to the students and profession at large.

1. Michael McRae, 23, fourth year AA, staff-student committee
2. Jeremy Mackay Lewis, 27, assistant Robert Matthew and Johnson-Marshall
3. Norman Adams, 25, fourth year, Leicester
4. Christopher Rayson, 25, fourth year, Oxford
5. John Knowles, 21, fourth year, Nottingham
6. William Steer, 24, fifth year, Northern Polytechnic, student committee
7. Mrs. Wynne Perrin, permanent secretary BASA
8. Hilary Chambers, 26, assistant, Robert Matthew and Johnson-Marshall
9. David Ackerman, 22, fourth year, Liverpool
10. Rodney Hutchenson, 23, fourth year, Liverpool, president architectural society
11. Christopher Mussen, 24, fifth year, Cardiff, staff-student council
12. Jeoffrey Freeman, 20, fourth year, Canterbury
13. George Davies, 20, third year, Cardiff
14. Tony Monk, 23, fifth year, Bartlett chairman students' society

HAPPY PLANNING!

W. Kay-Korzeniewicz throws out some ideas for a new start in the 1960's

IT IS SOMETIMES FOUND THAT THROUGH NEGLECT & OTHER CAUSES THINGS GET INTO SUCH A MESS THAT GENERAL REPLANNING – THE SO CALLED "START AFRESH" IS NEEDED IN ORDER TO PUT THEM ON THE RIGHT ROAD AGAIN.

THIS IS APPLICABLE EQUALLY TO A PAIR OF MEN'S TROUSERS (WHICH GO OUT OF SHAPE OCCASIONALLY) AS WELL AS TO BIG ITEMS SUCH AS

CITIES & TOWNS

IT IS THE LATTER WHICH ARE MUCH CLOSER TO OUR HEARTS; IN PARTICULAR THAT GREAT METROPOLIS WHICH LIES ON EITHER SIDE OF THE RIVER THAMES.

A NUMBER OF "FRESH STARTS" TOWARDS THE REPLANNING OF LONDON HAS ALREADY BEEN MADE.
THE 19.... PLAN OF LONDON, THE 19... .. LONDON PLAN ETC. ETC.
THESE DID NOT GET MUCH FURTHER THAN THEIR TITLES.

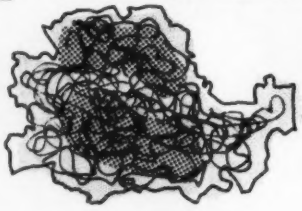
ANY NEW YEAR IS A WONDERFUL OPPORTUNITY FOR ANOTHER RESOLUTION AND ANOTHER START, ESPECIALLY FOR THIS SORT OF THING. **1960** HOWEVER IS NOT JUST ANOTHER NEW YEAR, NOR JUST THE BEGINNING OF A NEW DECADE.
1960 IS A **LEAP YEAR**
FULL OF EXPECTATION, MYSTERY & MAGIC. OUR RESOLUTIONS THEREFORE SHOULD LEAP FORWARD FULL OF MAGICAL IDEAS. UNDETERRED BY DIFFICULTIES THEREFORE, WE RESOLVE TO REPLAN LONDON IN THE 1960's

---

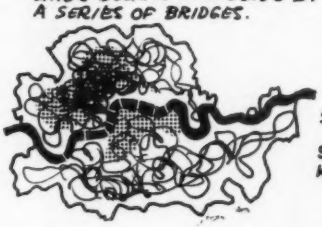
AND WE SUPPORT THIS RESOLUTION BY A PLAN WHICH IS MADE PUBLIC HEREWITH

PLANNING IS FULL OF MAGIC, THEREFORE THERE IS NO DIFFICULTY ABOUT THIS BUT TO LEAP FORWARD IS A BIT OF A PROBLEM.
WE BELIEVE THAT **PICTURES** TELL THE STORY BETTER THAN WORDS (ASK THE GREAT PIONEER IN THIS FIELD PERCY JOHNSON-MARSHALL & HE WILL AGREE WITH YOU) OUR PLAN IS THEREFORE LARGELY PICTORIAL. (IN ORDER THAT OUR CONSCIENCE BE CLEAR, SINCERE APOLOGIES ARE OFFERED TO THOSE WHO THINK THAT A MISTAKE OR TWO HAS UNFORTUNATELY CREPT IN, OR TO THOSE WHO MAY DIFFER SLIGHTLY IN THEIR OPINIONS).

IN THE BEGINNING WAS CHAOS –



AND THEN THE RIVER FLOWED AND SPLIT THIS CHAOS INTO TWO CHAOSES, THE SOUTHERN & THE NORTHERN (THE LATTER GREATER IN INTENSITY & VIGOUR). BOTH LATER BECAME CONNECTED BY MEANS OF A SERIES OF BRIDGES.



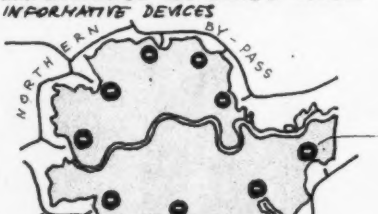
SO THIS IS THE SITUATION WE LEFT IN 1959

IT IS EVIDENT FROM THESE PRELIMINARY STUDIES THAT WE MUST AGAIN START AFRESH...
AND SO WE BEGIN AGAIN WITH

THE ROADS

THERE ARE MANY VIEWS ON THE SUBJECT, BUT CONTRARY TO THE GENERAL OPINION THERE IS NO SUCH THING AS A ROAD SYSTEM. HOWEVER – IN ORDER TO SATISFY THOSE WHO THINK THAT THERE IS, WE PROPOSE:
(SUBJECT TO AGREEMENTS ON DETAILS)

A **NO ENTRY** SYSTEM WITH WONDERFUL NEW SIGNS & OTHER INFORMATIVE DEVICES

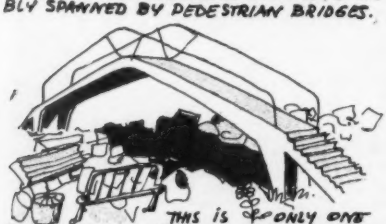


SIMPLE!
ISN'T IT?

AT LEAST ONE HEADACHE LESS AND ALL OPPORTUNITY BEFORE US
AT LAST!

NO ENTRY STATIONS WILL BE SET UP IN STRATEGIC POSITIONS DETERMINED BY THE INTENSITY OF VEHICLES PER HOUR. THE MINIMUM TAKEN FOR THE PURPOSE OF THIS CALCULATION IS 2.000 V.P.H.

OUTSIDE BETWEEN THESE STATIONS SOME TYPE OF BARRICADES WILL BE ERECTED, SUITABLY SPANNED BY PEDESTRIAN BRIDGES.



THIS IS ONLY ONE EXAMPLE OF A SIMPLE TYPE OF BARRICADE CONSTRUCTED OF RUBBLE FROM DEMOLITIONS OF REASONABLE & SUBSTANTIAL PROPERTIES.

POPULATION

IT WOULD BE EASIER IF WE COULD HOOK THE PROBLEM ON TO THE NEW TOWNS – BUT ALAS... IT IS THEREFORE PROPOSED TO DO ONE OF THE FOLLOWING THINGS ONE CAN DO WITH A POPULATION:

1. TO SHIFT
2. TO MOVE
3. TO TRANSPORT
4. TO MAKE IT IMPOSSIBLE
5. TO INDUCE
6. TO LEAVE AS IT IS
7. TO ENLARGE
8. TO CLASSIFY
9. TO DIMINISH
10. TO DECIMATE.

ADMINISTRATIVE DIFFICULTIES WOULD PREVENT THE ADOPTION OF NO. 10, BUT NO. 8 OFFERS SOME POSSIBILITIES.

CLASS 1: SUPERIOR
PLACED ON THE RIVER BANKS OR OTHER HIGH POSITIONS OF ENJOYMENT.

CLASS 2: MASSES
PACKED TIGHTLY IN ORDER TO AVOID OVERSPILLING.

CLASS 3: CRIMINALS & OTHERS
OCCASIONAL SETTLEMENTS HERE & THERE OUTSIDE THE BOUNDARIES.

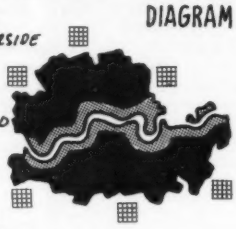
DISTRIBUTION OF POPULATION

DIAGRAM

CLASS 1. PRIVILEGED RIVERSIDE POSITION.

CLASS 2. TIGHTLY PACKED AREA

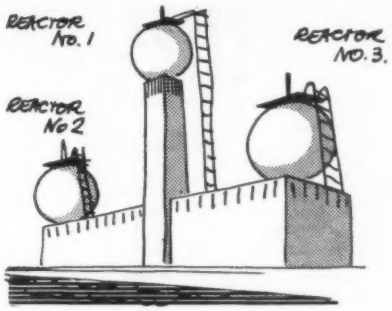
SETTLEMENTS FOR THE SCUM.



INDUSTRY

WE PLAN FOR THE FUTURE
THEREFORE THE **ATOM**
WILL DO ALL THE WORK.
ONE POWER STATION (REPEAT: ONE ONLY) SUITABLY PLACED OPPOSITE ST. PAULS ON THE SOUTH BANK OF THE RIVER

A GRAND OPPORTUNITY FOR THE MINISTER OF POWER TO ADAPT THE EXISTING DESIGN!



ANY RADIOACTIVE WASTE MAY EASILY BE TRANSPORTED VIA THE CHISWICK FLYOVER & THE M1 TO THE NORTH & DUMPED IN AREAS WHERE IT IS MOST NEEDED.

(INFORMATION AWAITED)

DANGER

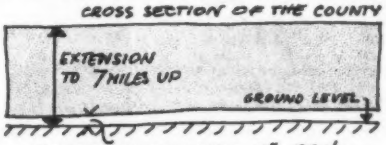
OPEN SPACE

SURPRISINGLY ENOUGH THERE IS A TREMENDOUS AMOUNT OF IT & WE WONDER WHY NOBODY HAS NOTICED THIS.

FORTIFIED BY THE SCIENTIFIC DEVELOPMENTS IN OPEN SPACE & RESEARCH IN SOVIET RUSSIA WE PROPOSE THAT

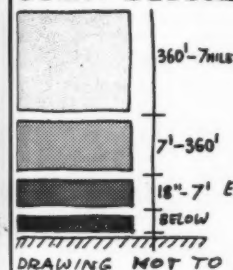
IT SHOULD BE EXTENDED & ITS USE EVENLY DISTRIBUTED.

CROSS SECTION OF THE COUNTY



THIS DISTANCE MAY VARY 6" – 360'o

OPEN SPACE ZONING



DRAWING NOT TO SCALE

HOUSING

CONSIDER THE BEES!

THE MOST PERFECTLY ORGANISED SOCIETY

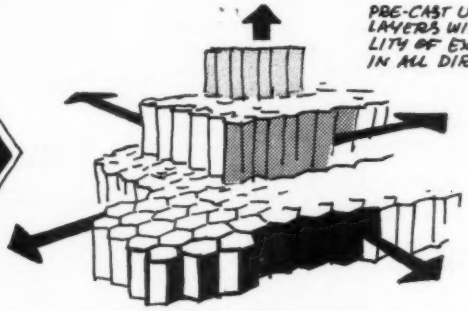
THEIR STRUCTURAL ENGINEERS THOUGHT OF HEXAGONS LONG, LONG BEFORE HIGH PADDINGTON.

(AUTHORS OF THE LATTER THEREFORE SHOULD NOT BE WORRIED BY THE INFRINGEMENT OF THEIR COPYRIGHT IF WE ADOPT THE IDEA)

THE MODULE IS:

(MEANT TO BE 6 OF COURSE)

ALTHOUGH THE BEE NEVER BUILDS ITS HEXAGONAL CELL VERTICALLY WE — HAVING AT OUR DISPOSAL 5000 YEARS OF BUILDING EXPERIENCE & MODERN MATERIALS — SHALL DO SO.



PRE-CAST UNITS IN LAYERS WITH POSSIBILITY OF EXPANSION IN ALL DIRECTIONS!

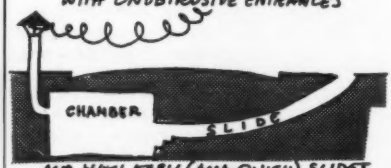
THIS SYSTEM WOULD BE ADOPTED ESPECIALLY FOR CLASS 2 – THE TIGHTLY PACKED MASSES.

DAYLIGHT FACTOR

WE CONSIDER THAT IT WILL BE DISPENSED WITH ENTIRELY. SINCE THE IMMENDRIAC WE HAVE GONE FOR A WALK "TO TAKE SOME FRESH AIR". WHY NOT GO OUT "TO TAKE SOME DAYLIGHT"? OTHERWISE THE FLUORESCENT TUBE WILL DO.

PUBLIC BLDGS.

THE BEST POSITION FOR THEM IS UNDER THE ROADS WITH UNOBTRUSIVE ENTRANCES



AND WITH EASY (AND QUICK) SLIDES AT A REASONABLE GRADIENT.

SHOULD THERE BE A BUILDING ABOVE GROUND ITS POSITION MUST BE VERY CAREFULLY CONSIDERED. THERE MAY BE 10 POSITIONS:

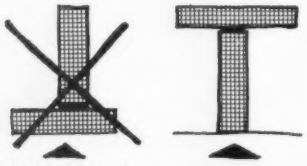
1. TUCKED AWAY
2. PROMINENT
3. DOUBTFUL
4. UNQUESTIONABLE
5. QUESTIONABLE
6. OBVIOUS
7. NOT SO OBVIOUS
8. OBSCURE
9. AWKWARD AND FINALLY –
10. SPLENDID

Important notice

We would like to illustrate fully various examples of buildings (existing & proposed) of each category. But we fear that too much controversy would ensue & too many letters to the Editor might follow. We are compelled therefore to leave the examples to the reader's own choice.

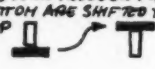
OFFICES

WE FEEL THAT A NEW TYPE OF OFFICE BUILDING CALLS FOR EARLY INTRODUCTION

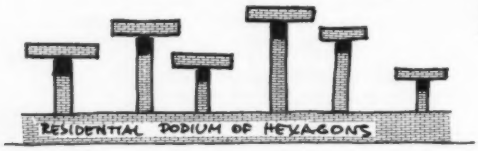


OLDFASHIONED NEW

ANALYSIS: THE DOWN TRODDEN FROM THE BOTTOM ARE SHIFTED TO THE TOP



THUS THE NEW SILHOUETTE OF THE TOWN



THE UPLIFTED PODIUMS MAY NOW SERVE SOME OTHER USEFUL PURPOSE

1: HELICOPTERS OF COURSE

IF SUITABLY DESIGNED THEY MAY SERVE AS SPRING-BOARDS FOR ASSISTED TAKE-OFF.

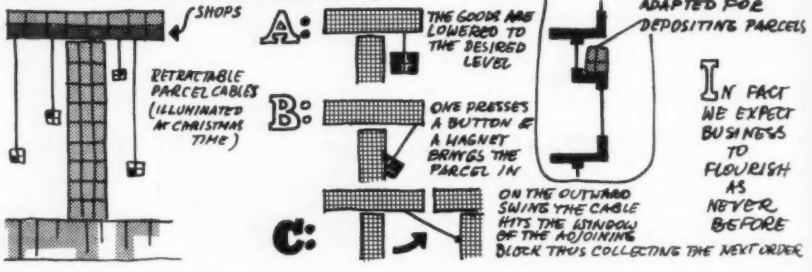
2: SUICIDE PLATFORMS FOR:

A: DISAPPOINTED (ARCHITECTS)
B: FRUSTRATED (PLANNERS)
C: MISINFORMED (PUBLIC)
D: OVERWORRED (COMMITTEES)
E: OTHERWISE DISSATISFIED PERSONS

COMMERCE & SHOPS

THE GENERAL FEELING IS THAT WE SHOULD FOLLOW TRADITION & LEAVE COMMERCIAL LIFE TO THE TYCOONS OF THE CITY OF LONDON.

THESE WILL BE COMBINED WITH OFFICES. HOUSEWIVES WOULD NOT SHOP; THE WHOLE PROCESS WOULD TAKE PLACE DURING THE LUNCH-TIME (OR THEREABOUTS) OF OFFICE WORKERS. A FEW TECHNICAL DETAILS MAY YET HAVE TO BE CONSIDERED, BUT IN PRINCIPLE THE IDEA WOULD WORK AS FOLLOWS:



IN FACT WE EXPECT BUSINESS TO FLOURISH AS NEVER BEFORE

PUBLIC TRANSPORT

AS SUCH WOULD CEASE TO EXIST.

WITH A HEXAGONAL SYSTEM OF HOUSING EXTENDING IN ALL DIRECTIONS ONE WILL BE ABLE TO VISIT ONE'S FRIENDS LIVING COUPLE OF MILES AWAY WITHOUT LEAVING THE BUILDINGS !!!

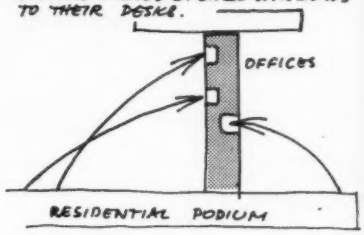
THE ONLY TRANSPORT TO BE PROVIDED WILL BE FOR OFFICE WORKERS. FOR THIS PURPOSE WE PROPOSE TO ENLIST THE HELP OF THE AIRCRAFT INDUSTRY.

THE (RECENTLY AMALGAMATED) AIRCRAFT MANUFACTURING COMPANIES WILL BE ASKED TO TURN THEIR PRODUCTION TOWARDS PEACEFUL PURPOSES & TO DEVELOP A STANDARD TYPE OF

EJECTOR SEAT

* * * * * *

OFFICE WORKERS WILL BE EJECTED FROM THEIR HOMES BETWEEN 8.30 AND 9 a.m. & PROJECTED THROUGH THE PREVIOUSLY OPENED WINDOWS TO THEIR DESKS.



ABOUT 5G WILL CERTAINLY WAKE UP EVERYONE SUFFICIENTLY TO START WORK WITH VIGOUR & VITALITY IMMEDIATELY ON LANDING (EVEN ON MONDAYS)

HIGHLY DESIRABLE CHANGES WILL BE INTRODUCED IN THOSE OFFICES WHERE THE MEDIAEVAL SYSTEM OF SIGNING THE ATTENDANCE BOOK STILL PREVAILS.

THIS HUMILIATION WILL BE BANISHED NEVER TO RETURN!

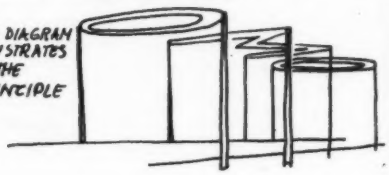
ALL EJECTORS WILL BE CONNECTED TO A SINGLE NERVE CENTRE WHERE THE APPROPRIATE ESTABLISHMENT OFFICER WILL PRESS THE BUTTON.

(UNFORTUNATELY THE POOR CHAP WILL HAVE TO BE THERE HIMSELF ONE HOUR BEFORE, TO SWITCH ON THE CURRENT TO WARM UP THE MECHANISM – BUT THIS WOULD BE THE ONLY CASUALTY OF THE SYSTEM.)

STREET LIGHTING

THIS WOULD BE COMBINED WITH ADVERTISING CONTROL. THIS WOULD SAVE SPACE AND AVOID CONTROVERSY OVER THE BEAUTY OF LAMP STANDARDS. THE STREETS WOULD BE LIT AT PRIVATE EXPENSE INSTEAD OF PUBLIC.

THIS DIAGRAM ILLUSTRATES THE PRINCIPLE



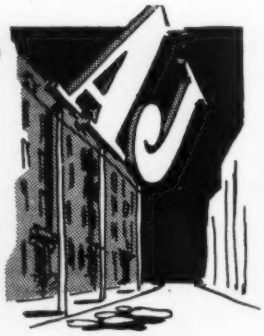
FINALLY

WE DO NOT WISH TO FORGET SUCH UNIMPORTANT DETAILS AS

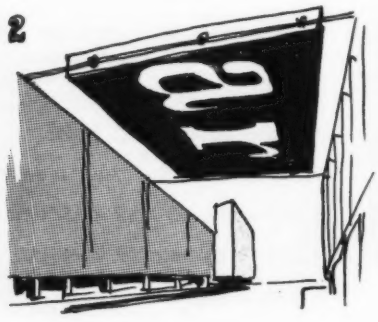
THE FOLLOWING DRAWINGS SHOW TWO DIFFERENT APPROACHES TO THE PROBLEM.

1. UNIMAGINATIVE TREATMENT OF LIGHTING A STREET OF HISTORICAL CHARACTER.
2. ..... IN THE SPIRIT OF THE SIXTIES

1



2



WE HAVE DEALT WITH OUR PROPOSALS IN THE MOST GENERAL TERMS & WE HAVE ENDEAVOURED TO SHOW WHAT A LOT CAN BE DONE ONCE WE ABANDON THE "ESTABLISHED" & "TRADITIONAL" WAY OF DOING THINGS

THE MESS OF THE FIFTIES IS BEHIND US. THE NEW HORIZONS OF THE SIXTIES APPEAR TO BE BRIGHT & FULL OF OPPORTUNITIES.

WE WILL TAKE ONE OF THESE FORTH WITH & WISH EVERYBODY HAPPY PLANNING IN THE NEW DECADE.

the 1950's

From the sublime (left), the slender skylon, advertising the South Bank exhibition of 1951 which also pointed the promise of the '50s, to the ridiculous (above), the square "tower" for the Monico site, Piccadilly, the design-without-an-architect of the end of the decade which must cause everyone to ask where we are going. . . .

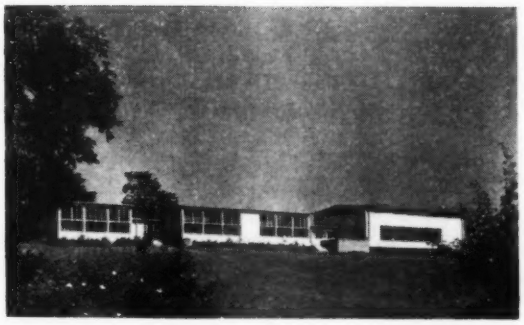
If the start of the 'fifties was a period of frustration for private architects, because buildings were few and hard to get, it was also a period of great promise. The profession's liveliest minds had been combed out and set to designing that popular triumph, the South Bank Exhibition under Hugh Casson and to demonstrate our awareness of social and planning problems in the rebuilding of Lansbury. Michael and Philip Powell and Hidalgo Moya had spared a moment

from their great Westminster housing scheme to win a competition with the Skylon, a vertical feature to advertise the South Bank. In that same year, 1950, two young, little known architects, Peter and Alison Smithson, quietly won a competition for a secondary school at Hunstanton, a design which stands out as a fascinating, controversial and much-visited rock in the midst of the smoothly developing stream of school building. Abroad, Reidi, Niemeyer and Costa were putting up in Brazil those exotic expensive flats which made the brick and bodge terraces of England's newly started New Towns rather tame (Lubetkin, incidentally, left Peterlee New Town this year). Unite and Danish housing—the latter displayed by Finn Juhl in an RIBA exhibition—were still setting standards we found hard to attain; Arne Jacobsen's name became more familiar through his work at Klampenborg and Gentofte. The late Frank Lloyd Wright was putting up the research tower at Racine for Johnson Wax, and the UN Secretariat was nearing completion. In England the Scott designed Chamber of the House of Commons was opened, the LCC's architect Robert H. Matthew appointed Whitfield Lewis to run the Housing Division (recently rescued from the Valuer's Department), and the Ackroyden housing estate was designed, the notable first of a great series. Eero Saarinen got the Royal Gold Medal. *The Architectural Review* ushered in the '50s with a major study of the functional tradition and townscape, and a competition for public house design; and ended the year with a hard-hitting study of America in which the car was still regarded as a useful convenience and not as dynamite under accepted ideas of urbanity. Gordon Cullen proposed that gardens should be grown on bombed sites in the City: a proposal which, with the exception of Golden Lane and the Barbican, was more innocuous than the strange fruit now reposing there. Fans of Dargan Bullivant and filing will recall that the International Council for Building Documentation was formed in 1950, and the Anglo-American Productivity Team's report on building was worth keeping. The main subject for criticism in 1950 was the Lessor scheme, the appalling series of office blocks sponsored by the MOW. That is how this last decade of the '50s began in simple terms of news items. The decade ends with another advertisement, Cotton's Piccadilly building, in the news. More squat and less idealistic than the Skylon, a pointer this time to the steady deterioration in standards which takes place when commerce and expediency takes command.

For an appraisal of the salient events of the last ten years and for a forecast of the 'sixties, we have asked the views of two architects and one architect planner. The architects are Peter Smithson, in private practice, and Henry Swain, in public office. Smithson hardly needs introduction: a dynamic architectural individualist of the '50s, his designs and statements invariably arouse interest and provoke discussion. Less well known, perhaps, as befits an architect in a local authority office, but equally forthright in his opinions, is Henry Swain, deputy architect Notts CC, one of the architects in the mainstream of architectural development as demonstrated by the school-building programme. Finally, the significance of the last decade for the planner of town and country is judged by Percy Johnson-Marshall, senior lecturer in planning at Edinburgh University—a propagandist for planning with experience at Coventry and in charge of all the Reconstruction Areas in London, the two cities which have achieved fame on planning grounds and demonstrated its value in solid three-dimensional terms.

The idea of architecture in the '50s

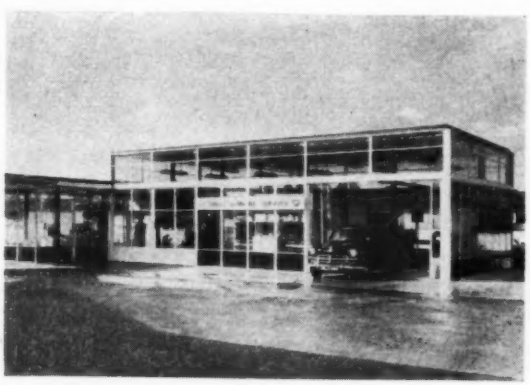
by Peter Smithson



Early Herts school.

LCC Hills' system school.

BP filling station (architect D. A. Birchett). It is not just the straightforward structure of the garage itself, but the treatment of the ancillary facilities, w.c.s and so on, with their bold use of signwriting and white paint, which build up a generally exciting and frankly transient environment.



As I have said elsewhere,* the real change since the end of the forties has been the total re-definition of the processes by which an architecture appropriate to a machine society can come about.

To find built evidence of this revolution in architectural thinking, one must look rather hard and know the signs. As far as England is concerned, THE FIRST SIGN (beginning in the late forties) of the possibility of an architecture appropriate to the technology available and the scale of the operation in hand, is the Hertfordshire Schools.

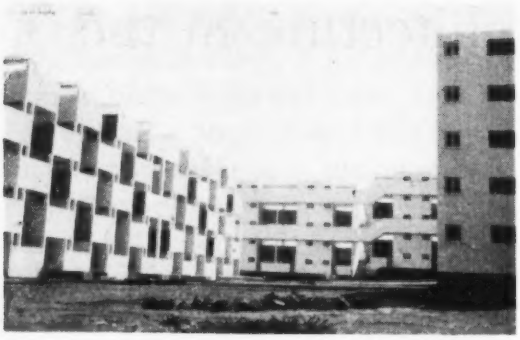
The earliest of these schools have the rough promise of all prototypes—which production models rarely seem to really live up to. Nevertheless the Hills' System of Construction developed for these schools have some of the flavour of a genuine twentieth century environment.

"Systems" of building are most successful when handled either by a person willing to submit to the rigours of limitation, or a person with absolutely no pretensions whatsoever, who simply puts the thing together.

The most common failures of System schools have been when they have been subjected to obsolete compositional ideas, and the subsequent bodging of the system to fit.

However, this is an unavoidable hazard faced by any designer of a System, and errors are tactical and relatively minor, compared with a possible error of strategic thinking in this particular case. That is, are the techniques involved too transient for an object which is pretty fixed and long term?—thirty years minimum cycle I should guess. There is a tendency for them to look a bit battered and as if a new model should be coming out soon. This is partly a question of the rough use unavoidable in a school and the relatively low maintenance level which is usual in buildings of no capital return, but it is also a question of the relationship between length of life, maintenance, materials and finishes, and the aesthetic techniques necessary to make clear (through the various cycles-of-change) the pattern of the community, which we are just beginning to understand. At the end of the fifties we can recognize that the expectation of quick replacement and regular re-paint make the transient aesthetic and technology of the series of the BP Filling Stations entirely appropriate.

*Revolution in Architectural Thinking since 1950. ICA lecture October, 1959



ATBAT housing, Casablanca.

The Lijnbahn shopping centre, Rotterdam, by Bakema.

THE SECOND SIGN grew out of certain dissatisfactions with the theoretical bases of the New Towns and the town-extensions on the Continent, notably in Holland (based respectively on the Garden City (1909) and the Functional City (1928)), which became easier to define as these projects grew towards completion.

These dissatisfactions focused round certain key concepts:

—of communities as ASSOCIATIONS of people (not as mechanisms)

—of the need for IDENTITY (feeling of place)

—of the existence of a new MOBILITY (both social and physical)

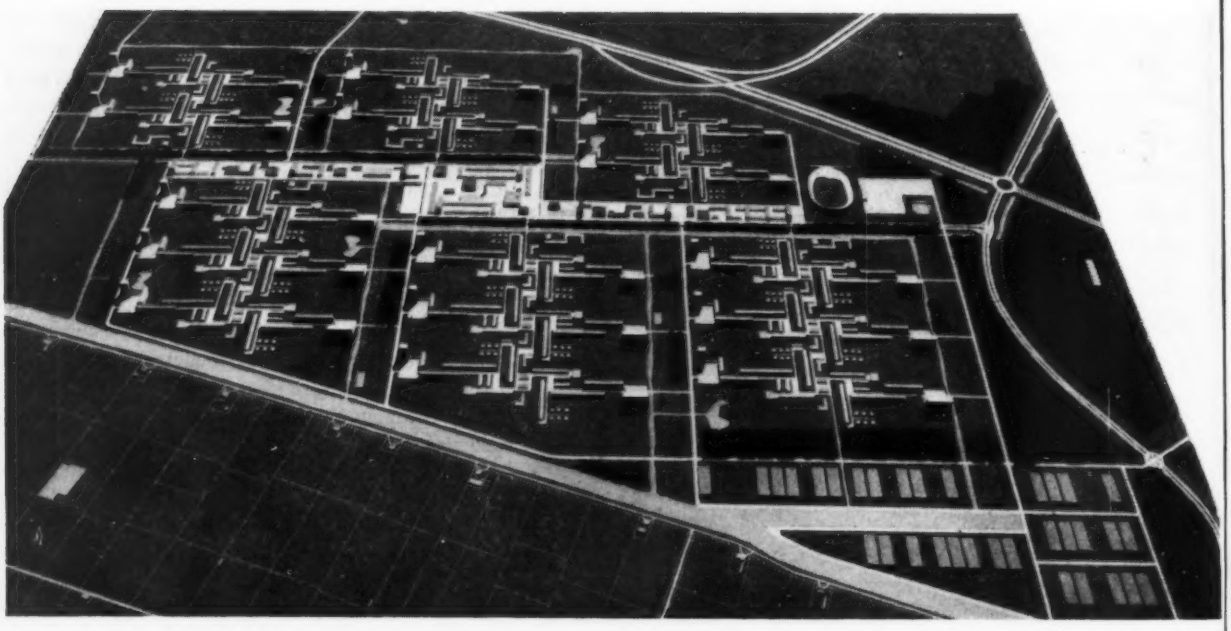
—and that all these phenomena were concerned with patterns of GROWTH AND CHANGE (which is what town planning should be all about).

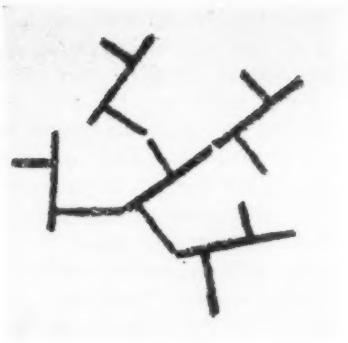
These concepts were the concern of Team X (a phoenix organization within the old CIAM) which came formally into being at Doorn in 1954, following the 9th Congress of CIAM at Aix-en-Provence in 1953.

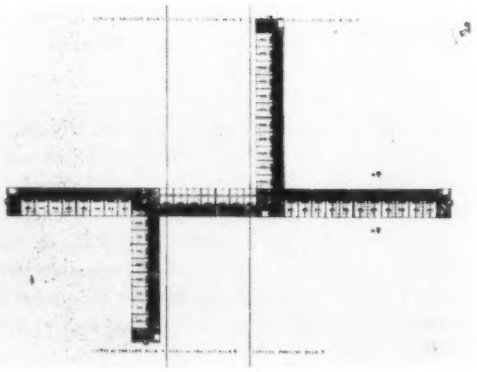
What brought Team X together, and has held them together, is a mutual understanding and trust borne out of certain work—the Candillis/Woods (ATBAT) Muslim housing at Casablanca, the Bakema Lijnbahn in Rotterdam, and the Smithson Deck Housing ("Golden Lane"). Their mutually developed ideas resulted in such projects as the Candillis/Woods/Josic atomic town at Bagnols-sur-Ceze, the van den Broek and Bakema Alkmaar plan, and the Smithson/Sigmond Hauptstadt Berlin plan.

Somewhere in all these projects is essentially the idea of *the building as a component* and not as a monument. Of building towards the community idea. Of facing up to the new sort of scale—the new sort of forces that are at work. Of developing new sorts of building organization and aesthetic techniques appropriate to a new technology.

Project for Alkmaar by van der Broek and Bakema.

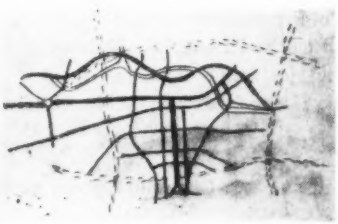


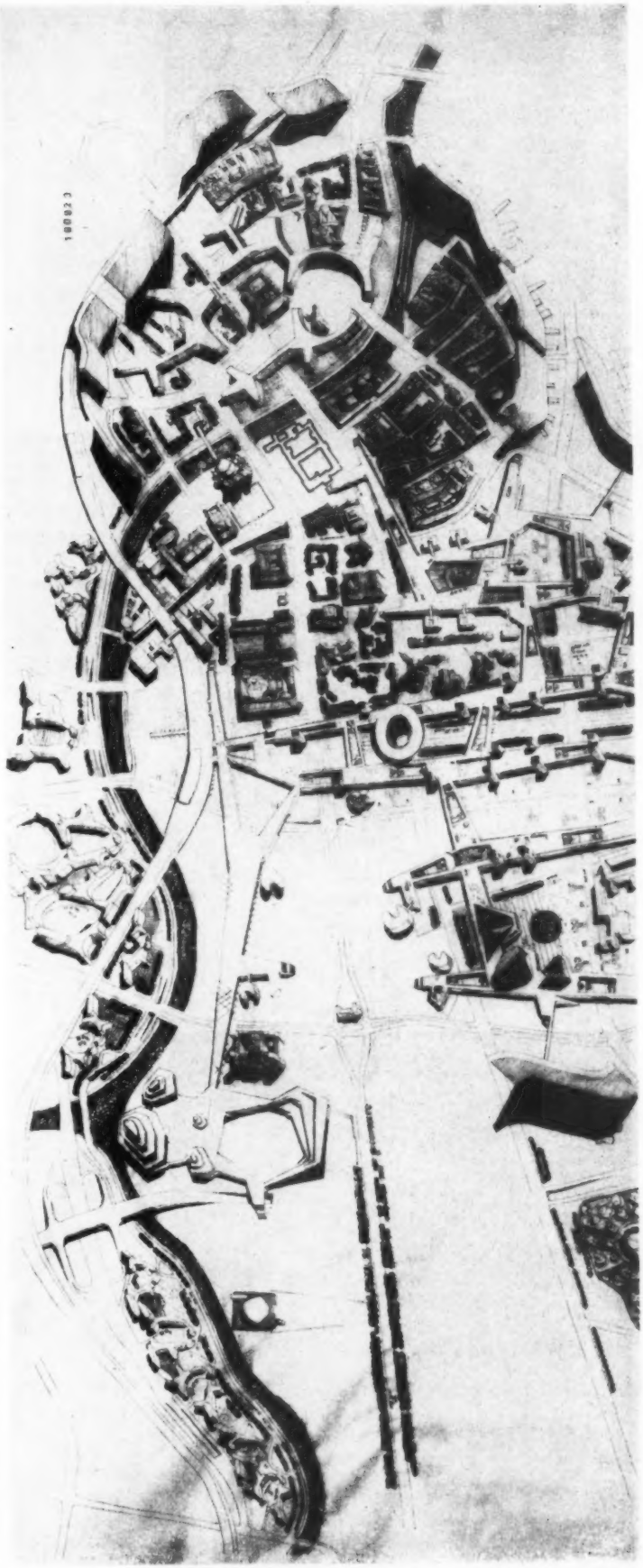




Above, Golden Lane deck housing. Competition entry by Alison and Peter Smithson.

Below and right, Hauptstadt, Berlin. The Smithson Sigmond plan.





Palladian Villa.

Sculpture by Paolozzi.

Painting by Dubuffet

The development of these ideas in "middle Europe" has, of course, been in full contact with ideas from other cultures and from other fields.

It is difficult in retrospect even to remember the exact order in which ideas have been ploughed in. The reaction to the Festival, Empiricism, and Shake-Hands styles of the reconstruction period was a *Retreat to Discipline.* Discipline means to architects *geometry and system of proportion,* and to English architects it means particularly Wittkower's Seminars, and his *Architectural Principles in the Age of Humanism.* This time ('49-'50-'51) is all mixed up with Le Corbusier's Unité d'Habitation at Marseilles, the image of which dominated the whole period between '47 and '53.

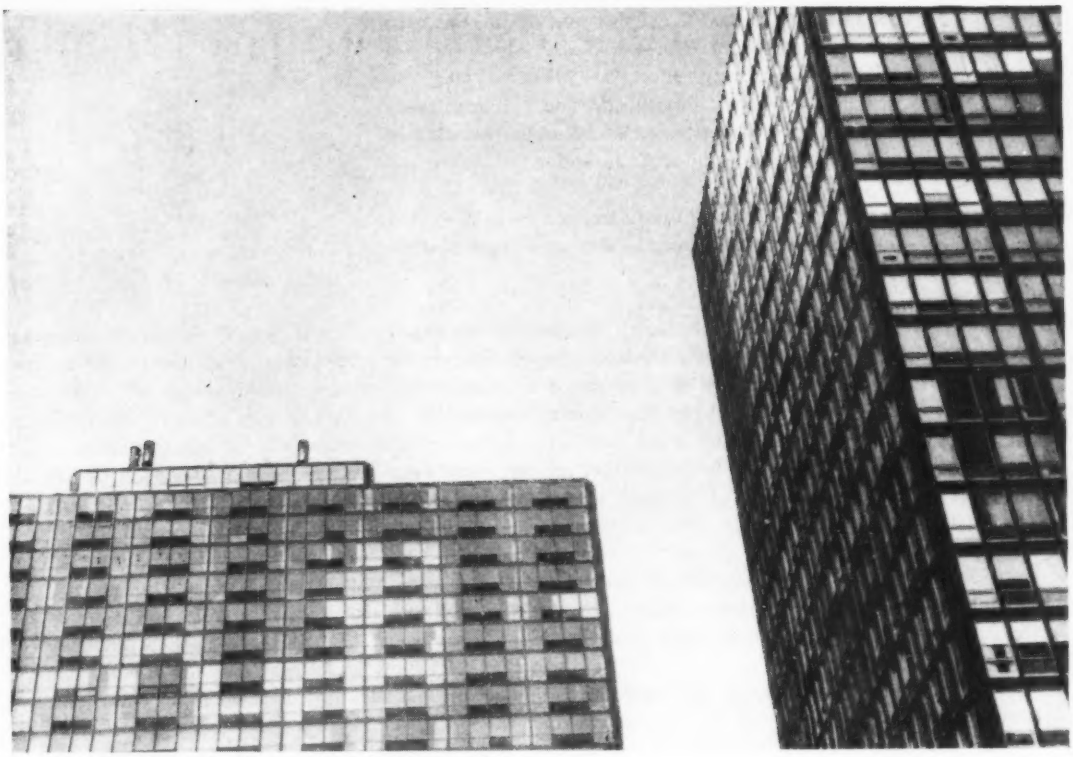
Co-existing with this (surprisingly), and triggered off by the first European sight of Pollock ('49ish) was the relationship with the Dubuffet-Paolozzi-Appel "revalidation of the human image" phenomenon, and the confidence inspired, especially by Pollock, that a freer, more complex yet quite comprehensible idea of "order" might be developed without the—now fully returned to academic status (1953)—DIVINA PROPORTIONE.

In the second half of the decade, fed into these general ideas was Japanese Brutalism (a mixture of confidence and Corb in equal parts); that half of Mies that is gradually turning away from the Altes Museum (for example, 900, Lake Shore Drive); and, since the publication of the Philadelphia Plan, Louis Kahn; also, throughout the period there has been the subtle but pervasive influence of Charles Eames.

At the end of the fifties there are certain buildings which have arisen within the decade and can be seen to be truly modern. They are, I believe, pointers to what will happen in the 60s.

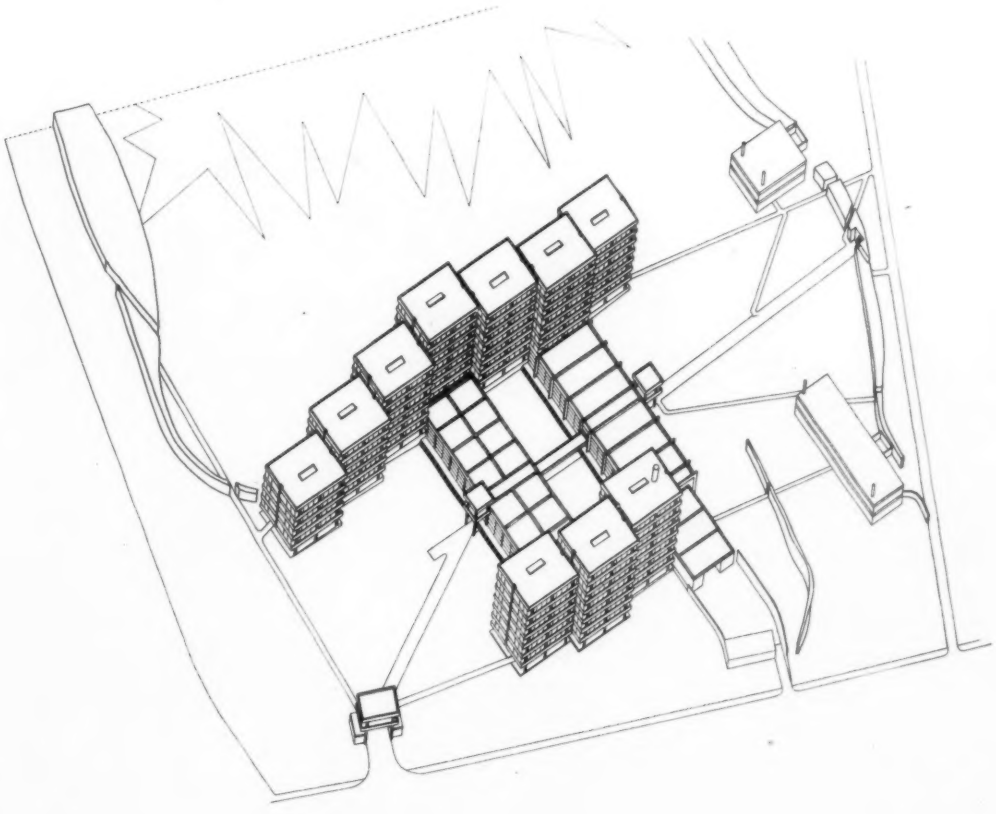
By modern is meant:
calm
truly "open"
full of light
making full use of appliances and machinery for a new way of life built-in grouping not mutually destructive but with characteristics.

To give some examples:
Le Corbusier's Unité d'Habitation,
the Hochschule at Ulm,
the Heinz factory by Skidmore, Owings & Merrill,
860, Lake Shore Drive,
Tokio Town Hall,
and our own Churchill College project.



900 Lake Shore Drive, by Mies van der Rohe (860 on right).

Alison and Peter Smithson's design for Churchill College.



ON THE OTHER HAND, all this time Aalto had been churning away *in the North* (and also, with wonderful shibboleth-destroying effect, at MIT), turning the weaklings towards Peasantism and whimsy; only rarely it being understood that his importance lay in his crushing strokes of urban invention.

In the South, Divina Proportione, and Ponti decorated furniture were the top step of a staircase back to 1900 and beyond.

To which point,* for many, also led the road that started in Neuilly in 1954 (Maison Jaoul), but not for Le Corbusier himself who produced a master work in the Convent at Evreux (La Tourette, finished '59).

For Le Corbusier, in fact, a first decade which both started and finished with a masterwork (Unite/La Tourette).

For Mies a decade that contained 860, Lake Shore Drive, the Farnsworth House, Crown Hall, and the beginning of a new series.

For Frank Lloyd Wright the Guggenheim and the end.

* To L'Art Nouveau.

La Tourette convent at Evreux, by Le Corbusier.

The mass production spirit

by Henry Swain

Modern architecture is concerned with people. Its purpose is to provide a convenient and beautiful environment which can be enjoyed by everyone at a price they can afford to pay. In this essay, an attempt will be made to make an assessment of British architecture of the nineteen fifties, to see how far it is achieving these aims, and what pointers can be found to direct its development in the next decade.

It is not proposed to make a critical review of the more important buildings of the last ten years as individual architectural solutions; but rather try to analyse the principles and ideas that have helped to produce some of the most significant work. We have had ten tremendous years of building. It seems important at this point in time to define the theory that has emerged from our practice.

An absence of principle in modern architecture is perhaps its main weakness at the present time. To a large degree this explains, on the one hand an uncertainty among architects about the future of architecture and their own rôle in building, and, on the other hand, the present preoccupation with its purely formal aspects. If there are no principles directing the architect's work, it will inevitably be influenced mainly by considerations of expedience and fashion, and architecture as a conscious and developing art is hardly likely to emerge.

This essay is going to study one of the best things we have done in the 'fifties—the building of schools. It is unusual for people from abroad to come to this country to look at our new architecture, but schools seem to have attracted the attention of many visitors. Our contribution to architecture is generally acknowledged in this one type of building, and it is perhaps a little surprising to find school construction standing beside electronics and nuclear energy as one of the notable achievements of post-war Britain. In terms of money, five hundred million pounds worth has been built, and the two million children's places which have been provided represent a greater quantity per head of the population than has been achieved by any other country. The quality of the schools has varied, but there are hardly any bad ones, a large number of moderate ones, and a lot of extremely good ones.

Both in quantity and quality some degree of success has been attained, and this type of architecture, therefore, perhaps deserves the most study.

It is often said that building schools is easy compared with some of the other tasks facing the architect. This is not because of any inherent simplicity but because the administrative framework for educational building in this country has been redesigned, to accord with needs of modern building. In this it is unique. If schools seem simple it is because we now know how to build them. It is reasonable, therefore, to enquire whether the principles that have guided our school building are equally relevant to other types of building and might assist us in the creation of architecture of the future.

The new schools which have been built in such large numbers are now familiar sights in almost every village and town in Britain. I hope to argue that in the best of these plain, functional, unimposing buildings there can be discerned the outlines of modern architecture.

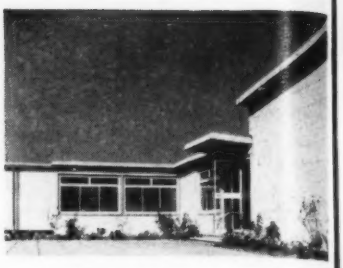
Determining the client's requirements

In the best of our new schools, the plan, appearance, character and construction of the buildings is a direct expression of the human activities which they were designed to serve. They reflect an attitude to the client's requirements which is a positive one.

A good deal of lip-service is frequently paid to the functional basis of modern architecture; in practice it is often not seen as a fundamental part of it at all, but as the somewhat dull bread-and-butter on which the architectural jam can later be spread. The client insists on it—but the less the better. The best school design, on the other hand, has been characterized by a deliberate attempt to define as precisely as possible the kind of buildings which were needed by the client, and in successive building programmes, techniques for doing this have been evolved.

The architect has accepted his share in the responsibility for writing his own brief which, in the best conditions, has meant a close and continuing collaboration with his client. The client will know the overall educational requirements; but he will not know the most suitable ways of meeting them in building form. The architect is not an expert in education, but he can imagine many different ways of providing for it if the requirements can be made clear to him by an enlightened and enthusiastic client. Each is an expert in his own subject, but, given time and understanding, each will associate himself with the other's task. Both will work for a common objective—the civilized education of children—and the architect will appreciate architecture not as a thing in itself but as a means to a more important end. Perhaps in this way architecture assumes its real importance.

The client in school building is not necessarily the user of the building, although he is responsible for all final decisions concerning the requirements. The people who use the building are teachers and children, and their needs are various and different. The archi-



Left and top right: Cheshunt junior mixed infants' school. A Hertfordshire County Council prototype opened in 1948. Based on a close liaison between the client and the architect, the design is as far as possible an expression of what happens in primary education as envisaged by the 1944 Act. With a few exceptions, its predecessors were the forbidding pre-war institutions surrounded by grey asphalt and iron railings.

Above right: Essendon junior mixed infants' school by Hertfordshire, built at the same time as Cheshunt. These two schools represent the first attempts to apply component prefabrication to school building.

tect should have direct and continuous access to these people. It is not sufficient for the client to describe what education is: it is necessary for the architect to go out with a notebook and a tape measure and be shown it happening. What he wants to know is the nature of the human activities which he is asked to provide for in his design. His question is not " tell me what sort of rooms or buildings do you want? " but " show me what you are going to do and how often are you going to do it." He needs to have a picture in his mind for his imagination to work on. Gradually the pattern of educational activities as it is now and as it is developing emerges from the restrictions of the out-of-date buildings which at present confine it.

This then forms the basis for the " brief " for the new building. With the function fully understood and agreed with the client, the architect is then free to design new and more appropriate forms of building.

The enquiry work involved in defining the requirements cannot be left to specialized experts. It is above all an architect's job, for it requires an understanding of people and an insight into their aspirations. These are the real generators of modern architecture, and to interpose a specialist between him and his client is to cut the architect off from his sources of inspiration. Defining the requirements of a building needs a designer's approach, human and imaginative, not statistical.

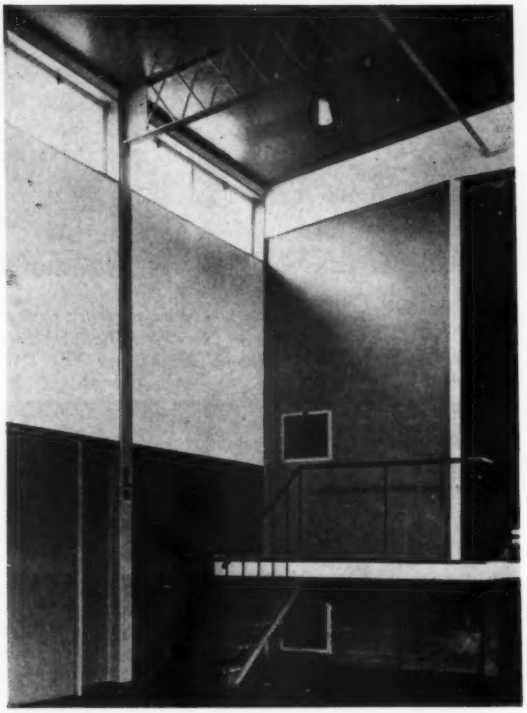
This positive approach to the client's requirements preceded the design of Hertfordshire County Council's first post-war schools. The 1944 Education Act had transformed the scene. There had been no building for seven years. The prototype school at Cheshunt, completed in 1948, appears as it were out of the blue—a revolutionary departure from pre-war schools. It looks orthodox enough now, but in 1948 it was a new kind of building. Owing almost nothing to other schools, its design is an interpretation of a new brief.

The best buildings only approximate to their needs. Herts, by its own work, made the conception of primary schools developed for Cheshunt obsolete. By 1950 fourteen schools designed to the original brief had been in operation for a year. A second major study carried out by the education officers and architects was based on these schools. How had they worked in practice? The information was co-ordinated into a second brief. Using this, a new and far better type of primary school appeared in the 1951 programme.

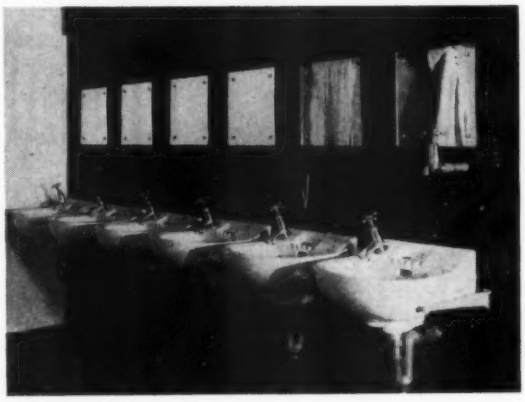
I have quoted Hertfordshire as an illustration, but the method of working evolved there has, of course, been applied in subsequent programmes by other architects.

Learning the results of our building and incorporating the lessons learnt in our new designs is an important principle that has been applied in school building. Although each building is an individual answer to its particular requirements, it is also necessary to look through it and beyond to those that follow. The architect's brief is constantly reviewed and recast. The content and method of education continually changes: so it is often desirable for the architect and his client to go back to the teachers and the operating schools.

A full knowledge of what has to happen in a building does not produce architecture. In the end, architecture is created by individuals in the actual process of design, and this is an imaginative synthesis in form of the requirements, on the one hand, and building technique on the other. But insight into human actions and aspirations is the starting point, and al-



Detail of stage at Cheshunt, demonstrating the co-ordination of factory-made components.



Lavatory basins designed to meet school requirements.

A Hertfordshire 1948-49 *programme infant school at St. Albans. Twenty-one schools using the same, quantity-produced components, were started in one year, mostly opening in* 1950.

most obviously among the buildings of the 'fifties our best schools give evidence that its importance is systematically recognized.

Designing an environment

Although a school is often isolated from other buildings, it is, in itself, a whole environment designed to meet the needs of education. It is not just elevations and plans but a comprehensively conceived part of the physical world. Site, building and contents are co-ordinated in a total design.

In a school the eye takes in a great deal more than the building. There is furniture of all kinds, teaching equipment, curtains and pictures, outdoor teaching spaces and games areas, the landscape itself. Perhaps, more than in other types of building, it is apparent that to the extent that architecture is a matter of the visual environment the architect cannot confine design to the actual building itself. In school design the architect has had to evolve methods of unifying the whole.

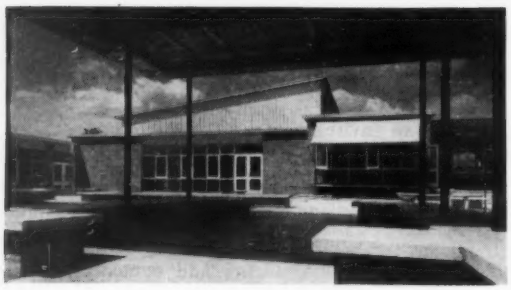
They have learnt to design furniture, sanitary fittings, light fittings, switches, play equipment, textiles, blinds, and a thousand other things. They have become industrial designers. They have slowly worked out ways in which painter and sculptor can contribute to the educational purpose and to the enrichment of the building. In this they have had to establish the confidence of the client officers responsible for ordering all the loose equipment in a school. There must be no unco-ordinated item to jar on the senses for it is obvious that the random introduction of badly-designed chairs can destroy the architecture more effectively than a discordant elevation. Item by item, the equipment, fittings and furniture have been put back on the drawing board, and there is now a reasonable range of good standard designs being manufactured.

This comprehensive view of architecture is most clearly shown in the Amersham Junior School, designed by the Ministry of Education architects for Bucks County Council. It is described fully in the MOE Building Bulletin No. 16. For its unity of design this building may well be considered a major contribution to architecture.

Too often the architect says: "I couldn't help the furniture and equipment, that wasn't my responsibility." But it always is; and in some of our new schools the responsibility has been accepted.

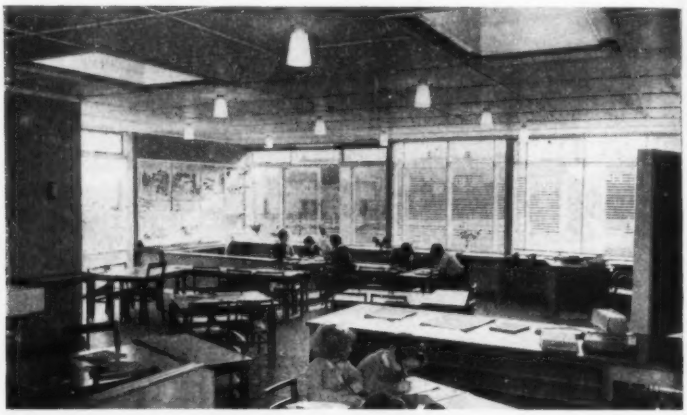
Developing industrial building technique

To produce the kind of schools that were needed in the quantities required, new ways of building had to be found. The most significant development has been prefabrication. The story of how it was first applied to school construction is well known. In 1947 and 1948 Hertfordshire, with scarcely any of the resources of traditional building trades and materials, built its first programme of steel-framed prefabricated primary schools. In those days, these first buildings of a new type stood like a revelation among the temporary expedients and attempts to imitate pre-war methods. They were not perfect technical answers, but they had an architectural integrity which still seems impressive today. Also, they did seem to be trying to answer the right question.



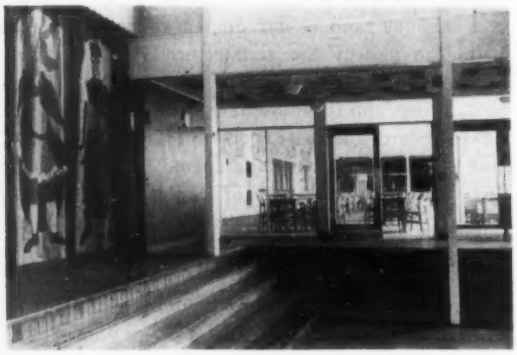
The garden court in the centre of the Amersham school designed by the MOE Architects Department. The outdoor space is designed as part of the teaching area (left).

The assembly hall centre and music room right at Amersham, an environment for children. Each element in the building is part of a co-ordinated design.

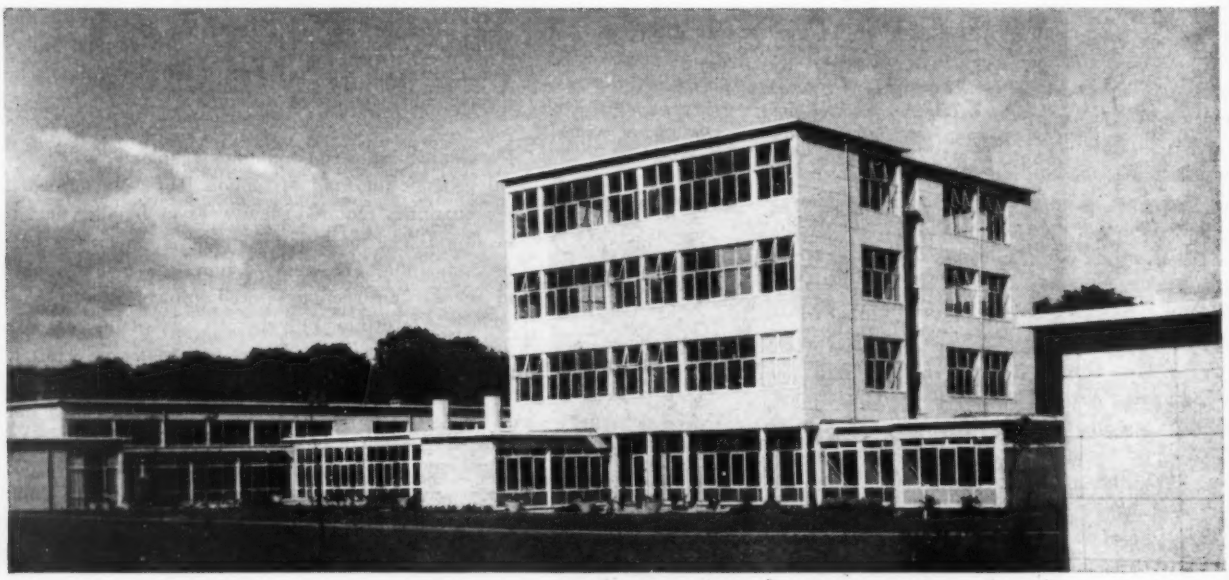


A Nottinghamshire County Council school opened in 1957.

An example of built-in furniture for infant classroom (above left).



Left and below: St. Crispin's School at Wokingham, by MOE architects, opened in 1953. Prefabricated construction is taken up to four storeys. The design is based on a fundamental analysis of what are the needs of secondary modern education. This building to a large extent has influenced the design of all subsequent secondary schools.



The 1950s has seen the steady development by architects and manufacturers of methods of building schools based on rapid site assembly of factory-made components. Prefabrication probably represents Britain's biggest contribution to building technique since the war.

The use of factory production technique can be explained by saying that the schools would not have been built in sufficient numbers without it. But there was a little more to it than the argument of temporary expedience. Many architects who worked on these projects thought that the development of the kind of widespread architecture that seemed to be required today depended on the use of today's industrial techniques. The social and economic forces which had turned almost all other industries over to machine production were inevitably beginning to affect building. It would go this way in the long run whether architects accepted it or not, because people prefer to work in factories. In addition to being cheaper, it was clear that things could also be made better under factory controlled conditions. It seemed sensible, therefore, to base architecture on the emerging technique.

In school construction some of the ways of designing for industrial production have been learnt. The architect has had to go into the factories and evolve a new basis for design. The industrial disciplines had to be accepted—long-term planning of production, mock-up, prototype, tooling up, standardization, batch production, and above all the relationship between quantity and cost.

The inherent limitation of prefabrication was that it was always liable to be directed by commercial rather than architectural considerations. The manufacturer of the system would generally control its development and it would tend to appear on the market for architects to take it or leave it. Many of them would take it, but somewhat reluctantly, with the result that the more co-operative manufacturers would find their production runs made uneconomical because of the specials demanded. The consortium formed by a number of public authorities in 1957 was devised to overcome this disadvantage. Its architects, by accepting the responsibility of co-ordinating many factories and sites and by carrying out continuous technical development work, are able to reconcile architectural control with the need to standardize components for quantity production. This represents our latest and most significant attempt to relate our architecture to the economics of industrialism. CLASP is young yet, but I think it opens up a tremendously important way in for industrialized building.

Only tentative steps have been taken in the æsthetic exploitation of the logic, lightness and precision of this sort of building. In particular, the outside appearance of our prefabricated schools has not matched the quality of their interior design. This is perhaps the next design task to be tackled.

Looking back for a moment to a period long before the decade we are discussing, it is interesting to note what Le Corbusier wrote in 1927 in *Towards a New Architecture:* "Industry on the grand scale must occupy itself with building and establish the elements of the house on a mass production basis. We must create the mass production spirit." The idea behind his chapter "mass production homes," still points the way forward for our architecture. Post-war school building has a bigger debt to Le Corbusier than can be repaid by copying the façades of his latest buildings.

Affording architecture

The facts are well known. A school today is better than one built in 1949. It costs 20 per cent less in terms of money in spite of the fact that building costs have risen over 60 per cent in 10 years. For architects these figures are worth knowing: school building has been almost exclusively their show. The price of schools seems to have been going in precisely the opposite direction from other buildings and almost everything else too.

Looking back over 10 years, we were designing to lower and lower cost ceilings, off-setting inflation and rising prices on the drawing board, scraping for every penny. It could have been a depressing and losing battle to maintain standards against a discouraging financial policy. In fact, it seemed, we all shared in an exercise aimed at laying the basis for an architecture which by its cheapness could become universal, available to everyone, capable of competing in cost with the best that could be done by the all-in men, the borough engineer, or the speculative builder. The schools programme was an opportunity to try out the idea that good architecture was also the best value for money however you reckoned it. One hears it said so often that people must be educated so that they will be prepared to pay extra for good architecture. They have not been asked to in their new schools.

Cost control methods devised by the MOE Building Branch primarily for schools are now being widely applied in other types of buildings. Whatever else determines it, the future of architecture depends quite a bit on the rehabilitation of the architect himself in the eyes of the public. It is generally agreed that he will be an architect with cost at his finger tips.

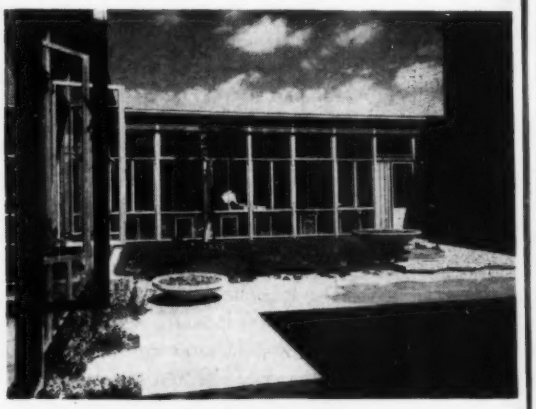
The efforts to beat cost have encouraged innovation. It has made it necessary to re-examine established building practice, it has made the case for research and development in both technique and planning. More useful floor area, better finishes, more equipment, better performance within the MOE limit of cost, have in fact been a challenge which the architect can respond to. Economy is a fixed starting point in the production of most modern buildings. It must be accepted as a fundamental design limitation like gravity or the climate. Reducing the relative cost of good architecture is a condition for any large-scale transformation of our cities and towns.

Organizing a building programme

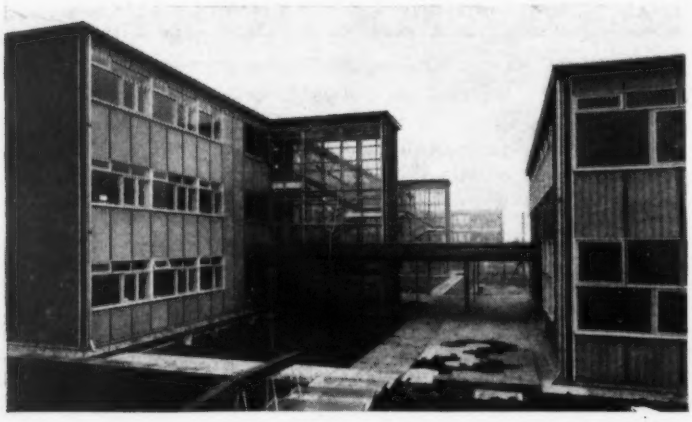
An advance in building production on a major scale is dependent on a corresponding advance in the administration and financial control of building. In an industrial society, technique and organization are inter-related. Changes in one will affect the other. This fact can be seen very clearly in school building, where

Above prefabricated construction developed by the MOE, Coventry City Architect's Department and Bristol Aeroplane Company using aluminium—Lyng Hall and Whitley Abbey comprehensive schools.
Right: outdoor space: the library court at the Lyng Hall Comprehensive School, Coventry, by the MOE.
Below right: curtains and chandeliers designed by artists in the assembly hall at Whitley Abbey.

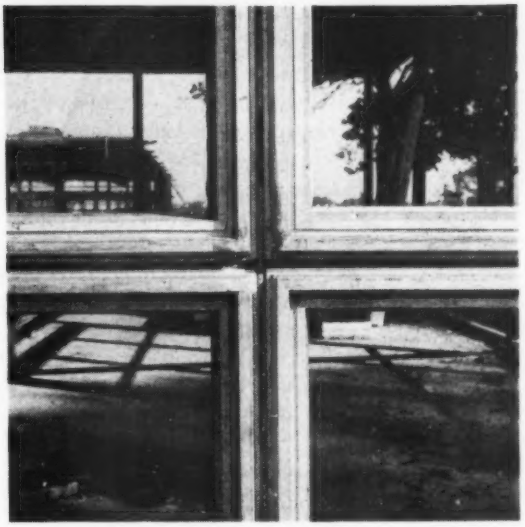
such successes as have been obtained have been to a large degree dependent on the way the national school building programme has been organized by the Ministry of Education. The three most important administrative methods used by the Ministry have been: firstly, the fixing of a universal cost limit for school construction, based on so many pounds per child place; secondly, the formulation of building regulations by defining the required physical performance of the buildings and thirdly, the determining of building programmes for Local Authorities well in advance. To an architect in a local authority, this means that he knows the number of jobs he is building in a year, starting on the ground a year ahead; he knows that provided each school is within the predetermined cost it will automatically be approved and he knows that he can build them any way he likes if he meets the requirements of light, heat, ventilation and so on. He can plan ahead in confidence for research, design and production in a way not enjoyed by architects working in other types of building. The remote, and, to our way of thinking, hostile world of the administrator has



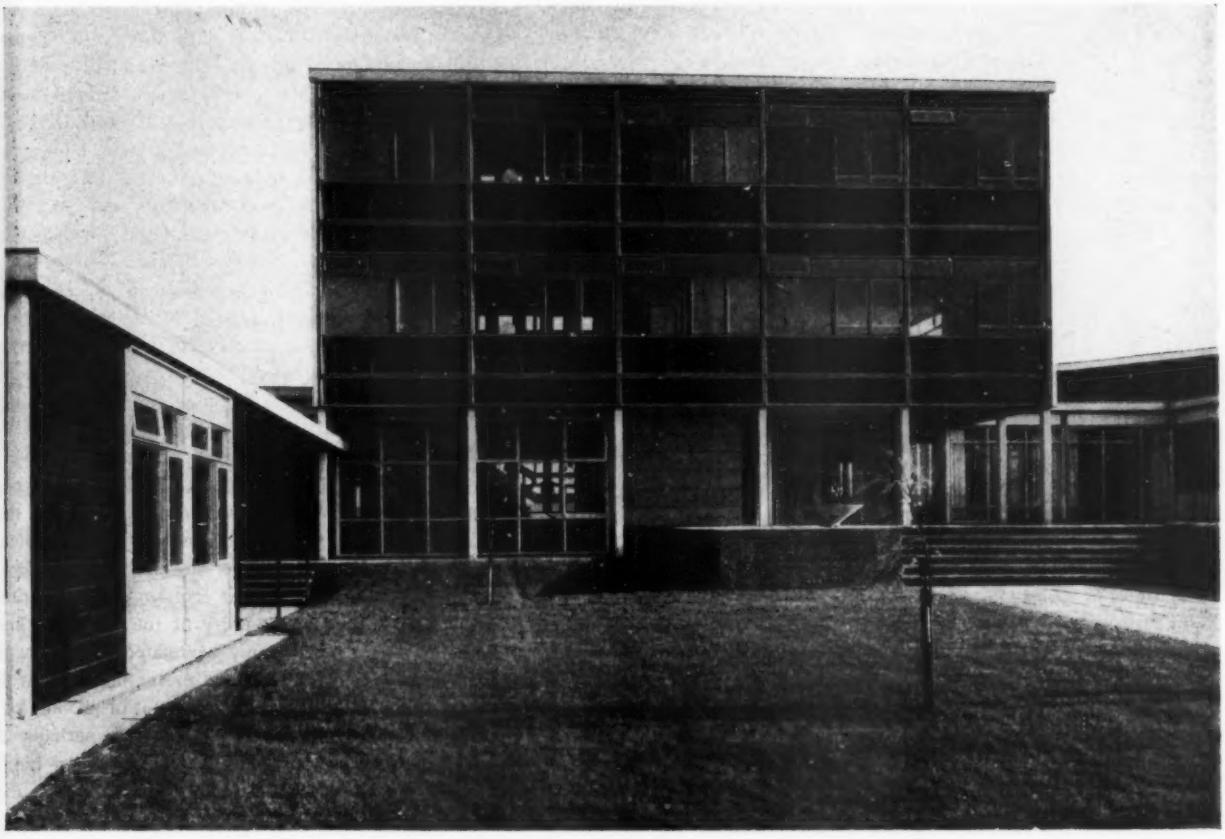
Below left and right: the second phase of the Lyng Hall Comprehensive School, built four years later. It is designed by the Coventry City Architect's Department using CLASP construction, with aluminium cladding to match the aluminium construction of the earlier phase.



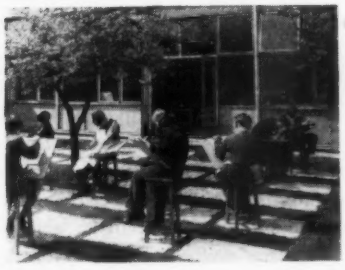
Window sub-frames assembled on a CLASP construction primary school. Thirty-six different timber frame units are manufactured in quantity and can be used in any number of ways on the 50 contracts in the 1959-60 programme. The quantities of components used in a programme of this size are big enough to begin to produce marked price reductions.

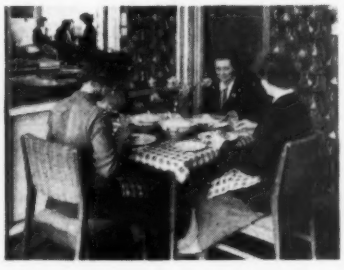


Below: Tuxford secondary modern school, designed by Nottinghamshire County Council Architect's Department, in CLASP construction, opened in September, 1958, after 12 months contract time (about the same time as a Hertfordshire primary). Method of building is based on light steel frame but uses components developed by the architects in collaboration with a variety of different manufacturers. The architect is fully in control of prefabrication. At the end of the ten years since Cheshunt, the problem of how to organize prefabrication, the problems of its cost, and many of its technical problems have been solved to some degree. Everything else has still to be done, and this school, therefore, should be regarded as representing only the beginning of the application of large-scale machine production to architecture.



Below left: outside the art room at Tuxford school—a space being used in precisely the way it was designed to be used. Design of this school accords with a "brief" prepared on the basis of the study of six existing secondary modern schools in operation. Below centre: dining space in the housecraft room in Tuxford school. Below right: farm unit in the same school.





been directed, in this one case only, by an understanding of the conditions that make architecture possible.

At every level, from the joint head of the MOE Architects & Building Branch downwards, administrator has worked with architect, and legislation has been influenced by technical considerations. In ten years architects have learnt how to organize a national building programme, they have learnt their part in it in building up the right kind of partnership with the administrators, and they have recognized its importance in determining the quality of their work. The correct organization of a building programme is not perhaps directly an architectural matter, but it is the precondition for its general development.

Applying scientific research

School design had relied on the work of official scientific research and development organizations. It has been possible for the architect to build up contact with scientists and architects working at the Building Research Station, the universities, the British Standards Institution, the Ministry of Education development group, and in many other similar institutions. The results of tests and measurements made on sites and in laboratories have been freely interchanged.

The special problems that have followed from the techniques used in building have only been solved in a close relationship between research and production. The extremely light constructions often used which have needed analysis and testing, and dimensional co-ordination which follows from prefabrication, are examples of this kind of thing.

But by far the most significant contribution has been the development work carried out by the Building Research Station and the Ministry of Education's Architects & Building Branch on the physical standards of school buildings. This is the aspect of architecture which is concerned with the comfort, health, and good working conditions of the people who use the buildings. It is particularly important when the users are children. In the last 10 years a considerable knowledge has been accumulated on the physical standards we should provide in heating, ventilation, daylighting, artificial lighting, colour, anthropometrics, acoustics and sound insulation; and ways of providing them have been evolved. The good relationships between the Local Authorities and scientific departments has meant that the results of research have quickly found their way on to the building sites and have been tested in practice, and many new schools have carried a fair number of strain gauges and thermometers.

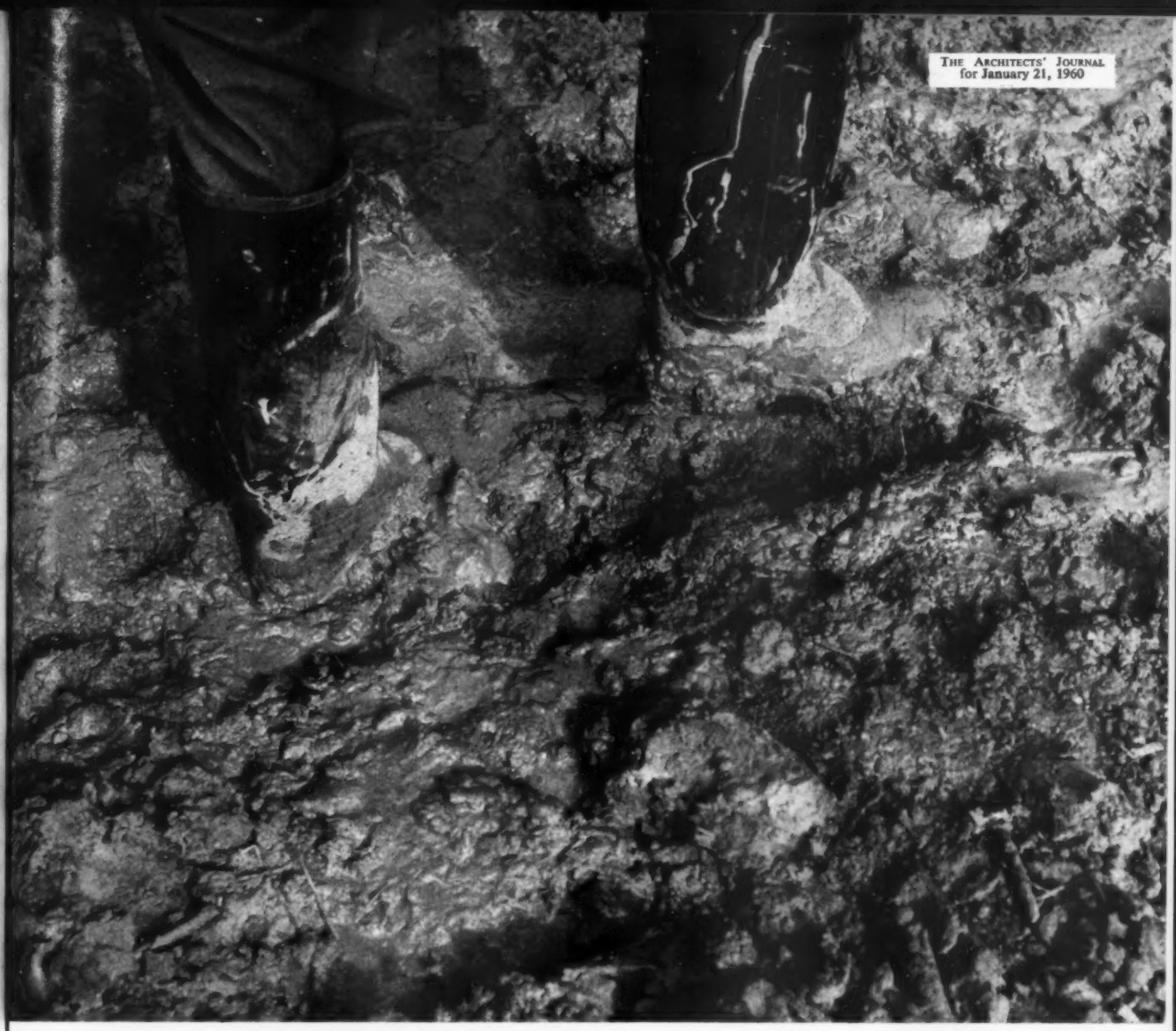
The correct use of colour, tables and chairs which are comfortable to use, artificial lighting with sparkle but without glare, daylight of the right quality and intensity, are today taken for granted as basic to the design of a school. But how much the standards have been raised is seen clearly enough in any attempt to remodel a pre-war building and bring it to the present accepted standards.

Experience has shown how much the good physical performance of school buildings affects the comfort and efficiency of teachers and children, and how much it determines their general attitude to the building. Architects designing schools have tried to make sure that their schools have at least been right in this respect. It has been the beginning of their architecture.

Working with people

I think it was Bertrand Russell who said that nothing any longer was an individual work of art except a poem and a painting. The last 10 years have revealed the interlocking complexity of modern technology and administration, but even now not all architects have awakened to the fact that a lot of people design a building—not just the architect. Building a school reveals most clearly the role of the architect as initiator and co-ordinator of a design process which involves the creative contribution of many individuals. He has had to learn to work with other people. The conscious acceptance by the architect of this new way of designing accounts for much of the achievement of our leading school building authorities. The architect will collaborate in detail with different specialists at different stages of the job. The formulation of the client's brief for the building is a joint exercise with education officers and teachers. By working with them, in effect, the architect is showing them how their ideas and experience of education can shape most creatively the final design. In preparing the cost plan, which inevitably influences design, he is working with the quantity surveyor. How much money is spent on what part of the building is a problem which has to be worked on together. Design of the construction means working with a number of technologists each specialist in his own field. They may be consultants or they may be the men directing industrial production in factories, but in all cases they are seen as collaborators making a contribution to the final design. The determination of the form for each specialized component of the building will not be made by the architect alone on the basis of his limited experience, but will be made by specialist and architect together. It will equate up-to-date and economical production methods with the overall unity of the building. The design of furniture can only be related to particular machine processes: the architect must collaborate with the engineers and managers at the point of production. At some stage in the process the partner is perhaps an artist or textile designer, and for the design of landscape and playing fields the architect will need the help of men who understand planting and are responsible for maintenance. The process will continue with perhaps other collaborators until the design is completed. The architect is the link between them all. To each he presents the picture of the project as a whole so that each can contribute effectively to a single unified result. It will be a far richer and more thorough result than even the most brilliant architect could produce alone.

The only real alternative to this method of working is, in fact, to allow important aspects of the building to be designed by someone else regardless of the overall conception. Major decisions are, in fact, made by consultants and specialists, and it is necessary to accept the badly designed components that industry



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normally produces. The architect is so busy trying to play all the instruments himself that he has no time to conduct the orchestra. Whether the fact is accepted or disregarded, no one man at this point in history can be master of all the skills and industries that make buildings.

By acknowledging his responsibility as co-ordinator of a team operation, the architect's role assumes considerable importance. Without needing to know everything in detail, he is able to deploy the trained minds and all the technical and scientific resources of an industrial society to provide the sort of architecture that is needed.

In formulating the requirements for the building the architect has had to work with and understand the people for whom he is designing. In the same way the construction of the building depends on working with people and requires the same sort of understanding of the problems and ideas of the men who are responsible for making it on the site and at the machines.

The appearance of modern architecture

The development of the forms of modern architecture, and hence the appearance of our buildings, is related to function and to the techniques with which we build. As in all art, it is through form that emotion is conveyed, and the architect's determining the formal expression for each part of the building, and the relationship between the parts, will decide whether the building provides merely a reasonable environment for the people who use it, or whether it also influences and directs their feelings. This depends on his skill and sensitivity as a designer.

Changes in the way people live and work and the growing industrialisation of building mean the abandonment of a lot of preconceived ideas of what buildings should look like. Forms which express building methods based on skilled tradesmen and the availability of cheap labour will obviously differ from forms deriving from building based on highly paid men who prefer to work at machines in factories. And yet it is not easy to shrug off the conditioning of a hundred years of debased renaissance.

It would seem to be necessary for us to establish our architecture on correct principles and, in general, allow form to emerge. All the schools illustrated here bear evidence of this approach, and their failures and successes in the purely sculptural aspect of architecture represent this process of discovery. The attempt has been made to avoid style and re-establish form as an expression of the function of the building and of the way it was put together.

It seems to me that the weakness of much of the architecture of the last 10 years has been revealed in an over pre-occupation with precisely this sculptural aspect of architecture. We have experimented too much with form and not done enough to root modern architecture firmly in function and techniques.

This is understandable: it is rather more easy to alter the outside appearance of a building at the dictate of the current style or of some new ideology. It is the one bit of architecture that our profession still indisputably controls after the lawyers, engineers, specialists and experts of all kinds have got hold of the rest.

Although much of the experiment in form which has characterized the building of the last decade is a serious contribution to the development of architecture, it is only one aspect of it, and the other aspects are often neglected. Meanwhile the all-in men, the engineers, the package system outfit, and the big contractors pinch our clothes whilst we are bathing.

The nineteen-sixties

Architecture in the last 10 years was faced with what was virtually a new task. This was the construction in far greater quantity than ever before in Britain of buildings which form the living and working environment for millions of people. The requirement may have been stated simply in terms of so many million yards of floor space, but the real need was also the enrichment of the lives of the people who would use it. All the good architecture of the past had been based on the slow growth of tradition, the care of skilled artist and craftsman, the enlightened and leisured building promoter in a smaller, more stratified, but less organized social milieu. It was concerned with the needs of only a small part of the population. When the war ended, architects were confronted with the challenge that the modern movement in architecture, as conceived by the pioneers such as Le Corbusier and Walter Gropius, was intended to meet. New ways of working had to be invented and the conditions under which architecture could grow with a new objective and in new circumstances had to be improvised. They have had to go into the unknown territory of machine production, cost, management and legislation. In this essay I have discussed only the school building programme. This is not just because it represented a very large part of our work in the last 10 years, but because by the nature of the work the improvisation and invention has gone further, and in it we are therefore more likely to discover the basis for an architecture which will measure up to the demands made on it.

I think that the ideas I have discussed are valid in general for all architecture today, and their further application in wider and quite different spheres of building holds out the best hope for architecture in the nineteen-sixties.

One cannot predict with any certainty what demands will, in fact, be made on architecture in the next 10 years. But we can discern the problems. They stare at us from every strangled city, every street of decaying slums, and every ugly spreading suburb. A society which provides itself with 21-in. television sets and fast cars universally is beginning to notice its physical surroundings. I do not think we shall have to invent the need for an architecture: our job is to invent the means of providing it.

In the rebuilding of our city centres and industrial areas, in our offices and public buildings, and above all in the construction of housing and living communities, the approach to the problem may be guided by these principles. The architect will need to carry out the task of preparing his own brief in collaboration with the client, going out and discovering what really

are the needs and establishing direct personal relationships between client, user and architect. This is the functional basis of modern architecture. I do not think we have done nearly enough of this. People live quite differently now from the way they did 50 years ago, yet this is barely reflected in house or community design. Perhaps there is too much speculation by architects and sociologists about how people ought to live and not enough direct operational study. Perhaps there are too many dead statistics and not enough human understanding. I think the close collaboration built up between architect, educationalist and the operating schools can be repeated somehow in all projects. Before architectural answers can be produced, the human questions have to be formulated properly.

Architecture will have to be thought of as a comprehensive thing concerning the whole visual environment from neighbourhood to light switches. It is necessary to stop thinking of isolated buildings and isolated furniture. The complexity of this task means that the architect will have to discover ways of working with other people at all stages of the design, from the town planners to the general contractor so that specialist knowledge can contribute creatively to the whole. Some of the lessons on how the architect might work in the new role of co-ordinator of such a diverse group have been learnt in school design.

The architect will have to take the initiative in the development and organization of industrial techniques of building. The kind of architecture that is needed will never be produced in sufficient quantity with the inefficient and expensive products of the building industry at present available. As it has often been said, architecture must foreshadow the harnessing of a 20th century factory production technique to the construction of the human environment: in the school programme a small start has been made in this direction.

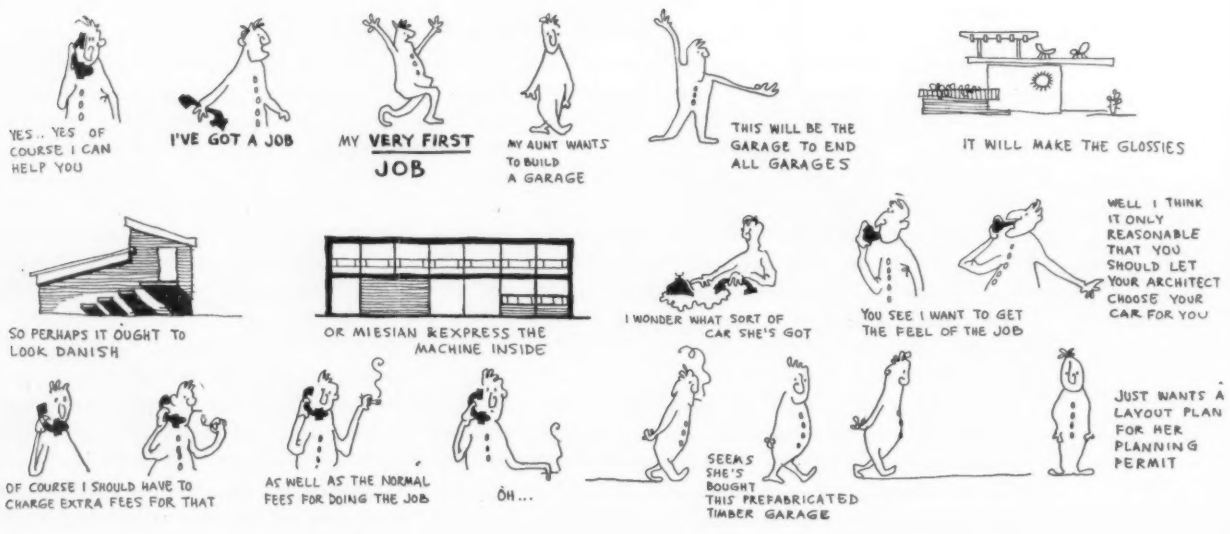
The cost of building will have to be reduced because it is necessary to be able to afford new buildings in much greater quantity. Only if architecture is based firmly on economic reality will it develop.

It will be necessary to apply the lessons learnt in organizing the school building programme to other types of building. The lack of long term programming at present contributes more than anything to the inefficiency of building. Hospitals, houses, universities and city centres require the same stable organizational framework that was invented for school construction. Architecture must be scientific. The results of research are only beginning to be applied to building. Architects might well rediscover the scientific enthusiasm of Wren, Hook and Brunel. In schools the scientists were called in to raise the physical functional performance in which children would work. At the least, modern architecture has to provide good physical working and living conditions.

And finally it will be desirable to play down a little the emphasis that is placed on style in architecture. The imagination needs to concentrate not on form for its own sake, but on the exploitation of the entirely new formal possibilities that are inherent in new human needs and new ways of building.

In this essay I have attempted to distil from my own experience in building schools some of the ideas that seem to have helped. I am conscious that they do not add up to a theory of modern architecture—perhaps there never can be one—but I think they represent principles which are fundamental to architecture today. Perhaps the best achievement of building in the nineteen fifties is that we have learnt something from it.

After all, we are only at the beginning of architecture for a modern industrialized and democratic society—we are still defining the aims and methods. This essay attempts to contribute to that process.



Planning in the last ten years

by Percy Johnson-Marshall

The retreat from planning

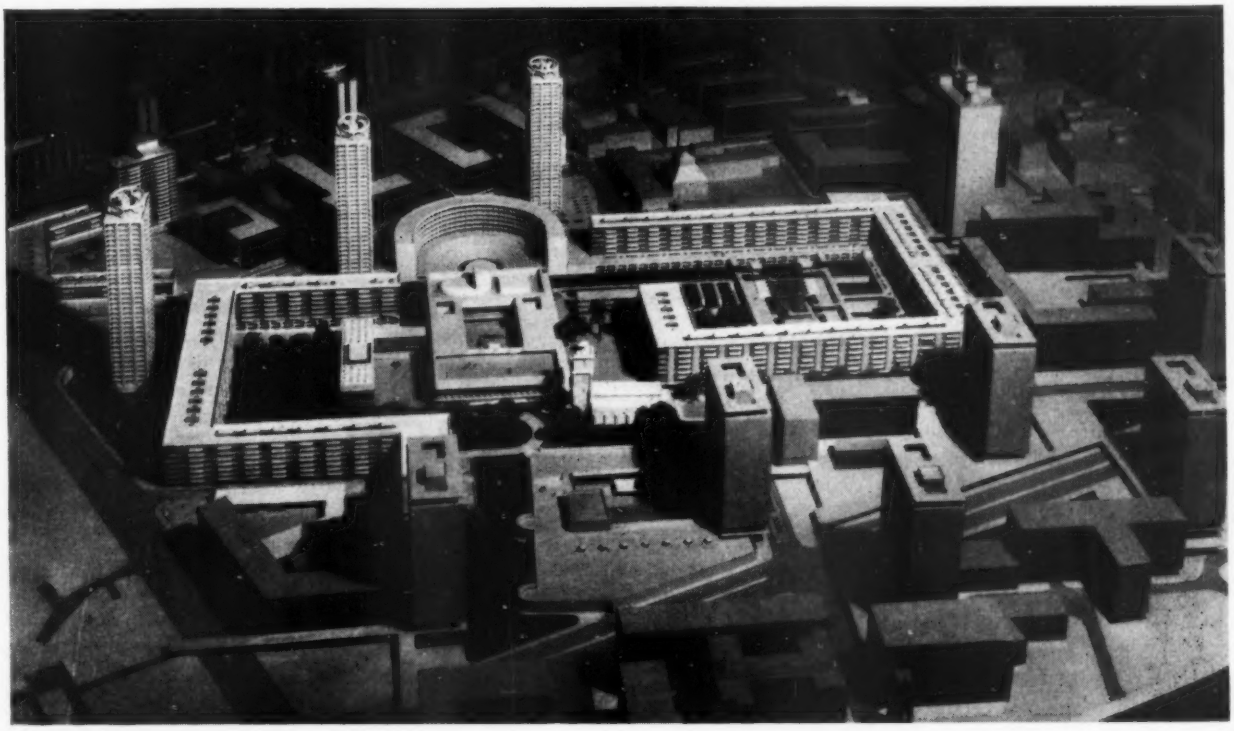
On all sides during the last decade, Britain has heard the drums of society beating the retreat from planning. The theme has been less planning, less interference and less public initiative. Changes in the law have gradually eroded the economic framework of planning so painstakingly set up after the war; in fact we have seen the implementation of a non-planning policy at Government level.

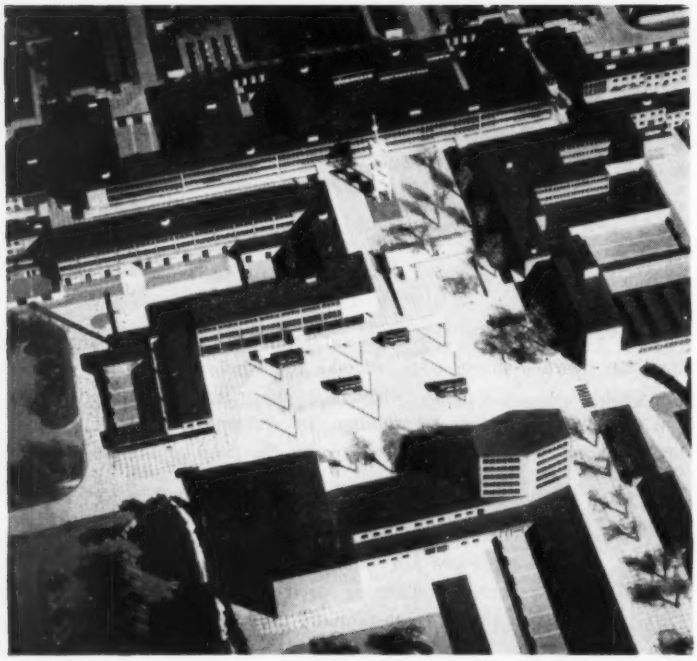
This has been accompanied by a loss of public enthusiasm and even interest, and by the failure of most of the planning authorities, and particularly the urban ones, to take the whole problem of planning the environment seriously or intelligently enough. But before continuing the mournful dirge of planning failure, let us look on the positive side to see what has been achieved.

Creative preservation

One can ask what might have happened if there had been no planning, or if the powers and controls had remained substantially the same as before the war.

THE BARBICAN SCHEME—PROGRESS: *A progress photograph (left) of Britain's largest central area Comprehensive Development Scheme. It was planned jointly by the LCC Architect's Department and the City Corporation Planning Officer's Department. Here for the first time a three-dimensional ideas plan embodying new principles of urban design is actually being carried out. A number of different developers are involved, the whole scheme being co-ordinated by the planners from start (and one hopes) to finish. This early model (below) showed the joint LCC/City scheme after it had included the first detailed housing proposals, by Messrs. Chamberlin, Powell & Bon. These proposals as modified, have been approved by the City Corporation, but in the meantime about half of the rest of the scheme, including the two-decker Route 11, is completed or under construction.*





STEVENAGE NEW TOWN: *With their many faults the British New Towns still represent a very considerable planning achievement. In some cases they have also made an important design achievement, as in the case of Stevenage's Town Centre (above), now nearly complete.*
It is a great day for planners when plans and models actually get built according to plan (below), and an especially good day when both plan and buildings are of good quality, with all the incidental details carefully designed.

Unquestionably a great deal of damage has been prevented. Much of the really bad land speculation has been stopped. Thanks to the Development Plans a great deal of good quiet work has been done, first in the collection of facts and figures, then in the allocation of land to various purposes, and finally in the form of development control to ensure that the land is developed for the use to which it was allocated.

If you add on a whole series of other invisible activities, such as the guidance of a considerable amount of new industry (though not nearly enough) towards areas which require it rather than areas of greatest convenience to the industrialist, or the preservation of large areas of the National Parks (which still look as beautiful as they did, in spite of a few spectacular misdemeanours by Government Departments) you get a formidable list of bad things prevented, which after all, in an old historic country of mature landscape, may well be nearly as important as new things created.

The new towns

Let us turn to positive achievements. Hundreds of visitors from abroad come every year to Britain to see the New Towns, in spite of our own uncomfortable feelings that they are still solving yesterday's problems, using too many of the day before yesterday's planning and architectural ideas, and all of the same pattern. But any reasonable assessment would admit that we now have a dozen New Towns, nearly all well advanced as new communities, and located and populated as part of a larger strategic planning concept. Even if they are designed at very low densities they could, provided the architecture were all of a high standard, have been making design history as well as a success story for New Town enthusiasts.

There is every ground for hope, too, that Cumbernauld in Scotland may yet redress this shortcoming and even a possibility that the accumulated design experience of the LCC Architects' Department may repeat the exercise for the South-East. So here we have one considerable planning achievement of the 50's, as any visiting Venezuelan would confirm if you were to offer him—or more trenchantly, *her*—the choice between a terrace house in Harlow of a twelfth storey apartment in Caracas. Linked to at least two of the Scottish New Towns and their basic cause is the maintenance of some kind of organization and policy in the implementation of the Clyde Valley Regional Plan—the only one to survive.

Housing layout

Our next achievement is in public housing layout. Thanks largely to the lead given by the LCC, this country has probably built more, better designed and better equipped housing with better space standards and a closer eye to social needs than any other. And I say this advisedly knowing that there have been thousands of failures, failures owing to many Local Authorities still being too short sighted to use architects, and some failures owing to the use of bad ones, alas. But one can go round the country and see well-designed tall blocks of flats in the most surprising places, and literally hundreds of seemly groups of two and three and four storey terraces. I do not think that anyone has yet gone as far in industrial prefabricated design as Donald Gibson at Coventry in 1940, but that is only twenty years ago, and as they say, this is an old country.

Here of course, I am on the verge of talking about architecture, and I am indeed tempted to follow housing by schools, and to say that, provided the new schools have been sited correctly in the first place, our school building programme has indeed been one of the finest examples of planning anywhere, but of course planning of another sort, although this kind of planning should be much more closely linked to town planning than it has been so far.

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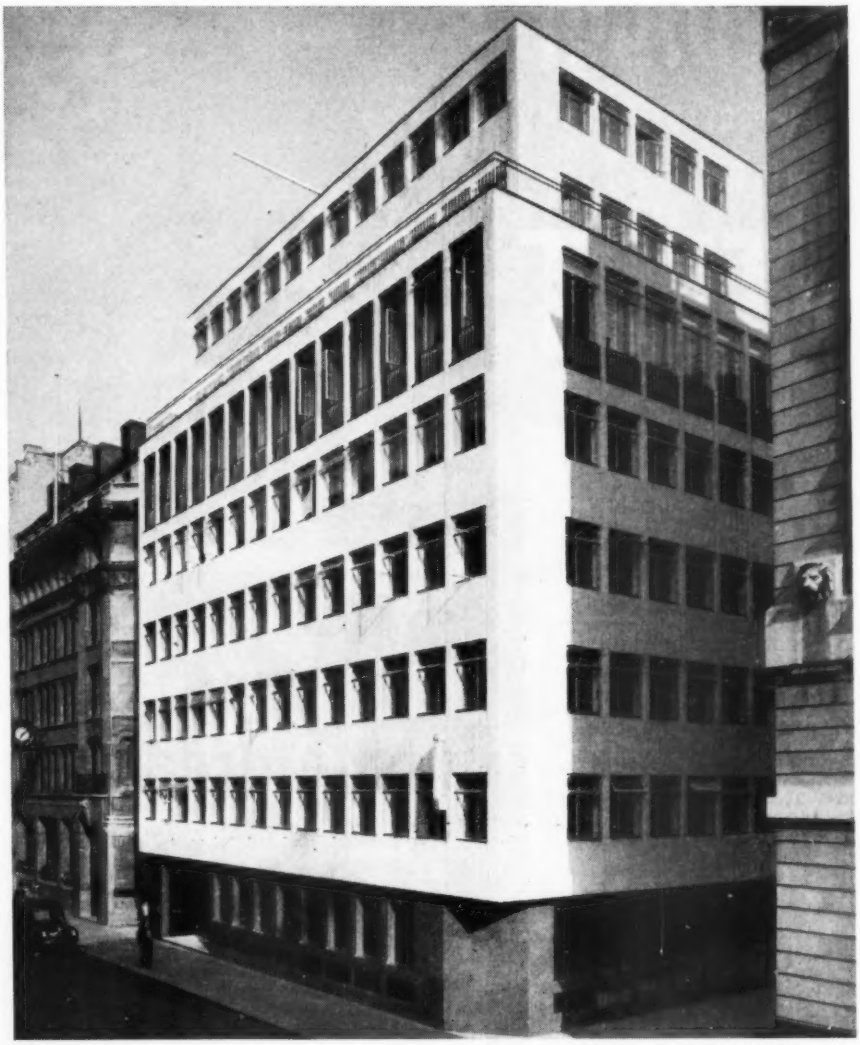

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Positive achievements

Of all the many cities of Britain where reconstruction and rebuilding was an urgent necessity very few have given promise of real achievement, and perhaps only two have reached an international level—but then of course there are few enough in any country, since the problem is so very complex and intractable. Again and again in Britain we come back to Coventry and the LCC, and to avoid misunderstanding it is important to get the evaluation basis clear.

Any good plan must begin with civilized ends in view. It must express in design terms ideas about living in cities, and it must not only provide efficient and comfortable spaces for working, shopping, and all the other necessary things that have to take place in cities, but create beautiful spaces in which civilized men and women can talk, think, promenade, and even just stroll around. But it would be simpler to say " back to the Books " for it's all in the Culture of Cities and the City of Tomorrow.

COVENTRY—PROGRESS: *The centre of Coventry is now unrecognizable from the devastated chaos of the war. The vital thing is that the whole area is proceeding in accordance with an overall three-dimensional scheme, carefully co-ordinated by the City Architect and Planning Officer and his enthusiastic Department. In the foreground of the top picture is the shopping precinct, the lower half of which (including the market) is well on the way to completion, although car-parking is not yet fully organized. At centre left is the new Leofric Hotel and the Owen Owen Store, both facing Broadgate, while beside the ruins of the old Cathedral Basil Spence's competition winner is rising rapidly. Beyond it can be seen the new technical college, and to the right is the newly completed art gallery, with the new offices for the City Architectural and Planning Department across the road. Just completed, the new Departmental offices (above) are not only interesting as a prototype of a building for a new kind of Architectural and Planning Department, providing for instance a ground floor exhibition area for the public; they also contribute to the comprehensive scheme by completing a pleasant urban square.*

Coventry

Now from the day Donald Gibson set up his new kind of City Architectural department in Coventry these ideas were paramount. Although the anti-planners and the practical men time after time endeavoured to damage the comprehensive plan for the city centre, and even succeeded in the '40s in driving a road through the famous shopping Precinct, the continuity of design co-ordination and leadership has been maintained, and for the last five years Arthur Ling and his planning team have improved and enriched the original grand design. One of Ling's first achievements, and I don't underestimate its importance, was to have the offending Precinct road turned back to a pedestrian way, and he has continued in this vein.

His latest contribution is the office for his own Architectural and Planning Department, which encloses a quiet paved square that Gibson planned over ten years before, and which opens its ground floor to exhibition and model space for the public so that Coventry's citizens can be on the inside of its Council's planning ideas. And the Council, as the collective client representatives, have been by and large far seeing and intelligent, and ready to give their architects and planners a good deal of rein, even if they have not always been prepared to pay them properly. But in this they are merely akin to nearly every other public body.

So we can say that Coventry in the last decade is an achievement of urban design continuity, of architect/planning co-ordination, and of the survival of a prototype, a prototype that remains, alas, almost in isolation.

The LCC

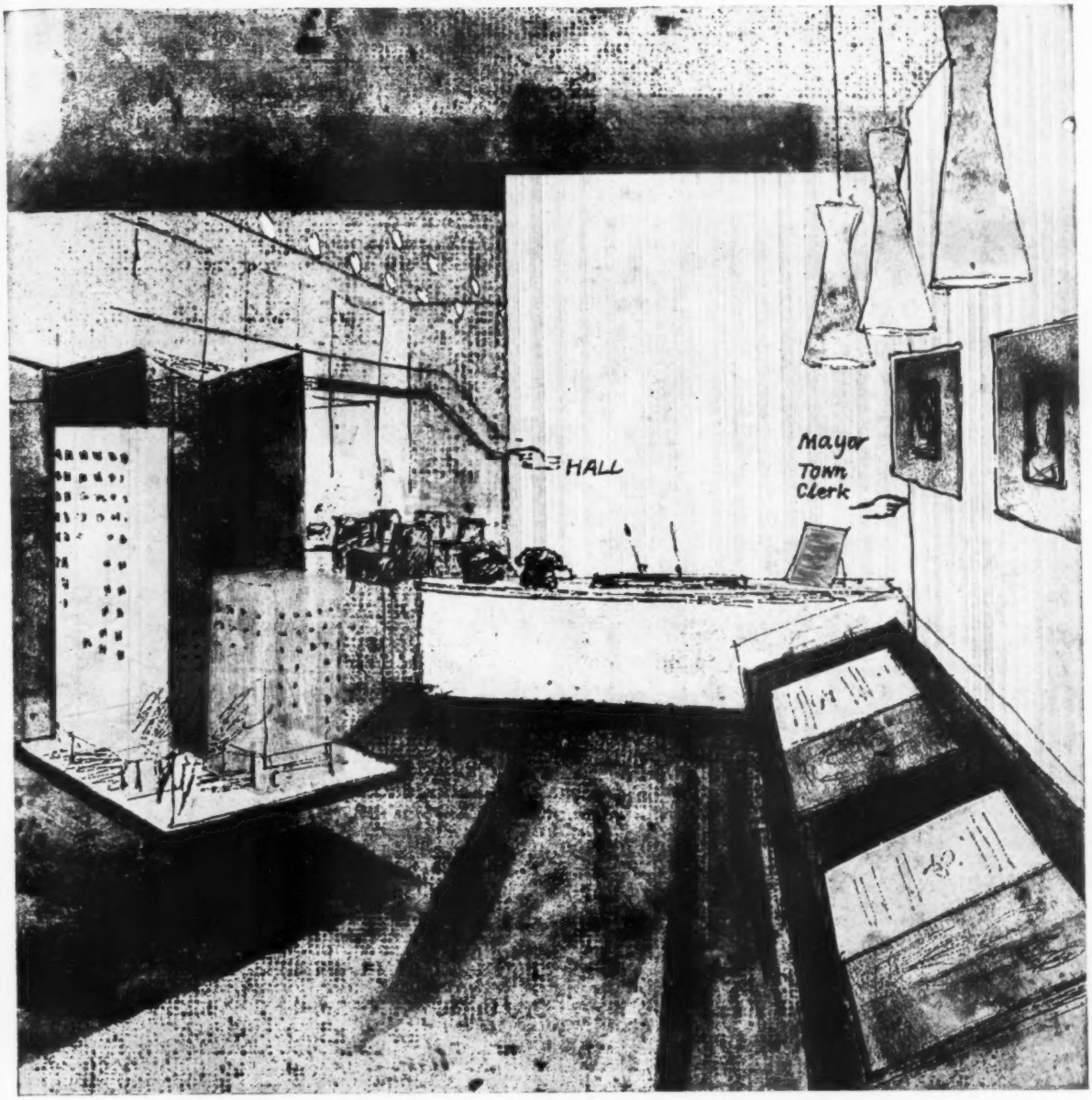
And now the LCC. This, the largest public authority with the biggest income and expenditure, the largest staff and nearly everything else in similar scale, surprised everyone after the war by surmounting the problems of size which drain the creative life blood of so many biggest-ever organizations, and giving a lead in the co-ordination of planning and architecture on a really large scale.

The work of the Architects' Department is there to see, not only in plans but on the ground as well. A whole series of great housing projects have been integrated into neighbourhoods and communities, based on carefully considered densities and other planning standards, some breaking new ground with tall

LANSBURY—THE COMPREHENSIVE SCHEME: *Above is the three-dimensional scheme for the Lansbury Neighbourhood as part of the Poplar Community. The whole neighbourhood will take about 20 years to complete, but already about half is finished. Lansbury got away to a flying start at the Festival of Britain, when the southern part was developed. By 1955 a site on the west (Calcutta Street) and one on the north (Barchester Street) were built, and now a large area between the latter has joined it with the Festival scheme. At last the overall conception is becoming apparent, and a new town in a city is emerging in accordance with an overall plan. Left is the Alton Street project.*

towers, four storey squares. and new types of maisonettes, others experimenting with new structural techniques and building methods. In addition to the great record of housing progress there is a very considerable number of schools, and more particularly the difficult planning problem of large schools on small sites in a compact urban environment, also old peoples homes and other community buildings, and even flatted factories as a new form of municipal enterprise.

In the eight Reconstruction Areas, or as they are now known, the Comprehensive Development Areas, the special opportunities of laying out large urban areas afresh enabled a number of new ideas and even principles to be developed. There is the comprehensive three dimensional guide plan, for instance, which has been used as a flexible planning instrument instead of as a static strait jacket; or the careful co-relation of tall blocks of flats with the newly created open spaces;



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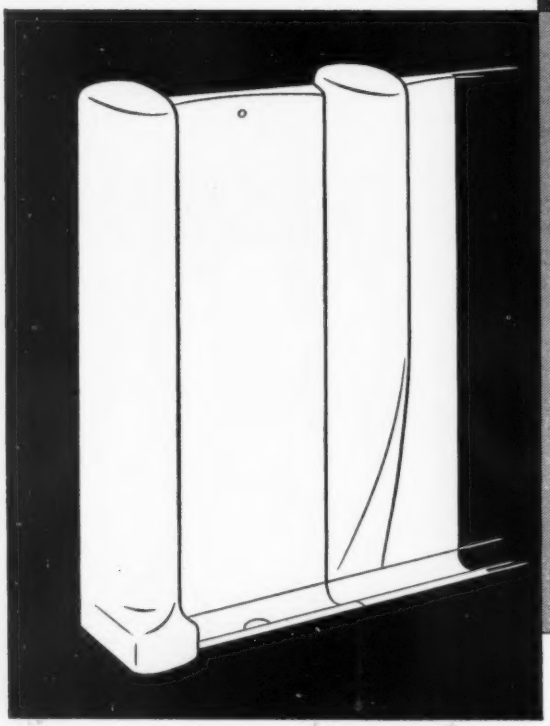

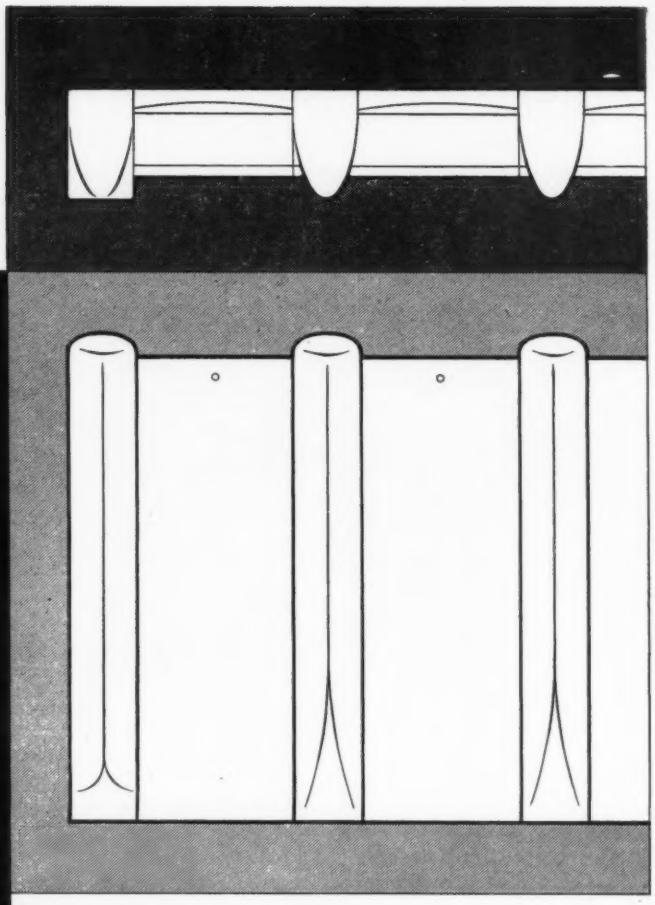

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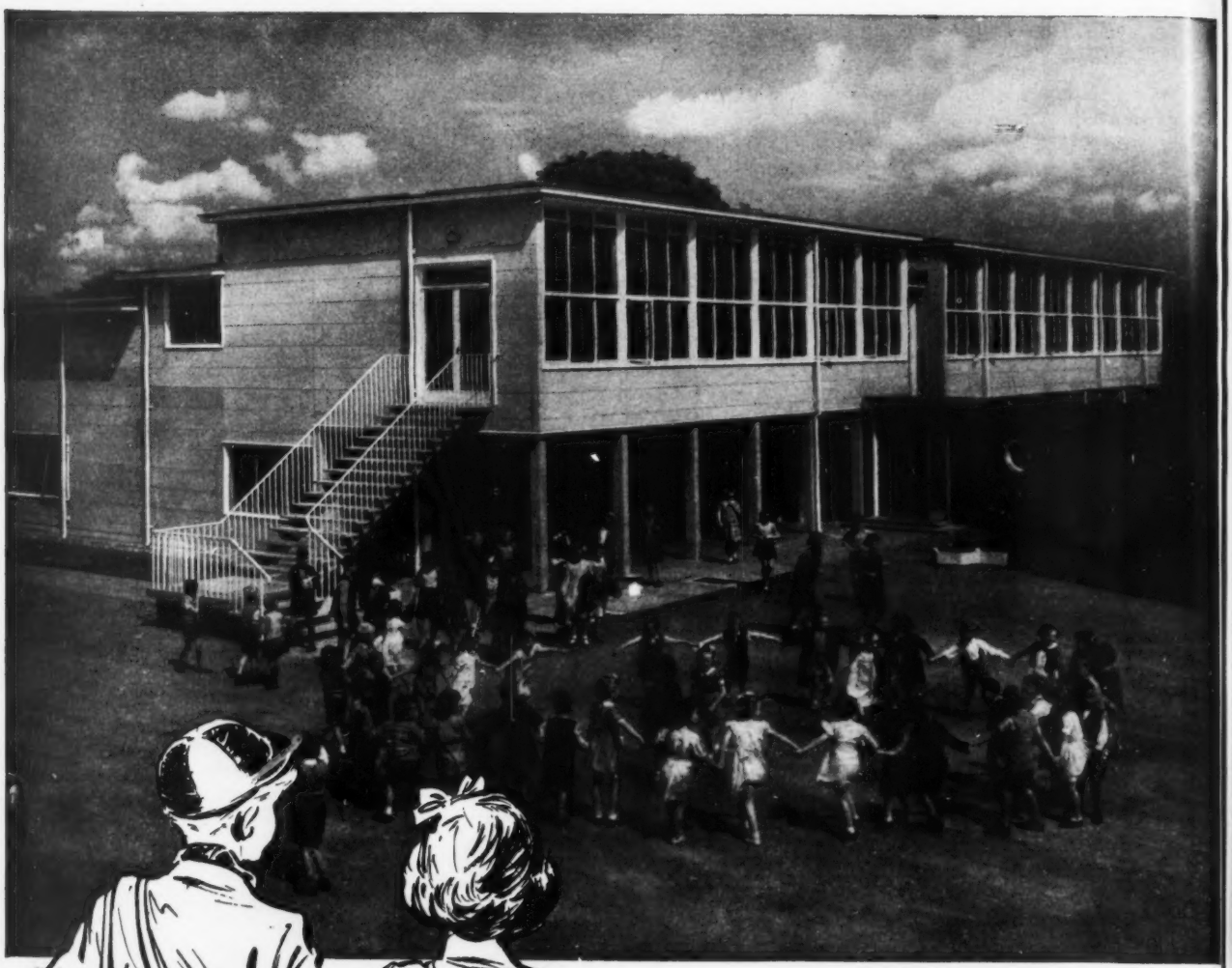
THE LCC'S ROEHAMPTON SCHEME: *Here is fairly high density residential redevelopment on the periphery, imaginatively designed within a careful planning brief. The result is the creation of a new townscape of considerable character, with the trees preserved and the surrounding landscape enriched and extended. It could easily have been worse than below.*

URBAN SPRAWL: *A still too prevalent example (below) of low quality residential town development. Poor architectural and layout design, in integration of community buildings, and above all no money spent on landscaping—one of the most important and least understood aspects of three-dimensional planning.*

or the gradual building up (now at last beginning to become apparent) of an entirely new urban townscape in the East End; or in the use of multi-levels, especially in the Barbican (planned with the City Corporation), where a whole group of Lever Building type of office towers have their bases or podiums joined together to form a continuous upper level walkway—and the extraordinary thing is that they are now actually being built more or less as imagined by the planners.

There have been ups and downs, of course; ups where the LCC has stepped in itself to realize some of the architecture, and so pump prime a difficult CDA, as in the Elephant and Castle; downs where a well-known architect is building the most prominent landmark in a very central area in the most ponderous manner imaginable, and very far from the original planning vision. But by and large all this comprehensive work (and I stress that it is all within the legal and financial definitions of Comprehensive Development Areas), with its many surprises and heartbreaks, is the solid planning achievement of the 50s, even if it has rarely come up to the expectations of Bedford Square or the Bride of Denmark. It has depended on large numbers of devoted architect planners (who would often rather be designing buildings) working on it over a considerable period and when you realize that the LCC Architect's Department has over 200 technical men in its Planning Division, you realize, as do too few people either inside or outside County Hall, that



Architects: John Dudding & Partners, F/A.R.I.B.A.,' in collaboration with F. Hamer Crossley, Esq., Dipl. Arch. (L'pool), F.R.I.B.A., County Architect.

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this is a unique phenomenon.

What other achievements can be recorded on urban planning? West Ham's Architect and Planning Officer and his Department have continued their gallant struggle in a too limited area, Canterbury has done a good but inevitably modest job of its reconstruction (in contrast to, say, York, where not long ago I watched bulldozers tearing down historic buildings for road widening). Liverpool has built large quantities of housing of a reasonable standard, and Birmingham and Sheffield have produced some interesting schemes, but have suffered because their Architects do not yet co-ordinate the Planning with the Architecture; while Northampton and Norwich both have capabilities (and Norwich has Magdalen Street), but in none of these or indeed any other cities are there clear signs of the real vision and design co-ordination which is most needed.

A word about the contribution of private (or at least non-official) enterprise. Eric Lyons and Span have designed and built the prototypes of what could be an excellent vernacular for the middle income housing that cannot or has not been provided by Local Authorities, and have reached a high standard of layout design. But after this cloud as big as a man's hand in the sky, what next? Not much, except that a limited amount of preservation work has been done, and thanks to the women's magazines, the spec. houses now have picture windows and car ports, although the battle for plum sites in the green belts still goes on.

Counter Attack, the Civic Trust and the National Trust as voluntary bodies have done gallant work, particularly in waking up the public conscience, and this, too, must be accounted an achievement for planning. But to return to the dark side of the moon: what has gone wrong? One could have hoped for great things in 1951. Even then the Ministry could have been given a shot in the arm (this is now happening, I am very pleased to hear). We might have had really effective national planning, in a broad economic way, pushing industry and offices and commerce away from the London/Midlands coffin up to the areas that really need redevelopment, and following this up by New Town type financial and technical organizations to help the handicapped and sometimes moribund Local Authorities to do real comprehensive development where it is most needed. I sometimes wonder whether Ministers and other top people ever do go and look at our great industrial deserts in the north and north west, for if they do they seem to be able to keep their eyes closed very tightly. Anyway, the whole kernel of the problem of large scale industrial and commercial rehabilitation and redevelopment has been avoided throughout the '50s, and this will only make it harder in the '60s and '70s. Regionally, too, we have seen the decay of the Greater London Plan, and with the exception of the Clyde Valley, of all the other essays in Regional Planning.

Apart from the modest success stories recorded above, and they are modest in a post-war planning context,

PARKLEYS—HAM COMMON: *An excellent example of the contribution which private developers could make to community and neighbourhood planning. The scheme provides a variety of houses and flats, some shops and a very high quality of landscape design. Sadly, it represents a minute proportion of private enterprise development.*

REHABILITATION NORWICH: *Our historic towns are rapidly disappearing, and a real rational effort is required in terms of creative preservation. Norwich has shown a lively awareness of this problem. Magdalen Street, left, restored through the efforts of the Civic Trust.*

REHABILITATION—THE LCC'S BRANDON ESTATE: *Here is one of the most important problems of an old country with a great architectural heritage. On the face of it not a brick has been moved, but in fact a large and expensive amount of work has been done both to make this terrace liveable and to preserve its character.*

LONDON—OFFICES IN VICTORIA STREET—BEFORE . . .

. . AND AFTER DEMOLITION: *All over London, and in other big cities, large commercial properties are being demolished, not because they are part of a planned programme of urban renewal, but because enormous profits can be scooped by speculators. No planner would wish for office workers to have any worse conditions for work than any other group of the community, but the rampant speculation in office building has been one of the worst features of non-planning in the second half of the '50s.*

city planning in Britain has been a sad record of missed opportunities and a muddling up of ideas so that each of the components of total planning such as roads, zoning, surveys, housing, etc., have been mistaken for the whole thing, with the result that most cities have no real idea about what they are going to look like in 50 or even 10 years time. This is all the more tragic in that first they had nearly 15 years of grace, during and after the war, and second that they are now about to be struck by an avalanche, created mainly by the motor vehicle and its attendant artefacts, but also by the new scale and speed of building development. In this latter context, by the way, one hopes that the lesson of Brazilia—a new capital in under three years—is not being lost.

The problem of the motor vehicle is really a flagrant example of British muddling through, as Malcolm MacEwen so ably demonstrated in *Motropolis*, and the '50s have seen our national vice at its worst. For ten years after the war practically no money was spent on roads, very little road research was undertaken, and yet the motor industry was allowed to gear itself up for a national "every family a car" campaign. Worse still, even now few people listen to the still small voice of the planner protesting that urban motorways, traffic networks, car parking, and multi-storey garages are all problems to be dealt with as part of the planning process long before they get into the energetic hands but limited vision of the road engineer.

A number of outstanding lessons on urban planning can be learned from the '50s, even though one could say that city planning will never have it so good again, because the large vacant bomb-damaged areas on which its successes were achieved no longer exist. Perhaps the foremost lesson for urban renewal is that the comprehensive redevelopment procedure is the only satisfactory way of doing the job. This means that the planning authority must have the powers and finance to acquire extensive worn-out and decayed areas, and employ teams of highly qualified planners and architects to plan and build comprehensively.

In the financially highly desirable central areas of cities, we have had proof in the last five years (in fact ever since building restrictions were raised) that the incubus of exorbitant land values coupled with speculative redevelopment not only prevents any real achievement of a civilized environment, but also puts all the rebuilding priorities out of joint. Large usable existing buildings are being demolished while millions of building money which should be going into more important nation-building tasks are being spent on office speculations which, incidentally, are aggravating urban congestion.

Another outstanding lesson concerns a problem I have already mentioned—road traffic. Multi-level communications in which pedestrians come into their own again is a top priority in the central areas of our large cities, and it needs to be provided both by incorporation of upper level podiums in new buildings and by light upper level walkways elsewhere. Really intensive *planning* study as distinct from road engineering study (although this is also required, of course) is urgently required on the whole motorway/city problem.

All this, of course, implies yet another hardly learned lesson of the '50s. Too many architects have drifted away from planning. Every city must, repeat *must*, have a first class City Architect/Planning Officer whose task is to co-ordinate the architecture and planning. This does not exclude in any way the various other disciplines which are necessary for all the complicated tasks of planning today, but it should surely be clear by now that the overall design co-ordination can only be satisfactorily undertaken by one whose basic approach is that of design. And it is not enough to take on architects without an understanding of planning for this vital job. The schools are failing to turn out the new type of architect/planner/co-ordinator we urgently need.

There is even at this late hour still time to turn over a new leaf, time for a new national effort at economic planning (the Dutch would call it national survival), for the setting up of viable regional planning organizations, for special Urban Development Corporations of a new type, for the big and not so big cities to consider the possibility of taking a tip from the LCC or Coventry, for more planning research to make sure that the fundamentals of planning are re-examined, and last for more planners, and most of all for more architect planners who combine co-ordinating and diplomatic ability with real imagination, and are willing to work (at an appropriate salary) inside as well as outside public service. The moon, perhaps, but it's worth making the attempt in the '60s.

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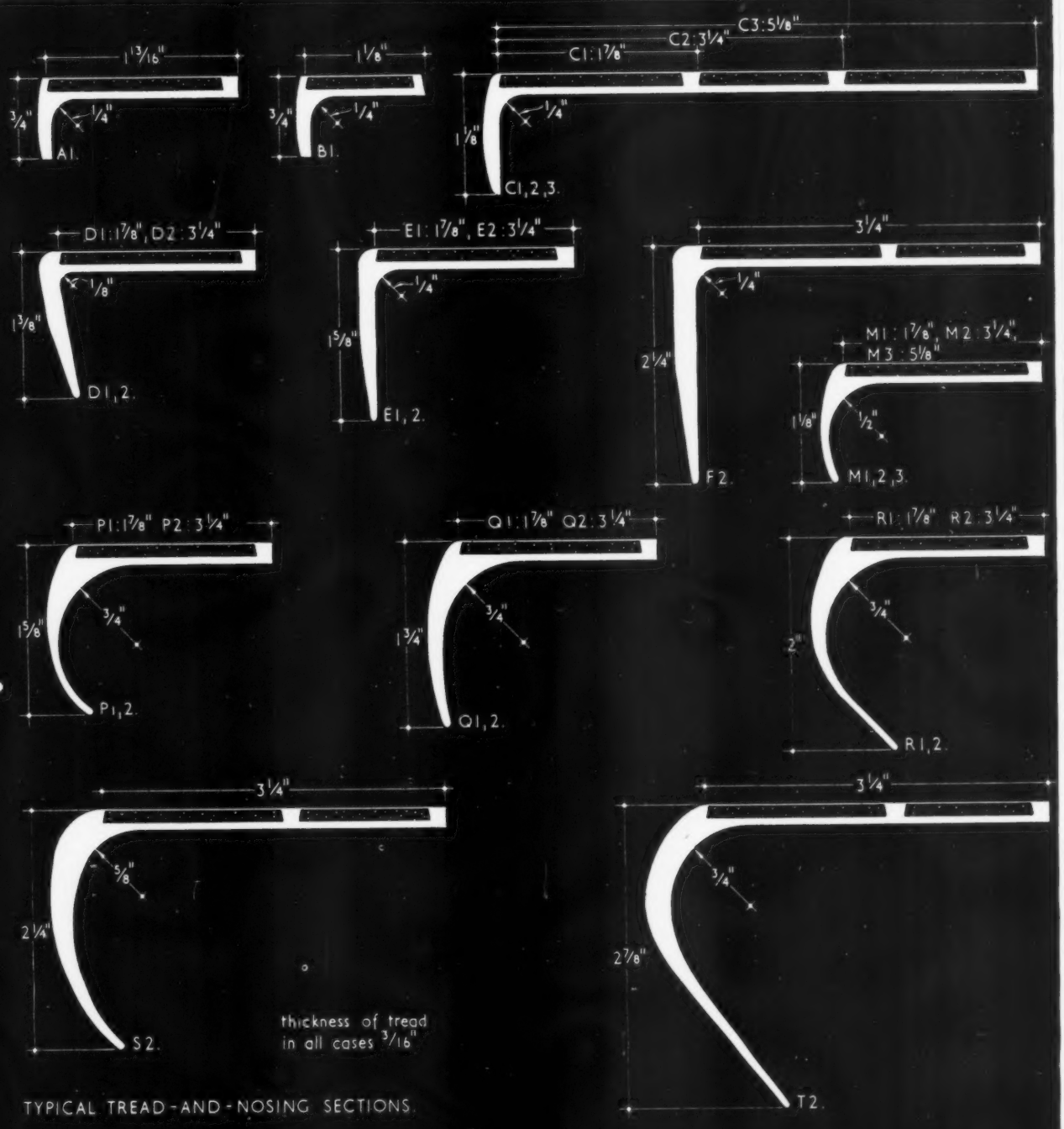
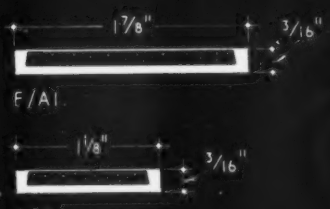


TYPICAL TREAD-AND-NOSING SECTIONS.

FERODO FABRIC TREAD WITH STEEL BACKING.



FLAT TREAD SECTIONS.

BACKING STRIPS.

FERODO METAL STAIRTREADS, FABRIC- OR COMPOSITION-FILLED. (scale 3/4 full size)

Manufacturer: Ferodo Limited.

19.Z11. ·FERODO· METAL STAIR TREADS, FABRIC- OR COMPOSITION-FILLED.

This Sheet describes a range of metal stair nosings which are available fitted with inserts of Ferodo fabric or moulded composition. The flat tread sections are used to make up the required width where a wider tread is desired than that given by the nosing section. The feather-edged metal strips are available for fixing to the back of the tread where the thickness of the flooring material does not bring the step up to the level of the nosing.

Sizes

The drawings on the face of the Sheet show, to a scale of ¾ full size, a selection from the range of sections available. They may be obtained in lengths up to 13 ft. 6 in., or cut and drilled to specification. The industrial type of tread illustrated at the bottom of the face of the Sheet is backed with 24 gauge steel and is available in standard or cut lengths to a maximum of 6 ft. 0 in. Curved and specially-shaped treads can be supplied to drawings or templates.

Metal Sections

These are extruded from commercial pure aluminium: in addition a limited range of silver bronze (maximum length 12 ft. 0 in.) or manganese bronze sections may be obtained. The industrial type are in steel as previously described.

Inserts

The fabric inserts are of the closely woven, chemically-bonded Ferodo material used in the manufacture of brake and clutch linings. The moulded composition used is an asbestos and rubber-based material. It is weather-resistant, and retains its colour permanently: it is non-slip even when wet.

Colours: The fabric material is brown. Moulded composition inserts are available in seven colours: red, white, blue, green, black, brown and grey.

Fixing

The treads are supplied drilled, according to the manufacturer's recommendations, to take 1-in. no. 8 countersunk screws. Alternatively, they may be supplied drilled in accordance with the architect's specification. Plugs of matching material for concealing the screw heads in the moulded stair treads are supplied by the manufacturer at no extra cost. Where the stairs are badly worn, the surface should be levelled up with latex-cement or other suitable filler and the nosing made good before the treads are filled.

Timber stairs: Stair treads should be fixed with countersunk screws in the holes provided. The space between the back of the stair tread and the riser should be covered with linoleum, plastic tile, or other suitable material to provide a level surface.

Concrete and granolithic stairs: These should be drilled and plugged with lead, hardwood or patent plugs, to correspond with the holes in the stair tread. Fixing is as for wood.

Metal stairs: For perforated metal stairs ¼-in. countersunk bolts and nuts should be used. The stair treads should be bolted through perforations, using washers under the nuts. Plain metal stairs should be drilled and the stair tread fixed with ¼-in. countersunk bolts and nuts.

Maintenance

Fabric treads simply require brushing with a clean, dry brush. Moulded composition treads may be easily washed.

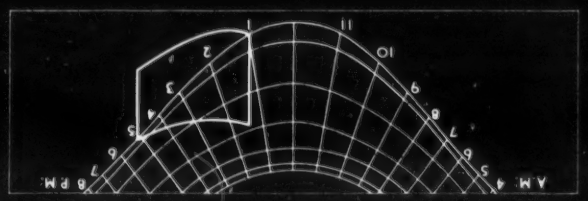
Compiled from information supplied by:

Ferodo Limited

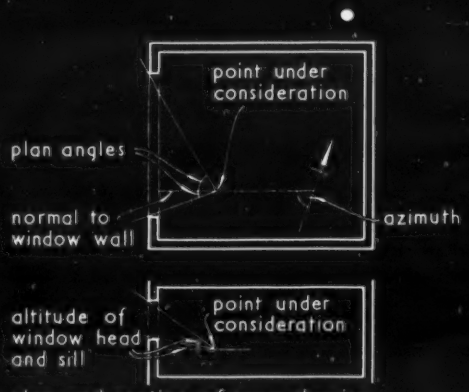
Address: Chapel-en-le-Frith, Derbyshire.
Telephone: Chapel-en-le-Frith 2520
Telegrams: Ferodo, Chapel-en-le-Frith, Buxton.

DESIGN DATA | APPARENT MOVEMENT OF SUN

The Architects' Journal Library of Information Sheets 750. Editor: Cotterell Butler, A.R.I.B.A.



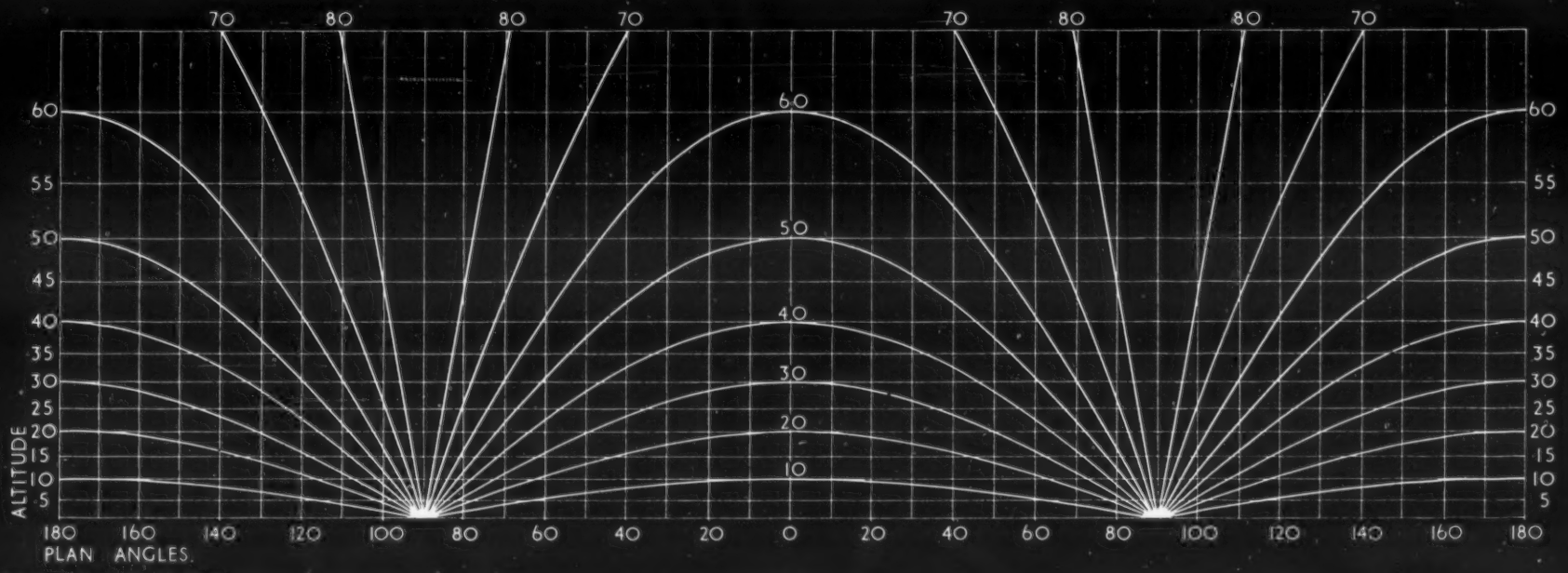
WINDOW OPENING PROJECTED ON TO SUN DIAGRAM.



plan and section of room showing method of projecting window opening

projection of window opening

EXAMPLES SHOWING USE OF DROOP-LINE DIAGRAM.



DROOP-LINE DIAGRAM.

APPARENT MOVEMENT OF SUN : ARCHITECTURAL APPLICATIONS : 2.

4.A3 APPARENT MOVEMENT OF SUN: ARCHITECTURAL APPLICATIONS, 2

This Sheet gives further applications of the diagram on Sheet 4.A2 and the two Sheets should be read in conjunction.

Duration of Insolation

To establish the duration of insolation on any day throughout the year for a given position inside a building, the outline of the window opening is projected on to the sun diagram on Sheet 4.A2. This is done by measuring the azimuth and altitude of significant points on the edge of the window, marking these points on the diagram and joining them to form an outline, as shown in the first drawing on the face of this Sheet. This demonstrates, for example, that the sun reaches the spot under consideration from 1 p.m. until 5 p.m. in June, but not at all in December. It will be noted that, although the vertical lines remain vertical, the head and sill of the window are curved.

Use of Droop-Line Diagram

The laborious task of plotting the curves, as described above, by taking sufficient points from the head and sill on the drawing, can be simplified by using the droop-line diagram shown on the face of the Sheet. The curved lines on the diagram represent the falling away of horizontal lines in perspective to the same scales as the sun diagram on Sheet 4.A2. The droop-line diagram is used as shown in the remainder of the drawings.

1. A line is drawn on the room plan from the point under consideration normal to the window wall.
2. The altitude of the head and sill are measured along the normal line.
3. The plan angles are measured between the normal line and the sides of the window opening.
4. A piece of tracing paper is placed over the droop-line diagram, the base and zero lines marked and the curves for head and sill traced (curves are given for each 10 deg. of altitude : intermediate curves can be interpolated). Verticals are drawn on the lines corresponding to the plan angles.
5. The outline obtained, a projection of the window, is then applied to the sun diagram as follows. It must first be laterally inverted and this can be done by turning over the tracing paper. The zero line is positioned over the azimuth line corresponding to the angle between south and the normal line on the plan.

Further Applications

The effects of external obstructions on the insolation of a given point inside a building can also be taken into account. Regular obstructions parallel to the window wall can be projected at the same time as the window. Those not parallel to the window wall will require a different normal line and the droop-line diagram used as before for the obstruction. The projection thus obtained is applied to the sun diagram at the same time as the projection of the window to give the final result. Irregular obstructions can be projected directly on to the sun diagram by measuring the altitude and azimuth of significant points. In addition to determining the insolation of points inside buildings, the foregoing system can be applied to open courts, playgrounds, etc.

Compiled from information supplied by Peter Burberry, A.R.I.B.A.

working detail

FOLDING DOORS: RESTAURANT IN COPENHAGEN

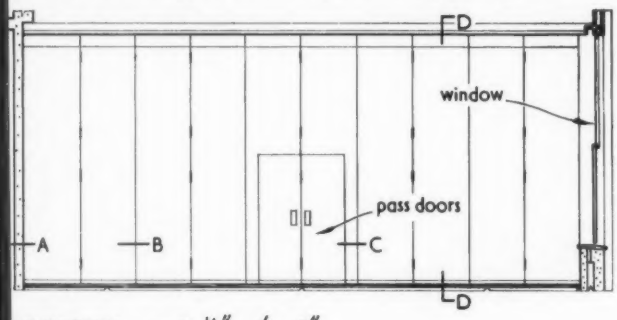
Eva and Nils Koppel, architects (material supplied by Alice Mylo)

To reduce sound transmissions rubber strips analogous to weather strips have been inserted into all edges of all panels. The main interest of these doors is, however, aesthetic. Note the use of black top rails and white bottom rails to emphasize the continuity between the doors and the walls.

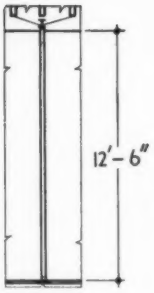
working detail

FOLDING DOORS: RESTAURANT IN COPENHAGEN

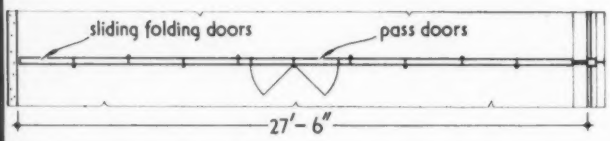
Eva and Nils Koppel, architects (material supplied by Alice Mylo)



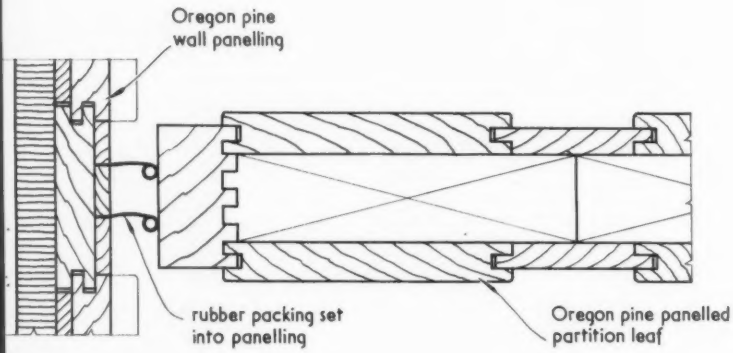
ELEVATION. scale 1/8" = 1' – 0"



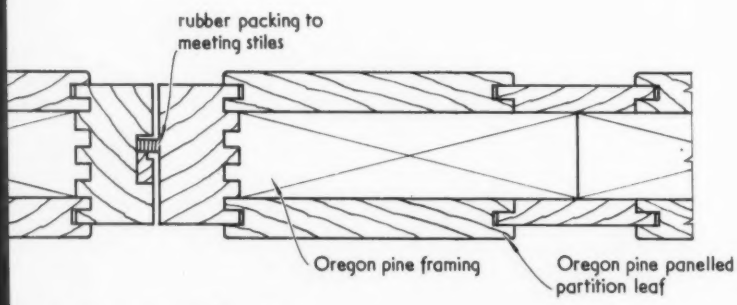
SECTION.



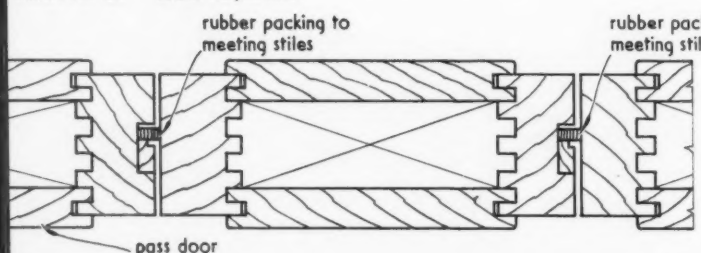
PLAN scale 1/8" = 1' – 0"



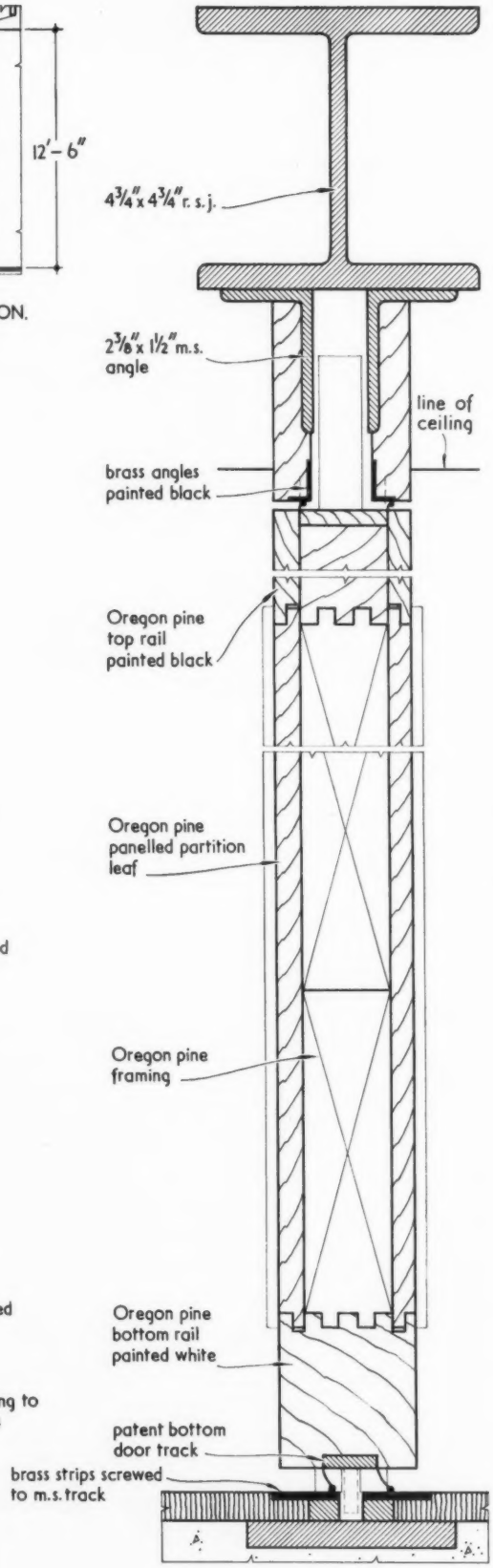
PLAN AT A. scale 3/8 full size



PLAN AT B. scale 3/8 full size



PLAN AT C. scale 3/8 full size



SECTION D–D. scale 3/8 full size

note: figured dimensions in feet and inches are approximate

Eros in Wonderland

by H. F. Ellis

with drawings by Gordon Cullen

From time to time I am stirred, like many another ordinary non-architectural member of the public, by one of those splendid development schemes. Here in front of me, propped up against the toast-rack, is a picture of St. Paul's looking very handsome in the middle of an open space reminiscent of the Piazza of St. Mark; or it may be the Barbican site or an entirely replanned Zoo. Sometimes the conception is bolder and I find myself gazing in excitement and awe at a great new highway on stilts spanning London from end to end, with Westminster Cathedral peeping out from one of its arches. "What London Will Look Like," my paper tells me underneath, and I believe it. It is true that if the picture is called "An artist's impression" I make certain reservations; the possibility occurs to me that the final completion date for the scheme may not yet be definitely fixed. But more often I am shown a photograph of a model, so solid and convincing that it is hard to credit the thing is not already built. Look at the detail! You can see the window-boxes, and little cars running along on the roof-tops, and perhaps a fountain or two playing. Here, clearly marked, is where Cheapside used to run, and that noble group of trees marks the site of, what it seems absurd to call, the existing pin-table saloon. Nobody, surely, would go to all that trouble unless the project were well under way? Each one of those trees, as anyone knows who has seen an actual model at Burlington House or the Royal Exchange, had to be specially made of a kind of green sponge.

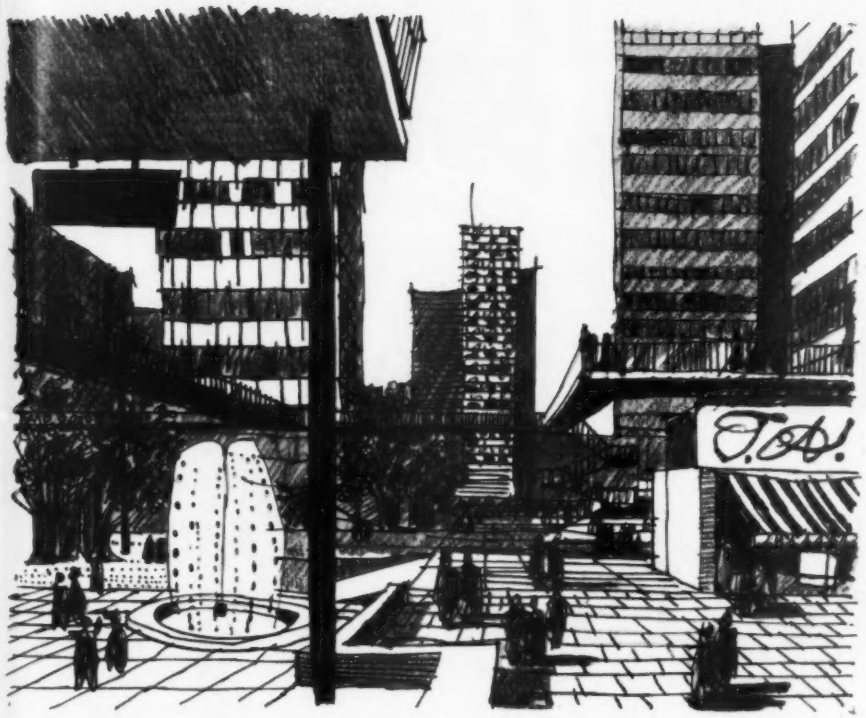
I suppose it is staggeringly naïve of me to get excited over these visionary plans. But I am not familiar with the processes, financial and otherwise, involved in clearing and developing a site, and when I read that Sir Somebody's design (above) was chosen from over thirty entries submitted by prominent architects or that Mr. So-and-so's imaginative scheme (below) has been approved by such and such a body, I make the ridiculous assumption that entries would not have been asked for unless the winning one was going to be used in some way, or that "approval" would not have been given unless there was at least a chance of the scheme's being carried out. Hence my amazement and sorrow when, some two years later, I open my paper and find that a totally different plan (left) has now been approved by some quite different body. It may or may not incorporate "the lofty campanile that was a prominent feature of Sir Somebody's original design." Probably not. In any case, it doesn't matter because this new scheme will at once be condemned, trees, swans, shopping precinct and all, as impractical, ugly, uneconomic, and likely to lead to traffic jams for twelve miles in every direction.

The next thing I shall hear about the matter will be that a great rectangular block of offices has already been erected just where the children's playground and Old Folk's recreational centre was to be.

Sometimes I feel that the näivety is not all on my side. To be a little more concrete, what was the point of the plans and models for a redesigned Piccadilly Circus produced by the LCC in October, 1958, when it now appears from the testimony of the LCC's own architect that nobody even in the LCC took the scheme seriously—apart, I suppose, from the devoted few in their ivory tower who actually produced it? "The conception of a master plan as the architectural solution for a complex area like Piccadilly Circus is highly improbable," observed Mr. Hubert Bennett, at the Ministry of Housing inquiry, after complaining that a great deal that had been written about the matter recently showed lack of understanding by the lay public and by members of the profession. As the layest of the lay I am bound to confess that I took the LCC's 1958 scheme, with its central piazza, raised walkways, highly original "pier" and bridge-building over Coventry Street, to *be* a master plan, and I readily plead guilty to a failure to understand that it was merely intended to amuse and distract me while the really important discussions went on as to whether Mr. Cotton's noble podium on the Monico site should be topped by a cruciform block or "a sort of squashed Y." There are even times, in my less inhibited moments, when I feel that if a real understanding of the complex issues involved (which is possessed, in Mr. Bennett's words, by only a small handful of "not very well known" people) leads to the erection of a building of the type proposed for the Monico site, then ignorance is indeed bliss.

What fun we shall all have, by the way, when the time comes for the next stage in the redevelopment of Piccadilly Circus (on the Trocadero site, I suppose) and everybody starts objecting to the proposed design on the grounds that it is not in keeping with the cosy character of the Cotton Building or spoils the view of that crane affair from the north-east. Only a *very* small handful of quite unknown architects will be applying for that job, I fancy.

Still, I am not qualified to pass architectural judgments. All that the layman can justifiably say is that the present procedure for replanning the heart of the capital of the Commonwealth is puerile. One doesn't need much "understanding" to see that. It is only necessary to read the evidence: to note the number of cooks who have a hand in this broth, the financial restrictions that hamper the LCC, the



THE ARCHITECT'S VISION . . .

What the new Liverpool Street Station will look like. An artist's impression.

difficulty that body has in discovering what its own committees are up to; to observe that this is impossible because " the developers " aren't satisfied, and that is impossible because of the " permitted plot ratio," and the other thing is impossible because of traffic plans (" We did consider bending Shaftesbury Avenue southwards," said Mr. Bennett in a fine phrase, " but the highway improvement lines were finalised three years ago "). What sort of a job would Ali Mardan Khan have made of the Taj Mahal if he had had the benefit of half-a-dozen sub-committees telling him where to put his minarets or ordering him to reduce the size of his central dome in case it frightened the elephants?*

One can see, of course, that it is easier to make a success of an isolated site than of a complex like Piccadilly Circus. The Acropolis at Athens would have been more of a problem if five or six roads had met in the middle of it, and if the Persians had not conveniently destroyed the " existing buildings " at a suitable moment in history. Still, every site has its difficulties. The very hill of the Acropolis had to be remodelled and its original ridge revetted by the

*It is true that the result might have saved Ali Khan from being put to death by his employer to ensure that he never designed a more beautiful building. But that is a risk not likely to be run by more than a *very* very small handful of architects.

. . . AND WHAT GOES UP

Final approved plan for the new Liverpool Street Station, subject to revision and amendment by the Minister of Housing, the LCC, British Railways Chief Architect, the Civic Trust, the Society for the Preservation of Old Railway Stations, the British Ornithological Union, etc., etc.

The cheapest central heating there is — SOLID FUEL

Cheapest Running Costs. A new generation of house hunters is insisting on central heating. They regard it as just as much of an essential as the water supply. It's as well then that *solid fuel* central heating has such rockbottom running costs. Look at the figures on the right: *no other fuel* can compare for cheapness with solid fuel.

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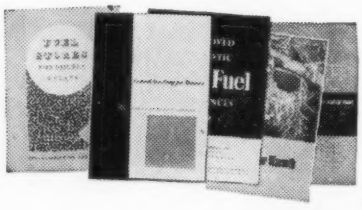
For Architects. "Central Heating for Houses." This 120-page survey of solid fuel central heating outlines the various systems available, from the open-fire-and-back-boiler to the latest small-pipe system. Copies 2/6 each. Write to the Coal Utilisation Council, 3 Upper Belgrave Street, London, S.W.1, for this booklet or any of the following publications: List of Approved Domestic Solid Fuel Appliances, Warmer Homes with Solid Fuel, Fuel Stores for Houses and Flats, Building for Warmth—all free; and for 1/6—Correct Fixing of Domestic Solid Fuel Appliances.



Compare the Costs! These are typical weekly costs, averaged over a year, for central heating and for hot water, summer and winter, in a three-bedroom house or bungalow. If you would like the data on which these figures are based, write to the Coal Utilisation Council, 3 Upper Belgrave Street, London, S.W.1.

CUC

	6 or 7 radiators and hot water ▼	2 or 3 radiators and hot water ▼	
COKE	**£9 per ton**	**9/9d**	**15/-**
SMALL ANTHRACITE	**£12 per ton**	**—**	**14/1d**
GAS	**1/4d therm** plus, say, 2/8d week standing charge	**16/1d**	**23/6d**
ELECTRICITY	**1d unit** (No standing charge included)	**18/2d**	**29/10d**
OIL	**1/5½d gallon**	**12/10d**	**22/8d**

THE BUILDING OF THE PROPYLAEA

erection of great walls to the north and the south. A piece of ground required by Mnesicles for the southern wing of his Propylaea turned out to be sacred to Artemis Brauronia (one can imagine the Society for the Preservation of Sacred Precincts giving evidence at the inquiry) and could not be built on. There must have been a great deal of argument, on all sorts of matters, in the many years that elapsed between the preparation of the site in the days of Themistocles and Cimon and the completion of the Parthenon in 432 BC. But the difficulties were overcome. Mnesicles, for instance, did not compromise his design for the Propylaea he simply stopped the southern wing short when it reached the sacred precinct—in the hope, no doubt, that a different "climate of opinion" would allow him to complete it later on. If there was any public outcry that the new Acropolis lacked the garish vulgarity and cosiness of its fifth-century predecessor, it seems to have been effectively suppressed—unless indeed one cares to suppose that it was to satisfy this demand that the great statue of Athene was made of ivory and gold and brightly coloured paint was applied to the scuptures on the pediment and frieze of the Parthenon.

What an uninstructed layman cannot help feeling about the fact that the Acropolis was redeveloped to a coherent plan by such a chattering crowd of individualists as the Athenians, is that there was a controlling body powerful enough to insist on treating the site as a site and wise enough to give as free a hand as possible to the best men. It may have been sheer luck that the "controlling body" was Pericles and the best men happened to be Ictinus, Pheidias and Mnesicles. But it was not sheer luck that they knew what the aim was, and that each knew what the other was doing.

Piccadilly Circus is far from being a national shrine, and Eros would be uncomfortable surrounded by temples. But it has its importance. It is at least as worthy of being treated as a whole as, say, the Elephant and Castle. And that is what the LCC seems to lack the power to do. It seems, unless I utterly misread the evidence, to be able to cope only with a little bit at a time—and even that only with the greatest difficulty. Wouldn't it be better then for the LCC, which presumably wants to have the finest possible Circus, to admit that the problem is beyond them, to say frankly, "We haven't the money or the powers, we are too hedged in by restrictions and plot ratios, too harassed by highway development lines, too badgered and bewildered by the demands of 'developers,' by architects who are too well known to be any good, by the Civic Trust and the Anti-Uglies and the Royal Fine Art Commission, not to mention the lay public who write without understanding—in short, this is a national problem and ought to be handled as such. Let the Government, who have the money and the powers, take it on"; would it not be, on the whole, better if the LCC were to say some such thing?

I don't know. I suspect I am being hopelessly näive again in suggesting that the replanning of an area can be undertaken ministerially. The thing will drift on no doubt to some final piecemeal solution, full of wise compromises between the planned and the profitable, the garish and the cosy. Some sort of ceremony will mark the removal of Eros to facilitate traffic flow. And in his place, for all I shall care, they can let in a plaque, bearing the inscription

Si monumentum requiris, circumspice,

which may be roughly translated "If you want to see a monumental mix-up, look at this Circus."

NEWS

In Brief

The result of the competition organized by the Glass Benders' Association for the use of bent glass in shopfront designs is as follows: Part (*a*), First, Leonard Daniels, A.R.I.B.A., Stoke-on-Trent; Second, Christopher Read, A.R.I.B.A., Teddington; Third, David H. White, Weston-super-Mare; Commended, Malcolm G. Baird, Crawley. Part (*b*), First, Richard Charles Burley, Hastings; Second, D. C. W. Vane and G. D. Baker, A/A.R.I.B.A., Canterbury; Third, Leonard Daniels, A.R.I.B.A., Stoke-on-Trent: Commended, James Harbinson, East Dulwich and D. C. W. Vane and G. D. Baker, A/A.R.I.B.A., Canterbury. The designs will be on show at the Building Centre from January 26 until February 6.

The Michael Ventris Memorial Fund Award, value £100, will be awarded to an architect or student of architecture in 1960 for the study of Mycenæan civilization. Applications should be submitted to The Architectural Association, 34, Bedford Square, London, W.C.1, not later than February 1, 1960.

The case for the Civic Trust at the Piccadilly Circus Inquiry was concluded last week. In this issue we report the evidence of Noel Moffett on behalf of 302 teachers of architecture, of H. T. Cadbury-Brown on behalf of the Council of the Architectural Association, Peter Chamberlin, the designer of the Barbican housing development, of Thomas S. Dulake, a chartered surveyor (who discussed the economics of alternative layouts and presented a case for the comprehensive development of a far wider area, including Soho), Professor John Grace, of Tulane University, New Orleans and Osbert Lancaster.

PICCADILLY CIRCUS INQUIRY

Case for Comprehensive Development and Creative Design

Noel Moffett, senior lecturer in achitecture at the Kingston School of Art, said that he represented 302 architects who were heads and teaching staff at some 18 schools of architecture. These were the Bartlett, the AA, Northern Polytechnic, Brixton Polytechnic, Hammersmith, Kingston, Oxford, Birmingham, Liverpool University, Manchester University, Manchester College of Art, Bristol, Nottingham, Canterbury, South-west Essex, Sheffield University, Edinburgh College of Art, Glasgow.

Mr. Moffett's principal submission was that while collaboration with the officers of a local authority, considerations of plot ratio, site profile, building lines, lights of right, etc., were all extremely important in the evolution of a design, they were not nearly enough. A fine architectural conception in the mind of the man responsible for the design of the building had to dominate and control the whole evolutionary process. Architecture was a creative process, and the "have a go" system was not architecture. If the day of creative design by a single man was over, so was architecture.

Piccadilly Circus in the future, as envisaged by Mr. Moffett, would be a raised pedestrian piazza as large as Trafalgar Square, 18-ft. above the traffic, with advertising completely separated from the buildings and disposed on treillages in the piazza. He also proposed the appointment of a Royal Commission to ensure the adequate study of this and other similar civic areas.

Ramsay Willis, Q.C., asked Mr. Moffett to agree that, whereas 19th century architecture reflected the personality of the architect, today important buildings were the products of groups of architects, but Mr. Moffett thought that what was missing in this case was an overall architectural conception.

Peter Chamberlin, the designer of the Barbican Redevelopment Scheme, compared Piccadilly's traffic problem to the railway traffic at Clapham Junction; yet for many generations nobody had thought of continuing to mix pedestrians and trains in the way that it was still thought inevitable to mix pedestrians and motors. By thinking in terms of a new dimension in town planning in Piccadilly Circus the traffic and servicing problems would be solved, and the Circus could become a far more agreeable place for people on foot.

"My objection to the present development as proposed," he said, "is that the approach to the problem of replanning Piccadilly Circus has been on too small a scale, that no adequate plans exist to solve the traffic problem in the future, that the pedestrian is not going to come into his own. The building is misguided primarily because it represents what I think of as piecemeal development which is bad in itself, and doubly bad because it will inhibit perhaps for 100 years the opportunity to create the sort of urban centre which Londoners deserve. Even if the intended building were a fine example of the art of architecture—which I do not regard it as being—I should be opposed to it because it is not designed as part of what should be a very significant open space which can be comprehended at a single glance, and which, therefore, should be conceived and designed as a whole."

Comprehensive development should make it possible to obtain control over all property rights and other interests so that (*a*) the practical problems of circulation and servicing buildings can be solved, and (*b*) so that the actual buildings and the architecture would collectively form something more than an agglomeration of individual buildings.

He accepted the "to-ing and fro-ing" as inseparable from planning and control, but he did not accept that it was impossible in those circumstances to appoint either a

DIARY

One-Day Course on Practical Fire Protection. At the RIBA, 66, Portland Place, London, W.1. 10 a.m.

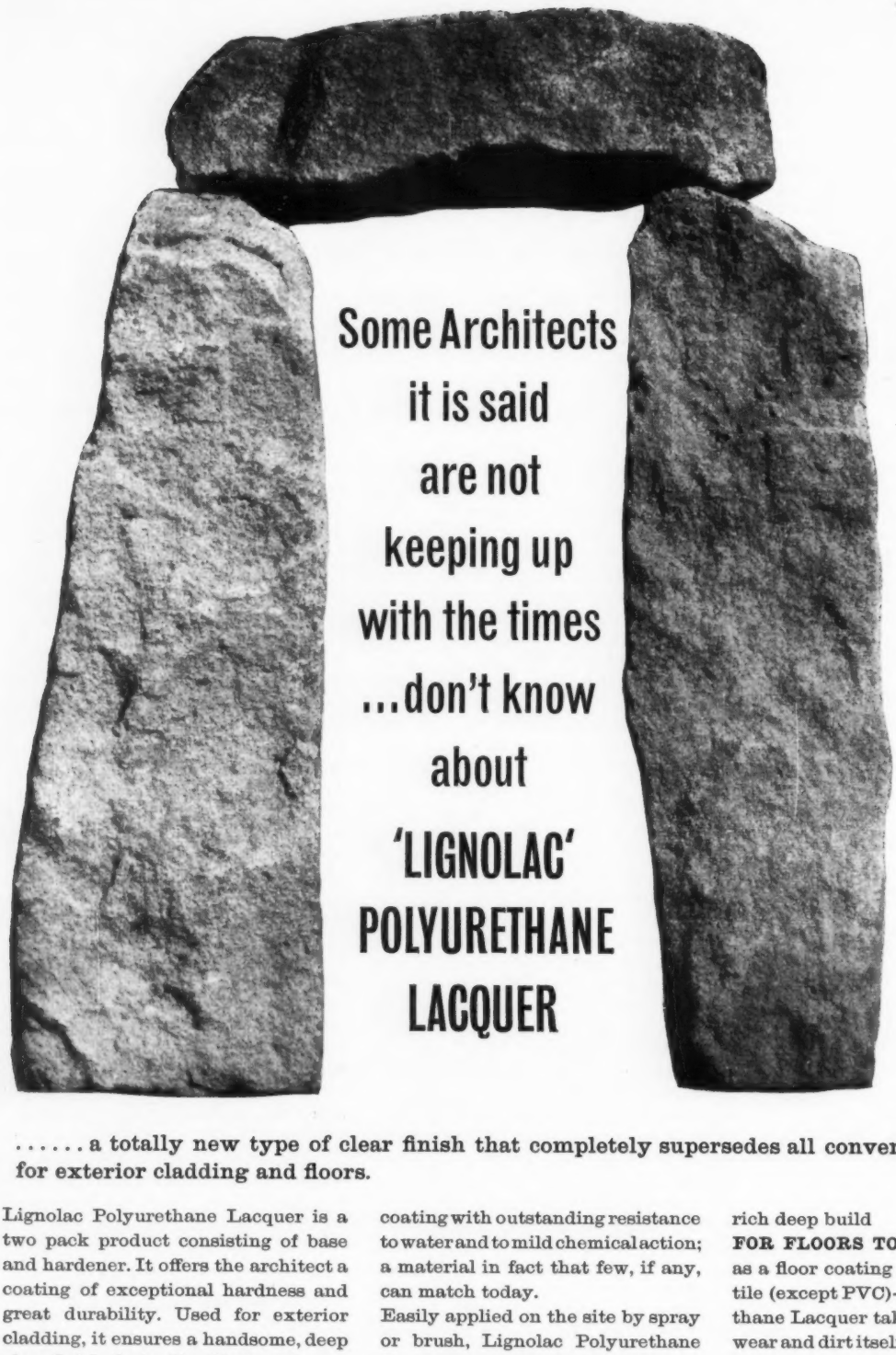
JANUARY 27

Vitruvius Go Home. Talk by Dr. Reyner Banham at the AA, 34/36, Bedford Square, London, W.C.1. 8 p.m.

JANUARY 27

High Buildings. An illustrated talk by Professor Robert Matthew at the RICS, 12, Great George Street, London, S.W.1. 5.45 p.m.

FEBRUARY 1



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single architect, or a group of architects who were sympathetic in their way of working, and giving them their head. In the Barbican he and his partners had been able, despite all the to-ing and fro-ing, to arrive at a total architectural concept. The Barbican was war damaged and Piccadilly was not; but if it took war to make these things possible it did not say much for our society.

The architect's duty

Where the limiting conditions were so severe that no architecture could result it was the job of the architect, and of the planning authority, to say so in no mean terms and to alter the conditions. "You must decide, first of all, what is desirable in the broadest terms, and then, if there are some obstacles, you must think of ways and means of getting over them, and I am sure they exist.

Mr. Stewart Brown asked if Mr. Chamberlin agreed with Mr. Bennett that there was "only a small handful of professional people" who understood all the implications of planning and could obtain a good architectural answer. Mr. Chamberlin replied "It may or may not be true. But I would like to say that only a very few have had an opportunity to solve them. I personally think that if more people were called upon to tackle these problems they would find they were able to solve them."

H. T. Cadbury-Brown, the President of the Architectural Association, who had been authorized to object to the proposed building by a unanimous resolution of his Council, said that he and many other architects had been aghast at the proposals for the Monico building when it was illustrated in the Press. It seemed that there was nobody, town planning, local authority or other, who seemed concerned with the architectural quality of this building, or the fact that its erection implied that the comprehensive development proposed and published by the LCC had been jettisoned for piecemeal development. He therefore asked architects to sign a letter (published in the ARCHITECTS' JOURNAL for December 24).

"Architecture is a positive thing" said Mr. Cadbury-Brown. "And not what is left over after a study of light angles. We are surely the masters of our environment, and the opportunity now exists during the next few years to make a positive contribution to London architecture and town planning. But by accepting this proposal and the resultant piecemeal development, we are deliberately accepting the second-rate. This inquiry is a turning point. If we show courage, not only London but many other towns will take heart. We shall show that something new means also something better."

Thomas S. Dulake, F.R.I.C.S., senior partner in Gerald Eve and Company a firm of surveyors, gave evidence, after a protest by the developers had been overruled, that even if the advertising area was substantially reduced there would still be a satisfactory profit for the developer. He estimated the value of the completed building at £4,064,000 (on an assumed rental of £254,000) and of the signs at £2,880,000 (on an assumed rental of £360.000), giving a total capital value of £6,944,000. He estimated the cost of construction, at 8s. 3d. a cube foot, at £1,525,000, and the value of the site at £3 million (at £100 a sq. ft. or £4,350,000 an acre). That left a profit to the developer of £2,419,000. If advertising above 100 ft. were excluded the profit to the developer would be £1,259,000.

Mr. Dulake also estimated the profitability of two alternative schemes for a 6-7 storey building, one based on the site as it now stands, another on the site with its frontage extended further east, assuming a plot ratio of 5 to 1. In the first case he estimated the developers' profit at £2,313,000, and in the second £2,345,000. He believed that a higher rent could be charged for signs if the lettable area was smaller, and he also considered that the signs on the upper part of the building were less valuable than signs on the lower part. He estimated the cost of a low building at 7s. 6d. a cubic foot.

Sir Milner Holland pointed out that Mr. Crickmay in his evidence for the developers had given the cost of acquiring the site at £4 million and the cost of constructing the building as £3 million.

Comprehensive development would pay

Mr. Dulake handed in a plan outlining a 14-acre area that should, in his view, be designated an area of comprehensive development because it would be affected by the redevelopment of Piccadilly Circus. But he emphasized that this would be only the first phase: the greater part of Soho was crying out for redevelopment, and he suggested that an area of comprehensive development should extend as far north as Oxford Street and as far east as Kingsway. Redevelopment, and the compulsory purchase of part, if not the whole, of the area would be economically sound, and would pay for itself. It would ensure that the increase in land values that would come about would not wholly go to existing freeholders. He did not think it was right, for example, that the present landowner of the site of St. Peter's Church in Windmill Street, the value of which would be increased many times when the London Pavilion was demolished and the site fronted on the Circus, should enjoy that kind of increment.

Stewart-Brown, QC, for the LCC, cross-examined Mr. Dulake on the difficulties of comprehensive development. First, he suggested, comprehensive development would involve a loss of theatres, to which Mr. Dulake could not agree. Then it was suggested that to leave the seven theatres in the area would make a great incision into the CDA: Mr. Dulake replied that in principle what could be left should not be disturbed, but that the greater need was a proper layout for the area. New theatres, he believed, could be economically fitted into redevelopment.

Mr. Stewart-Brown suggested it would cost nearly £1 million to rehouse well over 200 families: Mr. Dulake could not see why flats could not be included in the redevelopment. The cost of acquisition, clearance, compensation and rehousing was estimated by the LCC, said Stewart-Brown, at £50 million, and the value of the land available for redevelopment would only be £25 million. Mr. Dulake did not accept the figures, but thought the site value would be around £40 million. He was convinced that the operation would be financially self-supporting.

Why forsake principles?

Mr. Stewart-Brown suggested the type of trader in the area could not afford the rental of a new shop. Mr. Dulake replied that the shops would "let on the drawing-board," particularly if there was a large pedestrian shopping precinct behind the Monico site. The development could only be carried out, however, if the whole of the land was acquired either by the local authority or a public trust.

Mr. Stewart-Brown suggested, too, that Piccadilly was very different from Knightsbridge (which is to be designated for com-

prehensive development) because 90 per cent. of the Knightsbridge area is in the ownership of one freeholder who is anxious to redevelop. Mr. Dulake: "That is surely not a reason why you say 'it is easy in Knightsbridge; it is more difficult in Piccadilly Circus. Let us forsake our principles.' I think it is a matter of principle. If it is the wish of the LCC to see this area is developed in the best possible way, that is the way they would choose to do it. If they are prepared to have a second-rate scheme, then they will not bother."

Osbert Lancaster, appearing for the Westminster Liberal Association, had two objections: the unrestricted space for advertising on the tower would repeat the worst excesses of Times Square in New York, plonked down in the middle of London: and it seemed ridiculous when a rational scheme for the area had been devised, and a great deal of time, energy and ratepayers' money spent on it, to let the first building to go up in the area knock the scheme sideways.

Lord Conesford, the President of the Architecture Club, gave evidence to deny the suggestion made in cross-examination by Sir Milner Holland that he had been "lobbied" by Mr. Cadbury-Brown. "I cannot think who would have raised an agitation in the autumn," he said, "if it was not myself, because as far as I know I took the earliest action that was taken, and as I certainly did not raise an agitation I should certainly be surprised to hear that somebody else did."

Design by ghosts

John Grace, Professor of Architecture at Tulane University, New Orleans, an American who was trained at the Bartlett School and formerly practised in this country, said: "what we have witnessed is the most barefaced piece of design-by-default within decades. To date it would appear that no single person is capable of assuming responsibility for the whole building. We can leave this matter by saying that this building was designed by ghosts, with ghosts, for ghosts.

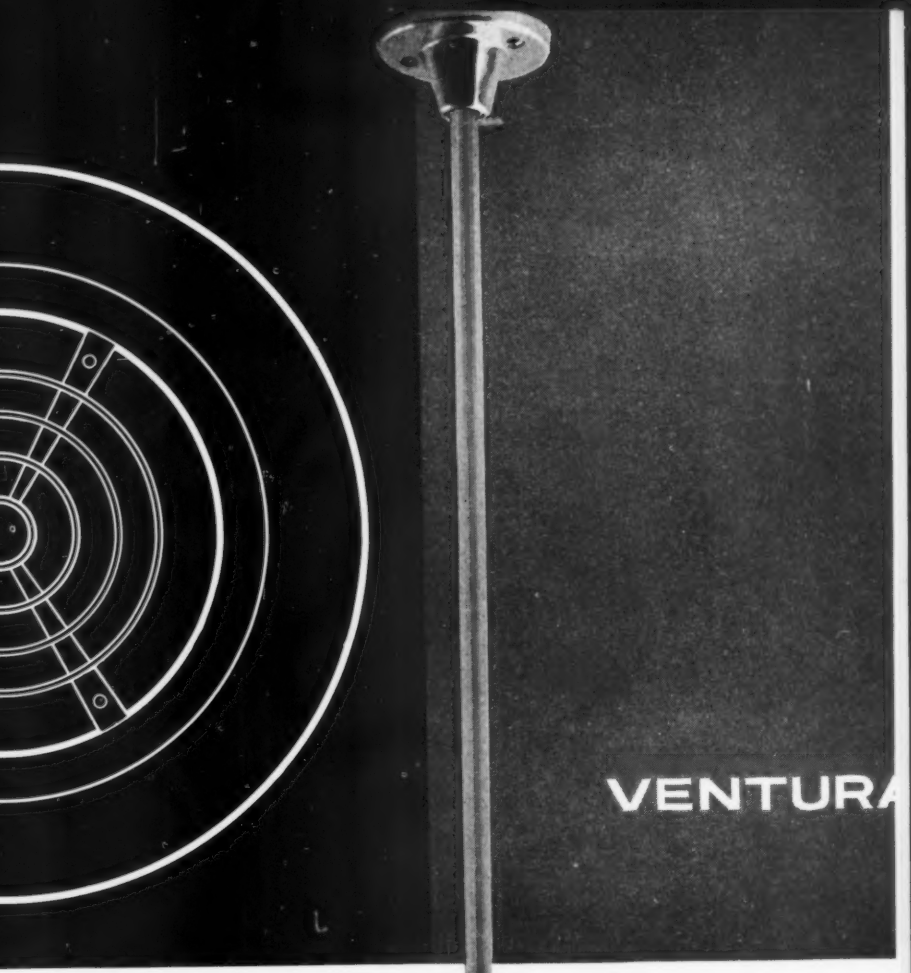
"This is the crux of the whole matter. Are we going to have our buildings designed by architects or 'puppet' architects? We still do not know who was responsible for the basic architectural concept. All we have are Mr. Booth's conjectures as to how it grew into the shape it did, and Mr. Bennett's explanations of what could not be done . . . the familiar pattern of argument so freely advanced by the weak student 'because of so-and-so, and thus-and-thus and so-and-so, it simply had to be that way.' Personally I think this is a inadequate approach to design.

"It is not yet fully realized by the majority of people in England what really drastic measures are going to have to be taken to relieve traffic congestion in the heart of English towns and cities. Anyone coming from the US cannot fail to be struck by this fact. Sir Howard Robertson is aware of this fact, and admits that he does not see any particular answer for Piccadilly Circus. Yet he denies the necessity of giving this matter any real consideration in regard to this building. Why does he lay such stress on the difficulties old people and children would have in using escalators, or moving staircases? Will they be better off trying to dodge the traffic in the street?

Why inflict advertising?

"I think it is time somebody seriously questioned what has so far been taken for granted, namely that advertising, as such, in the form of electrical signs depicting trade names, slogans and 'picture' designs should be permitted on the main facade of any new building in Piccadilly Circus. We should ask ourselves by what right does the owner of a piece of property inflict his or someone else's wares on the general public. The public, I submit, does not come to see the advertisements. It comes to see the lights. Why should the lights be in the form of advertisements at all?

"It is perhaps not generally recognized in England to what extent it is now accepted in the US that good building design is the best advertisement that anybody can possibly have. I suggest to Mr. Jack Cotton and his development group that they offer a challenge to the architects of Britain in the shape of a competition for a building truly worthy of their capacities. The programme of the building would specify that light would form an integral plastic element in the design. Needless to say, the total design of the building would be subject to a comprehensive development plan by the LCC."



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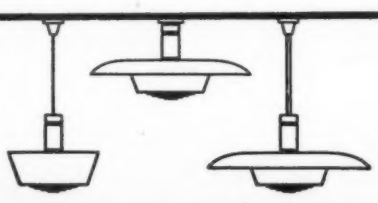

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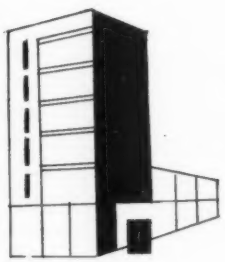

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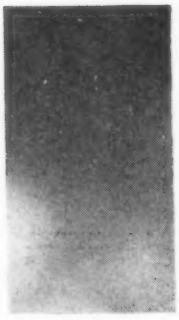

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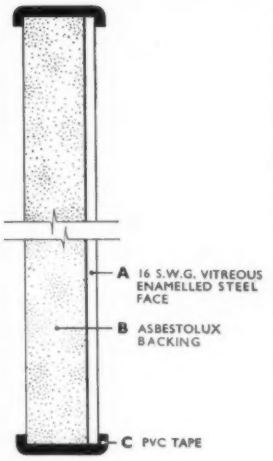

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'U' Value	Weight per sq. ft.	Panel Thickness	Core Thickness
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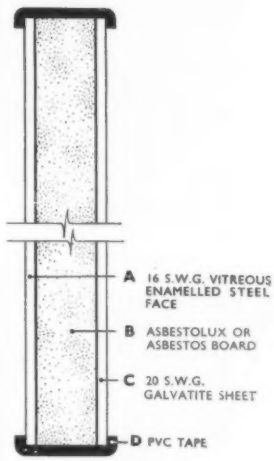
.503	4 lb. 1 oz.	$\frac{9}{16}$″	$\frac{1}{2}$″
.422	4 lb. 11$\frac{1}{4}$ oz.	$\frac{11}{16}$″	$\frac{3}{4}$″



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'U' value	Weight per sq. ft.	Panel Thickness	Core Thickness
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.500	6 lb. 0 oz.	$\frac{5}{8}$″	$\frac{1}{2}$″
.422	6 lb. 14 oz.	$\frac{7}{8}$″	$\frac{3}{4}$″

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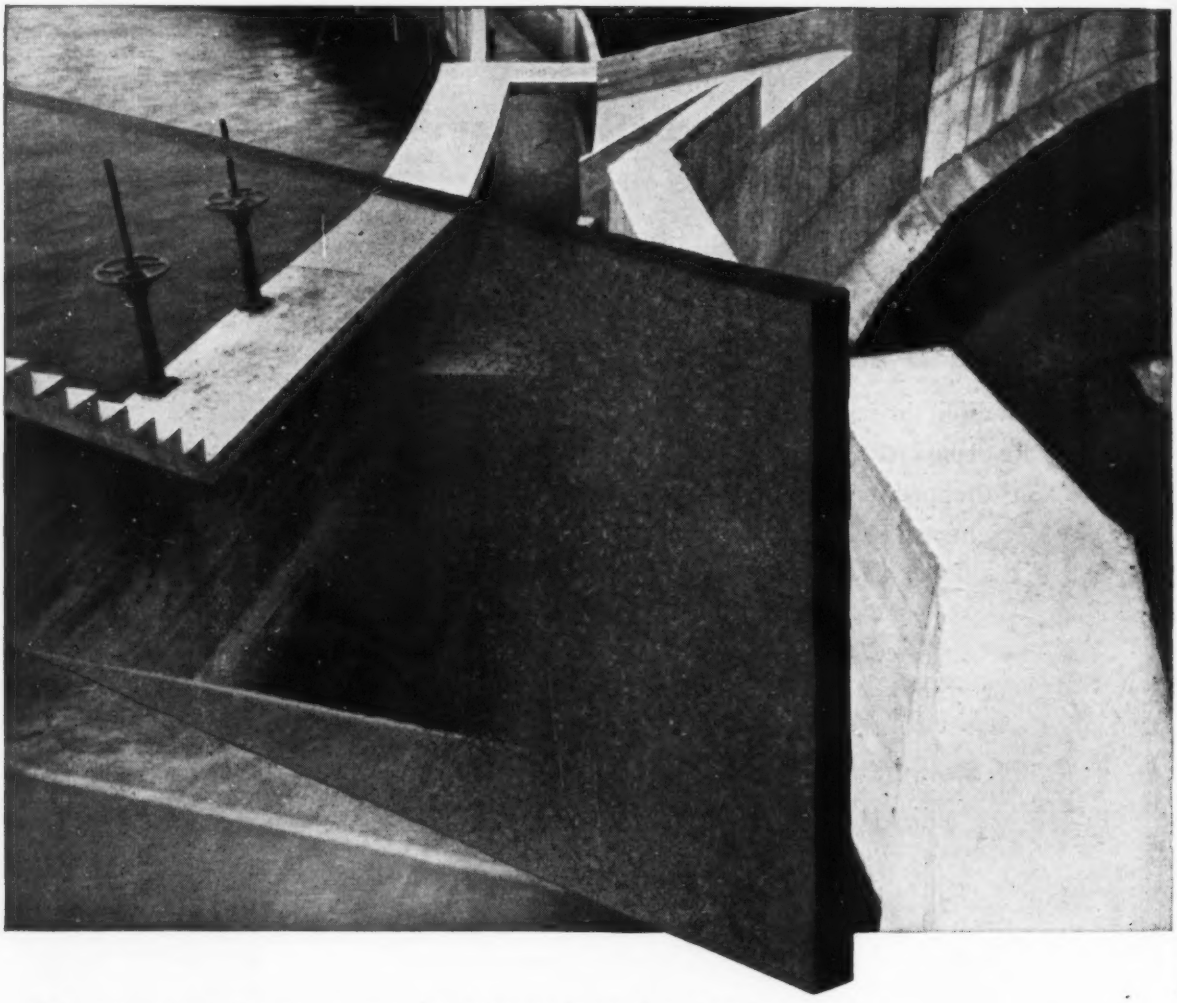

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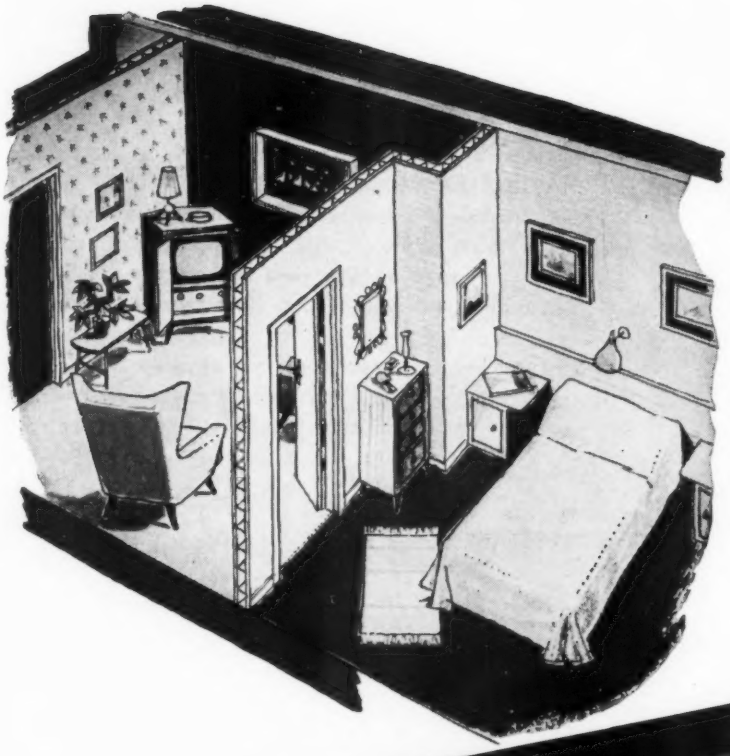

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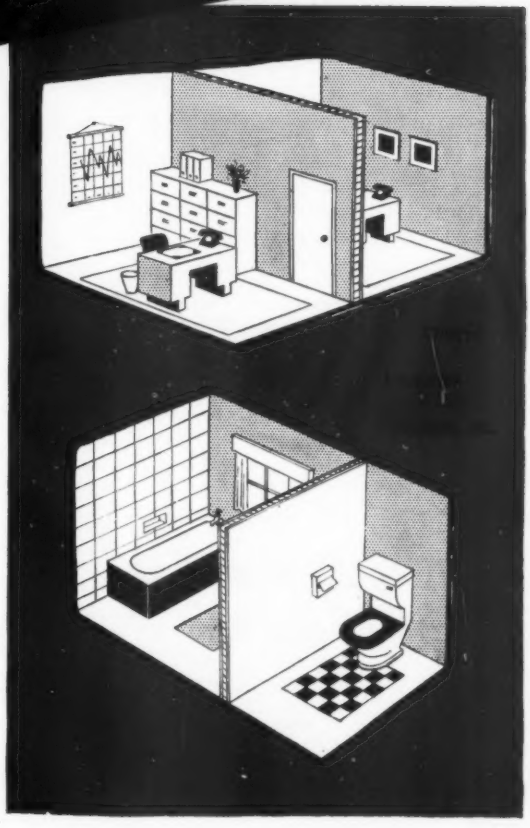

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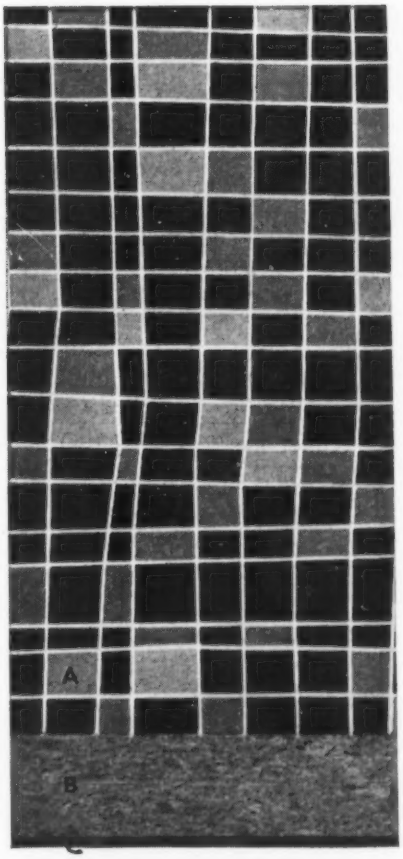

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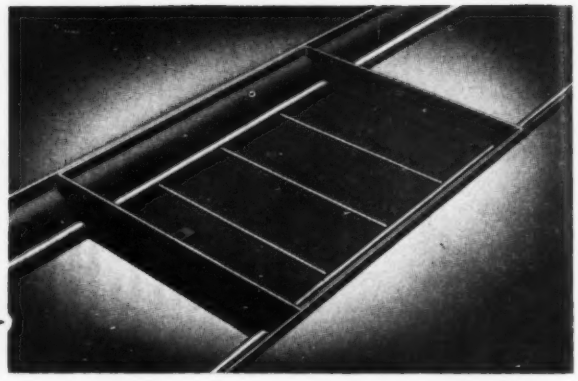

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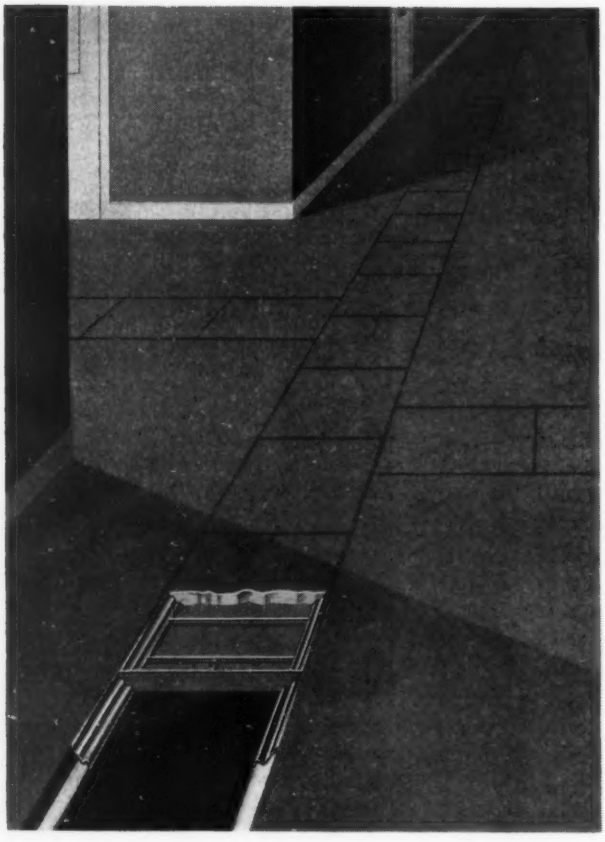

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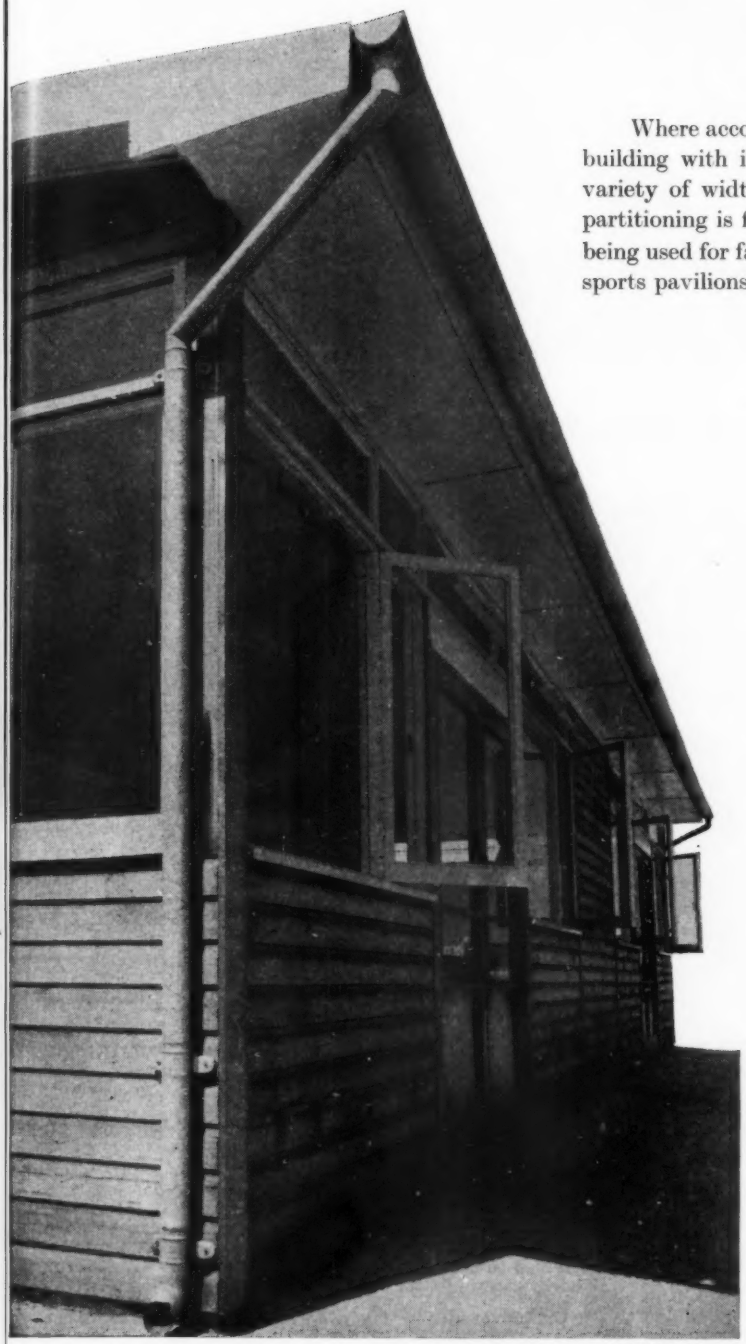

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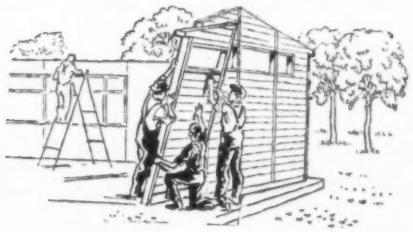

The latest Hall's demountable buildings although as durable as permanent buildings get their title of "demountable" because advanced factory prefabrication makes it possible to remove them from one site to another as need arises without even disturbing wall or ceiling linings. Prefabrication also avoids many site, foundation and labour costs. Maintenance costs are also negligible because the buildings are clad in Hall's Clear Grade anti-rot Western Red Cedar which needs no painting, creosoting or preservative.

To these advantages is now added the Hall's erection service which in normal cases can offer "from foundation to occupation in six weeks".

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CANTEENS · RECREATION HALLS ETC.

✻ **SEE THE COLOUR FILM.** A 16mm. 30 minute documentary colour film which shows in detail the erection sequence and the adaptability of Hall's demountable buildings for varying sites can be made available by arrangement.

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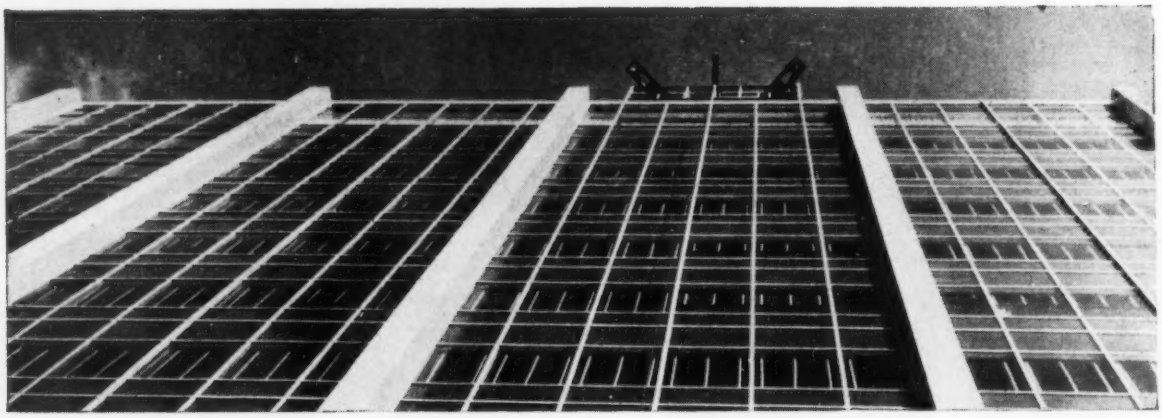

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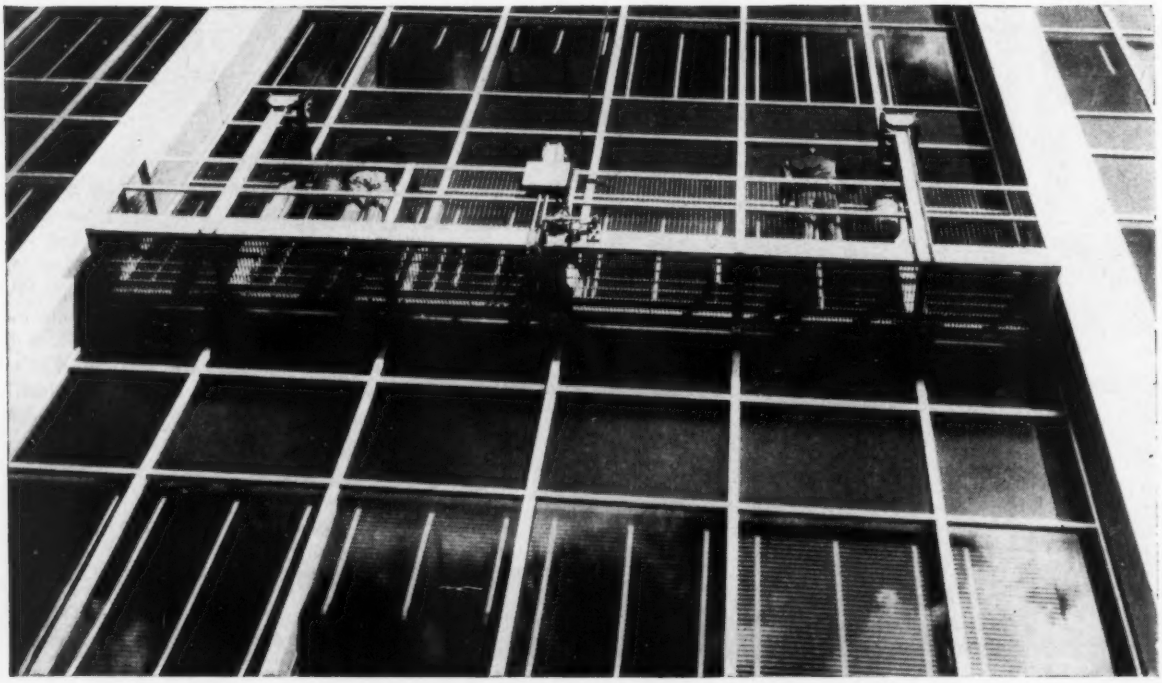

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For buildings up to six storeys high, angulated cable versions are available.

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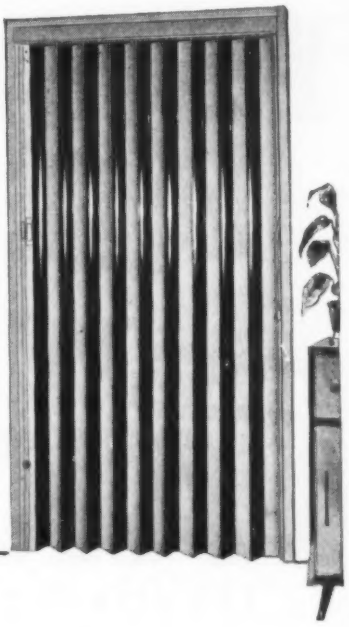

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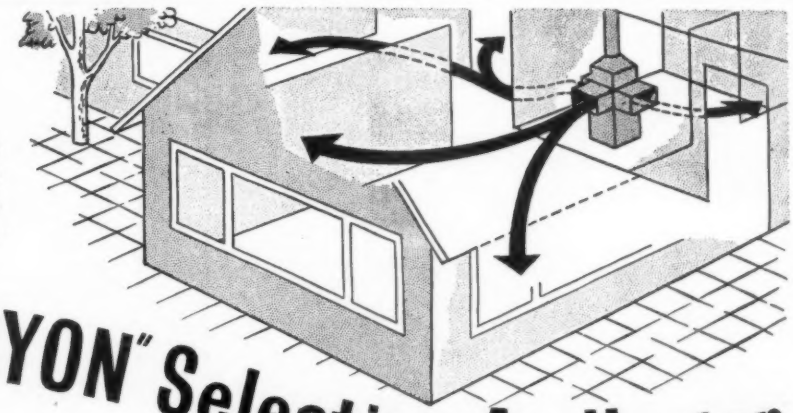
is just one of the good reasons why more and more architects have discovered the many technical and practical advantages of the



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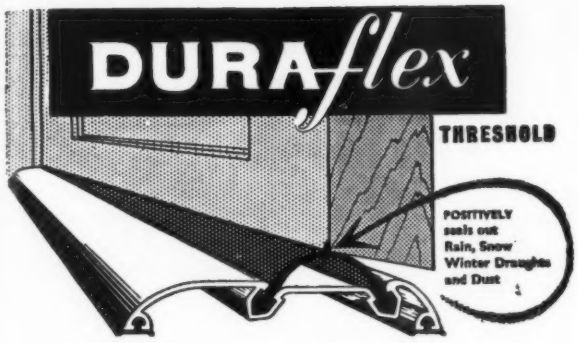

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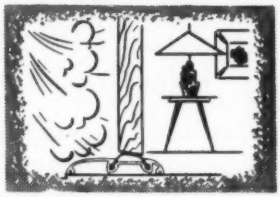

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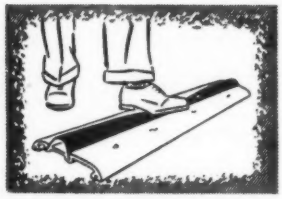

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The Thinker from "The Gate of Hell", Rodin, Bronze, 1879-1900

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CLASSIFIED ADVERTISEMENTS

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

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

AIR-MAIL SERVICE available on request:
In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 5s. for four weeks (1s. 3d. for each additional week) and prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

Public and Official Announcements

36s. per inch; each additional line, 3s.

BUILDING SURVEYORS

Architect's Department, L.C.C., has vacancies in Building Regulation Division and District Surveyors' Service for work in connection with applications under London Building Acts and bye-laws. District Surveyors' offices are located in Metropolitan Boroughs and work involves negotiations with developers and supervision of works in progress.

Up to £1,135, commencing according to qualifications and experience. Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council, EK/111/59, County Hall, S.E.1. (2628.) 7132

METROPOLITAN BOROUGH OF CAMBERWELL
ASSISTANT ARCHITECTS
(Borough Architect's Department)

Vacancies for Assistant Architects within a salary range of £795 to £1,485. Grade and commencing salary according to qualifications and experience. The work of the Department includes design and construction of public buildings, housing estates, including multi-storey construction.

One appointment is the head of a section responsible for the design and erection of public buildings. The salary for this post is lettered Grade "B" of the Chief Officers' Scales—£1,265 by four increments of £55 to £1,485.

Application form from Town Clerk, Town Hall, S.E.5. Closing date 25th January, 1960. 7526

BOROUGH OF LEYTON

(Municipal Borough in the County of Essex. Population approximately 100,000).

BOROUGH ENGINEER'S DEPARTMENT

Applications invited for appointment of ASSISTANT ARCHITECT at a salary within the scale of £785 per annum rising to £1,070 per annum (plus London weighting) in accordance with the provisions of the National Scheme of Conditions of Service for Local Authority Staffs (Special Classes).

Housing accommodation will be made available to successful applicant if required.

Five-day week is operated.

Apply by letter to Borough Engineer, Town Hall, Leyton, E.10 (giving names of two referees), not later than Monday, 1st February, 1960.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10. 7737

BOROUGH OF WATFORD

Watford is a pleasant, thriving town in South West Hertfordshire, in the Green Belt and with easy access to the open country. Although within easy reach of London it has a distinct civic consciousness and cultural, shopping, educational and transport facilities are excellent.

The Corporation has a large number of projects in hand and envisaged, including Swimming Bath, Library extensions, Multi-storey buildings, Flatted factories and housing and expansion of the Borough Engineer, Surveyor and Architect's Department is contemplated to handle these schemes.

Applications are invited from suitably qualified candidates for:—

(*a*) ASSISTANT ARCHITECTS. Salary within Grade Special + £70 per annum Special Responsibility Allowance. (Maximum salary £1,140 per annum.)

(*b*) ARCHITECTURAL ASSISTANTS. Salary within Grades II-III A.P.T. (£765—£1,065).

(*c*) ARCHITECTURAL ASSISTANTS. Salary within Grades I-II A.P.T. (£610—£880).

Assistants appointed to posts (*a*) will be Section Leaders for various projects and will carry a considerable amount of responsibility.

Commencing salaries will be commensurate with experience and ability and housing accommodation will be provided for those requiring it.

Applications to be sent to the undersigned not later than 27th January, 1960.

F. C. SAGE,
A.M.I.C.E., M.I.Mun.E., Reg. Architect.
Borough Engineer, Surveyor & Architect.

Town Hall,
Watford.
Herts. 7696

NEW ZEALAND MINISTRY OF WORKS
ENGINEERING STAFF

The New Zealand Ministry of Works invites applications for the following vacancies on the Permanent Staff. Positions, qualifications desired and salaries offered are as follows:—

Vacancy No. 1. CIVIL ENGINEERS.

Corporate Membership of the Institution of Civil Engineers, London, together with sufficient appropriate experience. Commencing salaries up to £1,525 p.a.

Vacancy No. 2. ASSISTANT CIVIL ENGINEERS.

A University Degree in Civil Engineering, or Graduate Membership of the Institution of Civil Engineers, London, with at least five years of practical experience since commencement of pupilage. Commencing salaries £870 up to £1,060 p.a.

Vacancy No. 3. MECHANICAL OR ELECTRICAL ENGINEERS.

Corporate Membership of the Institutions of Mechanical or Electrical Engineers, London, together with sufficient appropriate experience. Commencing salaries up to £1,525 p.a.

Vacancy No. 4. BUILDING SERVICES ENGINEERS.

Corporate Membership of the Institution of Heating & Ventilating Engineers, London. Commencing salaries up to £1,450 p.a.

Vacancy No. 5. ASSISTANT MECHANICAL OR ELECTRICAL ENGINEERS.

A university Degree in Mechanical Engineering or Graduate Membership of the Institutions of Mechanical or Electrical Engineers, London, together with at least five years' experience since commencement of pupilage. Commencing salaries £870 up to £1,060 p.a.

Vacancy No. 6. ASSISTANT BUILDING SERVICES ENGINEERS.

Graduate Membership of the Institution of Heating & Ventilating Engineers, London, with at least five years' experience since commencement of pupilage. Commencing salaries £870 to £1,060 p.a.

Experience is necessary in the design and installation of services or equipment for one or more of the following: heating and ventilating, air conditioning, hot and cold water or sewerage services, laundries, kitchens, boiler-houses, lifts and other mechanical services in offices, schools, hospitals, hotels, telephone exchanges, printing works, defence establishments, etc. All appointees will be required to undertake work of this nature.

Applicants must be resident in the United Kingdom or Eire and have fulfilled National Service obligations.

Enquiries, mentioning this publication and stating the Vacancy Number and the position sought, should be addressed to the High Commissioner for New Zealand, 415, Strand, London, W.C.2. Full details of duties, experience required, general information on the conditions of employment in the New Zealand Public Service and application forms will then be supplied. 7500

AIR MINISTRY Works Designs Branch requires in LONDON and Provinces, ARCHITECTURAL ASSISTANTS with adequate training and drawing office experience. O.N.C. (Building) an advantage. Work includes site layouts, sketch plans, working drawings and details for variety of technical and domestic buildings in permanent and semi-permanent construction. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. Five-day week with 18 working days leave per year initially. Overseas tours for which special allowances granted. Salary in LONDON ranges from £680 (age 25) to £900 p.a. for men; from £673 to £868 p.a. for women; somewhat lower in PROVINCES. Commencing salary dependent on age, qualifications and experience. Applicants, who must be natural born British subjects, should write to Air Ministry, W.G.c., Lacon House, Theobalds Road, London, W.C.1, or to any Employment Exchange (quoting Order No. Kings Cross 3744 giving age, details of training, qualifications, full particulars of former posts held and copies of any testimonials). Candidates selected will normally be interviewed in London and certain expenses reimbursed. 7498

WARWICKSHIRE COUNTY COUNCIL
DEPUTY COUNTY ARCHITECT

Applications are invited for the post of Deputy County Architect. The salary will be £2,303 per annum, rising, subject to satisfactory service, by annual increments of £90, to a maximum of £2,573. The appointment will be subject to three months' notice on either side and to the conditions of service of the Joint Negotiating Committee for Chief Officers of Local Authorities.

Candidates must be members of the Royal Institute of British Architects and preference will be given to those having had experience under large public authorities.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, 1937-1953, and the successful candidate will be required to pass a medical examination.

Applications must be made on forms obtainable from the undersigned and state the names and addresses of not more than three persons who have knowledge of the applicant's experience and work and to whom reference can be made. They should be addressed to the Clerk of the Council, Shire Hall, Warwick, in a sealed envelope marked "Deputy County Architect," and must reach me not later than first post on Monday, the 1st February, 1960.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
4th January, 1960. 7697

COUNTY BOROUGH OF SOUTHAMPTON

requires under N.J.C. conditions of service:

(*a*) ASSISTANT ARCHITECT, Special Scale, £785/£1,070. Applicants must have passed Parts I and II of the R.I.B.A. final examination and have had experience in housing design and construction and estate layout, preferably with a municipal authority.

(*b*) ARCHITECTURAL ASSISTANT, A.P.T. Grade II £765/£880. Applicants are required to have passed the Intermediate R.I.B.A. examination or its equivalent at one of the recognized schools of architecture, and preferably have had experience in local government housing.

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

Apply on application forms obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, by Monday, 1st February, 1960. 7747

CITY OF CARDIFF
CITY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(*a*) SENIOR ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade IV (£1,065—£1,220 per annum).

(*b*) MEASURING SURVEYOR, A.P.T. Grade II (£765—£880 per annum).

(*c*) ARCHITECTURAL ASSISTANT, A.P.T. Grade II (£765—£880 per annum).

Candidates should possess the minimum qualifications and experience prescribed by the National Joint Council for Local Authorities for posts in the above mentioned grades.

The point of entry in the grades will be subject to qualifications, ability and experience.

General Conditions of Appointment may be obtained from the undersigned.

Applications, accompanied by the names and addresses of two referees, appropriately endorsed, must be delivered to me not later than the 28th January, 1960.

S. TAPPER-JONES,
Town Clerk.

City Hall,
Cardiff.
January, 1960. 7663

WESTERN REGION HOUSING CORPORATION
IBADAN, NIGERIA
APPOINTMENT OF ARCHITECT

Applications are invited from qualified candidates for the post of Architect in the Western Region Housing Corporation, with Headquarters at Ibadan and Branch Office at Ikeja.

Appointment will be on contract for two tours of 18-24 months residential service, with paid leave of seven days per month of residential service. The salary is £1,188 × £48 to £1,380 × £54 to £1,650. In addition, an Inducement Allowance is payable to expatriate officers of £270—for salaries below £1,285—and £300—for salaries over. The point of entry will be determined by qualifications and experience. The successful candidate will be required to join the Corporation's Provident Fund, to which the Corporation and the officer each contribute a sum equal to 10 per cent. of the officer's basic salary.

First class passages by air will, on first appointment, be provided for the officer, his wife, and up to three children under 18 years of age. Free medical treatment will be provided for the officer and his family. A house with hard furnishings at rental will be made available if the successful candidate is recruited outside Nigeria. Conditions of service generally will be those applicable to Western Region Government Officers on contract.

Candidates must have wide experience and possess one of the following qualifications:—

(*i*) Associate Royal Institute British Architecture.

(*ii*) Members of recognised Architectural Association within the Commonwealth.

Recent practical experience in tropical architecture and experience in Town Planning will be considered an advantage.

The successful candidate will be appointed to the Department of Architecture and Engineering and will be resident in Ibadan. The Corporation's works are carried out by contract and the duties of the post will comprise all phases of work from sketch design to preparation of final accounts, including supervision of construction. The Corporation is engaged at present in extensive Housing development of all types in a new neighbourhood in Ibadan, and an Industrial and Housing Development project at Ikeja, near Lagos.

Applications, stating age, academic and professional qualifications, previous experience, present appointment and salary, together with the names of two referees, should be sent by air-mail to reach the undersigned not later than 31st January, 1960. Interviews for overseas candidates will be held at the Office of the Commissioner for Western Nigeria, 178, Great Portland Street, London, W.1, during February, 1960. 7634

EAST SUSSEX COUNTY COUNCIL

PLANNING ASSISTANT required at Headquarters, Lewes, on N.J.C. Special Grade, £785—£1,070, for work on planning surveys and development plans. Commencing salary according to experience and qualifications. Recognised qualification in planning or alternative professional qualification or University Degree required. Further information and application forms from the County Planning Officer, County Hall, Lewes, Sussex. Closing date 8th February, 1960. 7753

CANNOCK URBAN DISTRICT COUNCIL
APPOINTMENT OF DEPUTY ARCHITECT AND SENIOR ASSISTANT ARCHITECT

Applications are invited for the following appointments in the Architect's Department of the Council:—

(*a*) DEPUTY ARCHITECT. Salary in accordance with Grade A.P.T. IV (£1,065 p.a.—£1,220 p.a.).

(*b*) SENIOR ASSISTANT ARCHITECT. Salary in the range of £785 p.a. rising to £1,070 p.a.

Housing accommodation available (if married). Further particulars may be obtained from the undersigned to whom applications should be submitted by Wednesday, 27th January, 1960.

H. C. ALLEN,
Clerk of the Council.

Council House,
The Green,
Cannock, Staffs.
1st January, 1960. 7661

BOROUGH OF ACTON
BOROUGH ENGINEER'S DEPARTMENT

Applications are invited for the following appointments for general and multi-storey redevelopment work:—

(1) ARCHITECTURAL ASSISTANT, A.P.T. I (£610—£765 p.a.).

(2) ASSISTANT ARCHITECT OR SURVEYOR, Special Grade (£785—£1,070 p.a.).

Commencing salaries in accordance with age and experience, plus London Allowance (maximum £30 p.a.).

Candidates should have had suitable training and possess appropriate R.I.B.A. or R.I.C.S. qualifications in the case of the second vacancy.

Applications stating age, qualifications, experience and names of two referees should be sent to the Borough Engineer, Town Hall, Acton, W.3, by 1st February, 1960. 7823

COUNTY BOROUGH OF WEST HAM

Applications invited for the following established posts in the Borough Architect and Planning Officer's Department:—

(*a*) DEPUTY GROUP ARCHITECTS (2)—£785—£1,070 p.a.

(*b*) ASSISTANT PLANNING OFFICER—£785—£1,070 p.a. (plus London allowance).

In respect of posts (*a*) the Department has an extensive programme of urban renewal including the Borough's main shopping and administrative centre as well as residential, education and public buildings work.

The applicant for post (*b*) is urgently required to assist generally in the day-to-day administration of the Planning Section and will be expected to contribute to the Quinquennial Review of the Development Plan now in course of preparation.

Form of application to be obtained from Thomas E. North, O.B.E., F.R.I.B.A., Dist. T.P., M.T.P.I., 70, West Ham Lane, Stratford, E.15, returnable by 1st February, 1960. 7692

WESSEX REGIONAL HOSPITAL BOARD

Applications are invited for the following appointments on the Staff of the Board's Architect:—

ASSISTANT QUANTITY SURVEYOR

Salary: £730 to £1,055 per annum.

Commencing salary according to age and experience. Applicants must be Corporate Members of the Royal Institute of Chartered Surveyors.

SURVEYING ASSISTANT (Quantity or Building)

Salary: £545 (at age 21 or over) rising to a maximum of £765 per annum.

Commencing salary according to age and experience. Applicants must have passed the Intermediate Examination of the Royal Institute of Chartered Surveyors.

ARCHITECTURAL ASSISTANT

Salary: £545 (at age 21 or over) rising to a maximum of £765 per annum.

Commencing salary according to age and experience. Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects or an examination giving exemption therefrom.

Extensive hospital development is anticipated and the existing salary scales are at present under review.

Application forms may be obtained from The Secretary of the Board, "Highcroft," Romsey Road, Winchester, and must be completed and returned within fourteen days of the appearance of this advertisement. 7882

WANSTEAD AND WOODFORD CORPORATION

1. SENIOR ASSISTANT ENGINEER. A.P.T. IV/V (£1,065—£1,375 plus London weighting).

2. SENIOR PLANNING ASSISTANT A.P.T. IV (£1,065—£1,220 plus London weighting).

Post 1. Applicants must hold recognised professional qualifications and some previous experience in design and construction of highway work will be advantageous.

Post 2. Applicants must hold the Final Examination of the Town Planning Institute whilst additional architectural or engineering qualifications will be advantageous. Applicants will be preferred who have experience in urban redevelopment with a Local authority in addition to routine control of development.

The starting salaries will be fixed in accordance with the experience of the successful applicants. Casual user car allowances are payable but housing accommodation is not offered although this question is at present under review by the Council.

Forms obtainable from and to be returned to the Borough Engineer & Surveyor, Municipal Offices, High Road, Woodford, E.18, not later than first post Monday, February 1st, 1960. 7839

BOROUGH OF SWINDON
TOWN PLANNING OPPORTUNITIES

The Borough is expanding rapidly under the Town Development Act, and there is considerable scope for imaginative and skilful planning work—both in the layout of the large open areas earmarked for expansion, and in the town centre, which is being extensively remodelled and developed on pedestrian way lines for shopping.

Applications are therefore invited for the following appointments in the Borough Surveyor and Planning Officer's Department:—

(*a*) SENIOR PLANNING ASSISTANT A.P.T IV (£1,065—£1,220). Candidates should have had suitable experience and have passed the final examination of the Town Planning Institute.

(*b*) PLANNING ASSISTANT (VALUATION) A.P.T. II (£765—£880). Duties will include valuation reports in connection with planning proposals including redevelopment. Candidates should have passed the intermediate examination of the R.I.C.S. or possess an equivalent qualification.

(*c*) PLANNING ASSISTANT A.P.T. I (£610—£765) or A.P.T. II (£765—£880) according to qualifications and experience.

(*d*) TOWN PLANNING PUPIL (age 16 or over) General Division (£240—£595 according to age, with annual increments of £30 or £35). Candidates must possess the minimum entrance qualifications required for the profession, details of which will be sent on request. Practical training and supervision will be given for a period of three years, together with one day off with pay per week for the pursuance of approved studies under the Corporation's Post-entry Training Scheme.

Consideration may be given to the allocation of HOUSING ACCOMMODATION in the case of appointments (*a*), (*b*) and (*c*).

Applications, on forms to be obtained from the Town Clerk, Civic Offices, Swindon, should be submitted as soon as possible and in any case not later than 16th February. 7885

MOUNTAIN ASH URBAN DISTRICT COUNCIL
APPOINTMENT OF TEMPORARY ASSISTANT ARCHITECT

Applications are invited for the above appointment in the Architect's department at a salary in accordance with A.P.T. Grade I of the National Scheme of Conditions of Service (£610 × £30—£765 per annum).

Applicants should have good general experience in housing and should preferably have reached Intermediate R.I.B.A. standard.

The appointment will be superannuable, subject to one month's notice on either side and the successful applicant will be required to pass a Medical Examination.

Applications, stating age, qualifications and experience, accompanied by copies of two recent testimonials, must reach the undersigned not later than 18th February, 1960.

R. GWYNNE RICHARDS,
Clerk of the Council.

Town Hall, Mountain Ash.
13th January, 1960. 7836

THE ROYAL INFIRMARY OF EDINBURGH AND ASSOCIATED HOSPITALS
ARCHITECTURAL ASSISTANT

Applications are invited from candidates holding the Intermediate certificate of the R.I.B.A. and having practical experience. Varied and interesting work. Starting salary £525 to £605 per annum according to age and experience. Apply in writing to Personnel Officer, Royal Infirmary, Lauriston Place, Edinburgh, 3. 7647

CITY OF CHESTER
DEPARTMENT OF CITY ENGINEER

Applications are invited for the post of SENIOR ARCHITECTURAL ASSISTANT. Salary within the A.P.T. Special Grade Scale. Candidates should have passed the R.I.B.A. Final Examination and should have had good training and experience in housing re development work and planning. Housing accommodation will be available to the successful applicant if required. Application with two recent testimonials should reach the City Engineer, 49, Northgate Street, Chester, by 30th January, 1960. 7822

ARCHITECTS AND MAINTENANCE SURVEYORS. Pensionable posts for men and women at least 25 and under 35 on January 1st, 1960 (extension for regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Architect or Maintenance Surveyor). Candidates must be registered Architects or, alternatively, for Maintenance Surveyor posts, have achieved Corporate membership of R.I.C.S. (Building Section), or have passed examinations necessary for attaining Corporate membership. Starting salary (men, London) from £830 to £1,125 according to age. Scale maximum (London) £1,300. Promotion prospects. Write Civil Service Commission, 17, North Audley Street, London, W.1, for application form quoting S60-61. 7813

CITY AND COUNTY OF KINGSTON UPON HULL, City Architect's Department. Applications are invited for ASSISTANT ARCHITECTS Grade S.C.O. (£785—£1,070). The point of entry to the scale will be determined by experience. There is an interesting and varied programme of work in the department. Housing accommodation may be provided for the successful married applicants if they are not already resident in the city. Application forms may be obtained from Andrew Rankine, O.B.E., A.R.I.B.A., City Architect, Guildhall, Kingston upon Hull, and should be returned completed on or before Wednesday, 3rd February, 1960. 7808

GOVERNMENT OF WESTERN NIGERIA

VACANCIES FOR TOWN PLANNING OFFICERS

Applications are invited for the posts of Town Planning Officer.

Qualifications: Candidates must be corporate members of the Town Planning Institute.

Duties: Responsibility for a Town Planning Area in the Town Planning Division of the Ministry of Lands and Labour, Western Nigeria, including control of field and office staff and the supervision of the work of Technical Officers and Town Planning Assistants. Will also be required to collect data for planning and to prepare Town Planning Schemes.

Terms of Appointment: On contract terms for a minimum of two tours of 18-24 months each in the first instance. Salary is within the range of £1,410—£2,082 per annum, plus gratuity at the rate of £37 10s. for each completed three months' service. Free first-class passages for officer and his family on first appointment and when proceeding on leave, free medical treatment for officer and his family. Accommodation is provided at low rentals.

Applications should be completed in triplicate on the prescribed form obtainable from the Official Secretary (Recruitment Branch), Office of the Commissioner for Western Nigeria, 178/202, Great Portland Street, London, W.1, from whom further particulars may also be obtained.

Closing date: February 8th, 1960. 7820

CITY OF BIRMINGHAM PUBLIC WORKS DEPARTMENT
PLANNING AND REDEVELOPMENT SECTION

Applications are invited for the following posts:—

(*a*) SENIOR PLANNING ASSISTANT (Design), Grade A.P.T. IV (£1,065—£1,220 p.a.).

(*b*) SENIOR PLANNING ASSISTANT (Development Control), Grade A.P.T. IV (£1,065—£1,220 p.a.).

(*c*) PLANNING ASSISTANTS, Special Scale (£785—£1,070 p.a.).

(*d*) PLANNING ASSISTANTS, Grade A.P.T. II (£765—£880 p.a.).

(*e*) PLANNING ASSISTANT, Grade A.P.T. I (£630—£785 p.a.).

Applicants for posts (*a*), (*b*) and (*c*) should be Corporate Members of the Town Planning Institute and for posts (*d*) and (*e*) should have passed the Intermediate Examination of the Town Planing Institute or hold equivalent qualifications.

Candidates should have experience as follows:—

Post (*a*) Preparation of redevelopment schemes. The successful applicant will undertake design work requiring imagination, perception and initiative.

Post (*b*) Preparation of reports on planning applications in areas of intensive development.

Post (*c*) Preparation of reports on planning applications mainly relating to built-up areas.

Posts (*d*) and (*e*) General planning duties in connection with development control.

The appointments are permanent, superannuable and subject to a medical examination.

Applications endorsed with the heading of the post applied for, stating qualifications, age and experience together with the names of two persons to whom reference may be made, should reach the undersigned by the 13th February, 1960.

Canvassing disqualifies.

HERBERT J. MANZONI,
City Engineer and Surveyor.

Civic Centre,
Birmingham, 1. 7812

THE URBAN DISTRICT COUNCIL OF SEVENOAKS
APPOINTMENT OF PLANNING ASSISTANT AND TECHNICAL ASSISTANT

Applications are invited for the following appointments in the Engineer and Surveyor's Department:

(*a*) PLANNING ASSISTANT at a salary in accordance with A.P.T. Grade II (£765—£880 per annum).

(*b*) TECHNICAL ASSISTANT at a salary in accordance with A.P.T. Grade I (£610—£765 per annum).

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

Applications, stating age, education, qualifications and details of previous experience, together with the names of three persons to whom reference may be made, should be sent to the undersigned in sealed envelopes suitably endorsed by the 1st February, 1960.

Housing accommodation will be made available if required.

A. F. E. DAVIS,
Clerk of the Council.

Council Offices,
Argyle Road,
Sevenoaks,
Kent. 7863

COUNTY COUNCIL OF ROSS AND CROMARTY
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited from qualified Architects for appointments as SENIOR ASSISTANT ARCHITECTS in the Dingwall Office of the County Architect on salary scale £1,005—£1,200.

Applicants must be Associates of the Royal Institute of British Architects.

Applications giving details of training and experience with attached copies of three recent testimonials should be lodged with Peter S. Leask, A.R.I.B.A., A.M.T.P.I., County Architect, Tulloch Street, Dingwall, not later than Saturday, 30th January, 1960.

W. D. ROSS,
County Clerk.

County Buildings,
Dingwall.
January, 1960. 7804

BOROUGH OF TAUNTON
ASSISTANT ARCHITECT

Applications are invited for appointment of Assistant Architect in the Borough Architect's Department, Special Grade, salary £785—£1,070 per annum.

Superannuable post, subject to medical examination, and to National Conditions of Service. Applications stating age, present position and salary, qualifications, experience and names of two referees to be sent to C. Bacon, F.R.I.B.A., Borough Architect, Flook House, Station Road, Taunton, by 25th January, 1960.

Canvassing will disqualify.

Consideration will be given to housing accommodation if required.

K. A. HORNE,
Town Clerk.

Municipal Buildings,
Taunton. 7837

LINDSEY (LINCOLNSHIRE) COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Vacancies occur on the permanent staff for ASSISTANT ARCHITECTS to act as Team Leaders for a large and increasing programme of work, chiefly educational buildings. Must be A.R.I.B.A. and capable of controlling team. Grade A.P.T. IV, £1,065—£1,220. Commencing salary within the grade dependent upon experience.

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

Applications giving age, qualifications, experience, present post and salary and the names of two persons to whom reference can be made to be sent not later than 26th January, 1960, to the County Architect, County Offices, Lincoln. 7811

BOROUGH OF BEBINGTON

(*a*) SENIOR ARCHITECTURAL ASSISTANT, Grade IV A.P.T.
(*b*) ARCHITECTURAL ASSISTANT, Special Classes.
(*c*) BUILDING INSPECTOR, Grade I A.P.T.

Applications are invited for the above posts, commencing salaries of which will be fixed according to qualifications and experience.

Applicants for posts (*a*) and (*b*) must hold appropriate architectural qualifications, in the case of post (*a*) applicants should also be capable of undertaking development schemes of housing and public buildings; for (*c*) should preferably have had experience as a building inspector with a local authority.

Application forms are available from the Borough Engineer and Surveyor, Town Hall, Bebington, Cheshire and when completed should be returned to the Town Clerk so as to be received by him at the same address not later than first post on Monday, 1st February, 1960.

The candidates appointed, if married, and considered by the Council to be in need of housing at the time of appointment will be found accommodation within a reasonable period of time.

Canvassing will be a disqualification.

G. CHAPPELL,
Town Clerk.

Town Hall,
Bebington. 7865

WOKING U.D.C.
ARCHITECTURAL ASSISTANT
A.P.T. Grade Special (£785—£1,070)

Applicants for this appointment in Architectural Section of Engineer & Surveyor's Department should be A.R.I.B.A.

Appointment offers competent assistant excellent opportunity for work on variety of architectural projects in a town that has rapidly grown to 63,000 population.

Casual user's car allowance.

Forms of application from Engineer & Surveyor, Council Offices, Woking. Closing date 1st February, 1960. 7862

DURHAM COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

ARCHITECTURAL STAFF required on the following grades:—

A.P.T. IV—£1,065 to £1,220, A.R.I.B.A. with adequate experience.
Special Grade, £785 to £1,070—Qualified.
A.P.T. II, £765 to £880.

Forms and further particulars from the County Architect, South Street, Durham. Closing date 28th January, 1960. Canvassing members of the Council is prohibited.

J. K. HOPE,
Clerk of the County Council.
7879

WEST SUSSEX COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(1) ASSISTANT COUNTY ARCHITECT, at a salary in accordance with Scale B (£1,265 × £55 (4)—£1,485).
(2) CHIEF HEATING, MECHANICAL, ELECTRICAL ENGINEER, at a salary in accordance with Scale A (£1,170 × £55 (4)—£1,390).
(3) SENIOR ASSISTANT HEATING, MECHANICAL ENGINEER, at a salary in accordance with A.P.T. Grade IV of the National Scales of salaries (£1,065—£1,220).
(4) ASSISTANT MAINTENANCE SURVEYORS, one on A.P.T. Grade II (£765—£880) and one on A.P.T. Grade I (£610—£765).
(5) ARCHITECTURAL ASSISTANTS, one on A.P.T. Grade II (£765—£880) and one on A.P.T. Grade I (£610—£765).

Commencing salary in all cases will be according to experience.

Further particulars should be obtained from the County Architect, County Hall, Chichester, to whom all detailed applications must be submitted not later than the 10th February, 1960. 7860

COUNTY BOROUGH OF SWANSEA
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the posts of TWO ASSISTANT QUANTITY SURVEYORS, salary Grade A.P.T. II (£765 to £880 p.a.).

Applicants must have passed the Intermediate stage of the R.I.C.S. (Quantites) and have had at least two years' subsequent experience.

The commencing salary of both posts will be within the grade according to ability and experience.

Candidates must be under 45 years of age unless in Local Government Service.

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

Forms of application may be obtained from the Borough Architect, The Guildhall, Swansea, to whom they must be returned not later than the 29th January, 1960.

Canvassing disqualifies.

T. B. BOWEN,
Town Clerk.

Guildhall,
Swansea.
8th January, 1960. 7861

ALDRIDGE URBAN DISTRICT COUNCIL
ASSISTANT ARCHITECT

Applications are invited for this appointment on Grade A.P.T. II, III or Special; starting point dependent on qualifications and experience; Special Grade for Final R.I.B.A. only; A.P.T. III for part Final qualifications.

Applicants must be capable of preparing and supervising schemes in the Council's Housing programme.

Housing accommodation will be provided and the candidate's removal expenses paid.

The Urban District has a current annual capital works programme of approximately £1,000,000. Housing programme: 1958, 400 houses completed, target: future programme 550 dwellings.

Aldridge is expanding by approximately 3,000 persons per annum; estimated present population 47,500. School facilities are excellent.

H. G. G. NICHOLS,
Clerk of the Council.

Council House,
Aldridge,
Staffs. 7851

CARMARTHENSHIRE COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(*a*) ASSISTANT ARCHITECT, salary grade, Special Scale, £785—£1,070 per annum.
(*b*) ARCHITECTURAL ASSISTANTS, Salary Grade A.P.T. I, £610—£765 per annum.

Candidates for post (*a*) must be Associate Members of the R.I.B.A.

Details of qualifications, experience and present salary, with copies of three recent testimonials to County Architect, County Hall, Carmarthen, not later than Saturday, 6th February, 1960.

W. S. THOMAS,
Clerk of the County Council.

County Hall,
Carmarthen.
January, 1960. 7875

SCOTTISH SPECIAL HOUSING ASSOCIATION LIMITED
ARCHITECTS, GRADE II

The Association, a Government-sponsored and financed body, developing large scale housing schemes throughout Scotland, with an interesting programme of mixed developments including multi-storey blocks of flats, invite applications for the appointment of Architect, Grade II. The posts are superannuable with a salary scale of £780—£1,135 per annum with placing for age on entry up to £990 at age 31.

Application forms with full particulars obtainable from Harold E. Buteux, A.R.I.B.A., A.M.T.P.I., Chief Technical Officer, 19, Palmerston Place, Edinburgh 12. 7844

BOROUGH OF POOLE

BOROUGH ARCHITECT (new appointment) required for Borough of Poole. Salary scale £2,195 to £2,530, plus car allowance £150. Forms (to be returned by 13th February) and particulars from the Town Clerk, Municipal Buildings, Poole. 7838

EDINBURGH CORPORATION
DEPARTMENT OF THE CITY ARCHITECT

SENIOR ASSISTANT ARCHITECT to act as Group Leader to a section concerned with the design of public buildings other than schools and housing developments. The work normally undertaken is varied and interesting and the future programme may well contain projects offering unusual scope for those interested in contemporary design. Salary scale £1,075 × £40 to £1,275.

Applications giving full details of experience and the names of two referees as to character should be sent to the City Architect, City Chambers, Edinburgh 1, not later than 30th January, 1960, marked "Staff—Confidential." 7846

SOUTHAMPTON COUNTY BOROUGH COUNCIL requires under N.J.C. conditions of service:

ASSISTANT QUANTITY SURVEYOR, salary within the Special Grade, £785/£1,070. Applicants must be chartered quantity surveyors, preferably with experience in municipal housing including multi-storey flats and shopping centres.

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

Apply on application forms, obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, by Monday, 8th February, 1960. 7884

UNIVERSITY OF OXFORD

Applications are invited for the following appointments:—

(*a*) ASSISTANT ARCHITECT (commencing salary up to £1,200). Applicants must be qualified with several years' experience.
(*b*) SENIOR ARCHITECTURAL ASSISTANT (commencing salary up to £1,050). Applicants must be qualified or have held a senior post for several years.
(*c*) ARCHITECTURAL ASSISTANTS (commencing salary up to £765). Applicants must be of Intermediate standard with several years' experience.
(*d*) ARCHITECTURAL ASSISTANTS (commencing salary up to £610). Applicants must have had several years' experience and be competent draughtsmen.

Only those keenly interested in progressive design need apply.

Write for further particulars and form of application to The Surveyor to the University, The Malthouse, Tidmarsh Lane, Oxford. 7447

BOROUGH OF OLDBURY

Applicants are invited for the following appointments on the staff of the Borough Surveyor.

(*a*) CHIEF ARCHITECTURAL ASSISTANT, salary A.P.T. Grade V (£1,220—£1,375).
(*b*) SENIOR ARCHITECTURAL ASSISTANT, salary A.P.T. Grade IV (£1,065—£1,220).

Candidates for both posts must be Associates of the R.I.B.A.

Those for (*a*) should have high ability in design and be capable of preparing schemes and supervising contracts in connection with general housing, including multi-storey flats, public buildings, school buildings, minor improvements and maintenance works.

Candidates for (*b*) to be capable of preparing designs for schemes mentioned for post (*a*) above, under the direction of the Chief Architectural Assistant.

The appointments will be superannuable, subject to the National Conditions of Service and to the selected candidates passing a medical examination.

Applications on forms to be obtained from and completed and delivered to, the undersigned not later than 29th January, 1960. Canvassing will disqualify.

KENNETH PEARCE,
Town Clerk.

Municipal Buildings,
Oldbury.
January, 1960. 7845

BOROUGH OF WREXHAM
ENGINEER & SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments:—

(*a*) 2 ENGINEERING ASSISTANTS, Salary Range Specialist Grade (£785—£1,070 per annum).
Candidates should have passed the appropriate examinations of the Institute of Civil or Municipal Engineers or equivalent and have a general experience of Municipal Engineering.
(*b*) 2 ARCHITECTURAL ASSISTANTS, Salary Range Specialist Grade (£785—£1,070 per annum).
Candidates should have passed appropriate examinations of the R.I.B.A. or equivalent and have general experience of Architectural work.

Casual car user allowance payable on authority of the Borough Engineer.

HOUSING ACCOMMODATION supplied, if required.

Forms of application and particulars of works in hand may be obtained from the Borough Engineer and Surveyor, 31 Chester Street, Wrexham, and applications stating age, experience, qualifications, etc., and the names of two referees to be sent to the undersigned by not later than the 5th day of February, 1960.

PHILIP J. WALTERS,
Town Clerk.

Guildhall,
Wrexham.
11th January, 1960. 7888

BOROUGH OF DARTFORD

Applications are invited for:—

(1) ARCHITECTURAL ASSISTANT, salary: Special Scale (£785—£1,070).

(2) ARCHITECTURAL ASSISTANT, salary: Grade A.P.T. II-III (according to qualifications).

In addition to the salaries quoted above, a "plusage" rate of £20 or £30 per annum (according to age) is paid.

Housing accommodation available.

Applications, stating age, qualifications and experience and the names of three referees, should be forwarded to the Borough Surveyor, Bridge House, Dartford, by the 8th February, 1960.

THOMAS ARMSTRONG,
Town Clerk.
7878

LONDON ELECTRICITY BOARD
ARCHITECTURAL DRAUGHTSMAN

Applications are invited for the position of Architectural Draughtsman in the Architect's Section of the Board.

Applicants should be neat draughtsmen and have had experience in an Architect's office. Preference will be given to those who are taking a recognised course of study with a view to obtaining architectural qualifications.

The post is graded under Schedule "D" of the National Joint Board Agreement as Grade VI (£660 to £780 per annum, inclusive of London Allowance).

Application form obtainable from Personnel Officer, 46, New Broad Street, London, E.C.2, to be returned completed within fourteen days of the publication date of this advertisement. Please quote ref.: PER/V/2721/A. 7849

CITY OF LEICESTER EDUCATION COMMITTEE
LEICESTER COLLEGE OF ART

Principal: E. E. Pullée, A.R.C.A., F.S.A.E.

Applications are invited from holders of a Degree or Diploma of a recognised School of Architecture, or from Associate Members of the R.I.B.A., for a POST-GRADUATE RESEARCH FELLOWSHIP IN ARCHITECTURE tenable at the School of Architecture for advanced work in Architecture. The holder of the Fellowship, which is for a period of up to three years, will be paid on the Burnham scale, Grade 'B.'

Further details may be obtained from the Registrar, College of Art, The Newarke, Leicester. 7881

GLOUCESTERSHIRE COUNTY COUNCIL
ARCHITECTURAL ASSISTANT
(QUALIFYING CLASS)

A.P.T. Grade I (£610—£765), A.P.T. Grade II (£765—£880) or Special Grade (£785—£1,070). Applicants for Grade I and II must have passed the Intermediate Examination R.I.B.A. and for Special Grade the Final Examination. N.J.C. Service Conditions, superannuation, medical examination.

Apply stating age, present position, salary and date of appointment, details of previous appointments and names and addresses of two persons for reference, to COUNTY ARCHITECT, SHIRE HALL, GLOUCESTER, by 30th JANUARY, 1960.

GUY H. DAVIS,
Clerk of the County Council.
7883

HEREFORDSHIRE COUNTY COUNCIL

SENIOR ASSISTANT ARCHITECT required on APT. IV (£1,065 to £1,220 per annum). Must be A.R.I.B.A. Interesting and varied programme. FIVE-day week.

Superannuated post, subject to medical examination, and one month's notice either side. Travel and subsistence payable to married men in certain cases for limited period.

Application forms from County Architect, Bath Street, Hereford, to be submitted by 11th February, 1960.

Hereford is situated in the beautiful Wye Valley. 7892

CIVIL SERVICE. QUANTITY SURVEYORS AND ASSISTANT QUANTITY SURVEYORS

required by several Government Departments. Posts in London, provinces and occasionally overseas. London salaries for suitably qualified and experienced men over 25 years of age, range from £830 to £1,300 per annum. QUANTITY SURVEYING ASSISTANTS and others having some experience in Quantity Surveying at salaries ranging from £387 10s. to £900 per annum also required. Prospects of promotion and pensionable status. Write for particulars of vacancies in each department and forms quoting J.Q.S. to Ministry of Labour, Technical and Scientific Register, 26, King Street, London, S.W.1. 7893

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE
OFFICE OF THE COUNTY ARCHITECT

Applications are invited for the post of JUNIOR ARCHITECTURAL ASSISTANT—Grade APT.II—£765—£880, in the Divisional Architect's Office at Adwick-le-Street, near Doncaster.

Candidates should have passed the Intermediate Examination of the Royal Institute of British Architects.

Applications to be submitted by the first post on Tuesday, 2nd February, 1960, on forms to be obtained from and returned to the undersigned.

A. W. GLOVER, F.R.I.B.A.,
County Architect.

Bishopgarth,
Westfield Road,
Wakefield. 7890

CITY OF MANCHESTER—
HOUSING COMMITTEE

Applications invited from suitably qualified persons for the post of ARCHITECTURAL ASSISTANT Grade APT I £610—£765 p.a.

Applicants who should have passed the Intermediate R.I.B.A. examination or its equivalent should send particulars of age, qualifications and experience to the Director of Housing, Town Hall, Manchester, 2, to be received not later than February 6th, 1960. 7886

HACKNEY BOROUGH COUNCIL
JUNIOR ARCHITECTURAL ASSISTANT

Applications are invited for this appointment on salary grade APT I (£610—£765 p.a.). London "weighting" allowance £20 p.a. at age 21, £30 p.a. at age 26. Commencing salary according to training, qualifications and experience.

Candidates must be students of the R.I.B.A. or probationers with good architectural training and several years' experience in an architect's office.

Apply Town Clerk, Town Hall, Hackney, E.8, for application form returnable by 9 a.m. on 10th February, 1960. 7902

COUNTY BOROUGH OF EAST HAM
HOUSING DEPARTMENT
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited. Salary Grade APT.II (£765×£25(1)×£30(3)—£880 per annum, plus London Weighting).

Applicants should be experienced in the design, construction and supervision of the erection of housing schemes.

Further details and application form (returnable by 10th February, 1960) from the Town Clerk, Town Hall, East Ham, E.6. 7909

SOUTHERN ELECTRICITY BOARD
ARCHITECTURAL ASSISTANT

Sub-Area Office of No. 3 (Portsmouth) Sub-Area. Salary N.J.B. Grade 5 of Schedule "D" (£790 × £20—£890 per annum). N.J.B. Conditions of Service.

Applications are invited for the above appointment from persons requiring a minimum of supervision. Possession of Intermediate R.I.B.A. or R.I.C.S. would be an advantage. There is an interesting variety of new and alteration work on Offices, Showrooms, Workshops and Industrial Buildings.

Canteen and Sports facilities. Five-day week. Leave 3½ to 4 weeks, dependent upon service.

The successful candidate will be required to contribute to the Electricity Supply (Staff) Superannuation Scheme, if eligible.

Applications on forms obtainable from the Sub-Area Secretary, Lower Drayton Lane, Cosham, Portsmouth, and returned to him not later than February 1, 1960, quoting Z.1116. 7916

COUNTY BOROUGH OF MERTHYR TYDFIL
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments on the permanent staff of the Borough Architect.

(*a*) TWO SENIOR ARCHITECTS, A.P.T. Grade IV, £1,065—£1,220 per annum.

(*b*) ASSISTANT ARCHITECT, Special Grade, £785—£1,070 per annum.

(*c*) ARCHITECTURAL ASSISTANT, A.P.T. Grade III, £880—£1,065 per annum.

(*d*) TWO ARCHITECTURAL ASSISTANTS, A.P.T. Grade II, £765—£880 per annum.

There is to be a large programme of redevelopment, and all types of municipal buildings are to be erected. Every facility will be given for design and contract experience.

Appointments will be made within the grades according to qualifications and experience. Applications, stating age, experience, particulars of present and past appointments, together with two recent testimonials, should be received by the Town Clerk not later than 13th February, 1960.

The appointments are subject to the provisions of the Local Government Superannuation Acts and to the passing of a Medical Examination, and are terminable by one month's notice on either side.

Canvassing in any form will disqualify.

T. S. EVANS,
Town Clerk.

Town Hall,
Merthyr Tydfil.
15th January, 1960. 7921

AMENDED ADVERTISEMENT

CRICKLADE AND WOOTTON BASSETT RURAL DISTRICT COUNCIL
ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the appointment of ASSISTANT to the Engineer and Surveyor at a commencing salary within the A.P.T. II and "Special" Grades (£765—£880 and £785—£1,070) according to qualifications and experience. If appointed to A.P.T. II, promotion to "Special" grade on qualifying.

Preference will be given to applicants who have had experience in housing, sewerage and sewage disposal works.

The appointment is superannuable, subject to one month's notice on either side, National Joint Council Service Conditions, and to the successful candidate passing a medical examination.

Housing accommodation if required.

Applications endorsed "Engineering and Surveying Assistant" stating age, qualifications and experience, together with copies of not more than three recent testimonials, should reach the undersigned by Wednesday, the 10th February, 1960.

W. J. HOSIER,
Clerk of the Council.

Council Offices,
Manor House,
Wootton Bassett,
Swindon, Wilts. 7932

GOVERNMENT OF NORTHERN IRELAND
ASSISTANT QUANTITY SURVEYOR

Applications invited from Corporate Members of the Royal Institution of Chartered Surveyors (Quantities) for unestablished post in Chief Quantity Surveyor's Branch, Ministry of Finance. Experience in "taking off" for large building works essential. Salary scale £805—£1,260, entry point according to age and experience. Prospects of permanent and pensionable appointment. Preference for ex-Servicemen. Application forms, obtainable from Director of Establishments, Room 271, Stormont, Belfast, to be completed and returned by the 1st February, 1960. 7632

CITY COUNCIL OF NAIROBI
APPOINTMENT OF ARCHITECT GRADE II
CITY ENGINEER'S DEPARTMENT

Applications are invited for this permanent non-established post. Consolidated salary scale inclusive of overseas leave pay and passage privileges is £1,427 × £50 to £1,577 × £50 to £1,827 per annum.

Applicants should have completed a course at a recognised school of Architecture and/or have had experience in an Architect's office and preferably should hold the qualification A.R.I.B.A.

The successful applicant must pass a medical examination.

A summary of main Terms of Service and application forms are available from the East Africa Office, Grand Buildings, Trafalgar Square, London, W.C.2, and applications should reach the Establishment Officer, P.O. Box 30037, Nairobi, Kenya by the 25th February, 1960.

Canvassing will be a disqualification.

HAROLD AYREY,
Town Clerk.

City Hall,
Nairobi, Kenya.
30th December, 1959. 7922

Architectural Appointments Vacant

3s. per line; minimum 12s. Box Number, including forwarding replies, 2s. extra.

ERIC FIRMIN & PARTNERS require Senior ASSISTANTS for work on industrial and commercial projects. Five-day week, Luncheon Vouchers. Salary by arrangement. Please apply 5 Holborn Circus, E.C.1. CITy 8811. 6884

OFFICE OF PATRICK GWYNNE requires a JUNIOR ASSISTANT with office experience for work on interesting modern houses and interiors. Homewood, Esher, Surrey. Esher 3310. 7426

ASSISTANT ARCHITECT required with sufficient tact and "know how" to take charge of medium sized contracts for work of some variety. Contemporary outlook desirable. Apply Teather & Hadfield, Mazda Buildings, Campo Lane, Sheffield, 1. 7795

AMBITIOUS ARCHITECTURAL ASSISTANTS of Intermediate or Final standard should contact Ley, Colbeck & Partners, F./F.R.I.B.A., who have vacancies for men of initiative. Salary according to standing, pension scheme, L.V. and 5-day week. Apply 51, Bishopsgate, E.C.2. Tel: LON 7282. 7790

ARCHITECTS, London Office, have vacancies for a number of competent ARCHITECTURAL ASSISTANTS. Excellent opportunity for men with drive. L.V. 5-day week and pension scheme. Write Box JA/47, c/o 95, Bishopsgate, London, E.C.2. 7789

YOUNG and enterprising team in new London orbit of Grenfell Baines and Hargreaves partnership seek ASSISTANTS who enjoy responsibility in varied modern jobs and competitions: up to £1,200. Write David Rock, 80, Duke Street, W.1. 7786

ARCHITECTURAL ASSISTANTS, Intermediate and Final standards, required in Architect's Department for work in connection with Flat, Maisonette, Shop and Housing developments throughout the country. Applicants must be competent draughtsmen with contemporary outlook. Good salary and prospects. Pension scheme in operation. Apply: Architectural Department, Davis Estates Ltd., 346/350, Kilburn High Road, N.W.6. 7784

ASSISTANTS required for busy Architect's City office: Laboratory and Industrial projects. Intermediate standard or above. Apply to: Secretary, Fairtlough and Morris, Temple Chambers, Temple Avenue, E.C.4. FLE. 6295. 5932

RONALD WARD & PARTNERS have immediate vacancies for ASSISTANT ARCHITECTS with initiative and some experience, for interesting commercial, industrial and civic projects. Salaries commensurate with ability. Apply, 29, Chesham Place, S.W.1. BELgravia 3361. 5638

ARCHITECTURAL ASSISTANT at Final standard required by Buckinghamshire office. Interesting and varied work with scope for initiative and responsibility. State age, experience and salary required to Box 5871

ARCHITECTURAL ASSISTANTS, Senior and Junior, required by firm in High Wycombe for commercial and industrial schemes. Scope for responsibility and experience. Five-day week. Write Box 6636.

TREHEARNE & NORMAN, PRESTON & PARTNERS, have vacancies for ARCHITECTS and ASSISTANTS with imagination and designing ability to assist with important new developments in the London area. Apply in confidence to 83, Kingsway, London, W.C.2. (HOL. 4071.) 6429

THREE qualified ARCHITECTURAL ASSISTANTS with office experience required for (a) Industrial Work, (b) School Contracts, (c) large housing scheme abroad. Assistants will be expected to take the responsibility of running and supervising these contracts. Salary according to age (limit 35) and experience. Apply to J. M. Austin-Smith & Partners, 29 Sackville Street, London, W.1. 6566

SENIOR ASSISTANTS urgently required for busy City office engaged in industrial and commercial work. 5-day week. Luncheon Vouchers. Salary up to £1,200 according to experience. Box 6554.

ASSISTANTS of Intermediate or equivalent standard, required for office in South Kensington. Interesting and varied work, offering scope for initiative, responsibility and opportunities for design. Salary approximately £800 per annum. Five-day week. Apply R. Mountford Pigott & Partners, KENsington 1242. 6776

QUALIFIED ASSISTANT ARCHITECTS required, minimum three years' office experience, preferably in London. Minimum salary £1,000 according to ability and experience. Theo. H. Birks, 38, Portland Place, W.1. LAN 7236. 7126

INTERMEDIATE standard ASSISTANTS required, minimum two years' office experience. Minimum salary £750 according to ability. Theo. H. Birks, 38, Portland Place, W.1. LAN. 7236. 7127

SENIOR ARCHITECTURAL ASSISTANTS, and JUNIORS up to about Intermediate standard, required for varied industrial and commercial work in West End Office. Scope for initiative and advancement. Salary from £500 to £1,000 according to age and experience. Five-day week. Write, giving full details, to Box 7220.

ARCHITECTURAL ASSISTANT required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1. 7282

ARCHITECTURAL ASSISTANTS required up to Intermediate standard. Medium sized, varied and progressive practice. Good salaries and prospects. Collcutt & Hamp, Architects, 86, Prince Albert Road, N.W.8. PRI 5157. 7451

ARCHITECTS and ASSISTANTS required. Minimum Intermediate standard. Very large programme commercial, industrial and residential work. London office. Good salaries and bonus to right men. Five-day week. Box 7403.

W. J. LEWIS AND SONS require an ARCHITECTURAL ASSISTANT of Intermediate R.I.B.A. or above standard, for interesting and varied work in busy office, and with opportunities for future. Salary will be according to age and experience. Five-day week. Apply by letter to 68, Cranbrook Road, Ilford, Essex, or telephone Ilford 3589. 7490

ARCHITECTURAL ASSISTANTS required in London and Reading area. Five-day week. Full particulars and salary required to Box 7492.

ARCHITECTURAL ASSISTANT (Final standard) required in busy architect's office in Reading. Salary according to experience. Howell, Freeman & Batten, Chartered Architects, Reading. 7481

ARCHITECTURAL ASSISTANTS of Final and Intermediate standard required for work on industrial buildings. Excellent opportunities in an expanding London office. Apply, stating age, experience and salary range, to the Chief Architect, Nuclear Civil Constructors, 52/55, Carnaby Street, London, W.1. 7480

ARCHITECTURAL ASSISTANTS of all grades required in busy London Office. Applicants must be prepared to work on their own initiative and be capable of producing working drawings and details for new contracts of contemporary design. Pleasant working conditions, with a five-day week, 9.30 a.m.—5.30 p.m., and Luncheon Voucher scheme. Write stating experience, age and salary required to—W. Rossell Orme & Partners, 55, Manchester Street, W.1, or Telephone HUNter 1498. 7571

DOUGLAS J. OLIVER & PARTNERS, Members of the Grenfell Baines Group of 10 St. Matthew's Street, Rugby, urgently require ASSISTANTS of R.I.B.A. Intermediate and Final Standard. The positions are intended to be permanent and the work includes high building development, schools, public school work, good quality housing and a variety of interesting miscellaneous projects. Pleasant office conditions. Staff Superannuation Scheme. Salaries £800—£1,200 per annum according to ability. Applications should be made giving full details of experience to 10 St. Matthew's Street, Rugby. 7610

BOISSEVAIN & OSMOND will be pleased to hear from young architects of various grades, aged between 20 and 35, who possess drive and initiative and are capable of negotiating with clients and who are not afraid of hard work. Good educational background and previous experience of procedure desirable but a determination and an ability to succeed are more important. In return we offer good salaries reviewed regularly, interesting work and promotion on merit. Our principal office will be situated, to avoid London's congestion, in a new building in Epsom with excellent working conditions. Please apply in writing to the London office, 2 Field Court, Grays Inn, London, W.C.1. 7603

ARCHITECTURAL ASSISTANTS required, salary £450—£900 according to experience. W. Leslie Jones & Partners, 8, Acresfield, Bolton, Lancs. Tel.: Bolton 10221. 7555

ARCHITECTURAL ASSISTANTS required, salary £450—£1,000 according to experience. W. Leslie Jones & Partners, 241a, High Street, Poole, Dorset. Tel.: Poole 2238. 7556

ARCHITECTURAL ASSISTANTS.—Exceptional opportunity and rapid promotion exist in large modern firm of Contractors recently developing on a national scale an all-in building service. Work comprises mainly commercial and industrial projects and this is an ideal chance for ambitious young men. Applications, stating age, experience and salary required, should be forwarded to Box 7516.

ARCHITECTURAL ASSISTANT required, Intermediate standard, with office experience, for small busy practice in West End. No Saturdays. 'Phone MUSeum 9693. 7519

SENIOR ASSISTANT required. Excellent salary and opportunity offered to suitable applicant. Five-day week. Superannuation scheme in operation. Write, giving full particulars of experience, to Sandon and Harding, A/A.R.I.B.A., 14, Lower Brook Street, Ipswich. 7522

ARCHITECTURAL ASSISTANT, Intermediate stage, required immediately. Salary according to experience. Excellent office conditions and permanent position offered to right man. Apply Chas. W. Fox, F.R.I.B.A., National Provincial Bank Chambers, Welwyn Garden City. 7531

DIAMOND, HODGKINSON & PARTNERS require experienced Intermediate and qualified ASSISTANTS able to take responsibility for housing, flats and interiors. Salary £600—£900 p.a. 92, George Street, W.1. 7537

ARCHITECTS require two capable SENIOR ASSISTANTS. Commencing salaries £900—£1,000. Permanency and good prospects offered. Stephenson, Gillis and Partners, 2, Saville Chambers, North Street, Newcastle upon Tyne. 7546

WE require qualified and unqualified, experienced SENIOR and JUNIOR ASSISTANTS. Salaries by arrangement. After a qualifying period a Bonus scheme is in operation together with a non-contributory pension and life assurance scheme for Assistants. Telephone Chancery 3526 for an appointment. Appointments arranged for lunch hour if required. Woodroffe, Buchanan & Coulter, F/F.R.I.B.A., 5, Bedford Row, W.C.1. 7557

SENIOR ASSISTANT, A.R.I.B.A. or Final standard, required for London Architects' office. Interesting and varied practice. Salary £900 to £1,000 according to experience. Five-day week. Telephone WHI. 2552 or write Box 7578 for appointment.

INTERMEDIATE standard ARCHITECTURAL ASSISTANT required immediately for work on exhibition and ancillary buildings. Write, giving details of age, training, and experience, if any, to Staff Architect, Olympia Limited, Kensington, W.14. 7626

JUNIOR ARCHITECTURAL ASSISTANTS required in salary range £400—£600, quick and competent draughtsman, some knowledge of detailing. Write, stating age and experience, to Norman Jones, Sons & Rigby, 271 Lord Street, Southport. 7582

ASSISTANTS required, Senior and Junior, with experience in Industrial and Commercial schemes. Varied and interesting work; valuable experience; 5-day week. Apply in writing giving full particulars to Bostock & Partners, Central Hall Buildings, Station Approach, Southall. 7728

MESSRS. BEARD, BENNETT, WILKINS & PARTNERS still require SENIOR ASSISTANTS with enthusiastic outlook on modern design for major hospital and industrial projects. Profit sharing and Pension schemes. Salary according to qualification and experience. Apply in writing to 101, Baker Street, London, W.1. 7735

ARCHITECTURAL ASSISTANTS required by Hasker & Hall, L./F.R.I.B.A., for senior and intermediate positions. Good salary with scope for initiative and responsibility. Write to 13, Welbeck Street, W.1, or telephone WELbeck 0061. 7743

BURLES & NEWTON require ARCHITECTURAL ASSISTANTS in their London and Southend offices. Age 20—25. Intermediate/Final standard. Apply 26, Great James Street, W.C.1, or 36/38, County Chambers, Weston Road, Southend. 7775

ARCHITECTURAL ASSISTANTS required in West End office. Should have good knowledge of building construction and several years' office experience. Box 7777.

GRENFELL BAINES & HARGREAVES require school trained assistant, preferably with two years' experience, for small expanding office in Manchester with interesting variety of work. University buildings, Schools, Banks, etc. Considerable amount of freedom and responsibility given to person with good design ability and personal initiative. Pleasant country to live within easy commuting distance. Salary £900—£1,000 p.a. Apply: 423 Oxford Road, Manchester 13. 7774

A FIRST RATE LONDON PRACTICE in the Baker Street Area recommended by Senior Assistant to those considering a move. I will write to all who reply and give full details of our varied work, profit sharing and pension schemes, and a description of this progressive office. The partners are realistic about salaries and nobody stands still after joining us. Box 7736.

NORMAN & DAWBARN require experienced ARCHITECTS for interesting projects both here and overseas. Applicants should be good designers. Salaries from £900 upwards. Phone or write for an appointment to 7, Portland Place, W.1. 7745

HENRY C. SMART & PARTNERS require experienced ASSISTANT for School and other projects. Write stating age, experience and salary required to 120, Moorgate, London, E.C.2. 7759

ARCHITECTS' CO-PARTNERSHIP require qualified and nearly qualified ASSISTANTS with some experience for university work, teachers training college. Write to 44, Charlotte Street, W.1, or phone LANgham 5791. 7761

ARCHITECT'S DEPARTMENT in City requires an ASSISTANT of about Intermediate R.I.B.A. standard with some office experience. Salary £700—£750 and work of an interesting and varied nature. Secure future for suitable applicant. Write giving particulars of age, experience and salary required. 7766

PRE-FINAL ASSISTANT required in small private practice. Varied work with opportunity to gain all-round experience. Geoffrey Shires, A.R.I.B.A., 69, Walton Street, Chelsea, S.W.3. Tel. KNIghtsbridge 8677. 7767

ARCHITECTURAL ASSISTANT required, Intermediate standard with at least three years' office experience. Five-day week. Salary according to ability and experience. Phone Secretary, Hyde Park 2051. 7769

GRENFELL BAINES & HARGREAVES require SENIOR ASSISTANTS with at least four years' experience for interesting variety of work in their Manchester office. Salary about £1,200 p.a. Please apply to: D. A. Cobb, 423, Oxford Road, Manchester 13. 7771

ARCHITECT'S Department of City Development Company still requires at least two Intermediate Standard ASSISTANTS to deal with interesting redevelopment work. Excellent salaries paid to capable staff. Please ring Monarch 0230 for an appointment. 7656

POWELL & ALPORT require ASSISTANT in their Croydon office. Salary according to experience in range £600—£850, plus bonus. Write stating age, experience and salary required. 7658

ARCHITECTURAL ASSISTANTS required, R.I.B.A. Intermediate standard with some office experience. Varied and interesting work. Five-day week. Good salaries for keen and competent people. William Crabtree, F.R.I.B.A., 8, Robert Adam Street, W.1 (WELbeck 9909). 7668

LEWIS SOLOMON, KAYE & PARTNERS rapidly expanding practice, require ARCHITECTS and ASSISTANTS with initiative and competence to work on major design projects in the London area. These projects include Comprehensive Development Schemes, Hotels, Schools, Offices, and Luxury Flats. Good salaries according to ability and experience, luncheon vouchers, five-day week, and excellent working conditions. Write 5, Holborn Circus, Thavies Inn House, E.C.1, or telephone CITy 8811, quoting SLB in both instances. 7700

ROBERT MATTHEW & JOHNSON-MARSHALL have vacancies in their Edinburgh and Dundee offices for ASSISTANTS at salaries from £800 upwards; wide variety of University, Hospital and Housing projects. Applications should be marked "Confidential" and addressed to 31, Regent Terrace, Edinburgh 7. 7689

ASSISTANT required for interesting work in London and the Provinces. Good prospects for ambitious young man. Write stating age, experience and salary required to Westmore & Partners, 121, Cheapside, E.C.2. 7699

SENIOR and INTERMEDIATE ARCHITECTURAL ASSISTANTS required in Company's Architectural Department in Nottingham, working on prefabricated systems and the design and construction of traditional buildings. Qualifications desirable but not essential. Varied experience and enthusiasm required. Please write to Staff Architect, W. J. Simms Sons & Cooke Ltd., Building and Civil Engineering Contractors and Prefabricators, Haydn Road, Sherwood, Nottingham. 7703

OLIVER LAW & PARTNERS, 36, Ebury Street, S.W.1, require experienced ARCHITECTURAL ASSISTANT, full qualifications not essential but must be good draughtsman able to prepare working drawings, etc. 7701

ARCHITECTURAL ASSISTANTS and DRAUGHTSMEN with initiative for interesting and varied work. Speed and attention to detail with minimum of supervision necessary. Apply in writing, stating experience, qualifications, age and salary required to Chief Surveyor, 22, King Street, St. James's, London, S.W.1. 7702

ALISTER MACDONALD & PARTNERS require in their Bedford Street, Strand, office ARCHITECTURAL ASSISTANTS for varied and interesting work. Must have sound knowledge of construction and be good draughtsmen. Medium-sized office with congenial atmosphere. Five-day week and luncheon vouchers. Salary according to age, experience and ability. Phone TEMple Bar 3785 for interview. 7704

ARCHITECTURAL ASSISTANTS of all grades required by the Architect's Department of a Major Building Company based upon Liverpool. The successful applicants will join the groups responsible for the design and development of multi-storey offices and flats, housing, shops and industrial buildings. Applications with full particulars and salary desired to Box No. G298, Lee & Nightingale Ltd., Liverpool. 7709

TAYLOR & CROWTHER, Chartered Architects of Truro, Cornwall, require qualified, preferably school trained ASSISTANT. Work will be of an interesting modern nature and the applicant will have to prove his real interest, efficiency, acceptance of responsibility and awareness, in his application. Age limit 28. 7710

ASSISTANT ARCHITECT (A.R.I.B.A.) for varied work including housing, churches and community buildings. Good working conditions, pension scheme, salary range £900 to £1,100, according to experience. Apply Selby J. Clewer, F.R.I.B.A., Bournville Village Trust, Birmingham 30. 7713

QUALIFIED ARCHITECT'S ASSISTANTS required for work on a large office deevlopment in Morden and on flats. Five-day week. Salary according to experience and capability. Ring LANgham 5051 for appointment or write to A. Green, A.R.I.B.A., 23, Fitzroy Street, W.1. 7714

BIRMINGHAM ARCHITECTS require SENIOR and JUNIOR ASSISTANTS for large industrial work and also general practice. Five-day week. Good salary according to experience. Box 7718.

ASSISTANT required. Maidstone. Interesting and varied work. Must be neat draughtsman with Inter. Write stating age, experience, salary, when available. Box 7719.

FARMER AND DARK require experienced ARCHITECTS, all levels, offices, laboratories, factories, schools, etc. Apply in writing stating salary required. Romney House, Tufton Street, S.W.1. 7720

ARCHITECTURAL ASSISTANT required for private practice. Five-day week. Please write, stating age, training, experience and salary required. Alexander Graham, Chartered Architect, 15, The Tything, Worcester. 7723

ARCHITECTURAL ASSISTANTS required. Final and Intermediate standard. Churches, schools and general practice. Opportunity for experience and responsibility. State age, qualifications, experience and salary required. Apply Sandy & Norris, 134, Newport Road, Stafford. 7724

ARCHITECTS with offices in City and at Loughton, Essex, require SENIOR ASSISTANT. Ability in design and able to work on own initiative. Salary £900 to £1,000 according to experience. Apply: Kenneth Lindy, Joseph Hill & Partners, 24, St. Mary Axe, E.C.3. 7669

VERNER REES, LAURENCE & MITCHELL require ASSISTANTS for work on University projects. Please telephone PARk 3900 for interview or write to 38, Holland Villas Road, W.14. 7674

ARCHITECTS. Vacancies offering excellent opportunities for those interested in non-traditional as well as traditional building. Design ability is important. Please give full details of age, experience and salary to Box 7677.

IMAGINATIVE ASSISTANTS required for modern office. Salary up to £850 p.a. dependent on ability only. Housing accommodation can be arranged. Godsmark & Miller-Williams, A./A.R.I.B.A., Tubwell Row, Darlington. 7679

YORKE, ROSENBERG & MARDALL require ASSISTANT ARCHITECTS. Applicants please state age, training and experience to Y.R. & M., 2, Hyde Park Place, W.2, or ring AMB 4521. 7642

ASSISTANT required, Final standard, for varied practice in Kingston office of Barber, Dundy & Greenfield, F./A./A.R.I.B.A. Salary by arrangement. Reply to 5, Apple Market, Kingston-upon-Thames. 7637

EXCELLENT opportunity for SENIOR and INTERMEDIATE ASSISTANTS in a permanent and progressive appointment with Mid-land firm of Architects who are working on large projects of an advanced type of design, including comprehensive development schemes, multi-storey office buildings, multi-storey flats, shopping centres, schools, banks, public houses and industrial projects. Apply Box 7638.

SYDNEY GREENWOOD, A.R.I.B.A., Chief Architect, John Laing and Son Ltd., requires SENIOR ARCHITECTS, ARCHITECTS and ARCHITECTURAL ASSISTANTS in all grades to work on a wide range of projects in an office that is continually expanding. Salaries will be commensurate with experience.

Senior Architects should be Associates, R.I.B.A., and have some years' experience in one or more of the types of project listed below. They should be able and imaginative designers with competence in project management.

Architects and Architectural Assistants are required in all grades.

Projects in hand include:

Major Commercial developments.
Industrial projects including factories.
Laboratories, etc.
Multi-storey dwellings.
Schools.
Housing.
Proprietary systems.

Staff are also required to work with the development Architect in the Research and Development Division.

The office offers opportunity for advancement and for close collaboration with all other branches of the building industry.

Applicants should apply in the first instance to Personnel Manager (Ref. AA2), John Laing and Son Limited, Building and Civil Engineering Contractors, London, N.W.7. 7650

REGIONAL ARCHITECT required to cover the Lancashire and Yorkshire Area. The person appointed will deal with negotiations, site surveys, sketch designs and supervision of contracts in conjunction with the Head Office of a National Composite Design and Construction Firm. Qualified Architects with all-round ability and personality, and with Local Authority experience an advantage, are invited to apply in confidence to Box 7643.

SENIOR ARCHITECTURAL ASSISTANT required, must be qualified and good draughtsman, with at least seven years' practical experience; commence soon as possible, excellent prospects for anyone really keen and efficient. Salary £1,000 p.a. upwards according to ability, with annual bonus. Light and spacious London offices. Write full details of experience, age, and when available to Box 7635.

AN excellent opportunity for two qualified SENIOR ARCHITECTURAL ASSISTANTS to join immediately small but long established London firm to become Associate Architects in near future due to present reorganisation of firm. Previous experience in private practice, good draughtsmanship and keenness essential. Ability, accuracy and speed of execution will determine future salary and share of profit, but good salary from start. Practice covers general work in London and Home Counties. Write full details to Box 7636.

JOHN H. D. MADIN, Chartered Architect, 83/85, Hagley Road, Birmingham 16, has further vacancies for SENIOR and INTERMEDIATE ASSISTANTS. Suitable senior assistants would be required to take full responsibility for large scale interesting projects. 7639

DIVISIONAL Architect requires competent ASSISTANTS for new projects, experience in alteration work an asset but not essential. Full details on application. Box 7645.

MAIDSTONE, Kent, vacancies for ARCHITECTURAL ASSISTANTS, five-day week, non-contributory pension. House assistance scheme. Three weeks holiday after first year. Box 7646.

ARCHITECTURAL STAFF urgently required of Intermediate standard in busy office at Cleckheaton. Bonus and Pension schemes in operation. Write stating experience and salary requirements to Firth, Son & Blackburn, A.A.R.I.B.A., Broadway House, Crackenedge Lane, Dewsbury. 7648

ARCHITECTURAL ASSISTANTS, Intermediate and Qualified, for medium sized varied London West End practice. Interesting contemporary work, opportunity to exercise initiative. Salary range £700 to £1,200. Apply Box 7654.

JUNIOR ARCHITECTURAL ASSISTANT

required with good knowledge of general building construction and reasonable draughting ability. O.N.C. in Building an advantage. Age group preferred: 19-24 years. Candidates must have either completed or obtained exemption from National Service. The Company which has approximately 5,500 employees at its

HARROW FACTORY

operates non contributory sickness and pension plans and a part contributory life insurance scheme.

Please write for application form to
Men's Personnel Dept.,
Kodak Limited (Factories),
Wealdstone, Harrow, Middlesex,
quoting DGD/14. 7887

ARCHITECTS with busy practice in Brighton require ASSISTANTS with practical experience for varied work. Salary up to £750 per annum. Five-day week, pension scheme, etc. Box 5848.

CAPABLE ASSISTANT, good draughtsman, required for small, busy office, interesting and varied work. Five-day week. Apply to Ervin Katona, A.R.I.B.A., 23, Old Burlington Street, W.1. REG. 1945. 7907

GOTCH AND PARTNERS, ARCHITECTS OF LONDON AND BRIGHTON, require ASSISTANTS, both Senior and Junior. Salary according to ability and experience. Five-day week. Write or telephone for appointment 8, City Road, London, E.C.2. Monarch 3235. 7906

J. H. NAPPER & PARTNERS require an ARCHITECTURAL ASSISTANT for interesting and varied work in a busy office. Salary by arrangement according to experience. Please write giving full details of career and qualifications to 133 Osborne Road, Newcastle upon Tyne 2. 7905

LEEDS—SENIOR ASSISTANT ARCHITECT: To work in general practice and on University, Hospital and School programmes. Planning, working drawings, site supervision. A.R.I.B.A. Salary range £1,000 to £1,500 to discuss. Write, stating age and experience, to Jones & Stocks, F/F.R.I.B.A., 7, Blenheim Terrace, Leeds, 2. 7901

MORRISON, ROSE & PARTNERS are urgently seeking first-class qualified and Inter-standard ASSISTANTS. Write or 'phone for appointment—4 Wimpole Street, W.1. Tel.: LANgham 8061. 7899

EXPERIENCED SENIOR & JUNIOR ASSISTANT ARCHITECTS required immediately for London Office. Good salary, varied and interesting work on contracts of all types and sizes. Apply giving details to J. G. L. Poulson, L/F.R.I.B.A., 46 Catherine Place, Westminster, S.W.1. 7896

ARCHITECTURAL ASSISTANTS intermediate and qualified required for small West End branch office. Interesting and varied work. Salary range £800—£1,200. Box 7897.

EASTBOURNE. ARCHITECTURAL ASSISTANT with experience in Schools, Light Industrial Work and Housing, required immediately. Permanent position to suitable applicant. Write in own handwriting to—Scales & Howard Bradford, National Provincial Bank Chambers, Terminus Road, Eastbourne. 7894

ASSISTANT ARCHITECT required by Frederick Hill, F.R.I.B.A., A.M.T.P.I., F.I.L.A. Excellent opportunity for the right man in rapidly growing practice. Sensible modern outlook essential. 5-day week. Write stating age, experience and salary to 22, Masshouse Lane, Birmingham, 5. 7891

ARCHITECTS have vacancies in London and Birmingham offices for ASSISTANTS in salary grades £500—£700 and £900—£1,100. Senior grades carry three weeks' holiday with pay. Pension scheme applies to all grades after first year. Write stating age, experience, qualifications and salary and giving names of two referees to Jackson & Edmonds, 116, Colmore Row, Birmingham 3. 7903

QUALIFIED ARCHITECT required. Bristol. Industrial/commercial experience. Scope for individuality and freedom of expression. Good salary. Interesting work. Pension scheme. ASSISTANTS of Intermediate standard also required. Details of experience to W. H. Watkins, Gray and Partners, 1, Clare Street, Bristol 1. 7868

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