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HERB ACCIDENTS



another  
price break-through  
by *Haskins*



**Strongfold**  
SHUTTERDOOR

# ... A SUPERIOR SHUTTERDOOR AT LESS COST

Yes—Haskins new 'Strongfold' Shutterdoor really does cost less. Equally important, this dramatic cost-reduction has been achieved without sacrifice of quality; in fact, the 'Strongfold' sets a new high standard in Shutterdoor construction.

## just a few advantages:

### **50% REDUCTION IN WEIGHT**

STRENGTH TO WEIGHT RATIO AT LEAST DOUBLE  
THAT OF ANY PREVIOUS DOOR OF THIS TYPE

### **LIGHT AND EASY TO OPERATE**

8/12 LB. PRESSURE WILL OPEN A DOOR 15 FEET HIGH

TOP ROLLER HANGERS, FITTED WITH SELF-ALIGNING  
BALL RACES, REQUIRE **NO MAINTENANCE  
OR ADJUSTMENT**

BOTTOM GUIDES TO DOOR AND MOVING PINS  
ON LATTICE MEMBERS ARE FITTED WITH  
**LONG LIFE, LOW FRICTION 'DELTRIN' ROLLERS**

BOTTOM TRACK DESIGNED TO WITHSTAND  
**HEAVY TRAFFIC LOADS**

### **NO PAINTING NECESSARY**

ALL COMPONENTS HAVE ATTRACTIVE, DURABLE,  
RUST-FREE SURFACES

# Haskins

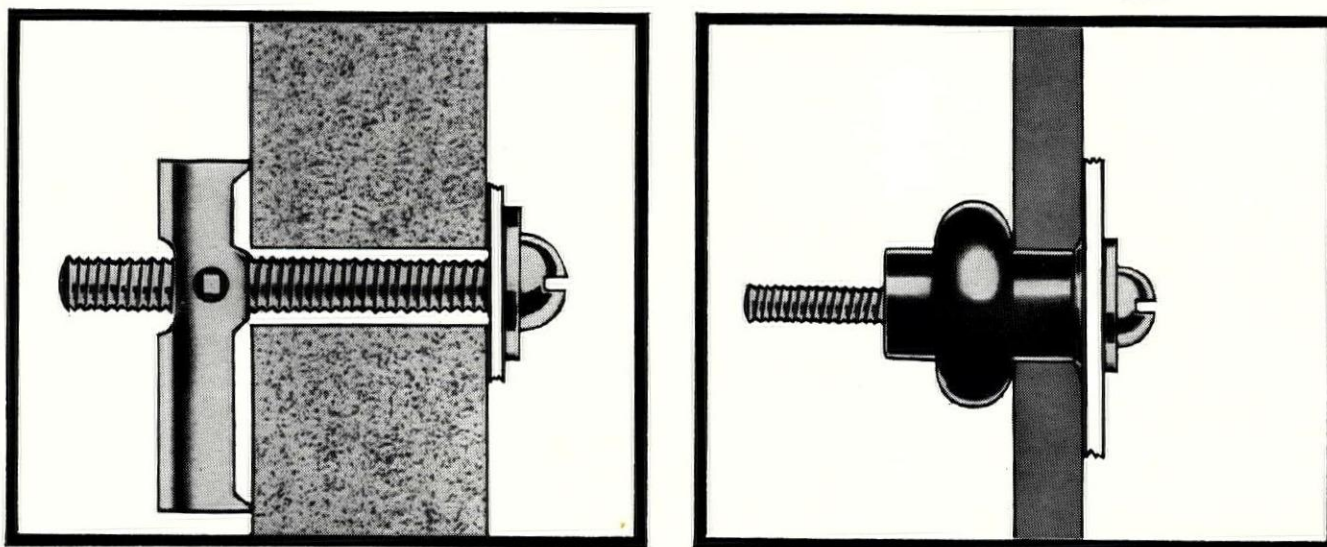
MORRIS SINGER & HASKINS LIMITED, Dept. YR6  
KINGSLAND, READING ROAD, BASINGSTOKE, HANTS.  
Telephone: Basingstoke 5701 Telex: 85204

WRITE FOR LEAFLET Ad 385/68

PATENT APPLIED FOR 9004/68



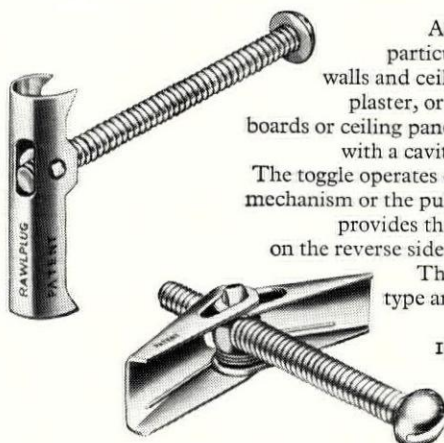
# Rawlplug cavity fixings support you through



## ...thick and thin.

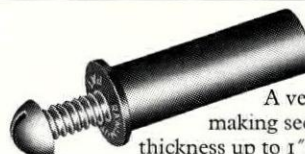
Rawlplug Cavity Fixing devices provide a secure anchorage for metal thread screws in thick, thin, hollow or friable materials where it is difficult or impossible to use conventional fixings. A simple trial will convince you that these devices meet a very prevalent need in the world of diverse proprietary building materials today.

### RAWLPLUG TOGGLES



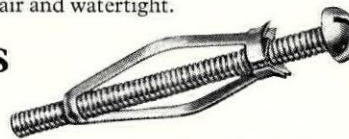
All-metal fixings; particularly useful for walls and ceilings of lath and plaster, or where building boards or ceiling panels are mounted with a cavity behind them. The toggle operates either by spring mechanism or the pull of gravity and provides the locking device on the reverse side of the material. Three sizes of each type are available with 1/8", 3/16" or 1/4" metal thread screws.

### RAWLNUTS



A very adaptable and useful device for making secure fixings to materials of varying thickness up to 1". They are particularly suitable for glass, sheet metal, plastics, plywood, asbestos and proprietary building materials. As the screw is tightened the Rawlnut is drawn up into a solid collar on the reverse side of the material completely locking the hole, making it air and watertight.

### RAWLANCHORS



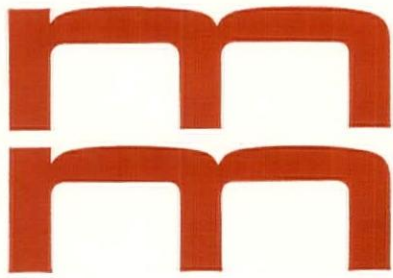
This device makes a permanent tapped insert into plywood, asbestos, insulating board, hardboard and plaster-board. Screws can be inserted and withdrawn at will. An ideal use is in providing fixing points in-situ in prefabricated building sections. There are three sizes for 1/8", 3/16" and 1/4" metal thread screws.

SEND YOUR TRADE CARD FOR FREE SAMPLES & TECHNICAL LITERATURE TO:- THE RAWLPLUG CO. LTD., RAWLPLUG HOUSE, 147 LONDON RD, KINGSTON-UPON-THAMES, SURREY. TEL. 01-546 2191. SCOTTISH DEPOT: 6 LAWMOOR PLACE, GLASGOW C.5. TEL. 041-429 3897

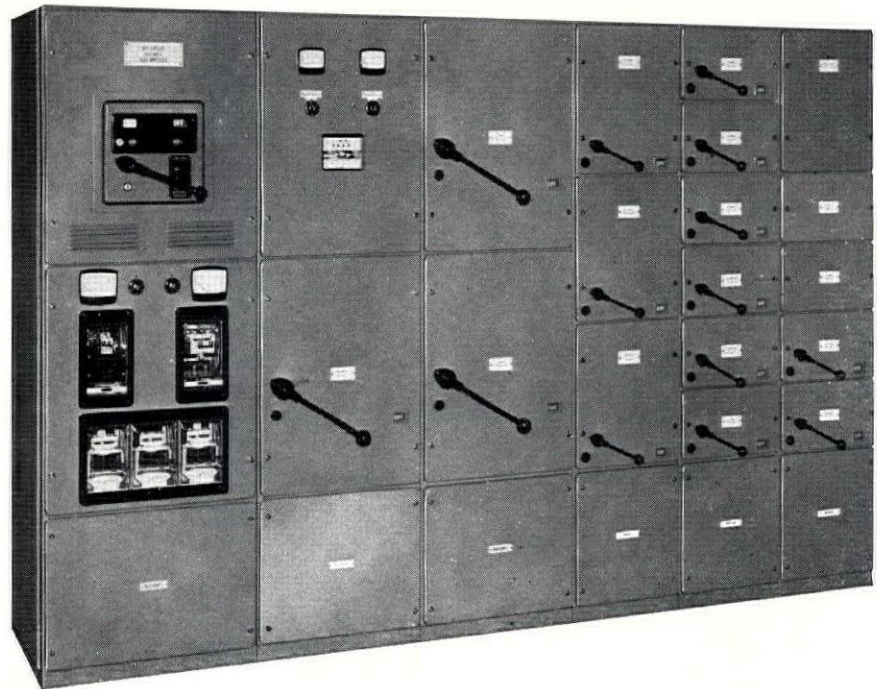


B959





**a new  
range of  
medium-voltage  
modular  
distribution  
gear by  
REYROLLE**



- \* A new range of distribution fuse-switchgear that offers Reyrolle standards of design and manufacture at prices that are strictly competitive. An associated range of heavy duty air-break circuit-breakers will be available shortly.
- \* Built on the module principle with two widths of cubicle, 15 in. and 20 in., covering the full range—nine sizes of fuse-switch from 60A to 1200A and an additional switch size, 1600A.
- \* Switches and fuse-switches are capable of making and breaking a.c. currents in excess of their normal rating over a wide range of power factors.
- \* Fuse-links can be changed and the moving contact assembly removed while busbars are energized. Additionally the whole fuse-switch unit can be withdrawn for bench maintenance or for replacement by a spare unit without closing down the board.
- \* Maximum safety during maintenance—busbars and risers are fully insulated and cabling of an outgoing circuit can be carried out while the board is energized.
- \* The equipment conforms to relevant British Standards and C.E.G.B. requirements.

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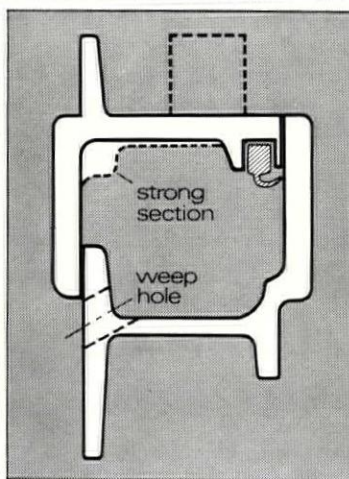


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A. Reyrolle & Co. Ltd., Hebburn, County Durham, England

739 C





The strong case for steel 'W20 Casements'

## For strength and economy in purpose-made windows -specify W20 Casements

Where robust yet elegant purpose-made windows are required, Crittall's 'W20 Casements' provide a remarkably economical solution. Since their introduction in 1965, they have been widely specified by architects for projects ranging from schools and public buildings, where economy and durability are essential, to the most elegant of office blocks. Close metal-to-metal contacts are a feature of these strong, slender-framed steel windows. Neoprene weather-stripping is available and double-glazing units can also be accommodated. Rust-proofing is by efficient hot-dip galvanizing. Extra-heavy sections give the additional strength required in larger frames—without changing sight lines.

Production of 'W20 Casements' is carried out with the aid of latest computer techniques in one of the well-equipped factories of the world's most experienced window-makers—Crittall. Ask for Crittall leaflet No. 311.

**CRITTALL**  
*purpose-made*  
**W20**  
**Casements**

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CR718



## This is a Gliksten Mark 12 door

You can buy doors  
that are cheaper...  
and look it

The Gliksten Mark 12 flush door looks beautiful in West African Cedar veneer. You can find doors that cost just a little less, but they don't have the Mark 12's looks and lasting quality. Mark 12 doors have built-in salesmanship. They create an air of elegance that impresses the prospective buyer and helps to sway a sale. It makes that little extra cost a good investment. When required, Mark 12 doors can be matched in pairs, or in sets. The Gliksten Mark 12 Door and the famous "Silkstone" door (the best door in the world for painting) can also be supplied as complete Glikfit door units, with hardwood threshold, "Yale" latch and rustproof butts.

Both these finishes are incorporated in Glikfold — a space-saving system providing the most economical and efficient form of closure for built-in cupboards and wardrobes. These doors glide easily on spring-loaded pivots, and run in an overhead track designed to eliminate the need for a bottom track without loss of rigidity.

Fill in and send coupon below  
for full details of the doors  
in the Gliksten range:

**GLIKSTEN DOORS LIMITED**  
LEADS ROAD, HULL Telephone HULL (OHU2) 71291/7

# GLIKSTEN



A Company in the Gliksten Group.

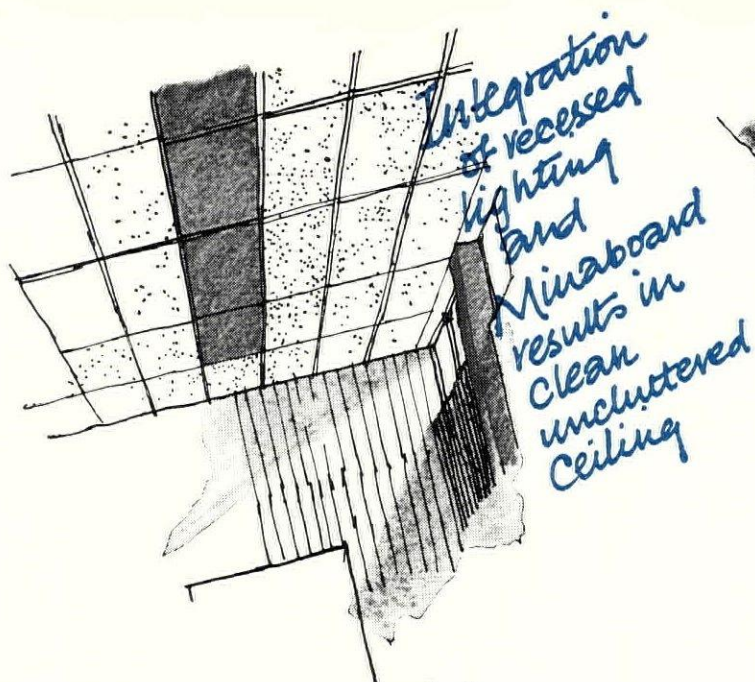
Please send full details of all the doors in the Gliksten range

NAME .....

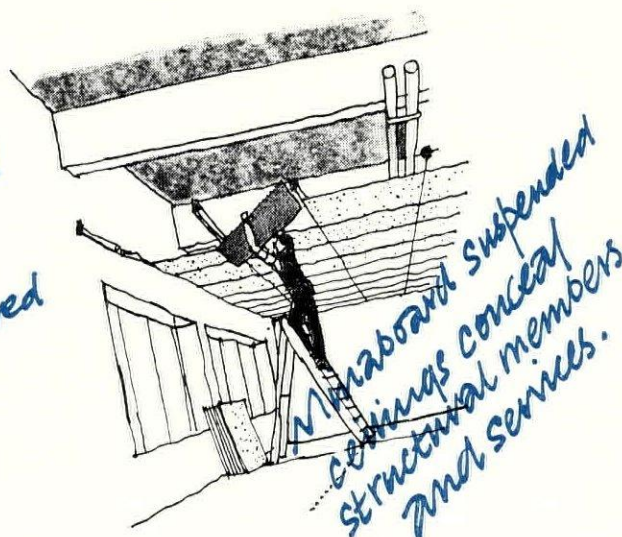
ADDRESS .....







*Integration of recessed lighting and Minaboard results in clean uncluttered ceiling*



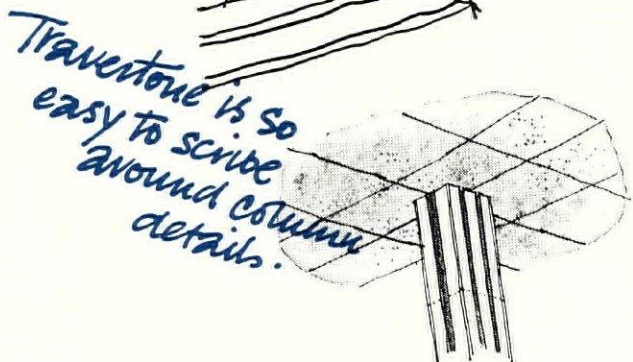
*Minaboard suspended ceilings conceal structural members and services.*



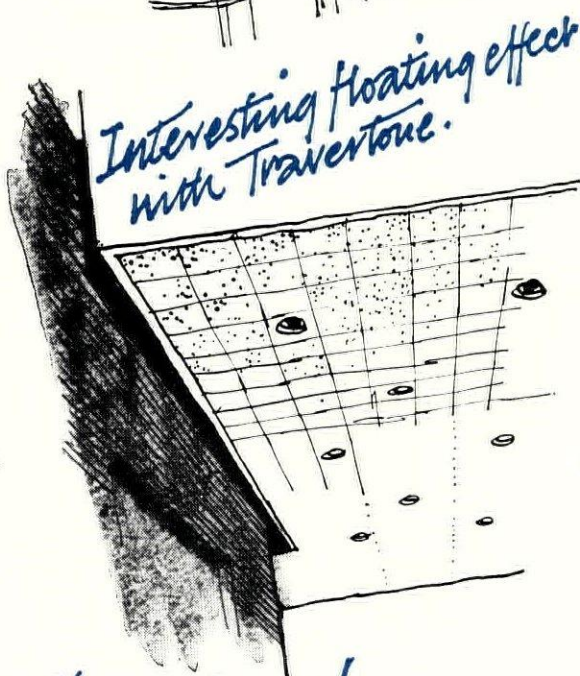
*Neat handling of changes in level with fissured Minatone.*



*Purpose made light fittings incorporating tile upstands.*



*Travertone is so easy to scribe around column details.*



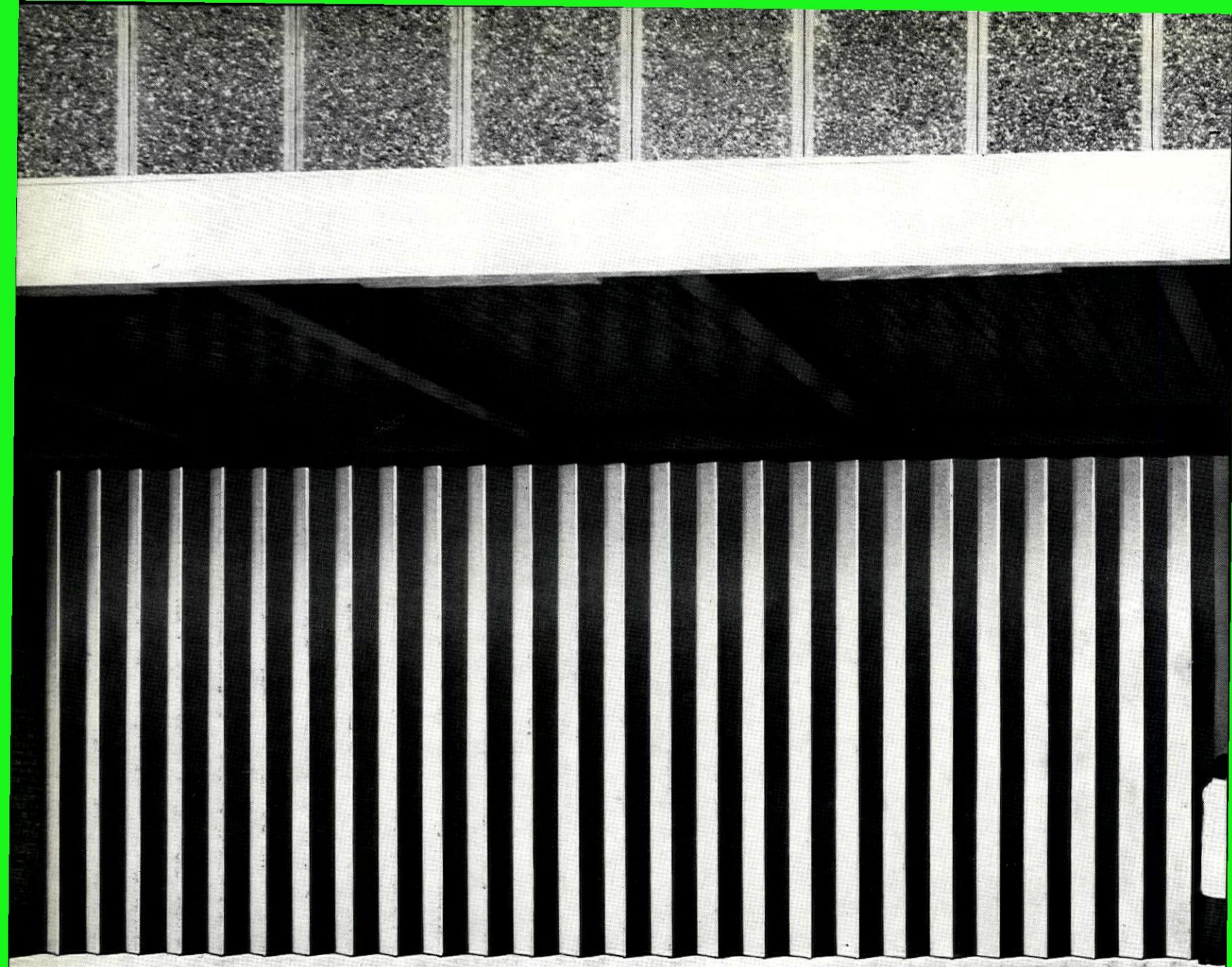
*Interesting floating effect with Travertone.*

*Use Armstrong ceilings throughout!*

## CEILING SYSTEMS BY **Armstrong**

ARMSTRONG CORK COMPANY LIMITED  
CEILING SYSTEMS DEPT. WOODGRANGE HOUSE, WOODGRANGE AVENUE, KENTON, MIDDX. TELEPHONE: 01-907 0151  
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*Makers of Minatone, Minaboard, Travertone, Cushiontone*

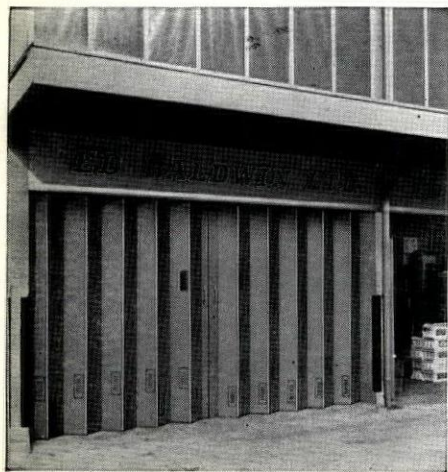




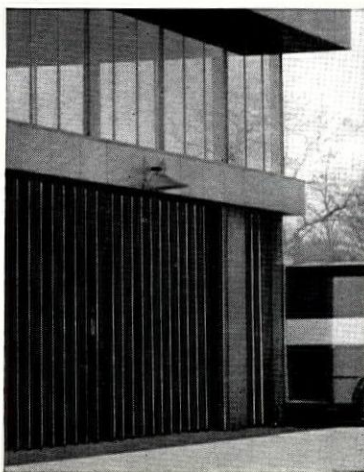
1.

**If these Bolton Shutter Doors  
and on... well, that's their**

2.



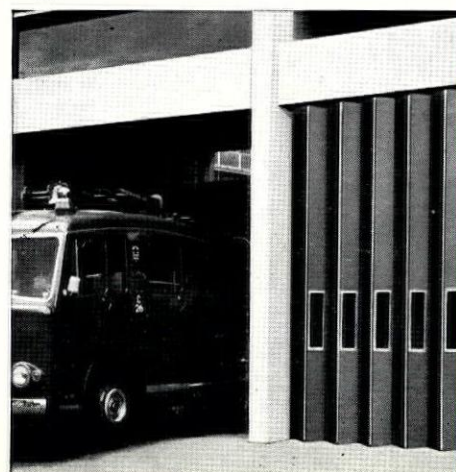
3.



4.



5.





# seem to go on...and on... success story!

over the world—Bolton Shutter Doors are continually  
ving their superiority on all counts. They could be the  
wer to your closure problem, too—get the full story  
v under ref.AR 724.

Electrically operated Bolton Shutter Doors at W. & A. Gilbey  
Ltd., Harlow.

Bolton Shutter Doors installed in Blackburn Wholesale  
Market.

An installation of Bolton Shutter Doors on B.E.A. Freight  
Heds, N. Ireland.

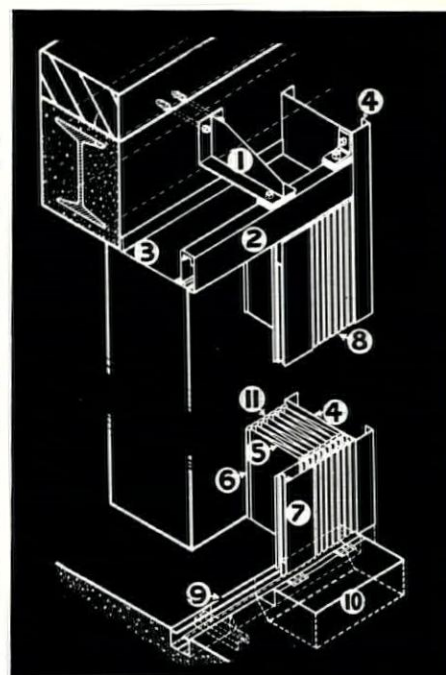
A factory installation of Bolton photo-cell controlled Shutter  
Doors.

Electrically operated Bolton Shutter Doors at Shoreditch  
Fire Station.

Architects: Architect to the Greater London Council, Hubert  
ennett, F.R.I.B.A.

1. Welded mild steel suspension bracket.
2. Bolton patent, totally-enclosed box-type top track.
3. Mild steel cover plate for the exclusion of draught.
4. Mild steel end panels.
5. 16's gauge (1.63 mm.) mild steel shutter leaves, Sherardised against corrosion.
6. Non-ferrous hinging strip.
7. Rigid front to accommodate locking arrangement.
8. Steel pickets on which the door is built.
9. Self-cleaning bottom track, built up from rolled steel channels.
10. Mild steel sump-box with hinged lid to facilitate cleaning out.
11. Shutter leaves rolled round  $\frac{1}{8}$ " (3.2 mm.) diameter wire reinforcement to give great vertical strength.

**BOLTON**  
GATE CO LTD



The **Biggest** name in Doors

**Bolton Lancs** Telephone Bolton 25241 (7 lines)  
Branches in London, Birmingham, Glasgow and throughout the country



# New LFS Grade ( LIMITED FLAME SPREAD ) from FILON



This new grade of Filon can be used for rooflights without restriction. It has a designation of not less than EXT. S.A.C. under B.S. 476 Part III and is available to match all Filon profiles.

It has improved weathering characteristics and costs less than Self Extinguishing Grade. You can readily identify L.F.S. Grade Filon by blue nylon threads embedded in the panel. For further information please contact BIP at the address shown.

**FILON**



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Streetly Works, Sutton Coldfield, Warwickshire  
Tel : 021-353 2411

A Turner & Newall Company





new approach to open planning which makes the most of costly space while looking after the human environment by avoiding dreary regimentation.

COMPOSIT furniture, by Esavian, provides a range of basic ingredients -

landscaping while the COMPOSIT comprehensive and competitive leasing terms can include all ancillary items.

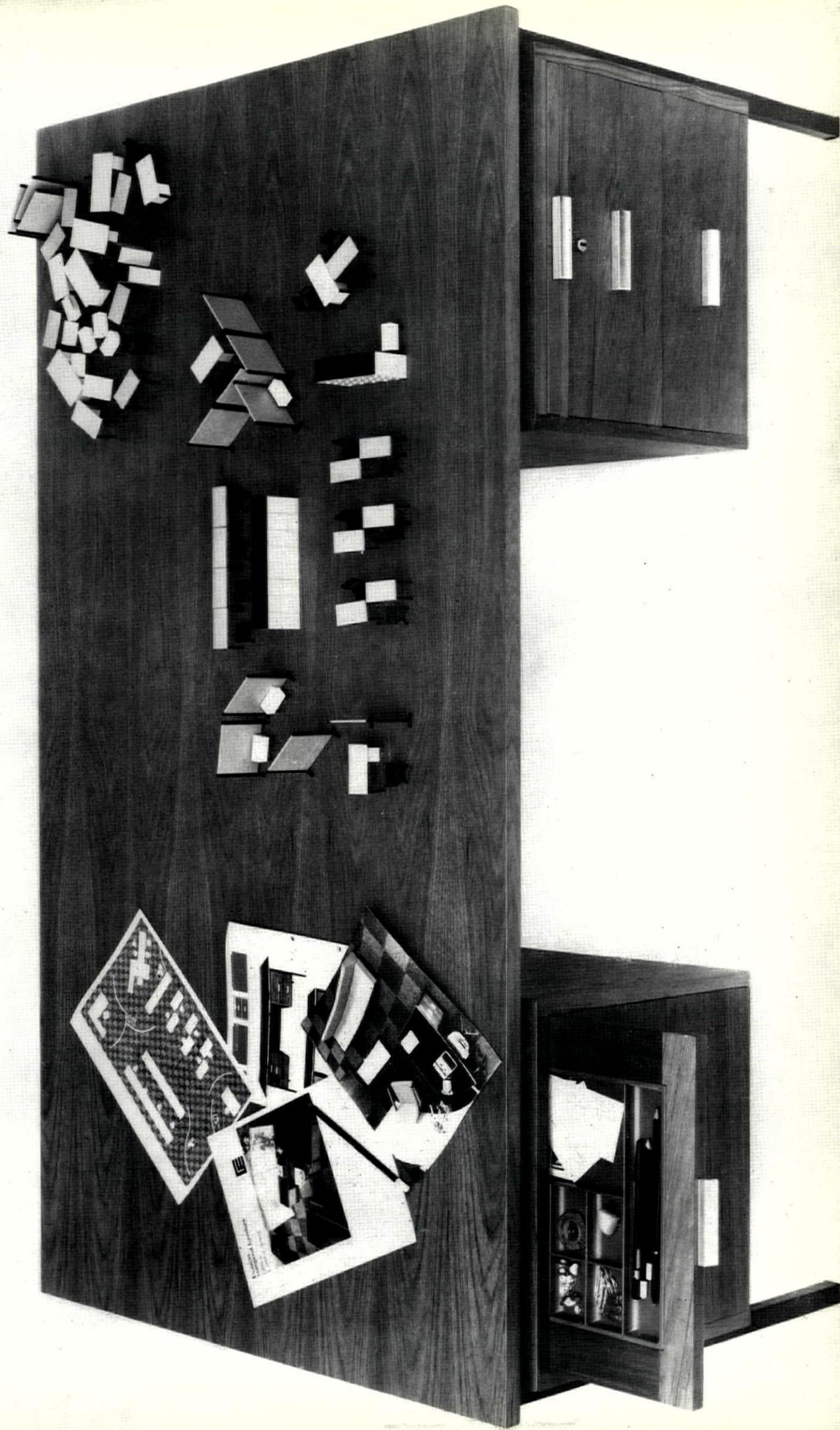
Write for a COMPOSIT brochure on 'Office Landscaping,' obtainable from the manufacturers' showrooms.

London W.1. 01-580 3436

Charles Street, West Bromwich,  
Birmingham B21-1TP 1631

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Glasgow C2. 041 CEN 2369

**ESAVIAN**





# Every Kitchen needs a Swanmaid fully automatic dishwasher



- Complete automatic washing and drying—your washing-up done at the touch of a button.
- New top spray gives even better washing and drying.
- Easy, quick, front loading.
- The Swanmaid can be fitted into any kitchen layout, with or without optional attractive working surface top.
- Approved by British Electrical Approvals Board and awarded The Certificate of the Royal Institute of Public Health and Hygiene.



## Keystone of a carefree kitchen

You will want to know more facts about the Swanmaid Dishwasher so post this coupon without delay.

To: **BULPITT & SONS LTD., (DEPT. A.R.), BIRMINGHAM 1**  
*Please send your fully coloured literature on the Swanmaid dishwasher.*

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M-W. 51



# The architect doesn't want to see your credentials



Quotation from Briggs

When there's pride in the job, it's hard to suppress it. Briggs men really know roofing. All our representatives are trained on the roof, in all conditions. It's practical experience — over 100 years of it — that gives us our unique sense of responsibility. That's worth remembering when you want a roof to last for generations, because in the long run, it's practical experience that keeps the rain out. But don't quote us — we'll quote you.

## **"BRIGGS FOR ROOFING"**

and for cladding too  
Bitumetal roof decks/Built up roofing/Colorclad

**William Briggs & Sons Limited** Registered Office/East Camperdown Street, Dundee. Telephone: 82211  
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BCD 211



# "Slotac solves big ceiling problems but.....



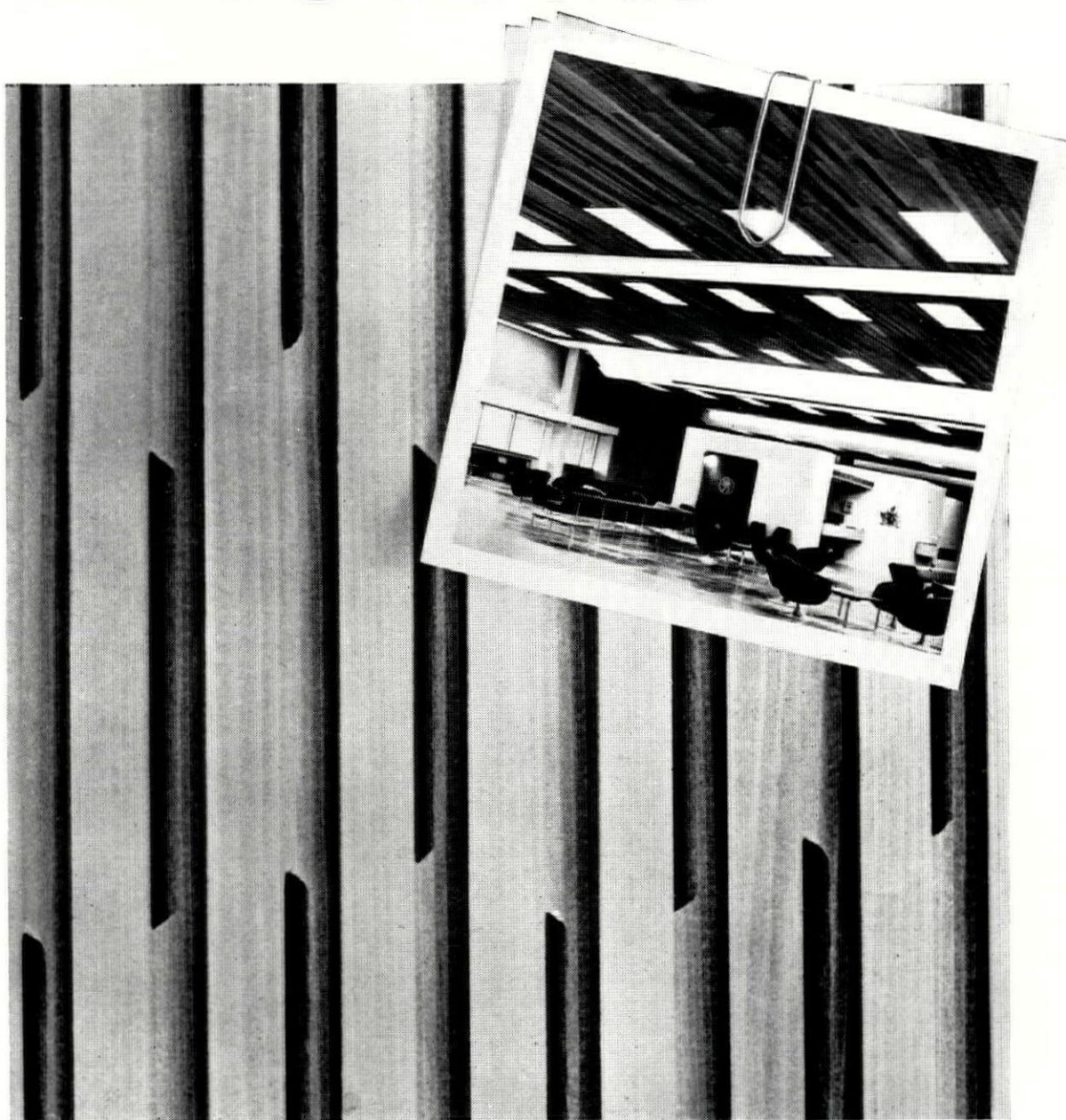
Design leaders in every field search out individuality in the products they use. In the field of ceiling design Slotac forged a new look. Crisp design, linear, wood fibre tiles and sheets. Slotac—functionally efficient as a sound absorption material attuned to modern architectural thinking. Slotac earned its reputation by usage. Now it is one of a number of Treetex original designs. For example.....

**Treetex Acoustics Ltd 8 Guilford Street W.C.1 Telephone: 01-242 5919**

# **Treetex**



# Queen Elizabeth II Terminal solved it with Cedac!"



Queen Elizabeth II Terminal, Southampton, specified Cedac for an atmosphere which was warm and relaxing to their passengers—even though the area was large. The natural colour harmony of cedar strip, varying from a light straw shade to a deep red-brown, fulfilled this need. Only Cedac has offset random slits cut through to the back, which give distinctive visual relief, depending on the angle from which they are seen, and allow for sound absorption. SfB technical sheets are in your Barbour Index, or please use the journal's Reader Enquiry Service for further information.

**Treetex Acoustics Ltd 8 Guilford Street W.C.1 Telephone: 01-242 5919**

## Treetex



# there's more to UAM than just asbestos sheet

## and there's more to asbestos sheet than broiler houses

The qualities which make Universal asbestos cement sheet ideal for industrial roofing and cladding are applicable to a wide range of other products too. Pipes, Guttering, Cisterns, Flue—all have the durability and positive inertness which allows you to virtually ignore maintenance costs. Capital costs are reduced too; asbestos cement is one of the cheapest materials available to the building industry.

For further information and quick deliveries anywhere in the British Isles **contact**



**The Universal Asbestos  
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UAM House · Exchange Road · Watford · Tel: 34551

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# Architectural anodising - Acorn quality

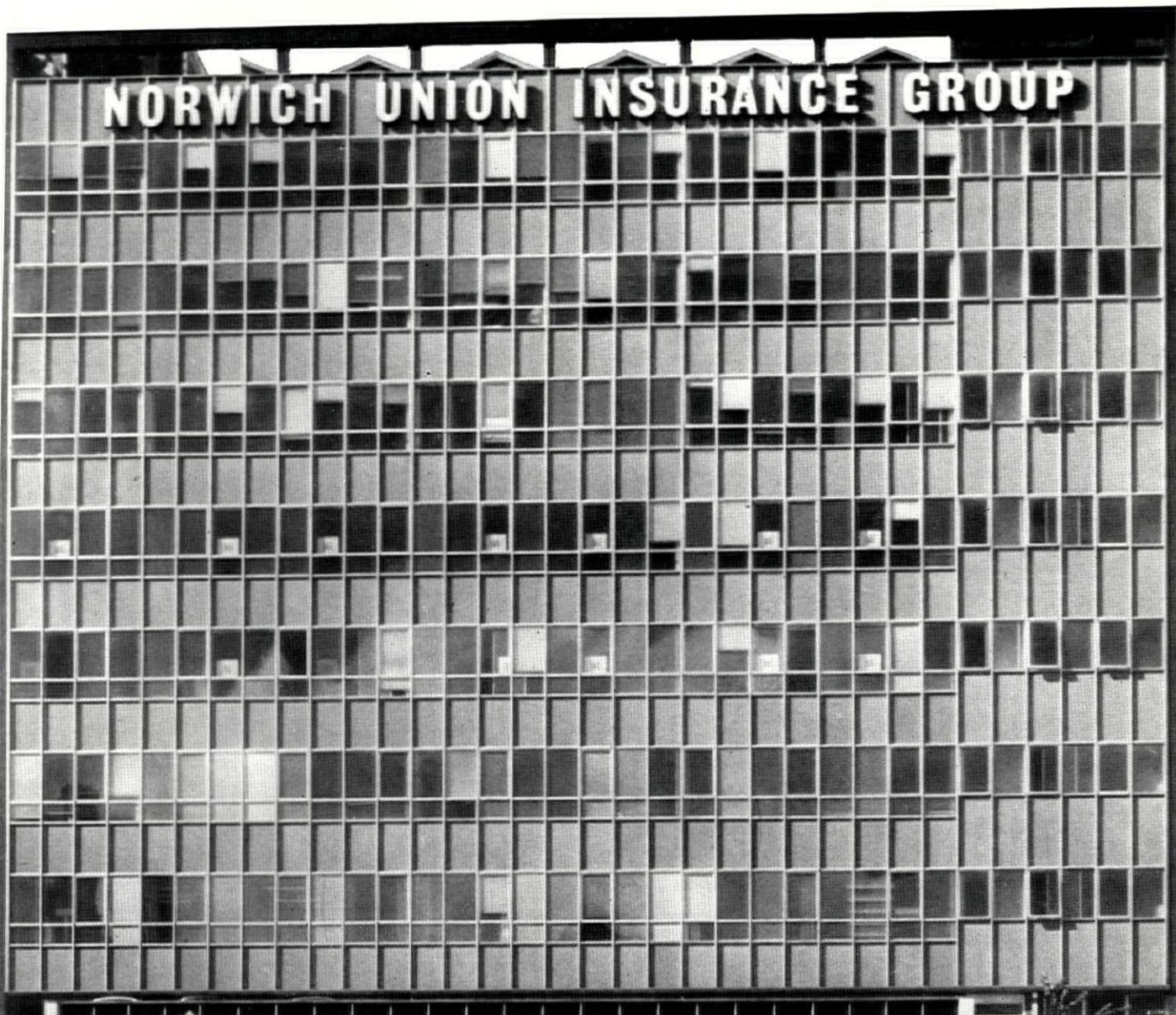
Acorn anodising means the finest aluminium finishes obtainable. Finishes that will stand up to all the rigours of wear and weather, backed by a unique 10-year guarantee. The exacting inspection and control techniques used in Acorn anodising are the result of long experience, and big resources in skilled personnel and modern plant. Always specify Acorn for quality anodising. 'Satinal' ready anodised sheet in 3 standard colours also available. **Now 4 colour processes Acorn now offer 'Duranodic 300'<sup>1</sup> and 'Anolok'<sup>2</sup> colour anodising processes, in addition to 'Alcanodox'<sup>3</sup> and 'Kalcolor'<sup>4</sup>.**



<sup>1</sup>A trade name of Aluminum Company of America    <sup>2</sup>A trade name of Alcan (U.K.) Limited  
<sup>3</sup>Registered trade mark of Alcan Industries Ltd    <sup>4</sup>Registered trade mark of Kaiser Aluminum and Chemical Corporation.

Norwich Union Insurance Group building, Leeds. Architects: Harry W. Weedon and Partners. Consulting Engineers: Sir Frederick Snow and Partners. Main Contractor: Tersons Ltd. Aluminium windows and curtain walling by Boulton & Paul (Metal Windows) Ltd.

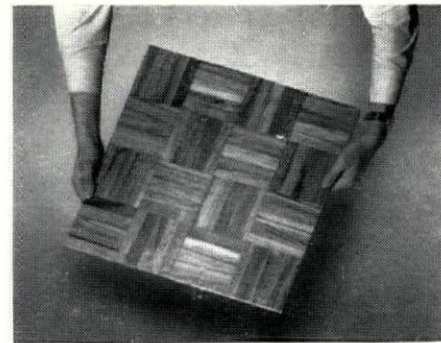
**Acorn Anodising Company Limited, Bilton Road, Bletchley, Bucks. Telephone: Bletchley 5151**



TW2523







## ***Feltwood***

**-the finest  
wood mosaic floor  
obtainable**

**-AND AT THE RIGHT PRICE!**

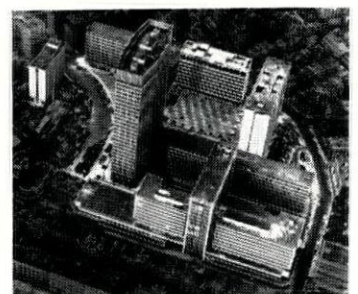
- Designed to retain the good looks and durability of the best wood-block flooring at a competitive price.
- Offers a choice of hardwoods giving wide scope as to colour and price for all types of contract.
- Made up in panels 18 ins. x 18 ins., each panel consisting of sixteen  $4\frac{1}{2}$  ins. x  $4\frac{1}{2}$  ins. squares which in turn are made up of a number of  $\frac{3}{8}$ ths. inch thick strips.
- Panels are die-squared, pre-sanded, and indissolubly bonded to a bitumen-felt backing which in turn is bonded to the screed or sub-floor.
- The work of laying is reduced to a minimum, cutting labour costs drastically. Time is the essence of the contract.

## ***Vistawood***

Vistawood is manufactured to the same dimensions as Feltwood and is similar in all respects except that it is paper-faced instead of being bitumen-felt backed and is therefore not pre-sanded or die-squared.

*\*Vistawood is also incorporated in the V.S.A. Cushioned Floor to provide a semi-sprung mosaic floor.*

- The selection of Feltwood for one of the largest flooring contracts awarded in recent years, 600,000 sq. ft. area in a complex commercial building in Central London, is proof of its quality and economy.



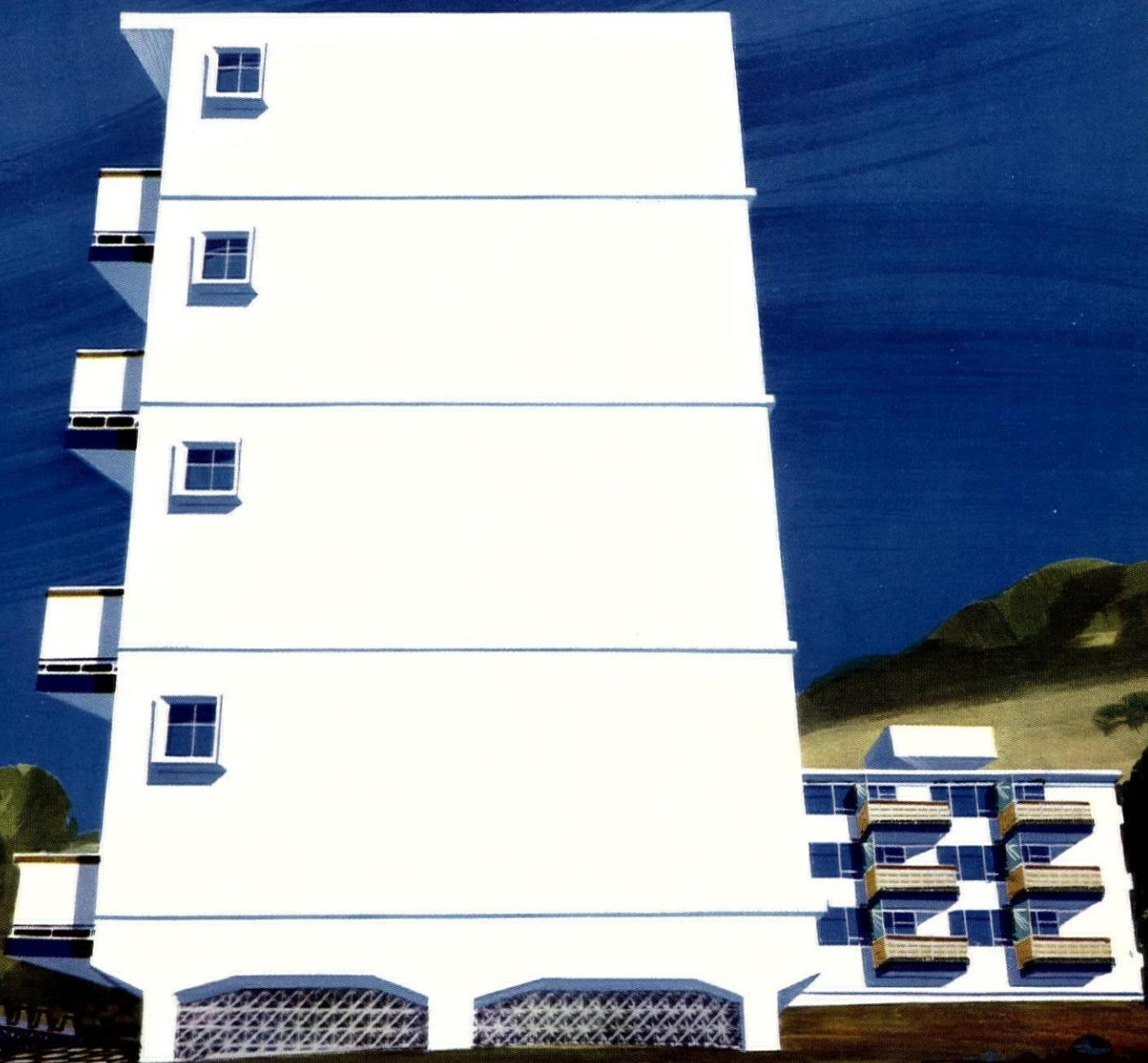
**VIGERS, STEVENS & ADAMS LIMITED**

Flooring Contractors, Hardwood Importers  
Manufacturers and Exporters of all types of wood flooring

**Leadale Works, Craven Walk, Stamford Hill, London. N.16. Tel: 01-800 1290**



# costs less..lasts longer.. goes on easily



New Polycell Cement Paint is the paint to order less of. Less often. Weight for weight, it gives 50% more coverage than other quality cement paints. It is extremely durable and virtually free from cracking and flaking. And it is the only cement paint which is easy to spray. All these virtues stem from the fact that it has vinyl polymer reinforcement. Patent applied for. And granted.

Polycell Cement Paint cuts initial costs *and* maintenance costs, for it has a longer life than any other cement paint, except some very, very expensive ones. So now you have low-cost *and* long-life in one exterior paint. Polycell Cement Paint. The paint you need less of. Less often.

## **NEW** Polycell cement paint



# You know what you can do with structural hollow sections?

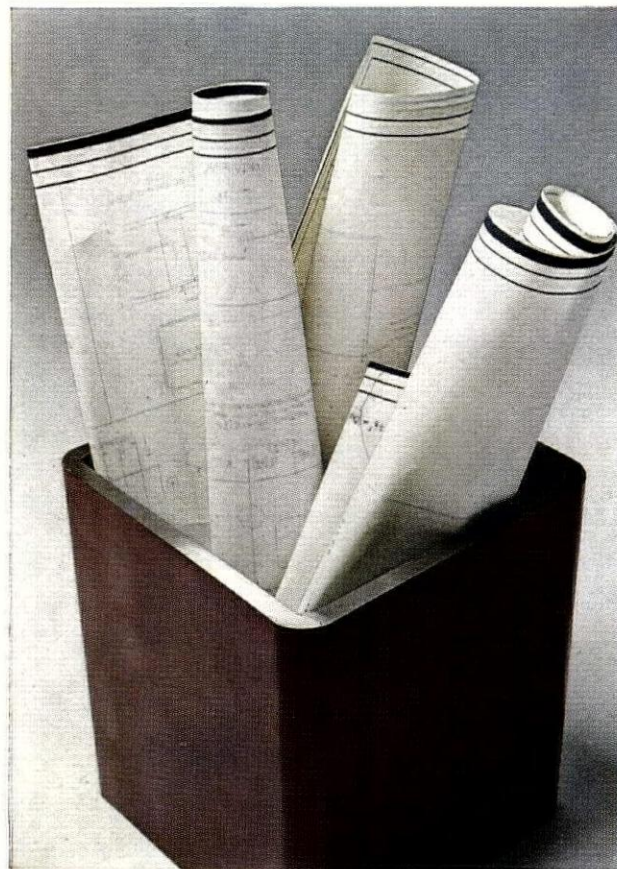
Ask Stewarts and Lloyds. When you've got a really tough, big-span problem to crack, a piece of SHS might make a handsome bin for your rejected ideas. But Stewart and Lloyds can help you use the hollow spaces in these new shapes in steel in a much more profitable way.

Suppose your problem is to design a roof for a big indoor sports stadium. A space structure is the answer, but what material do you use? SHS gives you the perfect solution. Its tremendous rigidity and high strength/weight ratio make it the natural material for domes, spheres and all other types of wide-span roofs for areas where unimpeded space to move

and see is the first essential. SHS is simple to weld and ideally suited to prefabrication, so labour costs are kept down. You don't get awkward corrosion pockets, so maintenance of the completed structure is no worry.

Maybe you're not space minded. SHS is making a lot of headway in other fields too. Road bridges, containers, fences, industrial buildings, balustrading, pipe-bridges and agricultural equipment are just a few. Stewarts and Lloyds have a lot of informative booklets on them all. Fill up the spaces on your shelves with SHS literature. It'll save you a lot in waste-paper bins.

**Stewarts and Lloyds Limited Lloyd House 2 Colmore Circus Ringway Birmingham 4 Telephone: Central 3300**  
Stocks of SHS are held in S & L warehouses, by leading stockholders throughout the United Kingdom and in 87 countries overseas.



**SHS—new shapes in steel from Stewarts and Lloyds**  
Northern and Tubes Group — British Steel Corporation

68 5



# Baby. It's gold outside!

And it only costs about 10% extra.

The tap shown here is just one of the many Shanks fittings that offer optional gold plating at remarkably little extra cost.

Our man is only too pleased to come and show you the rest.

They range from shower units to bidet fittings.

And when coupled with suites like the Clarendon in Sun King, they bring a touch of opulence that is hard to resist.

However, should you resist, then our man still has the answer. In baser metals than gold. On lesser suites than Clarendon.

Within the range that he offers

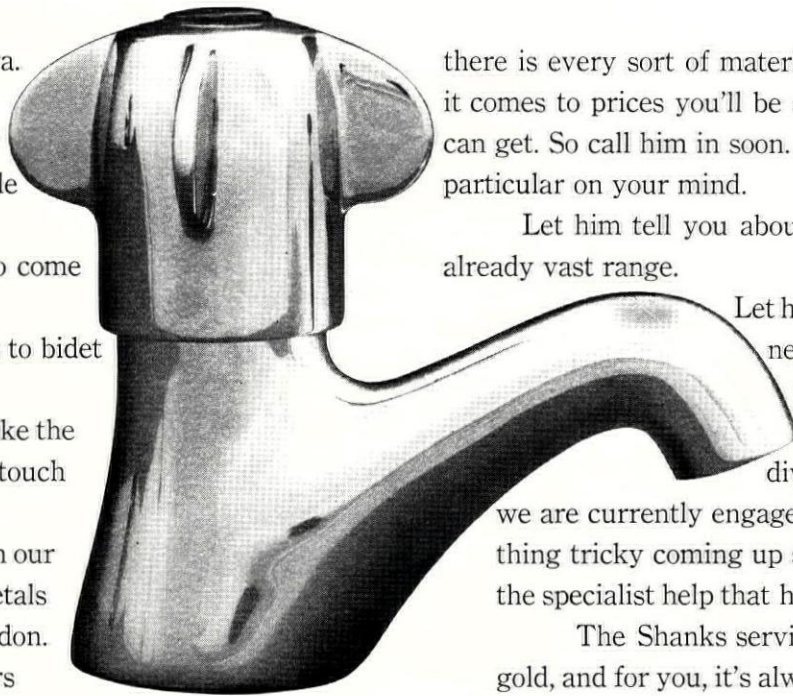
there is every sort of material and design. And when it comes to prices you'll be surprised at how keen he can get. So call him in soon. Even if you have nothing particular on your mind.

Let him tell you about our plans to extend an already vast range.

Let him show you new designs, new materials and swatches of new fashion colours.

Ask him about the diverse contracts on which we are currently engaged. And if you have something tricky coming up soon, then let him explain the specialist help that he, backed by us, can give.

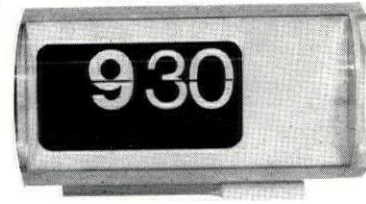
The Shanks service is worth its weight in gold, and for you, it's always on tap.



## Call in the man from Shanks



# We also sell toys for architects' clients



Work furniture at 200 Tottenham Court Road.

But to be exact, Conran Contracts is a company that supplies and installs furniture, carpets, curtains and accessories for offices, universities and industrial premises. One of our associate companies is the Conran Design Group, so we know about interior design problems as well.

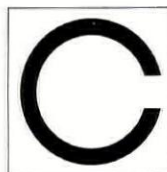
Many of the goods are designed and made by us. We use the rather dry words 'work furniture' to describe them – though, in appearance, our desks, textiles and office objects are far from boring. (You can see them in our big new 8,000 sq. ft. showroom at 200 Tottenham Court Road.)

We say 'work' because we want office furnishing to be seen in its right perspective. It should make people feel better at work. If they feel better, they work better.

The clock above is a case in point – simple, ingenious, and it tells you the time clearly. But it's a little better than that.

**You can Play with it.** We consider, when decision makers are making decisions, they need something more elaborate than a paper knife to fiddle with. We give them a mechanical representation of time.

Conran Contracts' Showroom is at 200 Tottenham Court Road, London, W1 01-580 0184. Open 9.30 am





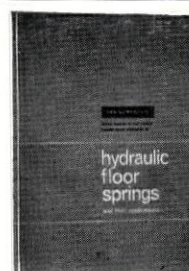
NEWMANS

makers of the

briton

details of this + door weight tables  
door mounted + heel radii data  
door closer + alternative closers

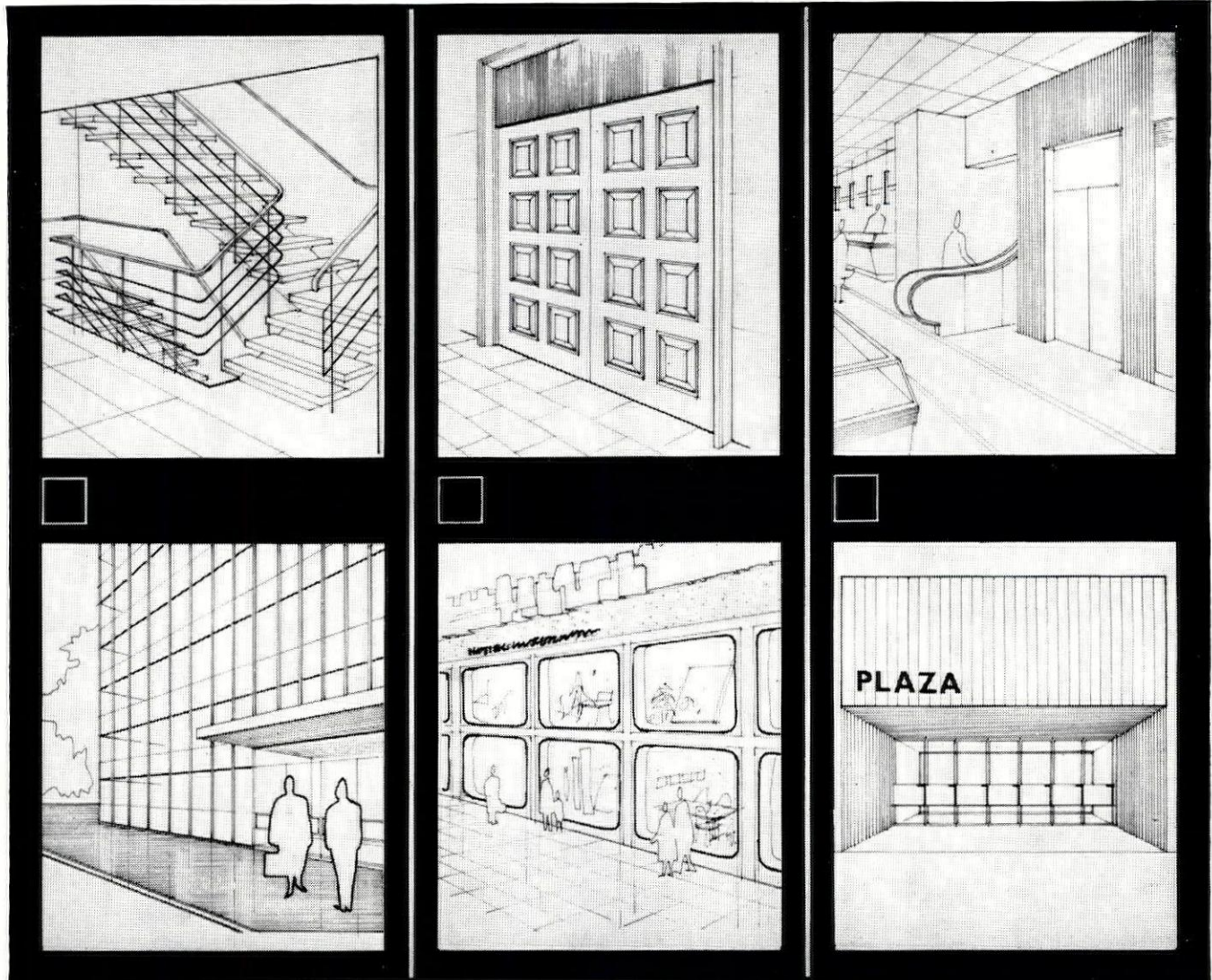
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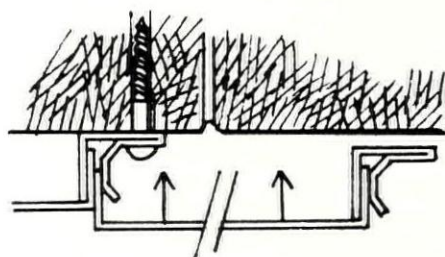
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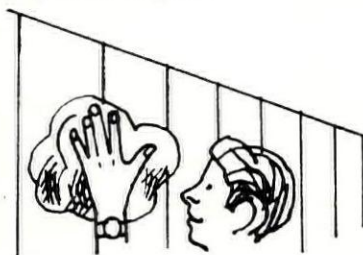
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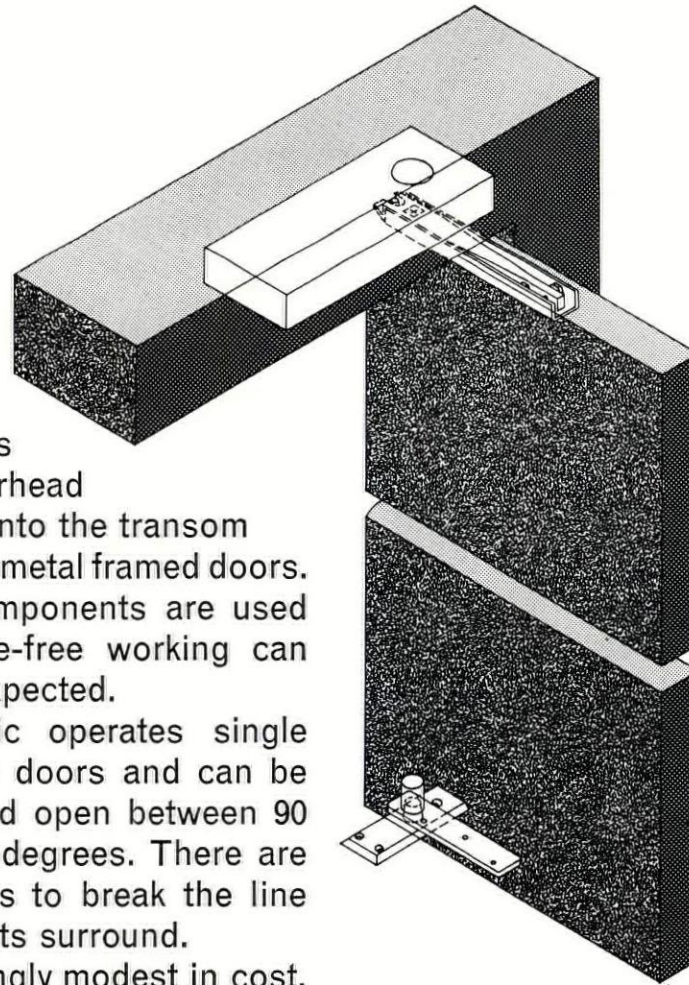
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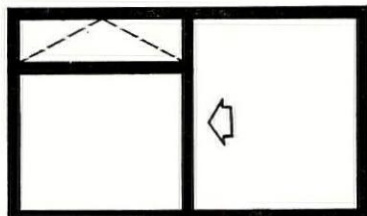


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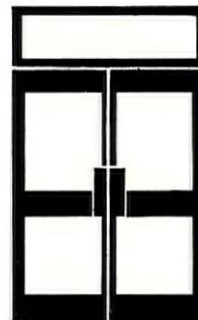
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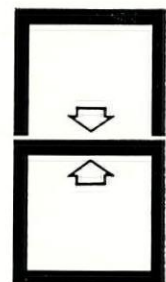
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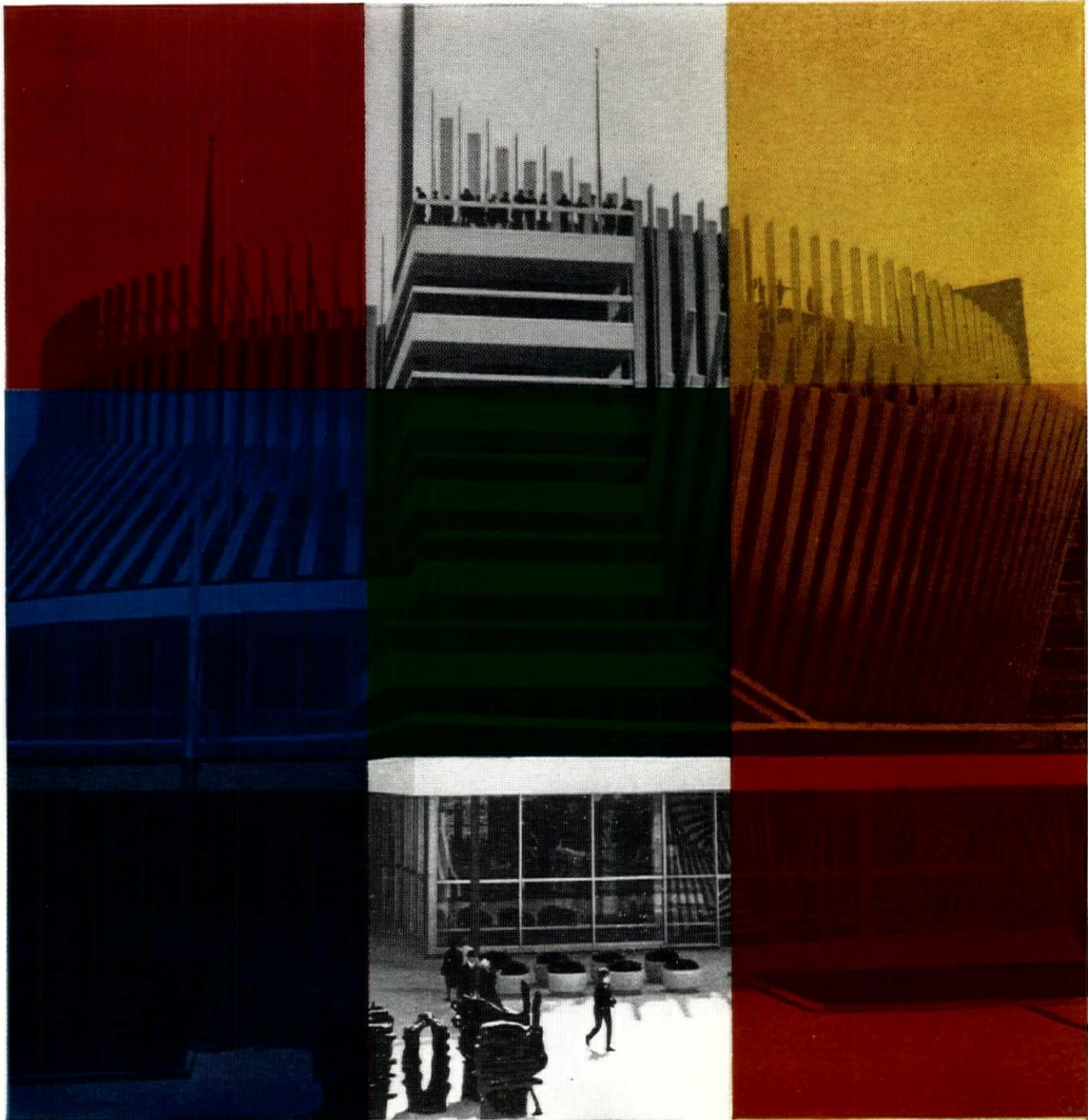
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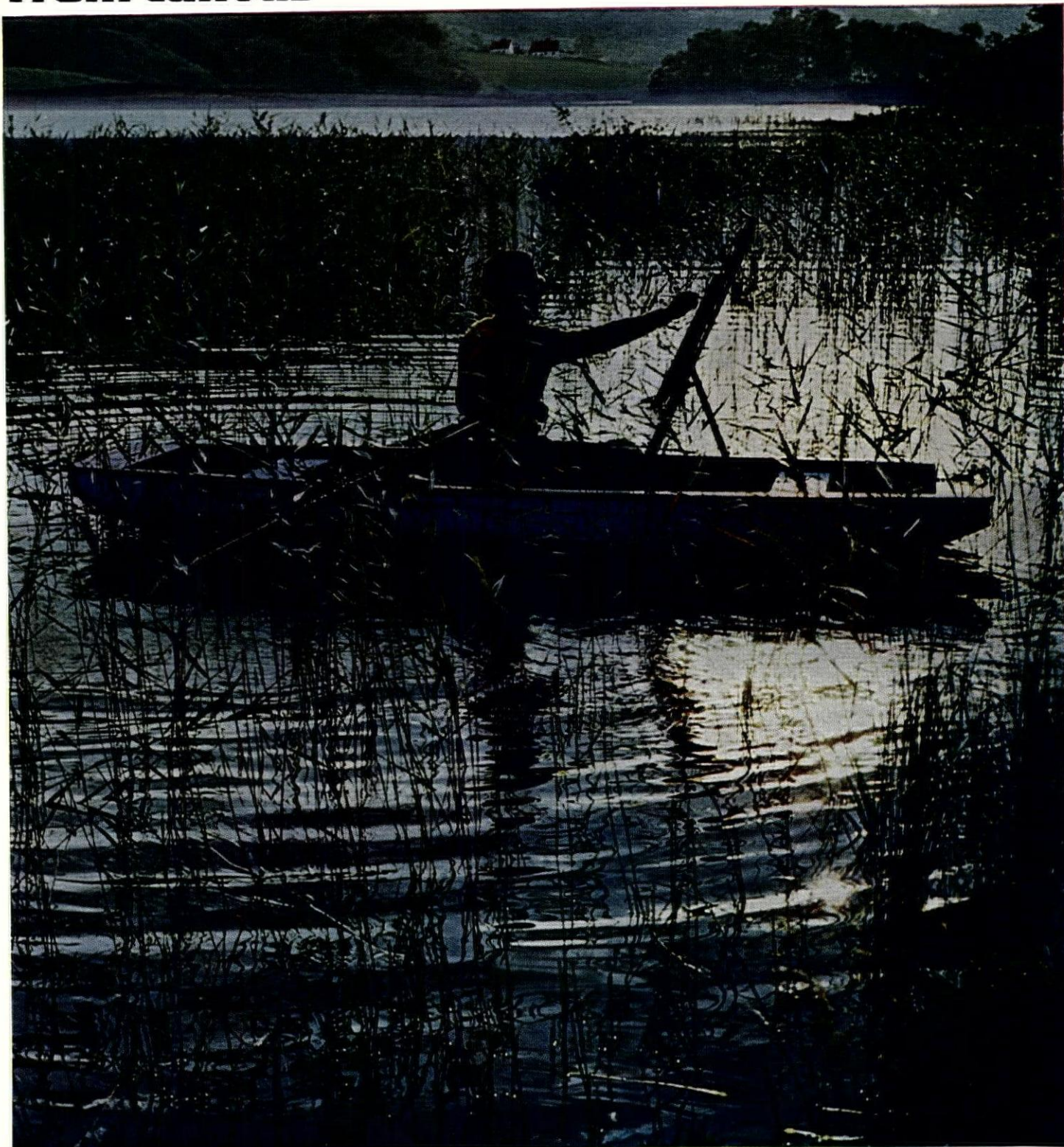
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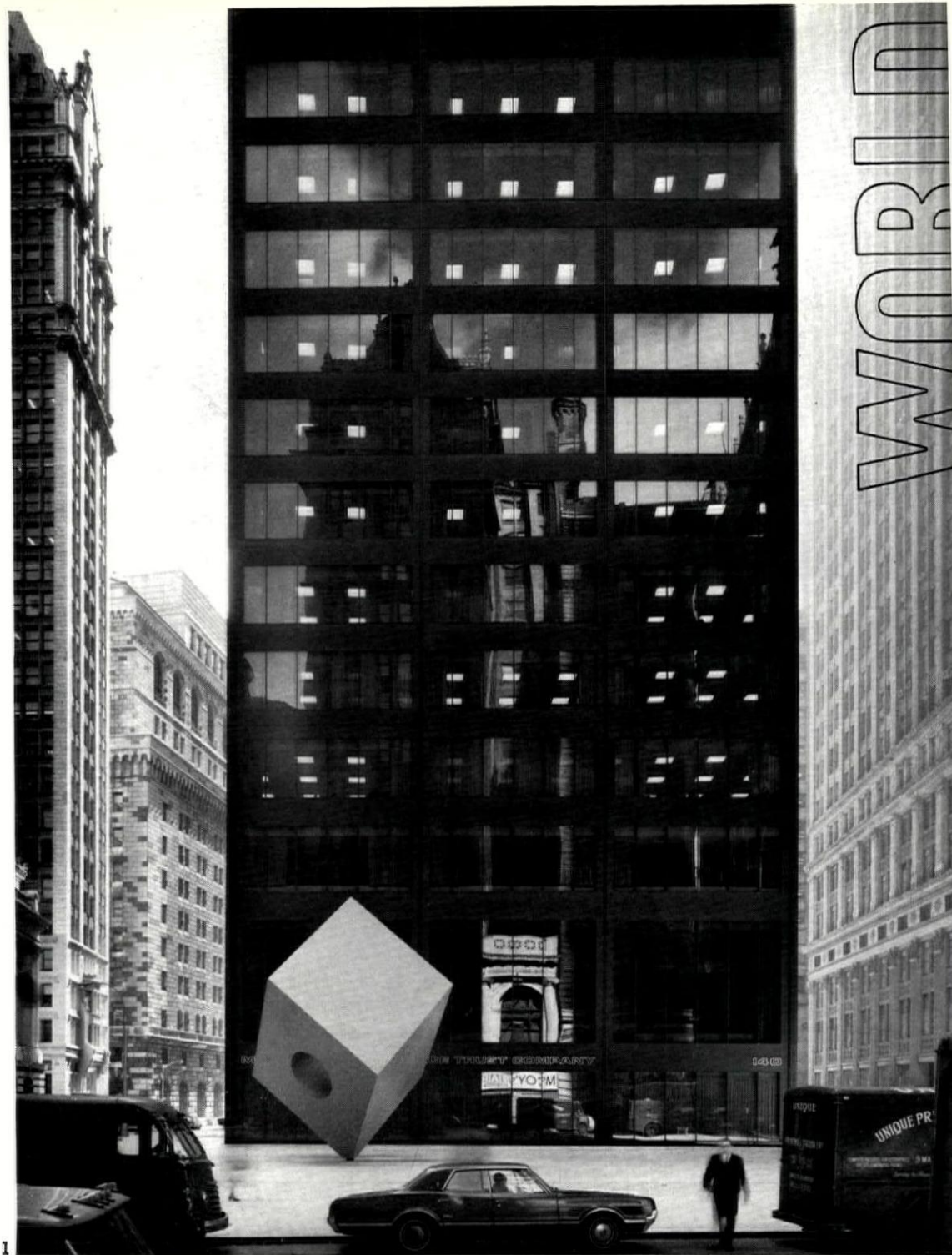
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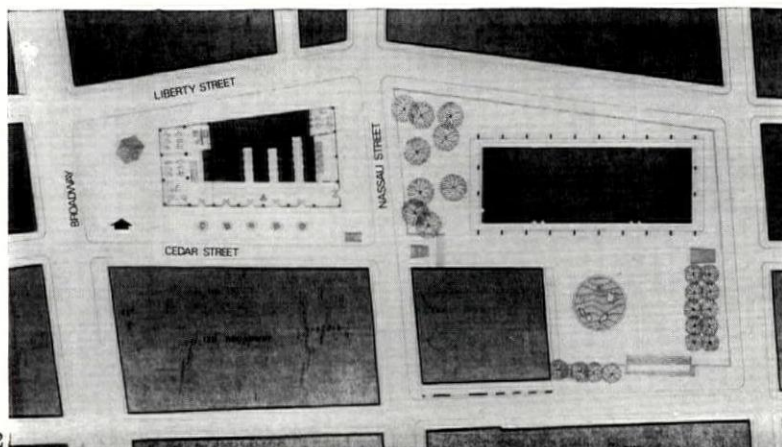
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# SOM CUBES



SOM'S new Marine Midland Building, a 52-storey office tower in anodized aluminium and bronze makes its impact by reflecting darkly, its surroundings in downtown Manhattan. Though SOM has returned to something like earlier curtain-wall style, they broken with strict rectangular adopting a wedge-shaped plan along the street line. 2. (The service is also wedge-shaped so that the of office space from wall to remains constant.) Marine Midland lies between way and SOM's earlier Chase Manhattan Building. It fronts on way with the building's only a element, a prominent red cube sculpture Isamu Noguchi in collection with SOM. Entrances to the building are on the south side with largely pedestrian open space like Chase Manhattan plaza, despite Nassau Street, to the plaza parking

## THE ARCHITECTURAL REVIEW

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## ODENSE

unit ensures a connected group of buildings, avoiding rigid departmental boundaries and providing maximum

flexibility of use. Cars circulate on a one-way system below ground level, underneath a pedestrian deck, 5, which is reached by frequent ramps and staircases. The result is a very compact plan which reduces walking to a minimum, but also makes it difficult for each building stage to have its own sense of completeness.

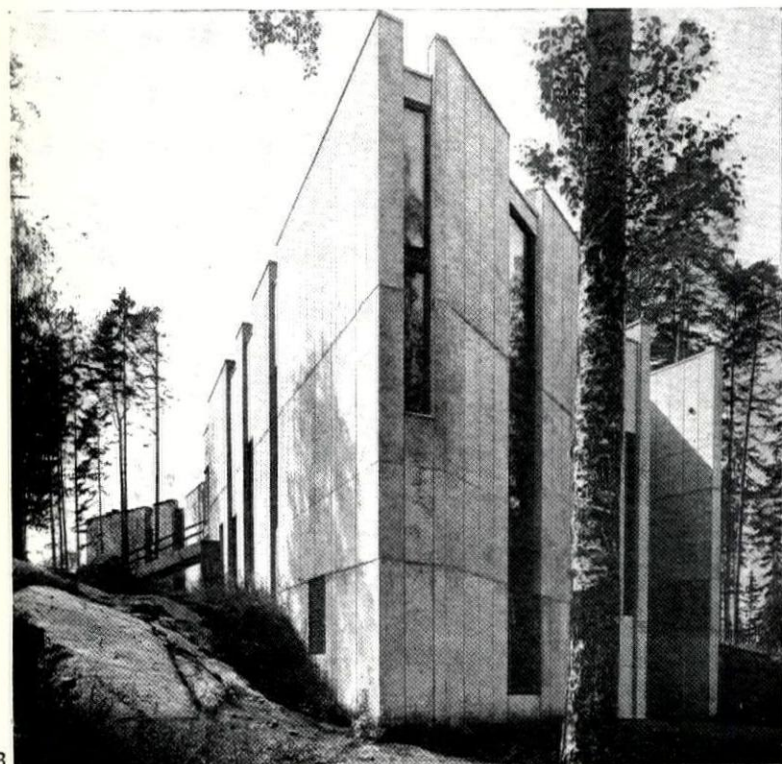
# ISTANBUL INFILL

It is good to see that in the wreck of a great city that is Istanbul there are still people who care for its scale and character. In 1959 Tekeli, Sisa and Hepgüler won a competition for a cloth market on Atatürk Boulevard, on a site over half a mile long and split in two by an existing small mosque, 6. Their solution was an informal group of low buildings stepping down the

hillside and keeping a polite distance on either side of the mosque. The view, 7, taken from this mosque, and looking uphill towards the Byzantine aqueduct and Schzadebasi mosque, shows the completed half of the cloth market. The whole will eventually contain 1,117 shops and stalls, restaurants and other social establishments.

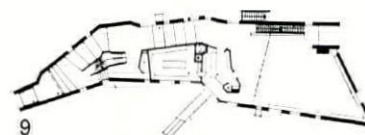


# OTANIEMI UNITY

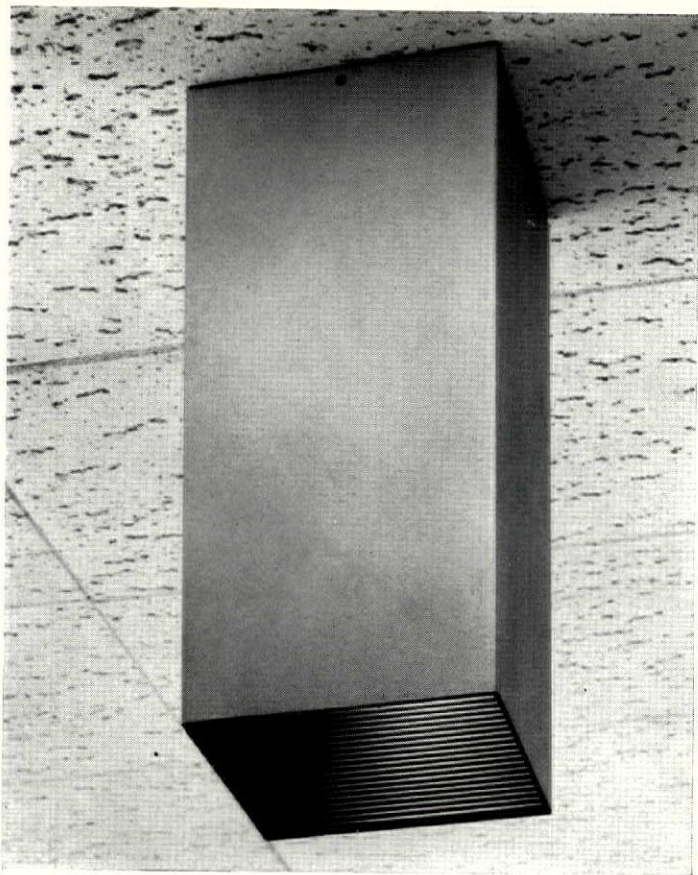


The group of buildings which form the technical college at Otaniemi are a kind of Scandinavian Weissenhof of the 'sixties. In the middle of a triangle formed by the Pietiläs' student centre, the Aaltos' Institute of Technology and the Sirens' hostel, Kurt Moberg has now added a remarkable little building—the Swedish Students Association Centre, 8. The building reflects the organic forms of the landscape in the way it is made to fit in between the fir trees and around the outcrops of rock, and with its vertical slot openings catching the rhythm of the tree trunks.

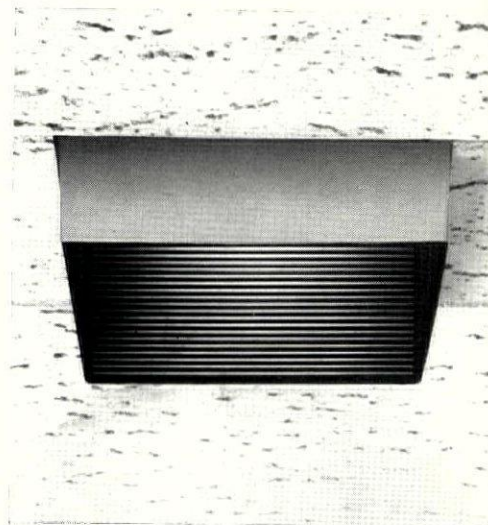
The plan, 9, remains open-ended, and could presumably be extended at either of the two main entrances. The real interest, however, is in the way access and circulation are organized. There are entrances on every side and at every level, including an external ramp to the first floor. The west entrance leads to what the architect





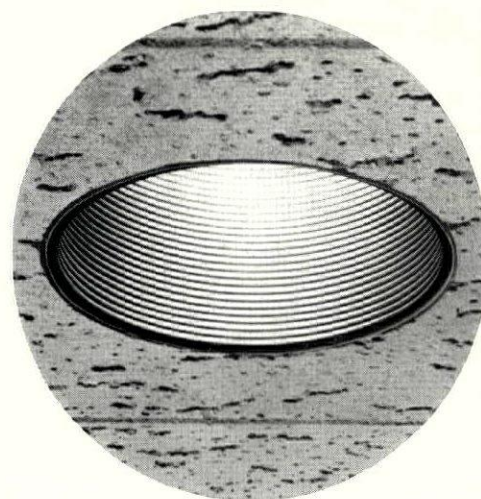
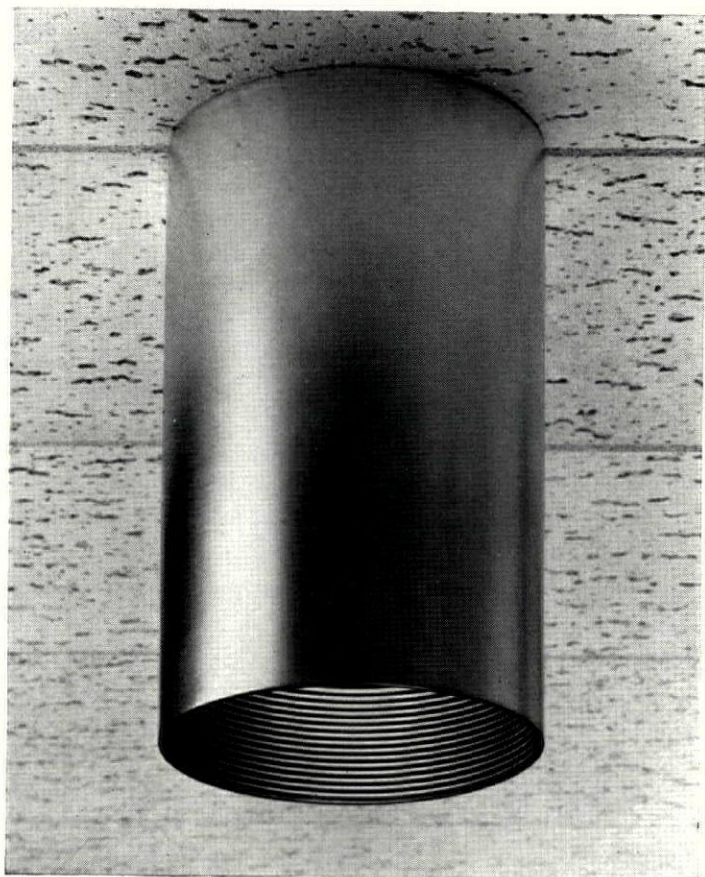


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## OTANIEMI UNITY

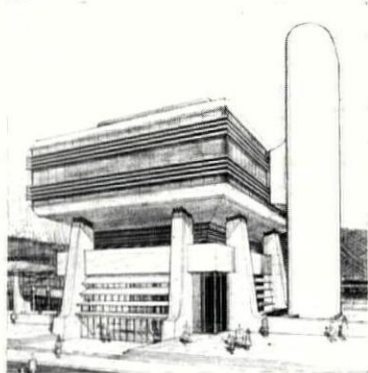
has called a 'happening street,' 10, a long space which rises and falls, turning almost imperceptibly into an assembly hall at the end, 11. There are points of rest where the space widens out and divides—places for chance meetings and conversations. The sense of unity may be enhanced by consistency in the detailing and choice of materials, but the rough concrete walls seem an inappropriate background to an eminently sociable building.

# HIDDEN POWER

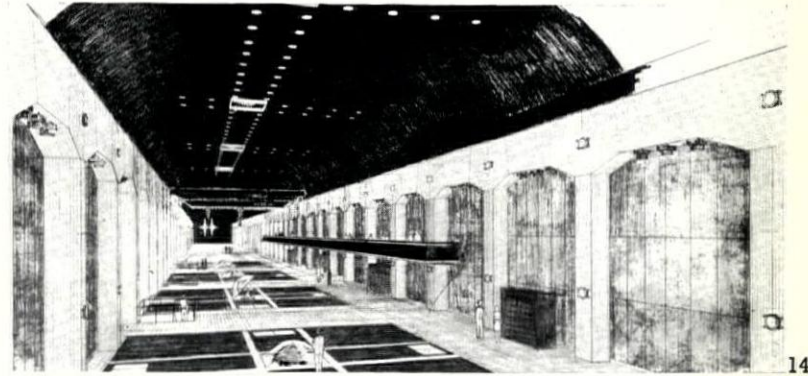
One of the largest hydro-electric projects in the world, the Portage Mountain Development on Peace River in British Columbia, will be completed this year. The Vancouver architects Rhone and Iredale have been responsible for the general layout and for the styling—for this is what one must call it despite their claim of functional expression. For example, the top of the central control building, 13, resembles an enormous transformer symbolizing electric power, but in fact contains tourist amenities and exhibition areas. The perspective, 12, shows the curving crest of the dam connected by a bridge to the ten intake towers on the up-stream side. Below the dam can be seen, neatly laid out, the access road and parking space, the central control building, the generator breaker buildings and transformer pockets and the switch-



13

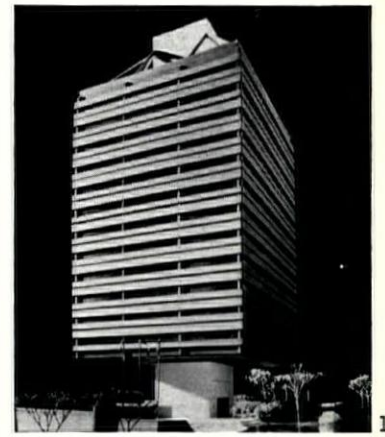


yard. But all this is merely the tip of the iceberg. Six hundred feet down, and accessible by lifts housed in the tower adjoining the control building, is an immense underground power house with a hall 60 ft. high and 900 ft. long, 14. Most of these wonders are on view to visitors (over 100,000 came in 1966), who can either indulge in the technical aspects or merely stroll along the crest of the dam enjoying the spectacular combination of man-made and natural landscape. The same architects have recently designed, for the Westcoast Transmission Company at Vancouver, an office block which is claimed to be the first building in North America with



14

floors suspended from a central core, 15. Also unusual is the fact that the building will contain a total energy system using natural gas to make its own heat, power and air-conditioning. The structure is clearly expressed with the first 30 ft. of the raw concrete core left exposed and the steel suspension cables clearly visible at the top. But 30 ft. seems too high for the suspended building to offer much protection to the outdoor plaza. Construction of the core will be by a single form, powered by motorized hydraulic jacks. The floors, consisting of pre-assembled steel frames, will be raised in position starting from the top and fixed to the steel suspension cables.



15

# PROSPEKT

Western interest in Russian architecture has recently been given a boost by Ada Louise Huxtable's extended tour and subsequent report in *Architectural Forum* (November, 1967). Mrs. Huxtable reminds us that the pre-war effort was largely industrial, while immediately after the war the Russians were pre-occupied with the reconstruction of their damaged cities. So it was only in the 'fifties that the housing problem began to be tackled seriously, by large scale prefabrication (France supplied whole factories), and with the help of a system which combined manufacture and site erection. Today Russia is the largest manufacturer of cement and probably the most advanced country in rein-

forced concrete building technology in the world. The interest is still largely technological as can be seen from the new housing along the Leninsky Prospekt in Moscow, 16, where high-

rise towers alternate with older five-storey walk-up blocks in a rigid and monotonous layout. But there are also signs that architecture as an art is once again playing a part, as in the

curvilinear Comecon building in Moscow, 17, or in the simple and elegant hotel at Alma-Ata in Kazakhstan, 18. The obsession of totalitarian regimes with quantity and size has its ad-



16



17





18



19

## PROSPEKT

vantages when it comes to ambitious structure. The 1,745-ft. tall TV tower in Moscow is an impressive landmark, 20, and the steel structure for the Moscow Circus, 19, recalls the great nineteenth-century engineering works.

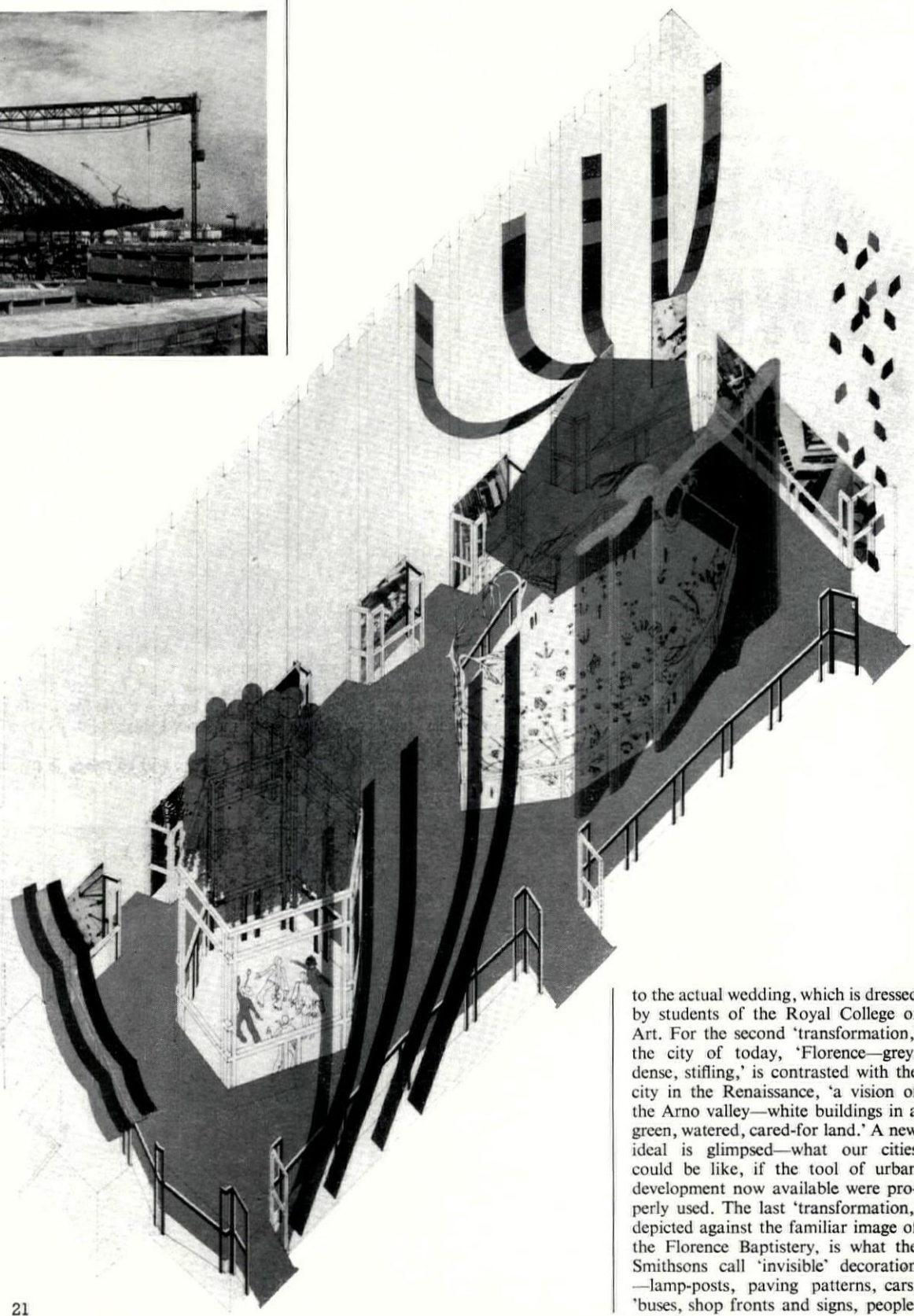


20

# TRIENNALE TRANSFORMATIONS

'The Greater Number' is the theme for this year's Milan Triennale and, predictably, Alison and Peter Smithson have taken the city as their subject. The setting for their exhibit is a very large room in the Palazzo dell'Arte with a balcony overlooking the park. To get the public to participate, they

are presenting three 'transformations,' two of which will be sunk in the middle of a raised floor and the third arranged around the perimeter of the room, 21. The first 'transformation' is a wedding. From a painting of an historical scene step allegorical figures, dressed by Jan Haworth, on the way



21

to the actual wedding, which is dressed by students of the Royal College of Art. For the second 'transformation,' the city of today, 'Florence—grey, dense, stifling,' is contrasted with the city in the Renaissance, 'a vision of the Arno valley—white buildings in a green, watered, cared-for land.' A new ideal is glimpsed—what our cities could be like, if the tool of urban development now available were properly used. The last 'transformation,' depicted against the familiar image of the Florence Baptistery, is what the Smithsons call 'invisible' decoration—lamp-posts, paving patterns, cars, 'buses, shop fronts and signs, people.



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# VIEWS AND REVIEWS

## marginalia

### WOTTON CENTENARY

Commoditie, Firmeries, and Delight—that is all that most people know about Sir Henry Wotton who was born 400 years ago this year. Yet his *Elements of Architecture*, which were published in 1624, contain much else of memorable sayings and some shall be recorded here in commemoration. Wotton writes urbanely, concisely but colloquially and always reasonably. He had read enough (Delorme, Vignola, Palladio, Barbaro's *Vitruvius*, Philander's *Vitruvius*, Dürer), but refused to be a slave to books. Instead he believed in the 'Lordship of the Eye' (page 3). This is what he writes *a propos* the siting of buildings: Criteria must be the 'Physicall qualitie of the Aire, a little Astrology, and then the principles which concerne the Properties of a well chosen Prospect: which I will call the Royaltie of Sight' (pages 2-3).

However, being a sensible man, he also warns his readers later on not to trust the eye too much. He recommends, before deciding on a design for a building, to insist on a model (an Italian Renaissance custom), and to insist that 'the said Modell bee as plain as may be, without colours or other beautifying, lest the pleasure of the Eye preoccupate the Iudgement' (page 51). Just as sensible is Wotton's advice to the man who wants to buy a work of art. 'When a Piece of Art, is set before us, let the first Caution be, not to aske who made it, least the Fame of the Author Doe Captivate the Fancie of the Buyer, For, that excellent Men doe alwaies excellently, is a false Conclusion' (page 67). This remarkable trust in the eye enabled Wotton, in spite of his concern with rational buildings, to plead for the irrational in the garden—more than fifty years before Sir William Temple's Sharawadgi: 'As Fabriques should bee regular, so Gardens should bee irregular, or at least cast into a very wilde Regularitie' (page 87). That must be enough. In the edition of 1903 (Longman Green's, printed in a private-press-way at the Chiswick Press, with decorations by Herbert Horne) the book has a bare hundred pages, and early editions are fairly easy to come by. N. P.

### SCULPTURE IN BRISTOL

New York is not the only city to experiment with modern sculpture temporarily exhibited on prominent public sites—see 'Sculpture on the Streets,' AR, March, 1968. Its example

(and the earlier example of King's Lynn—AR, November, 1964) has now been followed by Bristol, as a result of the enterprise of the Arnolfini Gallery.

An exhibition in the gallery of work by some of the younger British sculptors has been extended on to several open-air sites in the central part of the city. Three of these are illustrated here: 1, 'Inside,' and 'Stopped' by Brian Wall, on College Green, between the council house and the cathedral; 2, 'Two Ways' by William Turnbull, in Queens Square; 3, 'Tundra' by Ron Robertson-Swann, in the High Street.

The pieces were chosen by Ronald Alley and Jeremy Rees (director of the Arnolfini Gallery) and were sited in consultation with the sculptors concerned. The exhibition was opened on May 20 by Miss Jennie Lee and will continue until June 29.

### EMPLARY MUSEUM

That pace-setting museum of Modern Art in New York has just published a 48-page booklet based on its successful exhibition, *The New City: Architecture and Urban Renewal*, held in the early part of 1967. Sponsored jointly by the Museum and the City of New York, the exhibition contained four solutions to specific New York problems by teams from Cornell, Columbia, Princeton and MIT. Arthur Drexler, the director of the Department of Architecture and Design at

the Museum, set four problems. The first was how to modify New York's existing grid plan to encourage the development of parks and new neighbourhoods. The second was how to provide housing and other renewal without having to relocate the people for whom the improvements were intended. Third, how to open up the waterfront and lastly how to develop underused or misused areas so that they provide amenities for existing neighbourhoods. Cornell proposed to extend the park system from Central Park to the Harlem river in two green corridors in which free-standing apartment towers could be built, reinforcing

the clarity and order of the grid system. Columbia proposed a 37-block vault over the railway, erected in stages, on top of which new housing could be built for Harlem's residents without relocation but with community and commercial facilities.

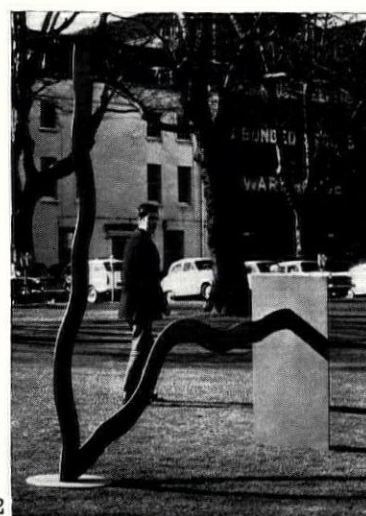
Princeton gouged out a public plaza opening to the river along the Hudson waterfront. Their proposals include a new park, a sheltered boating area and a group of buildings stretching 30 blocks out along the riverfront for community, institutional and commercial use.

MIT came up with proposals to connect two islands in the East River to each other and Manhattan, thus creating three new lakes for swimming and boating. These would serve as centres for new neighbourhoods which could be built on underused land.

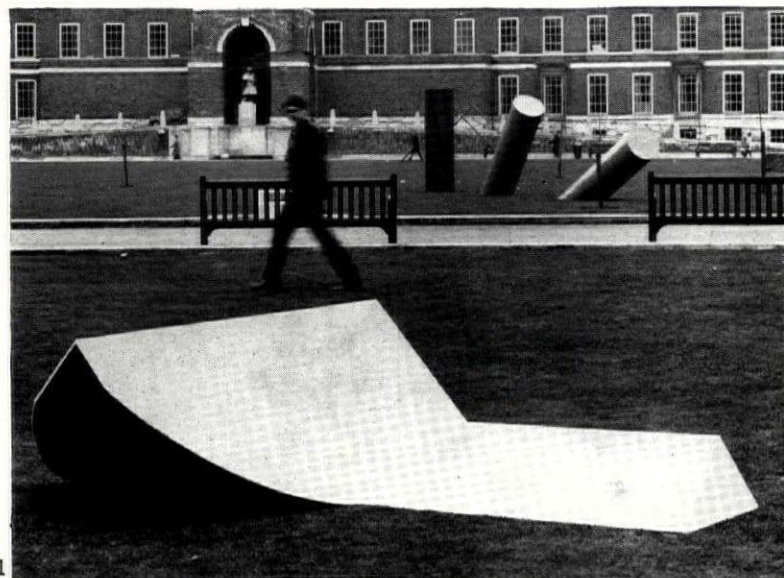
The booklet also contains two essays, one by Sidney Frigand, formerly Deputy Executive Director of the New York City Planning Commission and Elizabeth Kassler, author and critic. Frigand, persuasively and in an unusually well written text for a man of his craft, argues the case for flexible strategic planning. Elizabeth Kassler ranges far and wide, borrowing from Cumbernauld and Reston, history and Philip Johnson, pursuing her thesis that America has room and ought to have the vision to try every kind of urban experiment—new towns in town, new towns out of town, new cities and new regions 'where ecology is favourable, landscape beautiful vested interests few, prospects bright.' From the exhibition has resulted the establishment of the Institute for Architecture and Urban Studies in New York. This was founded through the joint efforts of the Museum and Cornell University. Its role will be something approaching that of the Centre for Environmental Studies in this country. It is hard to conceive of the Tate Gallery taking a similar initiative—art and architecture run their separate ways in Britain.

### INDISCRIMINATE COUNSEL.

The Council of Industrial Design has issued a third edition of its *Street Furniture Catalogue*. Addressed by and large to local and highway authorities who are responsible for choosing and siting new equipment in our streets and squares, this third edition is yet again liable to be a dangerous document in their hands. It includes in its foreword the briefest of warnings that the Council's approval of a design 'does not automatically make a design suitable for all sites' and then hands the problem over lock, stock, and barrel to the Royal Fine Art Commission and the Civic Trust among others. Surely the next edition must contain some visual advice on questions of scale and siting, if only in an appendix? The excellent paper presented to the Society of Lighting Engineers some years ago by Michael Middleton of the Civic Trust and Peter Whitworth, then on the staff of the COID, could provide ample cautionary material for such a brief appendix. It is not enough to shrug off the problem with a few well-worn phrases in a part of the catalogue that few busy local authority officials will read. Within the catalogue the Council's choice of a number of items must be



2



1



3



a cause for even greater concern. Throughout it is hard to detect any real consistency in selection and, taking one group as an example, the concrete indicator posts for services look wholly third-rate designs even if they function well. This edition of the catalogue includes three new sections, one of which is devoted to footbridges for urban roads. The Council in this same foreword warned that consideration for setting 'will be seen to have exceptional importance with items such as footbridges. . .'. The footbridges illustrated are without exception clumsy, banal and wholly unsuitable for a body that stands for good design to recommend without comment. Better to have omitted this section altogether than to have offered such plain bad counsel.

#### TOWN DESIGN MARK V

Frederick Gibberd has now revised and expanded his classic *Town Design* (Architectural Press, 84s.). Revision became necessary not because time had proved his ideas false or out of date, but because his vision of civic design fifteen years ago has become our day-to-day vocabulary; expansion was inevitable because our planning horizons have expanded—from the city to the city region. So in this fifth edition we find masterly introductions to the city region, to Action Areas and to more complex forms of circulation than post-war austerity had allowed us to dream of. Gibberd's analyses of historic towns and the spaces which form them are as valid now as when they were written. Future historians will find it hard to improve upon his analyses of Cumberland and the Dawley proposals. Gibberd's book, like the man and his architecture, continues to develop, to grow and to enrich.

### correspondence

#### THE SONIC MENACE

To the Editors.

SIRS: A report from its architectural correspondent in the *Berliner Morgenpost* for December 18, 1967, warns us that Balthasar Neumann's posthumous masterpiece, the Benedictine abbey church of Neresheim, threatens to collapse. It was examined by the German Federal Government's commission on ancient monuments with a view to stricter fire precautions, following the disastrous outbreak of January, 1963 at Schloss Langenburg. This examination revealed that the steep timber king-post trusses, from which the lath and stucco vaults depend, were giving way. For months past, cracks have been appearing in the side walls owing to the spreading of these trusses, and pieces of stucco have been falling off. Since June, 1966, it has been declared a dangerous structure, and all access to it has been forbidden, no less to its prime users, the Benedictines, than to the public, who had been visiting it to the tune of thirty bus loads a week.

As is well known, Neumann's successors, to whom the completion of this church is due, had not the courage to use the thin masonry vaults of large span, which Neumann had employed

with such results at Bruchsal and at Wuerzburg; they reverted instead to a well-trying lath and plaster construction, in which the ceilings form the bottom chord of a truss system, with the king-posts as main tension members; and it is these which are yielding. In the view of the Government commission, the danger of ultimate collapse, before there is time to undertake the necessary repairs, is being greatly accelerated and aggravated by the neighbouring American air-base: Neresheim lies directly in its sonic carpet, and each jet-fighter crashing the sound barrier subjects the already shaky roof to a sizeable bang. The building research station doubts that the shock wave is sufficient to do much harm, but the fact that some buildings are steel framed does not mean to say that others are, and is no reason, in any case, to tolerate such neo-technic barbarities.

The list of protesting German notabilities, headed by the Federal Chancellor, is a long one. They demand that this building, which the historian Georg Dehio called nearly unique for its age, be spared further supersonic punishment. It is to be hoped that men and women in this country who care for whatever is sumptuous, diverse and proud in our cultural wardrobe, will add their names to the list, so that our posterity may have something to look on with pleasure, their ears unencumbered by bangs.

Yours, etc.,

THOMAS STEVENS

Architectural Association,  
London WC1

Since receiving this letter the AR has been made aware of damage by sonic boom in Britain: the font in St. Michael's church at Bulley, Gloucestershire, was recently split by a sonic boom. An expert report on this menace is surely needed. *The Editors.*

#### SEA CITY

To the Editors.

SIRS: Pilkington's Sea City, described in the AR for March, 1968 (p. 175), may be a technical achievement; in human terms it seems to me a non-starter. Leaving aside the question of why one should want to put 30,000 people fifteen miles offshore, the environment within the city will be very limited in variety, even compared with the most dreary suburban areas ashore; and after the initial novelty has worn off the inhabitants will surely find life very dull and monotonous. The provision of material facilities (as THE ARCHITECTURAL REVIEW will, I hope, agree) is not enough. Transport to shore will be at the mercy of the weather and will be expensive unless it is subsidized. One would have more respect for the sponsors of this project if they spent their money and energy on the problem of using land at present wasted in city centres and in industrial areas.

One more thing: the project would in any case need space on land. The first thing that the planners would have to find at the shore terminal would be parking space for about 5,000 cars!

Yours, etc.

D. T. DONOVAN  
(Department of Geology,  
University College, London)

#### ALBERT DOCK

To the Editors.

SIRS: Despite the far-reaching and vast character of the proposal for the redevelopment of the site of the Albert Dock in Liverpool, it makes less nonsense of the city's plans than may have appeared to the authors of the note in the March, 1968, AR. The City Centre Plan specifically states that it may become possible to use part of the southern dock area, including the Albert Dock, for some other purpose before the end of the planned period.

It further states that, should this happen, detailed studies would be necessary. In addition, the City Centre Plan, and the interim planning policy for the city as a whole, both anticipate further growth of central area functions after 1981. For this reason the inner motorway has been located in such a position that there is adequate room for central area expansion within the envelope of the motorway. Similarly the city's public transport system has been designed so that it can accommodate far greater movement to and from the central area than was anticipated for the period of the plan. In fact, the developer has reduced his project from 10 to 8½ million square feet so that the potential employment on this site can be matched to the capacity of the transport facilities which are likely to be available.

But to show that the city's plans are capable of accommodating such a vast project is not to show that such development is in the best interests of all who would be affected. As you state, a project of this scale demands a sub-regional study, and it is for this reason that the implications of the Albert Dock development have been included in the Merseyside Area Land Use Transport Study. This is investigating, in detail, over three years, alternative envelopes for urban development, alternative distributions of employment and alternative transport systems for the Merseyside Region. This Study is due to be completed early in 1969, and it may well be that the national economic situation, which has tempered the urgency for a decision on this project, has provided the opportunity for a thorough investigation before a decision is necessary.

If it is found to be desirable that the development of this site should go forward, the fate of the Albert Dock buildings will immediately become a vital issue. Despite their outstanding architectural and historic quality, the developer has made it clear that he will not continue with his project unless he is permitted to demolish them. Faced with this choice it is unreal to expect local interests, in an area which has suffered for many decades from chronic unemployment, to consider the preservation of a building to be more important than the opportunity of 40,000 jobs. In this respect the study by the Liverpool School of Architecture is of value in showing one of a number of ways in which the desired accommodation could be achieved and the buildings rehabilitated for commercial and other use. In economic terms the example of Lewis Wharf, Boston, should assure the developer that such projects are sound investment propositions. Therefore, the questions which remain are: firstly, if rehabilitation is to be

achieved, what considerations would lead to a change of attitude on the part of the developer, and secondly, if this is not achieved, how can it be ensured that the new development will enhance the city at least as much as some of Liverpool's older major buildings?

Yours, etc.,

FRANCIS J. C. AMOS  
(Liverpool City Planning Officer)

### book reviews

#### ALBERT THE BRAKE

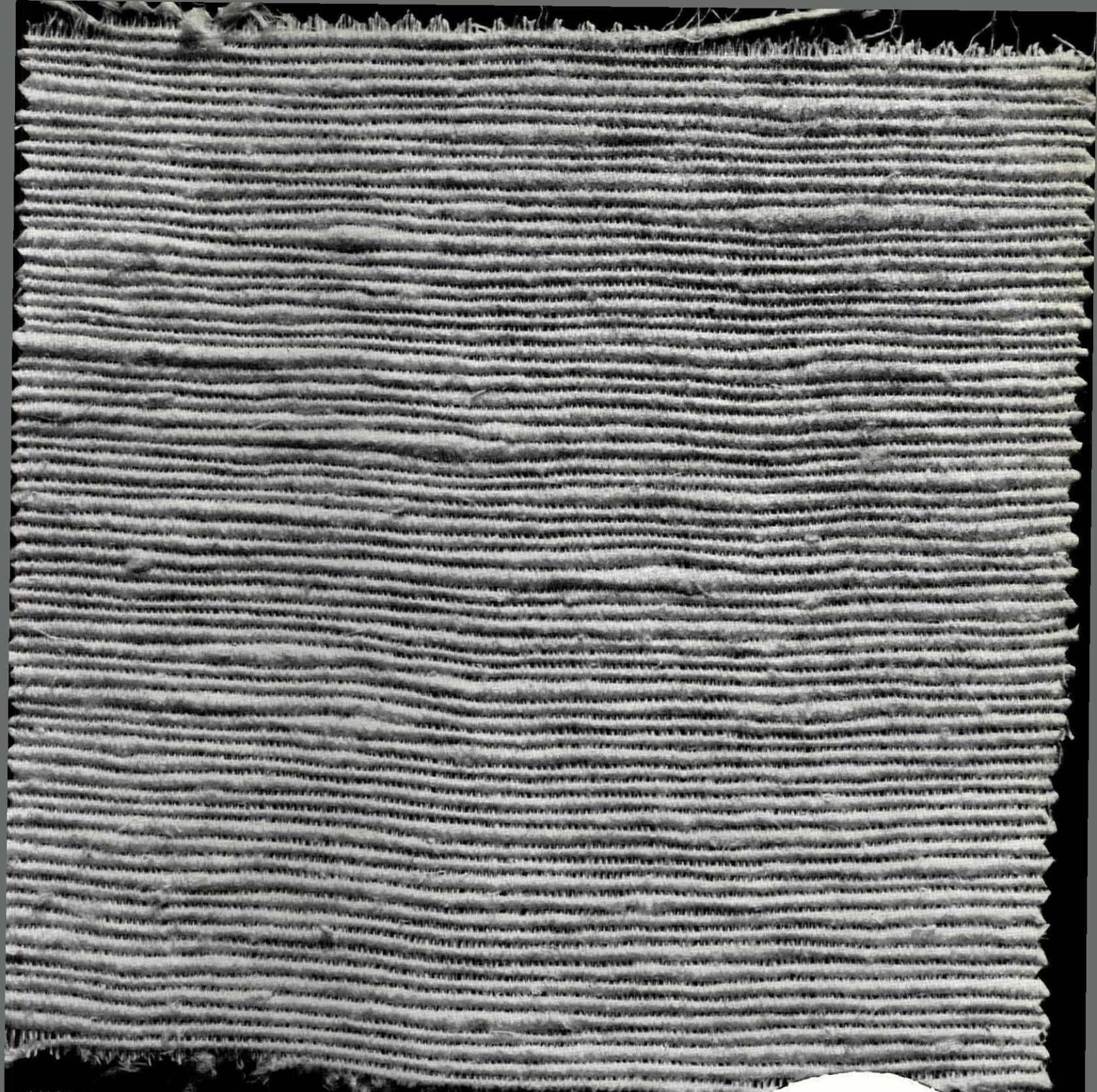
PRINCE ALBERT AND VICTORIAN TASTE. By Winslow Ames. Chapman and Hall, 84s.

This is an interesting, careful, fascinating and fully documented account of Victorian Taste—Victorian taste in general, but more specially as exemplified in the royal houses and their furnishing prior to Albert's death. It deals with painting, sculpture, decoration and, to a lesser extent, architecture. This is as well since the author writes with less certainty upon architecture than upon the other arts. He has, for instance, some very curious names for styles—'Lusso,' 'Grec,' 'Pushy,' 'Donnish,' 'the Sincere Style' and so on—which would seem to be of his own invention. Curious lapses into colloquialisms mar his otherwise careful prose.

Mr. Winslow Ames's theme is 'Prince Albert and Victorian Taste.' The italics are mine because the trouble with this book is that it was meant to show Albert as 'a cultivated and influential proponent' of the 'artistic ambitions' of the age, whereas in fact it reveals all too clearly the gulf between those ambitions on the one hand and, on the other hand, the worried German youth for whom no better job could be found than the encouragement of the 'arts.' The Royal Academy exhibitions and the curatorship of the royal collections were for him much what the Council of Industrial Design has been for a later Consort. None had much relationship to real life.

Near the beginning of his book Mr. Ames says that 'one of the puzzles of the period is the almost complete absence of contact between' Prince Albert and John Ruskin. It is no puzzle. It could not have been otherwise. Albert wished to preside over the Victorian Age, while Ruskin was opposed to it. Ruskin's only comment upon the Great Exhibition of 1851 was a prolonged and very eloquent silence. The resuscitation of Albert, as a figure in the arts, began in the 'thirties, was given a fillip by the Festival of Britain, and has now reached the point of absurdity. The Crystal Palace was no more than a lucky chance in Albert's life; it solved an urgent structural problem, has been made much of by modern critics, but has rightly been called 'a building without a sequel.' It was never a reflection of Albert's own taste, and Mr. Winslow Ames passes over the story in a few lines—fairly enough since it has been told too often. This, however, still leaves Albert with his full share of responsibility for the contents of the Crystal Palace—something which not





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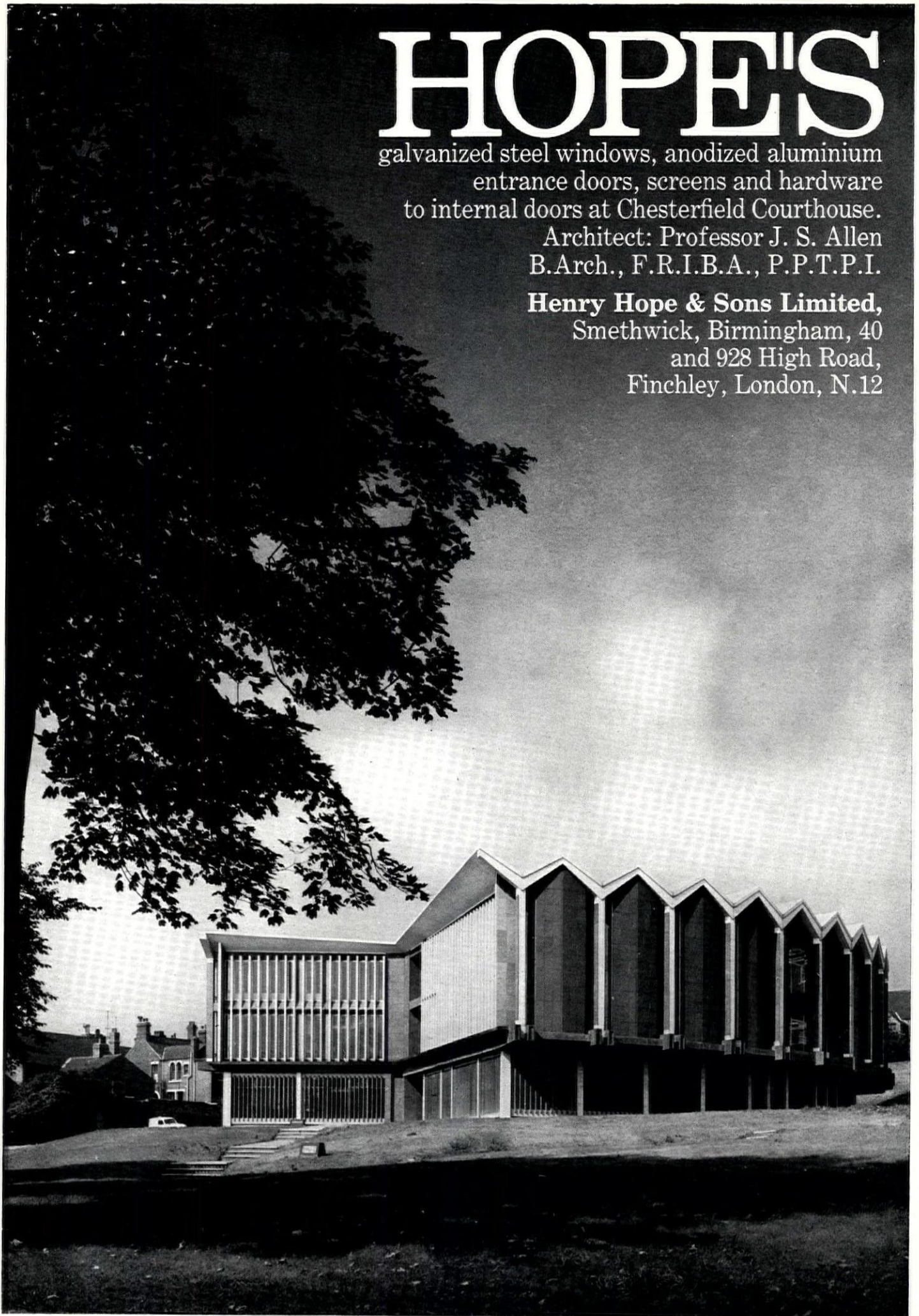


# HOPE'S

galvanized steel windows, anodized aluminium entrance doors, screens and hardware to internal doors at Chesterfield Courthouse.

Architect: Professor J. S. Allen  
B.Arch., F.R.I.B.A., P.P.T.P.I.

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even the most ecstatic Victorian would dare to redeem.

The truth is that Albert's taste, in spite of so much high-minded endeavour, was muddled from beginning to end. He was not a clever man; he was methodical and sentimental—contradictory qualities. His early Coburg background was compounded from the rather ineffective romanticism of Rosenau, from the debased seventeenth-century Baroque of Ehrenburg, and from three European tours planned, with a heavy German bias, by—of all people upon earth—Leopold and Stockmar. It was in the strange painter-sect of the Nazarenes that Albert probably found what he wanted, that dangerous tendency to 'substitute moral and ethical criteria for aesthetic ones, and to test beauty by supposed virtue.' Eventually he bought pictures by Cornelius, Overbeck and Von Fürich, never by Madox Brown or Rossetti. He bought Winterhalters, MacIsles, Friths, Dyces and Landseers; he made Eastlake secretary of the Commission for decorating the new Palace at Westminster. He never bought a Constable or a Turner—Victoria's diary entry on her visit to Petworth leaves Turner unmentioned—and had possibly never heard of Blake or Samuel Palmer. Albert also came to be infected by the virus of his wife's disease—'beauty by association.' This involved the belief that an object—whether a palace or a clock—was actually better because it had belonged to someone . . . life as a series of evocative anniversaries, turning every work of art into a glorified souvenir.

In architecture Albert must be held responsible for his own mausoleum at Frogmore, as well as that of his mother-in-law. He was also responsible for such things as Mary Thornycroft's life-size statues of the four eldest royal children, mounted on red marble pedestals at Osborne; also for the tartans and stag's heads at Balmoral, the dismantling of the Pavilion at Brighton and the 'reminiscences of the Villa Madama' in the ballroom at Buckingham Palace. The architects Albert employed were rather negligible figures—Thomas Cubitt at Osborne, a William Smith of Aberdeen at Balmoral, Edward Blore and James Pennethorne at Buckingham Palace. (The Queen may have disliked her uncles but she was on the whole loyal to their bastards.) Albert was shy of Barry, probably thought Pugin 'dangerous' and—had he lived another forty years—would certainly never have employed Philip Webb or Mackintosh, possibly Gilbert Scott and certainly Aston Webb.

It was only in the aftermath of the Great Exhibition that Albert came near to greatness. The whole educational complex of South Kensington is, architecturally, no more than a collection of curious specimens spread over the last hundred years. In itself it symbolizes a high ideal. But even there, under Cole's guidance, the emphasis was upon surface ornament, the sensuous convolutions of oriental pattern-making, rather than upon craftsmanship . . . Owen Jones rather than William Morris.

Albert was not a disaster. At that particular moment in our social history it was probably better to encourage

any sort of interest in the arts than none. He was, however, a severe brake upon all that was best because he was terrified of all that was revolutionary—a pillar of the Establishment, specially after he was dead. If, when modernisms did come, England was out of the race, we must attribute this at least partly to Albert. The few good men we had, right on into this century, were still dismissed by society as bohemians or rebels. Mr. Winslow Ames's book is informative and absorbing, but it has two themes—Albert and Victorian Taste—and they never quite meet. R. FURNEAUX JORDAN

#### GROWING GLASGOW

'THE SECOND CITY'. By C. A. Oakley. Blackie, 45s.

Glasgow, in 1771, rated a mere six lines in the new *Encyclopaedia Britannica* as 'one of the most elegant towns in Scotland.' Today it rates as many pages and is noticeably less elegant. From a small ecclesiastical and university town, little known outside Scotland, it grew within a generation into a large industrial city, becoming rich, after the Battle of Trafalgar had freed the waves, through the development of shipbuilding and thus of an export trade, chiefly in manufactured cottons, linens, and an imitation Indian cashmere, woven into 'Paisley shawls.' By 1811 it dawned upon the Glaswegians that their city had grown larger, not merely than Edinburgh, but than any other city in the British Empire, with the exception of London. They thus took to calling it 'the Second City,' and this it remained in fact for 140 years.

In recent times it has lost this distinction, but the name has stuck, and Mr. C. A. Oakley still uses it, now in discreet inverted commas, as the title of his book *'The Second City.'* This is a book first published (without the inverted commas) in 1946, but now brought up to date, with a profusion of new illustrations, including not only prints and photographs of the city at different periods, but cartoons and caricatures throwing a lively light on its Victorian and Edwardian scene. Thanks to these and to a diversity of well-selected, well-imparted information, it is a rewarding volume in which to browse.

Glasgow, of course, grew too quickly, with unhappy architectural and social results. Its expanding working class was housed, from an early date, not in the streets of small houses common to other industrial cities, but in tenement blocks, still unusual in England but familiar already in Scotland—and particularly in the Old Town of Edinburgh—to which the system came from Holland and ultimately from Central Europe. It was Glasgow's misfortune that they were built all too substantially, of stone, and thus remained standing for far too long, 'malodorous and infested though many had become. So the conceptions of a hundred and more years ago about bedrooms, kitchens, water supply and sanitation were perpetuated, and conditions presumably acceptable to many of the people of those days—who had come from places which were perhaps even worse—had later to be accepted by people who knew and wanted better.'



Lund Humphries have just produced a slim volume, refreshingly free from wordy explanations, of two dozen black and white photographs taken by Herbert Spencer. It is entitled *Traces of Man*, and above is a typical example—exuberant lettering painted on a fairground trailer.

When the well-to-do moved into the newer and more salubrious neighbourhoods their old houses, with five or six rooms to one family, were subdivided for the working classes on a basis of one room to one family, 'and this without any change of structure to secure isolation.' They lived huddled together to the extent of a thousand per acre, so that 'hordes of the criminal classes sheltered in the dens and caverns of dwellinghouses in the narrow lanes and dark closes, rendering the localities notorious in the annals of robbery and murder.' In the 1860's the Town Council was moved, by such conditions, to apply for a City Improvement Act, the pioneering slum clearance scheme, so Mr. Oakley informs us, in the United Kingdom. Thus some parts of the city were somewhat improved. But the way of housing reform was to be long and slow, and it is only today that the slums of the Gorbals are truly going. The New Town meanwhile was being well enough built and planned, if not as well as the New Town of Edinburgh. For the upper middle classes there were many 'freestone houses of elegant architecture,' still designed in a sober eighteenth-century style, but inclined to be monotonous and gloomy, from the use of grey stone unrelieved by colour, even on doors or around windows. There were—and still are—handsome public buildings, good bridges, and parks laid out by Paxton. A series of four International Exhibitions led to more daring architectural ventures. For that of 1888 Glasgow went all oriental, transforming itself into a 'Baghdad on the Kelvin,' and the citizens for the first time really let themselves go: 'No-one had seen the like of it nor felt in his provincial bosom that intoxicating sense of being devilishly cosmopolitan.' A permanent product of it is Kelvingrove Park, with its Art Gallery and other buildings on the slopes of Gilmohill. Less appreciated by the citizens, however, was the work of

their one truly creative architect, Charles Rennie Mackintosh. He was a prophet with little honour in his own city, who left Glasgow to win renown abroad.

At a convenient moment in its history the motto on Glasgow's coat-of-arms was abbreviated. Once 'Lord, Let Glasgow Flourish by the Preaching of the Word,' it now has simply, 'Let Glasgow Flourish.' The former Second City now aspires to flourish, by the mid-1970's, as 'the most modern city in Europe.' As its tardy re-development plans mature, it may well succeed in this ambition. KINROSS

#### LOVE OF CATHEDRALS

THE CATHEDRALS OF ENGLAND. by Alec Clifton-Taylor. Thames and Hudson, 21s.

Seventeen years ago Martin Hürlimann and Peter Meyer combined to produce *English Cathedrals*. Hürlimann's photographs were superlative; as a matter of editorial policy Meyer's text was kept to the minimum and in note form. The same publishers have now re-issued Hürlimann's photographs in paperback form beautifully printed with a much fuller text written by Alec Clifton-Taylor. Clifton-Taylor has long nursed a deep love for cathedrals and the text is informed and enthusiastic. His comments on the early examples are lively and adventurous. Those on Spence's Coventry, Gibberd's and Scott's Liverpool and Maufe's Guildford less so. And this timidity also mars what is one of the best features of the book—a set of ground plans all to the same scale and all accompanied by succinct and perceptive notes on what is architecturally and historically important about each cathedral—plans of the four 'modern' cathedrals, together with Pearson's Truro, are not given. When the book is reprinted these omissions must be put right. Thousands of visitors to Coventry and Liverpool would gain much from a clear linkage with these cathedrals' historical and liturgical background.





M. S. P.

Uxor: huiusmodi

Mariae huiusmodi

Tunc Turris S. M. E. d. d. Rector

Quibus et omnia illustrata Choro

Quae huiusmodi Huiusmodi Corpus submatur

Domus Veri Magni Placendi et alia illustrant

Huiusmodi Legitimi engi Voluit

In Dilectione Annue

Quae Decorem Domus Dei perditur

Ce cho perennius Monumentum

Anno 1697

123

AFFIXOS ARIS MI LECTOR, OCULOS HUC FLECTAS IBI  
GRANDE PIETATIS EXEMPLAR ALIO TE ACCERSIT.  
ET ILLIC REMITTAS ILLIC ENIM MERITO SUO, JUXTA  
POSITAM AGNOVERIS ANNAM TURNER MATRONAM  
HONORATISSIMAM SANCTISSIMAMQ. NATA EST  
CATTONII IN AGRO DERBIENSI EX UTROQUE ANTIQUA  
FAMILIA, PATERNA HORTONORUM, MATERNA FERBERSHORUM.  
IN URBE ET PROPE IN AULA, UT IN ACADEMIA, AUT  
MONASTERIO, DOCTA ATQ. EDUCATA, LITERAS COLUISSET,  
AD INVIDIAM NISI ET BONITATEM, AD MIRACULUM ISTIUS  
MODI FOEMINARIUM, POPULAM VENERARI FAS EST.  
SACERDOTES DUCERE, HANC VIRUM PRIMO PARTU  
FILIOLA AUCTIONEM, SESE ORRAVIT INIQUA QUIDEM  
PERMUTATIONE, NISI QUOD SIBI EXOPTATA QUIAE  
E CONFUGALI STATU AD ANGELICUM ASCENDIT.

*Transcript of original inscription as recorded  
in Chassan's History of Hertfordshire*



Opposite: rarity restored. Probably the first use of cedar in this country, this seventeenth-century monument is to be found, expertly restored, in a Hertfordshire church. More illustrations and a brief account of it appear on page 476.

Manfredi Nicoletti

# OBSOLESCENCE

Why do things get old? Why and how do they reach the point of decay? Why are decayed objects sometimes considered ugly and worthless and sometimes beautiful and valuable? Why are some ruins of buildings regarded with reverence, carefully studied by archaeologists and even almost worshipped as sacred, instead of being swept away by bulldozers? In other words: why scrap-yards and historical museums? These are the contradictory questions which arise when we face the problem of obsolescence.

Of this problem, in its modern implications, the world of architecture suddenly became aware around the second decade of this century. The increasingly faster pace of change and mutation was forcing the values of things to a critical breaking-point. Sturdiness and durability were giving way to the fragile and the transient. Indications of such a revolutionary state appeared simultaneously on two opposite sides of the architectural front. It was expressed with the heroic accents of Utopia and, oddly enough, between the carefully written lines of Real Estate literature. First there was the poetic approach of the dreamers: '... every generation will build its own city. Such a continuous renovation of our ambience will be the victory of Futurism. . . . ' Then, more prosaically in the United States, a certain committee on the Evaluation of Public Utilities, concerned with data on durability and renewal of building parts, produced perhaps the first systematic effort to understand the architectural organism as a non-static one, in which a continuous inner renovation could co-exist with a principle of identity.

'The Life Experience of Seventeen Railway Stations' is the animistic, quasi-pop, title of this account, referred to by Peter Cowan as 'the earliest reference so far discovered to physical deterioration of buildings.' It was a miraculous coincidence. The intentions of the poet and the research-worker, aiming at the same target, could gloriously merge within the understanding of an evolutionary modern truth. Unfortunately, the only catalyst able to make an emotional synthesis of this and other similar efforts at the level

of a humanistic consciousness—the voice of the poet—was annihilated by political storms. Not until the 1950's did such an awareness finally arise in architectural practice, thanks primarily to the mysterious, a-rational channels of art. Art exposed a drama of the present human condition that was fully understood only in secluded circles of science: the impossibility of grasping reality as a universal value. Indeed, for science, the amplification in power of the channels of information was counteracted by an increase of specialization, and by the fragmentation of the unity of knowledge. Hence—ironically—a sharper and more profound insight into a reality that was becoming more unstable and elusive than ever. In order to enter into this reality, it was necessary to create a conventional model of it: a temporary operational instrument whose precisely defined inner structures were programmed to be receptive to mutations, open to the unknown. Art celebrated this drama with a playful and popular catharsis. The art-object, by becoming a 'programme' of artistic happenings and mutations, conditioned its existence to the expression of a multi-versal truth.

It was only after the second World War that the concept of architecture as a space-time flexible programme began to be practically developed, together with more systematic studies of the laws of ageing. In fact any mutation is a critical state wherein a new condition makes the previous one obsolete; the planning of mutations necessarily implies the knowledge and forecasting of obsolescence patterns.

According to the *Oxford Dictionary*, the word 'obsolete,' derived from the Latin *obsoleo*, was in use from the middle of the sixteenth century with the following meanings: 'That which is no longer practised or used; discarded; out of date; worn out; effaced through wearing down, atrophy, degeneration.' Such a definition, related to the decay of tangible and intangible things is, no doubt, quite precise, and of this phenomenon we can immediately recognize two dimensions; the material and the temporal. All human products have an irresistible tendency to become old,



but the speed of ageing is different for different objects and circumstances. A newspaper becomes obsolete almost immediately, while a monument—depending on political and cultural conditions—in a very short time or after many centuries. From a material point of view, the obsolescence of an object can be defined in terms of physical deterioration or of changing requirements, which the object may no longer fulfil. Obsolescence deriving from a physical deterioration cannot be avoided but only retarded or prevented. When standards of performance are replaced by new ones, functional obsolescence takes place.

In architecture, present procedures for the forecasting of mutations generally resort to the method of 'structural' analysis, originally developed at the beginning of the 1930's in the fields of semantics and psychology. Every phenomenon is considered as part of a 'structure': a family of phenomena, each one coherently necessary to the whole and *vice versa*. Meaningful results are obtained either by investigating homogeneous data in the time dimension, or by enlarging the field of observation to include a greater diversification of apparently heterogeneous elements. For example when studying the evolution of hospital planning, Cowan took into account the mutations that have taken place, in various hospitals, in the past sixty years. However, in establishing the overall obsolescence pattern of a large city, such an historic survey might not be effective since the predictable future would be primarily conditioned by a complex of recent trends in different fields: those of building and transportation technology, mass psychology or socio-economic policies.

The more profound our surveys, the more we realize that we are inevitably pushed beyond a threshold of rationality to a situation where the phenomenon of obsolescence can only be forecast by intuition. For this reason it seems necessary to add to the two categories of ageing—functional and physical—a third category: aesthetic obsolescence. This occurs when the process takes place primarily 'in the mind'—as in the definition by Vance Packard—the pattern of decay deriving from the deterioration of an ideal of 'beauty.'

All men are continuously searching for beauty which, as a philosophical value, never dies. As a hedonistic projection in the environment of our inner self, however, this type of narcissistic beauty does go through a process of obsolescence. It is an emotional and competitive fruition for which the object, although maintaining a technical integrity, is segregated into the limbo of obsolescence. No product of design can possibly avoid aesthetic obsolescence in the sense of a degradation of semantic values. From this point of view there is only a difference of magnitude between the obsolescence, for instance, of Renaissance in relation to Baroque architecture, and the obsolescence of a Cadillac model in relation to the model of the following year. In both cases we face a corrosion of institutional aesthetic values of the object. Aesthetic obsolescence can be defined as 'the decay of the social meaning of beauty.'

The mechanism of aesthetic obsolescence is based on the dialectic between fashion and taste. Fashion is a desire to conform, an institution derived from the

necessity of imitation which is connected with the very essence of sociability. Indeed no language, including the architectural one, could exist without a large degree of imitation. As a consequence, fashion puts on the market of perception a great quantity of images. In some of these the emphasis is on individual taste, which is a product of discrimination; while fashion is passive, taste is aggressive and competitive. The interlocking occurrence, and the interaction between fashion and taste, starts a cycle producing the aesthetic consumption of institutional images. Such a cycle, which is a constant pattern throughout history, has profoundly influenced the world of our physical objects. What has changed today—as compared to the recent past—is that the aesthetic defence of our objects has greatly diminished. The institutional beauty of our environment has become subject to an appalling fragility.

It is surprising to see how a certain stream of Western architecture, for more than two thousand years almost up to the last century, was able to produce original expressions of different cultural content only through variations on the organizational patterns and the qualities of the same few basic elements; the Classic orders, arches and vaults, using the same language to create such different works as the Pantheon, San Vitale in Ravenna, and Wren's St. Paul's Cathedral. Probably this was possible because the world, although going through cultural changes, was consistently immersed in a well established hierarchy of values converging towards a univocal truth. In each cultural stage of this world there was little place for ambiguity, every image reflecting a facet of a 'unicum' which, descending from a theistic conception of life, had inevitably to be the same for everyone. Optical illusions, mysterious images, obscure poetry, all indeed existed in this world, but they were shaped in such a way as to have one—and only one—possibility of solution. In the Classic temples, the pediments were bent and the columns slanted in order to visually restore a 'straightness' otherwise distorted by the curvature of the retina. Converging walls, from the Paleao-Christian churches to Borromini, were used to give a greater illusion of depth, but the effect could be achieved only from one visual angle. The anamorphosis, in the sixteenth and seventeenth centuries, was solved by 'guessing' a particular point of view and from there only one well-defined image could be seen.

Today we may hopefully believe in a univocal truth, but the way of thinking that belongs to our culture cannot possibly give us the instruments to prove its existence. In this world of ours, a world of hypotheses, of temporary and variable models, of 'operational non-universal truths,' no value is established *a priori* but must always be re-stated at the occurrence of every new event. In this *milieu* the objects we choose to represent our personality—clothes, cars, houses, tools—share the same instability. We are compelled to re-state and reassure ourselves through a continuous change of our environment. The faster pace of obsolescence cannot be attributed only to the acceleration of technological progress, to increased production, to the population explosion or to our expanding communications—but primarily to an



endemic human condition: the crisis of the individual personality. Such a condition is characteristic of our times.

Technology itself, in its applications and development, is strongly conditioned by competitive emotions, so that today we can safely speak about an 'aesthetic of technology.' Indeed, also the two main instruments of our flexible planning technique: the conception of 'surplus' and 'built-in-obsolescence,' are largely directed by aesthetic considerations. For this reason, the proverbial better adaptability to changing situations of 'old' or pre-functionalist buildings has to be attributed not only to a physical abundance of space but also to a certain neutrality of architectural detail, acting like a sort of psychological receptivity to different situations. As regards built-in-obsolescence, the most important application of it is to avoid, in the city, that socially dangerous state of transition in which the environment is too degraded to serve human life with dignity and yet still sufficiently valid economically to avoid renovation. Even in this case it is impossible to ignore the shifting of the peak of desirability from one urban area to another under the pressure of mere fashion-trends.

The components of functional, physical and aesthetic ageing can hardly be separated when they combine in the making of flexible planning, particularly in our Western culture which is marked by an irresistible

acceleration of obsolescence. A question might arise—will our physical environment be destined to a continuous process of alterations, such as Jona Friedman has predicted in his mobile architecture? Can we expect in the near future that the slogan of Huxley's *Brave New World* 'more stitches-less-riches' and Packard's Cornucopia City will fully come to reality? We are too aware of the strict connection, and even identity, between tangible and intangible matters not to believe that an element of continuity, in our physical world, is necessary. The preservation in some remote corner of our senses of some degree of constancy is indeed the basis of any normal and dynamic behaviour. This is why everyone preserves in his memory the images of childhood, in the same way that nations sacredly guard those otherwise useless objects which are their historic monuments.

There is no doubt that in our democracies the structure of the economy is shaping the image of a city in which the infra-structures will be rapidly changed even to the point of forming a random pattern, free from any traditional aesthetic order and largely independent of the control of individual architects. Architects then will be primarily asked to conceive those main structures that will give a consistent physiognomy to cities and territories. If democracy is stating its individuality through continuous renovation it is also searching for its monuments, its symbols of continuity.



# 3 AUSTRALIAN HOUSES

## 1 HOUSE NEAR MELBOURNE

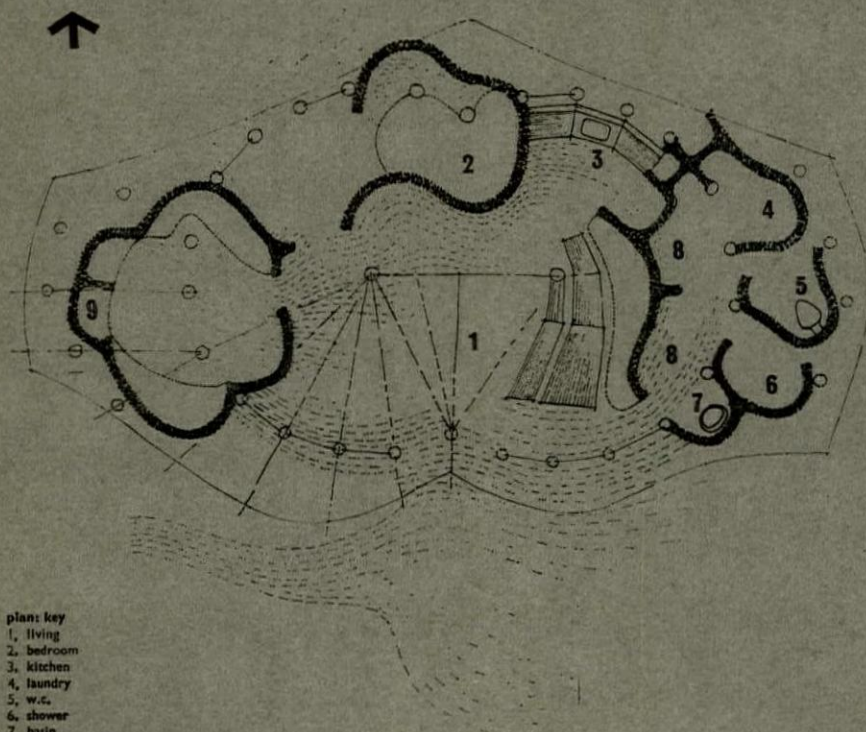
architect **MORRICE SHAW**



This house is in bushland 25 miles from Melbourne, and is for a client who demanded securely enclosed spaces for his own use but also large spaces for entertaining. The character of the house derives from the contrast between these two needs; between dark, withdrawn, intimate spaces and bright, open spaces linked with the open-air. The former are conceived as a sequence of low-ceilinged cells, with bedroom and fireplace forming the core. The bedroom cell contains a large foam mattress cut into a curved recess, providing a soft surface at ground level. The fireplace cell contains an open fire with surrounding bench-seats and storage for wood. There are also utility and storage cells.

The open area for entertaining has high ceilings with beams radiating outwards. The pattern of the floor also radiates outwards. All furniture is incorporated in the walls. On the open side are large sheets of glass fixed directly into grooved posts supporting the roof and reflecting views of the bush outside. The arrangement of the whole roof umbrella and its supporting posts is based on two intersecting circles with extensions at either end, giving uniform spans. The cell walls are pisé (a material already used for dwellings in the locality owing to the excellent binding quality of the local soil), and the form of the cells was allowed to develop freely beneath the timber umbrella, their exact form being determined as building progressed rather than being laid down in drawings beforehand.

The roof is covered with shingles, which blend into the landscape, the roof appearing to rise from the ground as the building is approached. The open slats of the ceiling are glazed. Cross ventilation is provided through adjustable louvres between the tops of the cells and the ceiling. The open fireplace is designed to conduct heat, by forced draught, into the living area.

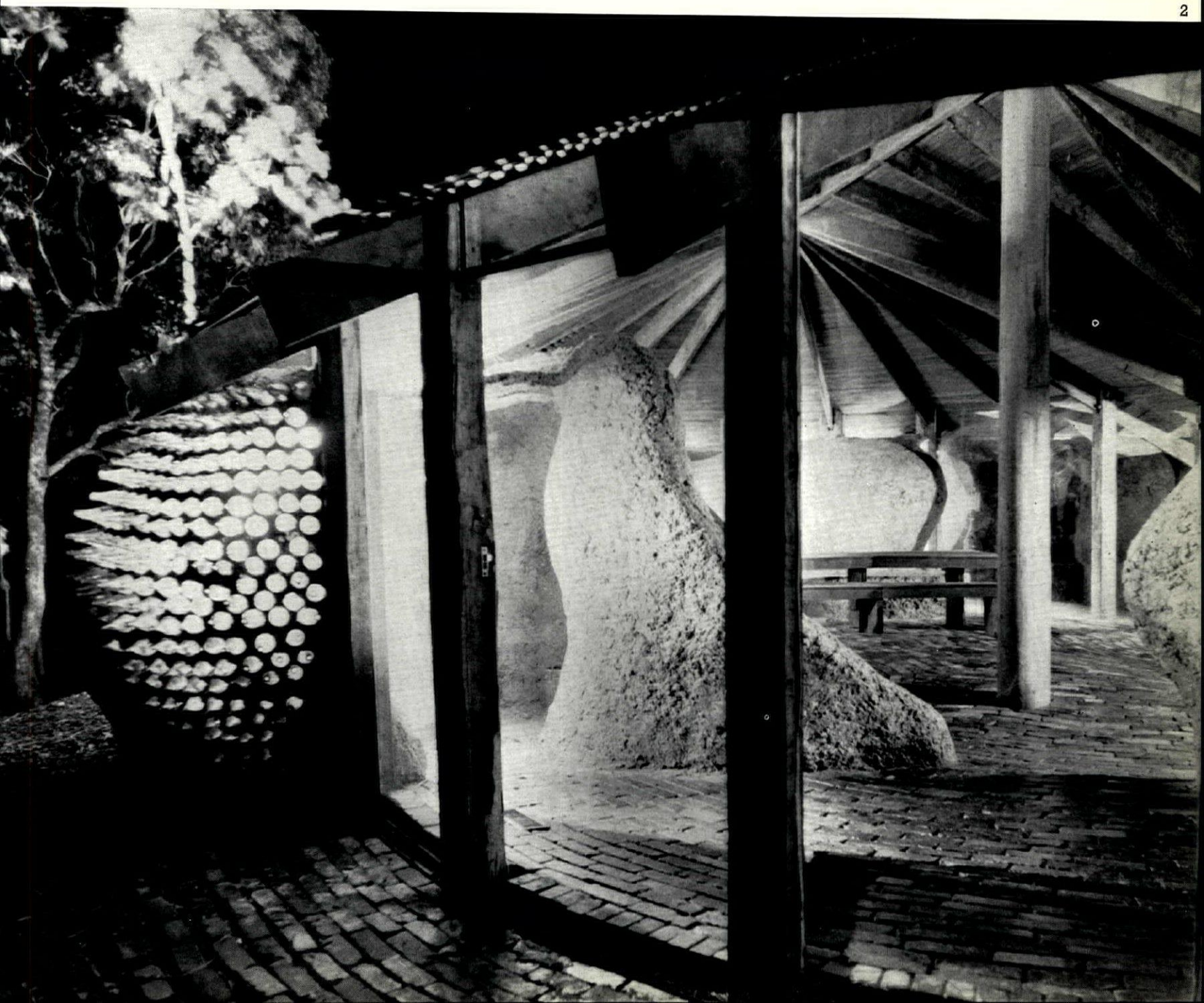


plant key  
1, living  
2, bedroom  
3, kitchen  
4, laundry  
5, w.c.  
6, shower  
7, basin  
8, utility and storage  
9, fire

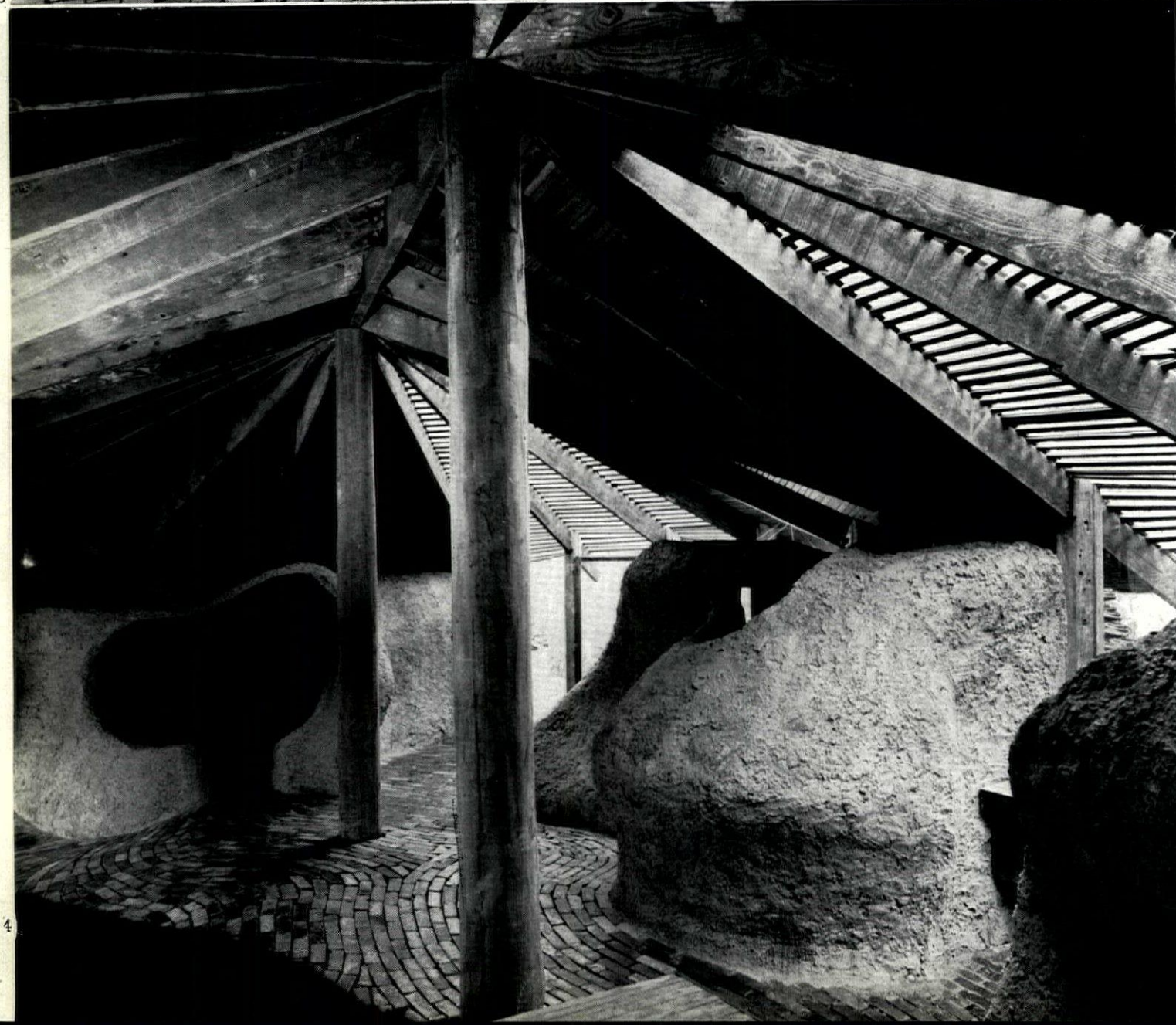
1, the house in its bushland setting. 2 (opposite), looking into the living area and bedroom cell at night. The lighting display on the left consists of projecting bottles, illuminated from behind.



*photographs by Mark Strizic*



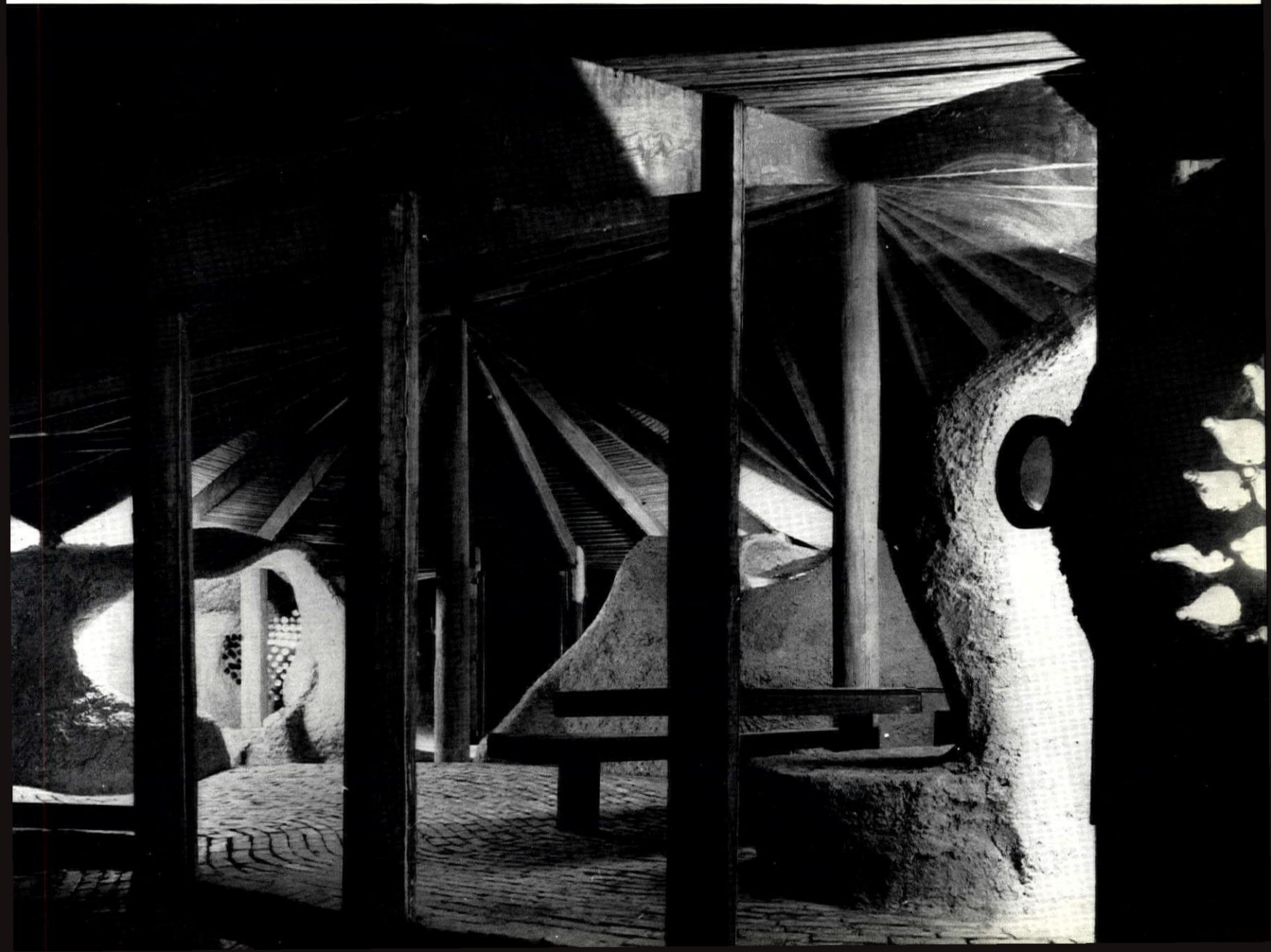






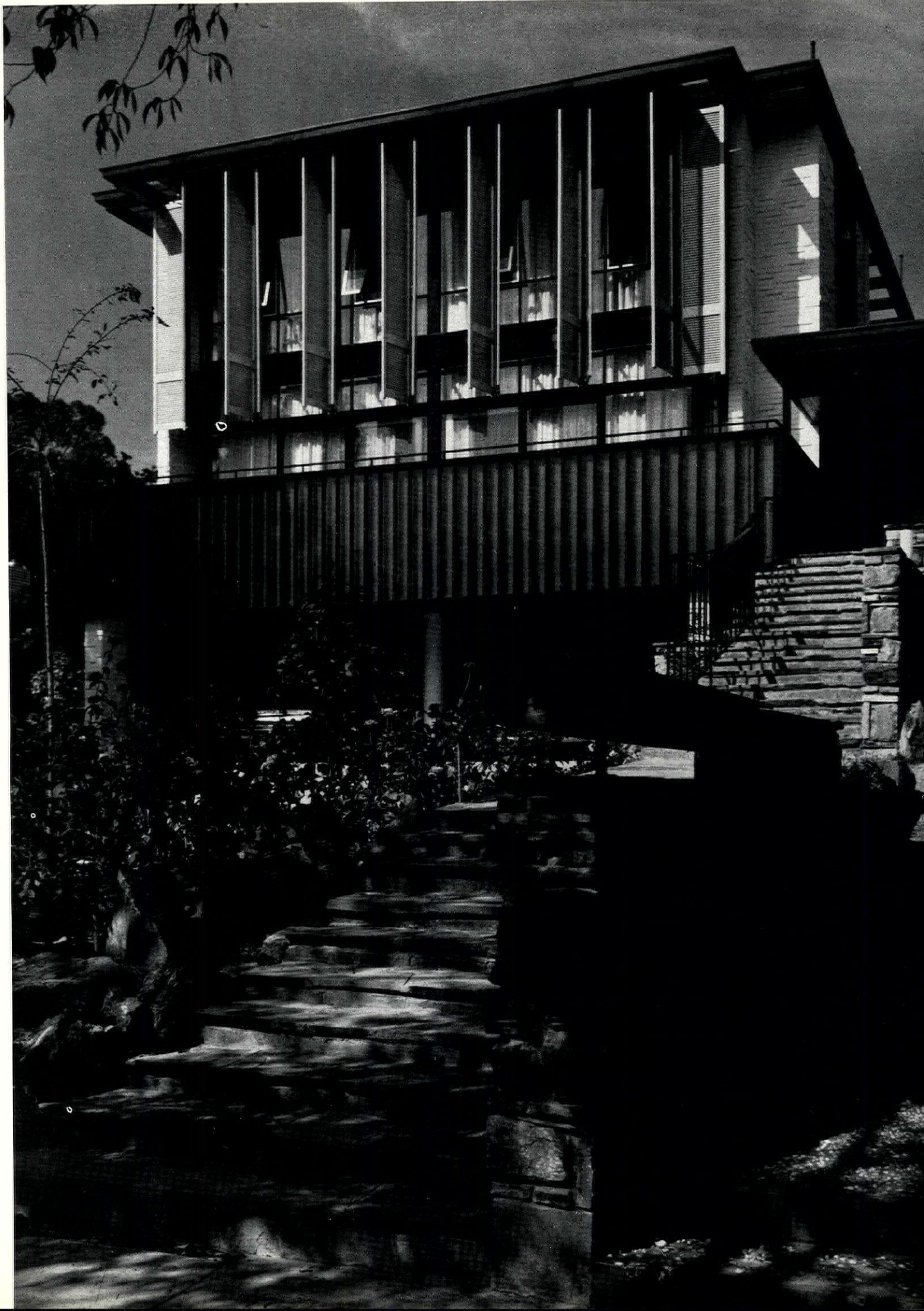
## HOUSE NEAR MELBOURNE

3, the living area, looking towards the utility and storage cells. 4, looking across the open living area towards the enclosed area, with the bedroom cell on the right. The cell walls are of pisé —local soil which has good binding quality. The open slats of the ceiling are glazed. 5, the living areas at night, with the enclosed cell illuminated.





6





This house is on a steeply sloping site with views to the west, which is also the entrance side. Taking advantage of these views by placing the main living area on this side posed two problems: that of providing privacy from the street and that of protecting the interior from the low afternoon sun. These have been solved by the use of 14ft. high wooden shutters suspended from the roof overhang, 5ft. clear of the wall. They can be opened at any angle and are electrically operated, controlled from inside. Below them is an 8ft. wide balcony.

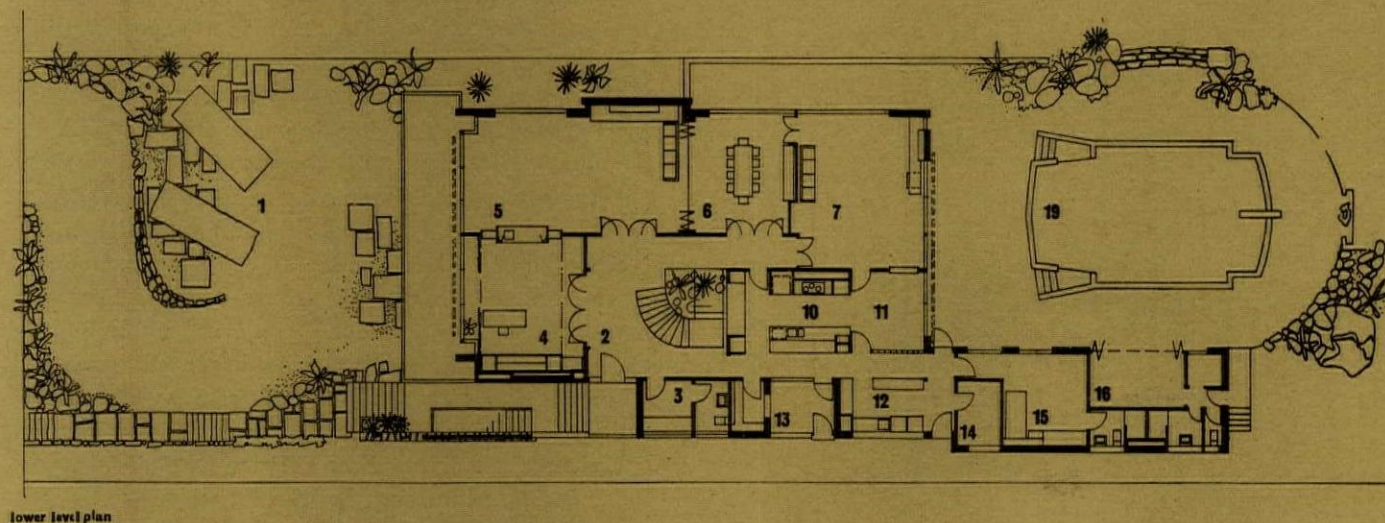
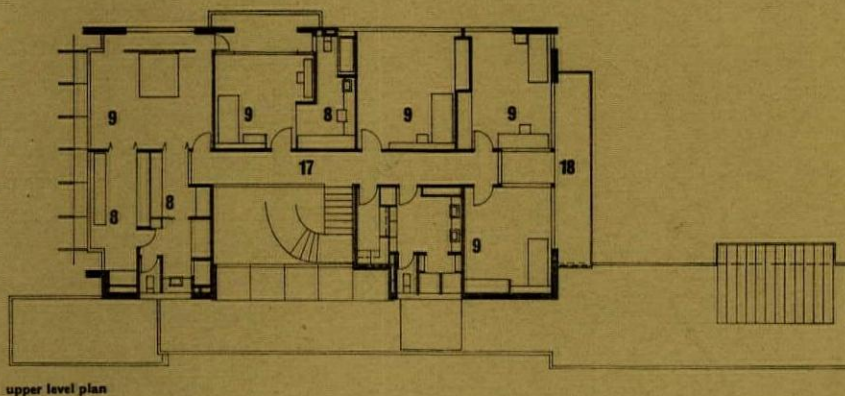
The whole living area is on one level and opens at the rear on to a swimming-pool terrace. The house is designed for a family with four children. All bedrooms are on the first floor, but the main hall, with an open curved staircase leading to the bedrooms, rises through two stories. Other entrance-floor rooms can be opened into this hall by means of folding doors, giving an uninterrupted area for entertaining, 70ft. long. The kitchen-breakfast area opens on to the pool terrace as well as from the hall and living-room.

The house is of steel-frame construction with some load-bearing brick walls which have been given a texture with random projecting stretchers. The roof is steel decking with corrugated perspex skylights, supported on steel beams and wood rafters. It is insulated by a 2in. blanket of fibreglass. Glazed areas are wood framed. Brickwork is plastered internally. Other walls are of wood framing between the steel columns covered with vertical planking, wax finished. The entrance floor is marble and that of the main hall tiled.



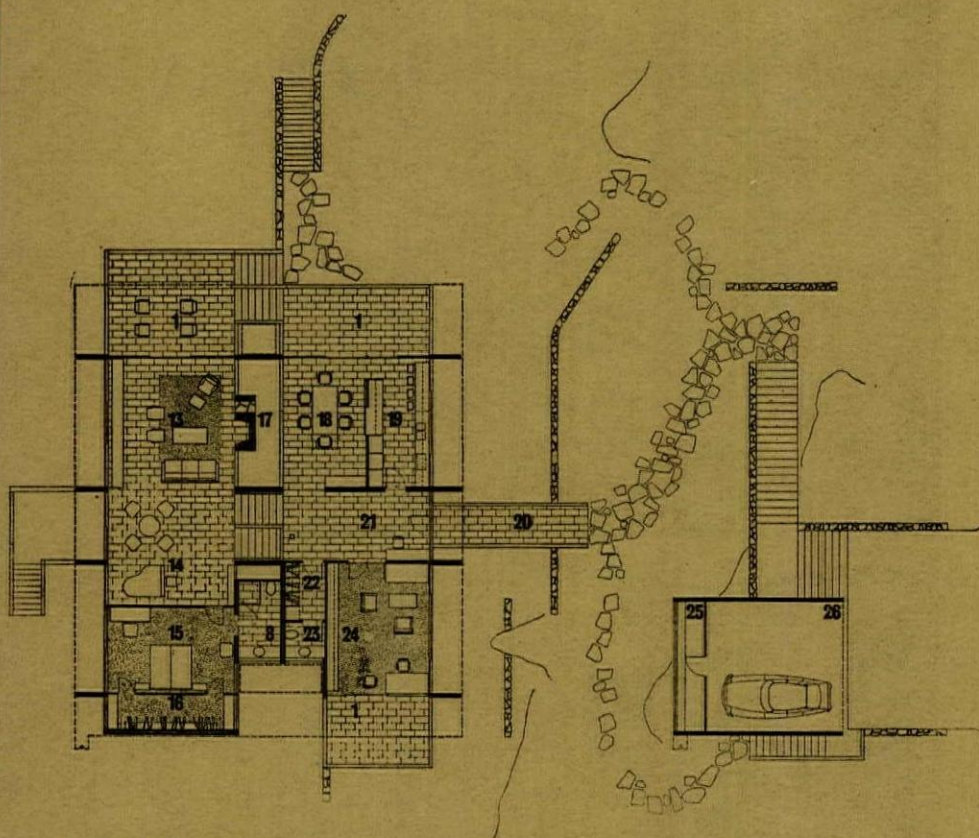
6 (opposite), the entrance side, with the shutters in front of the main living areas in the open position. 7, from the same viewpoint, with the shutters closed. 8, the lounge, looking towards the Shoji screen (made of wood and fibreglass) which separates it from the dining room.

- key
- 1, visitor's parking
  - 2, hall
  - 3, cloak
  - 4, study
  - 5, lounge
  - 6, dining room
  - 7, living room
  - 8, dressing room
  - 9, bedroom
  - 10, kitchen
  - 11, breakfast room
  - 12, utility
  - 13, court
  - 14, drying room
  - 15, maid
  - 16, cabana
  - 17, gallery
  - 18, balcony
  - 19, pool



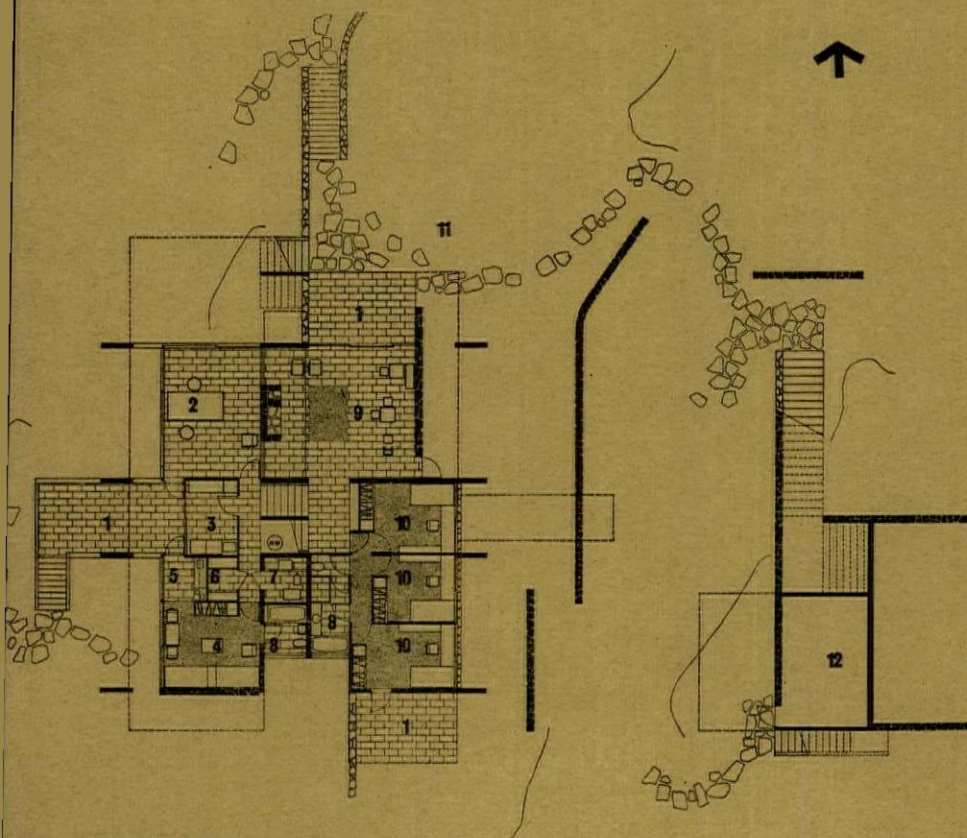


# HOUSE AT KILLARA, NSW



upper levels plan

- |                |                               |                     |                      |
|----------------|-------------------------------|---------------------|----------------------|
| <b>key</b>     | 7, air conditioning equipment | 14, music room      | 21, entrance gallery |
| 1, terrace     | 8, bathroom                   | 15, master bedroom  | 22, coat room        |
| 2, studio      | 9, children's playroom        | 16, dressing room   | 23, wash room        |
| 3, laundry     | 10, children's bedroom        | 17, void            | 24, library-study    |
| 4, housekeeper | 11, garden                    | 18, dining area     | 25, workshop         |
| 5, kitchenette | 12, garden store              | 19, kitchen         | 26, garage           |
| 6, cellar      | 13, living room               | 20, entrance bridge |                      |



lower levels plan

This house has been designed by Mr. Seidler and his wife for their own occupation. It is eight miles from the centre of Sydney and half a mile from a suburban railway-station, but is surrounded by natural bush and so has complete privacy. The site is on the low side of a narrow, dead-end street; it is very rugged, slopes steeply from east to west, away from the street, and is cut up by large ledges of rock and overshadowed by eucalyptus trees 60ft. to 80ft. high. The architects have exploited the difficult terrain to produce a multi-level interior which looks only on to unspoilt nature and on to a creek (which becomes a waterfall in rainy periods) that runs along the bottom of the site.

To have built a road into the site would have been difficult as well as spoiling the natural scenery. The garage is, therefore, at the top, just off the street, suspended over a ledge of rock whose surface is visible beneath it. The house is lower down, approached by steps following the rock ledges and finally by a bridge springing from the top of a ledge to the uppermost of the four half-levels of the house.

The plan is a simple rectangle, but is divided into a sunny northern part for active daytime use and a shady southern part, by the half-flights of stairs in the centre that connect the various levels. At the top level (where the entrance-hall also serves as an art-gallery) are the kitchen and dining-room on the north and the library-study on the south. The next level down has the main living area and the owners' bedroom. Below these are the children's bedrooms and playroom—on the only level that has direct access to the garden—and at the lowest level a studio, a laundry and a self-contained housekeeper's or guest suite. Each level has a bathroom, which are grouped vertically.

At various points the different levels merge into each other, creating through-views and a two-and-a-half storey vertical space. The through spaces are defined by the structural piers, fireplaces and concrete parapets. All levels open on to covered outdoor terraces.

The local blue-grey basalt is used for retaining walls in the garden, some of the exterior walls of the house and the free-standing fireplace that rises through the central vertical space. Otherwise construction is reinforced concrete. The three rows of vertical supports are of reinforced blocks made with white cement, their varying heights adjusting the building to the uneven ground. They carry suspended and cantilevered concrete floors, stiffened by the parapet. Similar stiffening (which makes the long projection possible) is provided for the roof in the form of down-turns to protect the full-height glazing from the sun. Concrete was poured into rough-sawn timber forms, and is left exposed inside and out. Concrete gutters have open ends from which rainwater cascades down groups of chains.

Floors in all living areas are slabs of Norwegian quartzite stone; in the bedrooms and the library-study they are carpeted. Windows are horizontal sliding sashes, in dark grey anodized aluminium. The main sloping ceiling has Tasmanian oak boarding, above which are air-conditioning ducts with air emitted through slots in the board joints. Furniture is also of oak. Lighting is from deeply recessed reflector units, with some wall surfaces illuminated from invisible sources. Structural consultants, P. D. Miller, Milston and Ferris. Lighting consultant, Edison Price (New York). Landscape consultant, Bruce Mackenzie.



**3 HOUSE AT KILLARA, NSW** *architects* **HARRY AND PENELOPE SEIDLER** *photographs by* **Max Dupain**

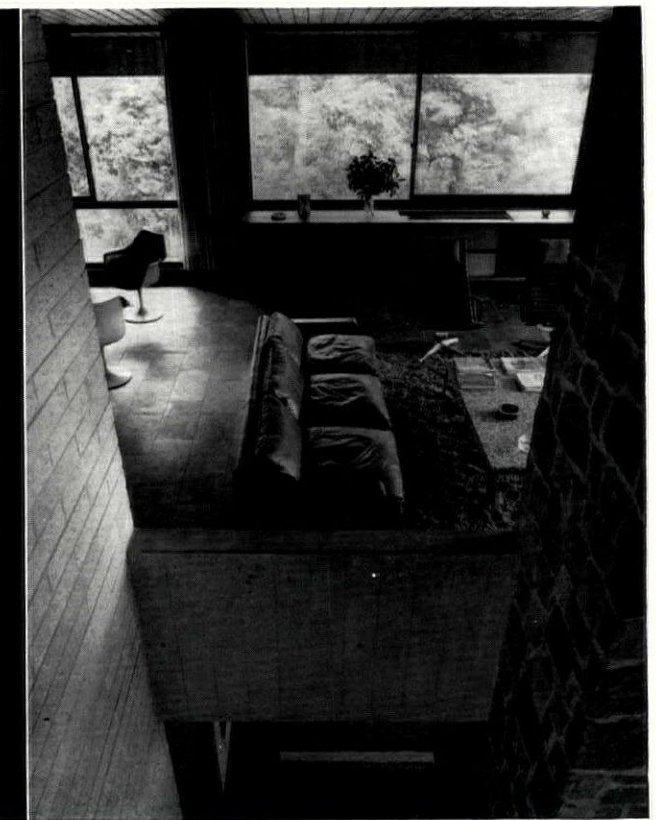
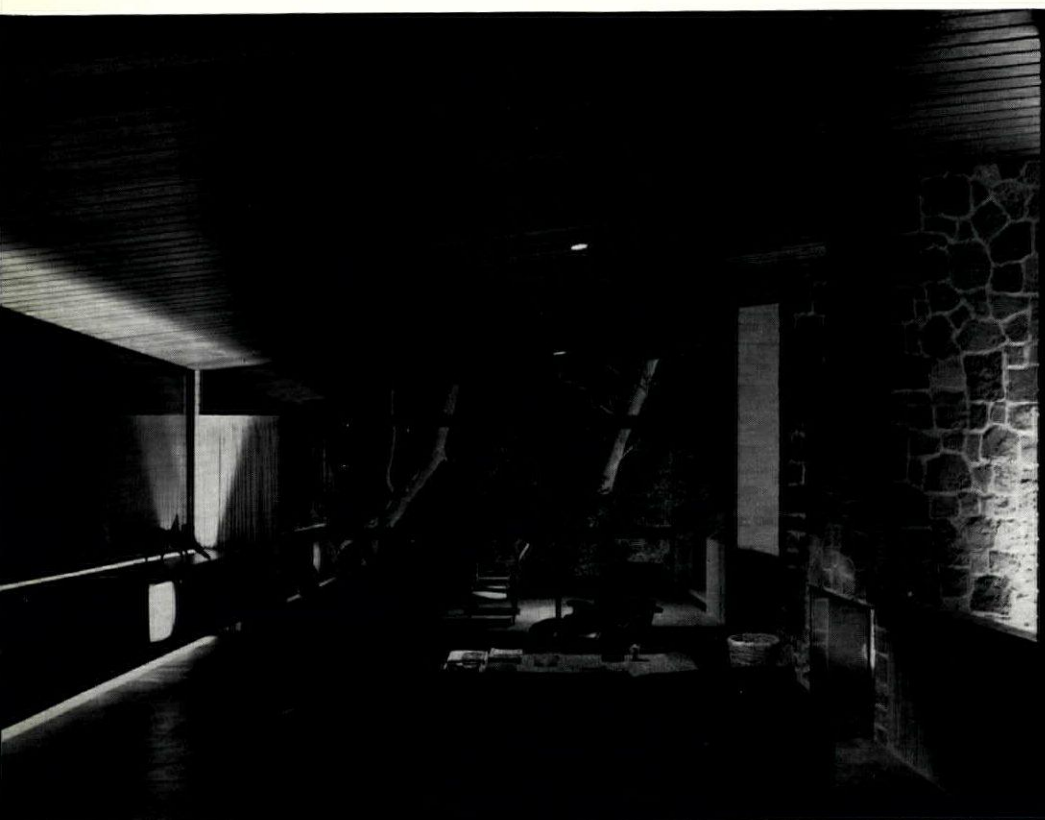






10

9 (previous page), from the creek bed, looking up at the living room terrace. 10, the north side 11, the living room. 12, looking down on to the living room from the dining area. 13, the south side, with studio balcony projecting. 14, the west elevation.

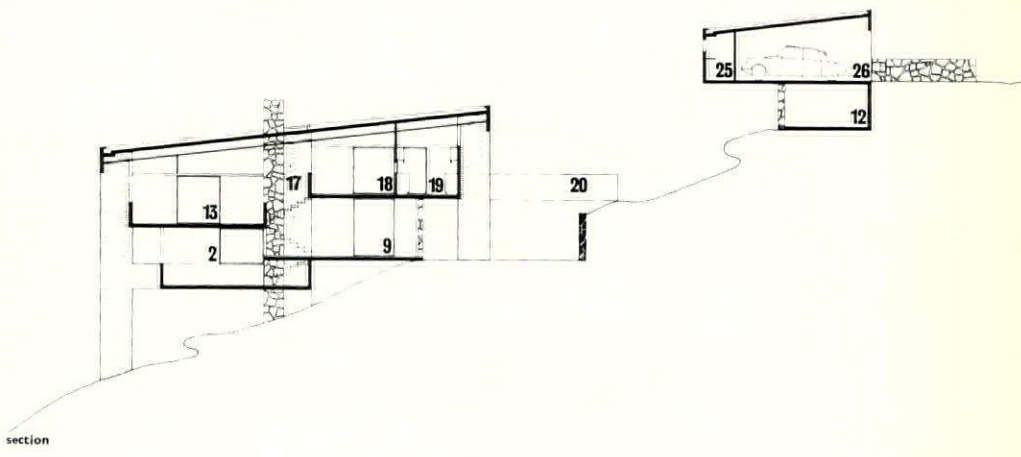


11

12



- key  
 2, studio  
 9, playroom  
 12, garden store  
 13, living room  
 17, void  
 18, dining area  
 19, kitchen  
 20, entrance bridge  
 25, workshop  
 26, garage



13

14





15



15, looking down from the garage to the entrance bridge. The chains carry away rainwater. 16, the living room terrace.

16





The familiar question 'why do Continental cities look so gay at night compared with our own?' underlines our need for a more imaginative approach to lighting, especially illuminated signs. Ironically, the question is often asked by planning officers whose own rules, or the puritanical way they apply them, inhibit all but the most banal displays. Compare, for instance, the typical English street scene at night, 5 (with no signs permitted above fascia level), with say Cologne, 8, or Brussels, 11, and the cover of this issue, and the difference is striking. Surely it is time we re-examined our attitudes and our rules—for illuminated signs can be a vital feature in the townscape.

#### WHAT SIGNS DO

Their use, both for publicity and identification, can lift the spirits by adding colour and vitality to the street. They activate space and shape the town at night, and, when tightly packed, they in fact become the townscape, 4, 11. Such intense use in the centre of cities truly reflects the concentration of activity, giving punch and drama just where they are needed.

#### THE SITUATION HERE

Sky signs, by which we mean those above roof level (as 1) are forbidden here altogether and all signs are subject to planning control—this means in effect that everything depends on the 'taste' of the local authority planner. Each new sign is judged 'on its merits' and only those which vary little from the average are approved. This system does, and can only, produce a standard of mediocrity, for generally speaking there is no creative incentive, no planning for signs. The advertisers are treated as untouchables by the planning authorities, the architects remain indifferent and the sign designers are discouraged. No wonder that our standard of signs, and lettering in particular, is deplorable generally, either timid or brutal and rarely with any feeling for placing on the building. And only in Piccadilly Circus, a special case where the feverish and ephemeral world of entertainment is exactly matched by the display, can we get an idea of the breathtaking impact which signs can give. There they create their own architecture of light, colour and movement. Design becomes almost irrelevant and built architecture non-existent, for the buildings have been transformed into giant poster screens.\* Suitable only in special, 'high voltage' places, this tight-packed effect is important—it gives continuity and intensity. Nevertheless, reacting from the appalling vulgarity of the developers' vision of a 'Snap, Plom for Vigour' tower, 2, the LCC suggested here an insipid jigsaw of small signs 'designed with a comprehensive elevation treatment to receive electric advertising signs,' 3—in fact replacing the present full-blooded excitement by a controlled, co-ordinated design, unhappily straitjacketed into a rectangular frame. The subsequent Holford scheme appeared to follow suit with little sympathy for the essential quality of the place. The point is, that the present unfettered display is based on competition, not co-ordination—the bigger the better. When signs are jammed together as they are now, you read the total effect, 4, and the individual product names do not obtrude. Separate them, and they will.

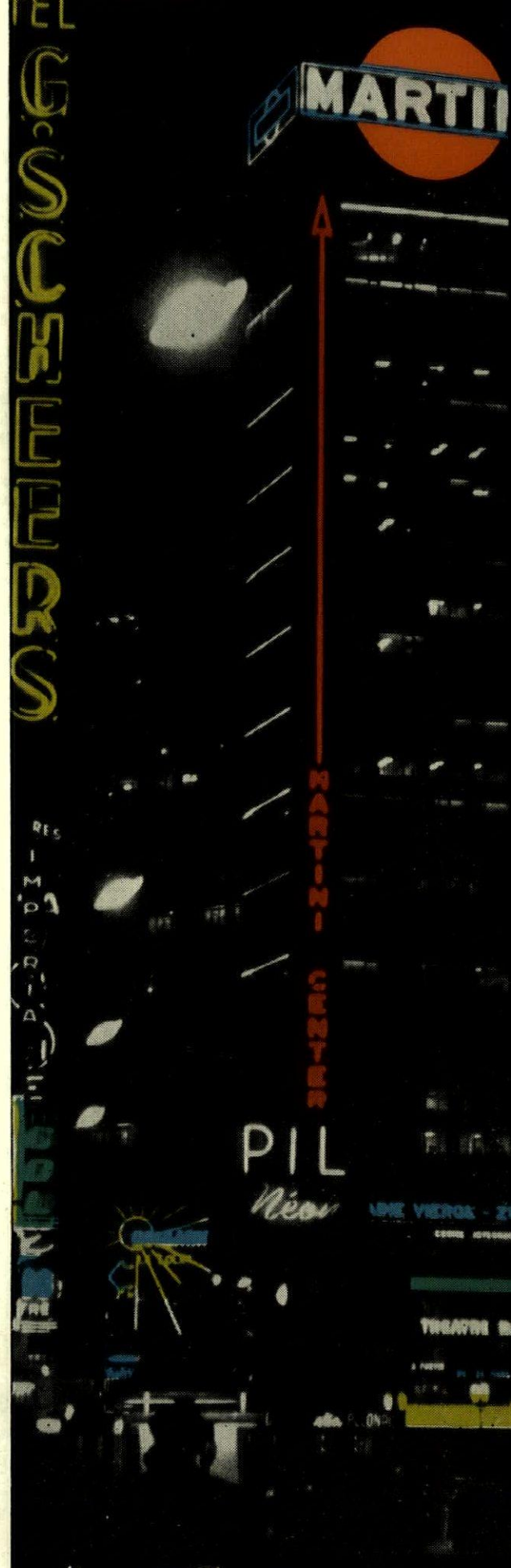
\*See 'Piccadilly Circus', AR June 1959, and 'Theatreland', AR December 1966, by the author.

#### WHAT SHOULD WE DO?

To enliven our streets at night we should learn from abroad, from the highly controlled lettering on German and Swiss buildings to the 'anything goes' vulgarity of Las Vegas, or Tokio. All have their place provided that daytime appearance is considered. The planners need to have another look at their regulations and encourage more imagination in the design and use of signs, particularly where people naturally want to meet—the entertainment and shopping areas—the places with cafés and pedestrian streets. Also they should allow sky signs in the centres of big cities, which should be gay places at night, the areas of maximum vitality. This makes advertising sense too, which is important, for otherwise the signs will lack the necessary financial backing. In fact, town planners need to think of signs at the same time as all the other forms of lighting—street lighting, floodlighting, illuminated fountains, etc. (6 for example shows Stevenage town centre now, and 7 as it might be). Illumination should be graded from places with subdued, restful lighting to others, such as theatreland, which are brightly lit and where almost anything goes. For example take Cologne, 8, where gay shopping streets contrast with the spires of the cathedral. However, care is needed, for though there can be overmuch reverence of the wrong kind, an indiscriminate use of signs everywhere, especially on historic buildings themselves, would be disastrous. Also, and very important, careful consideration must be given to distant views—perhaps the principal objection raised to the use of sky signs. Unlike lower signs, they affect ether places. For instance, St. James's Park would be affected by sky signs in Piccadilly. However, if care were taken over daytime appearance, this need not be an objection and in many places the night scene would be enhanced. A careful survey would first need to be made to find out what important townscape views would be affected, what kind of effect was desirable. In special places consideration should be given to signs which fold down in daytime as 26.

#### REGULATIONS

The Town and Country Planning Act, Control of Advertisement Regulations, makes everything illuminated on the outside of a building subject to planning consent, given normally for a period of 3 years. Unfortunately this leads to the arbitrary making of rules by local authorities. One discriminates against trade names, another insists on standard lettering, while a third demands certain colours. (Witness the recorded instance of permission being granted for a Watney's Red Barrel sign



Kenneth Browne

# ILLUMINATED

# SIGNS

1, sky sign on the Martini Centre, Brussels. See also 12, which shows the daytime appearance.

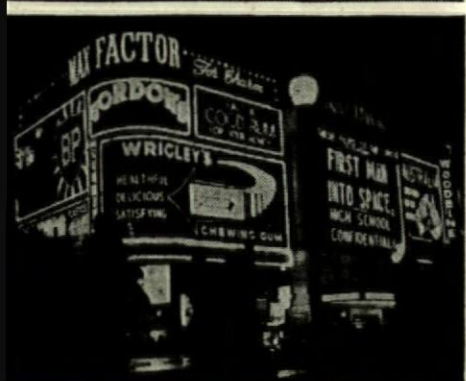




2



3



4

provided it were blue.) In Birmingham no signs are allowed with a projection of more than 12 in. by a bye-law of 1897 and nearly all discourage illuminated signs above fascia height. Appeal means up to six months delay, so the advertiser generally plays safe with the poor results we see around us.

Besides adding gaiety to any scene, signs can be used to obtain definite effects.

*Centre*: they can define this by size, close spacing, intensity of light and movement. They signal that a lot is going on, that there are many alternatives.

*Focal Point*: particularly effective at the end of a vista, as the Martini Centre, Brussels, 1, 12 (seen down the Boulevard Adolphe Max). On a high building, as here, the sky sign continues the intensity of the centre over a considerable distance, 14.

*Shape*: boldly used, signs define and emphasize a space, such as a central square, 11.

*Recession*: given particularly by projecting vertical signs seen in perspective as 8, 9, or by arches as 10.

*Giantism*: exciting contrast of scale becomes possible changing a place from its daytime appearance, 11.

#### SKY SIGNS

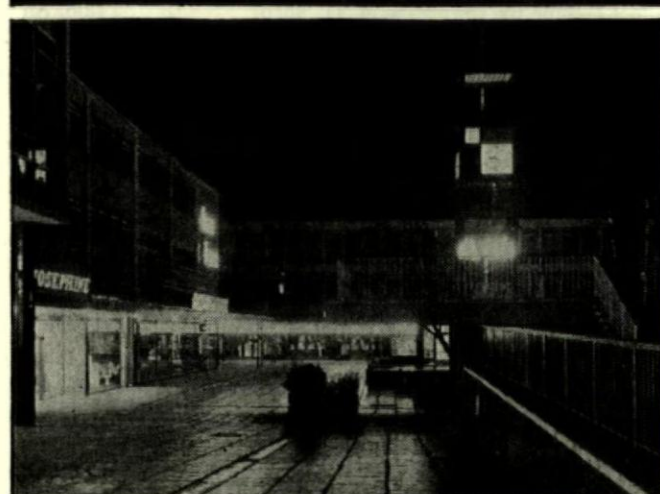
By banning these entirely we deny ourselves the most exciting night effects, 1, 11.

Objection is largely on grounds of daytime appearance, but this can be satisfactory if they are considered in the overall design of the building, 12, 22.

By lifting the apparent height of buildings, sky signs help to enclose space at night, 11. This can be valuable, for nothing is more depressing than a central space the walls of which are too low.



5



6

Above: Piccadilly Circus. 2, 3, versions of the building proposed for the Monico site, 1958-59. 2 shows the designers' suggestions for advertising. 3, the LCC's tidied-up version. 4, the present unfettered display. 5, typical English street scene at night, with no signs above fascia level, 6, Stevenage as it is and, 7, as it could be.



7





Continental street scenes at night. 8, Cologne. 9-11, Brussels.



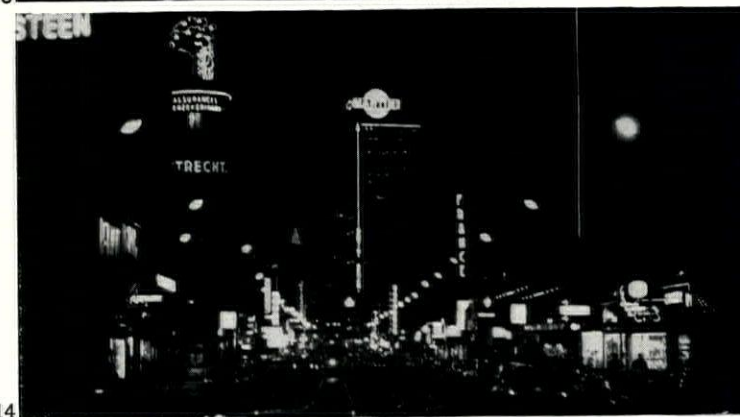




12



13



14

15

16





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ROLEX

COLO

Facing page: 12, sky sign on the Martini Centre in Brussels and, 14, as seen at night down the length of the Boulevard Max. 13, striking use of sky sign structures in the Ginza, Tokyo. 15, giant sign on a flank wall in Stockholm. 16, bands of lettering between windows in Zurich. (Note satisfactory daytime appearance in 21). This page: 17, rooftop lettering forming a crown to a building in Zurich. 18-20, Continental examples showing appropriate and imaginative use of lettering. 22, sky sign structures in Vallingby, Sweden.

Revolving signs add another dimension and help to link places a considerable distance apart by carrying the eye between them.

#### OTHER SIGNS

**Banner:** the projecting vertical sign, most effective seen in echelon, as 8, 9. Ties the street together when seen in perspective. Each sign a visual stop, so right for the pedestrian street.

**Band:** 16, 19. Long continuous ribbons of lettering, occupying the full depth between windows, emphasize architectural form. Curtain walls might have been made for this. Well used, there is a satisfying play between good letter forms, a contrast of bold, light and cursive, like a good type book.

**Crown:** a semi-sky sign, and an answer to the complaint that modern architecture is all flat-topped—it can give richness to the top line of a building, 17. Very effective at Geneva where a continuous display is reflected in the lake. Also good on a curve, 27.

**Badge:** 18. Effective on blank end walls.

**Fantasy:** Sheer joie de vivre (see cover).

#### MOVEMENT

The addition of movement to light and colour gives liveliness and interest, particularly in the case of the developing signs such as 23.

Bottles empty, glasses fill, wheels rotate.

The Martini sign, 1, for instance, is immensely effective, its red orb growing from nothing until it is like a great harvest moon in the sky, then diminishing again. Winking signs contrast with the smooth continuous horizontal movement of the ticker tape, particularly effective seen disappearing round a corner, while revolving signs, free standing on pavement kiosk or roof top, give movement in another plane.

#### LETTERING

Good letter forms are essential (but used with

variety, not regimentation)—and this is where we fail most conspicuously. Aptness to position and subject are very important—as 16-21.

#### COLOUR

We could learn much from the greater range and subtlety of colour used on the Continent.

#### METHODS

The two principal methods of illumination are bare fluorescent tube used as line, and tube used to backlight or outline a perspex letter or picture.

The first, the bare tube, acquired a bad name because of the clutter of electrodes, wires, junction boxes, etc., which were often littered over the face of the building. This was the result of the sign being applied as an afterthought, but considered in time this is quite unnecessary for the works can easily be concealed in the building. The exposed neon tube still has great possibilities;\* the designer writes or draws on the night sky, and the limitations of the medium impose a discipline on what he does. They give a sense of immediacy, scale and character and make grossness of design, at night anyway, almost impossible. The second, backlit perspex, though it can be very successful and is easier to keep tidy, has great visual dangers. Virtually no discipline is imposed by the medium, nothing to give scale as the exposed tube does, and the result can and very often is vulgar in a trite sort of way. (For instance the Martini orb already mentioned would be nothing like as effective were it not composed of concentric rings of exposed tube which light one at a time, making you realize its enormous size.)

However, combinations of the two methods can be very successful.

\*As the Lausanne Expo. of 1964 demonstrated with layers of neon lighting in sequence.

LOEWE OPTA

SIEMENS

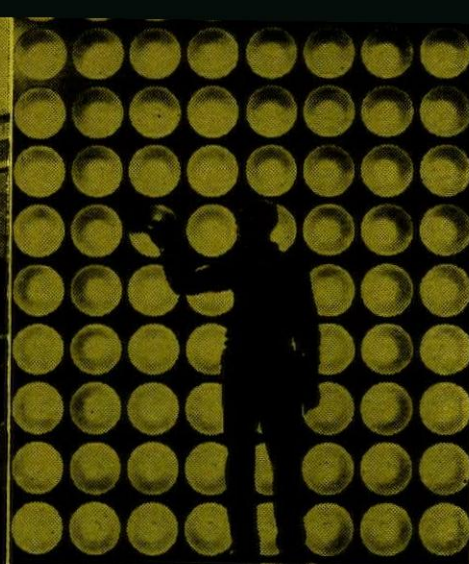
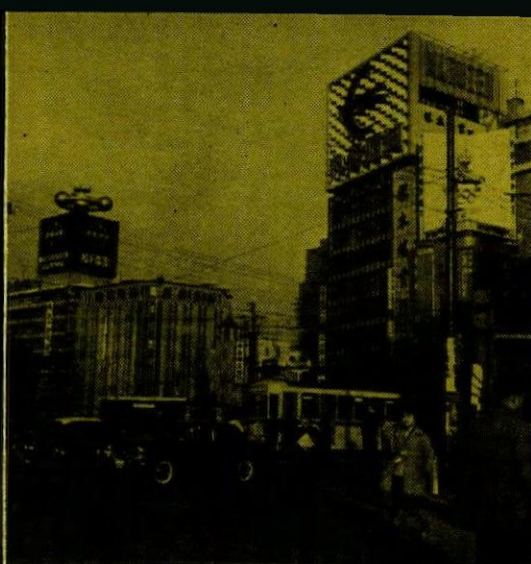
GRUNDIG

Schallplatten

gigi







23,24,25

23, 34 ft. illuminated sign on side elevation of office building in the Bull Ring Birmingham (designed by DRU). 24, sky sign structures in the Ginza district of Tokyo. 25, part of light grid of William Mitchell's project for Piccadilly, Manchester. 26, retractable rooftop sign in Basle, invisible in daytime. The aluminium letters are faced with acrylglas. A small electric motor operates the hydraulic jacks which raise the letters. 27, rooftop lettering used on a curve in the Piazza Esedra, Rome.

#### DAYLIGHT APPEARANCE

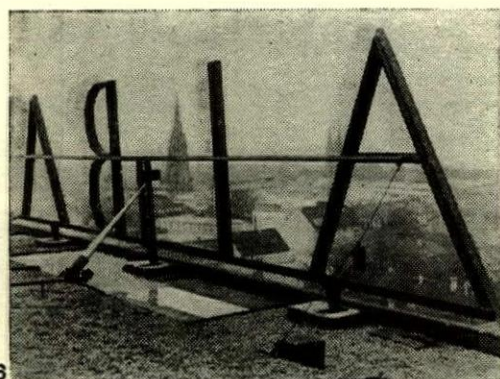
This is the greatest cause of objection to illuminated signs but with care, as 17, 21, it can be satisfactory. For larger, especially sky, signs it is a question of better design of supporting structure as 12, 22, or extending the framework of the building to support the sign. It is entirely a question of taking trouble. Certain buildings such as multi-storey garages lend themselves to signs and pierced screens make for easily changed title fixing.

#### FUTURE

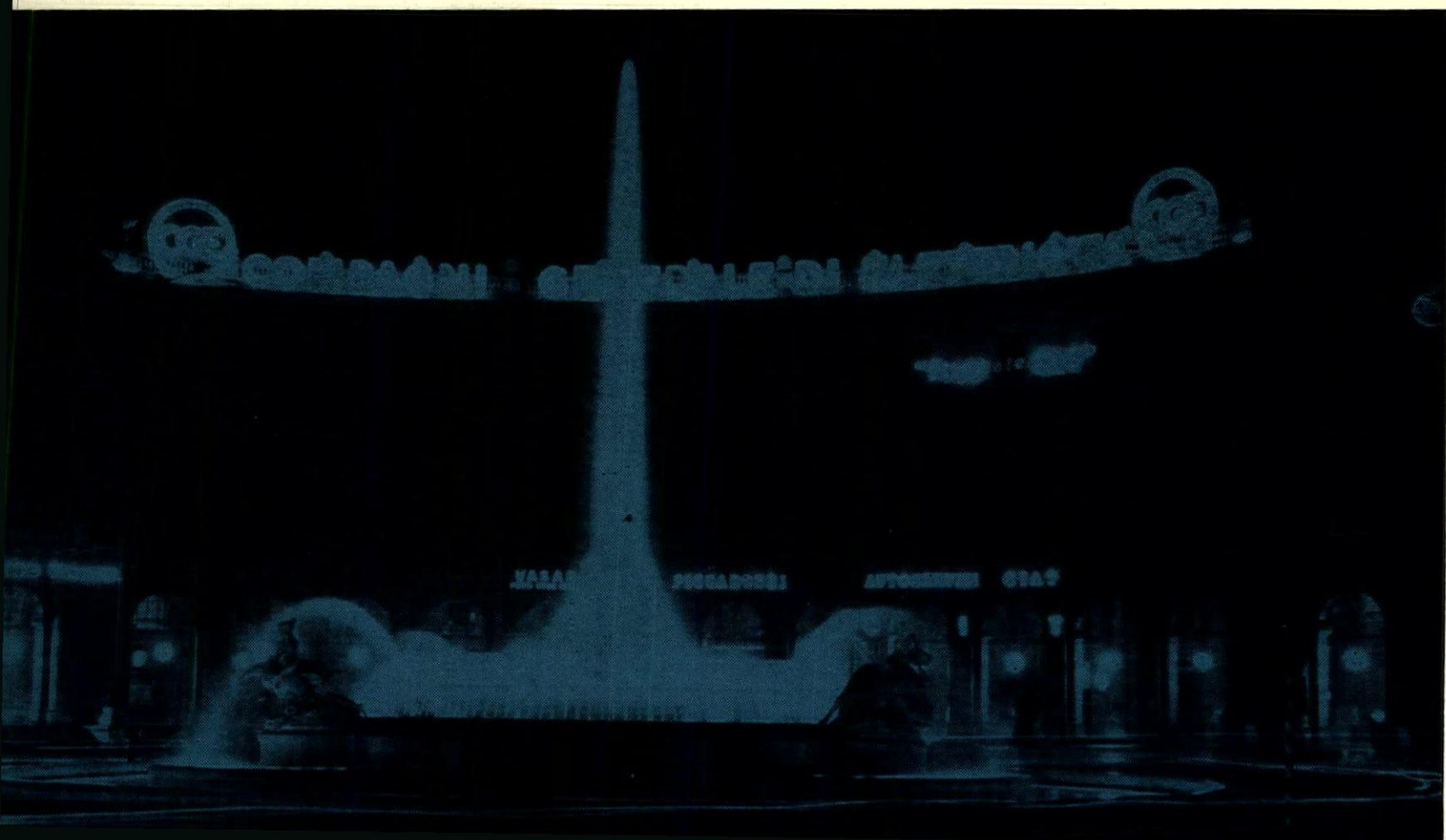
The possibilities for enlivening the night-time city are far from exhausted but, despite Maholy-Nagy's prophecy of 1939 that artists would soon begin to exploit the aesthetic possibilities of intense artificial light, there is so far disappointingly little to show. As for interesting ideas, the 'Times Square Tomorrow' project of 1955 by Harvard architectural students demonstrated the possibilities of an imaginative use of space frames for freestanding advertising towers and structures, while as far back as the 'nineties a 'light organ' was invented for colour mixing. In fact, there has been considerable experiment with light, notably by the Light Sound Workshop based on Hornsey College of Art. Their use of

multi-projector film techniques suggests fabulous possibilities, with hidden projectors overcoming the difficulty of daytime appearance and blank walls of buildings used as screens. Marvellous effects have been demonstrated with images changing, developing and merging in weightless fashion.

But so far the combination of vested interest, reluctance to try something new, and the regulations themselves have combined to prevent the use of new ideas on anything like city scale. For example, one victim appears to be William Mitchell's project for Piccadilly, Manchester. There a giant grid of light bulbs, 60 ft. by 300 ft. (25 shows a small section) would form a picture screen and, coupled to an electronic control system, could produce a full range of brightness levels from peak white to black, thus simulating the half-tones of a printed image. Any picture presented to a monitoring machine in the basement of the building would be automatically reproduced on the screen. So far this remains unbuilt, but a similar idea is proposed for Blackpool. Another invention, by Peter Adams, employs a huge grid of backlit perspex boxes each containing light bulbs in the primary colours. Connected to a master control, this would present a coloured image disciplined by the grid pattern of the boxes.



26



27



# GEORGE SQUARE

## TOWN VERSUS GOWN IN EDINBURGH

For four years from 1956 to 1960 George Square was the scene of battle—between two doughty adversaries, the Scottish National Trust and Edinburgh University. No word was harsh enough, no political manoeuvre too difficult for either side as they attacked and counter-attacked. Accusation, petition, litigation and recrimination—these were the weapons.

The issues at the time were never clearly agreed. The Trust, who held that George Square should be preserved unless an unanswerable case for its rebuilding could be made out, stuck to its guns on the public's right to be informed and consulted. The University as landlord clung to its right to redevelop land that it owned to meet the university's unquestionable needs for expansion. The one person who could have cleared the air, the Secretary of State for Scotland, failed lamentably to make the large-scale gesture called for when passions mount and reason fades. And when at the eleventh hour he seemed on the brink of calling a public inquiry, the matter was swept out of his jurisdiction to be dealt with on the basis of an individual case before the Court of Session. Some good came out of the affair—the National Trust gained enormous prestige and an increased membership, the University's public relations and its plan improved out of all recognition and the Secretary of State's department became more sensitive to public opinion and the need for consultation.

If the issues were unclear at the time, it may be foolhardy to attempt to clarify them now. But clarified they must be, if the redevelopment of George Square is to be evaluated. First a word on the history and character of the square.

George Square, laid out by James Brown in 1766, was the first sizeable (600 ft. by 500 ft.) planned development in Edinburgh, though it was not strictly within the city boundary. The houses were never uniform but they adhered to a general height and scale and were all built of stone. The north side was redeveloped as a school in the mid-nineteenth century—observing the height but breeching the scale. The garden in the centre was, and still is, a mature landscape of fine trees billowing out over a strong traditional spearhead iron fence. So the square in 1954, when Sir Basil Spence first produced his plan involving the rebuilding of three sides, was a unified

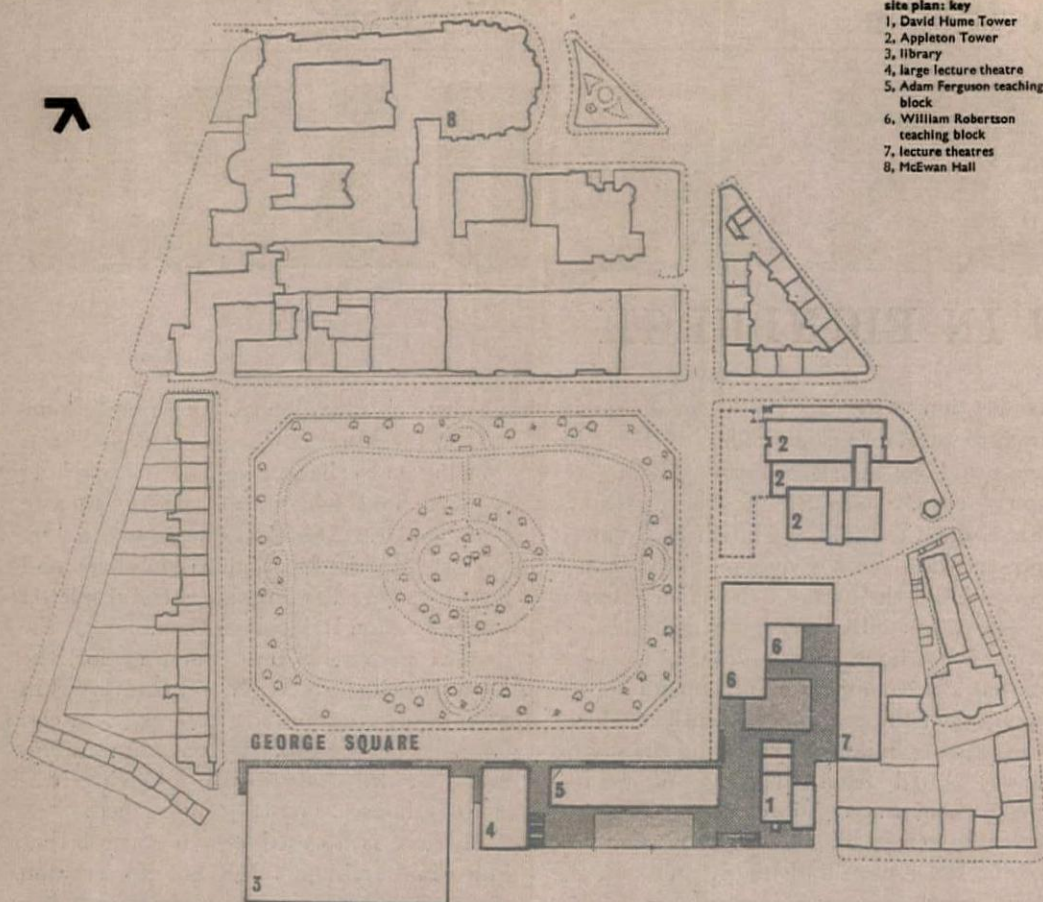
conception with a severe break in its architectural uniformity. Thus at the architectural level the issues resolve themselves fairly clearly into a series of questions. First, did the buildings intrinsically merit preservation, as a group or individually? Second, did the unity of the space warrant preservation with or without the buildings? And if without the buildings, to what extent did George Square depend for its quality on the scale and overall height of the existing buildings? Or would the square have gained from buildings of greater height and mass? In retrospect it seems possible to say that the scale and character of the space were undeniably an asset, the buildings less so. But in any case, on the intrinsic merit of the buildings there is much to be said for Lionel Brett's thesis that 'the formal composition which depends on precise repetition and completion for its effect must either be kept *in toto* or scrapped, but we hardly ever do either.' And this seems to be the fundamental criterion in making any judgment on the redevelopment of George Square. The square today is visually fragmented. This follows from its functional fragmentation. It is the brain child of a hydraheaded parent. It consists of a series of architectural responses to different needs. The simple brief of terrace houses for families which produced a straightforward and pleasing solution in the eighteenth century has been replaced in the twentieth by a complex and varied programme carving up the square into different sites developed by different architects. The only element remaining unchanged in size and shape is the garden. But even this is wholly changed by the scale of the new buildings and is threatened by some ill-conceived landscaping.

Could such a fragmented approach ever have resulted in visual coherence? Could Sir Basil Spence ever have been right when he announced in 1954 'I will preserve the essence of George Square'? It is just possible, if one architect had designed the entire development. It might have been possible if a carefully drawn brief had limited the redevelopment to one use, or compatible uses, to produce a common built form. In George Square the disintegration is total because the briefs, the architects, and the sites were all variables: on the south side is the library by Sir Basil Spence, Glover and Ferguson. Next to it is

a lecture theatre alongside a separate four-storey teaching block and on the east, fronting on to the square, another teaching block behind which is a lecture theatre block and the David Hume tower, all by Robert Matthew, Johnson-Marshall and Partners. On the same side is the Appleton tower by Alan Reiach. On the north, at the eastern corner, a new building for the Medical School by W. N. W. Ramsay is in process of erection and at the western end is an earlier building by the same architects. The west side is a row of eighteenth-century houses, virtually untouched.

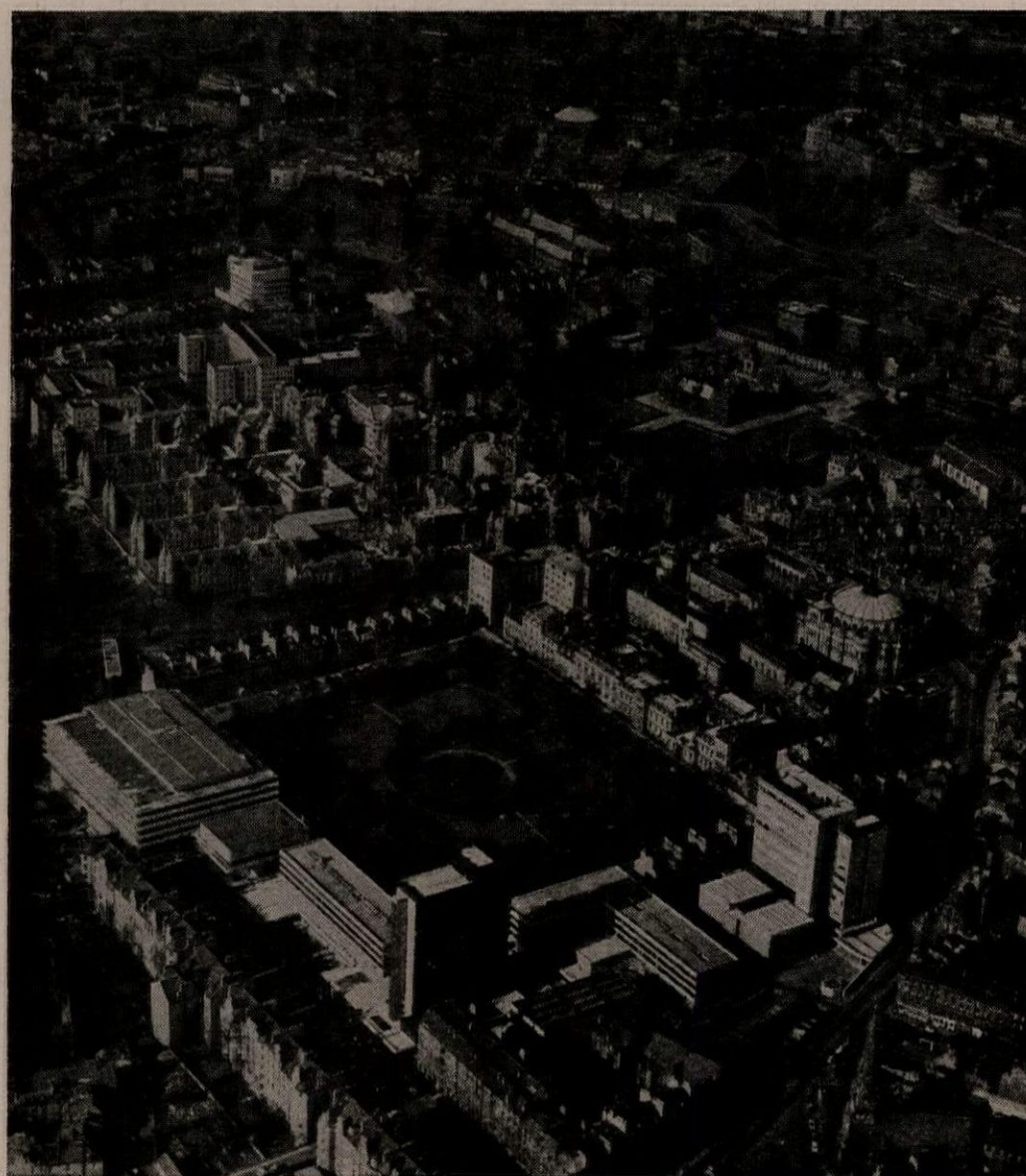
And there is no evidence to suggest that individual architects were able to question their slice of the cake. Alan Reiach has produced a built form at a plot ratio of 3 to 1, which is a sensitive response to two insensitive limitations—the tiny size of his site and the overfull requirements of his brief. Yet because of these two pressures he has had to make two sacrifices which question the whole validity of the Appleton Tower's built form. The first is to function. Lecture rooms disgorge their students at the end of lectures as devastatingly as the 5 o'clock siren drains factories. But at factories it generally happens on one level. In the Appleton Tower, when a moving mass of students hits the lift spaces simultaneously on every floor, a tower form dependent on lifts seems questionable. And the same criticism can be made of the Hume Tower. The second sacrifice is at the planning level—one which Edinburgh as a city should not have been asked to pay. From the city's three major viewpoints—Calton Hill, the Castle and Arthur's Seat—the emergence of Appleton and Hume Towers on Edinburgh's ravishing skyline is a major disaster. The view from Calton Hill has been crudely interrupted. Two lumpish masses now rudely assert themselves against the Pentlands. From the Castle, the subtle, curving, upturned saucer roof of the McEwan Hall has been overpowered and brutalized and two slender spires neutralized. And from Arthur's Seat, the historic domination of the rockgirt Castle holding sway over the valley lying at its feet, has for ever been broken. After seven centuries the bastions of knowledge impudently challenge the Keep of history. But these views, justly famous and important as they are, are those of the picture book, the postcard, and the shortbread tin. They are there to





site plan: key  
1, David Hume Tower  
2, Appleton Tower  
3, library  
4, large lecture theatre  
5, Adam Ferguson teaching block  
6, William Robertson teaching block  
7, lecture theatres  
8, McEwan Hall

1, George Square from the air, looking north-west. Appleton Tower stands at the north-east corner, Hume Tower at the south-east corner and the university library at the south-west corner. Immediately north-west of the Appleton Tower is the McEwan Hall and in the distance is Edinburgh Castle. For the effect the three new buildings have on the skyline of Edinburgh, see the fold-out pages opposite.

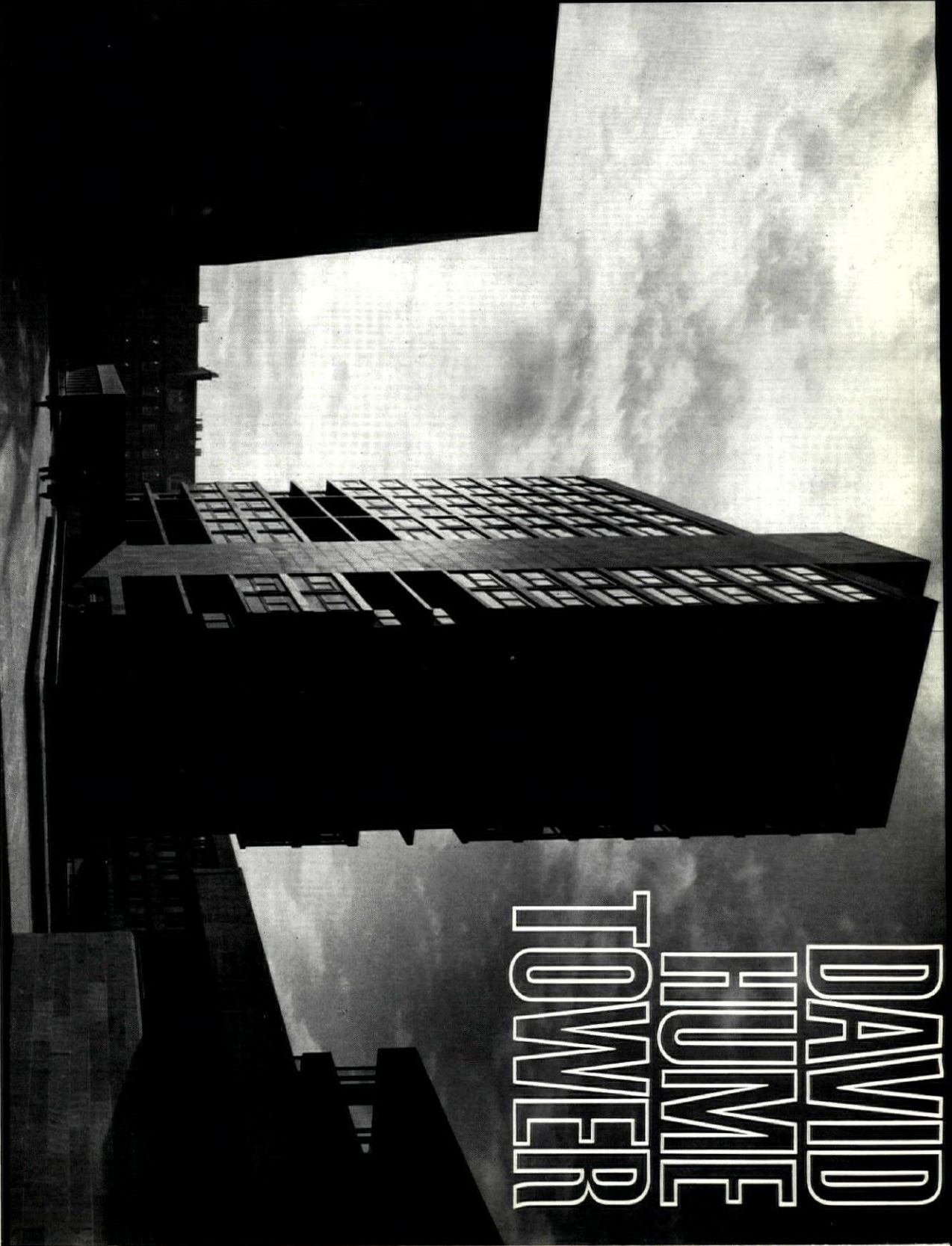


be enjoyed by the energetic and the young, or the less active on an evening drive. The view that all can enjoy is across the Meadows from the putting green. Now even this view has been cruelly assaulted. At three o'clock the sun catches the two towers. The Hume Tower stands etched in sharp relief, shining and smooth, against the dramatic, moody backcloth of Edinburgh's precipitous Salisbury crags. The Appleton Tower crushes the gentle natural downward swoop of the crags going to ground and appears stark and white and man-made where all before was black and mysterious and natural. And the library, otherwise with a blameless record, envelops the base of Hume Tower making the tower squat uncomfortably on an over-large white podium. Both towers from almost any viewpoint, when they are bathed in sun, make one thing very clear: add 'whiteness to brightness' in Edinburgh and it will not wash. Imported mosaic, York and Portland stone coupled with large areas of glass are alien to Edinburgh's monochrome tradition and chilling climate. In retrospect the overall lesson is plain. Somewhere along the line the needs of the University and the character of Edinburgh came into conflict. If the character of Edinburgh is to win, the brief, whoever the developer is, must be questioned right at the beginning. The city must have a high buildings policy. But the siting of high buildings is not just a game for aesthetes. It is only meaningful if it attacks the problem at its roots—what are the major uses in the city and are they likely to expand? If they are, is their site large enough to allow them to do so without going high? If they occupy a site where a high building would be acceptable or even desirable, well and good. If they are cramped and their site is unsuitable for high rise, then to where are they to be encouraged to go?

By the same token, Edinburgh must have a conservation policy for its remarkable planned squares, terraces and circuses. If other squares or unities are to be replaced, then the moral of George Square must be made clear. A unity has been unseated by disunity. Historic terraces have given place to academic histrionics. George Square could have been kept intact and the land to the east developed—if the university had so wished or, more to the point, if the city had so insisted. Or, George Square could have been redeveloped as the total unified expression of one mind. Or as the uniform expression of compatible uses. The high quality of the library and scale of the lecture blocks indicate what might have been possible if the university had either stuck to one architect or to compatible uses. And the library shows that George Square was a grand enough space in itself to absorb large-scale architecture. As it stands, it has no coherence because it is rooted in incoherence. It is an indict-

[continued on page 443]





# DAVID HUME TOWER



# APPLETON TOWER

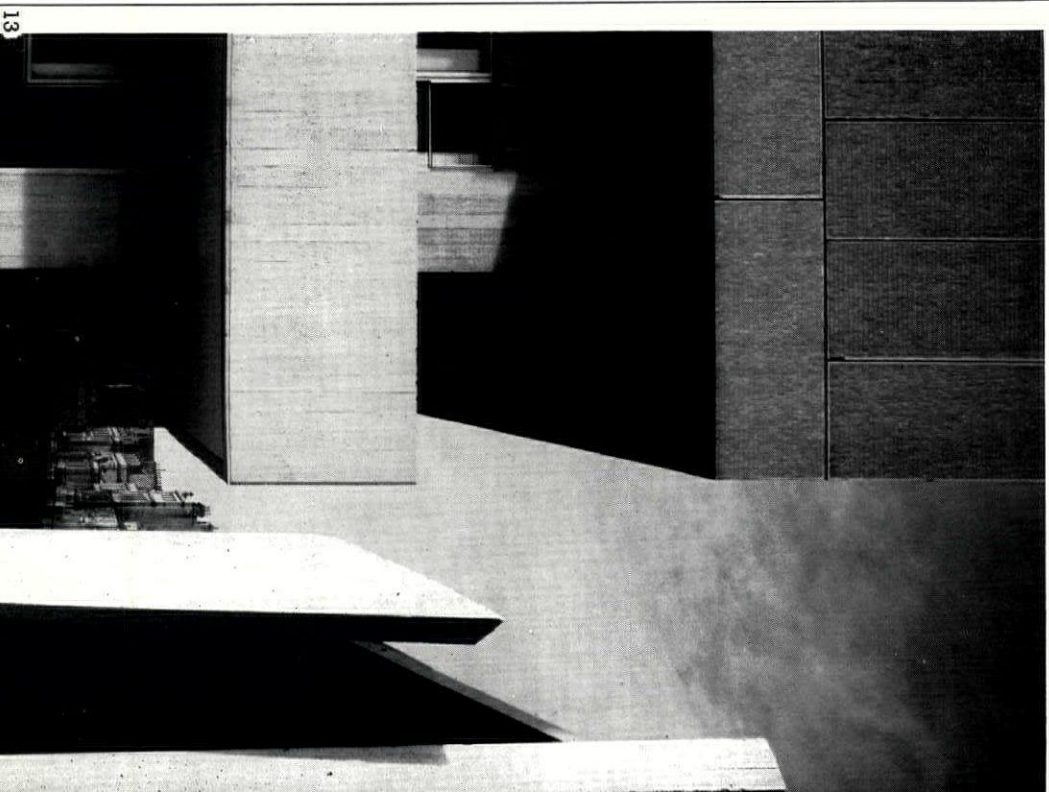
8

## FACULTY OF ARTS AND SOCIAL SCIENCES (DAVID HUME TOWER) EDINBURGH UNIVERSITY

*architects*

**ROBERT MATTHEW,  
JOHNSON-MARSHALL  
AND PARTNERS**

8. Hume Tower from the podium—the fulcrum of a newly-created space at the south-east corner of George Square. 9. from within the square garden the tower closes the corner and extends the space upwards. Over fold: 10. entering the podium from the south, between the large lecture theatre and the Adam Ferguson teaching block. 11. the south-east corner, with the Hume Tower on the right and the Adam Ferguson building on the left. Ahead is the William Robertson teaching block and rising above it is the Appleton Tower.



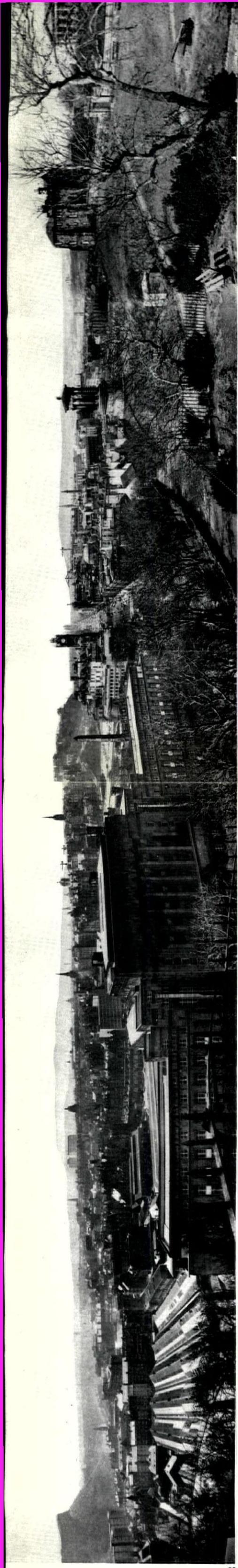
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11

13

12

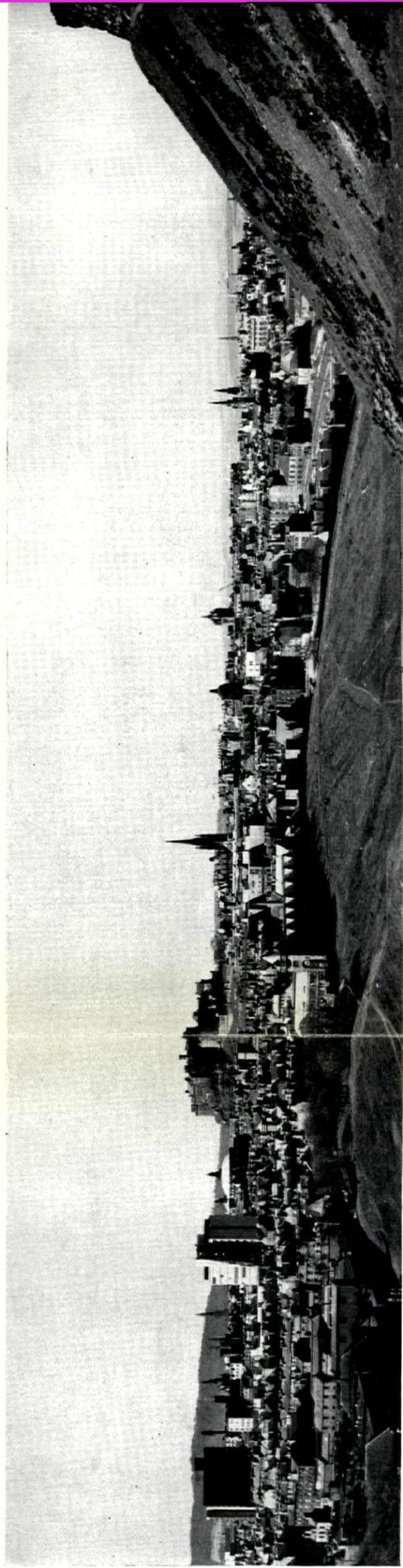




2

The chief criticism that can be made of the new university buildings in George Square, Edinburgh, illustrated herewith, is that the tower form of two of them has a disastrous effect on distant views of Edinburgh's skyline. The critical comments on the right are from the article on pages 433-434.

3



2, 'The view from Calton Hill has been crudely interrupted . . . A panorama unequalled in the British Isles has been sullied'.

3, ' . . . from Arthur's Seat, the historic domination of the rock-girt castle holding sway over the valley lying at its feet, has for ever been broken. After seven centuries the bastions of knowledge impudently challenge the keep of history.'

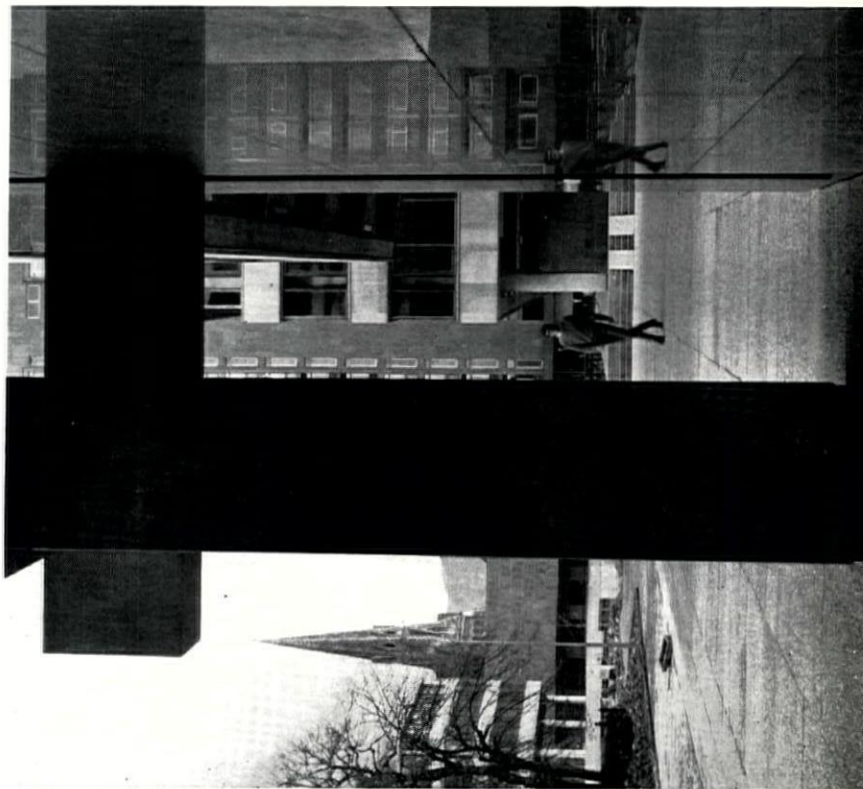
4, 5, 'The square today is visually fragmented. It consists of a series of architectural responses to different needs—different sites developed by different architects.'

6, ' . . . the Hume Tower stands etched in sharp relief against Salisbury crags. Appleton Tower crushes the gentle natural downward sweep of the crags going to ground.'

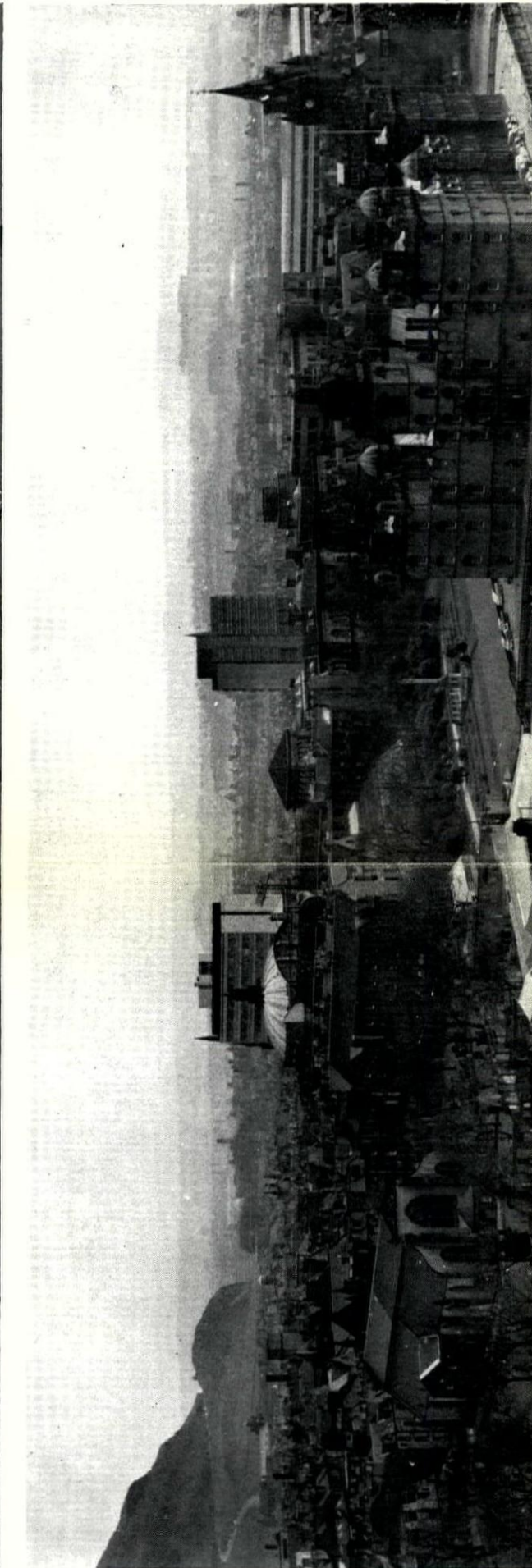
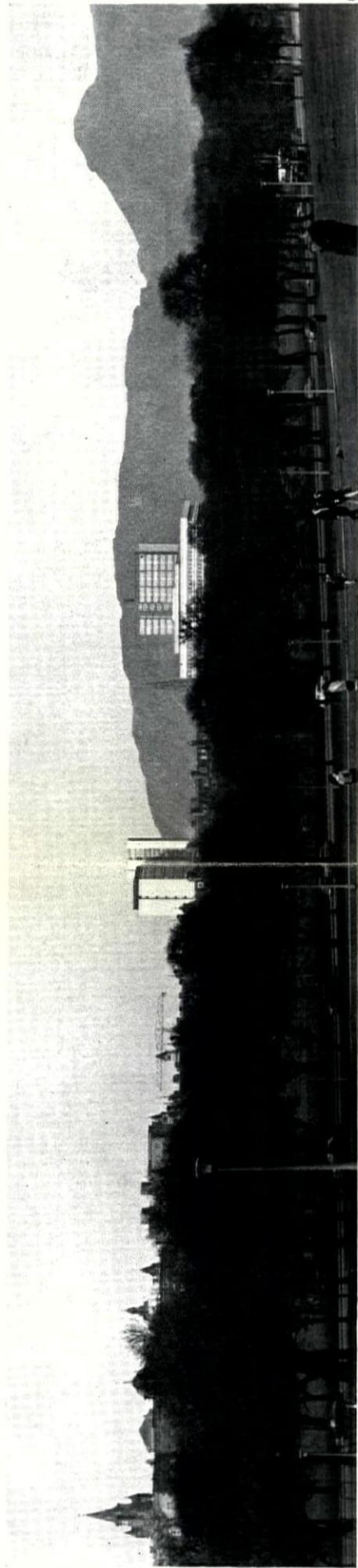
7, 'From the castle, the subtle, curving upturned saucer roof of the McEwan Hall has been overpowered and brutalized and two slender spires neutralized.'



4



5



7



**FACULTY OF ARTS AND  
SOCIAL SCIENCES  
(APPLETON TOWER)  
EDINBURGH UNIVERSITY**

*architects*

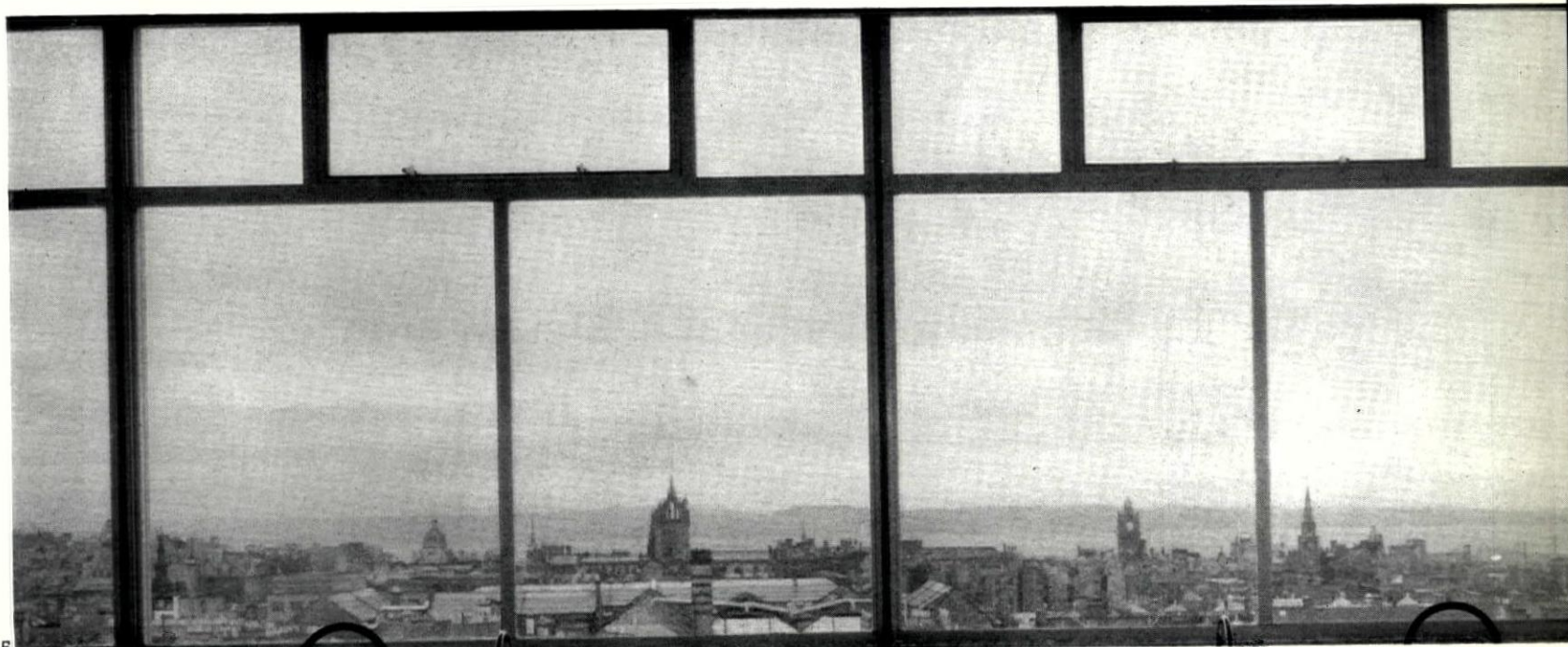
**ALAN REIACH, ERIC HALL  
AND PARTNERS**

*Opposite: 12, the view from the Appleton Tower staircase, looking east. 13, detail of the external board-marked concrete landing, with the north side of George Square beyond. This page: 14, Appleton Tower from within the square, looking east, with eighteenth-century terrace houses which are to be demolished to make room for a tutorial block by the same architects. 15, part of Edinburgh's skyline seen from the top-floor windows of the Appleton Tower.*

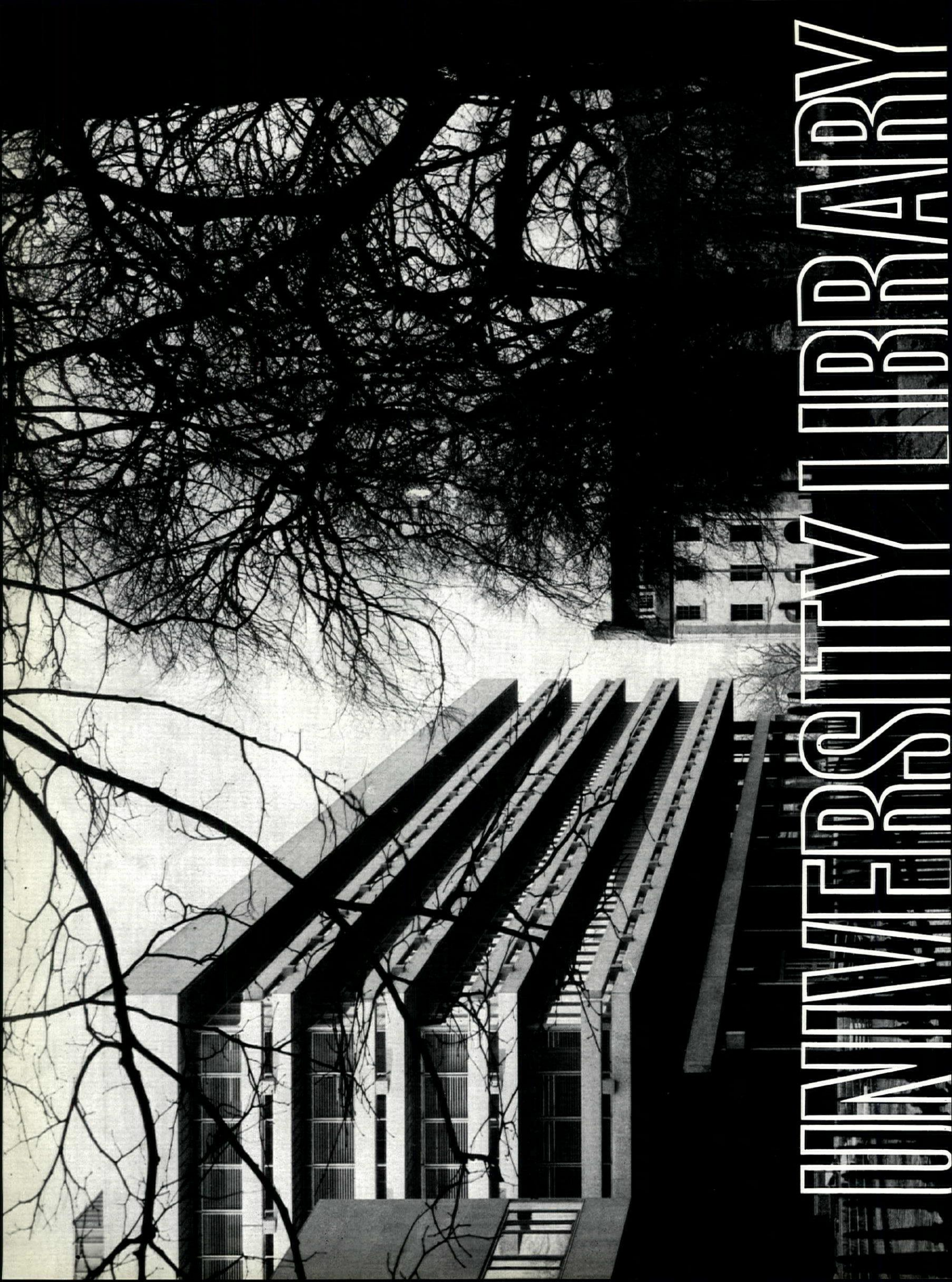
14



15







# UNIVERSITY LIBRARY



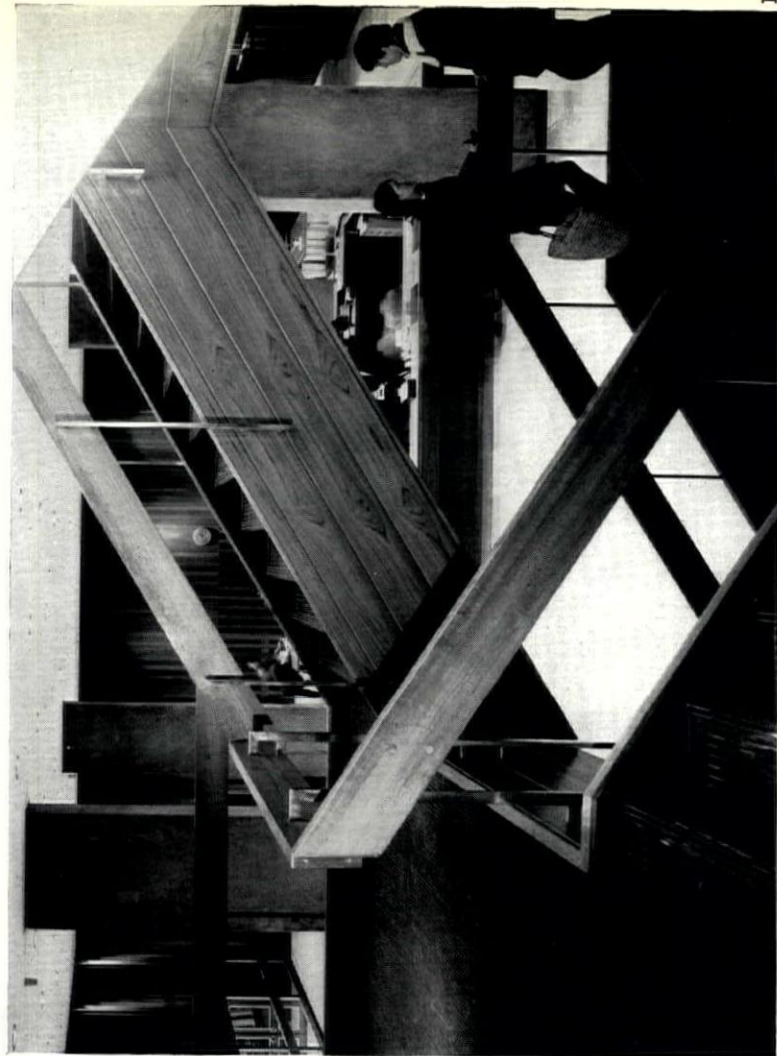
# LIBRARY, EDINBURGH UNIVERSITY *architects* **SIR BASIL SPENCE, GLOVER AND FERGUSON**

*photographs by Henk Snoek*

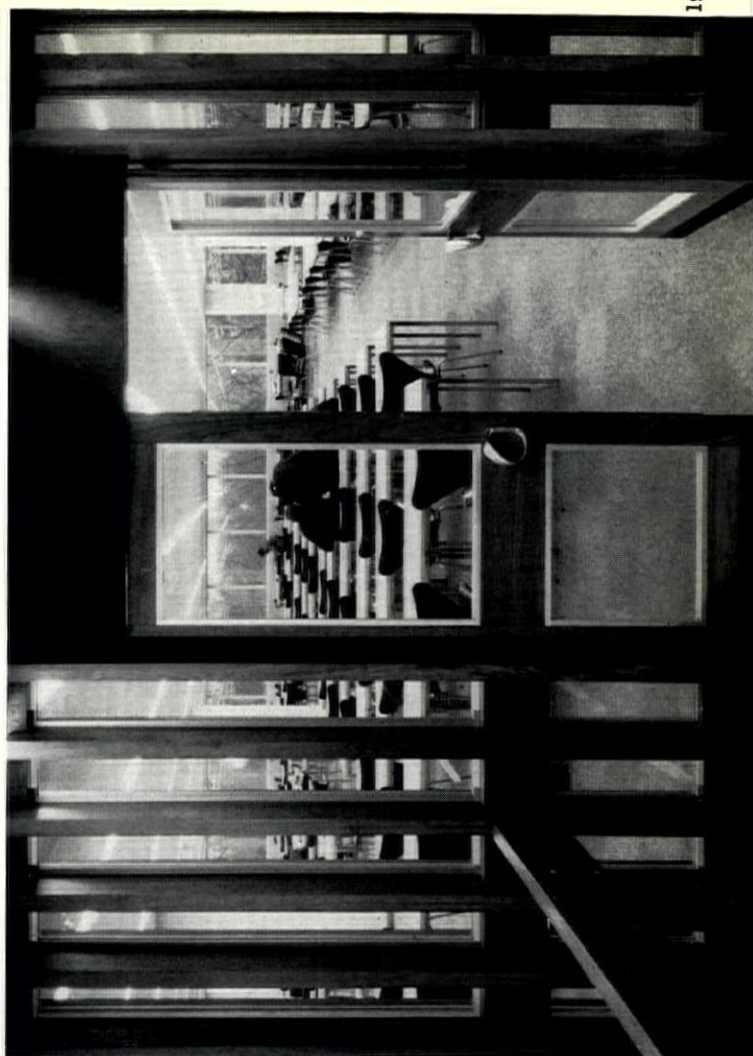


17

16 (opposite): the library seen from the east side of George Square. 17, the cataloguing room seen from the entrance hall. 18, the main staircase with the ground floor circulation desk below. 19, second floor reading room.



18



19



The library serves the daily needs for study and research of an academic population of between five and six thousand undergraduates, principally those in the Faculties of Arts and Social Sciences. It also houses certain central services for the entire university library system.

The form of the building was dictated by a series of requirements imposed at various times by different agencies. The height was restricted by the City as planning authority; the size of the site was established in the 1934 Spence plan; the floor area was determined by the University librarian's brief; the placing of the building on a podium was stipulated in the University's comprehensive plan; and at the more detailed level, the librarian's brief calling for all floors to be strong enough to bear full stack weights at all points, level to allow books to be moved easily and flexibly planned, led inexorably to a design solution with strong horizontal emphasis externally and internally.

The library is entered at ground floor level directly off the podium along the south side of George Square. A lobby with armour-plate glass doors leads into the entrance hall, a space which rises through the first floor above. The entrance hall is dominated by two elements: the main stairs and the circulation desk. The rest of the ground floor is divided into two zones;

public rooms and administrative offices. The largest reading room on the second floor is broken into a series of small spaces by the use of removable curtains suspended between columns. In all, 2,500 reader-spaces are provided.

The library is fully air-conditioned. Solar gain has been minimized by providing overhanging balconies on the upper floors, the use of grey tinted glass in all windows to the south and internal louvres on the east and west facades. Ventilation and lighting are combined in one fitting. The noise level is kept to the minimum by the use of acoustic ceiling tiles, by shielding the entrance from other areas and by closing off the lift lobbies from the two reading rooms by glazed partitions. Externally, balcony fronts are precast concrete with a veneer of rough-bed Portland stone. Balcony soffits and columns are shuttered concrete with a smooth finish. The podium is clad in riven York stone.

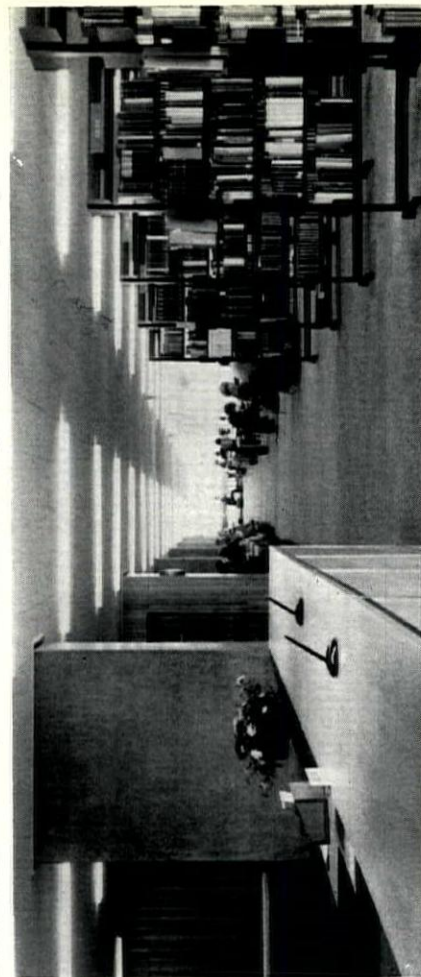
The entrance hall is clad and furnished in teak with a quartzite floor. All other areas are finished in white beech or plaster with carpeted or linoleum floors.

Typographical consultant, Andrew Chisholm. Quantity surveyors, James D. Gibson and Simpson; Structural engineers, Ove Arup and Partners. Mechanical and electrical engineers, Steensen, Varming, Mulcahy and Partners.

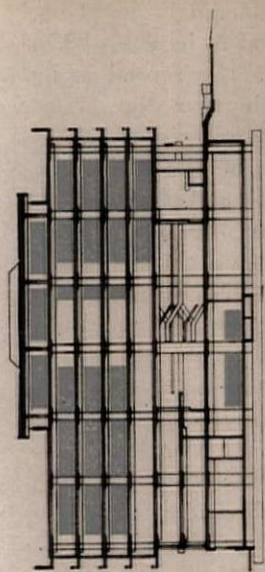
For contractors see page 480.

## LIBRARY, EDINBURGH UNIVERSITY

20, the entrance hall. 21, the Drummond Room on the ground floor. 22, the first floor reading room.

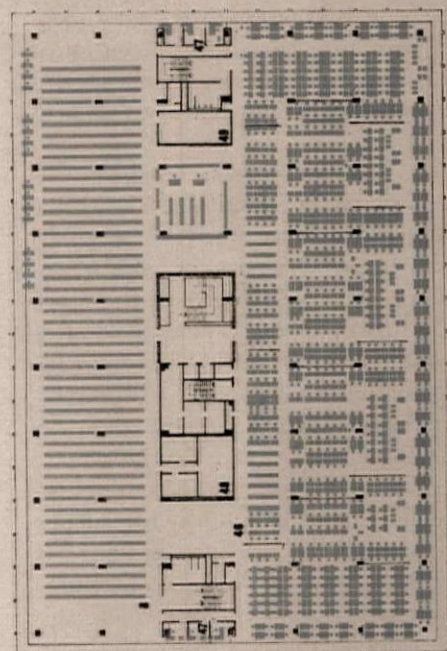




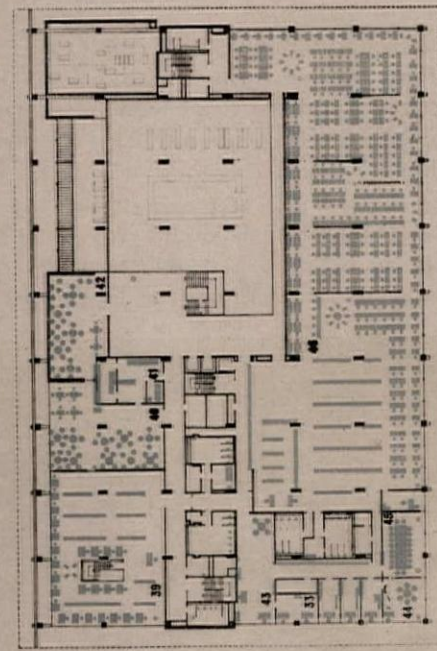


cross section (stacks elated)

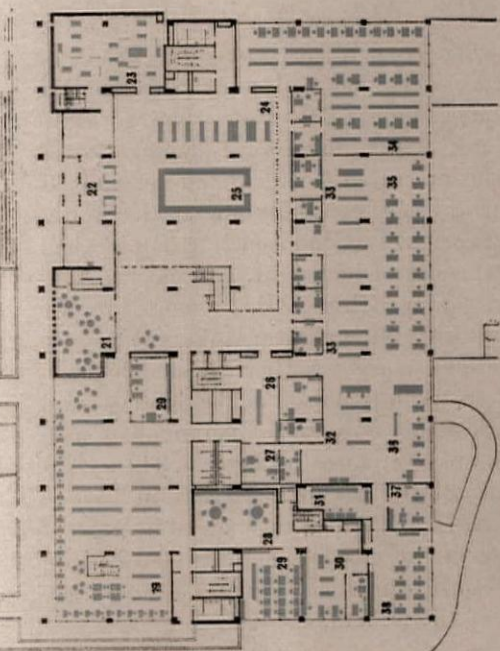
- key
- 1. strong room
  - 2. transformer
  - 3. refrigeration
  - 4. filter plant
  - 5. control room
  - 6. lockers
  - 7. store
  - 8. stack
  - 9. maintenance
  - 10. mail
  - 11. shipping room
  - 12. palaeography reading room
  - 13. bindery
  - 14. binding preparation
  - 15. goods entrance
  - 16. workshop
  - 17. library staff
  - 18. photography
  - 19. current periodicals
  - 20. serials office
  - 21. browsing
  - 22. foyer and control
  - 23. exhibition hall
  - 24. catalogues
  - 25. service desk
  - 26. trolley park
  - 27. class libraries
  - 28. Drummond Room
  - 29. rare book reading
  - 30. rare book workshop
  - 31. machines
  - 32. accessioning
  - 33. offices
  - 34. main reference
  - 35. cataloguing
  - 36. ordering
  - 37. accounts
  - 38. typing
  - 39. statistical reference
  - 40. staff common room
  - 41. kitchen
  - 42. coffee room
  - 43. administration
  - 44. librarian
  - 45. committee room
  - 46. reading room
  - 47. study room
  - 48. microtexts
  - 49. sound
  - 50. typing carrels
  - 51. carrels



second floor plan



first floor plan



ground floor plan, Edinburgh University library



lower ground floor plan

continued from page 434

ment of conception by committee where compromise not architecture must almost always win.

The David Hume Tower and the lecture blocks to the east of it comprised the first stage of the university's plan to house the Faculties of Arts and Social Sciences at the south-east corner of George Square. The Spence plan had envisaged a slab tower slim end on to the south side of the square. In fact, the Hume tower stands outside the square, forming a visual stop at the west-east axis of the south side. The organization is straightforward: entrance hall, none too lavish in space, on the ground floor and thereafter one or two departments, according to size, on each floor, with libraries all grouped together on the sixth and seventh floors. The libraries give a welcome modelling to an otherwise stark form—the set-back and lower cill height were necessary to allow them to be adequately lit. The lift gear and tanks are somewhat bluntly extruded. The tower's longest sides are clad in polished black slate—the polish now wearing thin—and York stone is used on the gables. The slate fixings proved unsatisfactory shortly after erection and now, from anywhere near the tower, the crude refixing is painfully obvious. A conscious attempt to make the tower appear dark and brooding against the dramatic Salisbury crags seems to have ordained the use of slate and sombre hardwood window frames. But three miscalculations have resulted in an incompatible aesthetic. Shiny slate, unshielded glazing and the use of horizontal rolling aluminium sashes combine to produce brilliance and starkness where the opposite seems to have been intended. On the short sides the aesthetic seems similarly muddled. The conjunction of York stone and slate has all the appearance of clipped-on rusticity—the gables ask to be completed. At podium level, the tower and indeed the whole Robert Matthew, Johnson-Marshall development, comes into its own looking into the square from the north-western corner of the lecture block. At this point it develops a personality of its own. Spaces interplay and the York stone windowless flank of the tower acts as a foil to the view beyond of the teaching block and lecture theatre similarly clad. The space enclosed is excitingly and invitingly extended in every direction. The space is dynamic. Upwards, the Hume tower is the force; downwards, the sunken courtyard; outwards the long finger of the teaching block. The Matthew, Johnson-Marshall development extends a series of small and private-feeling spaces into George Square beyond. The unity of the podium, clad throughout in exposed aggregate reinforced slabs, makes this progression inevitable and effortless. The whole south-east corner hangs together as a sophisticated exercise in spatial design. The connection between



the public podium and the private underworld is somewhat labyrinthine.

In 1954 the university decided to bring first-year science students into closer contact with others by including a Science Faculty building in the George Square comprehensive development plan. Until this was built, almost the entire Science Faculty was housed 1½ miles away at King's Buildings. The Spence plan proposed a built form, square on plan and low in height, but the restricted site area and the immediate need for seven large main teaching laboratories led inevitably to the Appleton Tower becoming a high building. It is of course a great delight to work in a tower with ravishing views over Edinburgh's skyline. Fundamental to the conception of the building was that it should be capable of eventual extension westwards (when the houses fronting on to George Square are demolished) and northwards.

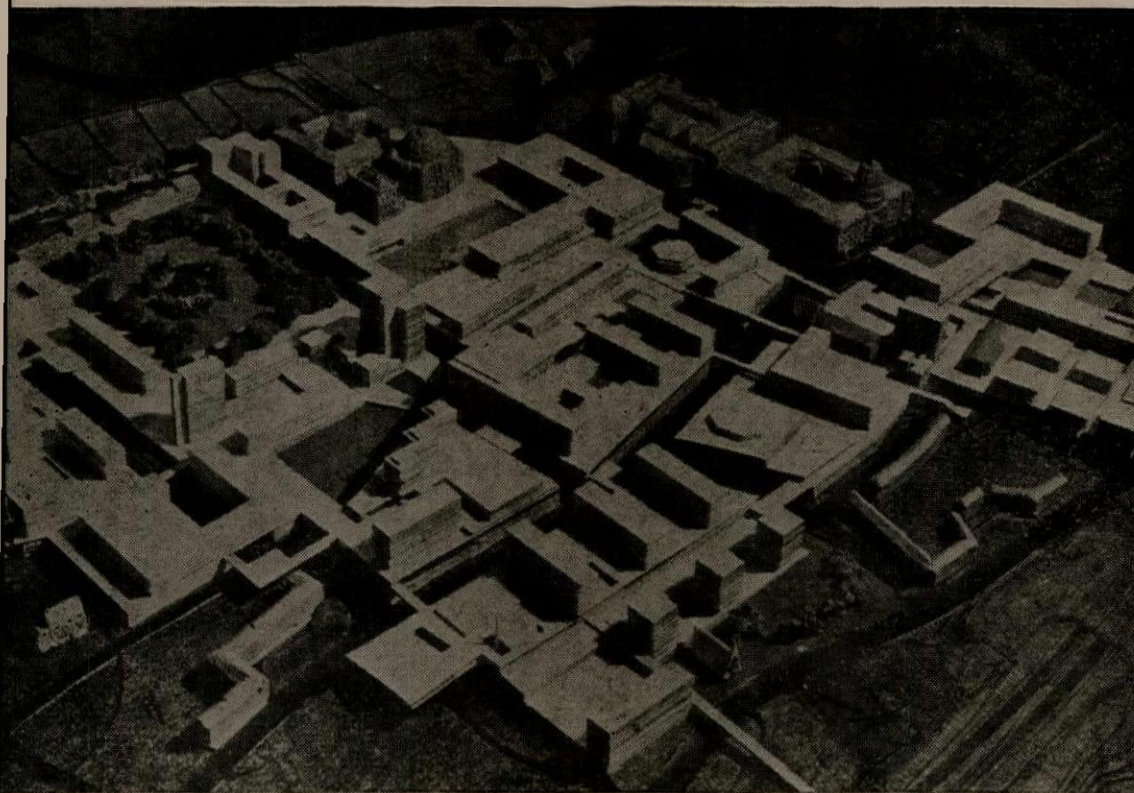
The Appleton Tower consists of a seven-storey laboratory tower; a four-storey lecture theatre block and a concourse. The two-storey galleried concourse is the hub of the entire building and makes the organization of the tower direct and inevitable. On its two levels, ground floor and mezzanine, the concourse connects all the main parts of the building, and with its double height volume is able to absorb the intensive use by over 2,000 students daily during term time.

and of standard metal windows may be unfair. The real regret is that the first class board marked concrete finish on all the exposed columns in the concourse, and externally on the first floor landing, should not have replaced the mosaic.

Spence's library, as Colin McWilliam wrote in the *Scotsman*, 'is a calm unity, patrician in scale, detail and materials as well as something of a revolution in library design.' It is undoubtedly the aristocrat of the square. From the Meadows, low down, it is a long low massive monolith just breaking over the trees. And from all the high vantage points its modesty at city scale is unsurpassed. Despite its bulk it sits serenely and silent, almost invisible upon Edinburgh's fragile skyline. As a building it is the inevitable logical outcome of a finely tuned partnership between client and architect, structure and function. The brief was clear and the site large enough for the building to emerge as it has done. The internal organization with a double volume entrance hall is clear and direct. The resolute restriction of the number of materials internally and externally is soothing for those inside and those outside. And roach-bed Portland stone sits more happily with smooth white concrete than with York stone. But the building errs in three different ways. The smallest error is at the point when the architects set out to make an external gesture which has no functional justification. In a gratuitous

to the square is maddeningly withheld. The building is too good to have tossed in such a slight gesture. The second is its resolute disregard of the four-storey limit laid down by the university's plan. But this is not the fault of the architects. Either the three-dimensional plan must be obeyed, in which case the library goes elsewhere, or the architectural unity must stem from a brief which matches built form with built form. George Square could undoubtedly have taken buildings of the scale of the library on all sides—or of the four-storey teaching blocks. But how can it have both if the situation was controlled? The third fault is its overpowering effect on the eighteenth-century west side of the square, which has suddenly become an empty historical hangover. Looking from the library along this side it is hard to imagine why Sir Basil Spence ever recommended its retention. For at its northern end the terrace is cowed by an architectural banality—the first Medical School rebuilding. Thus in two directions the west side is compromised, not to say overpowered in scale. Is its continued preservation warrantable—except as a monument to twentieth-century fragmentation?

In 1961, Percy Johnson-Marshall was appointed planning consultant. The Hume and Appleton towers were, if not *faits accomplis*, fixed elements in any reconsideration he was able to give at this stage to the destiny of George Square. And after a long line of consultants, it has been his unique contribution to conceive of university and town as one, to extend the university's thinking far beyond George Square and to persuade it to adopt a comprehensive plan for a large area in which academic and commercial life will be wedded. It has also been his plan which has extended and exploited the levels on which this marriage can take place. Already the south-east corner of George Square shows what this will mean. If this plan is seen through, George Square will be seen, as Colin McWilliam has forecast, 'more as a luxuriant green wedge pushed into the south-west of a vast complex.' Professor Johnson-Marshall's plan (AR July 1964) is plainly a much better one than Sir Basil Spence's 1954 model for a campus dotted with towers and George Square leaking its space inconsequentially out at the south-east corner. But Johnson-Marshall has had the benefit of hindsight. His time in London equipped him with enough examples of the difficulties of siting towers and slabs. The question is whether he—and his successors—can pull it off at the detailed level when such a large-scale plan involves such a chorus of architectural voices. The lack of unity in the use of materials in George Square, and the misunderstanding of scale in the groundscape just finished on the south side of the square, are only the tip of the iceberg.



23, planning consultant's model of the comprehensive development area, with George Square as the major space on the left and the commercial and residential area in the centre foreground. No high towers other than those already built are to be allowed.

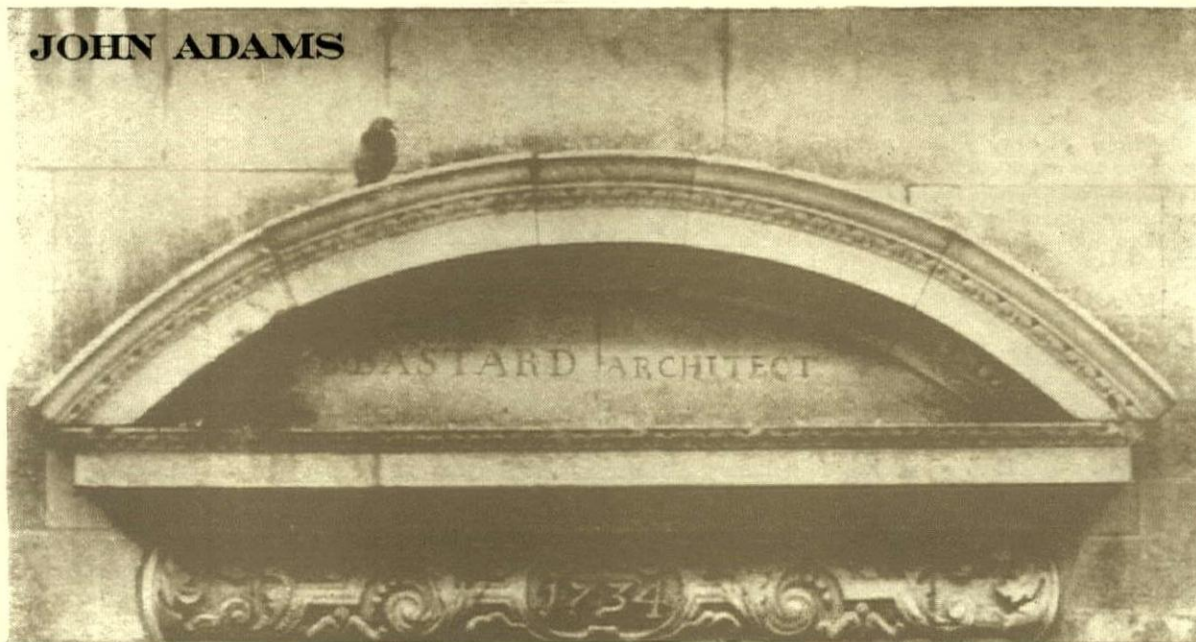
The lift and staircase tower, separately expressed externally, provides a sense of space at each floor, as much as anything by its large-scale glazing. Criticism of the use of grey vitreous mosaic—very much *a la mode* at the time the tower was built—

concession to civic design, a massive bressumer which houses strip lighting has been run across the face of the library on the north side. Internally the effect on the staff rooms at upper ground floor level is disastrous. The view from these rooms out



# THE BASTARDS OF BLANDFORD

JOHN ADAMS



1, inscribed central window pediment on the Town Hall in the Market Place, Blandford, Dorset, designed by John and William Bastard and built in 1734.

On July 14, 1731, a fire broke out in Blandford which destroyed most of the town. The Blandford of today is unique because it was rebuilt within the thirty years that followed and thus became the example of an entirely Georgian country town. Also, it was built by a group of men whose work was of such individuality that it has become known as that of the Blandford school.

The Blandford school owed its existence to a boom in the building of country houses. Some of the finest in Dorset are centred around Blandford, and a group of master builders had become firmly established there by 1731. Their experience, gained whilst acting as contractors under more eminent architects, was applied to the smaller houses on which they acted as both architect and builder themselves. It also influenced the work that they carried out at Blandford. Two of them were John and William Bastard who, because they both held office within the town's administration, were able to influence much of the legislation that was to affect both the shape and construction of the new town. In the same way they were able to steer most of the important work into their own office. However, it is largely due to their enlightened influence that Blandford is a significant example of Georgian consistency.

Blandford is also interesting because of the appearance of a rare Baroque variant of the Corinthian capital, which appears in several buildings in the area and on two facades in the town itself. By 1731 the Burlington fashion had become firmly established in architecture and most of the Blandford buildings reflect this. However, towards 1750 Blandford work shows a definite Baroque influence which, because it was a

reversion of the fashion, has led to much speculation concerning the original source of influence.

Until recently it had not been possible to prove who designed the two Blandford facades just mentioned, but owing to the reappearance of lost evidence we can now say that the Bastards built one of them, i.e. 26 Market Place, also known traditionally as the Bastards' House, and we can deduce that they built the other, the Red Lion, 15, 17, 19.

Both stand near the church on the south side of the Market Place, 14. In each case a service road to the rear is spanned by an arch in the centre of the building. These 'gateways' are flanked by Corinthian pilasters topped by broken pediments, but, whereas the volutes of the Corinthian capital normally turn outwards, in this case they turn inwards, 10, 11. Although they are often called 'Bastard capitals' they have been connected with each of the other architects who worked in Blandford at the time.

In addition to the Bastards, two architects closely connected with Blandford were Nathaniel Ireson and Francis Cartwright. Also, Thomas Archer and Sir James Thornhill, the painter, were involved indirectly. Archer, it has been suggested, introduced the Bastard capitals to England: for he had visited Italy and probably saw Borromini's similar capitals in St. John Lateran in Rome or elsewhere, 4. He probably also saw an even more unusual type of capital used by Carlo Maderno in S. Susanna. He used the former at Harcourt House (which used to stand in Cavendish Square, London), and both types appear at Marlow Place in Buckinghamshire (1720-1730), 5 and 6, which are attributed to him. Archer was the only major architect who con-

tinued to design Baroque buildings in the Burlington era, probably because he did not need to make his living by his practice, as he held the Court posts of Groom Porter and 'Comptroller of the Customs' at Newcastle. He was thus able to develop the Baroque movement further than any other English architect.

One of the most beautiful houses near Blandford, Chettle, 2, has been attributed to him by Professor Webb, because exactly the same Maderno-type capitals that appear at Marlow Place recur there, 7. It has one of the most Baroque plans in England, and was built for George Chafin around 1730. It shows the usual distinctive marks of the Blandford craftsmen with whom Archer must therefore have come into contact. Most of Archer's important work was carried out either in London or the Midlands. It is probably no coincidence that the only other occurrence of Bastard capitals is in buildings associated with another family firm, the Smiths of Warwick, who are also thought to have worked with Archer. Archer retired to Hale in Hampshire, which is not far from Blandford, and he is likely to have been sufficiently interested to have visited the town after the fire.

Sir James Thornhill was MP for Dorchester and lived between Blandford and Sherborne. According to Walpole, he 'dabbled in architecture.' In 1733 he made a sketch<sup>1</sup> for the new Town Hall at Blandford which shows similarity to the one built by the Bastards. Nathaniel Ireson was born at Nuneaton in Warwickshire in 1686. He remained in that county until at least 1711; therefore he probably received his early training in Archer territory. But by 1720 he had settled at Stourton in Wiltshire and worked on Colen Camp-

bell's Stourhead until 1722. In 1726 he moved to Wincanton, where he ultimately died in April 1769. Sweetman<sup>2</sup> notes that he worked at Blandford about 1741. He took over the construction of Crowcombe Court in Somerset, 3, from Thomas Parker in 1734, and there once again the 'Bastard capitals' make their appearance, 8. Although there is no way of knowing whether Parker or Ireson was responsible, Ireson sketched similar capitals on to an unexecuted design for Corsham Court in 1747.

Francis Cartwright (1695-1758) was probably a native of Blandford, and was a master builder. He is buried in Blandford St. Mary where he built a house not long before his death. The elevation of a house, incised on his memorial, has been identified by Mr. Oswald as that of Came House (1754) near Dorchester, and this was consequently attributed to him. Bastard capitals recur here too, on the south elevation, 13. Apart from some alterations made to Creech Grange (1738-1741) little is known of his work.

John and William Bastard came from a Blandford family and inherited a well established business from their father, Thomas. They later erected a monument in the new church to their mother's parents, Thomas and Jane Creech. On it they described their father as 'eminent for his skill in Architecture,' and they also describe themselves as '... educated in the same Art.' They add that they 'rebuilt this Church, The Town Hall and several other Publick and Private Edifices.'

When the old man died in 1720, he left all his Blandford property to his wife and six sons. The eldest, also called Thomas (1686-1731), inherited a house in Salisbury Street, 'near the George Inn upper back gate.' John (1688-1770) and William (1689-1766) were left a house adjoining 'The George' and Samuel, Benjamin (c. 1698-1772) and Joseph (d. 1783) other houses. Only three of the sons remained at Blandford. Joseph moved to Sherborne St. John near Basingstoke, Samuel became a 'ship-modeller' at Gosport, and Benjamin an architect in Sherborne. (He designed Sherborne House). Thomas, the eldest, died shortly after the fire, leaving John and William in control of the most substantial building business in town.

The evidence to suggest that John and William built the Red Lion and the 'Bastards' House' is to be found in a note-book which was given to the County Record Office about five years ago. It is a record, probably in John Bastard's handwriting, of damage done by the Blandford fire of 1731, together with other fires elsewhere. It also provides conclusive proof that they built the Greyhound Inn in Blandford (hitherto only attributed to them) and helps us to form an impression of a small country practice at the time. More than ever before, the story of the rebuilding of Blandford is entwined with the story of John and William Bastard.

An account of the fire is included



on a survey map, 20,<sup>2</sup> drawn up afterwards by the Bastard brothers:

'This Dreadfull Fire broke out about 2 in the afternoon at Letter A. a thatch'd house being a Tallow Chandlers at which time the wind blew strong at N.West which carried the Flame over towards the East end of the Church, and set fire to all the buildings in that Tract, so that not less than 20 houses were on fire within  $\frac{1}{4}$  of an hour. The Wind soon shifted from N.West to North, which hurried the Flames aloft that at once fired the other Parts of the Town with ye adjacent Villages of Briantstone and Bland-

ford was at least the fourth Blandford fire. Estimates as to the total damage ranged between £84,348 and £100,000.<sup>4</sup> A disaster fund raised £16,152 16s. 2d. 'Collection Money' and the Royal Family gave £1,300 which:

'bought land to widen the streets at many places, land to build ye Town Hous upon, sum to ye School House and some to ye Church, et. . .'<sup>5</sup>

A 'Court of Record' was set up, whose job it was to distribute the Collection Money. They also recorded the extent of the damage and settled disputes concerning boundaries and differences between landlord and tenant. They were



2, Chettle, Dorset, attributed to Thomas Archer. 3, Crowcombe Court, Somerset, by Parker and Ireson.

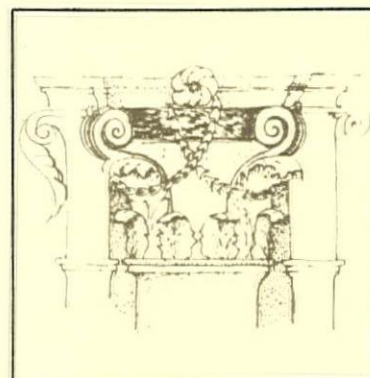


ford St. Mary, so that all before the Wind in the space of an hour was on Fire, and the Thatch'd buildings soon consumed. The stronger parts of the Town remained till towards Night, but all the intermediate spaces between the Houses Streets &c were so hot that about 16 persons lost their lives in the Flames. The Church by the care of some of the Inhabitants was preserved till about 11 at night tho' the Spire which was covered with Lead took fire within side about 4 in the afternoon which was soon extinguished, but the fire flying over and thro' it at every crevice, some sparks whereof lay Latent till abt. 2 in the morning, then broke out in the middle Isle under the lead, where 'twas impossible to extinguish it without the Engines which were already burnt many hours before, & the Inhabitants so tired with Fatigues that before morning ye Church was entirely destroy'd ye poor remains being scarcely fit for a Foundation.'

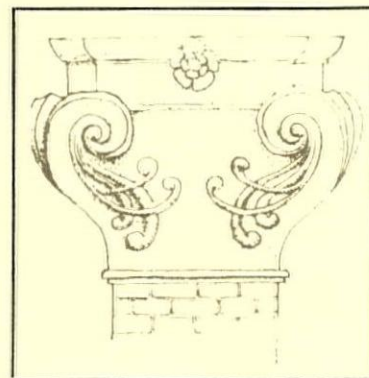
The only substantial part to escape destruction was the portion in East Street, which had been rebuilt in brick and tile following a fire in 1713. All early records were destroyed in the Town Hall in 1731, but we know that this

empowered by an Act of Parliament to ensure that the town was rebuilt safely with the result that legislation followed to prevent the use of thatch. No tradesman whose work required the use of fire was allowed to practise within the Market Place. Market Place land-owners who failed to get rebuilding under way within four years of March 25, 1732, lost their share of the Collection Money as well as their land, for which they received 'suitable compensation.' A form of compulsory purchase gave the Court power to widen streets, but they were hindered here by lack of money. However, the Royal Family's contribution at least enabled them to enlarge the Market Place. The unwritten purpose behind all this legislation was the need to re-establish the market before trade could move elsewhere. The Court's sessions were recorded in the Commissioners' Book. Among those who served on it were Sir James Thornhill, George Chafin of Chettle, George Dodington of Eastbury<sup>7</sup> and, as bailiff, both John and William Bastard in turn. A 'List of Sufferers' gives the losses of the Bastards' firm at £3,709 10s. 4d., the largest entry. A fuller record of their losses is given in John Bastard's newly

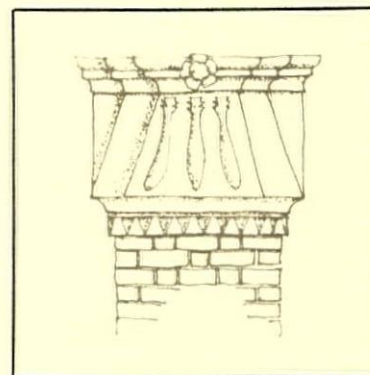
## DEVELOPMENT OF THE BASTARD CAPITALS



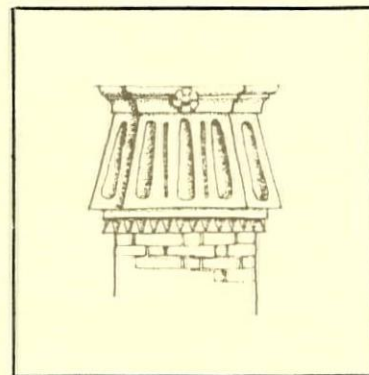
4, St. John Lateran, Rome (Borromini).



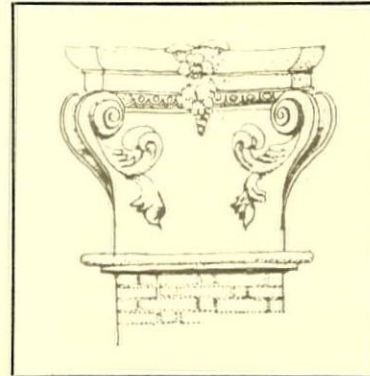
5, Marlow Court (Archer, c. 1720).



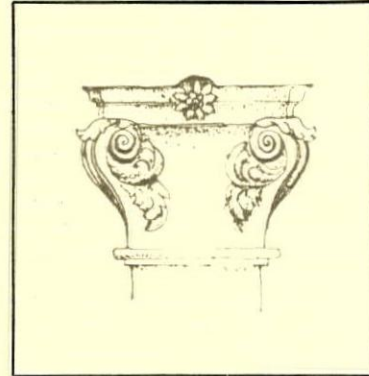
6, Marlow Court (Archer, c. 1720).



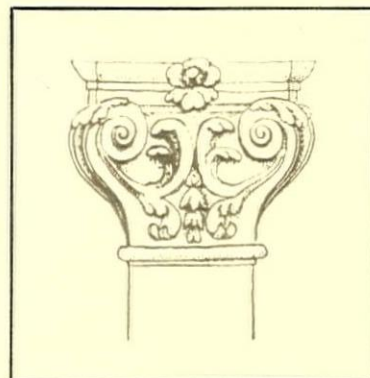
7, Chettle (attributed to Archer, c. 1730)



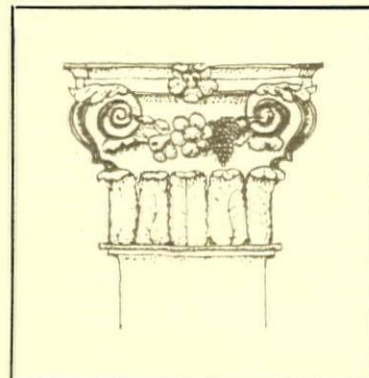
8, Crowcombe Court (Parker and Ireson, 1725-35).



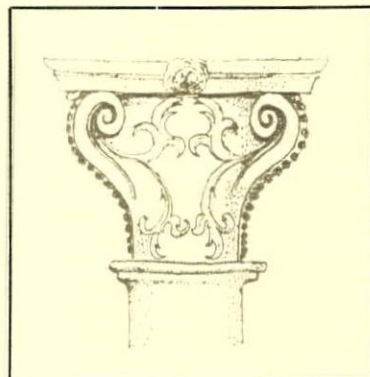
9, Spettisbury House (Blandford school, c. 1730).



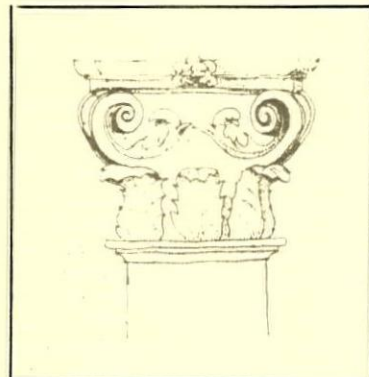
10, the Red Lion, Blandford (Bastard brothers, 1750-1760).



11, 26 Market Place — 'The Bastards' House' (Bastard brothers, finished 1766?).



12, Ranston House (Blandford school, c. 1754).



13, Came House (Cartwright, 1754).





## THE BASTARDS OF BLANDFORD

14, the south side of the Market Place, with the Town Hall, shown in 16, just before the church. 15, the north side of the Market Place with the Red Lion in the foreground and the Bastards' House beyond. Both are now known to have been designed by the Bastard brothers. 17, detail of the pediment and capitals of the Bastards' House.







18

## THE BASTARDS OF BLANDFORD

18, the Greyhound Inn in the Market Place,  
now also known to be by the Bastard brothers.  
19, detail of the pediment of the Red Lion.

19







20, the survey map of Blandford drawn up by the Bastard brothers after the fire of 1731.

found note-book. Its complete contents are described on the fly-leaf:

'This book contains the Dimensions and valew of Buildings lost and destroyed by Fire, & surveyed by John Bastard & C. and Mr. Thos. Gardener, a Surveyor of the Sun Fire Office sent down on purpose and Benjamin Byles. at Sturminster Newton Castle 1730 at Blandford June ye 4th 1731 at Arth Puddle Aug 10 1741 At Beaminster Oct 14th 1741 At Pudell Town March 1753 the pump by y churchyard in Blandford 1760 at Wareham July 25 1762 —Account of work done & value at Lulworth Castle.

The firm lost 'buildings tools Shop benches & other essentials' to the tune of £3,434. John and William lost £1,220 at the Greyhound Inn, and two houses in Salisbury Street worth £200. They had insured

'there stock in Trade, there household goods, etc.' with the Sun Fire Office up to the value of £1,000.

There follows an evaluation of the goods lost in their own house ('The house we lived in on Williams Charoty Land. . .') It includes several plates 'for coffin work,' and

'3 doz funeral sconces, best tin works=233:1:0  
8 large funeral candlesticks mock silver=438:19:0.'

Other losses include two tenements adjoining the Greyhound, ('Twas just new fronted and fitted up . . .') and two tenements in Salisbury St. (perhaps the two mentioned in the Commissioner's book, lived in by John Bastard and Elisabeth Fussell, whose husband Thomas Mascall could not afford to rebuild after the fire). A receipt for the payment of a year's rent, dated November 12, 1735, shows that the tenements were quickly rebuilt. The firm also lost saw-pits and other buildings 'erected in the Parsonage yard this was never built again,' a new house owned by Thomas in Salisbury Street, and another set back on the west side of Salisbury Street belonging to William that 'formerly was his Grandfather Creeches.'

Although it was known that they were proprietors at the Greyhound Inn after the fire, we can now be sure that they built it. For another note reads, 'Wee could have sold the land at ye Greyhound before wee began to build for 350 or 400 l. which we had better dun.'

And again later: 'Greyhound Inn & all the long back building that cellard and are Rt. under and ½ the front 1734 cost £787 Building ye other ½ ye front the two tenements all ye stables and Granary and Drake Teniment and let for £10 opend in Jan £436.7s.' It is one of the most imposing buildings in Blandford, 18, although the off-centre entrance and squashed proportions of the second floor windows are inconsistent with the meticulous detail of previously known work.

Their two most important undisputed Blandford Commissions were the Church (seen in 15) and the Town Hall, 16. Both required urgent rebuilding. That they built the church is proved by the Creech memorial and by a drawing of the building (now in the Bodleian Library) by one of the Bastards.

This shows both the tower that they designed and the one that we see today. A cartouche in the corner reads:

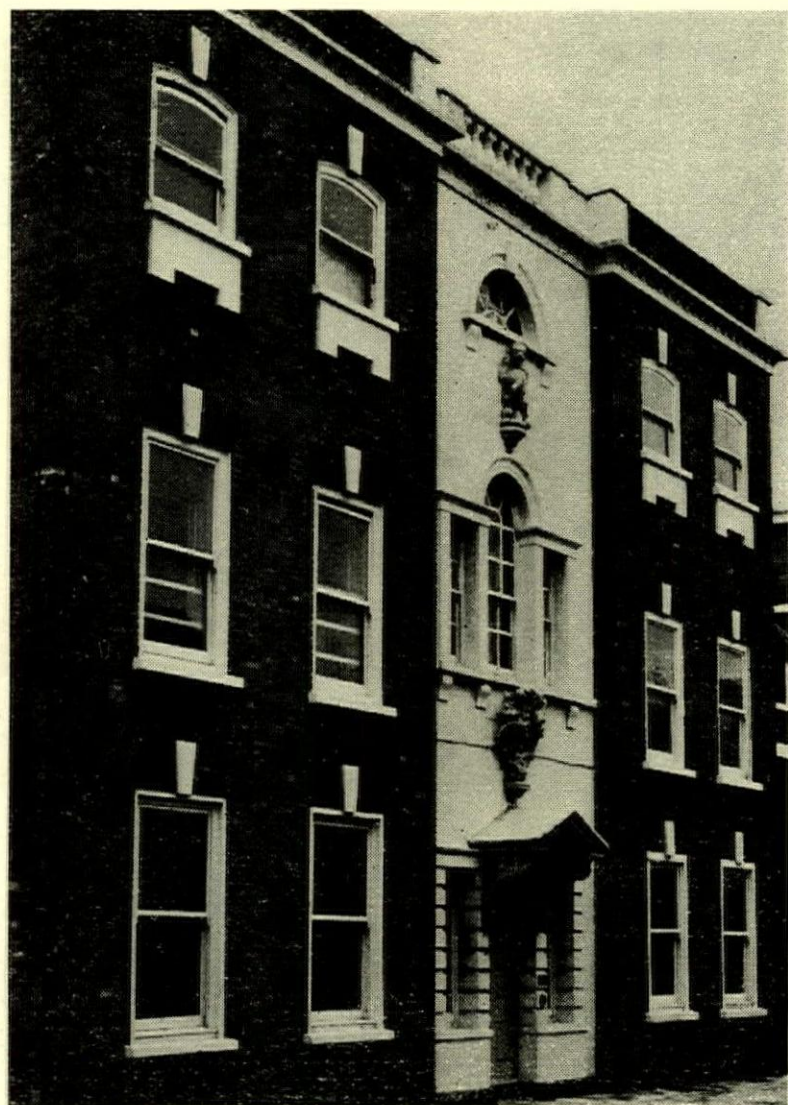
'This church was designed and built by JN° and Wm Bastard Architects & Buylders natives of the Sd towne & was carried on and finished by them inside and out except the tower and turret. The money being expended the buylding was stopt for some years —after which it fell into other hands who Rejected the spier & in steed there of erected the short lived wooden top or turret marked A which will not keep the Wett nor wethar out.'

The 'Short-lived turret' finally succumbed to a flash of lightning in 1964. This 'elegant modern fabric' was opened in 1739. Built in a greenish Chilmark stone dressed with white Portland stone, it is one of the finest Georgian churches in England. Except for the tower and the west front it is an entirely Palladian concept and shows no precedent for the sudden introduction of Baroque features such as the broken pediment, which are not to be seen on either



the model or the drawing. The turret is thought to have been completed by either Ireson or Cartwright. (The latter was paid £20 14s. 4d. for unspecified work by the church wardens between 1742-43). Hutchins says: 'The original plan included a spire

demand for the settlement of the account, dated July 6, 1752, established the connection.<sup>9</sup> The facade is of fair-faced brickwork and the porch is reminiscent of many in Blandford. The house has more in common with the 'Red Lion' and 'The Bastards' House' than any of the buildings so far



21, Sir Peter Thompson's house at Poole, designed by the Bastards and now an art school.

which was begun and finished 1749, 21' high: which rejected for an arch or cupola 8' high and on it a weather cock 9' 9" high made at the expense of £500.'

I think that Ireson was working on another building in Blandford and may have thus been able to bring Baroque influence to bear upon the Bastards who would have still been working on the west front. It is unlikely that Sweetman, when dating Ireson's visit to Blandford, wrote 1741 by mistake instead of 1749. Inside the church is the Bailiff's chair, a tremendous piece of woodwork. This and the font are fine examples of Bastard craftsmanship. Near the west door of the church is the little pump or 'conduit,' erected by John Bastard in 1760 to commemorate the fire. The Town Hall, built in 1734, is a straightforward Palladian composition, and is inscribed 'BASTARD ARCHITECT' within the central window pediment, 1.

The only other building hitherto known to have definitely been built by the Bastards was at Poole, not Blandford. Now an art school, 21, it was originally commissioned by Sir Peter Thompson. A blunt

mentioned. We now have evidence of the Bastards' authorship of these two houses. It comes from John Bastard's note-book<sup>10</sup> and concerns the earlier quotation in which is mentioned the house 'we lived in on Williams Charoty Land' together with other entries that follow it. For it is described as the house in which

'Thomas, John & William Bastard lost . . . all there stock in Trade, Household goods and waring apparell in the house they lived in which was y house belonging to Mr. Williamses Charotty on y sout side y street opposet the church . . .'

and further on:

'Mentnd before ye ylier we had but one of ye houses on Williamses Charoty Land and was that on ye East Side of ye Gate n have wee livd wee had a Lase out for 21 years paying 13-6-8 a year and we to Repaiar and deliver in Repaiar at the end of ye term, on this Case oblig'd us to build to Incurag us to Build the Oather two houses they gave us in Lase for 90 years from y 25th March 1732.

paying them y old rents that is 13-6-8 for that on y east side y

gate and that on ye west side of ye gate 10 l. per ann. in all 23.6.8 ann. and they gave us 300 l. in money towards ye building this was all agreed on and the money pd.'

Later on again:

'Under is an Account what all Cost the Rebuilding as it now is. 1766-finished-Building on Williamses Charoty Land this is ye house wee live in with all ye back building & Work Shops. . . . This on y East side of ye gateway. . . . The tenements on the west side of the gateway were let to a Mr. Price, an Apothecary, and to a Mr. Morgan, a Brasier, for £14 and £12 respectively. As I understand the text the following facts emerge.

Firstly, there were two houses separated by a gateway on the south side of the Market Place opposite the church. Both were owned by Williams' Charity. Secondly, the Bastards had lived on the east side of the gate, prior to the fire, on a twenty-one year lease. They were encouraged to rebuild this house after the fire in return for a renewal of lease (ninety years) at the original rent. Thirdly, they were also encouraged to rebuild the western side of the gate in return for the lease on that half at £10 a year. This was divided into two houses, or tenements. The 'Oather two houses' may refer either to the two tenements in the western half, or possibly to the Red Lion.

The only Blandford buildings constructed on the south side of the market, with gateways through the middle, are these two; therefore, it seems reasonable to conclude that the Bastards built the 'Bastards' House.' Comparison with the 'Red Lion' suggests that they built that too. No other Blandford buildings can be certainly attributed to them. The strong resemblance between Eagle House and the 'Bastards' House' makes it an obvious suspect. It may have replaced the house left to William by his father that

'stood back on the West side of Solsbury Streete formerly was his Grandfather Creeches.'<sup>10</sup>

A house opposite Coupar House, called Lime Tree House, may have replaced the house inherited by the eldest brother Thomas 'near the George Inn upper back Gate.'

assuming that the siting of the George Inn remained the same.

Eastway House, which is one of the most beautiful Blandford buildings, may be a pre-fire house which was altered later. This is suggested by the way in which the door is unsympathetically wedged between the adjacent windows.

The curved gable does not appear anywhere else at Blandford either. Coupar House has often been attributed to the Bastards, but I think that this may be what Ireson was building at Blandford in 1741. Perhaps he only designed it, but in any case it shows distinct resemblances to Crowcombe Court. The central features on the fronts of each are closely related: the door is flanked by pilasters which stop at a cornice above the first floor windows, this window is

flanked by consoles, above it the arched second-floor window penetrates a broken pediment. Inside, the fire-places at Coupar House borrow much from one at Crowcombe Court, and the carving on the outer string of the staircase is also similar.

The relationship between Ireson and the Bastards is likely to have been one of friendly rivalry. If the latter did build Coupar House, then they may have seen Ireson's designs for Crowcombe. If they did not learn about 'Bastard Capitals' in this way, then it must have been through Archer, as the contractors at Chettle would have known Archer well enough to discuss their own work with him. This might explain the appearance of the typical Archer plan in Blandford church with the north-south axis predominating. (Fashionable architects such as Gibbs emphasized the east-west axis.) However, if the Bastards did seek advice on more important work, the rather scrambled interpretation of their various influences would be understandable on lesser work.

'Bastard' capitals also appeared on Spettisbury House (1735), 9, now demolished, and in a more ornate form inside Ranston House (1754), 12. Both houses being near Blandford, they have been attributed to the Bastards. However, there is no evidence to prove that they built either these houses or others which show unmistakable signs of Blandford craftsmanship, such as the scrolling of handrails like a clenched fist at the end of the balustrades. Among the most important other buildings associated with the Blandford school are Merly House, Whatcombe House, Stepleton, Smedmore and Crichel.

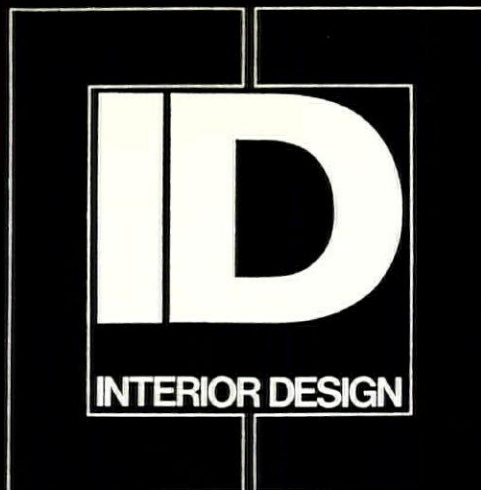
William Bastard died rich in 1766, John in 1770. The latter not only left the Conduit to the town, but also made provision for the education of thirty-five boys and girls. By this time, the rebuilding work must have been virtually complete. Since both William and John remained unmarried the firm was taken over by their two nephews.

Thomas 'the Elder' (1720-71) was Samuel's son, and Thomas 'the Younger' (1724-91) was the son of the Thomas who died in 1731. There is no known work of significance by either, but since Thomas 'the Younger' married well and inherited a small fortune from his uncles, he retired to an estate at Charlton Marshall. Thus the deaths of John and William brought an end to the most significant stage in Blandford's reconstruction.

#### REFERENCES

- <sup>1</sup> Now in the Soane Museum.
- <sup>2</sup> Sweetman: *Historian of Wincanton, Somerset*.
- <sup>3</sup> Survey Map; also in CRO, Dorchester.
- <sup>4</sup> Hutchins: *The History and Antiquities of the County of Dorset*.
- <sup>5</sup> M.S. in the Shipp Collection, Dorchester Museum.
- <sup>6</sup> In the possession of the Town Clerk, Blandford.
- <sup>7</sup> Eastbury—Vanbrugh's third largest work, about four miles north of Blandford, begun c. 1718. Only a fragment now remains.
- <sup>8</sup> List of Sufferers: in possession of the Town Clerk, Blandford.
- <sup>9</sup> In possession of Mr. A. F. V. Johnstone, Poole (1954).
- <sup>10</sup> John Bastard's Fire Survey: CRO, Dorchester.





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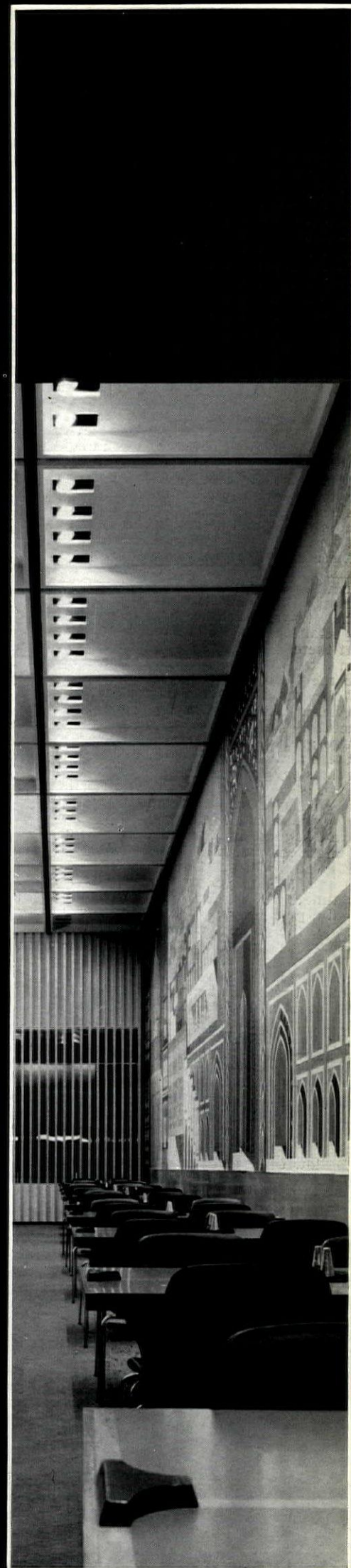
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### Britannic House, Moor Lane London Special interior areas

**Architects: Design Research Unit**  
**Partners in charge: Misha Black**  
**and Alexander Gibson**

The new headquarters of the British Petroleum Company is a 35-storey block, at present the tallest in the City and part of the Barbican redevelopment. Design Research Unit co-operated with the architects of the building, Joseph, F. Milton Cashmore and Partners, from an early stage. At the interior designers' suggestion a panel met monthly for three years to discuss all design problems, and to act both as a link between clients, architects and interior designers and as an arbiter for design proposals. In addition, a small committee was formed to choose and commission works of art. The intention was to accumulate a collection of contemporary British art and to include a few older pictures, as well as gifts from BP companies abroad. Of the special areas for which the interior designers were responsible, three are illustrated. On the ground floor they also designed the entrance hall in collaboration with the architects, and gave advice on the fountains and flower boxes in the piazza.

*1, the restaurant, showing the floodlighting for the mural and the glazed aluminium screen in the background which divides the restaurant from the foyer.*





# **Britannic House, London : Restaurant and dining room area**

**Section designer: Ronald Riggs**

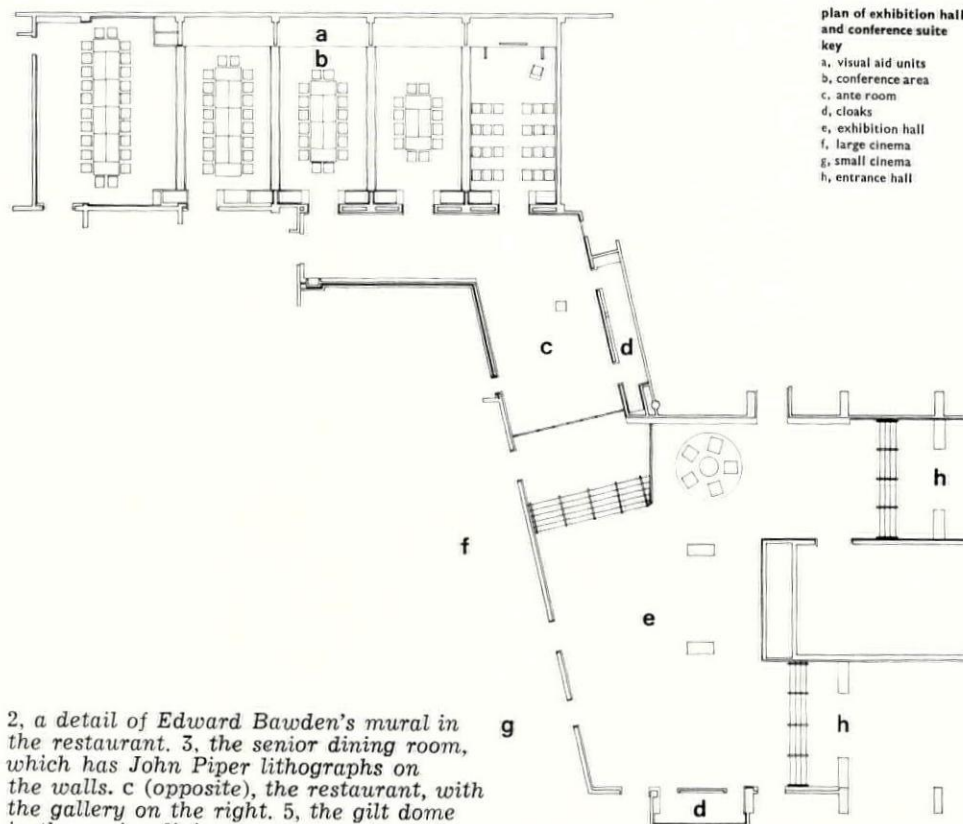
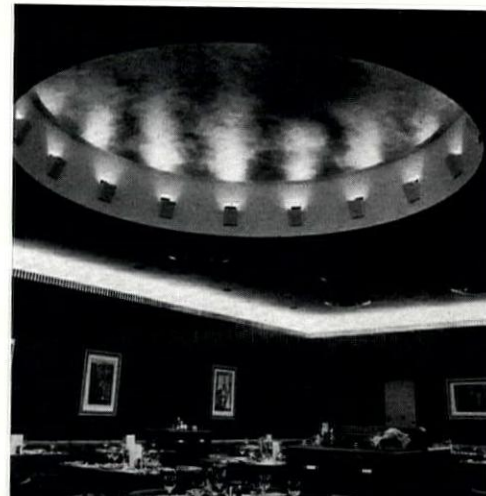
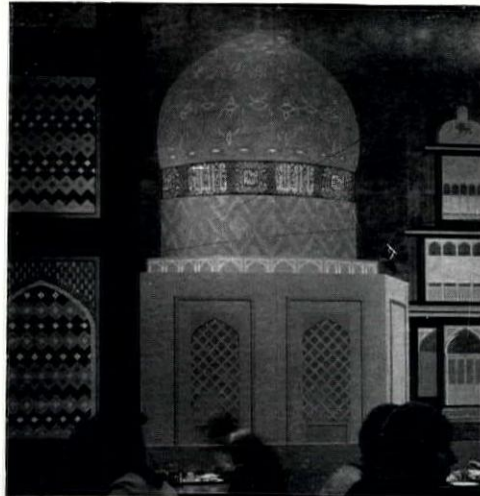
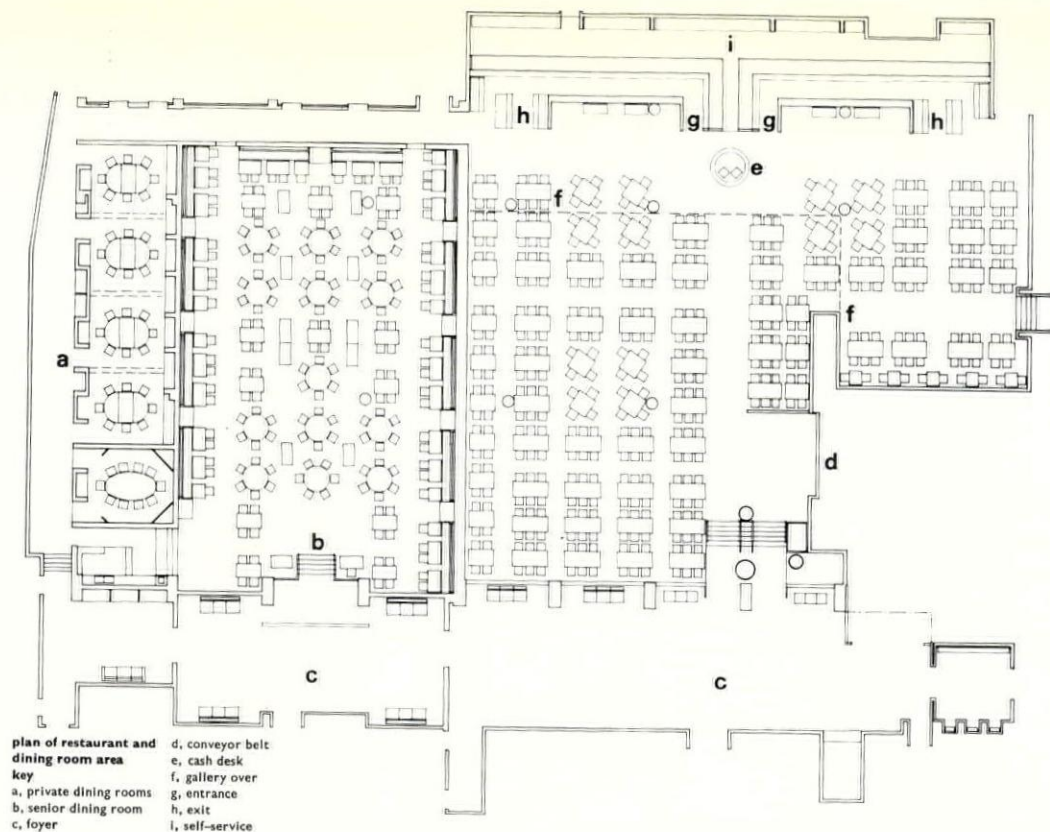
This area, which is on the lower ground floor, is reached by escalators from the ground floor. It consists of a restaurant, a senior dining room and five private dining rooms, four of which can be made into one long room for large parties by means of folding partitions. The restaurant and senior dining room are each preceded by a foyer which is at a higher level and divided from the dining area by glazed aluminium screens. The restaurant is on two levels, the double-height lower floor and the gallery, seating 404 and 150 people respectively. But spatial relationships between the two remain unexploited, and the two areas are indeed used for different purposes, the lower floor serving lunches and the gallery providing coffee and evening snacks. Only Edward Bawden's mural of Islamic motifs brings the two spaces together by an interesting combination of scales—as a complete mural for the main space, and as detail when seen cut off from the gallery.

There is self-service at both levels (channelled in two directions past a central cash desk and menu board on the lower floor), and staff eat directly from their trays, which are held in position by special location units fixed to the tables. At the end of the meal trays are placed on a conveyor belt which delivers them to the wash-up area.

Wall finishes are vertical teak strip or p.v.c. and the colours are predominantly neutral—dark grey or green for the walls, sage green plastic laminate for half the tables and dark grey-green p.v.c. upholstery for the chairs. This is just what is needed to allow the mural its full say, with its bright greens, blues and browns. Afraid of being dull, however, the designers introduced colour in a limited manner but with detrimental effect: a sweet pink and grey in the carpet, a dirty yellow in the plastic laminate for the other half of the tables, and a pale yellow p.v.c. for the wall finish under the gallery, which is already showing signs of wear.

The ceiling consists of square white fibrous plaster panels forming a strong pattern, which is right for the scale of the room and with which the diffusers and suspended light fittings are well integrated. The lighting on the lower floor is more successful than on the gallery. The reflected ceiling light avoids glare, and the flood-lighting of the mural and teak wall opposite picks out areas of interest. With a high ceiling there is no discomfort for people sitting under lighting of excessive brightness, but with the low ceiling of the gallery the strong perimeter lighting is too close, and also shows up every imperfection in the p.v.c. wall panels.

The senior dining room, seating 236 people and providing waitress service, has none of the airiness of the restaurant, but gains in its cosiness and club-like atmosphere. The ceiling is uniformly low and busy with diffusers and recessed lights. For relief, the designer cut a dome 14ft. in diameter and flamboyantly covered it in gold leaf. But its simple geometry is impaired by the protruding teeth which conceal light fittings, and its arbitrary position, unrelated to the furniture arrangement but intended to balance the asymmetrical columns, is disturbing. The colour scheme is rich and dark—American walnut for the ribbed wall panelling and tables (no table cloths are used), dark green hide for the columns, orange p.v.c. for the seating and sienna for the carpet. The designer acknowledges that the intensity of the cornice lighting is unnecessarily bright.



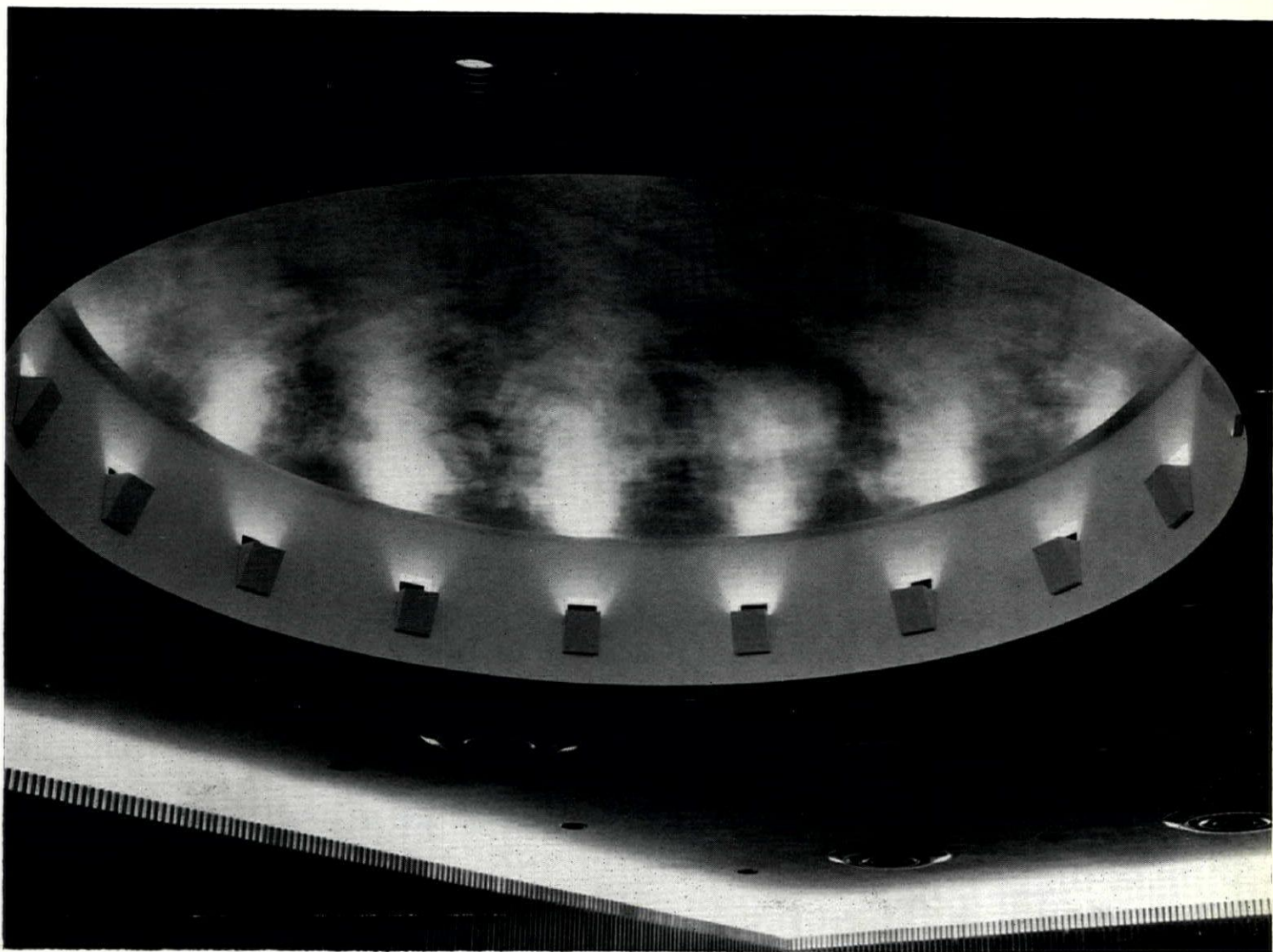
2, a detail of Edward Bawden's mural in the restaurant. 3, the senior dining room, which has John Piper lithographs on the walls. c (opposite), the restaurant, with the gallery on the right. 5, the gilt dome in the senior dining room.



4



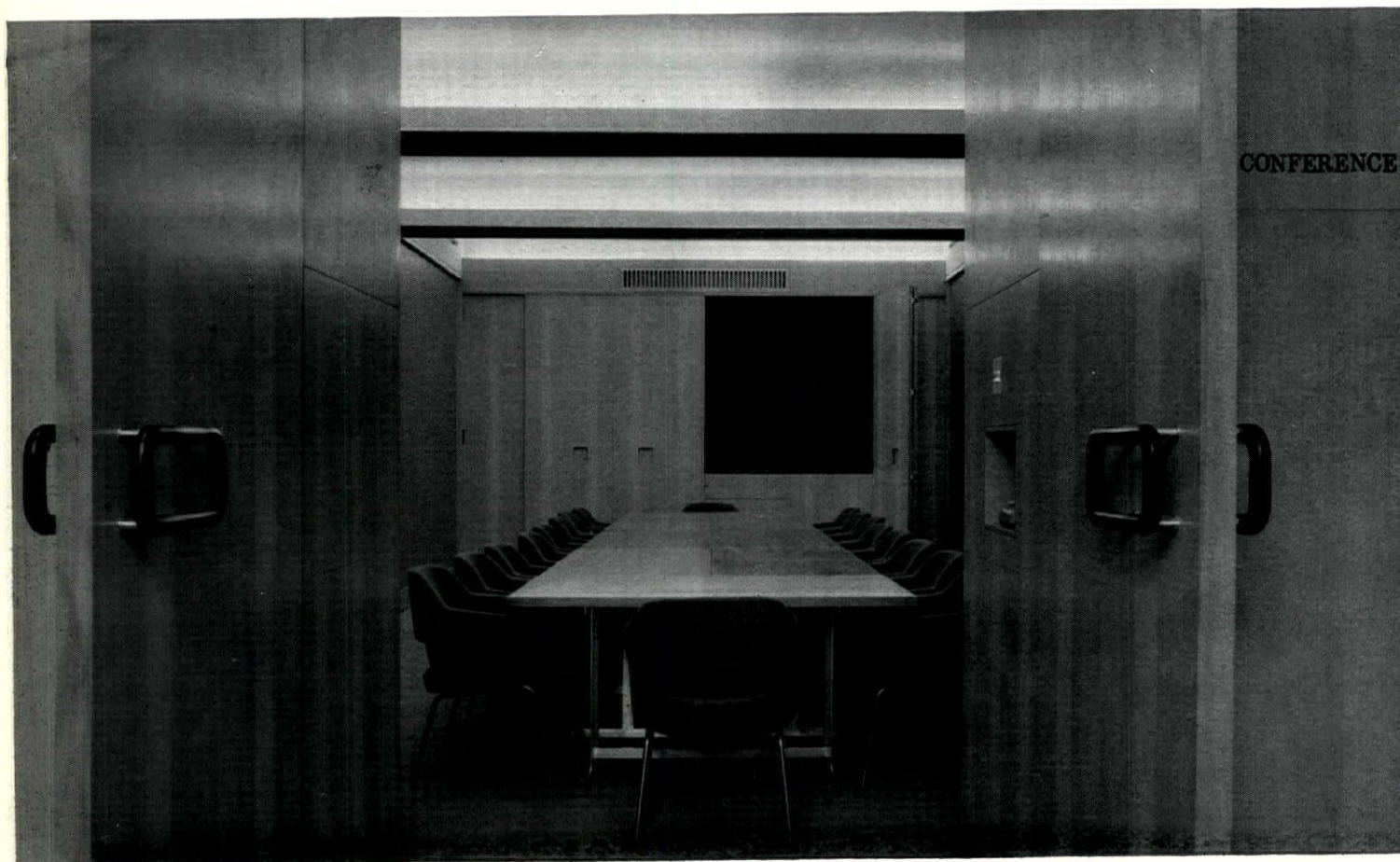
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## Britannic House, London : Exhibition hall and conference suite

Section designer : Patrick Reardon

At one end of the entrance hall two sets of doors and steps lead down to a space of irregular shape which is the exhibition hall. Some continuity between the two areas is established by using the same floor finish (Bluehill granite), and the same rug and chairs. A dark brown ceiling throws the emphasis on the light walls, panelled in cedar of Lebanon or, in the case of the two piers, sheathed in Arabescato marble. The panelling has vertical tracks for brackets to carry display panels, shelves or pictures, and the ceiling has a recessed track which provides an equally flexible lighting arrangement. Dark brown leather covered doors lead to the two cinemas, and more steps with simple stainless steel handrails lead down to the conference area.

The ante-room has a well thought-out cloakroom with horizontal heating fins underneath the coat hooks and a copious umbrella stand. The admirable simplicity of the exhibition hall is carried through to this area and to the conference rooms by using the same wall panelling, but with a white ceiling and a carpeted floor. The conference rooms are flexible and well equipped. Double partitions between each room can be folded away, and sectional teak tables can be grouped for any number of people.

6, the exhibition hall with stairs leading down to the conference suite. 7, one of the conference rooms. The chairs are upholstered in blue and the carpet is sienna. 8, the reception area on the 32nd floor. The ceiling is white and the carpet sienna.

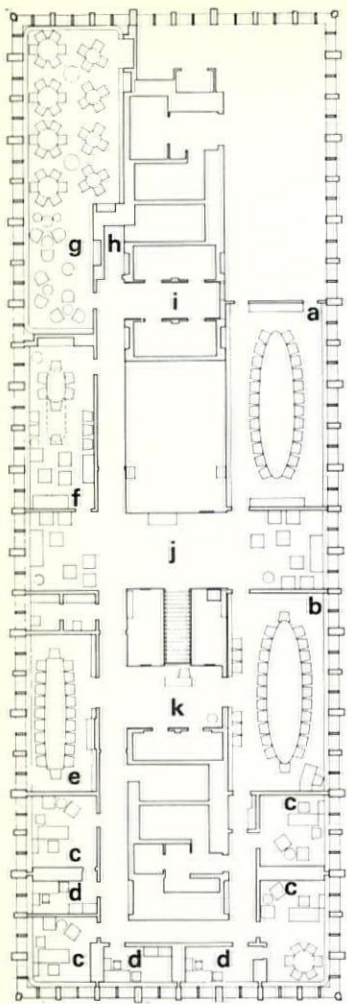
## Directors' suite

Section designer : William Furbisher

The designers had to accept the large ceiling diffusers on the lower floors, but were able to alter the system to take slotted perimeter diffusers on the upper floors. These are barely noticeable and greatly improve the appearance of the rooms. The core of the building, containing service rooms which were not the designer's responsibility, is faced with Portuguese travertine to express its permanence. Deflection at the top of the building made it impossible to use solid partitions (flexibility in arrangement not being required), and some degree of sound insulation was achieved by lining the frame with a double skin of lead and asbestos on which veneered panels were hung. Owing to the design of the window wall, in which three sizes of mullion occur, frames have been added on the inside which are of the same width and so provide unity in the fenestration. By bringing these out to the same plane as the heating units below the windows, the designer has also provided a zone between inside and outside which gives a much needed sense of protection when the cill level is relatively low. Effective visual use has in fact been made of this low cill line by the choice of furniture, which never sticks up above it. The restrained use of colour is particularly successful on these two floors, and can be seen at its best in the chairman's dining room with its silver grey sycamore panelling, pale grey silk curtains and yellow silk upholstery.







**plan of directors' suite**  
**key**  
 a, board dining room  
 b, board room  
 c, office  
 d, secretary  
 e, committee room  
 f, chairman's dining room  
 g, director's dining room  
 h, staircase lobby  
 i, lift lobby  
 j, ante room  
 k, directors' lift lobby

9, the directors' and senior managers' dining room. The wall is faced with olive ash veneer, the Saarinen tables have rosewood tops, the chairs and curtains are blue, and the carpet is off-white.  
 10, the chairman's private dining room.  
 11, the boardroom. The panelling and the table are teak, the carpet is dark green, the curtains are red and the chairs are upholstered in black leather. The ceiling lights are housed in curved plaster pendants which prevent acoustic flutter.



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The conventional self-service system of cafeterias exemplified in Britannic House is not always the best way of feeding large numbers of people. This article compares the advantages of the new food hall with the older system.

## Cafeterias and food halls

John Stewart

Most people like to feel that those responsible for preparing and serving their food are fastidious and well organized, qualities which can well be expressed in the layout and choice of equipment in the servery.

Successful self-service operation is directly related to the speed and ease of dispensing food and to the design of circulation. The two general arrangements for serving are the linear system of cafeteria with a long counter and continuous tray slide, or the recently introduced food hall or free-flow layout. 5 and 6 show good examples of the linear system.

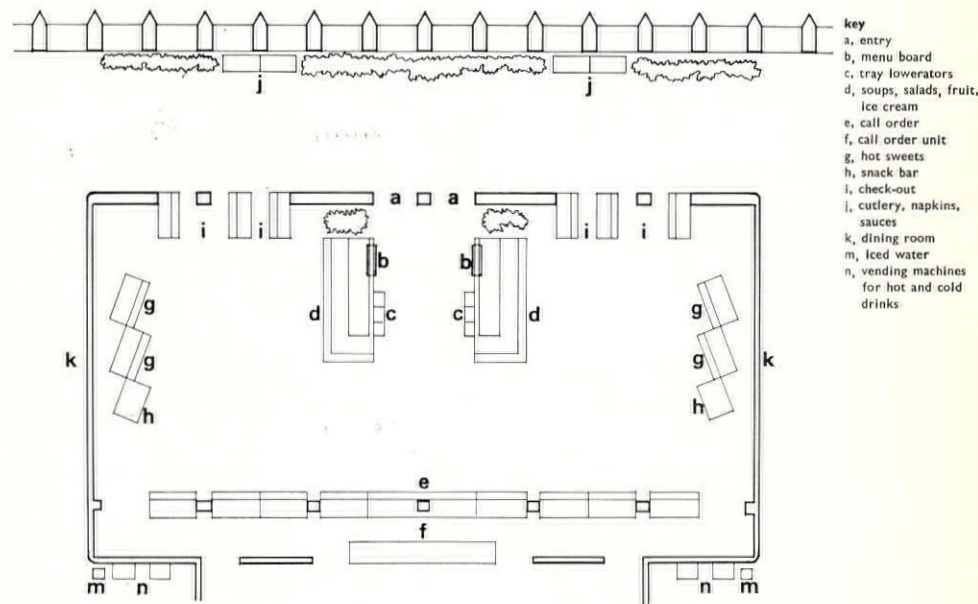
One of the disadvantages of this system is the limited speed of service. An average line, usually 20ft. to 30ft. long, will serve five to eight persons per minute, the rate depending upon the variety of menus available and the efficiencies of the layout, the back-up service and the cashier.

The linear system operates most effectively when there is a steady inflow of diners without peak periods. The rate of service can be improved most easily by additional service lines. 5 shows a method of doing this within one overall counter length.

Other methods of increasing the flow include the serving of restricted menus, the simplification of payment (e.g., meal tickets, set price meals, etc.) or by the isolation of grilled food, or similar items which are likely to cause delay to a continuous line.

In cases where large numbers of people arrive within a very short period, a common occurrence with factory and office canteens, the free-flow system may become a viable alternative.

This departs from ordinary cafeteria practice by breaking down the food and beverage services into sections. Queues are avoided and service time is reduced; it is reckoned that whereas an efficient cafeteria line serves a meal in about seven or eight minutes, this time may be halved in a food hall using the same number of kitchen staff.



plan of food hall for Boots Pure Drug Co., Nottingham

1, general view from check out of the food hall for Boots Pure Drug Co., Nottingham; call order dishes (grills, omelettes, etc.), which are selected by 25 out of every 100 users are served from two central counter bays in the main servery. 2, the central island unit serving soup, salads, cold sweets. 3, detail of the main servery bay. The tray rest is subdivided to reinforce the effect of the unit servery. Infra-red radiant heaters are mounted inside stainless steel purpose-made housings over all counters serving hot food. Signs are engraved and filled laminated plastic on blockboard fitted with magnetic catches to facilitate interchange. 4, people entering the food hall pick up trays from one of two groups of mobile lowerators. Menu information is given at these points, grouped under the heading shown in the servery signposting. The original hardwood floor has been retained.





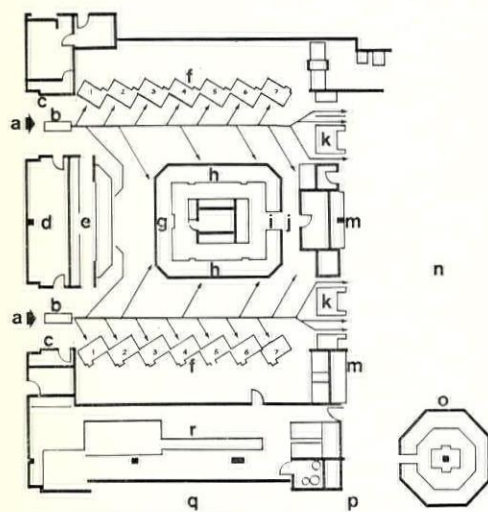
In public self-service restaurants it is unlikely that free-flow principles could be made to work satisfactorily, since familiarity with both the layout and the method is necessary. At both the Ford and Boots factories the managements issued leaflets to staff explaining the free-flow routine prior to opening.

In addition to familiarity (which is quickly gained) a first class signposting system is essential for successful working. Ford use a numbering system for counters corresponding to menus displayed at the entrance, 7, whilst Boots have a number of interchangeable 'generic headings' signs over counters ('roasts,' 'hot sweets,' etc.) which also head relative sections of the menu boards, 4.

One of the most advantageous features of the free-flow system is its ability to cope with large numbers of diners needing service at one time. The flexibility is such that counters can be closed down when demand is low and opened during peak periods.

Both the illustrated installations serve around 2,000 meals an hour, and it is reported that there is little loss of efficiency when the layout is only required to serve 200 to 300 persons per hour which is common during holiday periods.

Although the traditional cafeteria line system is well established and proven, the working experience of the food hall layout in this country is relatively short. However, the experience at Boots and Ford, after some minor adjustment to the original arrangements is considered by both organizations to be very satisfactory, and it is clear that similar layouts, common for several years in the United States, are likely to be adopted here.



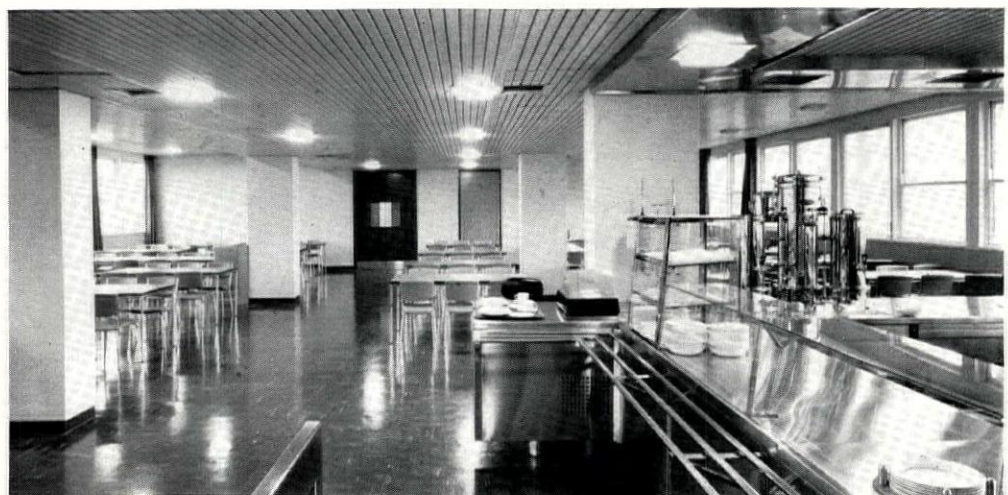
plan of food hall for Ford Motor Co., Dunton

key  
a, entry  
b, trays  
c, menu board  
d, cash control office  
e, snacks and sandwiches  
f, hot dishes  
g, salads  
h, grill  
i, cold sweets  
j, cold drinks  
k, cashiers  
m, sauces and cutlery  
n, dining room  
o, hot drinks  
p, exit  
q, conveyor  
r, dishwashing

5, staff canteen servery at head office of the Alliance Building Society, Hove (architects Jackson, Greenen and Down with Design Research Unit). Doors in the centre and ends of the wall screening the servery from the dining area open to allow two cafeteria lines to operate from the centre. Lighting and ventilation louvres are neatly incorporated into the ceiling. 6, staff servery at Hull Royal Infirmary (architects, Yorke, Rosenberg and Mardall). The servery counter is sited in the dining space. Counter lighting and air extracts are incorporated into a slim bulkhead, the casing of which, like the counter, tray slide and barrier rail, is stainless steel. 7, échelon arrangement of servery units in the Ford Motor Co. Research Centre food hall, Dunton. Menus are identified by numbers on the fascia above. Food is lit and kept warm by suspended infra-red lighting fittings. Warmed plates lowerators can be seen along the rear wall. 8, the rear view of the servery units in the Ford Motor Co. food hall, showing plate lowerators inserted into the units.



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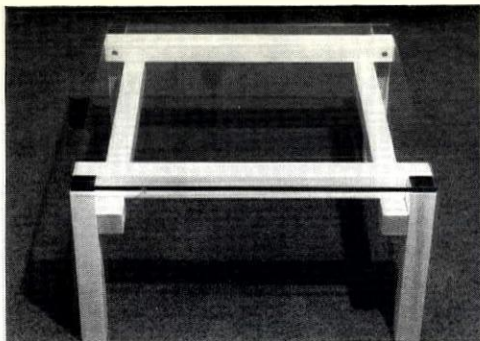




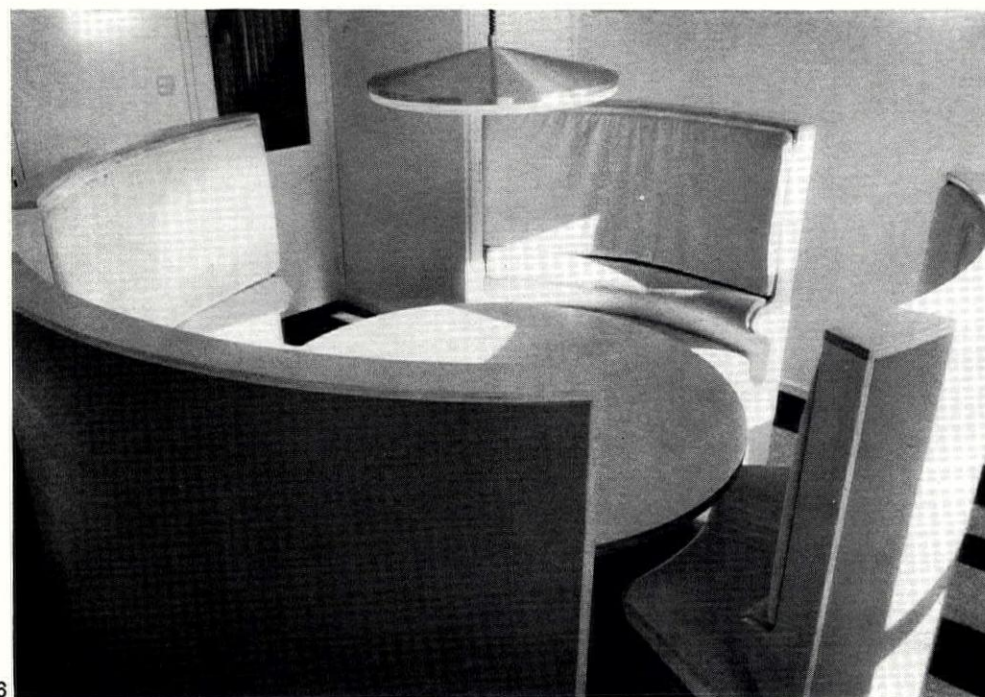
## Furniture by John Makepeace

John Makepeace both designs his furniture and makes it. The actual means by which a particular result is achieved is important to him, and he believes that it is only by understanding the method that a technique can be properly exploited. His superb standard of finish suggests that he is sensitive to the tactile qualities of furniture, and it is not surprising that he has so far used mainly rich natural materials like wood and hide. The illustrations show a selection of his work designed over the last three years, generally for specific situations, though a few items, like the glass top coffee table, 1, are standard products made in limited quantities. Furnishing contracts are also forming an important part of his activities, and he likes to collaborate with the architect from the beginning because furnishing, he insists, should be integrated with the design of a building, even when most of the pieces are free-standing. He is at present working with Richard Burton (of Ahrends, Burton and Koralek) on the College of Management Studies at Kennington, Oxford. In his furniture John Makepeace tries to express the function, the material and the construction. The combined seating

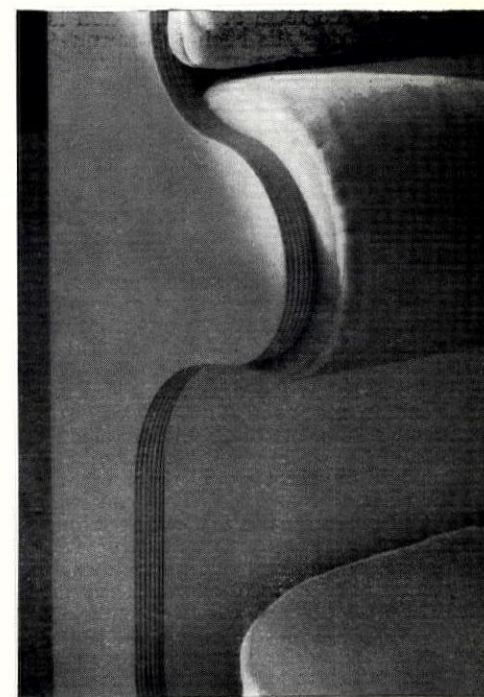
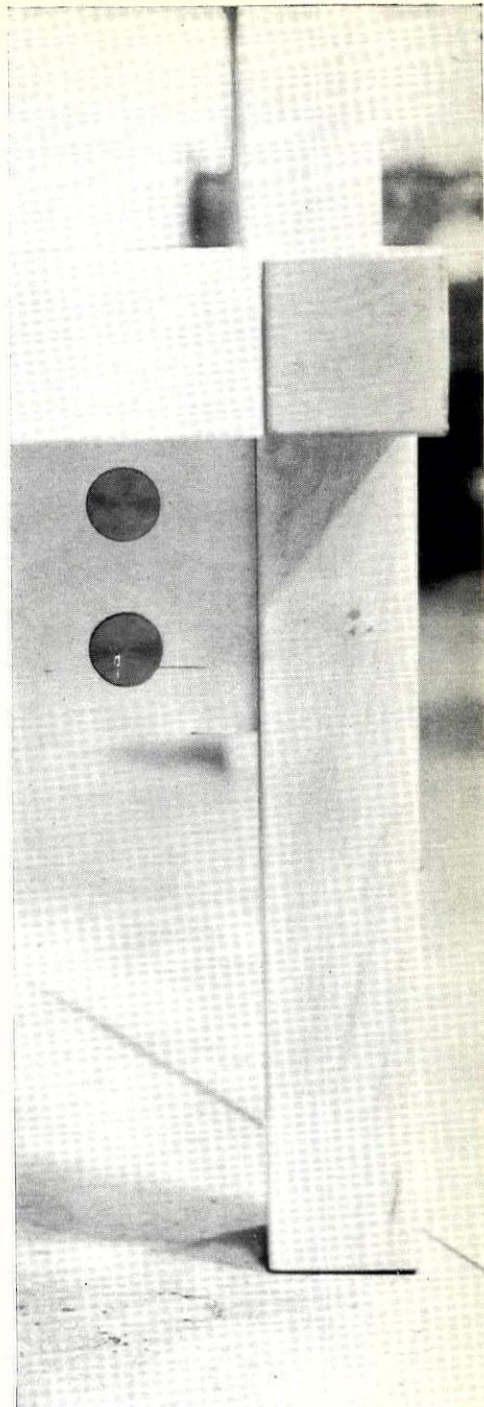
1, coffee table in sycamore, teak or dyed finish. The construction is knock-down, and the packing has been specially designed so that the pieces of wood protect the glass top. 2, 3, dining table and six chairs. The table is in Adaman Padouk and the chairs are in Adaman Padouk and hide. 4, combined seating and table in sycamore, birch and white melamine. 5, detail of combined seating and table showing jointing of bolts and brass rods. 6, 7, dining group in birch ply with honey-coloured Dralon velvet cushions and red leather panels on the backs of the seats. The cylindrical fixed base supporting the table can be lowered, and a smaller table substituted. The seats, which are on castors, can form an enclosure round the table or be pushed back for informal use.



1,2,3,4

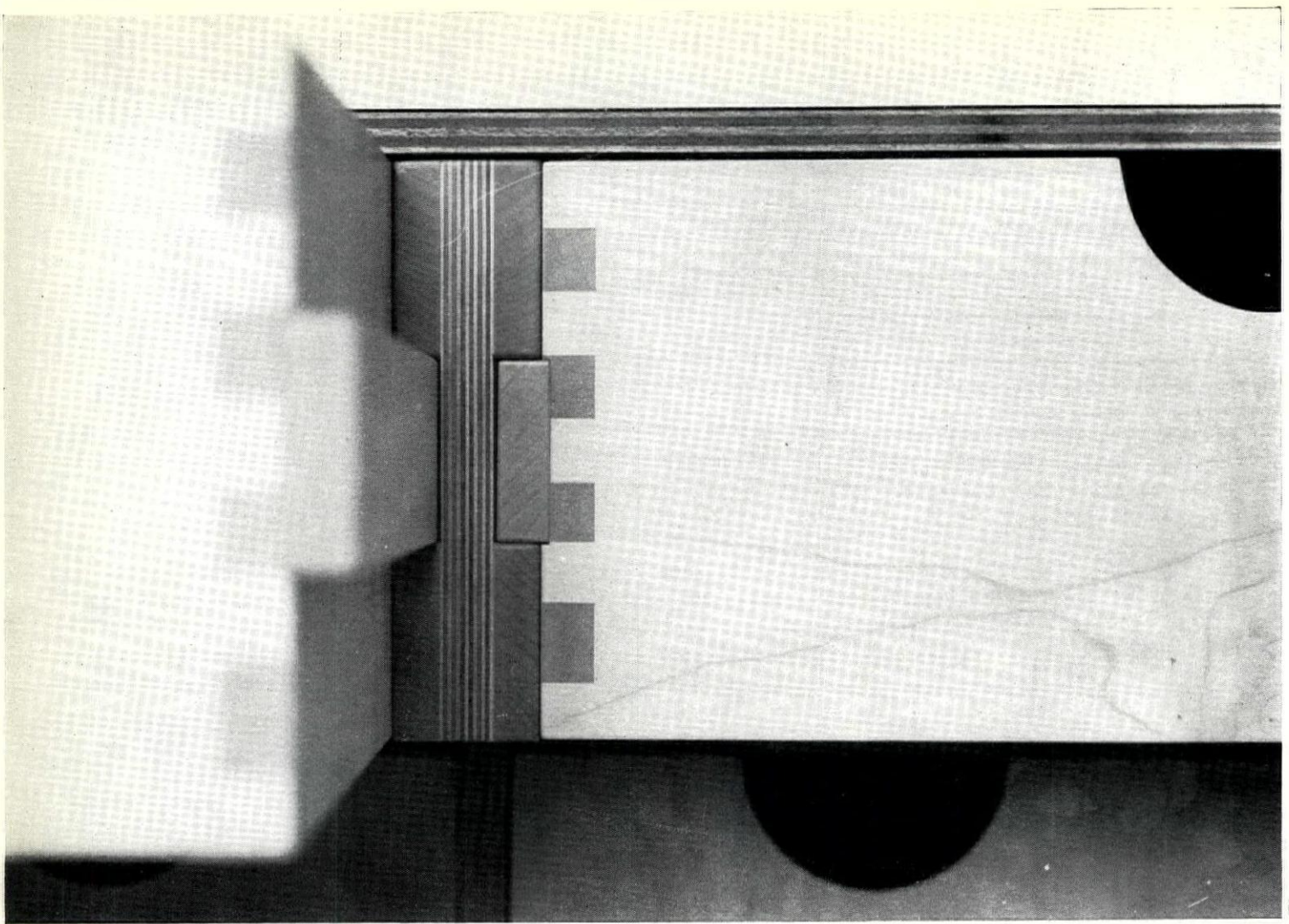


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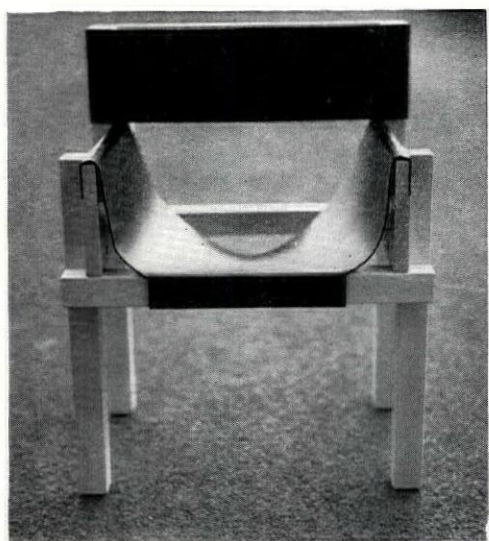




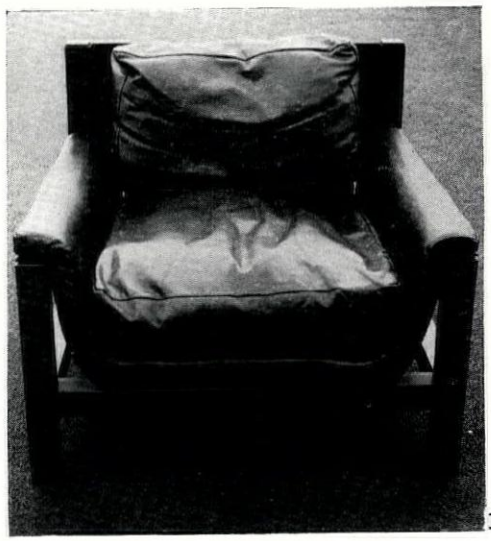
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8, typical detail of a drawer front. 9, chair in Oregon pine and hide. 10, armchair in Adaman Padouk and hide upholstery. 11, desk in Indian rosewood.

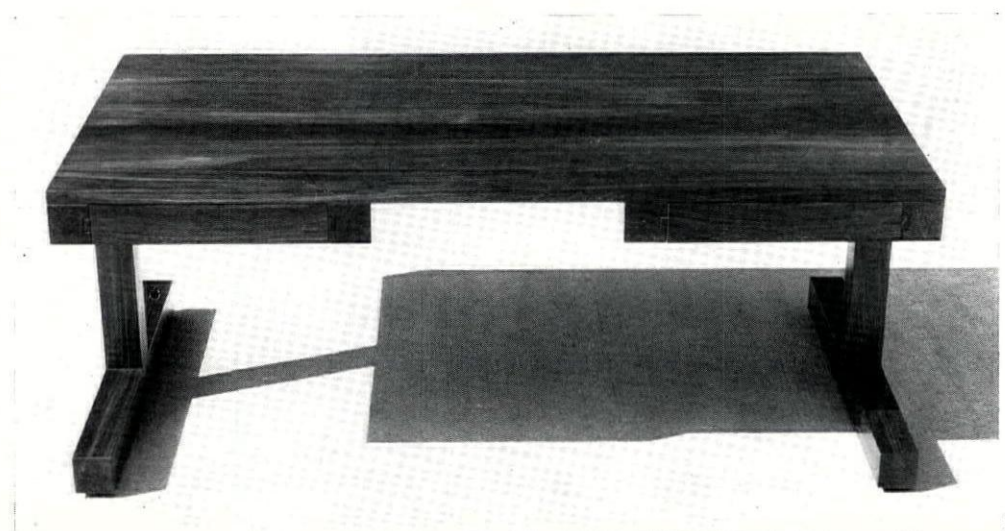
and table, 4, is a family dining unit with plenty of unobstructed space underneath for legs of all ages. On the other hand the round table in Adaman Padouk, 2 and 3, obviously serves a more formal purpose with its system of supports designed to combine precisely with six chairs. The expression of materials is everywhere evident, but perhaps most tellingly in the naked plywood edge of the dining group, 6, 7, the two-dimensional character of the material being further emphasized by the curved cut. The form of construction is made clear in details such as drawer fronts, 8, where the runners are brought forward to the face, expressing the action of a drawer, which for Makepeace compares in enjoyment with the action of fine machinery; in the bolts and brass rods which hold together the combined seating and table, 5, and in the way of jointing, reminiscent of de Stijl furniture, where each member retains its integrity and independence, 1 and 9 (used, however, in an undoctinaire manner; other more conventional ways of jointing also being used as in the Adaman Padouk chairs, 10. One of the most successful pieces in which these three aspects are well integrated is the desk made out of solid Indian rosewood, 11. The design is based on a 1½ in. module which is also the size of the basic structural member—one module for the top and three modules for the rails, legs and feet. The four rails show end grain on the flush desk front, the slightly darker tone contrasting with the drawer fronts and adding richness to the timber. The form of the desk invites use. The structure—a balanced cantilever—means that there are no obstructing legs, and the middle drawer has been left out on one side to allow for knee space.



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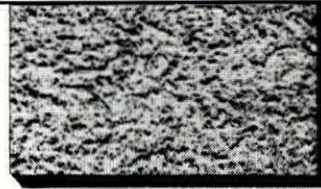
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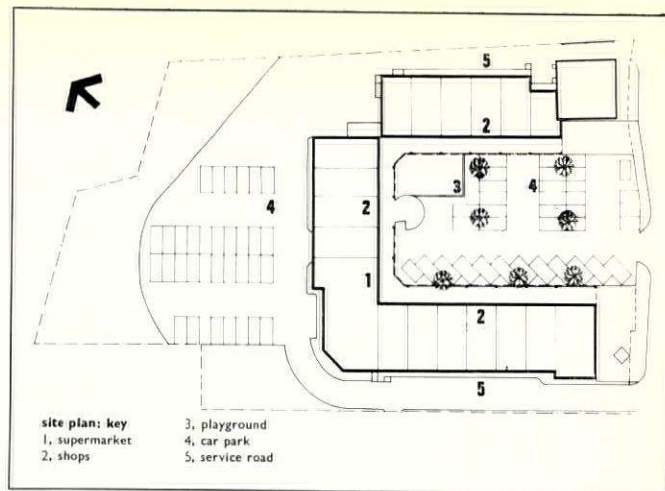


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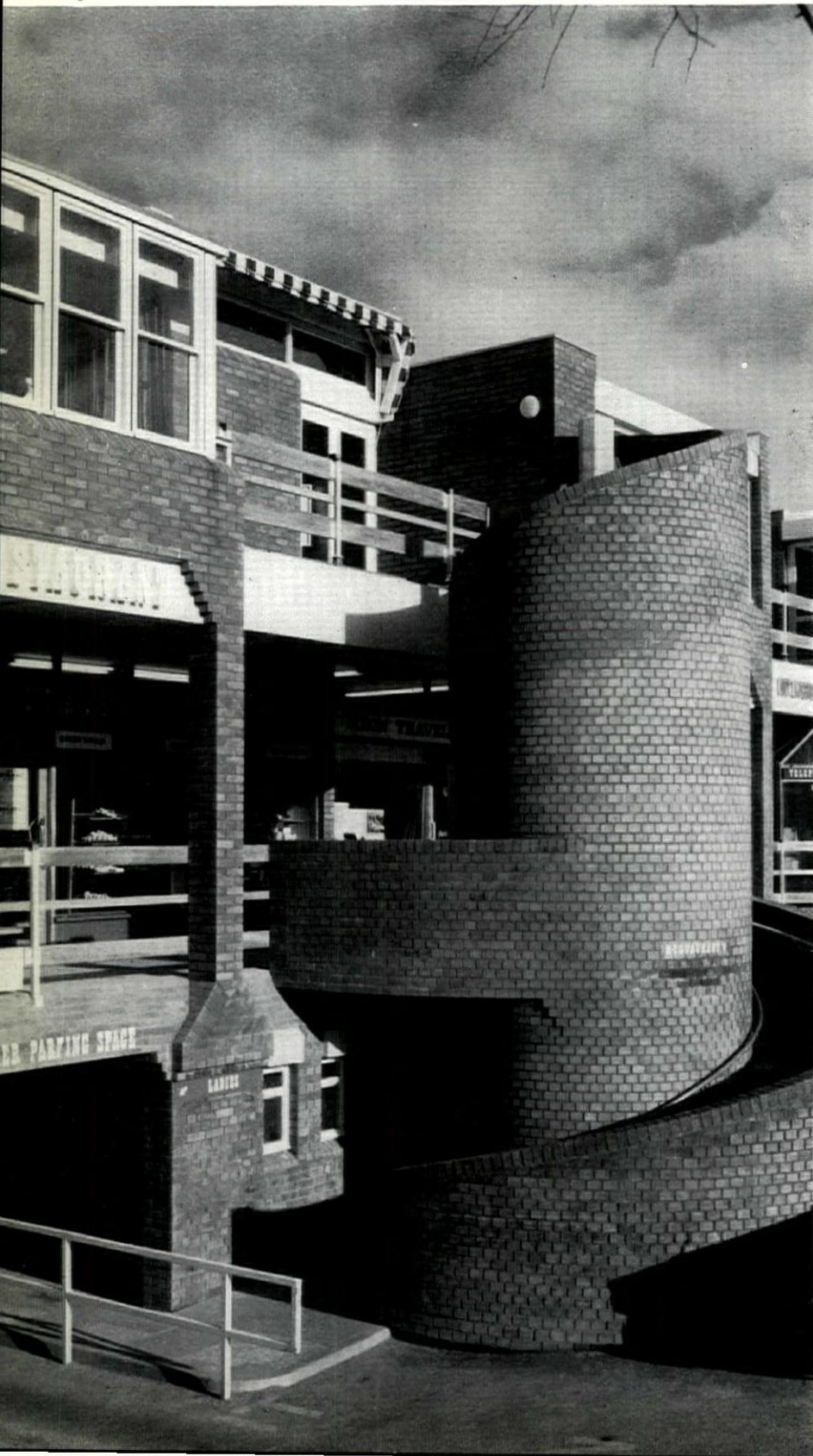
**SHOPPING CENTRE, CHANDLER'S FORD, HANTS** architects **JULIAN KEABLE AND PARTNERS**







Previous page : 1, approach to the shopping centre from Winchester Road. 2, detail of the staircase leading to the restaurant and shops. This page : 3, looking across the car park to the circular staircase and supermarket. 4, general view of the external staircase, with shops on the first floor and flats on the second.

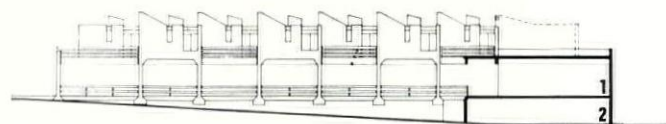


## SHOPPING CENTRE, CHANDLER'S FORD

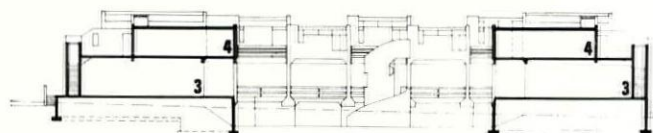
Fryern Arcade at Chandler's Ford is a two-level neighbourhood centre, the ground floor being a shopping centre and the upper level a restaurant, flats and stores. The centre has a population catchment area of 20,000 and is situated on the main A33 road, between Winchester and Southampton. A by-pass means that Chandler's Ford will no longer be divided by a main traffic artery.

The centre is built in the shape of a 'U' with the open side facing on to the Winchester Road. It consists of 18 shops, one of which is a supermarket, facing inwards to a parking area which is sunken to conform with the fall of the site. The pedestrian way is at one level under cover, and is connected at the rear to the parking area by a circular brick staircase which also leads to the restaurant at first floor level. This staircase and the restaurant form the focal points of the centre, particularly at night when the conical staircase is floodlit. Overflow parking and exit are through a tunnel below the rear of the arcade. Prior to building, the developers sent out 1,000 questionnaires to local householders. As a result a children's playground with a slide and a sand pit has been provided and outside each shop-window, under the covered arcade, is a public seat. The buildings are of loadbearing brickwork with blue engineering bricks for facing. A number of semi-mature trees were transplanted to the car park. The shops have been given the opportunity to express their individuality under the overall control of the architects. Julian Keable and Partners are now practising with others as TRIAD.

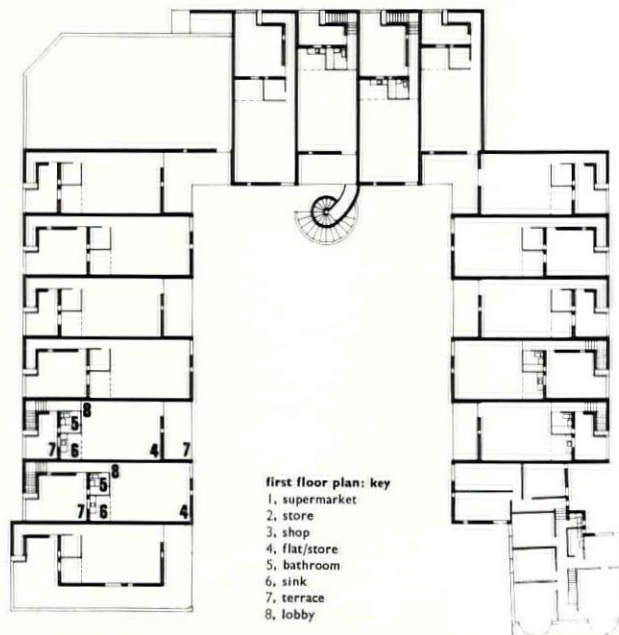
Partner-in-charge, Julian Keable. Assistant-in-charge, R. Power, Structural engineers, Bernard Rekel & Associates. Quantity surveyors, John Watson & Carter. For contractors see page 480.



north-east sectional elevation



south-east sectional elevation



first floor plan: key  
1, supermarket  
2, store  
3, shop  
4, flat/store  
5, bathroom  
6, sink  
7, terrace  
8, lobby



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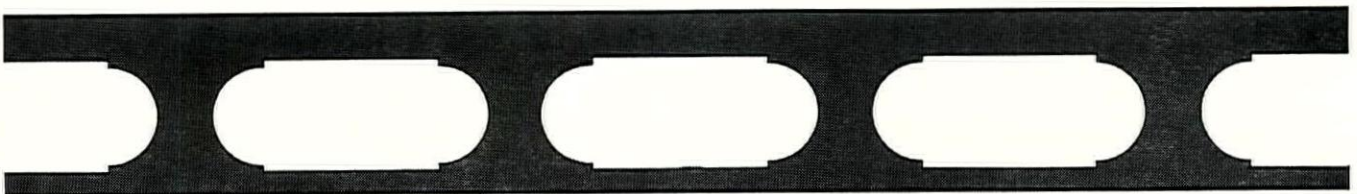
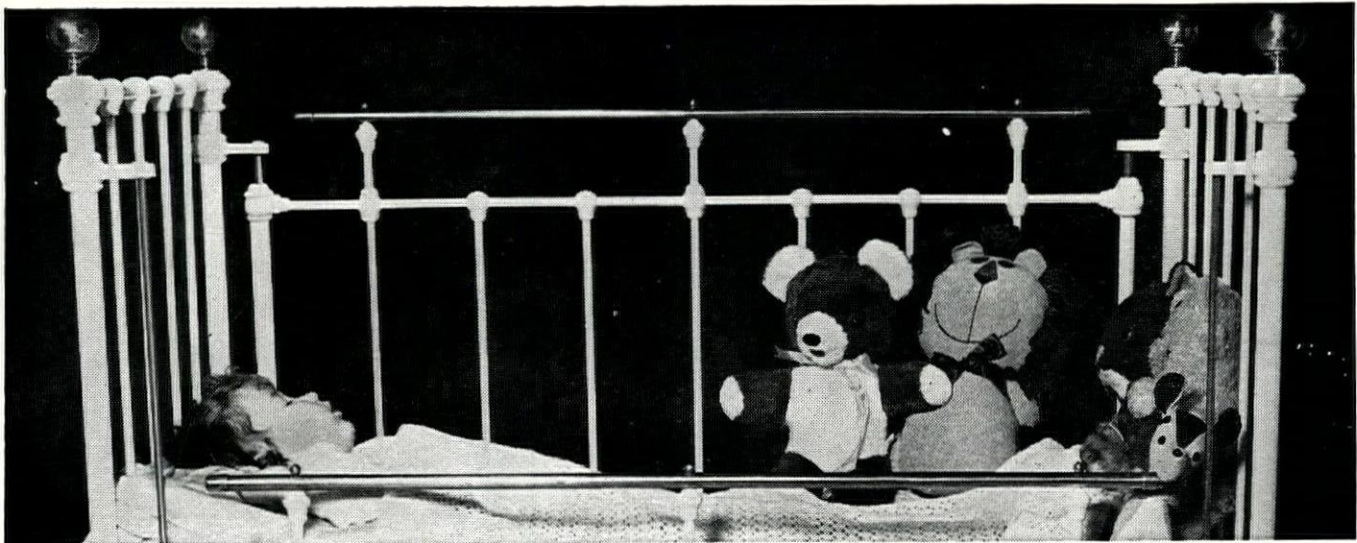
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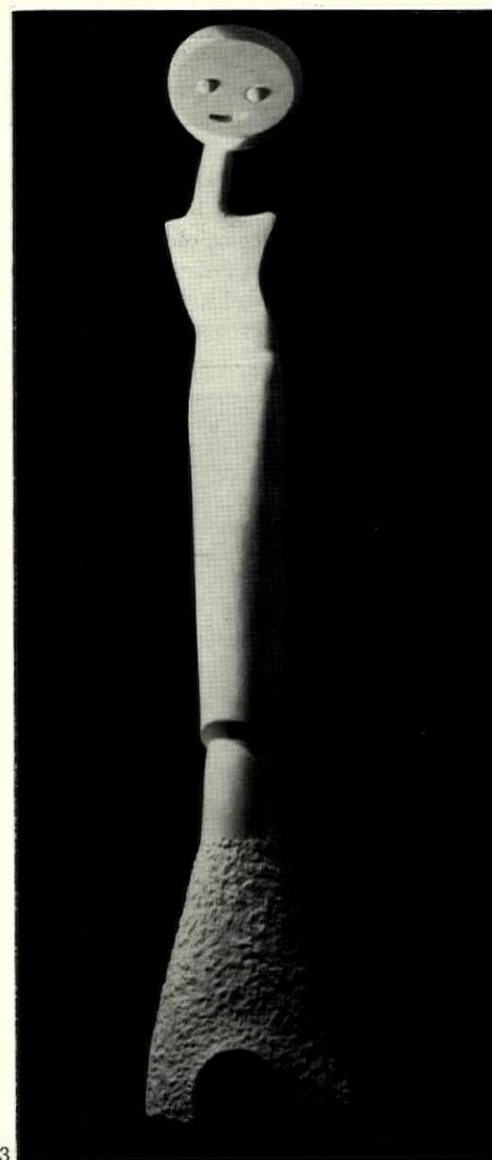
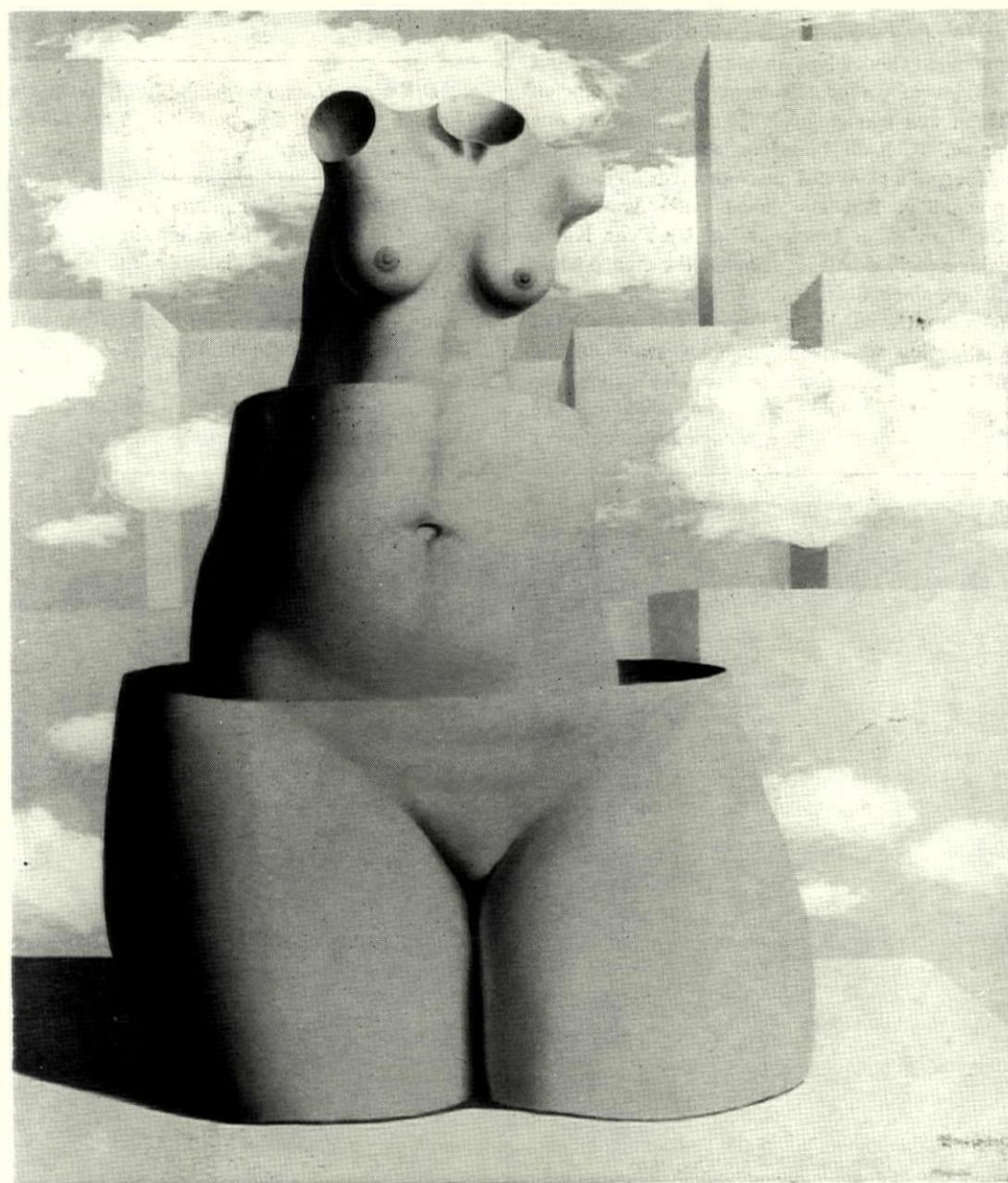
## THE OBSESSIVE IMAGE: 1960-68

Robert Melville

The exhibition of painting and sculpture which bore the above title opened the Institute of Contemporary Art's new and very handsome gallery at Nash House in The Mall. It had several points of contact with the exhibition called 'Forty Thousand Years of Modern Art' which the ICA arranged twenty years ago in the basement of the Academy Cinema. The 'Forty Thousand Years' show brought together the art of the avant-garde and the art of primitive peoples, and the 'Obsessive Image' confined itself to the avant-garde treatment of the human figure during the

last eight years; but some of the moderns who appeared in the earlier show—Picasso, Miró, Ernst, Moore, Sutherland, Giacometti—were also included in 'The Obsessive Image.'

These artists are among the masters of twentieth-century painting and sculpture, but it was evident at Nash House that they are not the masters to whom the younger generation owes allegiance, and their inclusion took on the appearance of a concession to the past. Their work seemed to suggest that an attitude to the figure which involves either its radical distortion or the substitution of a totally



1, Magritte: 'La Folie des Grandeurs.' 2, Miro: 'Personnage et Oiseaux.' 3, Ernst: 'La Plus Belle.'

3

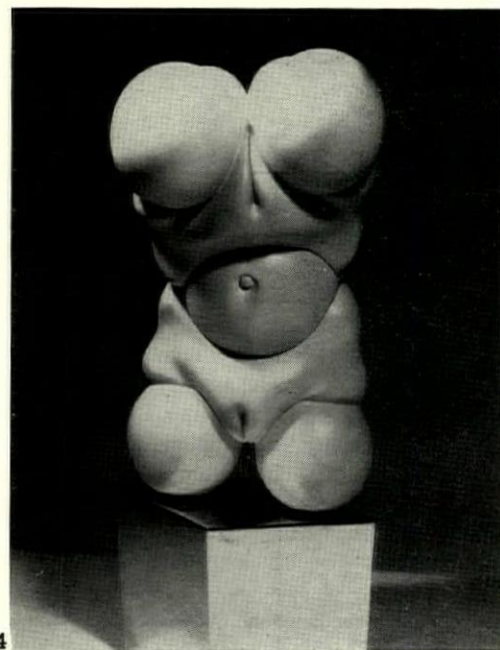


invented personage may well be in its final phase. But if so, it's only fair to say that it's not going out with a whimper. Miró's 'Personnage et Oiseaux,' for instance, 2, painted in 1966, mixes distortion and invention as tirelessly as ever, and Ernst's invented personage 'La Plus Belle,' 3, a stone carving executed last year, indicates that he still has a sense of humour, even if it has become whimsical and very much less 'black' than it used to be. (Incidentally, I recommend to collectors of posters a gorgeous blow-up, printed in two colours on silver, of a macabre engraving from Ernst's 1934 collage novel *Une Semaine de Bonté*, which is available at Indica bookshop for a few shillings.)

Magritte, who died last year at the age of sixty-nine, and Bellmer, who is sixty-six, are more relevant to the present situation than any of the artists mentioned above, and their work occupied a key position in the exhibition. They both came to maturity in the heyday of Surrealism, but their work was excluded from the 'Forty Thousand Years' show because the organizers were looking for formalistic parallels between the moderns and the primitives. The procedures of Magritte and Bellmer embrace the re-arrangement of human anatomy but not the distortion of the parts, and seemed to lack that necessary element of abstraction which André Breton called 'the artistic alibi.' They would now be represented in such a show, if only because it has become obvious that such things as Magritte's 'La Folie des Grandeurs,' 1, painted in 1961 and probably the last painted version of a theme which he had more

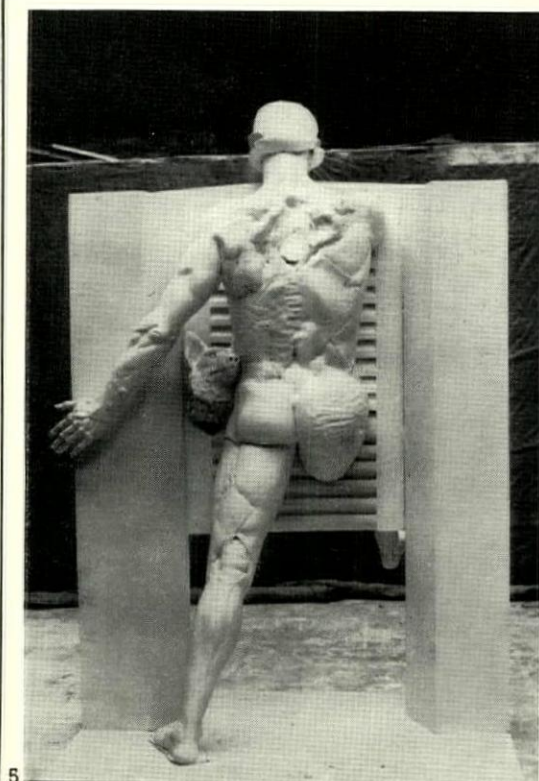
or less perfected in the 'thirties, and Bellmer's 'La Poupée,' 4, cast in aluminium in 1965 but conceived many years earlier, subject the female figure to a scale of values as intransigently as the prehistoric figurines from Savignano and Willendorf. The same region of the body is aggrandized; the difference is that Magritte's tripartite nude and Bellmer's conception of the vulva as a woman's crowning glory are more purely acts of praise. Conceived as perfect biological entities, they rise above the erotic ferment like Venus rising from the sea.

A few months before he died, Magritte made a bronze of the tripartite nude which is very faithful to the painting, and although it could be argued that 'sculptural values' were more consequentially disclosed by other works on view, it dominated the exhibition like a sacred object, and some of the best things contributed to the ICA exhibition by younger artists attempting a kind of imaginative naturalism arranged themselves around it like images and effigies of an erotico-humanist cult. One of them was Ipousteguy's 'Homme poussant une porte,' 5, itself based on an early Magritte idea, and a powerful move towards anatomical normality. But the finest was 'Arman sur fond or,' 6, a bronze relief by Yves Klein, whose early death is probably the greatest loss to art since Chirico changed course in 1917. (Arman, the subject of the relief, is an artist of distinction who won the chief award in the Marzotto Prize exhibition held at the Tate last year, and he was represented in 'The Obsessive Image' by a nice semi-transparent

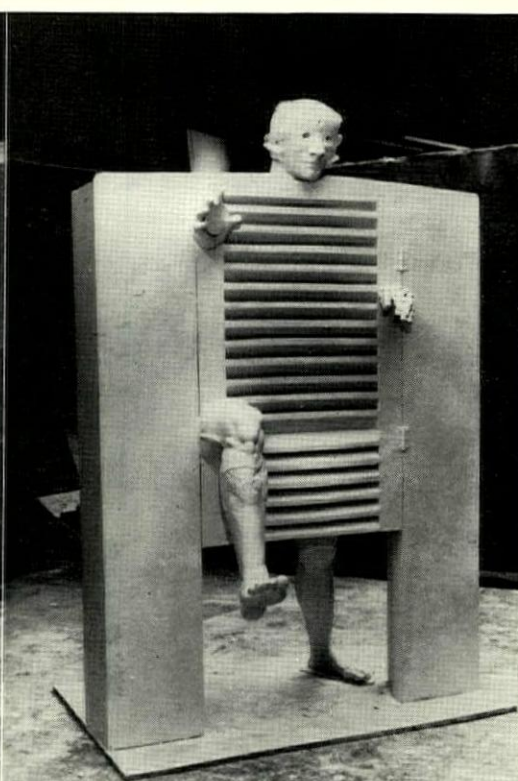


4, Bellmer: 'La Poupée.' 5, Ipousteguy: 'Homme poussant une porte.' 6, Yves Klein: 'Arman sur fond or.'

torso filled with rubber gloves.) It's no doubt wrong to illustrate the Klein in half-tone: without its colour it is only an excellent portrait of a man with a rather splendid-looking body. The bronze is painted a uniquely Kleinian night-sky blue and suspended against a gold background, and the blue and the gold have transformed it into an astonishing and marvellous glorification of the male principle.



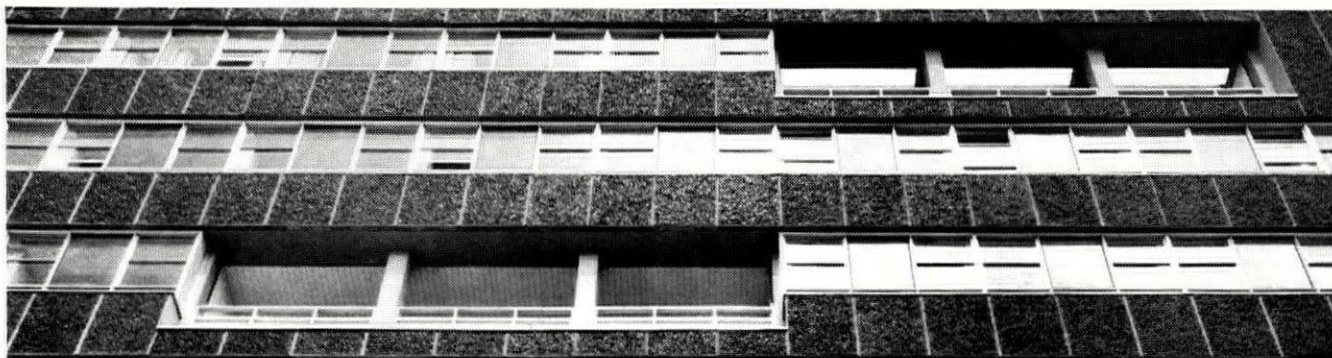
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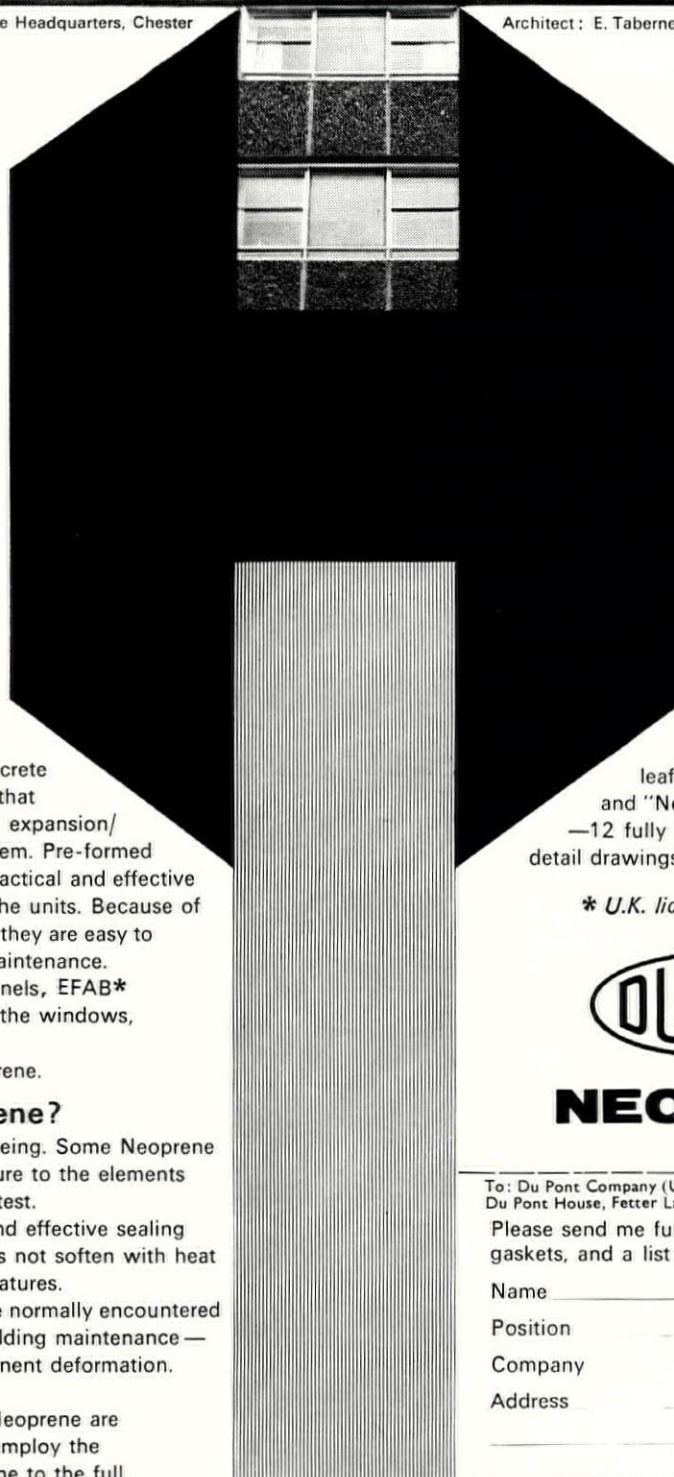


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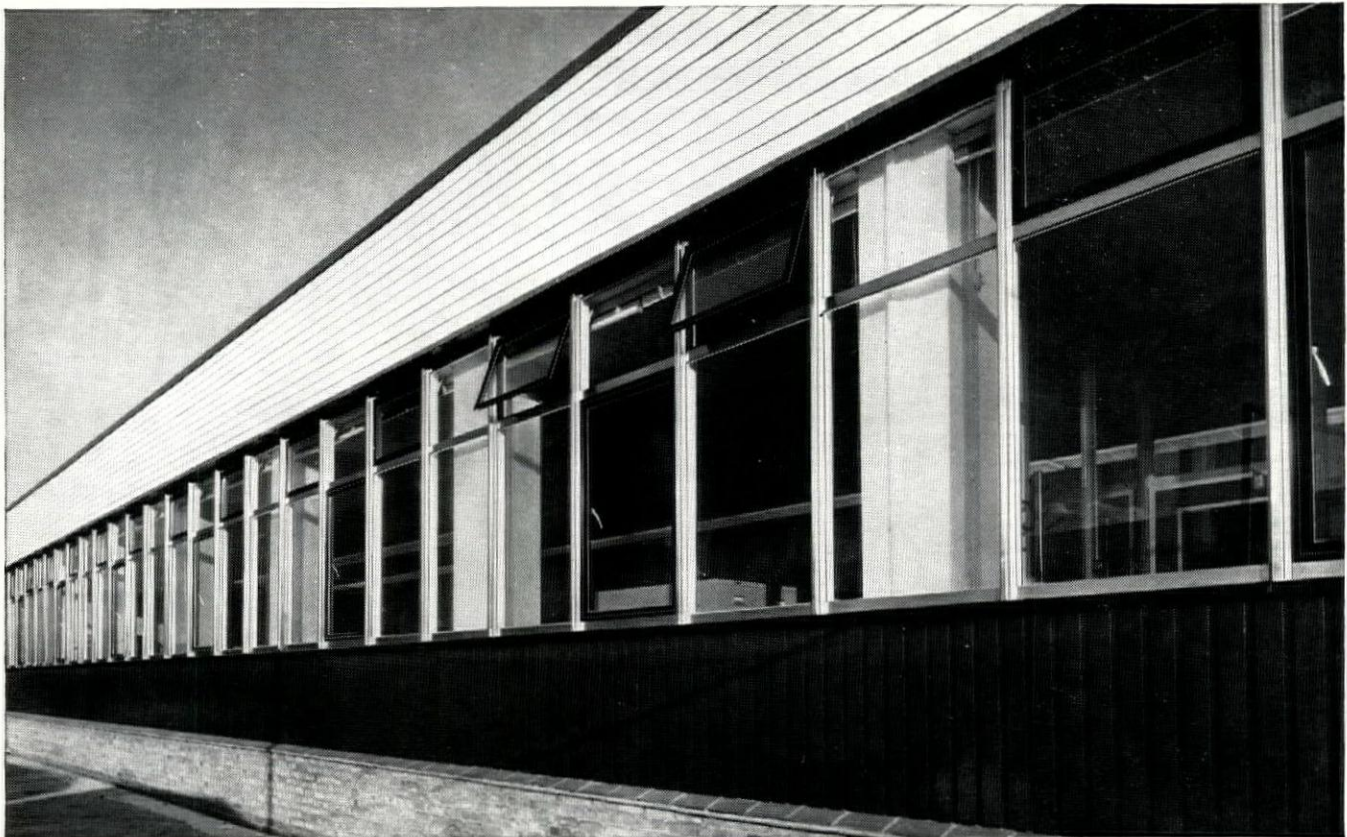
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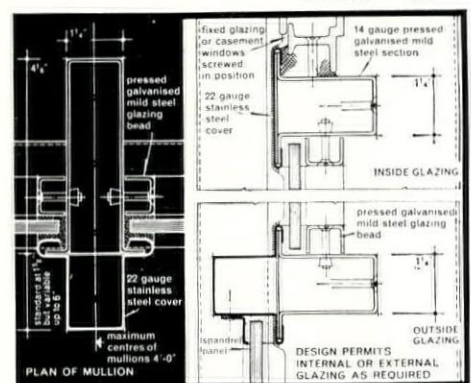
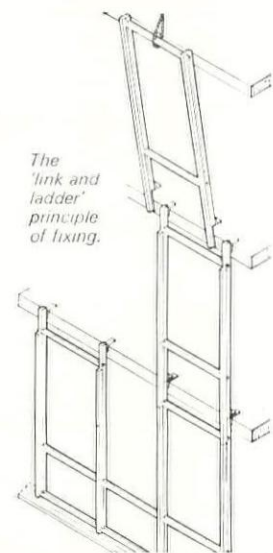
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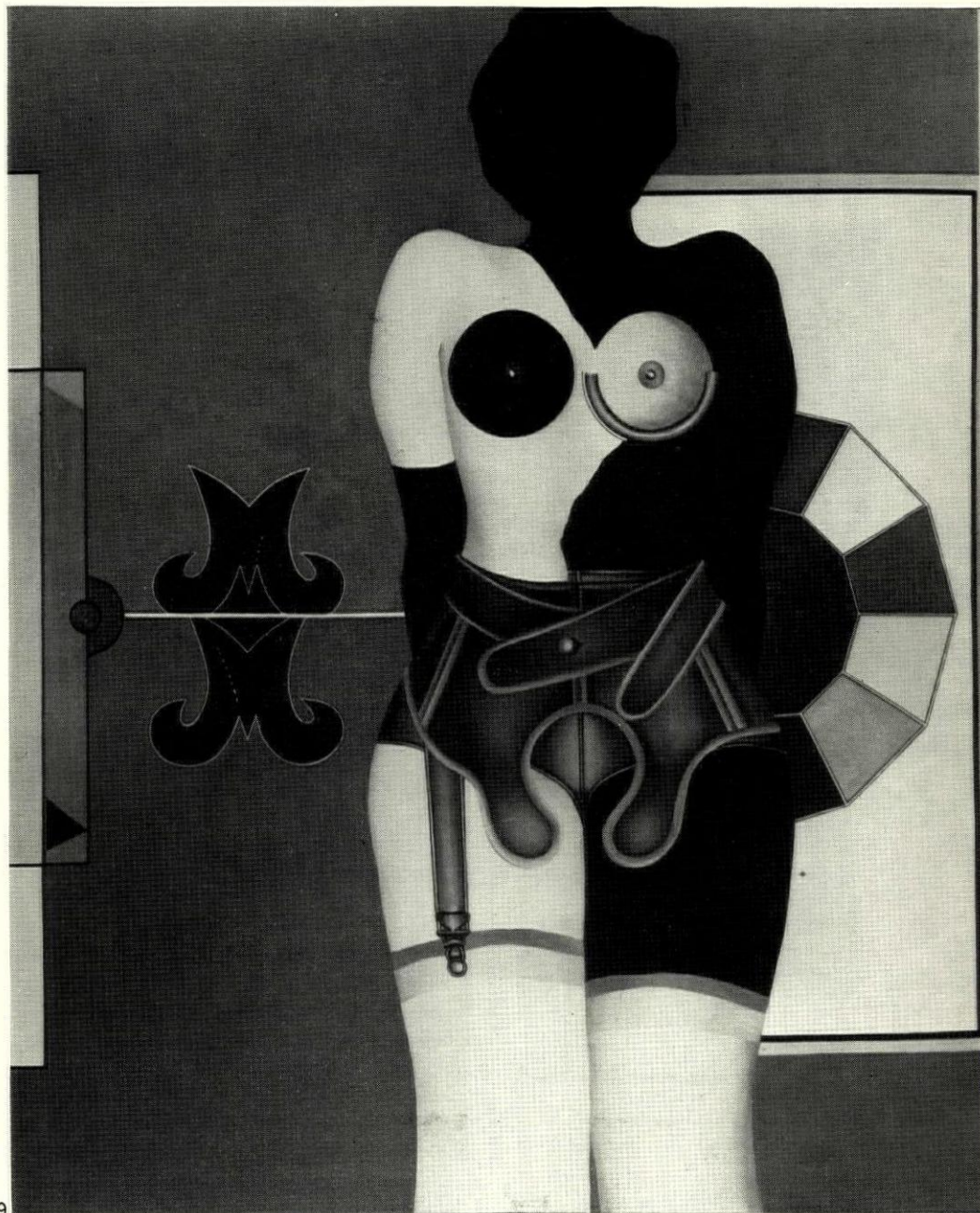
7, Jann Haworth: 'Mae West, W. C. Fields, Shirley Temple.' 8, Niki de Saint-Phalle: 'Clarice Again.' 9, Richard Lindner: 'Marilyn was here.'

such a sacrifice. Her brutally affectionate, soft, stuffed effigies of film idols, arranged like a family group, in which Mae West, hand on swingable hip, provides Shirley Temple with a lap from which to project her famous and fearsome display of daintiness, whilst W. C. Fields treads down an innocent child, 7, achieve a weird kind of truth to appearances. There's a touch of the Tussaud tableau, but it would be absurd to call her technique retrograde.

I would be more inclined to call Niki de Saint-Phalle's figuration a bit retrogressive, since she appears to adhere to the modernistic fallacy that a sculpture has to be either too fat or too thin to be formally significant. I admire her work very much, and she usually emphasizes the belly, but she has done less excessively lumpish things than her 'Clarice

Again,' 8, with even more delightful results. It was the ornamentation of Clarice, or to put it alliteratively, her beach-ball breasts and brightly banded belly, which made her one of the belles of the show.

Richard Lindner, an artist of the same generation as Bellmer, paid homage to the memory of Marilyn Monroe by enticing her image into his private world of semi-mechanized female idols, 9, but treated her with a certain gentleness by refraining from casting her for the ultimate resplendent grossness of his most characteristic creations. Like Bellmer, he has dedicated his life to dolls of his own fashioning, but whereas Bellmer sometimes gives his dolls convulsive dreams of fellatio, Lindner sternly rejects the slightest sign of misbehaviour. The key in Marilyn's side, ornamented with her initials, will never



9

No one in our time has succeeded in achieving anything quite as superbly idolatrous for the female principle without recourse to displacements, exaggerations or distortions. Nothing at Nash House approached it. Andy Warhol's painted-up photo of Liz Taylor was too smart, too dreadingly knowing and shallow to come anywhere near it. It's possible that Jann Haworth could create such an image if she could somehow subdue her sharp observation of character and her wide-eyed sense of humour. But one wouldn't want her to make





10

10, Allen Jones: 'What do you mean? What do you mean?' 11, Patrick Caulfield: 'Greece Expiring on the Ruins of Missolonghi.'

be turned, and the regalia of enticement will forever remain a reinforced chastity belt.

Allen Jones produced another of his large, rich, two-part slabs of cheesecake specially for the exhibition, 10, with sparks at her nipples and gleams on her body-stocking. But I'm not too happy about her unexpected display of emotion. Her face and streaming hair look as if they have strayed from a comic strip which Lichtenstein might have chosen, and even have the collage look of not quite belonging to the body. The face is of little or no importance in his girls and he hit on the perfect formula in a similar panel in his last show at Tooth's, where he cut off the face just above the 'promise' of the mouth.

Patrick Caulfield was represented by 'Greece

Expiring on the Ruins of Missolonghi,' 11, the only painting of the figure he has done since the portrait of Juan Gris in 1963. It's extraordinarily effective in its poster-like simplicity, and it's to be hoped that he will attempt more paraphrases of romantic subjects. That bleak painting of battlements recently purchased by the Tate could have done with a hand gripping the stonework or some other slight sign of life.

Altogether, seventy-five artists were represented in the exhibition. In many ways it was the most enjoyable spectacle the ICA has ever staged, and a nice link with tradition before the promised plunge into experiments dedicated to the elimination of hand-made paintings and sculpture.



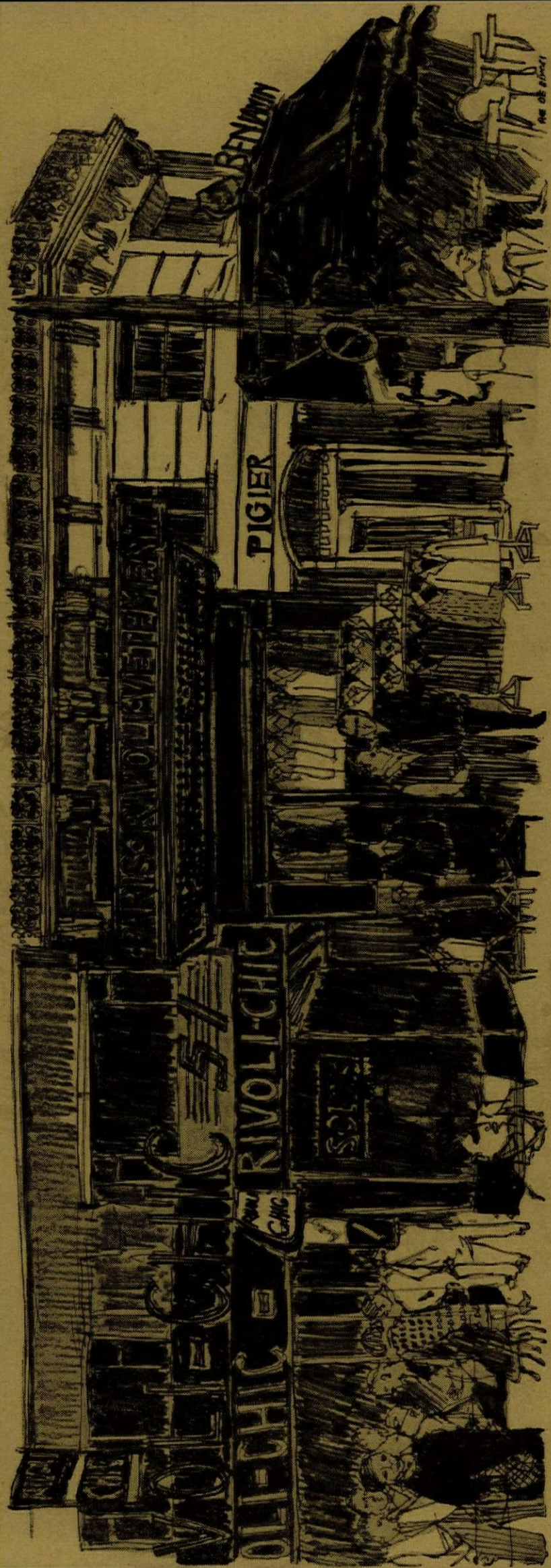
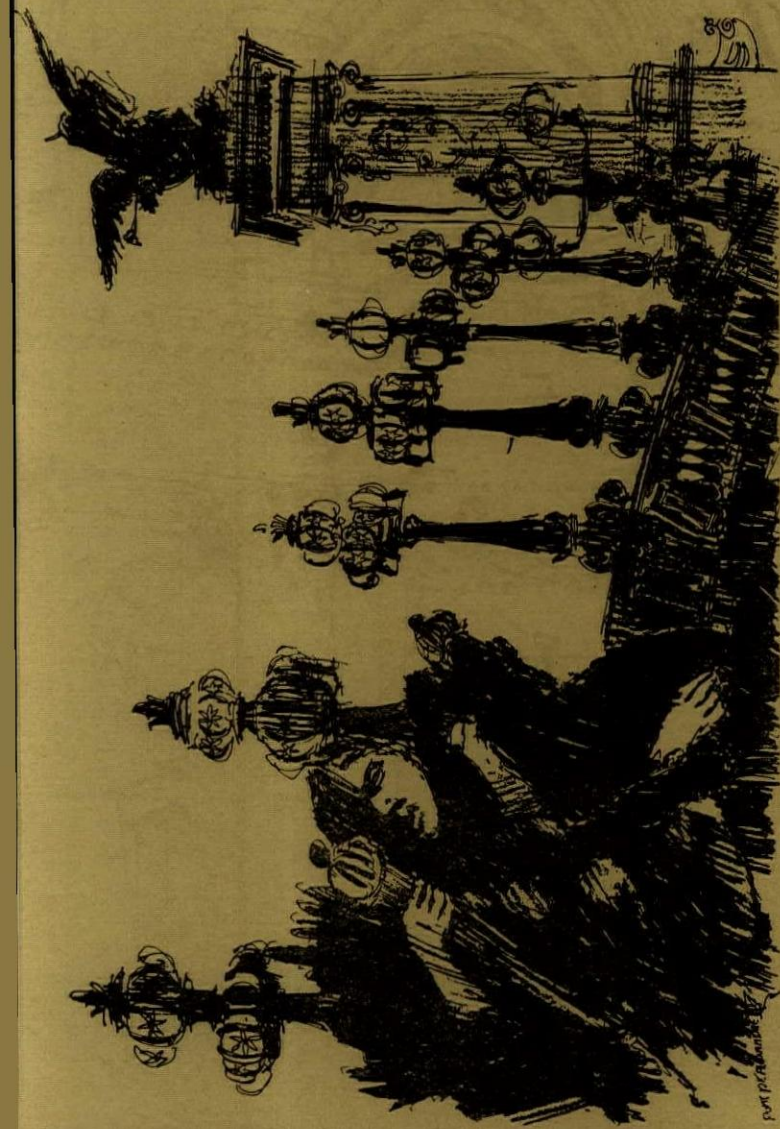
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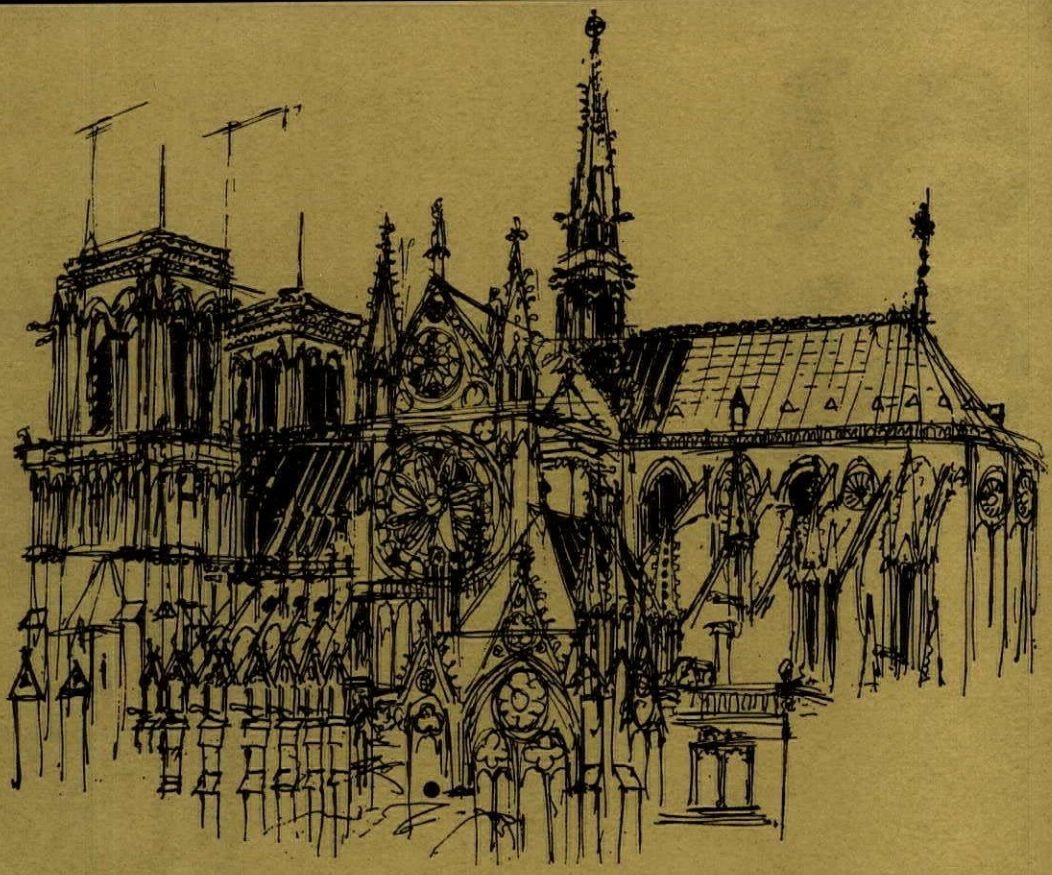
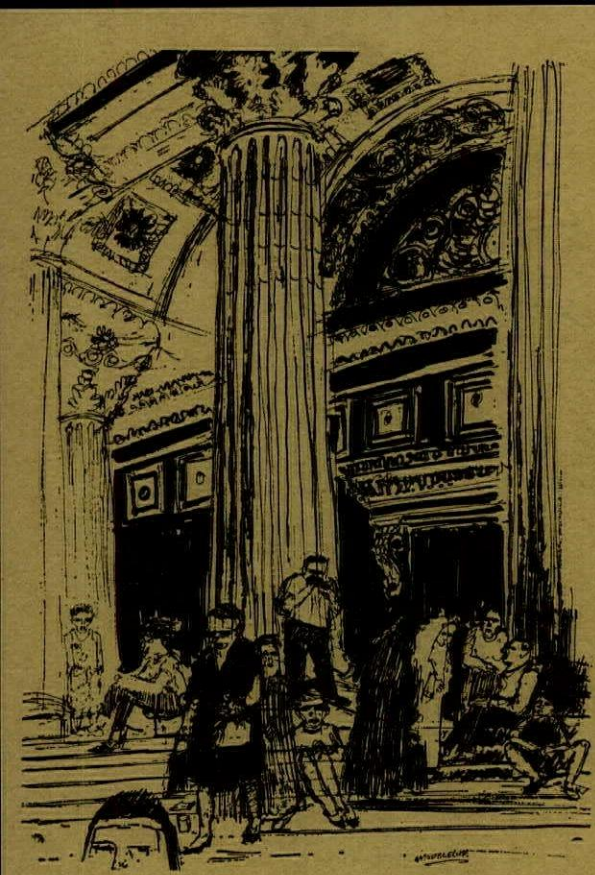
Geoffrey Leggett

Born in Newport, Monmouthshire, Geoffrey Leggett studied at Newport College of Art and the Royal College of Art. Now a freelance illustrator and printmaker, he has also taught graphics at Sutton School of Art and worked as a designer on several films. He is particularly interested in Victorian buildings and likes drawing architecture as environment—people using architecture and its effect on them. The drawings on these two pages were done in Paris. Leggett has just returned from a tour of German Baroque buildings.

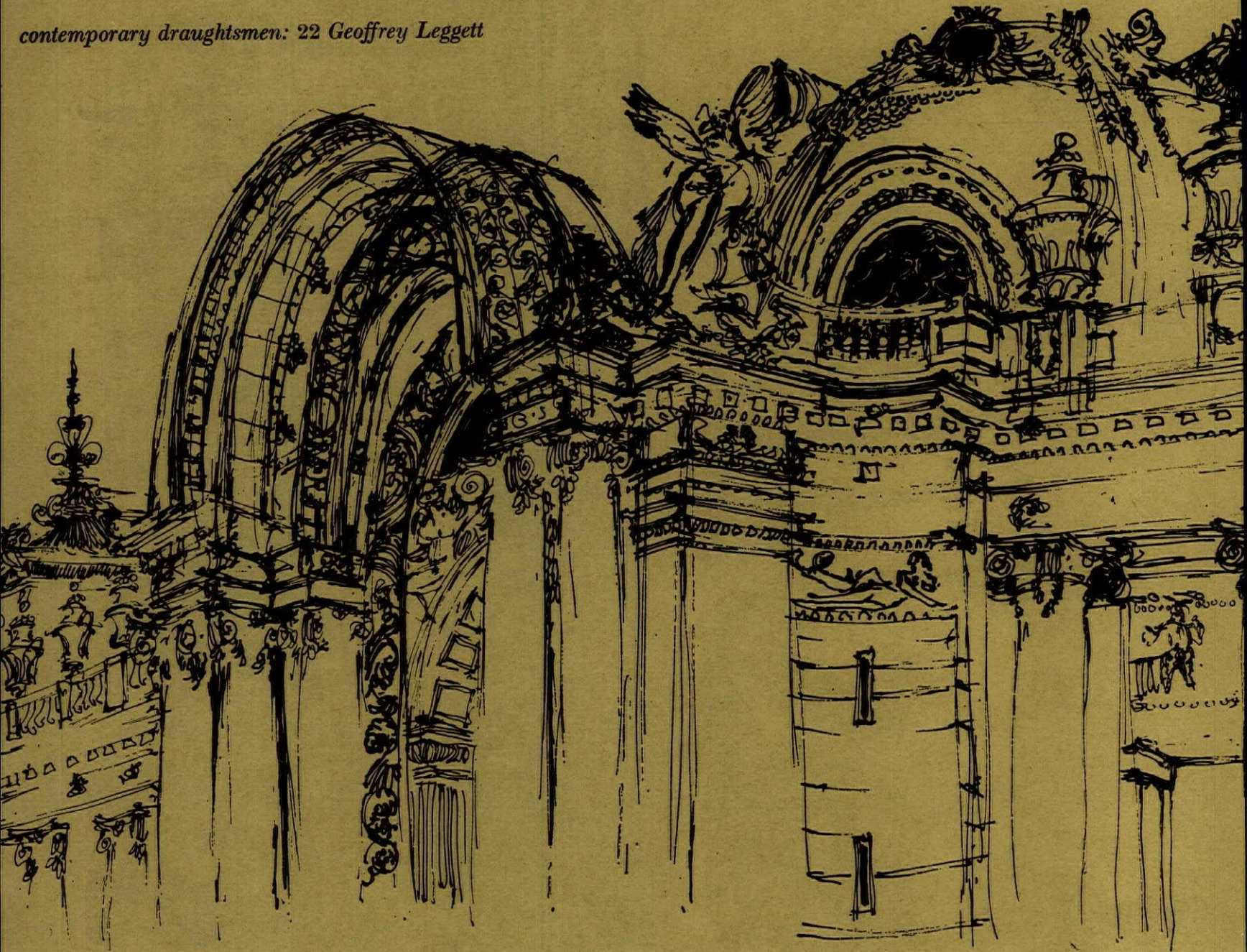
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contemporary draughtsmen: 22 Geoffrey Leggett





Pentillie Castle, near Saltash in Cornwall, which is about to be demolished, deserves recording for its nobly picturesque tower alone, 1, dominating a superb landscape on a bluff above the Tamar river. But it is also an exceedingly interesting building in the development of the Gothic Revival; for, within a landscape created by Humphry Repton, the house was remodelled by William Wilkins—father and son. The younger Wilkins (1778–1839) had already made his name as a pioneer of the purest and most sublime Grecian at the Grange (1809), Haileybury School (designed 1806) and Downing College, Cambridge (designed 1804). Yet his popular as well as architectural-historical fame has rested equally on his Gothic designs of the 1820s at Cambridge, at Trinity and Corpus Christi and, above all, at King's. The question is: when did the young Greek take to Gothic? In his Cambridge thesis of 1939 on Wilkins (at the RIBA and Cambridge Libraries), Gavin

Walkley has fixed on the Scottish house of Dalmeny, 2, designed in 1814 for Lord Rosebery, as the architect's first attempt at Tudor Gothic. But in recent years the claims of Pentillie to this position have been briefly suggested by Colvin, who dates it c.1811, and by Pevsner, who dates it c. 1805–10.

But the younger Wilkins can be easily confused with his father of the same name (1751–1815), who from his relative humble origin as an East Anglian builder-designer advanced to

the climax of his career at Donington Hall in Leicestershire, 3, built for Lord Moira, later Marquess of Hastings, in 1790. Its substantial Gothic details are similar in many respects to those of Pentillie. So it is possible that Pentillie is the last work of old Wilkins rather than the tentative first Gothic of young Wilkins, following his father. The attribution to the younger man is apparently due to the reference in Britton and Brayley's *Cornwall Illustrated* of 1831, but there is an even earlier



# PENTILLIE







4

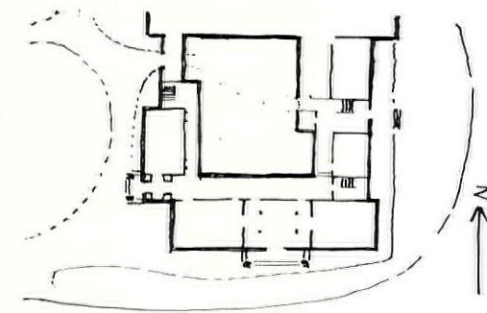
attribution to him (when the client was still alive) in Fortescue Hitchins's *History of Cornwall*, 1824.

The documentation that survives at the Castle is connected mainly with the landscape. In 1809 John Tillie Coryton commissioned Repton to provide a new setting for the small and unpretentious seventeenth-century house already on the site. In his Red Book, which survives, Repton 'takes the liberty' of showing various designs by his son, presumably John Adey Repton, for the improvement of the seventeenth-century house in addition to his own suggestions for the landscape. Perhaps not surprisingly the designs were not executed; for in Repton's own admission they were designed 'in view of the magnificence of the site' to emulate Windsor Castle. The elder Wilkins, if it was he who was called in instead, had co-operated with Repton before the latter in 1796 started on his partnership with Nash, and J. A. Repton had been in his office as a pupil. In 1810-11 designs seem to have been agreed. The old house, facing east, was dis-



5

guised with rough stucco and a battery of thin buttresses, 4, so as to make it the east wing of a new enclosed courtyard, 5 (from the original house two doorways of 1698 survive, Gothic Survival in style, 6, and possibly some medieval foundations). The new main wing faced south, with three big rooms: drawing room on the east, library beneath the central tower and dining room on the west. These were interconnected by double doors. Behind them, forming the inner face of the courtyard, ran a long spinal corridor, connecting the surprisingly mean main staircase attached to the old house on the east with the entrance porch, approached by a new drive, in the west wing. The corridor had a heightened perspective where the ceiling actually dropped towards the old house. The north side of the courtyard was occupied by the kitchens and service rooms. The demolition of 1968 (architects, Trenwith Wills & Wills) will, ironically



6 plan of Pentillie Castle







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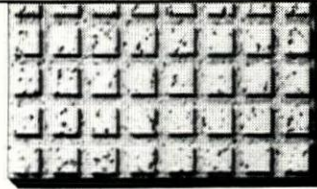
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enough, reduce the house to the original seventeenth-century east wing.

Seen at close range Pentillie is relatively modest and, for Wilkins, cheap, as it is faced in stucco and not stone. But the tower, oversailing the library in a manner slightly reminiscent of modern *pilotis*, is undeniably impressive, 7. At Donington the similar portecochère provides a loggia of even huger, and certainly nobler, proportions against a backcloth of similarly thin turrets, buttresses and single-light windows to each bay; though there it has the logic of sheltering an entrance rather than acting just as a sculptural feature in the landscape. The entrance hall in the west wing of Pentillie also relates closely to Donington; it is planned on a Greek cross with thin continuous shafts running into the vault, 9. But Pentillie is a distinct development in three ways: first, in its evidence of closer research into original Tudor sources as in the porch, 8; secondly, in the bolder projection and recession of forms, particularly on the entrance front; and thirdly, in its less forced silhouette. Bound at a later date into the front of the



9

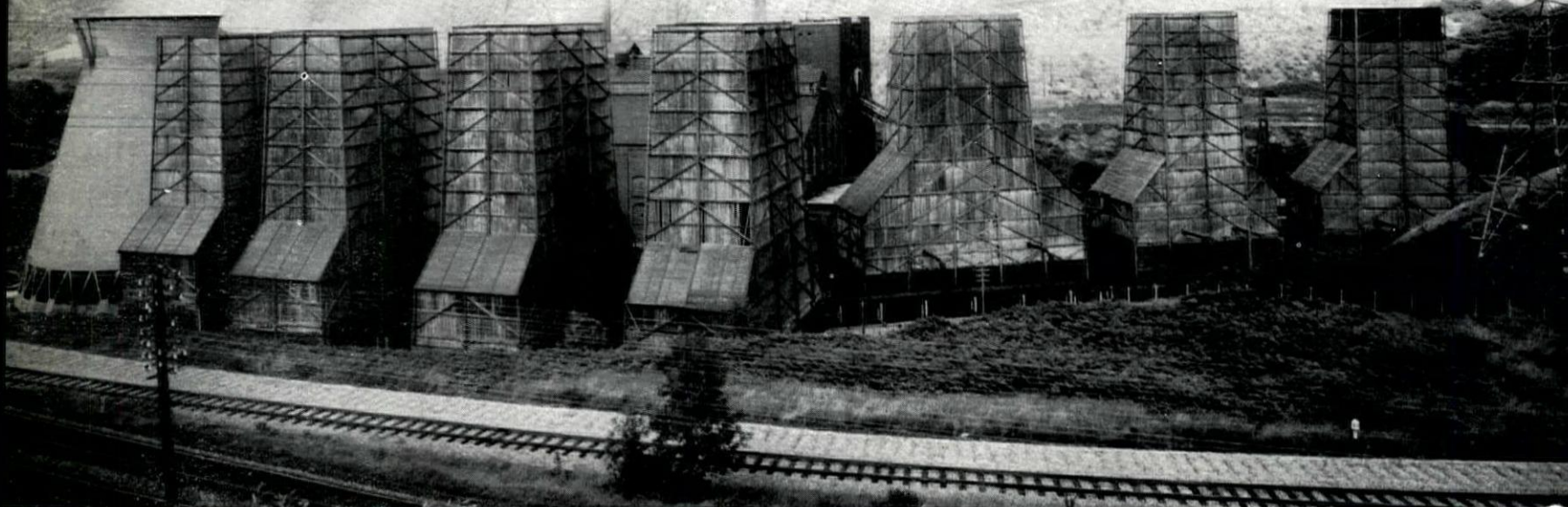
Pentillie Red Book are three elevations of the house that also suggest a more antiquarian approach to Gothic forms. The modifications that they contain were not all carried out, but their character, like that of the porch, for which there is a more elaborate design, suggests that they may be the work of the son, after the father's death in 1815. If this is so it would be sufficient to account for the younger man's name being associated with the house in 1824. The son, also possibly in a later intervention, is suggested by the restrained Grecian detailing of the library, 10 (the drawing room by contrast has much richer Early Victorian decoration by some other hand). It is possible that the exact chronology may be established in the estate papers, which have yet to be sorted out by the County Records Office.

WILLIAM POWELL WILKINS

*The author of the above article is a great-great-grandson of the younger Wilkins referred to. Editors.*



# WOODEN COOLING TOWERS



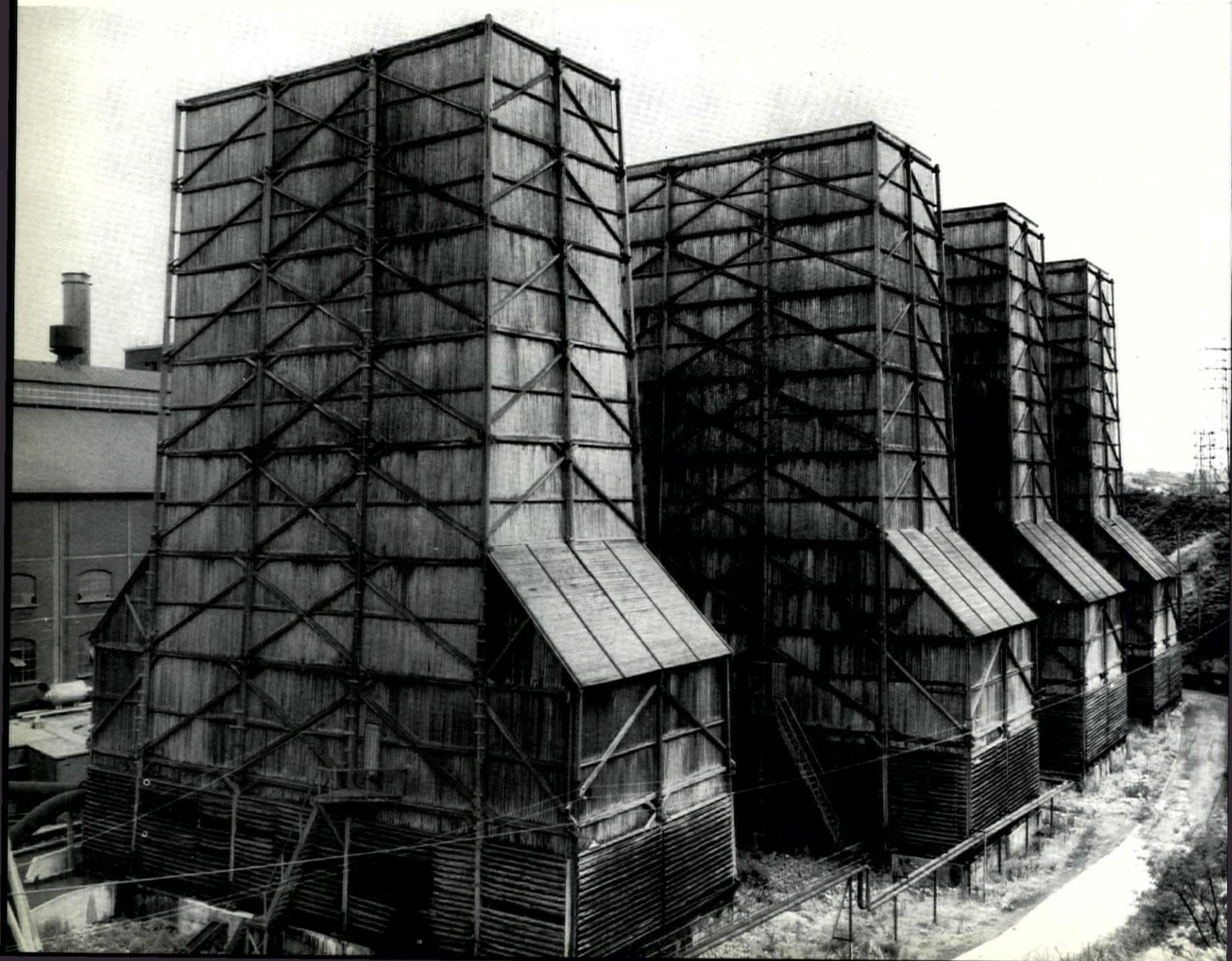
One of the subjects that Bernhard Becher, the German industrial archaeologist, photographed when he and his wife toured British industrial

areas last year (see AR February 1968: Pit-head Archaeology) was the early timber-framed type of cooling-tower of which a

number can still be found in operation although new ones are now always of the drum-shaped concrete type.

1

2





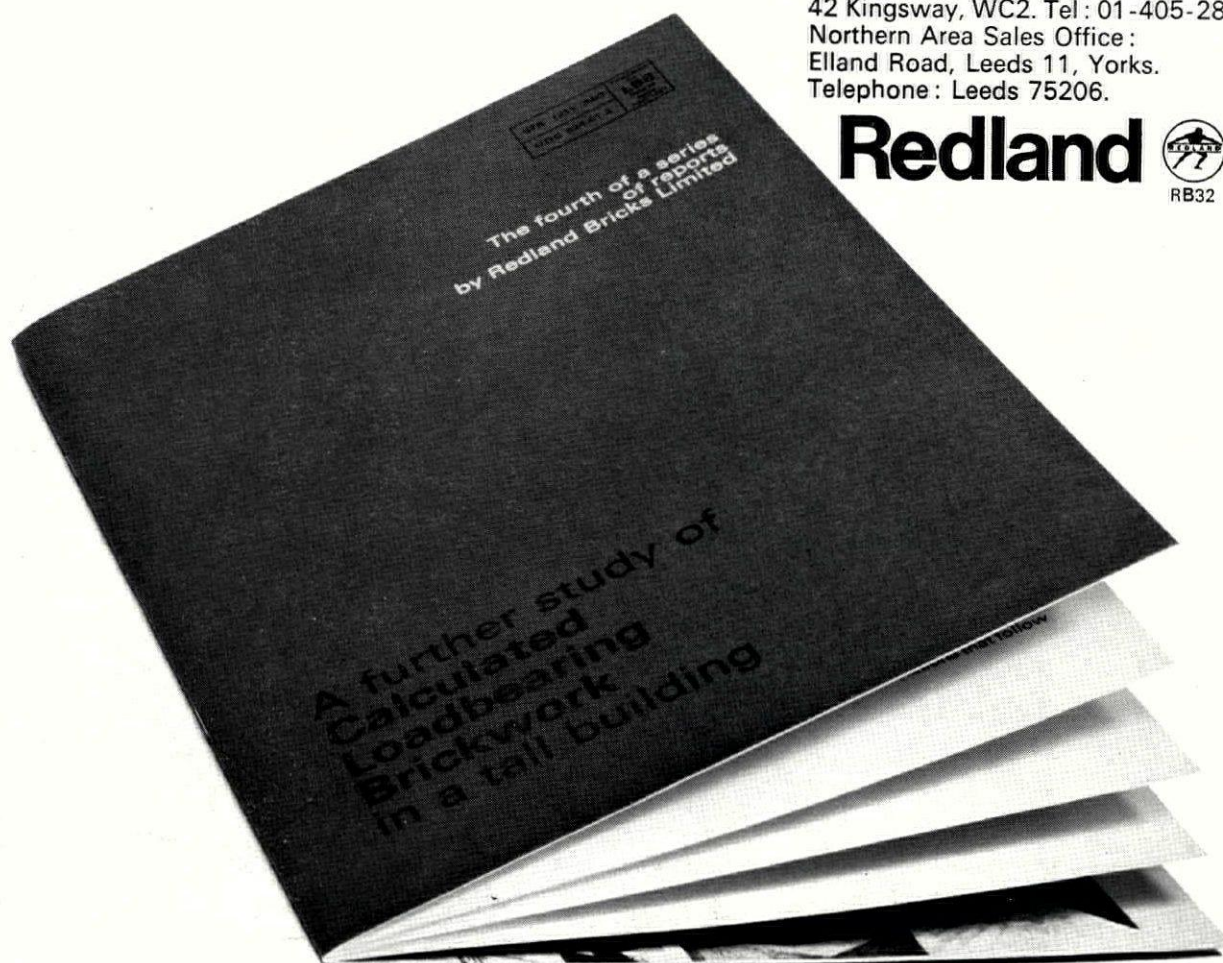
# Have you seen our fifth\* report on calculated brickwork?

We have now completed a further study in the area of calculated loadbearing brickwork. There is much in it that has great significance in tall building projects. Redland, as always, are well to the fore in the development and manufacturing of bricks for high rise building. This latest addition to our list of technical publications is of great significance to architects and the building industry in their continuing search for improved design at satisfactory cost. The number of this publication is LB8. Please write for it.

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RB32



\*Five includes the illustrated report on Baylis Road.

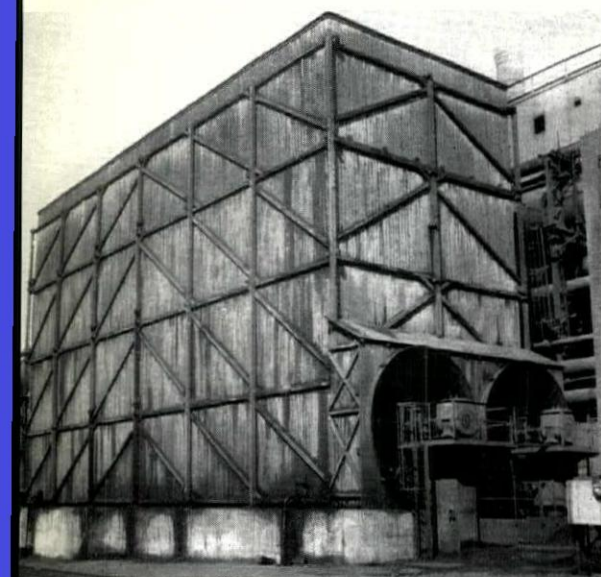


continued from page 472]

Reproduced herewith are some examples of wooden cooling-towers, photographed by Mr. Becher, mostly in South Wales. Cooling-towers are to be found at power stations, mines, ironworks and coking plants, their purpose being to render water that has been used for cooling—and thus become warm—suitable for re-use. They replaced the still earlier cooling *ponds*, since towers had the advantage of cooling more water in a shorter time and occupying a smaller area of ground. The process is that hot water returning from the condenser is introduced into the tower about 20–25 ft. above the cooling water-tank and uniformly distributed over the whole cross-section of the tower by means of an ingenious system of grooves. In the case of the wooden towers, an arrangement of wooden laths, staggered in relation to each other and set out in fin-fashion, converts the water to



3

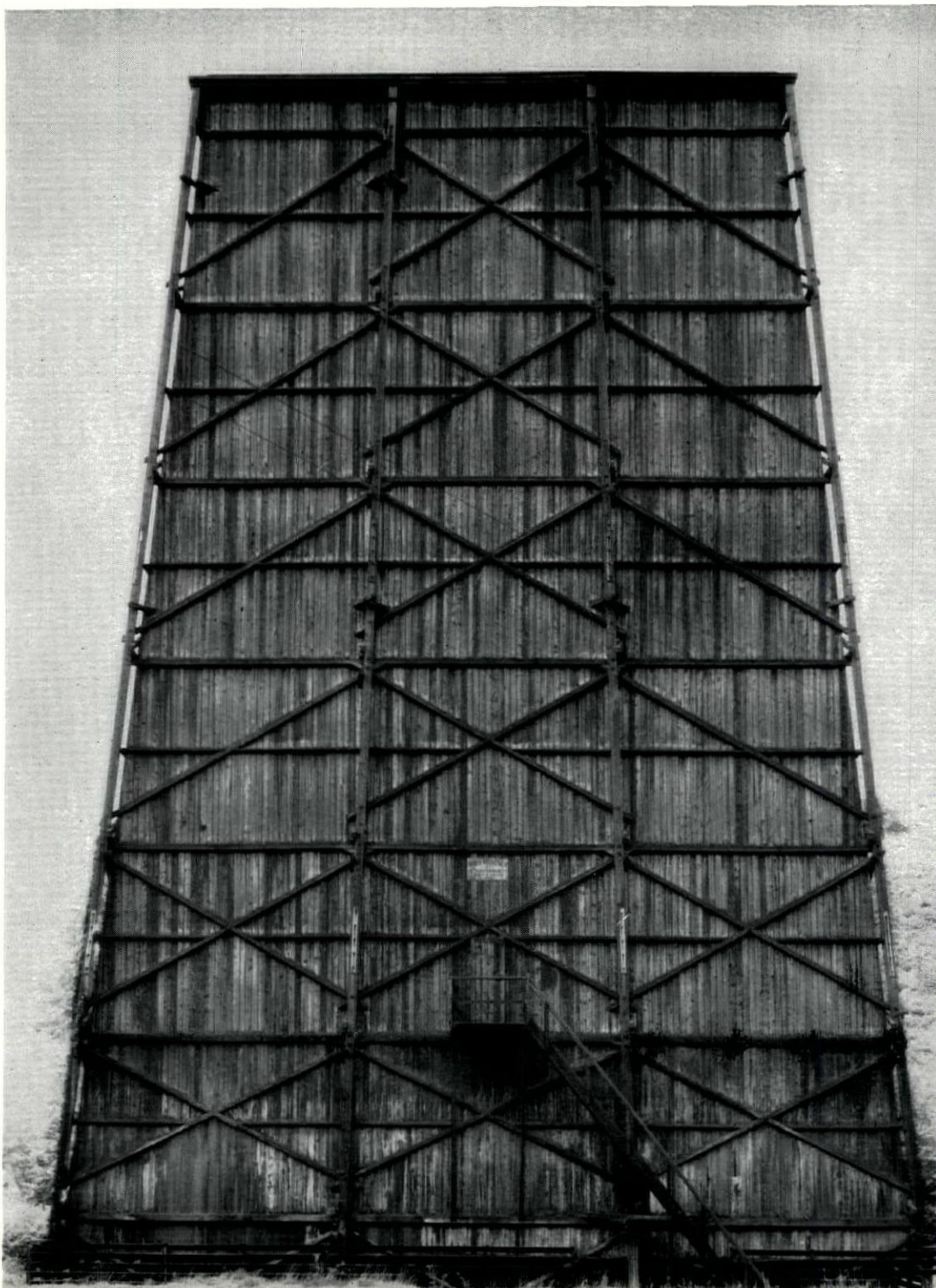


4

fine rain which, by retarding its fall, is kept in contact with the air for as long as possible. The cooling process is assisted by the rising heat—a mixture of air and water—drawing cold air upwards through the lower open part of the tower. The cooled water is collected in a tank beneath the tower. Most towers use natural draught, but sometimes the draught is increased by mechanical fans, which enable the same quantity of water to be cooled in a tower of smaller area and height, and have the additional advantage of making the process independent of temperature fluctuations outside.

Wooden cooling towers almost all follow the same pattern: a rectangular structure, cross-braced with the frame exposed on the outside and filled in with wood boarding. The structure is widened at the base, where there is usually a lean-to roof. The photographs show: 1, 2, natural draught cooling towers at Bargoed power station, South Wales, built between 1912 and 1920 (an example of the more modern type of concrete cooling-tower can be seen at the end of the line of wooden towers); 3, natural draught tower at Cwm coking-plant, near Pontypridd, South Wales, built about 1925; 4, cooling tower with elec-

5





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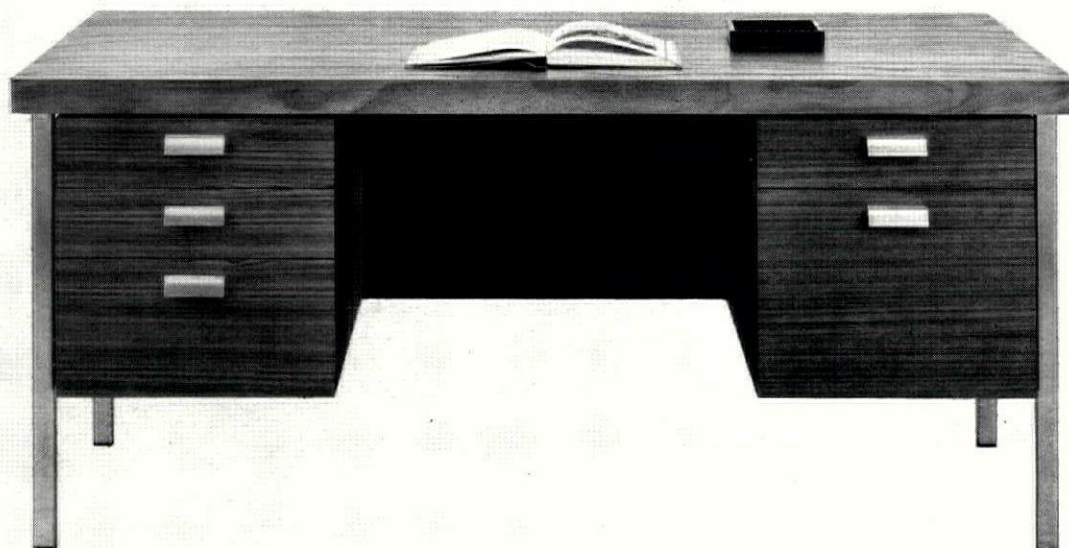
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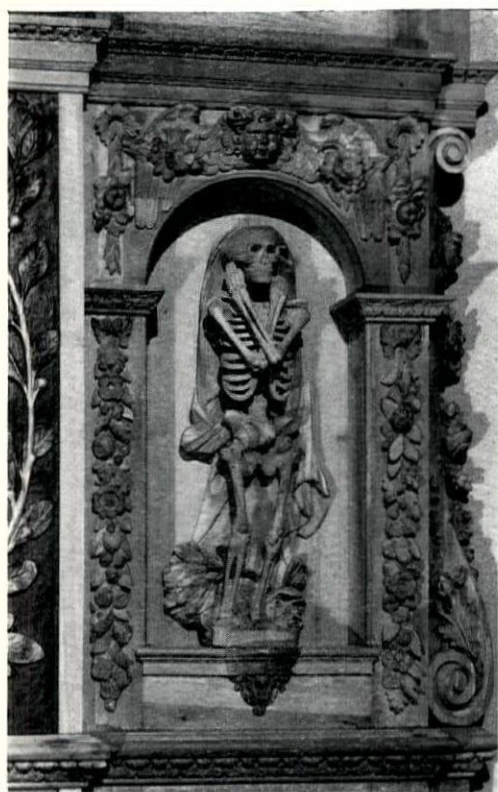
trically driven forced draught in the Ebbw Vale ironworks, South Wales, built about 1930; 5, natural draught cooling tower at a

power station at Lydney, Forest of Dean, built in 1924.

These wooden towers were first built (in Germany) in 1894. They require constant atten-

tion and repair, which have become increasingly uneconomic as the cost of labour has risen. Concrete cooling towers have finally replaced them since about 1945.

# CEDAR MEMORIAL



1

A rare and unusually successful work of restoration has lately been completed at Therfield, Hertfordshire. It is the Turner memorial of 1677 in the parish church, perhaps the earliest known use of cedar in England. Dr. Margaret Whinney has described it as 'unique, for though a very small number of post-Reformation monuments were made in wood, I know of none which is anywhere near this in quality.'

The memorial is to Ann Turner, wife of a rector of Therfield, Francis Turner. Besides its material, its iconography is also unusual: the figure of Time seldom appeared on monuments before the eighteenth century. The only examples as early as this are in Belgium.

The restoration has been done by H. and K. Mabbitt, woodcarvers, of Colchester under the direction of Donald Insall and Associates. The cost was met by grants from the Pilgrim Trust, the Leche Trust and the Morris Bequest. A scrapbook of early photographs found in the parish records provided essential and accurate evidence of its original appearance. See frontispiece on page 412.



2



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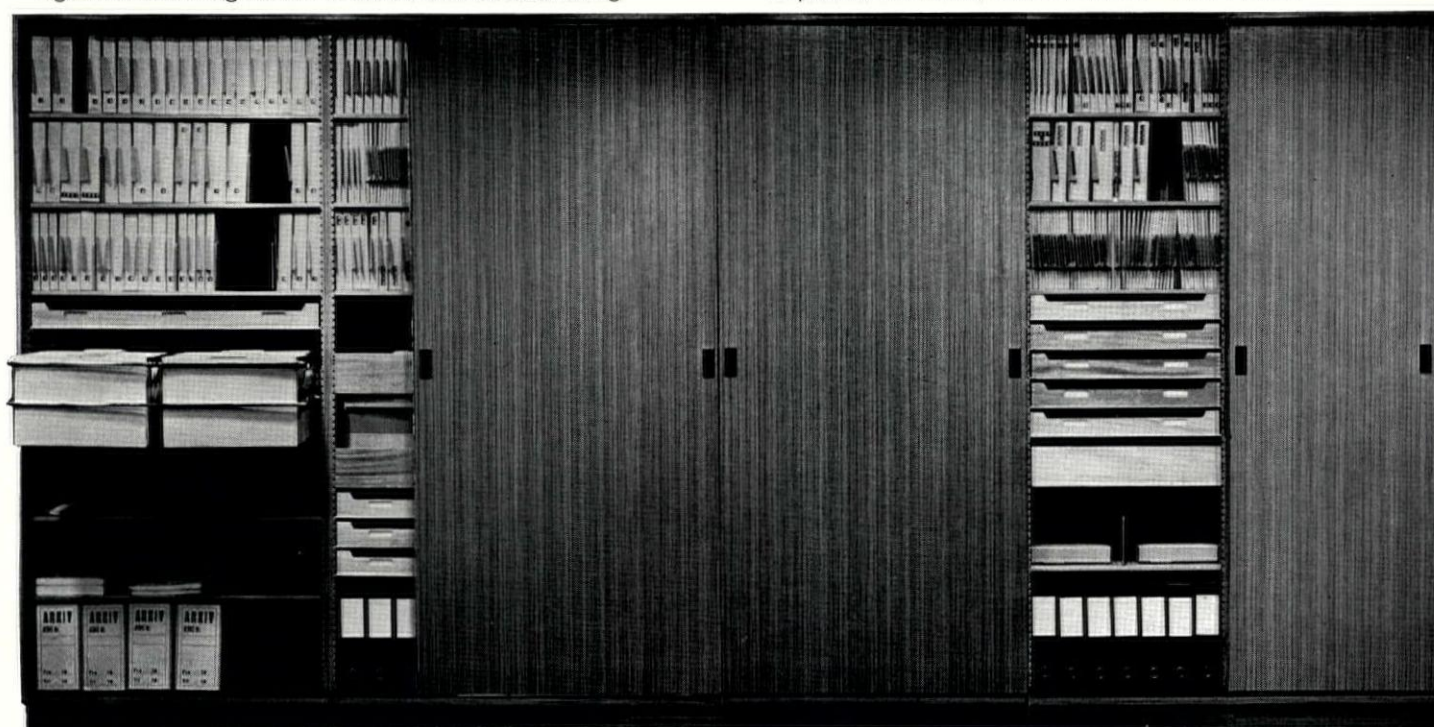
They can be built to form partitioning, placed against existing walls or used as free standing

units, they are equipped with **Intercraft's** own suspended sliding door system and built-in levelling device for any uneven floor surface.

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# The Industry

## Large roofing units

Broderick Structures, a subsidiary of Imperial Metal Industries, have recently developed Spandry, a pre-fabricated roofing unit which can be made in units from 8 ft. by 4 ft. up to 20 ft. by 10 ft., by increments of 2 ft., with a preferred size of 8 ft. by 16 ft. The unit is based on a softwood grid carrying a chipboard or flaxboard deck, factory faced with a felt or glass-fibre based underlay. It is finished on site with built-up felt roofing or copper based felt, and the supporting structure should consist of steel or concrete beams at least 5 in. wide running with the length of the unit. The depth of the units ranges from 5 in. to 7 in. according to size, not including furring pieces to provide the necessary falls, which must be not less than 2 in. in 10 ft. The units can be made with openings, complete with kerbs, to accommodate rooflights.

Broderick Structures Ltd., Hermitage Road, Woking, Surrey.

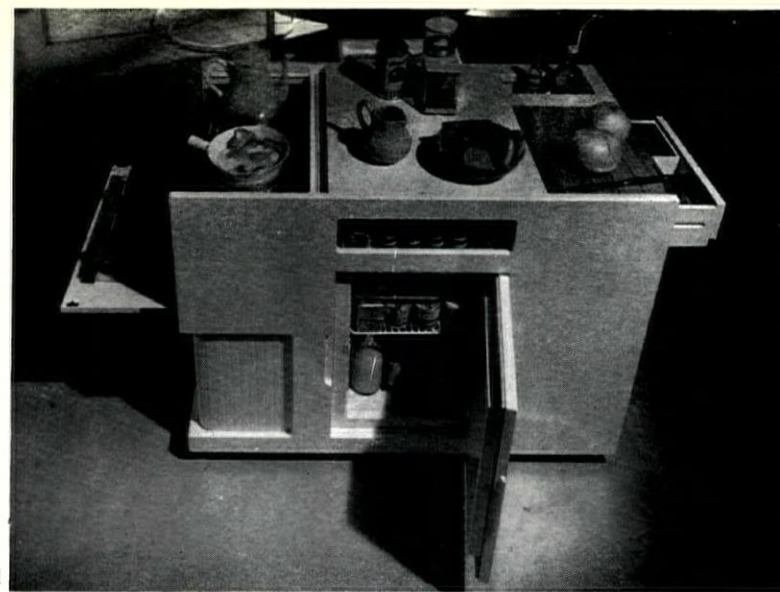
## Cast-iron boilers

Three years ago Pottertons started a thorough survey of the boiler market and came to the conclusion that while the market was largely traditional, new designs were required for gas- and oil-fired types as many of the existing models were very largely based on solid fuel designs with a minimum of adaptation for burning other fuels. The company has introduced several new types of boiler to replace the older models and now has an industrial range of five types to provide outputs from  $\frac{1}{2}$  million to 12 million B.t.u. per hour, for use with gas or oil, and, in the two larger sizes, with solid fuel and automatic stokers. It is also Potterton's policy to supply not only the boilers but also as much material and ancillary equipment as possible, particularly burners and fans. There is also a full and up-to-date service section to carry out erection, commission and maintenance contracts throughout the life of the boilers.

Thomas Potterton Ltd., Commercial Boiler Division, Hardwick's Way, London, SW18.

## Miniature kitchen

A mobile 'capsule kitchen,' 1, designed by John Wright and Jean Schofield, and built by the Furniture and Joinery Division of Brooke Marine, was on view recently at the Design Centre. Mounted on casters, it is about the same size as a single drainer sink unit and contains a small Electrolux refrigerator and a Belling Rotadine cooker, which has a single large oval hot plate with an oven and grill below. A pull-out top over the cooker can be closed to give extra work top area. A teak bread board is recessed into the top, and the complete unit is finished in a melamine faced material. Both ends of the unit have large cupboards behind tambour shutters and the total storage capacity is 4.4 cu. ft. There is also a cutlery drawer with a removable baize-lined inset. Apart from a recess for bottle storage the whole of the top can be used as a food preparation area and the whole unit can be wheeled from room to room and is ready for use as soon as it is plugged into a standard 13-amp. socket. It is intended for use in small flats or weekend cottages where there is a prime need to save space. The present version is a working prototype but it is expected that the final price will probably be under £100. Furniture and Joinery Division, Brooke-Marine Ltd., Lowestoft.



1



2

## Corrosion resistant steel

Cor-Ten is a high strength low alloy steel which has a high resistance to corrosion and does not need painting. It has been used for some years in America and is now available in this country, where its most recent use is on a multi-storey bus station and car park in Doncaster, 2. It is used as a covering for the verticals of the framework and also for horizontal

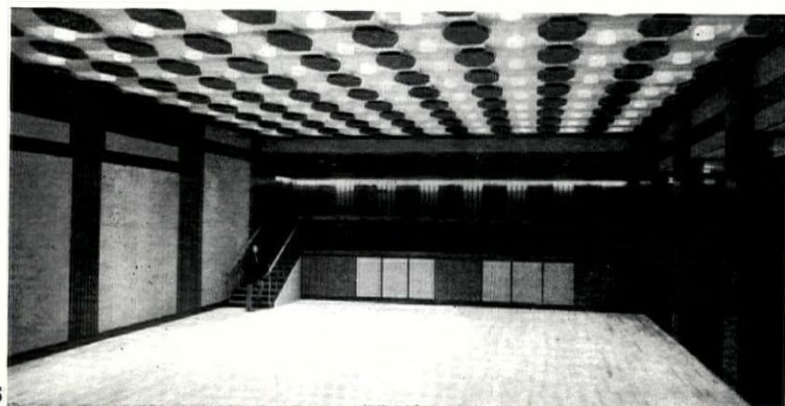
members to absorb the impact of any cars which may over-run the parking area, and there is also a Cor-Ten handrail on each floor. During the first two years of exposure the steel oxidises to the familiar rusty red colour, but this coating does not peel off and ultimately changes to a dark brown. If the oxide layer is scratched a new coating forms over the exposed steel. During



3



4



5

this weathering process rain running off the steel will stain the adjacent surfaces, particularly concrete, and the building must be designed to avoid run off on to light coloured or matt surfaces. Rivets or fixing bolts should also be in Cor-Ten. Price is £16 to £19 per ton more than mild steel, but owing to the greater strength of Cor-Ten lighter sections can be used, and the freedom from all painting costs should also be taken into account.

Steel Peech & Tozer Ltd, PO Box 50, The Ickles, Rotherham.

## Standardized balustrading

Starkie Gardner's Secural balustrading, 3, is assembled from a series of standardized components, and can be produced in curved as well as straight runs, and also, as the photograph shows, for use on staircases. Except for the uprights, which are steel-cored aluminium, the components are extruded aluminium sections, anodized to choice, or in Kalcolor. Top and bottom rails are pierced to take the uprights, which are located by stainless steel staples. Handrails may be solid or hollow sections and the standard rail height is 36 in. plus the height of the bottom rail from floor level, though other heights can be made to order. Supports are normally at 50 in. centres with a baluster spacing of 5 in., though here again other spacings can be provided. Instead of the balusters perspex or glass infilling panels can be used with channel section extrusions under the handrail. Pedestrian guard rails can also be supplied to meet the requirements of BS 3049.

J. Starkie Gardner Ltd., Merton Road, London, SW18.

## New gas boiler

Smith and Wellstood, perhaps best known for solid fuel cookers and room heaters, have now introduced two gas fired boilers, 4, with outputs of 50,000 and 75,000 Btu/hr. They are for use on town or natural gas and are approved by the Gas Council. There is no down rating on conversion to natural gas and the makers claim that there should be no need for maintenance beyond the recommended twice-a-year servicing. There is a thermostat on the boiler but provision is also made for control by a room thermostat. The service selector panel has the usual clock to give two on and off timings in the 24 hours for hot water or central heating, or both. Both boilers are available with or without small bore circulating pumps or without the enamelled casing if they are to be built in.

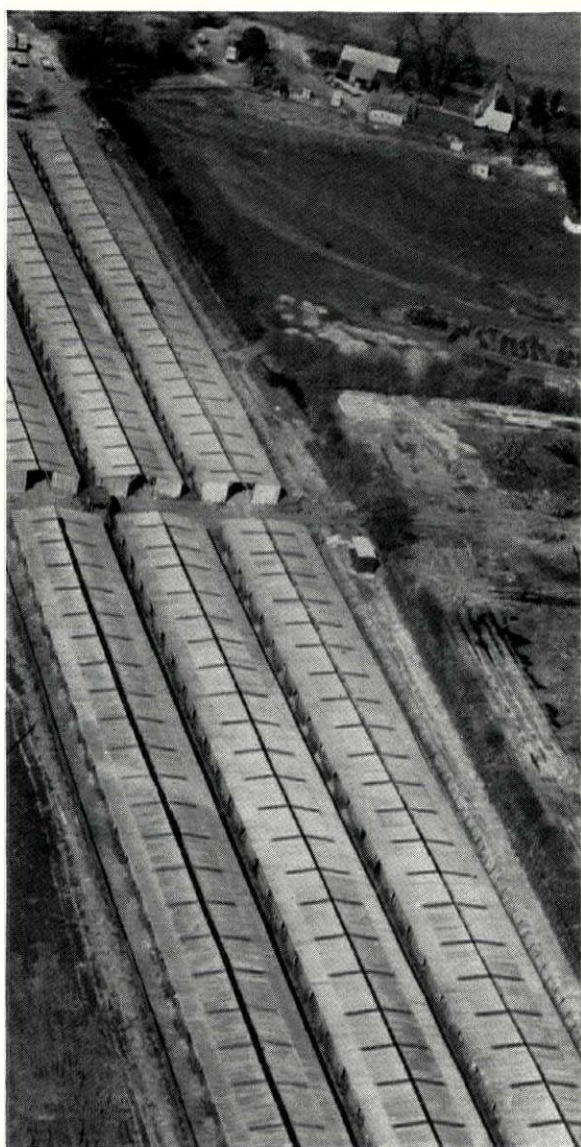
Smith and Wellstood (Mfg.) Ltd., Bonnybridge, Stirlingshire.

## Plastics for lighting

The Great Hall of Barclay's Bank head office, 5, has a suspended ceiling of 1,600 sq. ft. which incorporates coffered panels made by Brensal Plastics from glass fibre laminates bonded with a new fire-retardant polyester resin developed by BIP Chemicals, a Turner & Newall company. The panels have a Class I spread of flame rating to BS 476 part I and thus meet GLC building regulations. They are lighter in weight and easier to fabricate than any other Class I material suitable for large decorative panels and have a total weight of about 18 cwt., about  $\frac{1}{3}$  the weight of similar panels in plaster. The ceiling forms the underside of a raked auditorium floor which weighs some 22 tons. Seats for 270 people are attached to the upper side of the structure and the hall can be con-

[continued on page 480]





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**The Architectural Press**, 9 Queen Anne's Gate, London, SW1

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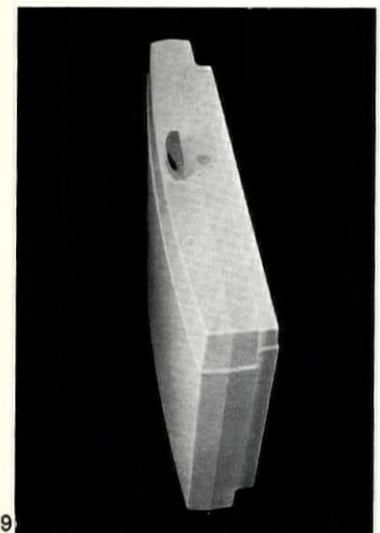
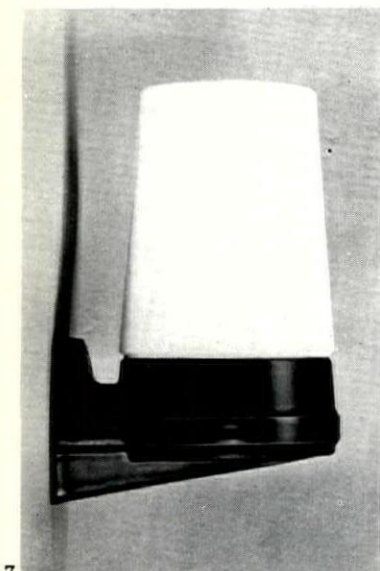
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having been set up by its occupant in slightly under five minutes. The chair consists of only six parts, seat, back, two sides and a pair of cushions. There is a table with only three parts made up with clips and screws, the chairs, with arms or without, needing only four bolts. Upholstery is polyether foam, 4 in. thick for the seat and 3 in. for the back with zipped covers in a linen-nylon mix by Parker-Knoll Textiles. Chairs and table are made of 15 mm. Finnish birch in a semi gloss white, or can be supplied unpainted. The chair illustrated costs £16 10s. unpainted, or £2 more in white.

Chilternhill Furniture, PO Box 35, Amersham, Bucks.

#### Light fittings

Frederick Thomas & Co. have introduced a new range of porcelain light fittings for use in hospitals, bathrooms or any areas where resistance to dust or steam is needed. Diffusers are in glossy opal glass and the porcelain bases are made in a choice of five colours. The fitting shown, 7, is 7½ in. high overall and will take a 60 watt lamp. All units have rubber gaskets between the glass and the porcelain and each fitting has a detachable plate for fitting on the standard conduit box to simplify wiring, though the fittings can also be fixed without the plate. Cleaning can be done without any likelihood of water reaching the electrical connections.

Frederick Thomas & Co. Ltd., Everton Buildings, Stanhope Street, London NW1.

#### Obscured glass

A patterned glass called Deep Flemish, 8, is now being marketed by Pilkingtons. It is a high diffusion and low obscuration glass with a deep antique rippled surface and, apart from windows, it is recommended for doors, partitions and any areas which can benefit from borrowed light. It is made in a thickness of ¾ in. and in sizes up to a maximum of 84 in. by 52 in., and has a light transmission of 84 per cent. Price is about 8s. per sq. ft.

Pilkington Brothers Ltd., St. Helens, Lancs.

#### Flush panel cistern

Fordham's flush panel cistern, 9, has a capacity of 2 gallons and a projection from the wall face of only 4½ in. The shell and cover of the cistern are in styrene with a high gloss finish and the syphon and ball float have been specially designed to fit into the narrow space available. Operation is by the push button on the cover though a foot pedal can be provided as an alternative.

Fordham Pressings Ltd., Melbourne Works, Dudley Road, Wolverhampton.

#### Fences and gates

Holmes of Wragby have a remarkably comprehensive range of fences and gates from the traditional Lincolnshire fence, with three or four rails of ash and posts of oak to ranch type fencing screens, or temporary hurdles for farmers. Traditional fencing materials are used, such as oak, ash, chestnut and selected softwoods, but it is also possible to supply West African hardwoods. Prices start at about 6s. 7d. a yard for a Lincolnshire fence, and 15s. 9d. for a fence with softwood rails scarf cut and set in morticed oak posts at 9 ft. 6 in. centres. The firm also supplies fencing components and several different types of gate as well as a standard stile 4 ft. 6 in. wide for 63s. There is a leaflet which gives a useful price guide for the various types of fence and components.

Holmes (Wragby) Ltd., Wragby, Lincs.

## Contractors

**Library, Edinburgh University. Architects:** Sir Basil Spence, Glover and Ferguson. **General contractor:** Gilbert Ash (Scotland) Ltd. **Sub-contractors:** **Joiner work (main building):** Dick & Benzie Ltd. **Joiner work (penthouse):** Hamilton & Forbes Ltd. **Windows:** Crittall Manufacturing Co. **Air-conditioning:** Midland Heating Ventilation Co. **Electrical work:** B. French Ltd. **Suspended ceilings:** R. F. Morrison & Co. **Lifts:** A. & P. Stevens Ltd. **Floor screeds:** Isocrete Co. **Plumber:** John Clephane & Sons. **Tiler:** Toffolo Jackson & Co. **Painterwork:** Rolland Decorators Ltd. **Floor finishes:** Rowan & Boden Ltd. **Granite work:** John F. Shackleton & Son Ltd. **Metal work:** Buceleuch Light Engineering Ltd.; Thomas Hadden. **Portland stone work:** Stone Firms Ltd. **Glazier:** A. S. Wright & Co. **Roofing:** Amalgamated Asphalt Co. **York stone work:** S. Marshall & Sons Ltd. **Balcony finishes:** Paropa (Scotland) Ltd. **Precast concrete work:** The Falkirk Concrete Co.; The Scottish Construction Co. **Book stacks:** Luxfer Building Products Ltd. **Kitchen equipment:** The Eclipse Copper Co. of York Ltd. **Furniture:** Scandinavian Furnishings; C. & J. Brown of Newington; Alba Furniture; R. L. Rae Ltd.; Heggie & Aitchison Ltd.; Hille of London Ltd.; Conran Contracts Ltd.; Meredew Contracts Ltd. **Carpet tiles:** Van Heughton Brothers Ltd. **Nylon carpets:** Aldred Morris Furnishings Ltd. **Ironmongery:** Rycofts Ltd. **Fire doors:** Haskins Ltd.; Mather & Platt Ltd. **Spiral stair:** Lion Foundry. **Automatic doors:** Unicost Auto Doors Ltd. **Roller shutters:** Roller Shutters Ltd.; J. Taylor (System) Ltd. **Sanitary fittings:** Adamsez Ltd. **Double glazing:** William Mathison & Co.; Plyglass Ltd. **Ribbed rubber flooring:** Pirelli. **Dry risers:** Merryweather & Sons Ltd.; British Gypsum. **Teak:** William Malinsson & Sons Ltd. **Sprayed asbestos:** J. W. Roberts. **Notices:** Formica Ltd. **Locks:** Yale Locks Hardware Ltd. **Laminated plastic:** Perstop Products Ltd. **Fibreglass ducting:** Van Den Bosch; Centravacs; Trane Ltd. **Service controls:** Satchwell Control Systems. **Insulation:** W. Kenyon & Sons. **Quartzite flooring:** Altazite Ltd. **Dishwashers:** Dawson Brothers/MMP Ltd. **Ventilation grilles:** Waterloo Grille Co. **Mosaic:** Dennis M. Williams. **Light switches, electrical sockets:** Wandsworth Electrical Manufacturing Co. **Woodwork slabs:** Charles Tennant. **Duct sealing:** R. A. Brand Co. **Ceiling tiles:** Armstrong Cork Co.; Powell Duffryn Timber Industries Ltd. **Rainwater outlets:** Fulbora Ltd. **Hand driers:** J. Broughton & Son. **Manhole covers:** Broads Manufacturing Co. **Linoleum:** Nairn Williamson Ltd. **Hardwood finishes:** Hadfield (Merton) Ltd. **Beech:** Park Dobson & Co. **Veneered doors:** Robert Glen & Son. **Plant room floors:** Fisher Ludlow Ltd. **Time switches:** Venner Ltd. **Facing bricks:** James White Ltd. **Fire detection:** The Minerva Detector Co. **Switchgear:** Sanders Building Ltd. **Top soil:** Turf Landscape Development Co. **Twinlock lateral filing units:** Geo. Stewart Co.

**Faculty of Arts and Social Sciences, Edinburgh University (Hume Tower). Architects:** Robert Matthew, Johnson-Marshall & Partners. **General contractor:** Crudens Ltd. **Sub-contractors:** **Electrical work:** John Croad (Electrical Contractors) Ltd. **Slate cladding and cills:** The Bow Slate & Enamel Co. **Aluminium windows:** John Thompson Beacon Windows Ltd. **Lifts:** J. & E. Hall Ltd. **Rubber flooring:** R. J. Morpeth (Contracts) Ltd. **Plasterwork:** Peter Walker & Son Ltd. **Glazing:** Cunningham, Dick-

son & Walker Ltd. **Maintenance gantry:** Palmers Travelling Cradle & Scaffold Co. **Painterwork:** Rolland Decorators Ltd. **Ventilation work:** G. N. Haden & Sons Ltd. **Acoustic ceilings:** Stilsound Insulation Ltd. **Asphalt:** Limmer & Trinidad Lake Asphalt Co. **Tiling:** Carter Tiling, Edinburgh Ltd. **Lightning conductors:** Furse Ltd. **Scaffolding:** Scaffolding (GB) Ltd. **Smithwork:** Fencing & Smithcraft Ltd., Wm. Carnie Ltd. **Bituminous felt tanking:** Wm. Briggs & Sons Ltd. **Tarmac:** W. G. Walker & Sons. **Hardwood flooring:** A. M. MacDougall & Sons Ltd. **Thermoplastic flooring:** Semtex Ltd. **Handrails:** Railing & Polishing Ltd. **Trofdek roofing:** John Weston & Co. **York stone cladding:** Pawson Bros. **Pre-cast pavings, cills:** Sterling Pre-cast Ltd. **Ironmongery:** Bell-Donaldson & Co. **Fixed double-glazing:** The Hollow Seal Glass Co. **Furnishings:** Findlater Smith Ltd.

**Faculty of Arts and Social Sciences, Edinburgh University (Appleton Tower). Architects:** Alan Reiach, Eric Hall and Partners. **General contractor:** Wight Construction. **Foundation contract:** Crudens Ltd. **Sub-contractors:** **Joinery:** Nathaniel Grieve. **Plumber work:** P. Blackhall Ltd. **Plasterwork:** Peter Walker & Sons (Edin.) Ltd. **Screeding:** Isocrete Co. **Tiled flooring:** Thos. Graham & Sons Ltd. **Glazier work:** The Northern Glazing Co. **Metalwork:** Barnet & Morten Ltd. **Asphalt work:** Limmer & Trinidad Lake Asphalt Co. **Steelwork:** Bone, Connel and Baxters. **Lifts:** A. & P. Steven. **Built-in furniture:** Alba Furniture. **Mechanical ventilation:** G. N. Haden & Sons Ltd. **Electrical work:** B. French Ltd. **Asphalt tanking:** W. G. Walker & Sons (Edin.) Ltd.

**Britannic House, Moor Lane, London: special interior areas. Architects:** Design Research Unit. **RESTAURANT AND DINING ROOM AREA: Section designer:** Ronald Riggs. **Contractor:** George Parnall & Co. **Furniture:** Westnoffa (London) Ltd.; G. N. Burgess & Co.; LM Furniture Ltd.; Intereraft Designs Ltd.; George Stone Furniture Ltd.; Meredew Contracts Ltd.; Holloway Brothers Ltd. **EXHIBITION HALL AND CONFERENCE SUITE: Section designer:** Patrick Reardon. **Contractor:** George Parnall & Co. **Ceilings:** Clark & Fenn. **Furniture:** Heals Contracts Ltd.; Hille of London Ltd.; Mines & West Ltd.; Design Progression Ltd. **Rugs (entrance hall and exhibition hall):** S. J. Stockwell & Co. **Ashtrays (conference suite):** Ingleheart Metcalf Design Consultants Ltd. **DIRECTORS' SUITE: Section designer:** William Furbisher. **Contractor:** Courtney, Pope Ltd. **Ceilings:** Clark & Fenn Ltd. **Marble:** Walter W. Jenkins & Co. **Furniture:** Meredew Contracts; George Parnall & Co.; H. H. Martyn Ltd.; Druce & Co.; Westnoffa (London) Ltd.; Heals Contracts Ltd.; HK Furniture Ltd.; Hille of London Ltd. **GENERAL: Door furniture:** G. & S. Allgood Ltd. **Light fittings:** Allom Heffer & Co. **Rotaflex. Chandeliers:** Venini. **Carpets:** Taylor & Marr. **Curtain fabrics:** Sekers. **Tamesa Fabrics Ltd. Plant containers:** Ceramic Consultants. **Pedestal ashtrays:** Charles Spreckley & Co.

**Shopping Centre, Chandler's Ford, Hants. Architects:** Julian Keable and Partners (now part of TRIAD). **General contractors:** Brazier & Son Ltd. **Sub-contractors:** **Plastering and screeding:** A. C. V. Telling (Southern) Ltd. **Floor coverings, asphalt and felt roofing:** Limmer & Trinidad Co. **Glazing:** James Clark & Eaton Ltd. **Electrical:** K. Blair Ltd. **Decorations:** P. J. Hartel (Southern) Ltd. **Road surfacing:** Roads Reconstruction Ltd. **Fencing:** Durafencing (London) Ltd.

continued from page 478]

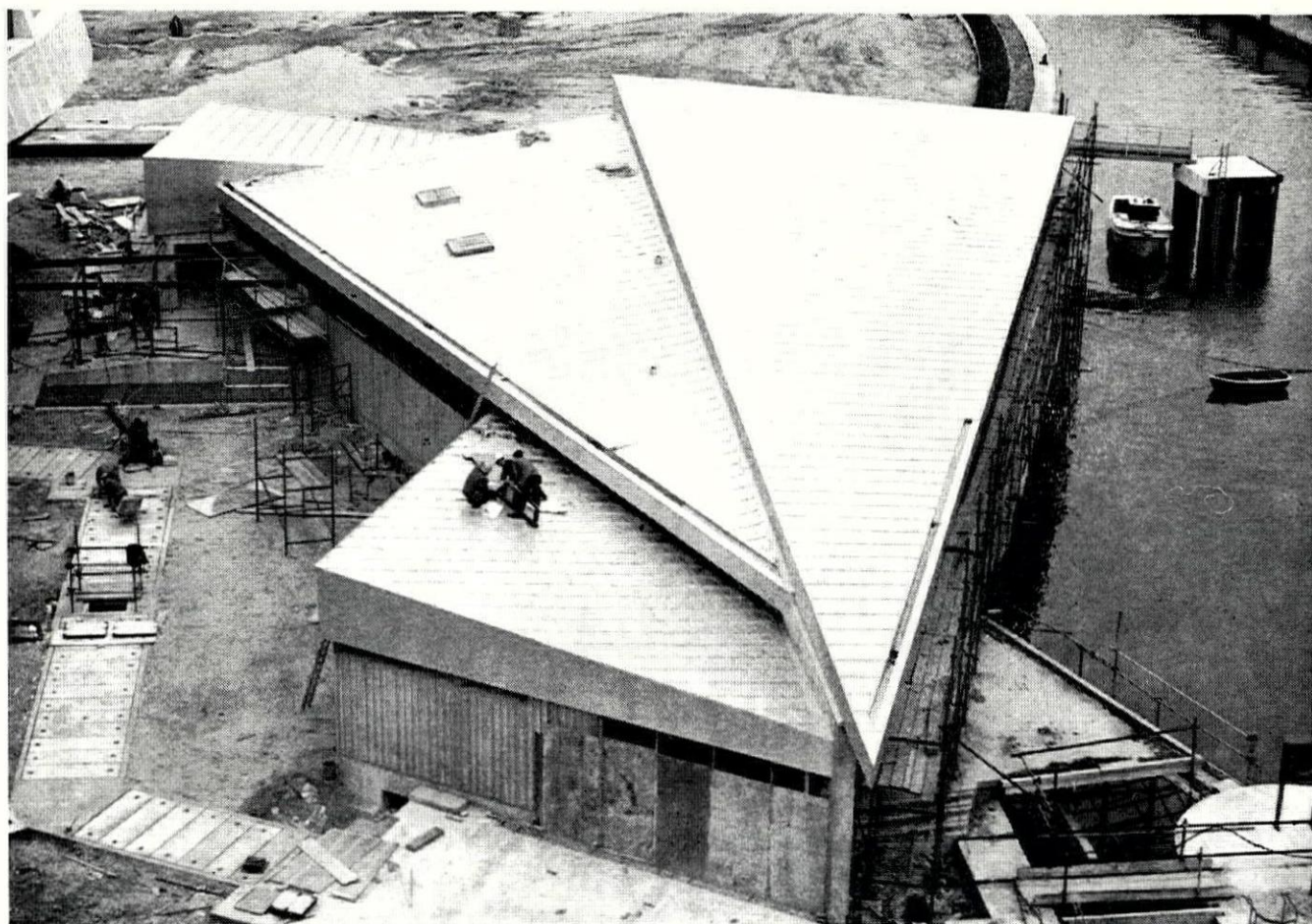
verted from an auditorium to a ballroom in about 25 minutes. **Brensal Plastics Ltd., Highbridge, Somerset.**

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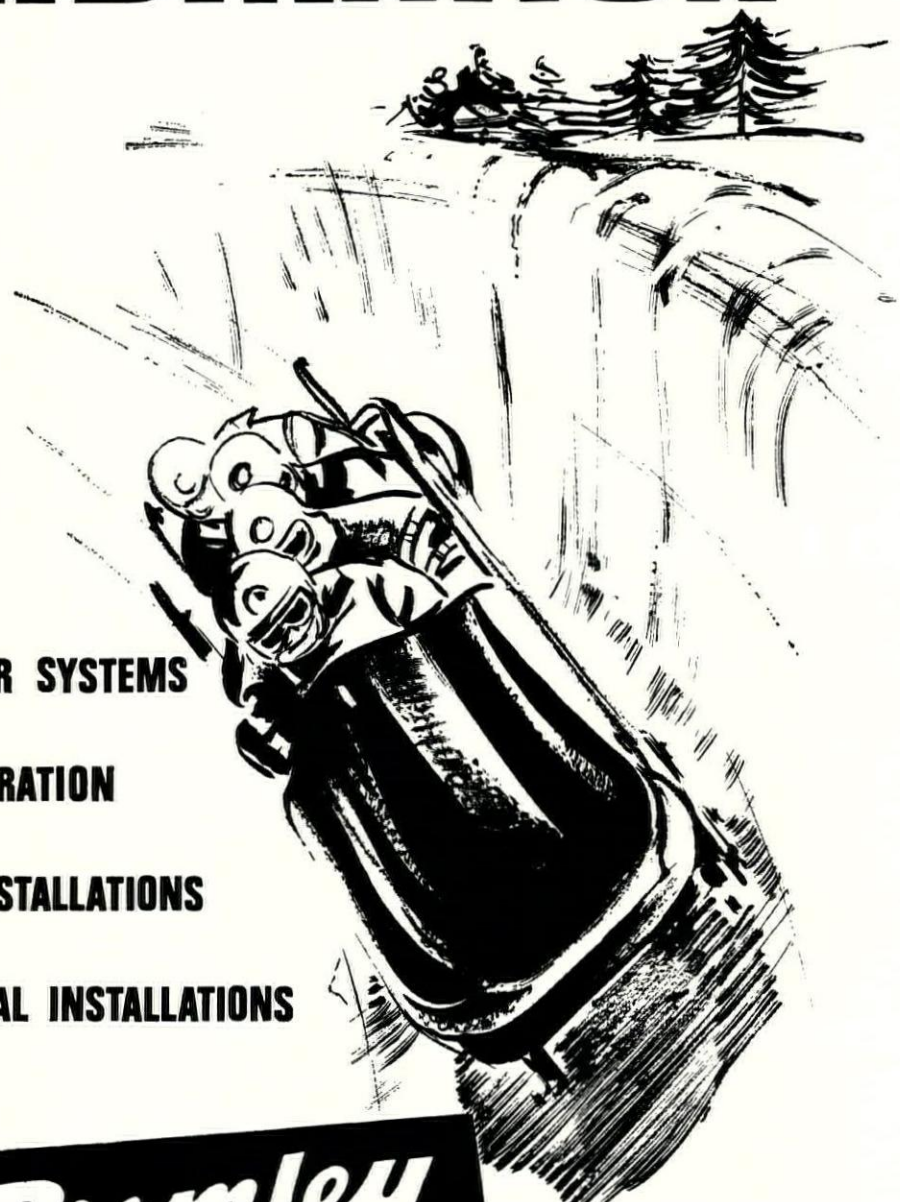
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Ian Nairn

# STOP PRESS

Townscape problems, outrages and opportunities compiled by Ian Nairn, with drawings by G. J. Nason.

## S.O.S.

PINNER, MIDDLESEX

The former Conservative Club next to the church, 1, one of the few genuine groups in a muddled suburb. Of course, while this is derelict, neo-Georgian is going up half a mile away at Nower Hill, 2.

## CAUTION

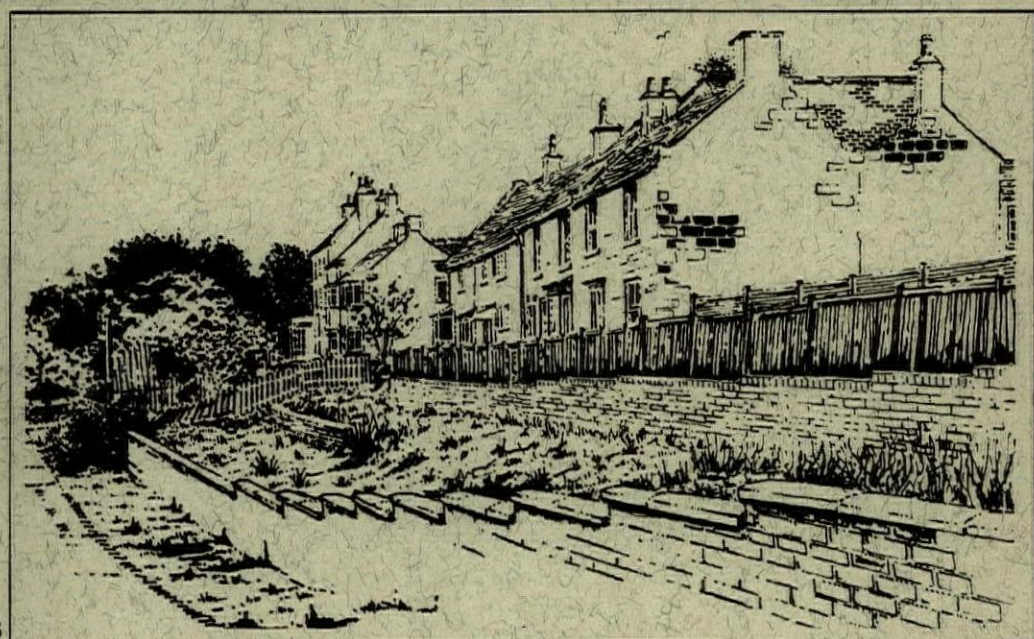
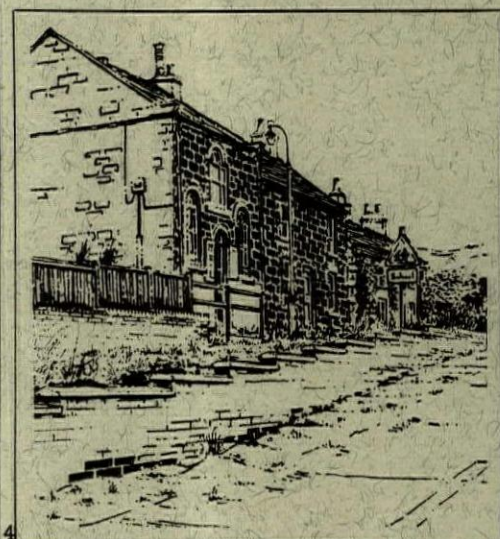
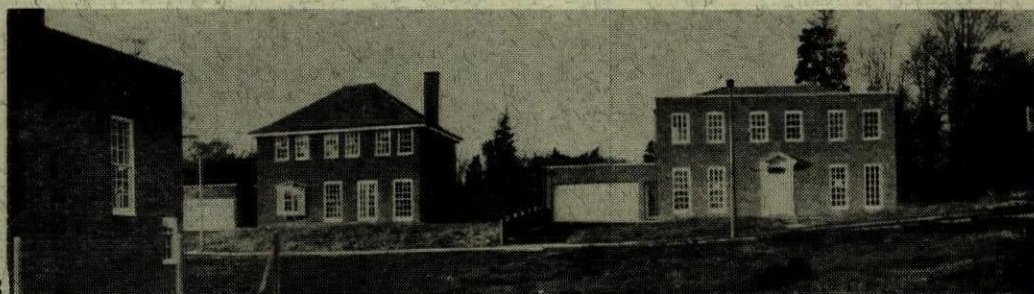
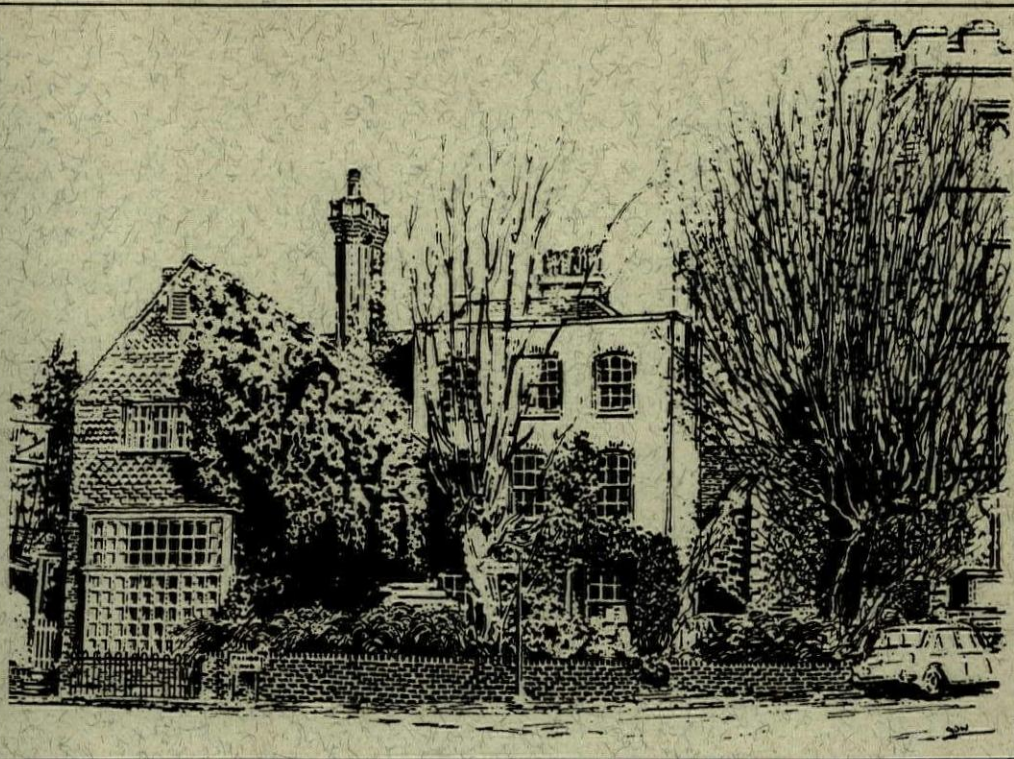
MARLOW, BUCKS

A subtle case of misunderstanding in Marlow, 3. It looks as though the cornice and fascia lines have been continued deliberately when the one basic fact about the rest of the street is that nothing in it lines up with anything else. 'Architectural order' has claimed one more victim.

## OUTRAGE

CARLTON, YORKS N.R.

A preposterously thick-skinned and over-complicated job has been made of a simple retaining wall, 4 and 5, in a good village which until now has expressed things simply and without pretension.





This is a perfect example of council-mindedness, satisfying all the statistical standards and ignoring the environment altogether.

# STAVANGER, NORWAY

A collection of photographs to show that Scandinavia can match our urban renewal, platitude for platitude. Stavanger is Norway's fourth largest town—a population of about 60,000—no war damage and a splendid site. The harbour faces west out to sea, there is a small lake behind it and on the hillock that separates them is the Gothic cathedral, the biggest in Norway after Trondheim. The old architecture is jolly, weatherboarded stuff, equally suitable for quayside, 6, or shopping street, 7. But it is disappearing fast; to quote the planning booklet 'the traffic must get through . . . several old buildings are removed to make place for each new'. And the 'new' is comprehensively mediocre, whether stone-faced, 8, or curtain-walled, 9. Parking lots and carelessly designed single-storey shops are pushed into the middle of town *à l'Americaine*, 10 and 11. The cathedral is almost disregarded, surrounded by new buildings of crushing dullness, 12 and 13, and the possibilities of the inland lake have never been exploited by either new or old buildings, 14.



6



7



8



9



10



12



11



13



14



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Peacock by courtesy of The British Museum, Natural History.

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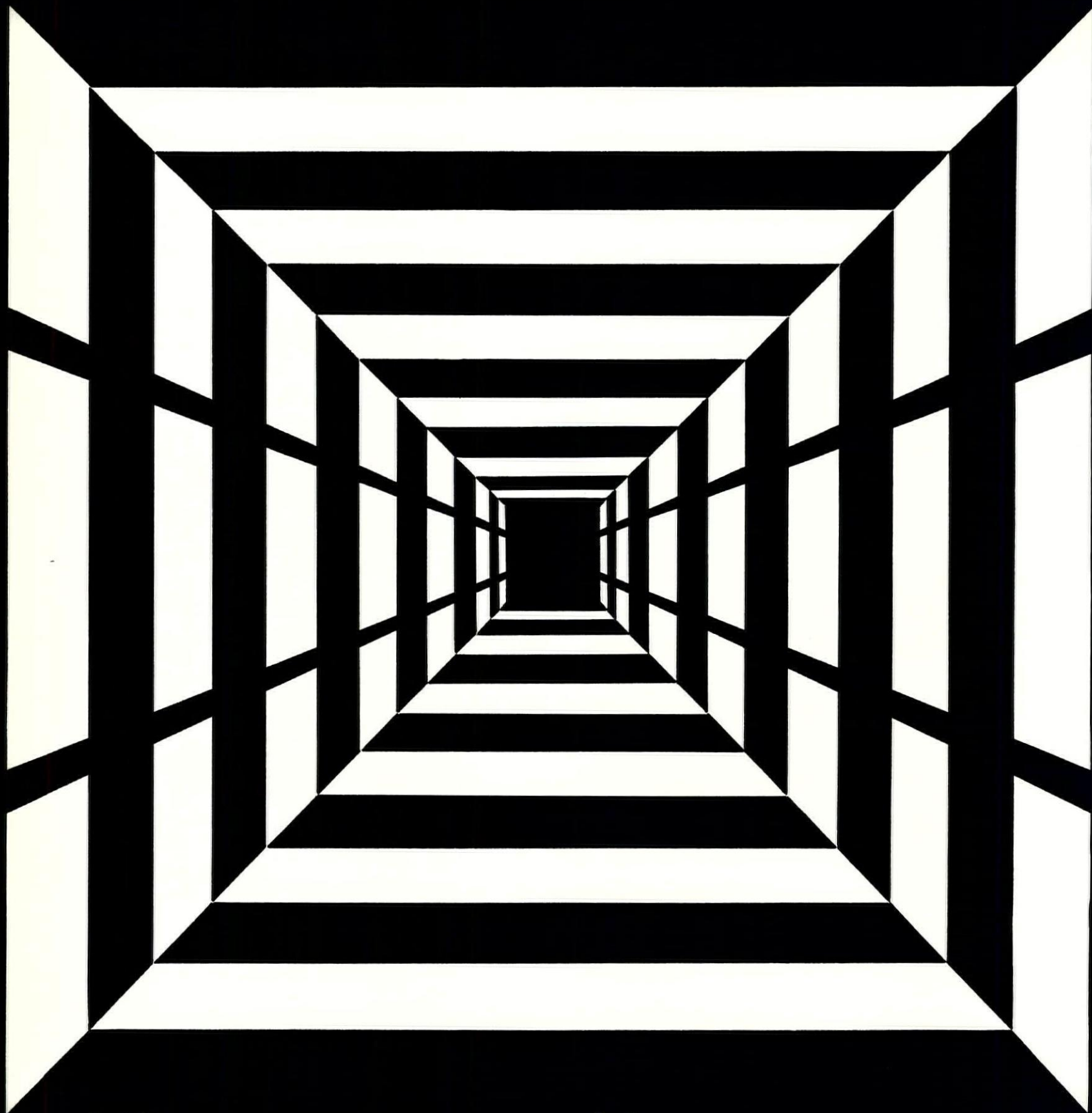
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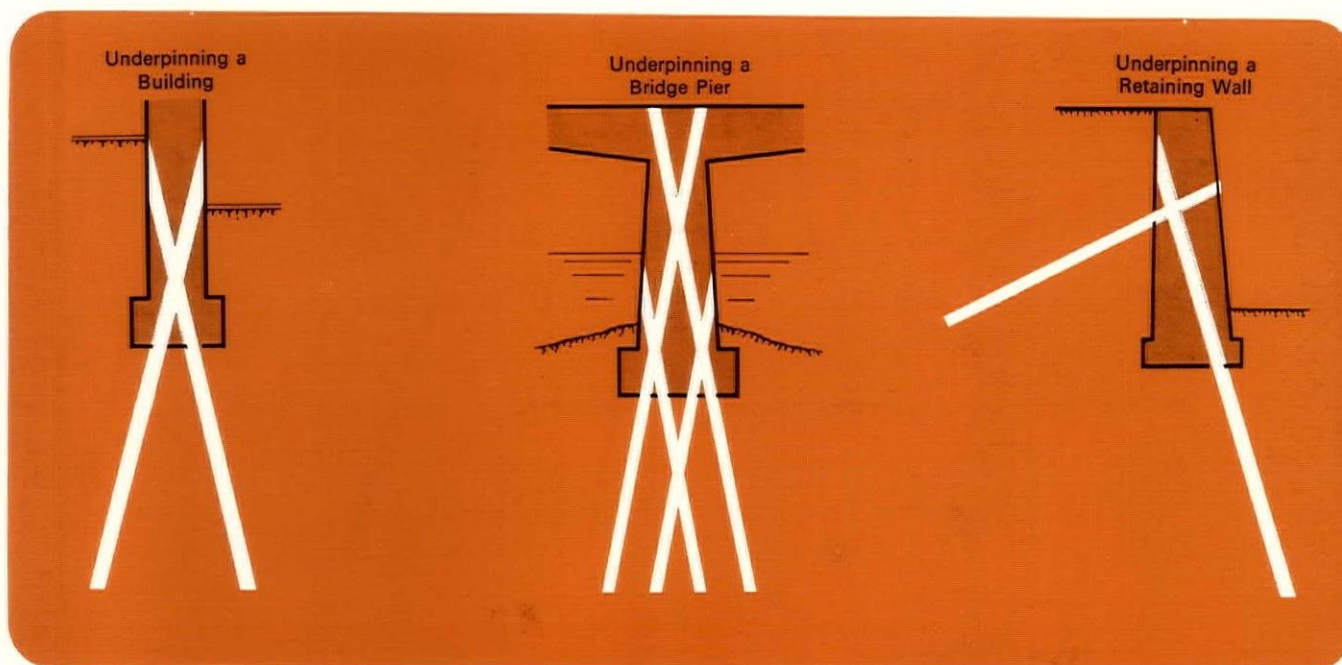
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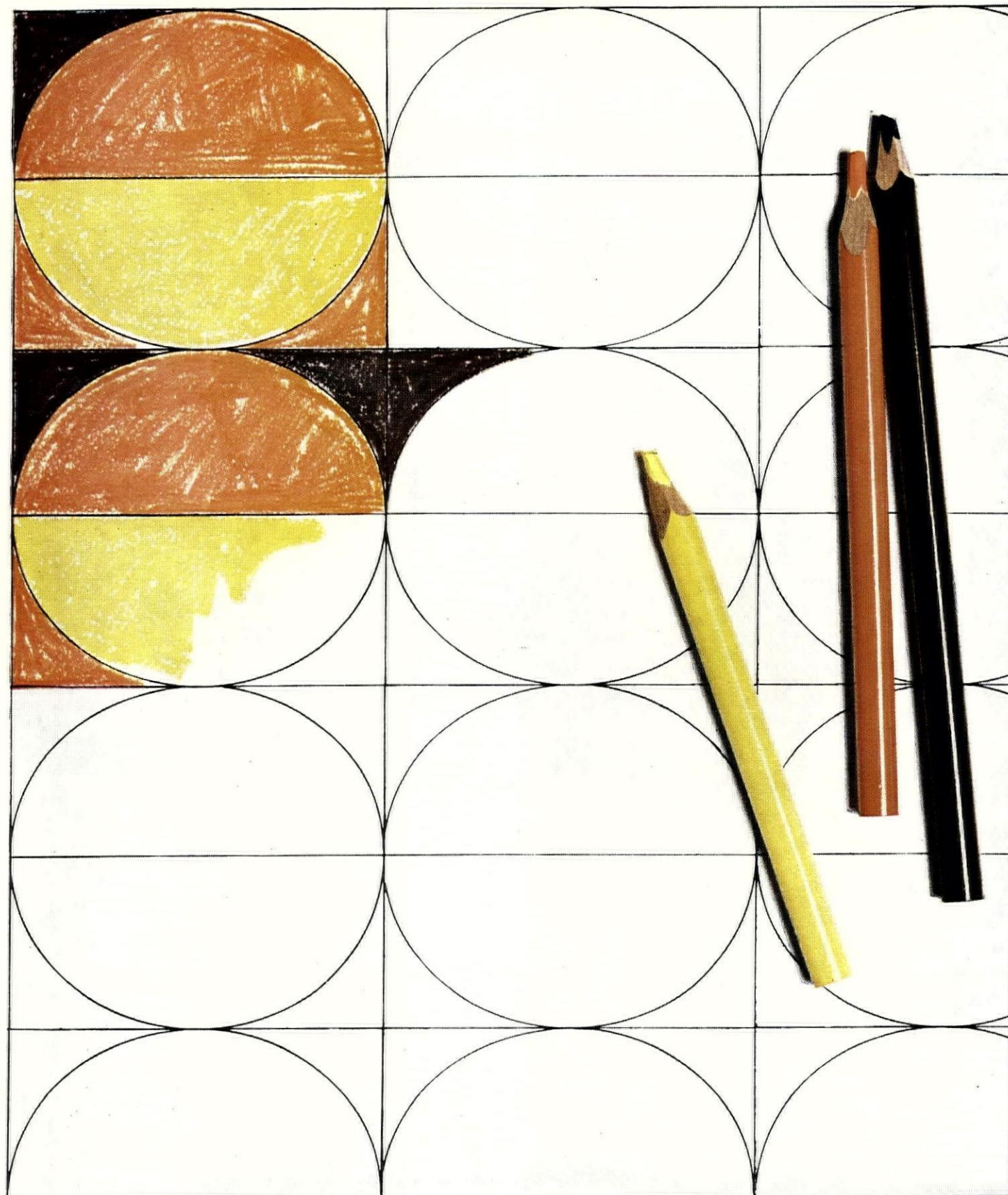
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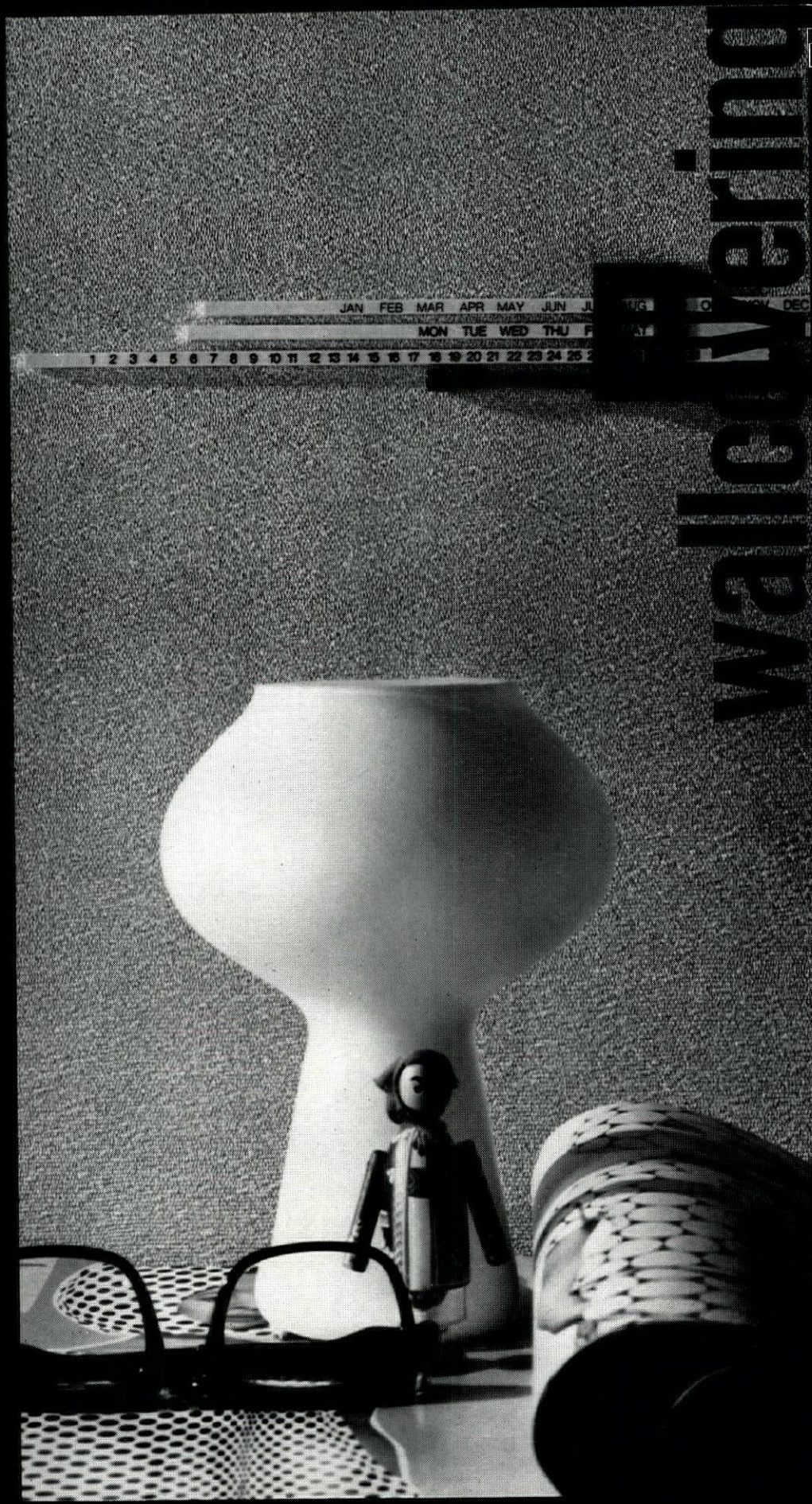
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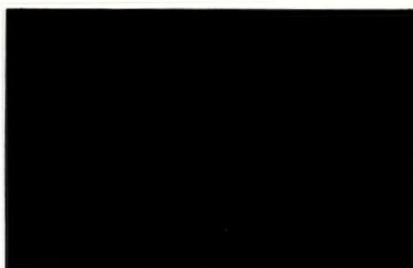
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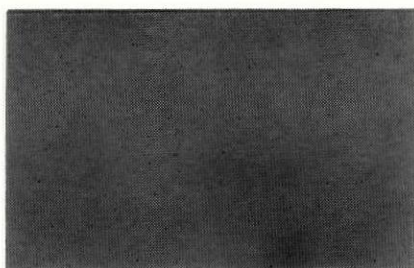
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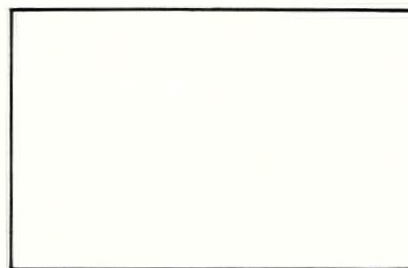
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## Another private developer goes 'timber-frame' to save time, money and manpower

Nine hours ago the five men, the lorry and the bungalow footings pictured below were the only signs of construction on the 26th plot at Curzon Place, Eastcote, Middlesex—leaving only three plots vacant. Now, at the end of the day, the walls, joists and roof are in position and ready for cladding.



**Fast work is the rule . . .**

Surprising as it may seem, construction at this rate breaks no records. As Mr. L. T. Baxter, Director of C. E. Wilkinson Ltd. the builders and developers, pointed out to our photographer, "Fast work is the rule in timber-frame housing, not the exception. Owners can reckon to move in eight weeks after exchange of contracts at the present time."

Wilkinson's selected the Guildway system, one of the many types of timber-frame systems on the market. (Apart from choosing specific designs produced by a manufacturer, builders can have timber-frame houses designed specially for them.) It is significant, therefore, that



Mr. Baxter's experiences are so typical of every other company in the industry that has turned to timber-frame. "This is our first venture into timber-frame, but personally I have no plans to go back to traditional building", said Mr. Baxter. "This is so much easier. It's all-dry construction of course, so there's far less manpower needed and fewer on-site man hours, too. Less paperwork as well . . . and clients have no trouble getting mortgages for these homes, either. All these things are important."

### Individuality

Something which is important to the residents on any development like this is

the layout. At Curzon Place all the homes are situated so as to afford attractive, non-obstructed views of the estate and its surroundings. All the bungalows belong to one line produced by the same manufacturer and yet there is an air of distinctive individuality about every home. The Eastern Region Manager for the manufacturers explained how this effect is achieved.

"They are all variations on one theme; like most timber-frame systems the buyer has a choice of internal layout, freedom to decide at the start which room he wants where. That's very important if he's to get the most out of his home and almost all timber-frame buildings will adjust to suit preferences. We leave plenty of other areas open to the individual's tastes as well. Exterior cladding, for instance. In this case the builder chose brick and



timber, but timber-framing leaves you plenty of scope. The same goes for flooring. You could choose anything from decorative hardwood flooring to tongued and grooved plywood or particle board."

### Warm and dry

Mrs. Collins, a Curzon Place resident, was keen to sing the praises of other aspects of timber-frame housing. Said Mrs. Collins: "We were free to start decorating as soon as we moved in because it was dry from the word 'go', no damp at all."

"Another wonderful thing is the warmth. We're very much exposed to the





North here, yet you would never know it from the warmth inside. We have gas warm air heating like the other homes on the estate, but it's usually set very low. We use a fire to boost the heat in the evenings, but it costs very little altogether. I remember how surprised we were when we received our first gas bill. Frankly, it was so low we couldn't believe it."

Speak to any occupier of a timber-frame home and you'll get the same reaction. But then the warmth of a timber-frame home is a fact, not merely an opinion. Efficient insulation techniques combined with the natural warmth of wood mean a timber-frame home is two to three times warmer than its traditionally-built equivalent. Said Mrs. Collins: "If we ever move I would certainly prefer another home like this."

#### No problems

The next job on the bungalow under construction is to apply the four-inch-thick non-loadbearing brick skin cladding. Of course, with the shell completed, interior work goes ahead regardless of the weather—few weather problems can hamper timber-frame construction at any time.

Once the roof and wall cladding has been completed it can be left to the electricians, plumbers, glaziers and heating engineers to complete the home. Only one day's work is needed by each of these trades.

#### Big savings in time and money

"I'm still getting used to the incredibly short time in which you can get things done in timber-frame construction", remarked Mr. Baxter. "I know for

a fact that there are a lot of builders who are newer to timber than I am and they haven't yet learnt how to take advantage of speed. You save so much time and money if you organise your trades well ahead."

"You save so much time and money"—nowhere do you hear this comment made more often than on a timber-frame site where the enormous time savings compared with traditional building techniques mean earlier recouping of land investments, reduced interest charges, greatly reduced remedials, and big S.E.T. savings, too, with the factory-produced components. It all leads to better houses which in turn mean quicker sales.

In Eastcote it seems, like everywhere else, both builders and buyers agree that the New World of Wood is very, very welcome indeed.



PHOTOGRAPHS FROM FAR LEFT

The lorry arrives.

8.30 a.m.

5.30 p.m.

Part of an estate of four-bedroom timber-frame houses built by Lyon Homes at Beckenham (Kent) using the FrameForm system.

Timber-frame construction employed by Wates Limited in a private development at Merstham (Surrey).

One of the Swift Homes range of single and two-storey timber-frame houses—this bungalow is at Lockerbie, Dumfriesshire.



### The Timber Trade Federation of the United Kingdom

Clareville House, (Dept. AR17), Whitcomb Street, London WC2

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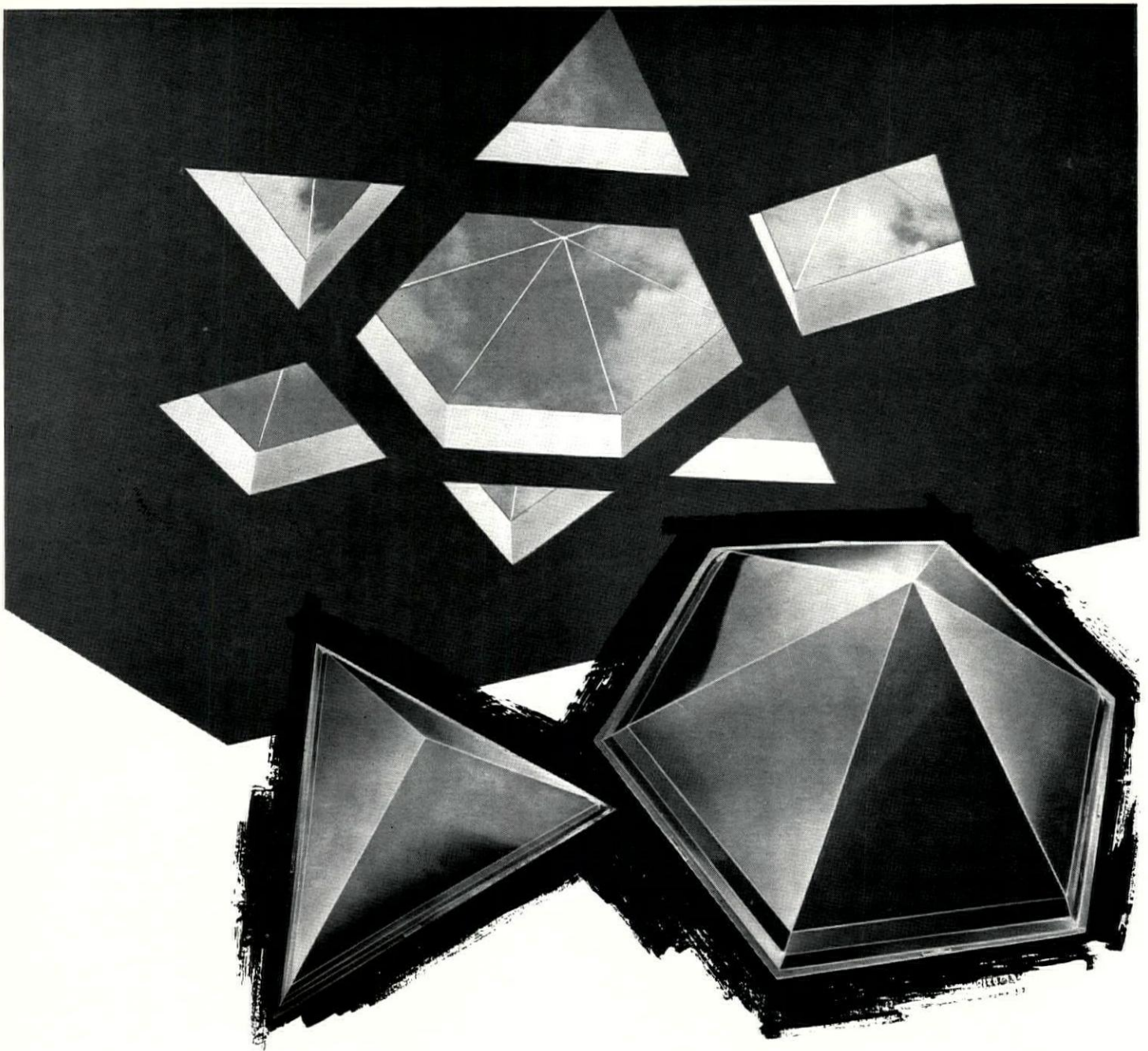
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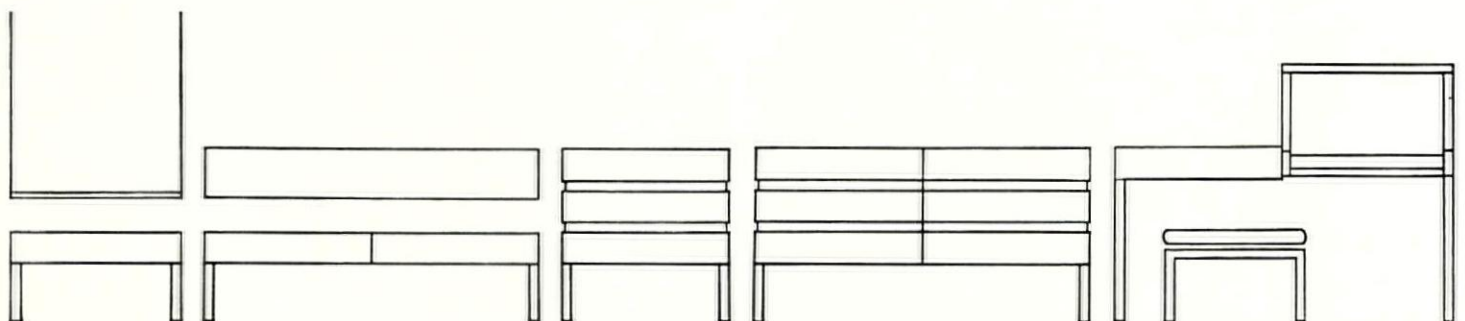




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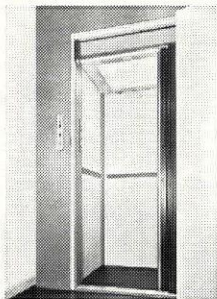
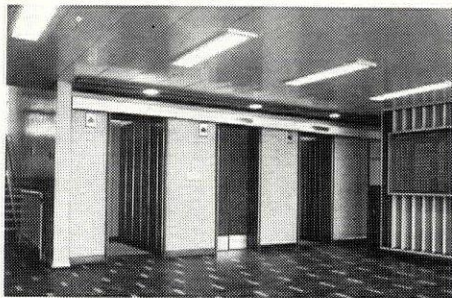
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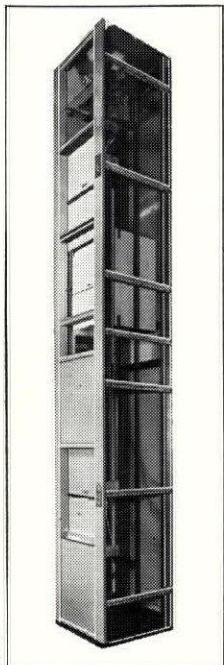


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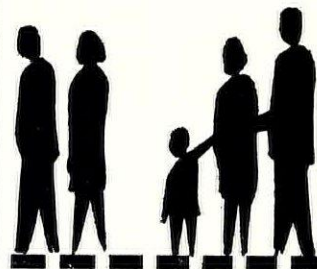
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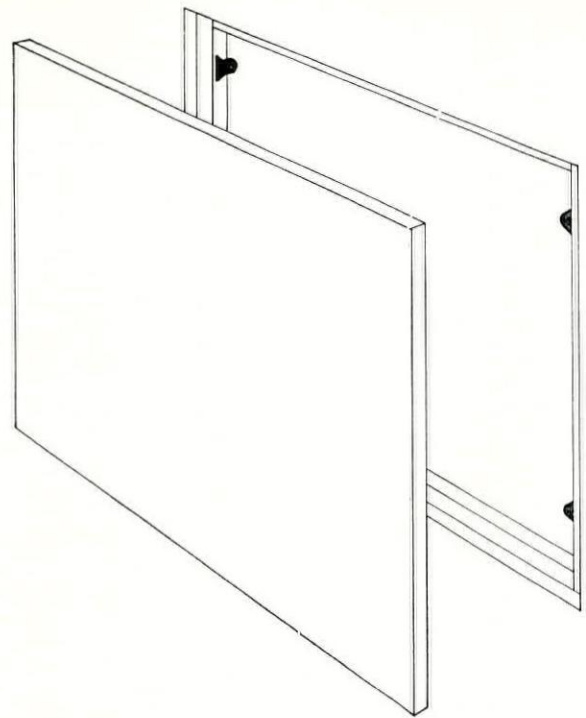
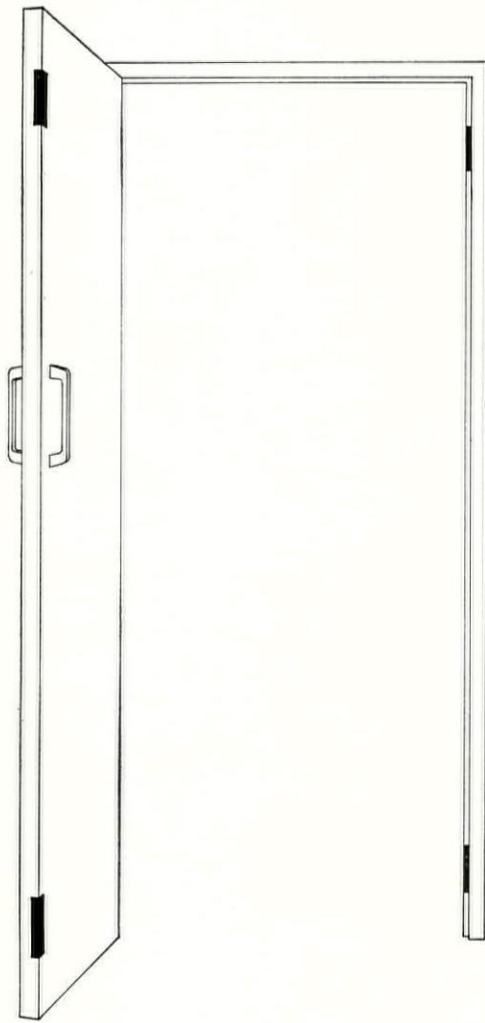
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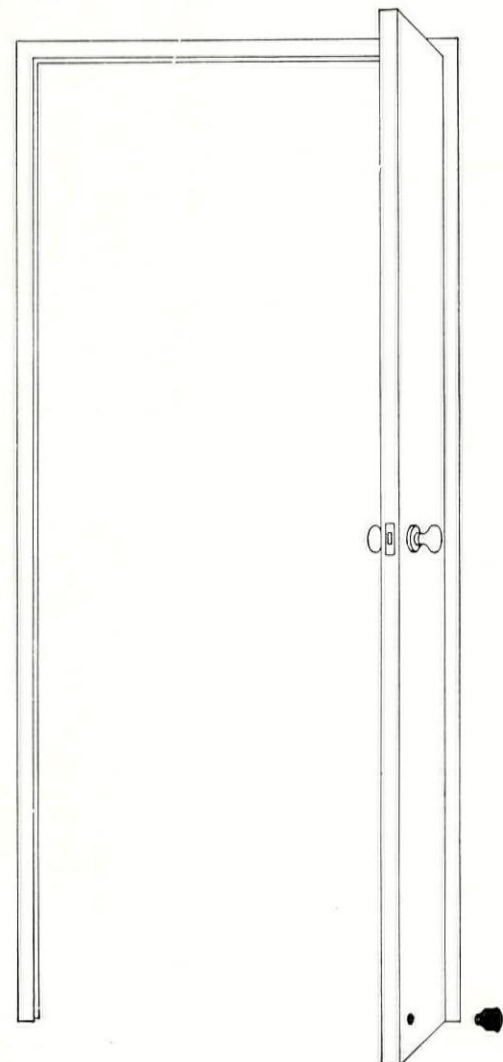
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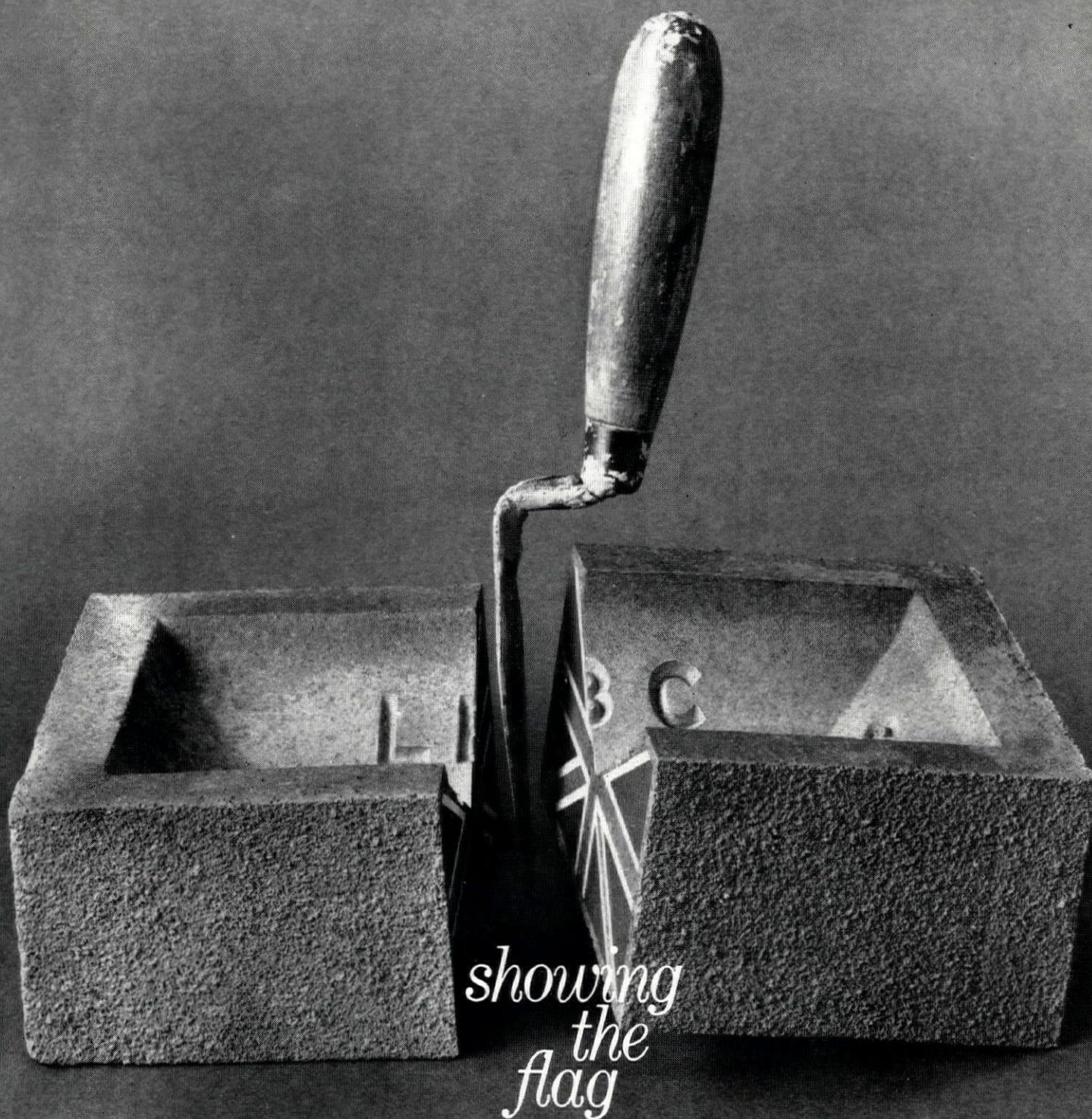


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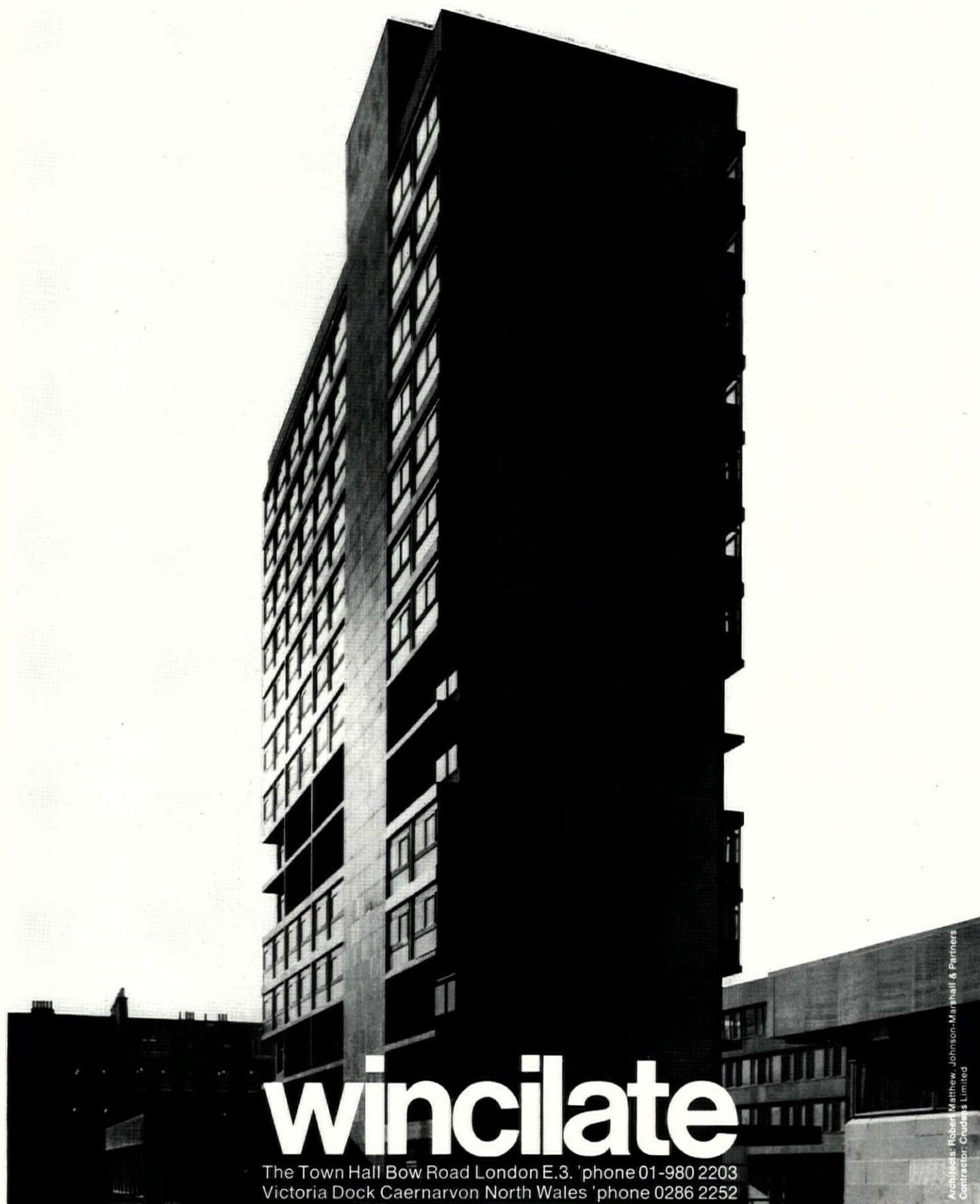
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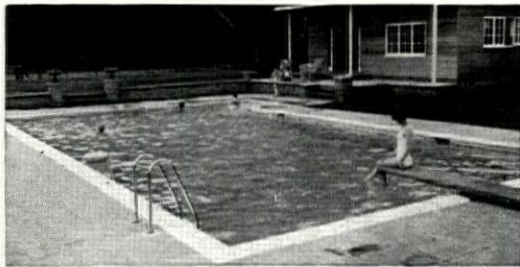


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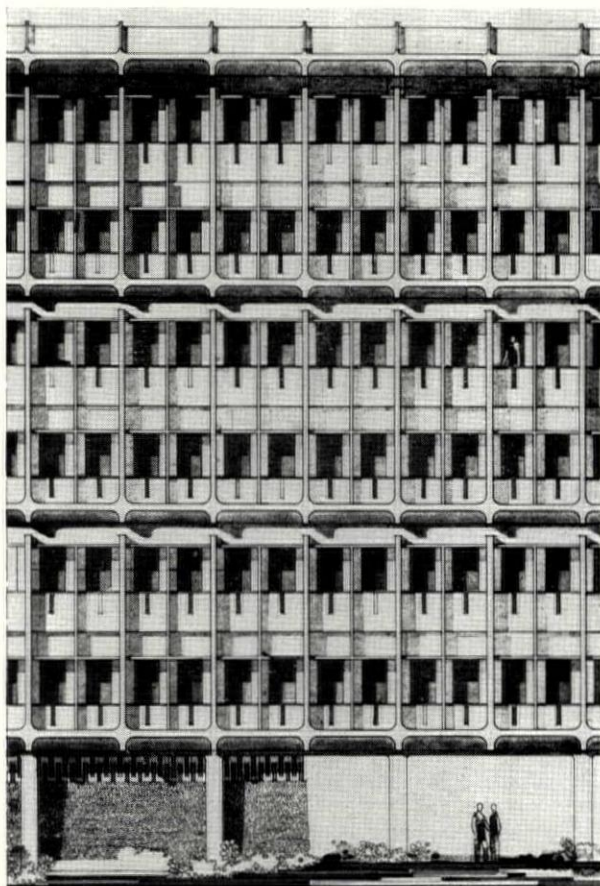
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