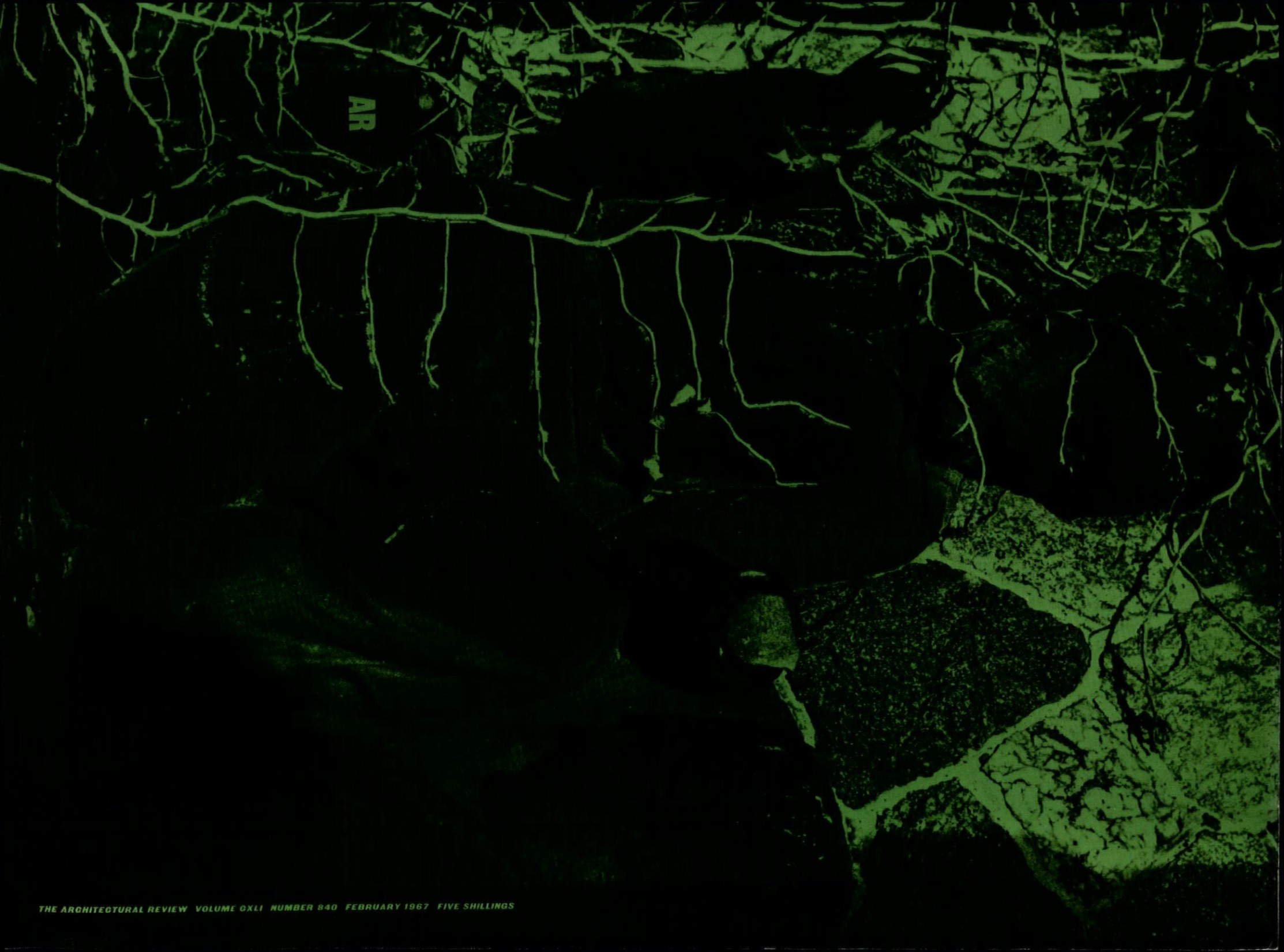


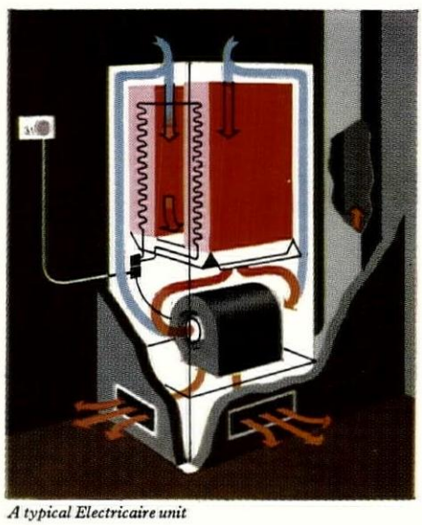
THE ARCHITECTURAL REVIEW VOLUME CXLI NUMBER 840 FEBRUARY 1967 FIVE SHILLINGS

ATTRACTIVE MAISONETTES ERECTED BY
KEYNSHAM U.D.C., AT KEYNSHAM, SOMERSET
Architects: Architects Department, Keynsham U.D.C.
Builders: J.A.Venn Ltd, Civil Engineers
and Building Contractors, Bristol

ELECTRICAIRE

the warm-air central heating that runs on half-price electricity

Electricaire is not only the most economical of all central heating systems to run, it's the easiest to install and it can fit your existing plans. These are just a few of the reasons why it is today setting a new trend everywhere in central heating



A typical Electricaire unit

How does Electricaire work?
Simple! A central thermal storage unit is fitted in each dwelling. This unit heats up on half-price electricity and incorporates a fan which discharges warm air as and when required. The fan can be manually or thermostatically controlled and a boost provides for a rapid warm-up. Units vary in size according to the output required but a normal unit will fit into a space a little over 2 feet square.

A thermostat in one of the main rooms controls the air temperature at the level desired by the occupier. Warm air is directed into individual rooms through outlet registers. These are unobtrusively sited near the skirting or in the floor.

Whether you're building houses, bungalows or blocks of flats, Electricaire gives you the most efficient and economical central heating in existence today.

7 reasons for choosing Electricaire

1. Electricaire gives you complete freedom to plan homes the way you want to. The central unit can be sited almost anywhere and there are no flues to construct.

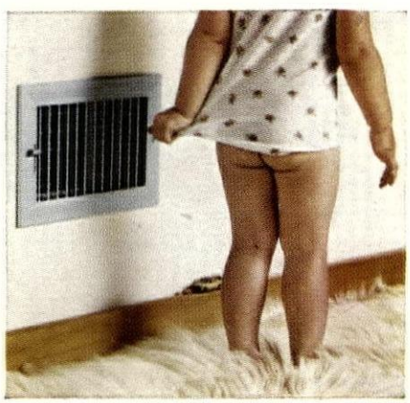
2. 100% efficiency. Electricaire, designed to Parker Morris standards, will give full value for every unit of current used.

3. Electricaire runs on half-price, off-peak electricity. It's the most economical of all central heating systems to run.

4. It's the cleanest, healthiest heating, too. No fumes, dust, ashes and the re-circulated air is filtered.

5. No stoking, no fuel storage. In flats, no boiler attendant is needed and storage space is saved. Each tenant controls the heating in his flat.

6. Electricaire minimises condensation.



The unobtrusive outlet register near the floor

The constant background warmth from the central unit, coupled with the absence of combustion minimises the risk of condensation.

7. Electricaire is silent. The fan runs quietly and there is no sound of burners lighting and shutting off.

ELECTRICAIRE

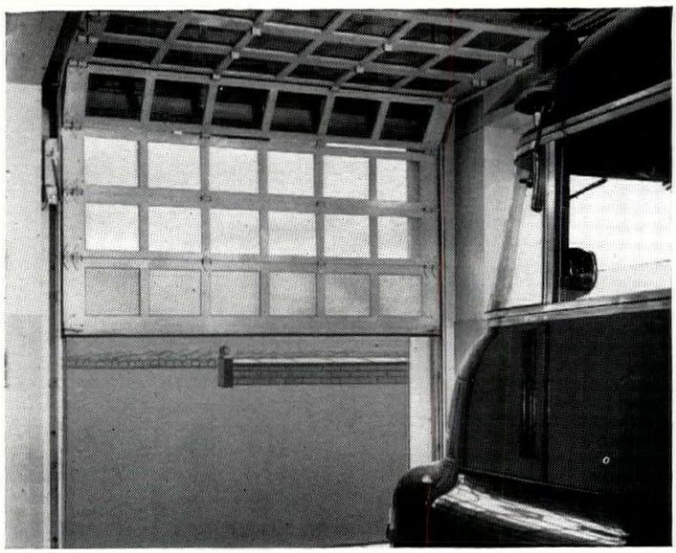
warm-air central heating on half-price electricity

Like to know more? For advice and technical information about Electricaire, just ring your Electricity Board; or write direct to: The Electricity Council, EDA Division, Trafalgar Buildings, 1 Charing Cross, London, SW1.

Issued by the Electricity Council, England & Wales.

Keynsham Council fit Electricaire in modern maisonettes

'*It's trouble-free heating*', *say delighted tenants.* At Keynsham, near Bristol the local Council decided to build 44 really modern maisonettes. The exterior design was carefully chosen, the interiors were planned on the most modern lines and extra special care was exercised in choosing the heating. After weighing up all the factors connected with different types of central heating, Electricaire was chosen by the Council. Electricaire units each with a loading of 10 kW and an active storage capacity of 40 kWh were installed at a cost of £170 per maisonette. (Similar installations today would cost about £145.) Each unit supplies warm air by stub ducts to the living/dining room, hall and kitchen, while a rising duct delivers warm air to keep the three bedrooms cosy. Tenants praise not only the economy of Electricaire but its cleanness and trouble-free running. It is estimated that a full year's running costs should work out at £40 to £45 per maisonette.



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A quality multi-leaf
up and over door
of American design
made in Britain

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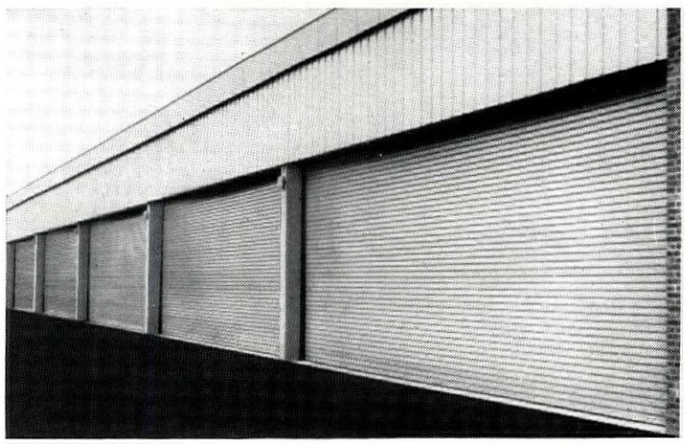

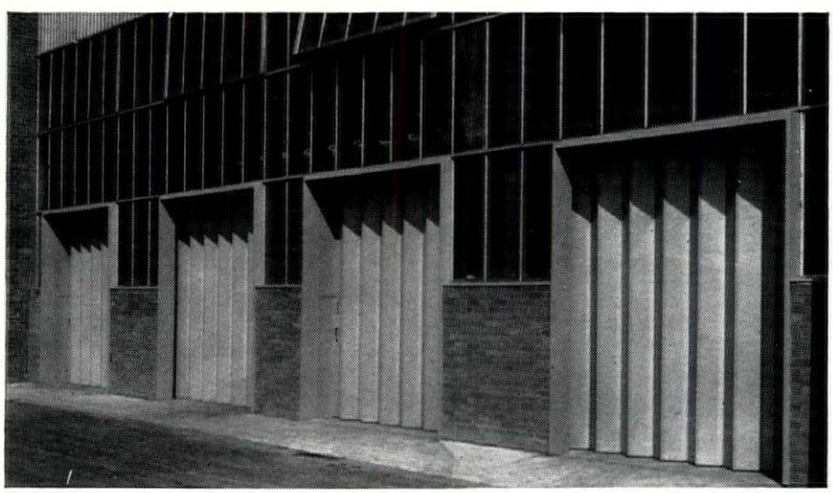

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THE DOORS COMMANDING THE WORLD'S LARGEST SALE

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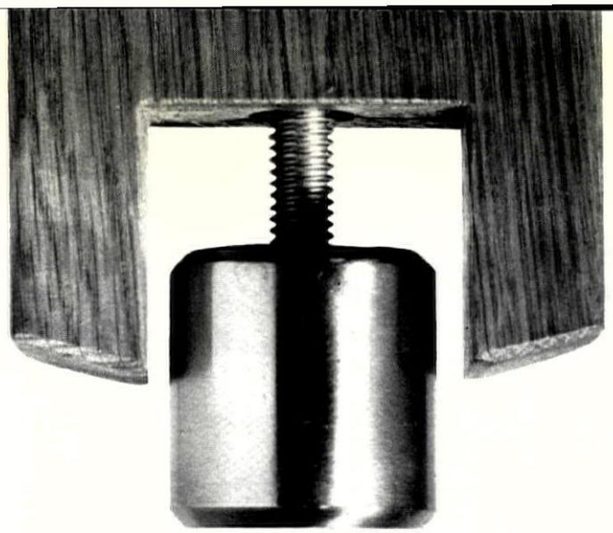
G. BRADY & CO. LTD. MANCHESTER, 4 • Telephone COLlyhurst 2797/P.B.X. *and at London, Birmingham, Glasgow, Montreal, Toronto, Hong Kong.*

BRADY FOR EVERY OPENING: BRADY ROLLING DOORS IN STEEL, WOOD AND ALUMINIUM, SLIDING SHUTTER DOORS. GRILLES IN STEEL, ALUMINIUM OR NYLON. UP AND OVER DOORS. FIREPROOF DOORS. COLLAPSIBLE GATES. SLIDING DOOR GEAR. RUBBER DOORS. ORNAMENTAL IRONWORK. ALSO MANUFACTURERS OF BRADY LIFTS.



Remember this? The adjustable foot fitted to Nexus desks and tables. Everybody likes it but not everybody can afford to indulge their foot-fiddling fetishes. If you want desks or tables for contract work – 12 or 24 or more – and the budget is tight, control yourself! Specify

nexus 24U

Aston Cabinet Co Ltd

Central London showrooms:
50-54 Charlotte St London W1
Phone Museum 7318

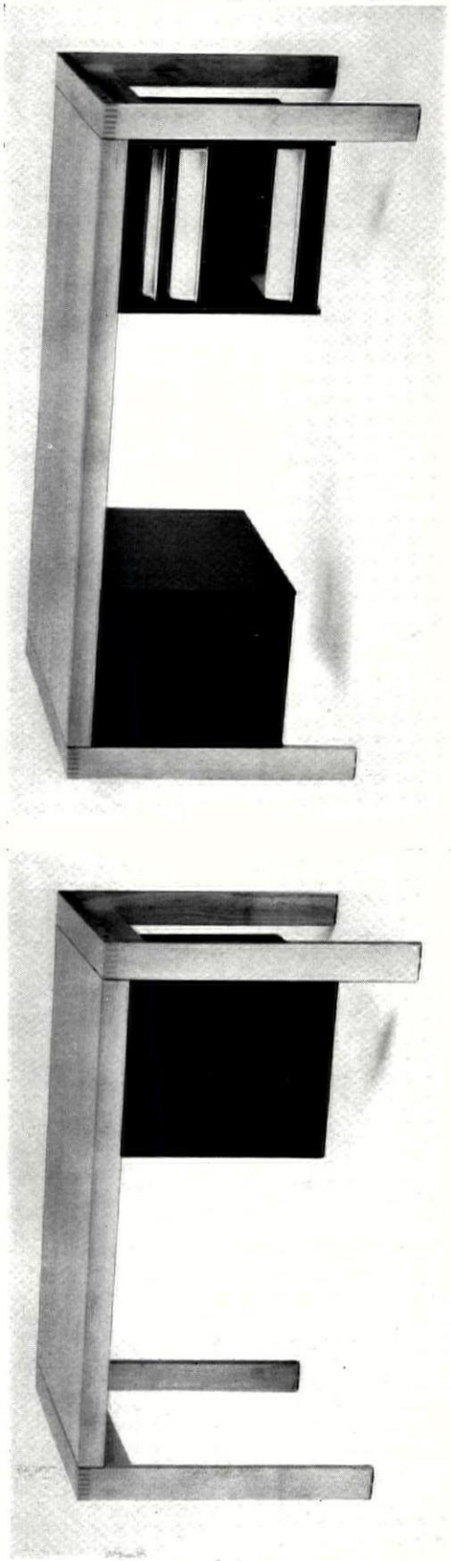
Head office and showroom:
Astrola Works, Roebuck Lane
West Bromwich, Staffs
Phone West Bromwich 2551

Shown here are two of the 1,226 desks which are available in the **Nexus 24U** range

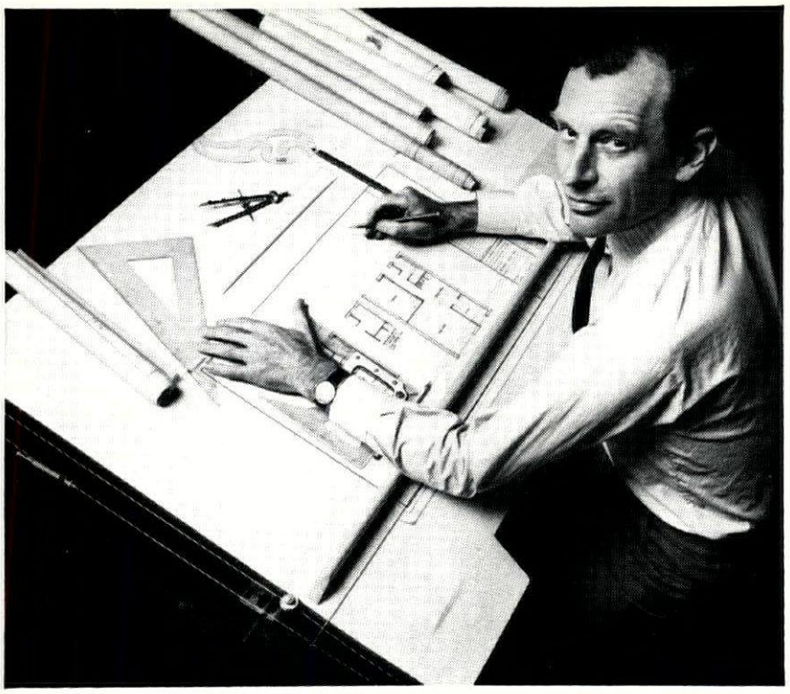
Designed by Martin Grierson MSIA FRSA

Left: single pedestal desk 24U/203 in beech 4′ 4″ x 2′ 8″ x 2′ 4″ high Price £27 12s 9d

Right: double pedestal desk 24U/311B in beech 5′ 4″ x 2′ 8″ x 2′ 4″ high Price £37 12s 3d



Ken Garland and Associates



Me? Specify Vent-Axia?

Why would my clients need anything like that?

Just because the air all of us breathe needs changing regularly. Stale, impure air should be removed for comfortable, healthy living. And for efficient easy working. Good ventilation is *vital* and need not be costly. Specify Vent-Axia Unit Ventilation for offices, factories, pubs, restaurants—in fact everywhere an efficient controlled ventilation system is required.

What about the problems? Draughts, for instance?

No problem.
With Vent-Axia, you have a choice of automatic or hand-operated shutter to take care of back-draught.

How about keeping the fans clean?

There again, your clients won't have to worry. Our units are so well designed they can be taken down from indoors for cleaning in a matter of seconds-without the use of tools.

Excellent, but is there a Vent-Axia to suit every need?

Certainly there is. Vent-Axia gives your clients unit ventilation tailored to their precise needs. We offer a range of sizes (6″, 7½″, 9″ and 12″ units) in window, wall and roof models. A Vent-Axia fan is controlled through a simple on-off switch; or a reversible three-speed switch that boosts performance—at the touch of a button, it will extract stale air or introduce fresh.

Sounds fine. And the price?

Depends on the size and type ordered. The 6″ unit starts at £12.12.3d. including purchase tax, and is less than £20 with automatic shutter and reversing control. Good value when you consider that Vent-Axia units installed over 20 years ago are still going strong. Solid value when you realise that Vent-Axia never cut quality in order to cut price. You can specify cheaper units than Vent-Axia.
You can't specify better.

For better air conditions

Vent-Axia

Registered trade mark

Unit Ventilation

A Hall-Thermotank Group Company

Details of service facilities from these Vent-Axia branches:
London SW1 60 Rochester Row (Victoria 2244)
Manchester 2 18 Lloyd Street (Blackfriars 0634) · **Glasgow C2** 135 Bath Street (City 7167)
Birmingham 1 Lee Bank House, Holloway Head (Midland 4595) · **Leeds 10** 49 Hunslet Lane (Leeds 22985) · **Newcastle-upon-Tyne 2** 42 Jesmond Road (Newcastle 813391)
Bristol 1 Brunel House, St. George's Road (Bristol 27567)

The 1/125 of a second truce.

Don't let this photograph fool you.

These gentleman are five of the bitterest rivals in the curtaining business.

Normally, they wouldn't be seen dead together.

But it's not every day they hit on the idea of using Acrilan for their curtaining fabrics.

Now they have.

As no one has ever manufactured curtaining in Acrilan before, we thought it was quite an event. That's why we cautiously asked them if they would pose together.

If not for Acrilan's sake. For posterity's. Reluctantly, they agreed to be photographed.

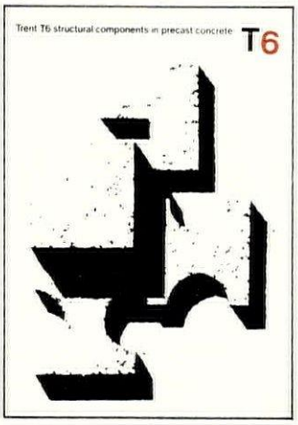
Believe us, it was a lot easier getting them to use Acrilan.

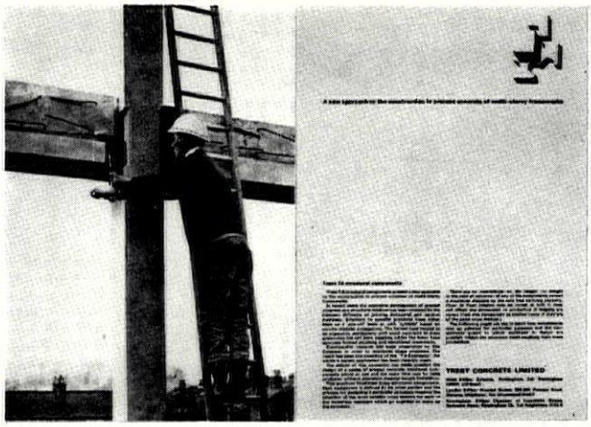
Trust the big Red A.

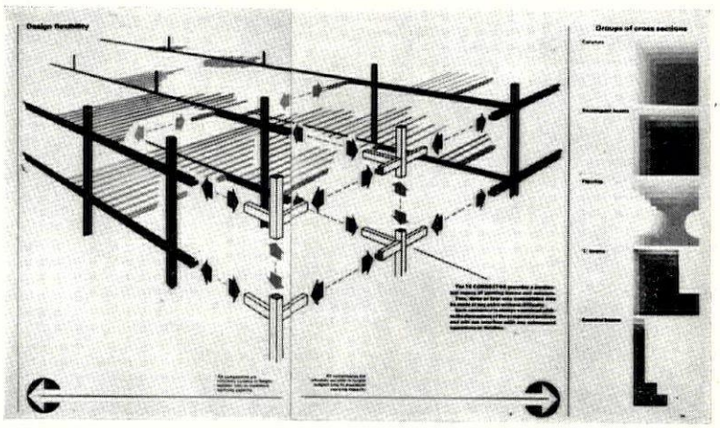
ACRILAN
acrylic fibre
CHEMSTRAND
REGD

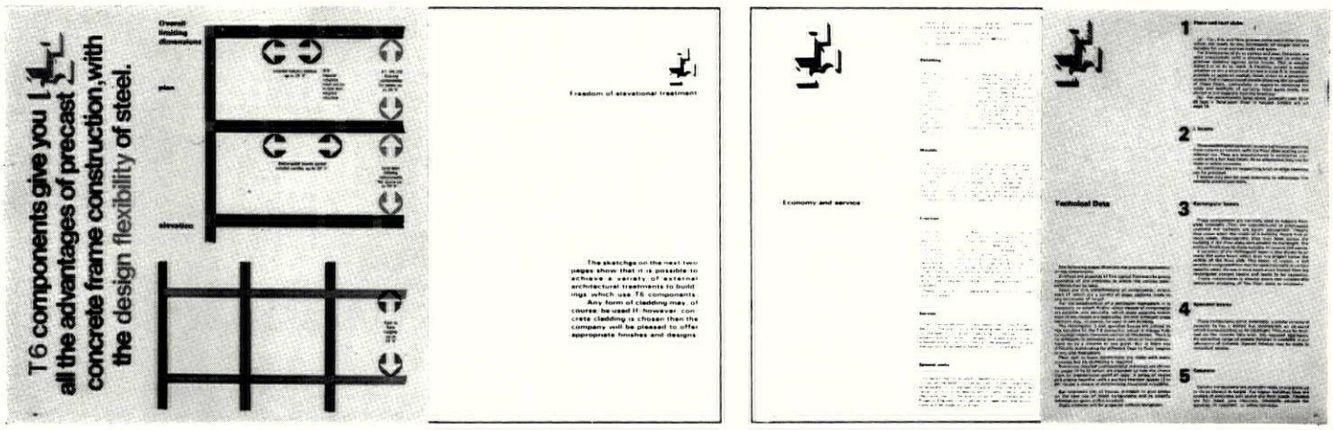
Acrilan are behind the nicest curtains.

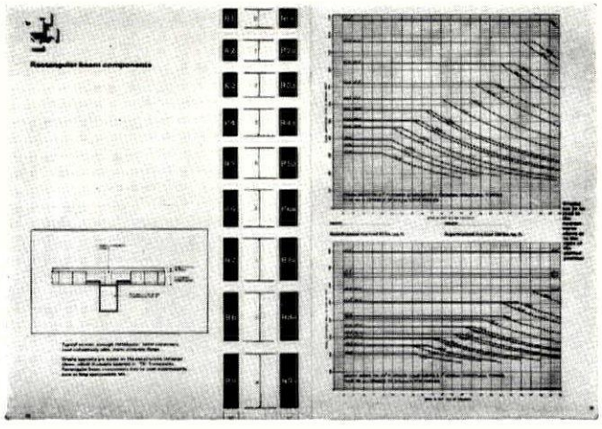
Forty pages like these will give you all the facts you need to make up your own mind about T6



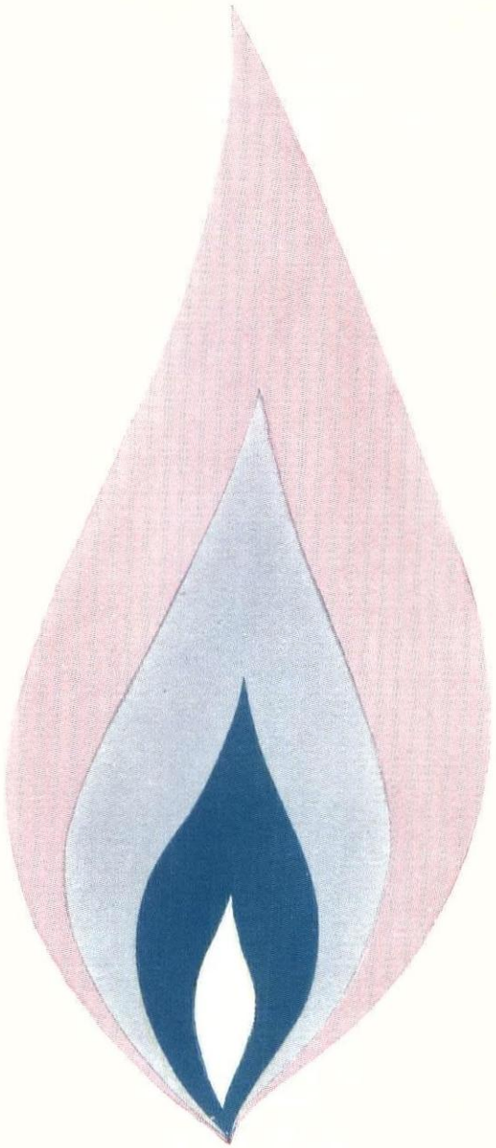








A copy is yours for the asking



Gas Board warms to Armourtile

Recently the West Midland Gas Board laid 2,880 square feet of Nairn's Armourtile in its Wolverhampton showroom.

Why? Because they know this tough smooth flooring stands up to years of the hardest use, stiletto heels and all; they know its compact surface needs minimum attention; they know Armourtile is colourful and comfortable to walk on.

Armourtile Specification: Gauge: 3.2 mm; 9″ x 9″ and 12″ x 12″ tiles; 18 colours related to B.S.2660; residual indentation; maximum residual indentation of .006in. after 10 minutes with a load of 350 lbs. applied through a .282 diameter indentor for 1 minute giving a pressure of 5,600 lbs. per square inch.

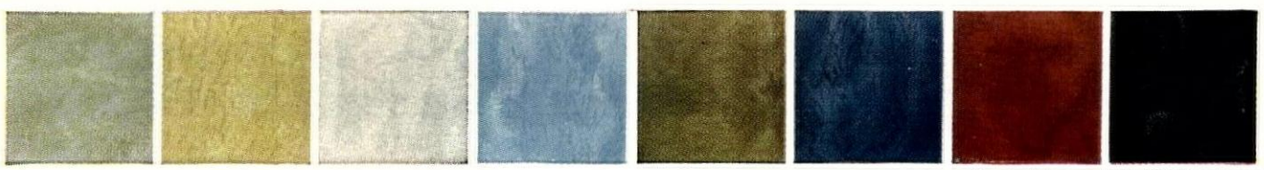
Armourtile is just one of Nairn's smooth floorings. If you want further information on contract or domestic installations or free technical services, contact Nairn floors direct.

NAIRN floors
P.O. Box 1, Kirkcaldy
Fife, Scotland

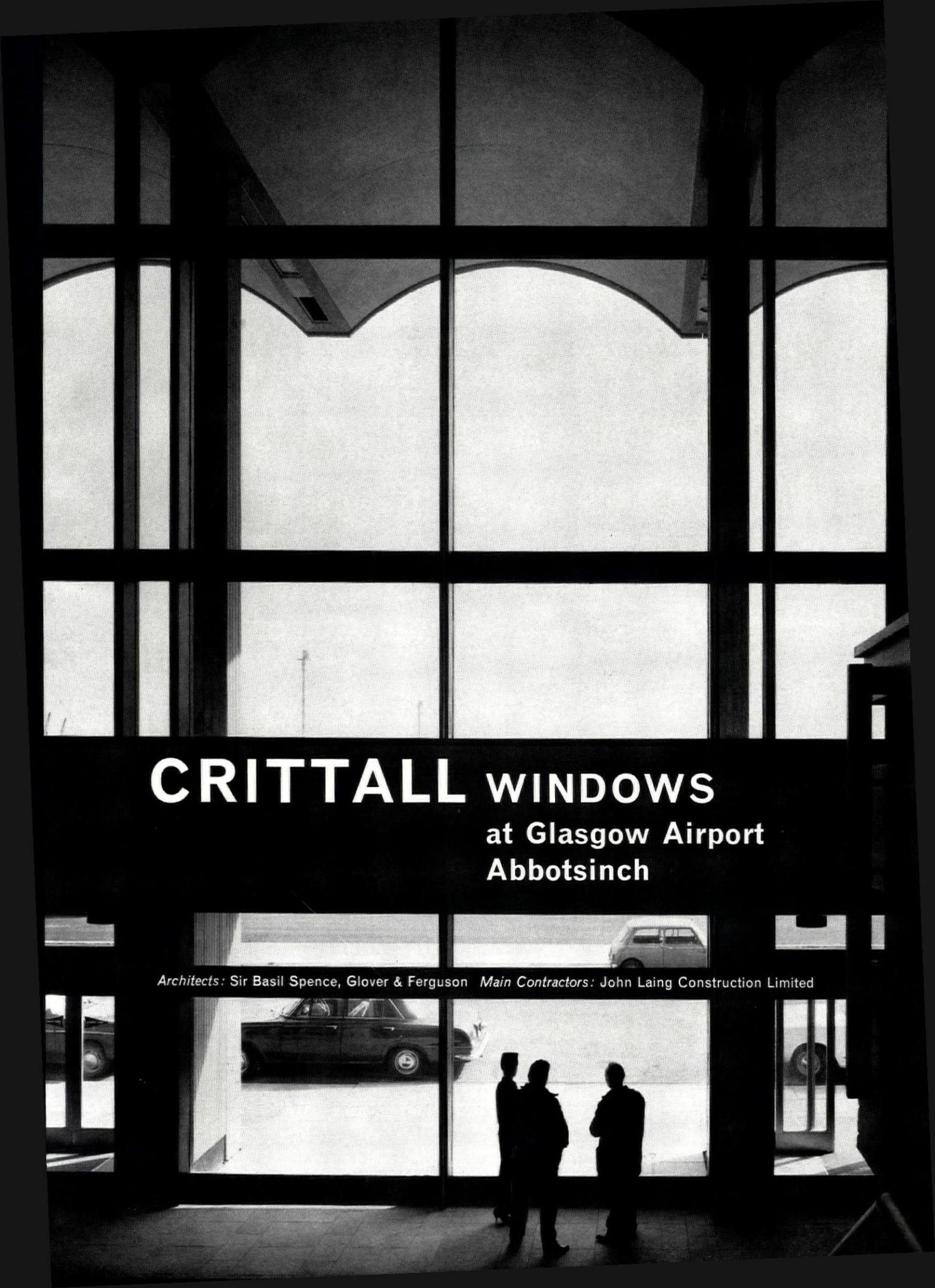
Tel: Kirkcaldy 0592-61111

NAIRN

A division of Nairn-Williamson Ltd.
Branches in London, Birmingham, Bristol, Manchester, Glasgow, Newcastle upon Tyne, Dublin, Belfast.



Some of Armourtile's 18 B.S. colours



CRITTALL WINDOWS

at Glasgow Airport Abbotsinch

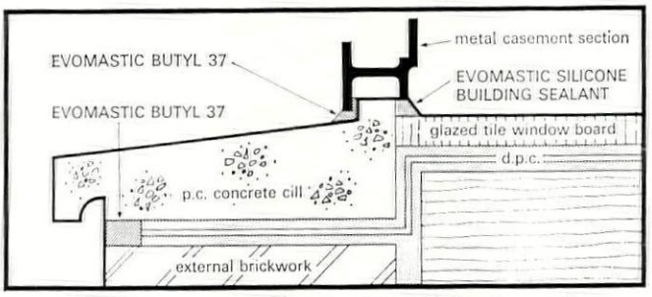
Architects: Sir Basil Spence, Glover & Ferguson *Main Contractors:* John Laing Construction Limited

Who fits long-range sights to their mastic guns?

You can aim wide, and hope. Or call in Evomastics and get right on target with such modern long-range sealants as Butyl .37.

One of our VIP customers puts his problem this way. "It's no good you chaps asking me to fill my mastics guns with super materials beyond my range." "You must remember I've got *two* targets to hit: target (a) is my specification—I've got to meet that technically; target (b) is this very low price. What do I do, aim between them!" The answer is in three parts: no, No and NO! In the short range, we are as aware as anyone that prices are important and that jointing materials must fit into the costings picture. In the long range, we also know—from over-the-years experience of thousands of construction jobs—that the cheapest materials often can be by far the most expensive. Usually this is simply because they have been 'aimed' too widely. The *right* inexpensive mastic will often do a splendid job and stand up over the years, *always providing that more sophisticated (and normally more expensive) jointing materials are used in conjunction with it, or used exclusively at points of particular stress.*
The answer to our customers, then, is that 'super' up-to-the-minute jointing materials are never beyond anyone's range. The specification and overall price 'targets' should always be lined up and aimed at together. And we have proved to hundreds of other customers, that on jobs of any size this can in fact be done. Take Butyl 37, or Silicone Building Sealant, or Polevomastic Two-Part Polysulphide Mastic, for example. No matter how technically desirable, they may at first all *seem* far too costly for the job you have in mind. But used in the *right* places, at the *right* time (and, perhaps, in conjunction with the *right* less expensive materials—Evomastic General Purpose Sealing Compound, for instance), they can save a great deal of time and money. And even more important, their correct use ensures that specifications are fully met on a calculated 'long-range' basis.
So this customer; and many new ones, now hands the complete specification over to us for our Sealant Systems men to work on. These men are, of course, scientists working in some of the finest sealants research laboratories in Europe. Their formulations combine a complete range of world-famous modern mastics, sealant compounds and strips, plus the capacity to research and recommend special formulations and applications procedures whenever they are necessary.
Will it pay *you* to fit 'long-range' sights to your mastic guns and to ask Evomastics to quote for your next project with their take-*every*-joint-into-account precision? Our technical representative will be glad to explain why the simple answer to that somewhat complex question is in three parts: yes, *Yes* and YES. We are at your service. Write or telephone now.

EVOMASTICS
SEALING SYSTEMS

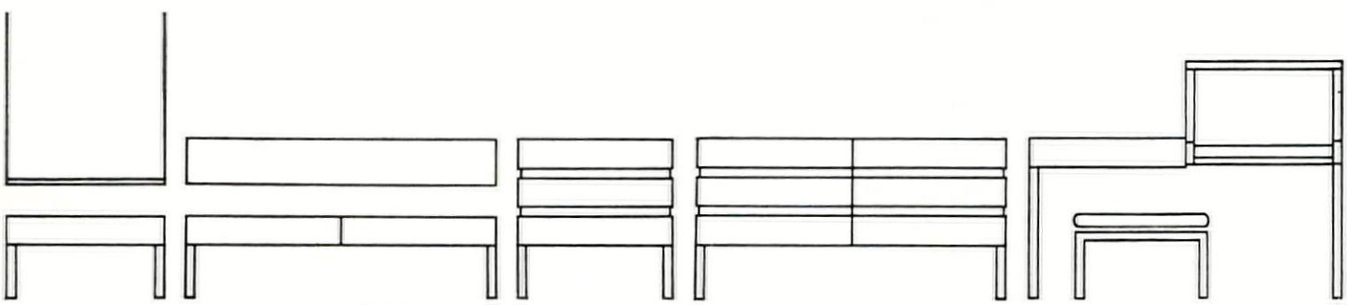


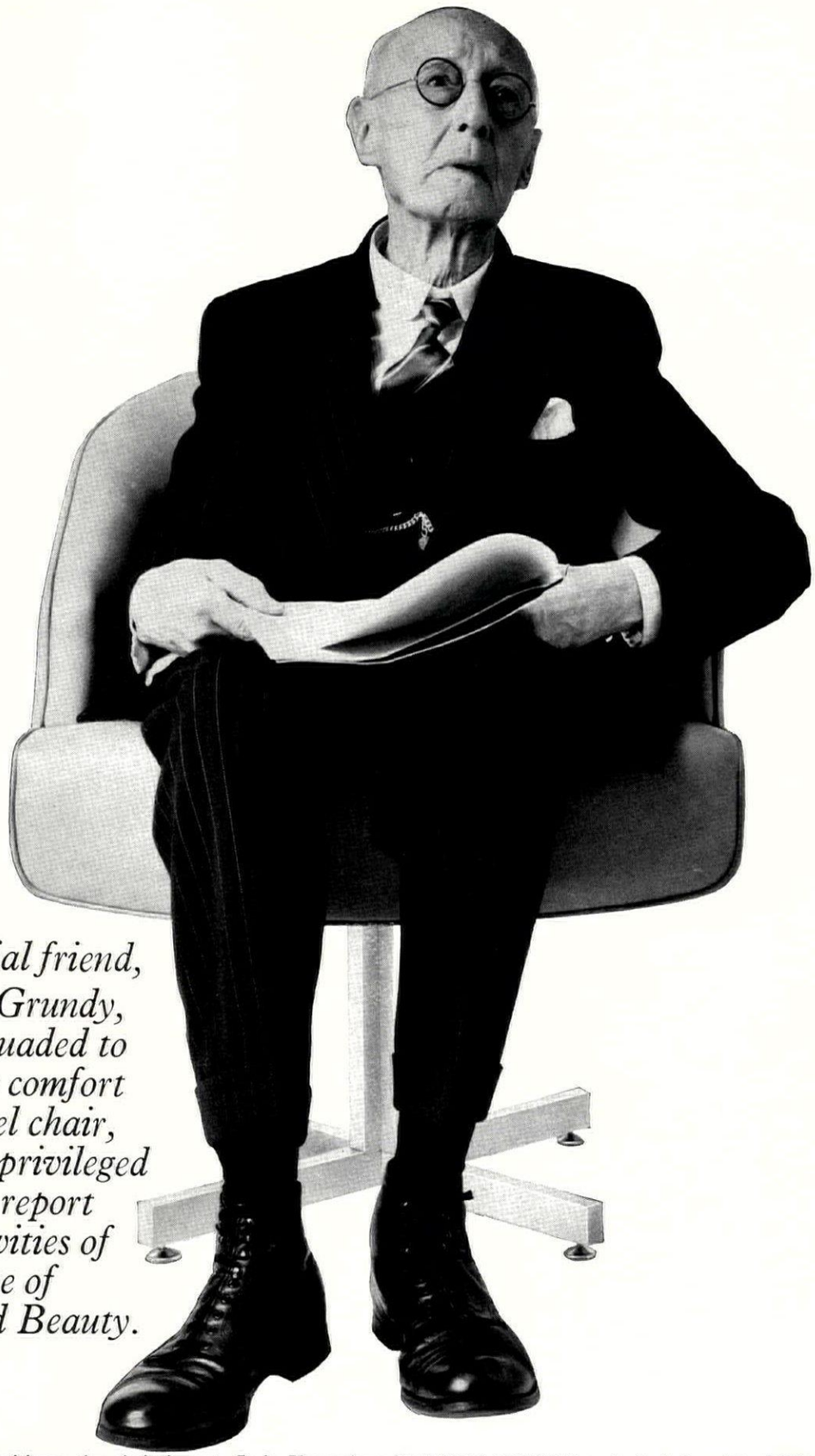
Evomastics Limited, Stafford, Tel: Stafford 2241. London Office 450/452 Edgware Road, W.2. Tel: Ambassador 2425

Opus 22

Beautifully designed wardrobe units with the built-in look. Quite unique for Contract furnishing. A flexible furnishing system that can be adapted for the smallest of bedrooms or the largest of contracts. The wardrobe units can be erected in multiples, each unit being 22″ wide, 24″ deep and 7′ 4⅝″ high. Interior fittings — shelves, shoe racks, drawers, hanging rails, may be arranged for any storage requirement. The units are beautifully designed, superbly made in a choice of four finishes, and can be delivered and erected on site to your instructions. A beautiful range of individual pieces with linking wall boards can be used to achieve unified schemes. If you would like to know more about OPUS 22 write to:—

THE STAG CABINET COMPANY LIMITED, HAYDN ROAD, NOTTINGHAM. TELEPHONE NOTTINGHAM 62121





If our genial friend, Alderman Grundy, can be persuaded to forsake the comfort of his swivel chair, we may be privileged to hear his report on the activities of The League of Health and Beauty.

The Alderman is fictitious; the chair is not. It is Kasparians X-ALUM KX/23-S swivel chair as supplied to Dumbarton County Council for their new council chamber. Kasparians' Sales Director is Raleigh Zilesnick. As the surname is unpronounceable, just ring Mayfair 5961 and ask for Raleigh (pronounced 'Rarly') or write to Kasparians (UK) Ltd, 28 Albemarle Street, W1

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Architect: Hugh McIlveen MA ARCH (Hons) DA (Edin) ARIBA
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Beautiful: any veneer of your choice
Efficient: proven by NPL absorption test results
Economical: from only 6s 6d per square foot
Strong: tremendous endurance and impact resistance
Practical: dry construction on battens, no maintenance
Adaptable: four standard sizes four slat widths

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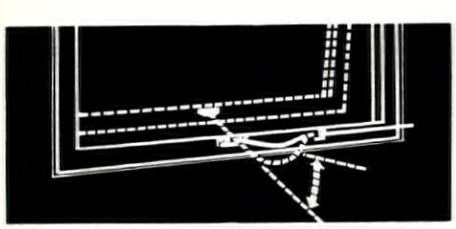
1



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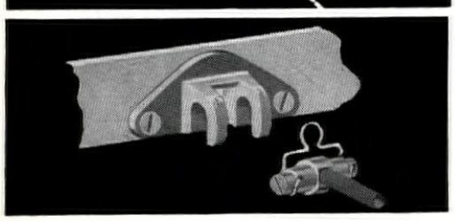


newflex window controls

Newflex cable window controls are fitted throughout the Northumberland Teachers College at Ponteland, Northumberland.

The assembly hall (illustrated) has six sets of gear each operating two lights. An efficient means of control is provided for the high opening lights without detracting from the building's appearance. Newflex is a new cable gear that will operate up to four lights from one gearbox.

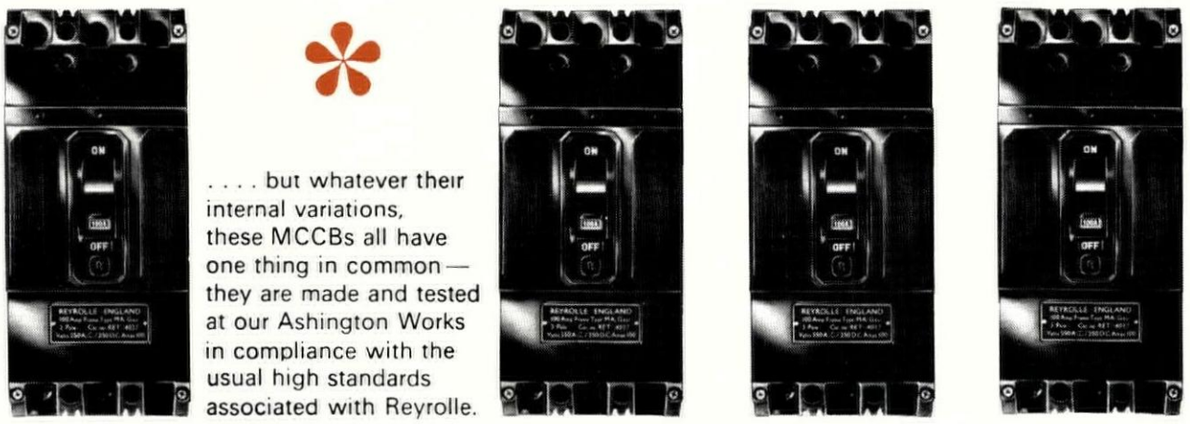
The features illustrated left are (1) swivel thrust design to ensure a direct thrust on the window throughout the opening cycle. (2) Flip over device to allow the window to be quickly detached for cleaning purposes.

C. C. Brown, Northumberland County Architect.
The A75 system of Industrial Building by A. H. Anderson Ltd.
Main Contractors: Ralph Bowey & Son Ltd.

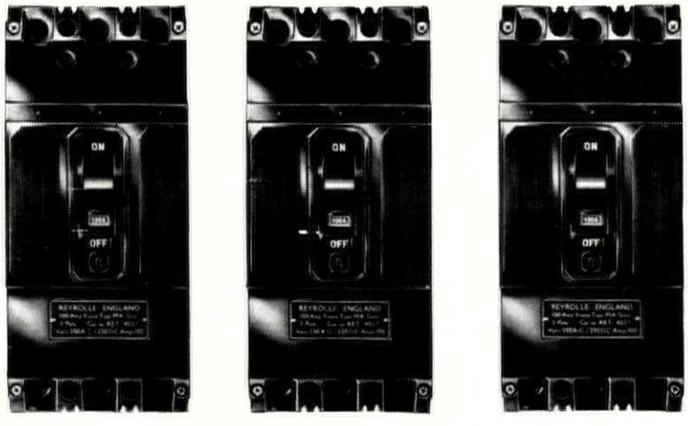
WILLIAM NEWMAN & SONS LTD., WELLHEAD LANE, BIRMINGHAM, 22B

NEWMANS

Moulded-case circuit-breakers may look alike but appearances can be deceptive. For example, some might incorporate additional features such as an auxiliary switch, or a shunt or under-voltage release . . . .



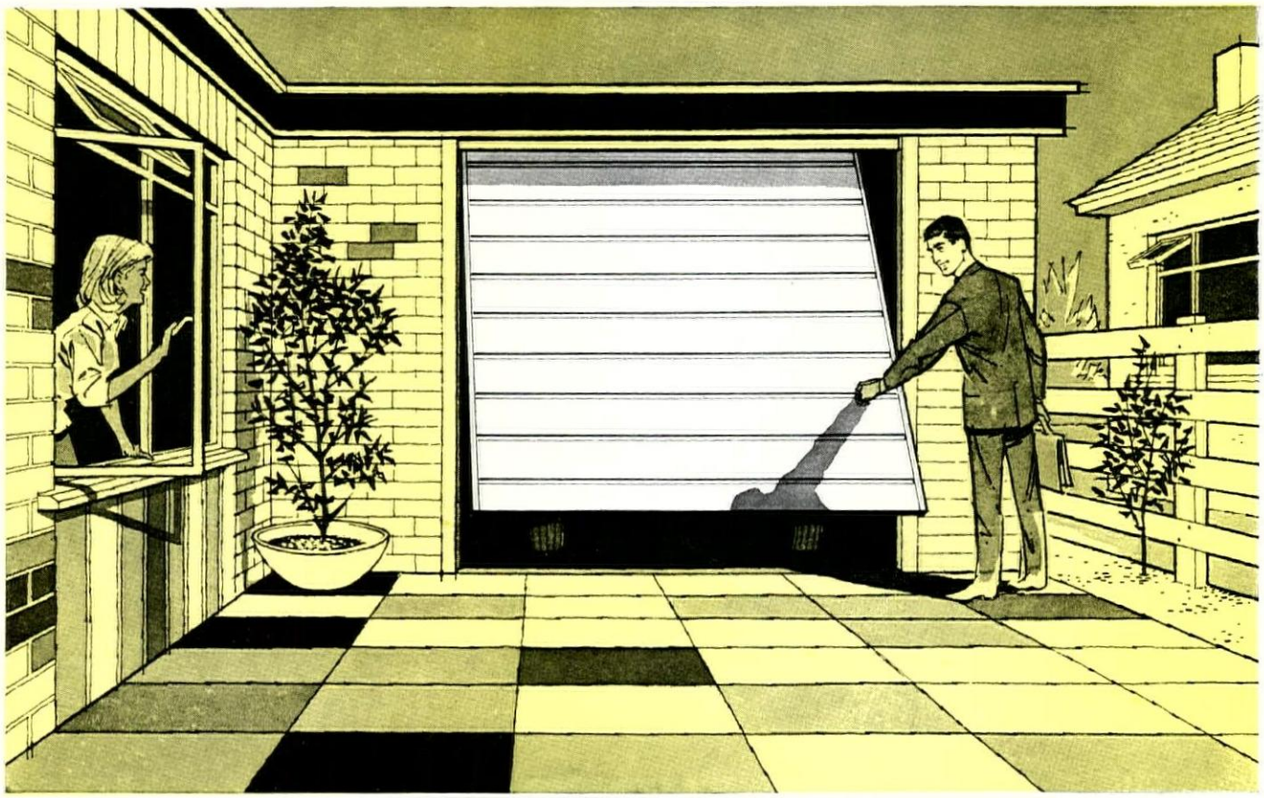
. . . . but whatever their internal variations, these MCCBs all have one thing in common — they are made and tested at our Ashington Works in compliance with the usual high standards associated with Reyrolle.



Ask for Pamphlet series 1346

Reyrolle

Hebburn County Durham England



BOLTON

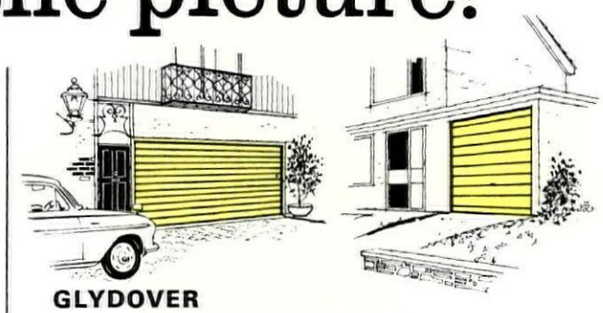
overhead garage doors complete the picture!

But there's a lot more to them than their stylish appearance. Between them, they answer every known problem encountered by overhead installations. What's more, they answer these problems for a lifetime because, despite their competitive prices, each is built to a lavish specification.

BOLTON Berry

The panel is of horizontally reinforced, corrosion-resistant steel, secured at stress points to a diagonal frame, giving great rigidity and strength. Nylon rollers provide smooth, quiet operation and the offset handle allows the operator to stand aside as the door rises. Stabilising arms prevent any side sway, and only 2½ ins. side clearance and 2 ins. headroom are required.

To suit opening sizes: 6 ft. 6 ins. high x 7 ft. and 7 ft. 5 ins. wide; 7 ft. high x 14 ft., 14 ft. 10 ins., 16 ft. and 18 ft. wide.



GLYDOVER

Four hinged, horizontally reinforced rust-resisting steel panels run upwards and inwards on a curved track. Full counterbalancing and finger-light operation are provided by powerful springs. The Glydover door is ideal for situations where outward swinging is not permissible.

Standard sizes: 7 ft. high x 8 ft. wide, and in any special size up to 16 ft. wide.

Power operation by a variety of controls is available for both doors.

Write today for full details of Bolton Berry and Glydover under ref. AR647

BOLTON GATE CO LTD

BOLTON LANCS *The Biggest Name in Doors*

Branches in London, Glasgow, Birmingham and throughout the country.

BG. 647

The Anderson Thermovent Roof breathes - dries and ventilates itself automatically

This advanced built-up roofing system permits the roof to "breathe" and eliminates problems caused by air and water vapour. It incorporates Thermovent Base Layer made of glass-fibre base bitumen roofing with controlled fixing apertures which enable the base layer to be securely fixed to the substructure. The mineral granules on the underside of the base layer raise the felt from the substructure and provide continuous passages for air and water vapour to escape. Ducts at eaves and verges permit continuous ventilation, and roofs of especially large area can have additional ventilation through Anderson Breather Vents.

The new improved Anderson Breather Vent has been developed to provide the most efficient design for flat roof ventilation.

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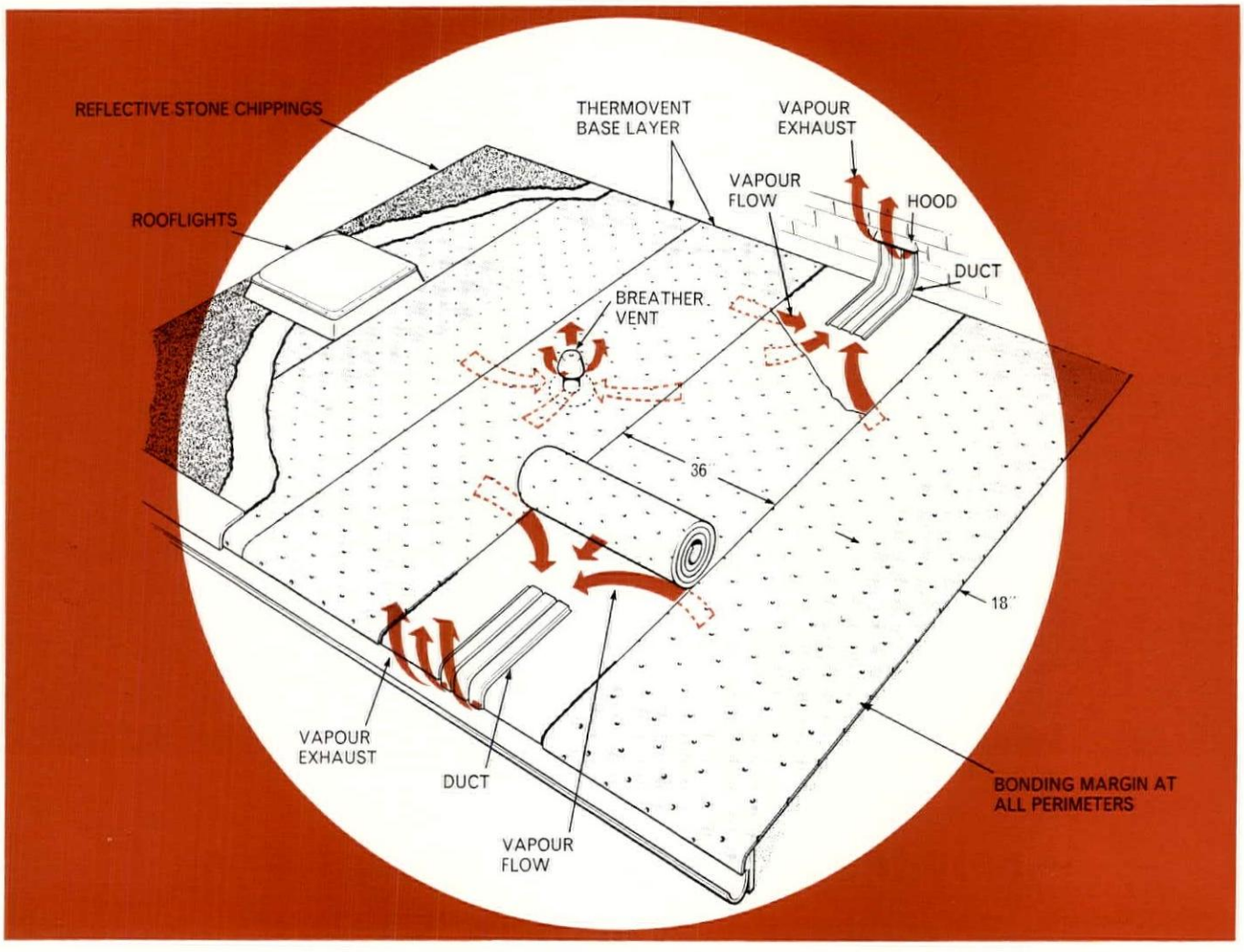

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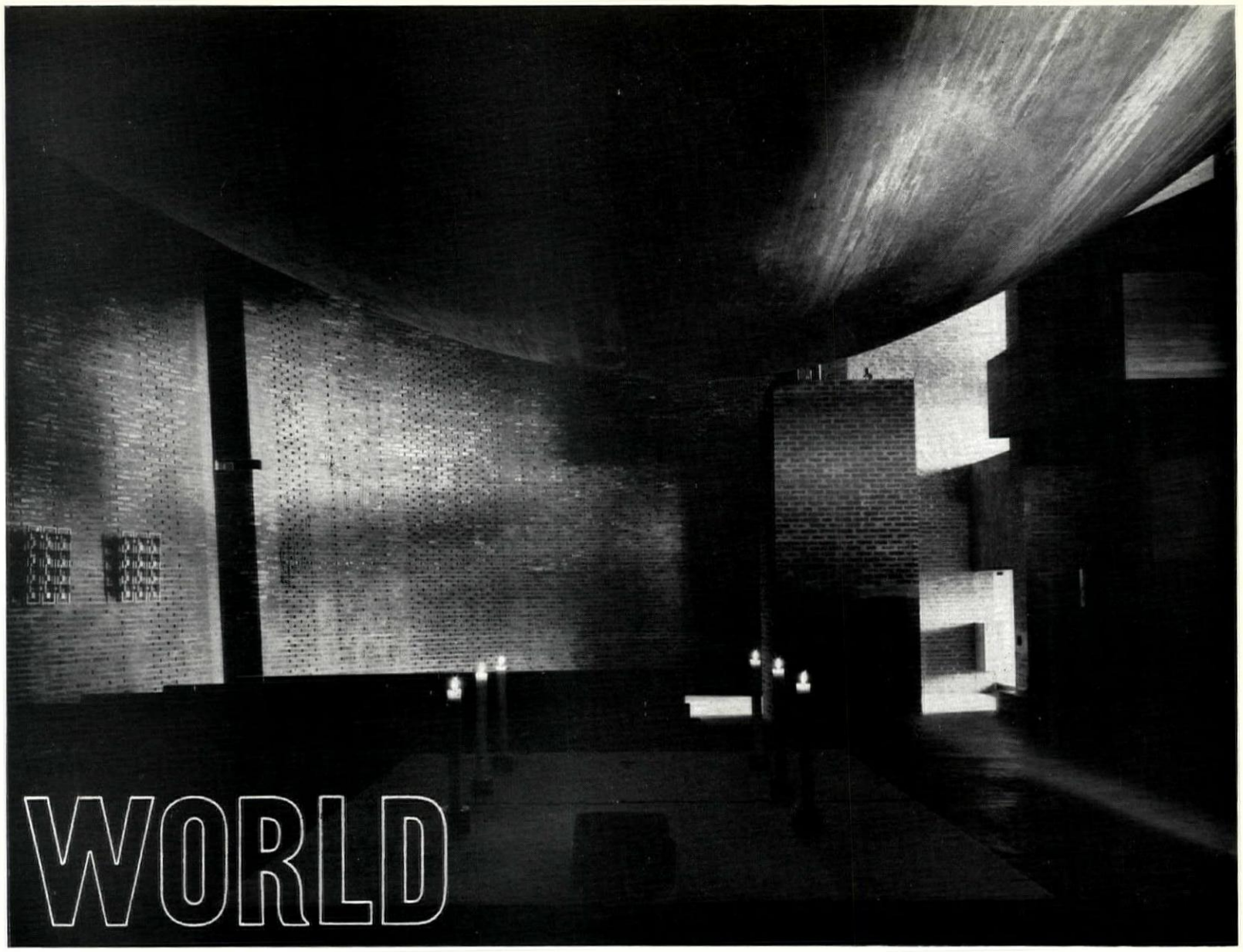

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acknowledgments

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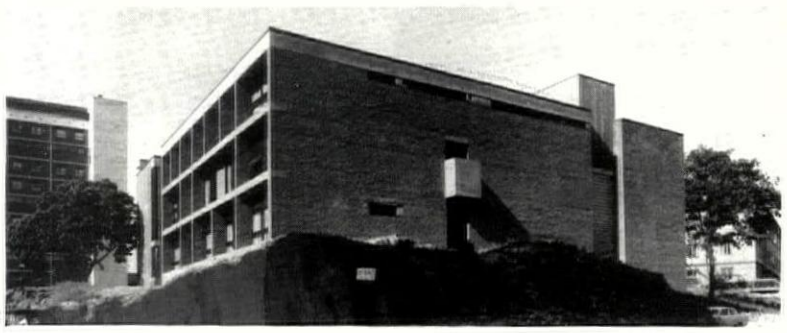

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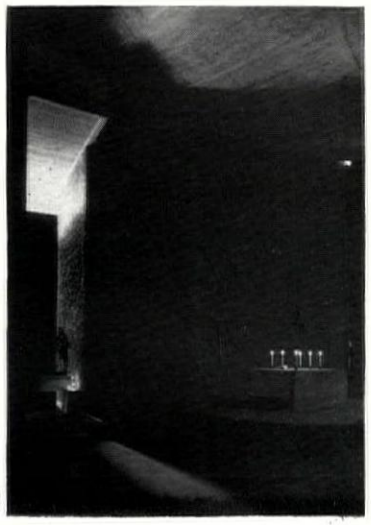
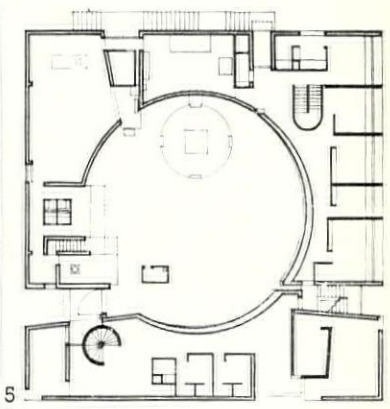


4

GOD'S HOUSE

St. Halvard, Enerhaugen, 1, a Franciscan church in the eastern suburbs of Oslo, is a masterly synthesis by Kjell Lund and Nils Slaatto of both formal and liturgical symbolism. Perched fortress-like on the rocky outcrop, 3, it contrasts in solid clinker bricks, 2, with the bland point blocks scattered around it; yet at the same time it is a *house* in the Early Christian sense and not a temple, the worship room being secreted within the surrounding parish rooms and friary. The friars' offices, common rooms and cells form the three floors on the one side that has generous fenestration, overlooking the fjord, 6, the built-in furniture being detailed with the same strong sense of priorities. The church



5

in plan, 5, has the most basic geometry: a circle within a square, containing a square altar on a circular dais. The sagging shell concrete dome is supported, 7, on walls which taper

6

This month's cover. *Creation is always a battle against time, and a man's work is not helped when his hand has dropped off and Virginia creeper is clinging to his dungarees. Edwin Johnston took this poignant photograph at the extraordinary dream house of an amateur architect at Edinburgh called Rockville, shortly before it was demolished last year—see 'Modular Rockery,' pages* 147-151. *The sculptor portrayed on this relief, which was fixed high up on the garden front of the house, is said to have been the owner-architect's brother.*

THE ARCHITECTURAL REVIEW

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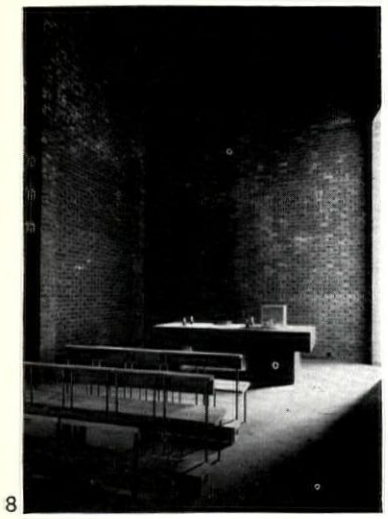

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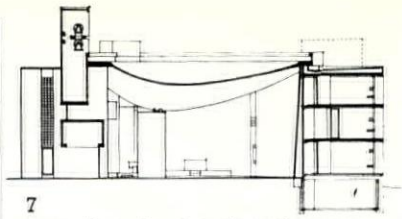
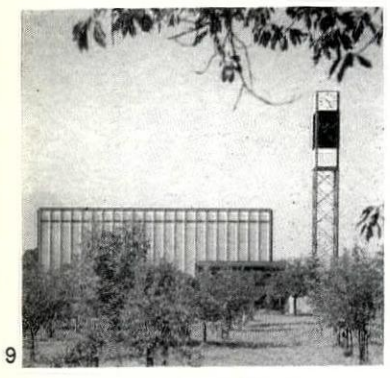


7

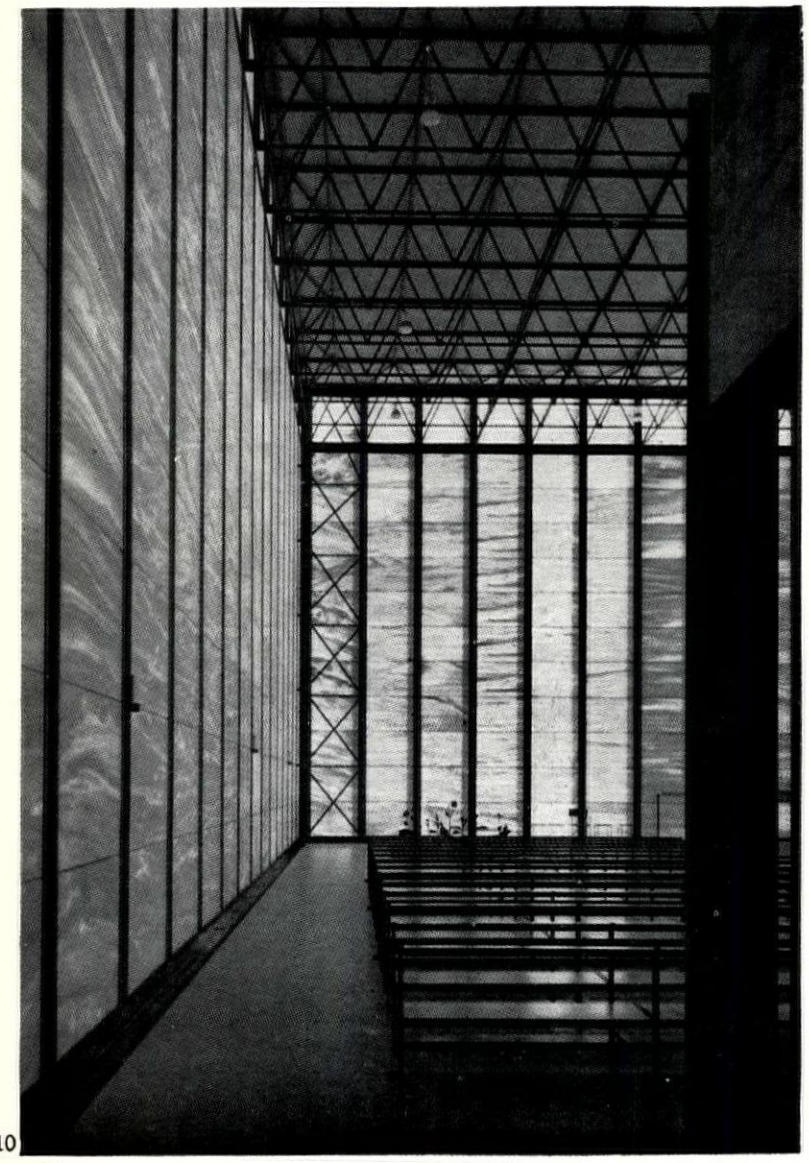
upwards and outwards and are penetrated in three places by the only shafts of natural light allowed into the room. The three divisions of the outer shell, reached by catacomb-like corridors and stairs of various shapes, represent the friary, the parish rooms and the Lady Chapel (with sacristies). The latter, open obliquely to the main altar, 4, is a high bare rectangle, 8, with bricks perforated for acoustic reasons evenly instead of in the artful pattern of the main church. Tubular steel supports the pews and stainless steel glitters round the font.



9

TEMPLE

A typically Swiss time-piece stands alongside the Grecian temple of Franz Füeg's exceedingly sophisticated Catholic village church, 9, among the orchards at Meggen, near Lucerne. This has an exquisite interior of prefabricated steel mullions and trusses, 10, infilled throughout with translucent marble just over an inch thick. The approach, 11, is by means of a monumental flight of steps ascending the rough-shuttered podium, which contains the morning chapel. The church itself is on the upper level, 12, entered away from the road from a piazza which is enclosed by the pavilions for parish hall and parsonage. The refinement, not lacking in strength, of Füeg's machine-made detailing is nowhere better seen than in the High Altar, 13, a solid block of grey marble on a tubular steel base.



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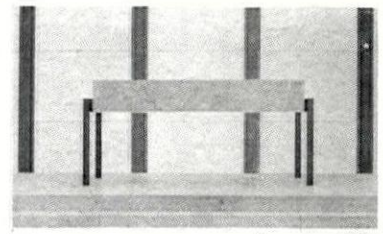

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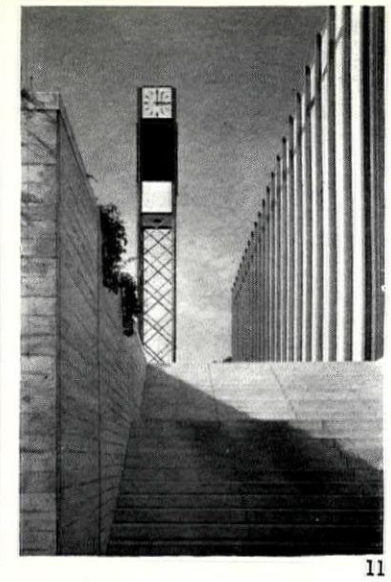

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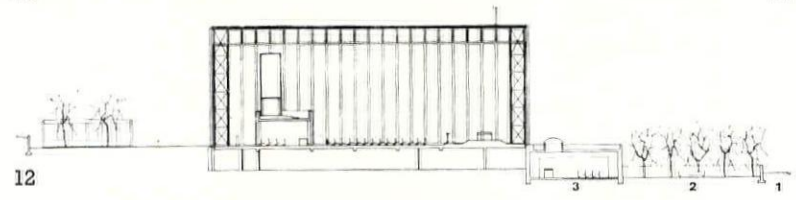

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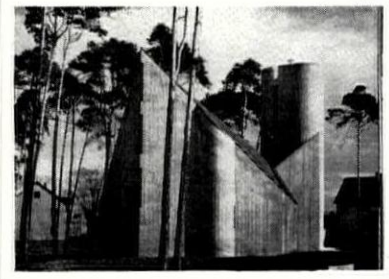
CONCEITS

The recent issue of *L'architecture d'aujourd'hui* on *Architecture Sacrée* (April-May 1966) was a grisly affair, through no fault of the editors; there is no more humiliating indication of the conceit of architects than to see eighty or more modern churches clapped between the same plain covers. Everyone has been desperately trying to express something; here we select a few which seem to have achieved a certain unity between liturgical space and appropriate local form. A lozenge or arrowhead shape is used by Victor Lundy in his movingly simple slum church of the Resurrection in Haarlem, 14, and by Helmut Striffler in his handsomely shuttered Protestant church at Mannheim-Blumenau, 15. Polygons are used in a decagon by Herb Greene at the Unitarian Church of Lexington, Kentucky, 16, and in a whole series of hexagons within an hexagon by Rainer Disse at the Catholic church of Karlsruhe-Durlach, 17, where the pattern of skylights disturbs an otherwise admirable plan,

14



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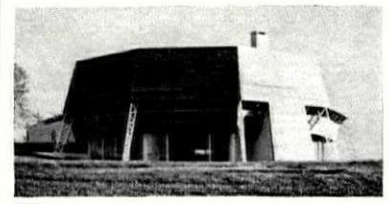

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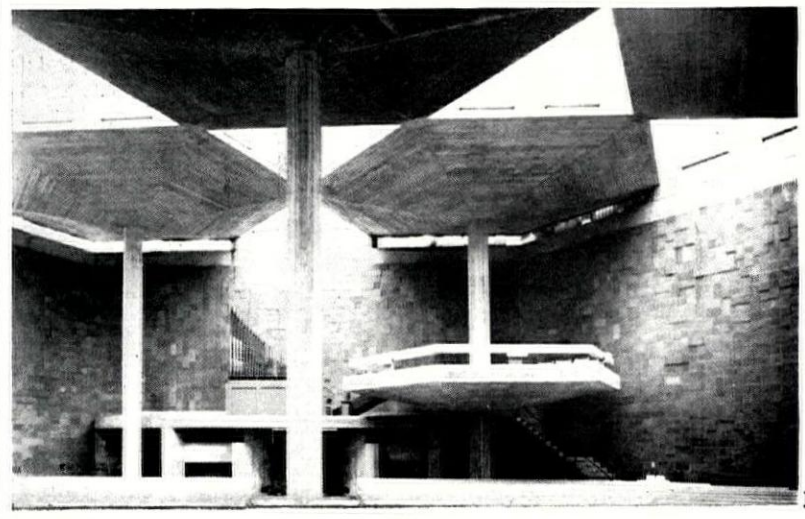

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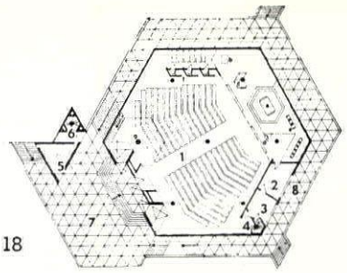


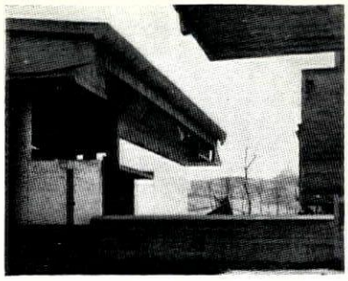
18

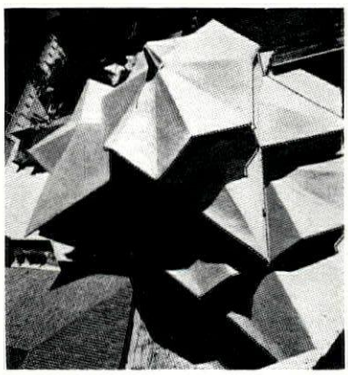
18. Disse's *béton brut* is typical of the powerful influence of later Corb on current church design, seen in a closer apostolic succession in the French chapel at Sao Paulo, 19, by J. Bonilha

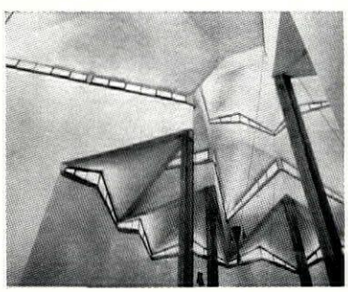
19

Esteves and I. Sankovski and in two impressive churches by Glauco Gresleri at Bologna, 20—the Communist capital which is shortly to receive, as part of Cardinal Lercaro's aggressive counter-attack, churches both by Le Corbusier and by Alvar Aalto. Architectural aggression in Italy is equally shown in two churches by Nicola Mosso: a hexagonal village church at Moriondo di Moncalieri, 21, in which the complicated system of rooflights relates to an admirably organized 'inner ring' of columns round a hexagonal sanctuary, and the church of the Holy Redeemer, 22, for the Fiat

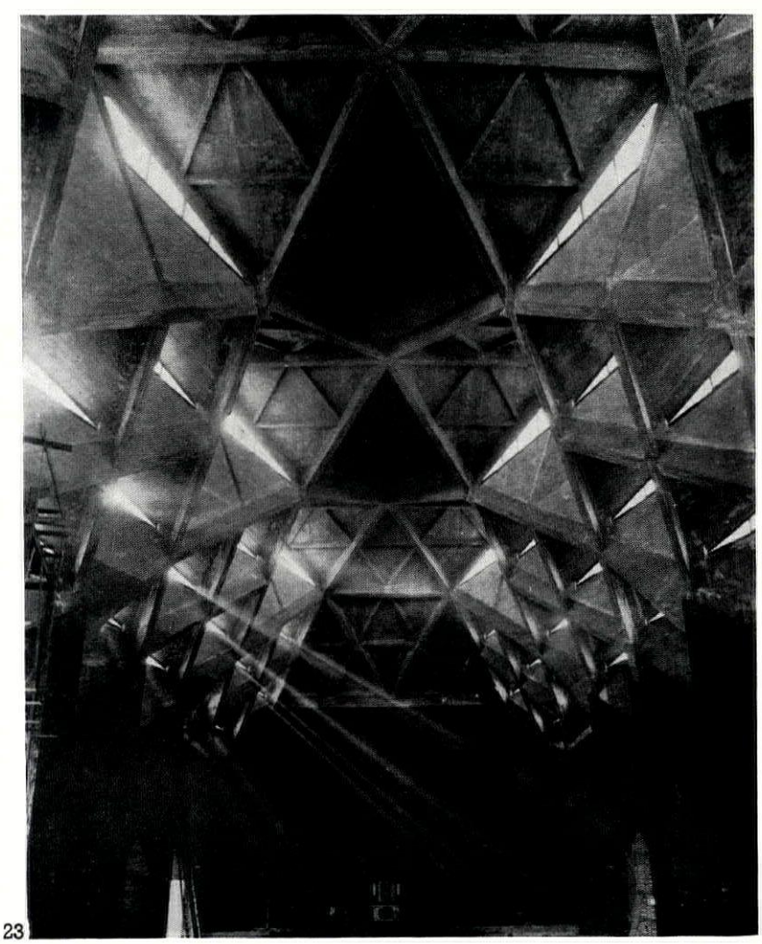
20, 21, 22







suburb of Borgo Morafiori at Turin, where the equally complicated polygonal skylights relate merely to a traditional long room, 23.



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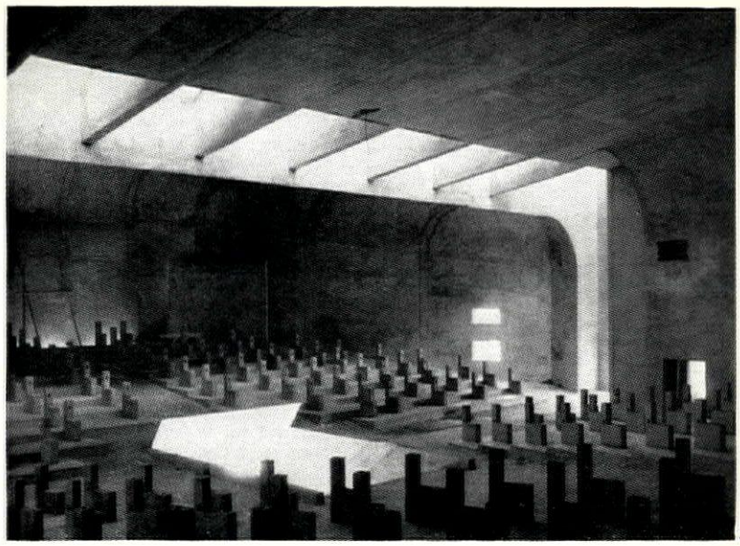

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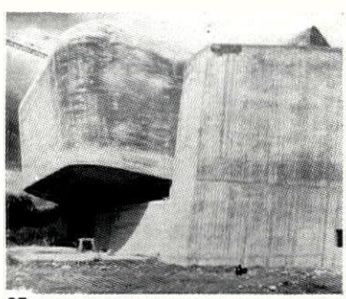
PROPAGANDA

Greeted with a near-riot at Folkestone in June, Claude Parent and Paul Vitilio have played cool in their first work, Ste. Bernadette at Nevers, 25. Their favourite play with diagonal *sols-plafonds*, 26, makes the church floor, 27, rise east to the altar and west to the confessionals from a central stairway leading up from the parish rooms beneath, 28. It makes a fine interior, seen in 24, before the pews were fixed to their supports. But the incorrigible propagandists tell us that they have created *un type nouveau d'architecture dite 'repulsive.'*



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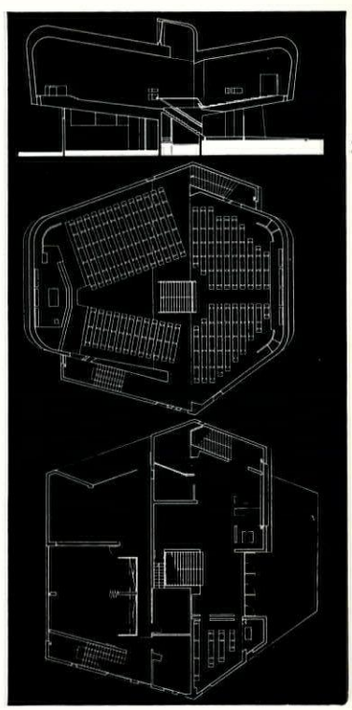

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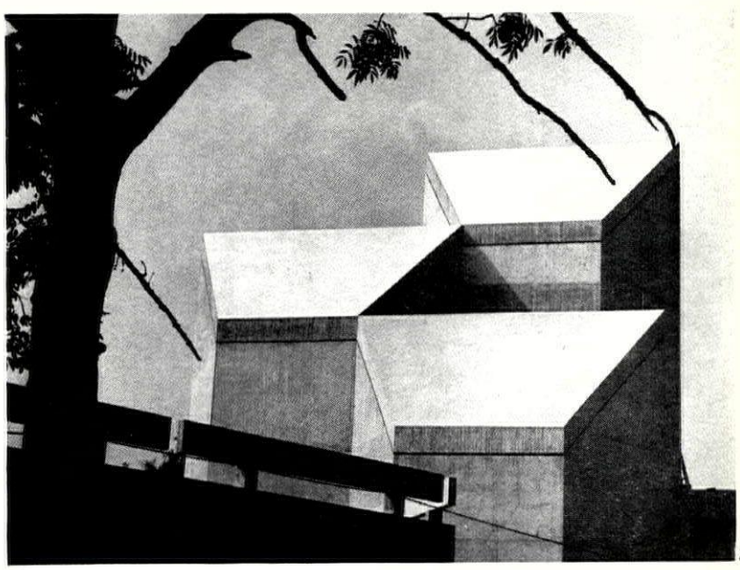
BOOKS

The three half-hexagons, 29, which crown the library and reading room of the Stimmen der Zeit seminary of the Jesuits at Munich is the latest contribution by Paul Schneider-Esleben



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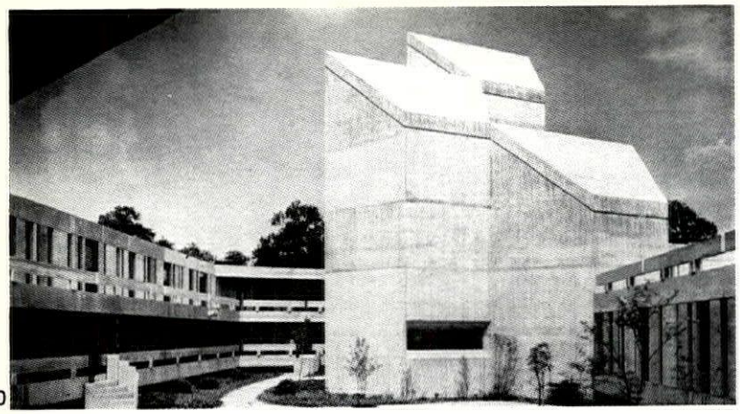
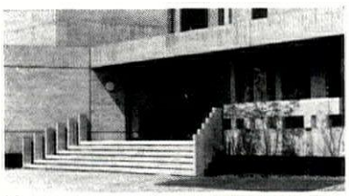


30

BOOKS

to architectural geometry (see also last month's World). Oddly enough the chapel and its four side-chapels are not at all prominent—the visitor would naturally suppose the library to be the



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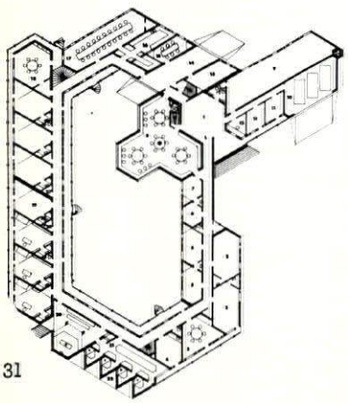
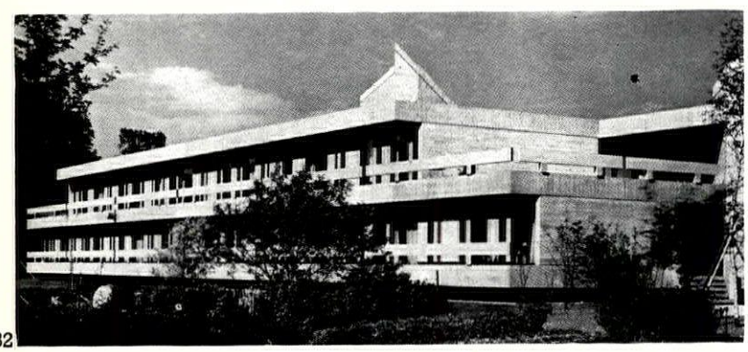


31

place of worship. The courtyard within, 30, is encircled by continuous access galleries on the two floors, leading to the nineteen cells. What is not expressed externally is that the plan, 31, is entirely of hexagons, the left-over triangular spaces being used for lavatories and cupboards On either side of the library are large straight-sided rooms for the refectory and book store. The board-marked concrete, 32, fits naturally into the parkland setting near the Nymphenburg Palace. The entrance steps, 33, are typical of Schneider-Esleben's orderly fancifulness.



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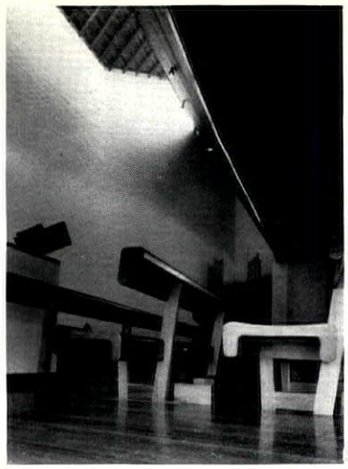
34

HARBOUR LIGHT

Situated above Sydney Harbour, the Wentworth Church at Vaucluse, 34, designed by Clarke, Gazzard and Partners, embraces its hilly site with an enclosed forecourt, 35, used as an after-church meeting place. The interior, 36, is one of the few successful examples of the often misused 'heavenly light over the altar' motif.



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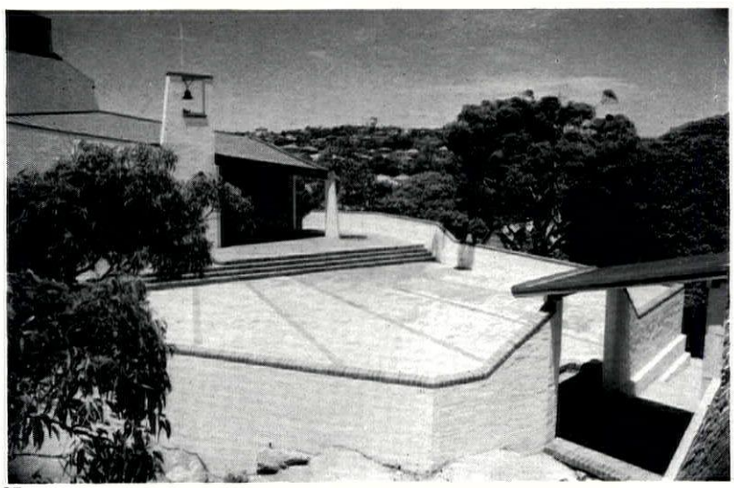

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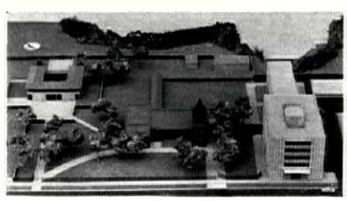
ACCRA CLOSE

Accra Cathedral, 37, is an early work of Sir Aston Webb (1893) with an English village appearance which forms an oasis between the seashore and High Street. A development plan by Anthony Hyland of the Ghana Architectural and Civil Engineering Company shows a new bishop's house (left in 38), provost's house and school (behind the cathedral) and a speculative office block similar in scale to those on the other side of the street, rather archly called Trinity House.

37



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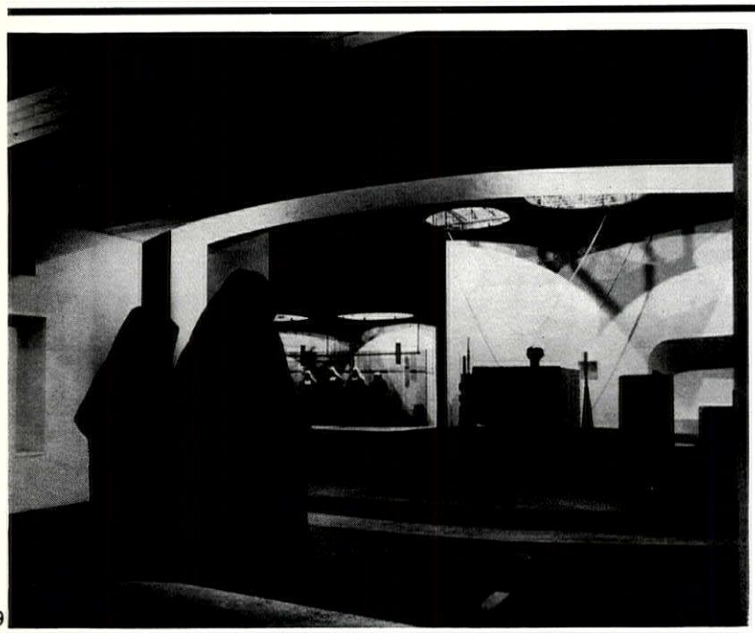

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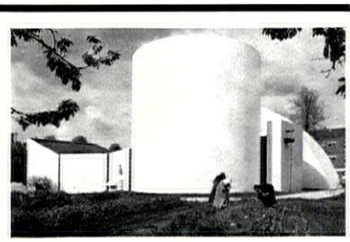
SCULPTED

Pierre Székély's Carmelite chapel at Valenciennes, 39, proves that sculptors' sculpture can be much more convincingly architectural than architects' sculpture. After the mother prioress had been converted to modernism on a visit to Ronchamp, a detailed liturgical brief was worked out. Le Corbusier (La Tourette rather than Ronchamp) influenced no doubt the toplit interior, its colours of brown and white and black reflecting the nuns' habits; the exterior of white-painted brick, 40, clearly defines the twin semicircles of nuns' choir and sanctuary (right) and the rectangular parish nave (left). An 1892 photograph of St. Teresa, 41, with a view through to the genuine 'little flowers' outside shows an intelligent understanding of pop art's ancestry in hagiography.



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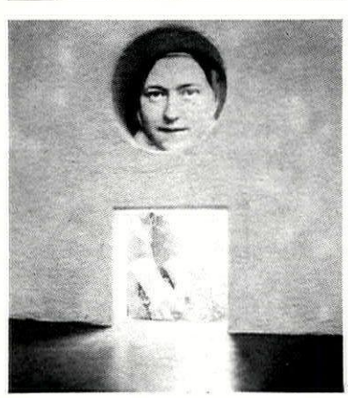

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VIEWS AND REVIEWS

marginalia

THE ICA 1967-68

The Institute of Contemporary Arts moves into its new premises in Carlton House Terrace later this year and, as part of its expansion programme, has appointed a new director and chief executive in the person of Dr. Desmond Morris, who has been up till now on the staff of the London Zoo. Dr. Morris has, however, though professionally a zoologist, always taken an active interest in the arts, is the author of a book called *The Biology of Art* and of two surrealist films and has carried out post-doctoral research at Oxford into the subject of the recognition of visual signals. He is chiefly known to the general public for his many television appearances arising out of his work at the zoo, and for the experiments he made with chimpanzees as painters. The paintings of the chimpanzee Congo were the subject of an ICA exhibition in 1957.

At the same time as announcing the appointment of its new director, the ICA has given details of the first major exhibition to be held in its new gallery in January 1968. The title of the exhibition, which is being organized by the present assistant director Jasia Reichardt, is Cybernetic Serendipity. It is described as an attempt to explore creative forms engendered by technology, illustrating at the same time artists' involvement with science and scientists' involvement with the arts, and in particular will introduce the computer as a tool for creative activity. Exhibits will include computer-generated graphics, music, poetry and films, robots and various self-controlling mechanisms made by artists, chance games and cybernetic devices.

BRACE OF MEDALS

The AR is proud to put on record the award to one of its own Editors of the RIBA Royal Gold Medal for Architecture. The 1967 medal goes to Nikolaus Pevsner, Professor of the History of Art at Birkbeck College, London University, editor of the *Pelican History of Art*, founder-editor (and author of nearly all the volumes) of the inimitable *Buildings of England* series of architectural guides (a couple of which are reviewed in this issue), chairman of the Victorian Society, wartime assistant editor of the AR and member of its editorial board ever since.

The medal usually goes to a practising architect, but services to architecture are equally what it was founded for. Professor Pevsner's very great services as writer, historian, critic and editor during the thirty-odd years since he came to live in England, are an astonishing achievement for one man. It can be recorded at the same time that Professor Pevsner has also been given the Alice Davis Hitchcock medallion, which is awarded annually by the Society of Architectural Historians of Great Britain for an outstanding contribution to the literature of architectural history, for his *Buildings of England* series. With the Berkshire volume, issued in 1966, the series reached its thirtieth volume.

RUSKINIAN ART SCHOOL

Birmingham School of Art has recently taken over the first phase of its new (and far from inspiring) buildings at Gosta Green; so now is the time to urge before it is too late the claims for survival of its original building, 1, which continues for the present to be occupied by the departments of painting and sculpture. Designed by the local architect, John Henry Chamberlain (no relation of Joseph, whose architect he nevertheless was), it is an excellent example of that Venetian Gothic through which Liberal Birmingham characteristically symbolized its commercial and spiritual independence of London.

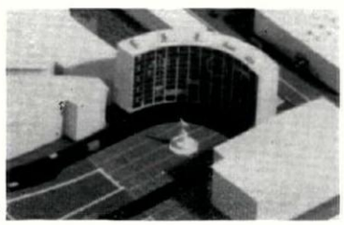
Its more than local importance, however, resides in a single feature: the so-called 'rose window'—it actually has no glass—in the left-hand gable, sculptured in terracotta by Chamberlain's lifelong friend, Samuel Barfield of Leicester. The fascinating ambiguity in historical terms of its writhing foliage, 2, is that for its date (designed 1881, built 1884–5), it seems incredibly early for *Art Nouveau*; but the alternative explanation (the true one) is that it is a belated example of Ruskinian truth-to-nature. Chamberlain was a close friend of the prophet and a trustee of his St. George's Guild; as chairman of the Art School as well as its architect, he demonstrated how far into the future Ruskin (contrary to his baser imitators) had seen.

1

PICCADILLY CIRCUS

In his recent article 'Theatreland' (AR, December 1966), Kenneth Browne expressed the opinion that it would probably be a mistake to turn Piccadilly Circus into a square as proposed in the Holford report of July 1966. He thought that somehow the sweeping curve of Regent Street should be continued in a curving wall to the circus itself.

A somewhat similar conclusion was reached by Konrad Smigielski in his second prize-winning scheme in the 'New roads for London' competition of 1959. The difference between the two suggestions appears to be that whereas the model of the Smigielski plan, 3, shows the curved wall as a quadrant-shaped building (presumably with illuminated signs mounted on it), Kenneth Browne envisages the whole eastern side of the circus as a semicircle formed by a freestanding screen of illuminated signs rising from a pedestrian deck, the front edge of which echoes the semicircular shape.



3

obituary

NIKOLAI KOLLI: 1895-1966

Another link with the pioneering days of modern architecture was lost when Nikolai Kolli died in Moscow in December last year at the age of 71. He was a leading Russian architect, an Academician and a member of the town-planning board for the Moscow region, but was chiefly known outside Russia as the executive architect of Le Corbusier's Centrosoyus building, completed in 1930. When the architecture of the constructivist period again became respectable in Russia a couple of years ago, it was decided to restore the Centrosoyus to its original condition—it had suffered from war-damage as well as neglect—and Professor Kolli was most appropriately put in charge of the work.

He was also known in the West as an active participator in IUA and other congresses, being president of the architectural section of the Soviet Union society for cultural relations with foreign countries. He had been an honorary corresponding member of the RIBA since as far back as 1936.

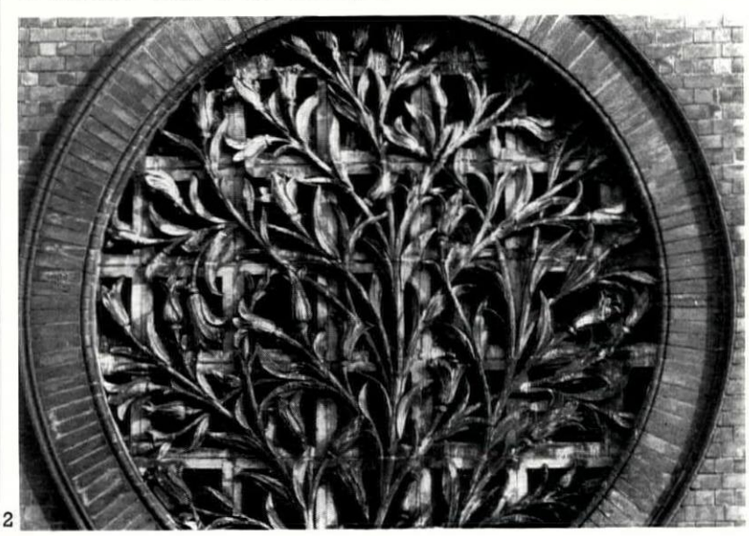
ANDRÉ BLOC: 1896-1966

The death of André Bloc in India last November, at the age of 70, deprived architecture of one of its prominent international figures and a man whose passionate adherence to the principles of modern architecture made the magazine he founded and edited, *L'Architecture d'Aujourd'hui*, a powerful influence all over the world. He was also a distinguished abstract sculptor and the relationship between sculpture and architecture was one of his continual interests.

Bloc was trained in Paris as an engineer, though he did not practice as such. At the age of 25 he made the acquaintance of Le Corbusier and it was out of consultations with him, with Auguste Perret and with Henri Sauvage that the idea of a new architectural magazine emerged. Bloc's initial partner in the project was another engineer, Marcel Cahen, but he died before it came to fruition. The first issue of *L'Architecture d'Aujourd'hui* appeared towards the end of 1930 and the magazine remained one of Bloc's principal preoccupations.

The other was his sculpture, on which he first concentrated when France was occupied during the last war and the magazine unable for a time to appear. Many of his sculptures were designed for particular architectural settings in close collaboration with architects. In 1949 he built his own house at Meudon outside Paris, and in 1956 a holiday house on Lake Garda in collaboration with the Italian architect Vittoriano Vigano. In the garden of Bloc's house at Meudon, where he hospitably entertained architects from all over the world, he had recently constructed a number of experimental objects—part architecture, part sculpture—including a large vaulted brick grotto, floodlit after dark. (see AR World).

André Bloc was also the founder, with Pierre Vago, in the 1930s of the *Réunion des Architectes* out of which the present International Union of Architects grew.



2

correspondence

RAIL CLOSURES AND AFTER

To the Editors.

SIRS: Your readers are indebted to Mr. O. H. Prosser for his commentary on your article in the light of the Government's White Paper on *Transport*

Policy. As he rightly says there are phrases which encourage those of us who have long looked for a new approach. However the continuing condemnation of more railways, the advance decision to close 400 more miles to passengers and 1,330 miles to freight (paragraph 20), and the promise of a new Transport Act only in 1968 must leave us very doubtful about a New Policy (Section 11). Even Mr. Marples and Dr. Beeching in their period of greatest glee cannot have hoped to close all the lines listed in the *Reshaping* Report and a slowing down in the later stages (which include the borderline cases) was to be expected. What is now manifestly needed is not a slowing down but a reversal; a restoration to use of lines now closed. The Minister recognizes the possibility of this (paragraph 22); when she does it, we shall believe in the new policy. The Minister sees the need for new authorities to run local transport and of assisting it in some way (62), even in the rural areas (27 and 28). Paragraph 79 cannot limit the proposal to road buses.

Mr. Prosser despairs of a change of policy by British Rail or by British Waterways. His pessimism is born of continuous frustration suffered in this country for very many years by those who believe that rail (to which automation can be so easily applied) and water should be our most advanced forms of transport. Countries as widely different in outlook as France, Italy, Japan, the Soviet Union and the USA (so often quoted as road-minded) are now a long way ahead. Britain's railways, and most of the canals, belong to the people; it should be possible, therefore, for the people to insist that the Government (whom they elect) give new directions to the Boards. I believe that we can only succeed in a massive way if this is done. We need to insist that the civil servants do not endorse with 'no action' such excellent proposals as that in paragraph 9 of *Transport Policy*, 'New thinking is required about . . . how (forms of transport) should be financed,' or the possibility of re-opening (22). But it is essential that all believers in better public transport put on the pressure now.

The Boards resist any taking over of services they want to discard. They do not want any other organization to succeed where they have failed, as the Norwegian company, Thoresen's, have done with the Channel ferries from Southampton to Le Havre. Unfortunately resistance is written into the White Paper where waterways are concerned (127) in spite of the fact that there are already many independent operators who possess the skills which the Government declares are only to be found in the official Board. Unfortunately also many of the self-help operators of railways are interested only in week-end amusement rather than Monday to Friday working services. The two are not necessarily incompatible but the Railway Board gives preference to the preservers (in the narrow sense) and does its best to discourage anything else.

Glasgow Corporation successfully runs an underground railway, Blackpool Corporation runs a light railway, Gloucestershire County Council formerly ran a canal. This principle could be extended, with working arrangements and running powers to cover joint operation of railways where necessary. For the canals and rivers a "National Waterways Trust" replacing the present Board is the most reasonable solution and would give ample scope for local initiative.

The National Council on Inland Transport is now supported by 112 county, municipal and district councils as well as companies, trade unions, amenity or technical bodies, and individuals. With this support we are able to speak with authority and experience in transport matters and would welcome any further assistance which your readers may care to give us. It is important that all who believe in a sane ordered system of transport, planned to relieve congestion and to aid movement, shall act now. Otherwise we shall be left with the paradox of less and less mobility in an era of growing numbers of vehicles.

Yours, etc.,

ROGER CALVERT

Hon. Secretary,
National Council on Inland Transport.
London, N7.

CANALS IN TOWNS

To the Editors.

SIRS: Increasing interest is currently being shown by people and organizations throughout the country, in our heritage of inland waterways. Much of this interest is, quite understandably, centred around the intrinsically beautiful stretches in the remoter rural areas. If the canals are to be used to their best effect, for pleasure and commerce, it is essential, however, that those which pass through the urban areas should also be retained, to provide the essential connections without which the other lengths will be unable to survive. These canals, while lacking many of the natural charms of the rural waterways, can be made attractive and useful by imaginative town-planning, such as that at present in hand around the Birmingham civic centre. An urban canal has usually become so closely integrated with the water supply and surface drainage systems of the town that it must be retained in being. To incorporate it into the town plan may thus be the most economic as well as the most attractive way to treat a canal.

The Midlands Branch of the Inland Waterways Association has decided to prepare a plan for the treatment of the canals in the West Midland conurbation, which it will discuss with, and present to, the local authorities in due course. Views and offers of help from organizations and members of the public are invited and should be addressed to the undersigned at Cotesbach Hall, Rugby.

Yours, etc.,

M. J. MACFARLANE

Inland Waterways Association,
Midlands Branch.

COLIN CAMBELL

To the Editors.

SIRS: The August issue of THE ARCHITECTURAL REVIEW contained an article by Mr. G. L. M. Goodfellow on Colin Campbell in which he stated that a considerable amount of information about the early life of the architect Colin Campbell could be found in two of the volumes published by the Spalding Club of Aberdeen in 1859 and 1863. Mr. Goodfellow then proceeded to identify Colin Campbell the architect with Colin Campbell of Boghole, and further suggested that he was also identical with another Colin Campbell who graduated at Edinburgh University in 1695.

Certainly Colin Campbell of Boghole was a lawyer who practised in Edinburgh and also in London, but I am afraid that the evidence for the identification of this man with the architect hardly bears examination. In the first place, Colin has always been an extremely popular name in the Campbell family, and it is by no means improbable that there should have been two of the same name in London shortly after the Act of Union of 1707. More important still, the identification is not made in any of the documents quoted in the two volumes of the Spalding Club. The editor of these volumes merely asserts, in a footnote and in the index, that Colin Campbell of Boghole was the architect and author of *Vitruvius Britannicus*. This, therefore, is an unsupported assertion made about a century ago. Against the identification there is a certain amount of evidence. To begin with, the portrait reproduced in Mr. Goodfellow's article seems to represent a man of about 40, in which case he would have been born nearer 1690 than the 1676 given by Mr. Goodfellow. Still more important are the facts that Campbell himself, in an engraving of 1729 in his edition of Palladio, gives a design for 'the house of Colin Campbell, Esquire, of Brook Street, Grosvenor Square.' We know that Colin Campbell the architect lived in his own house in Whitehall and died there in 1729, and his will, which is preserved in Somerset House, tells us that he lived in Whitehall and that he left some of his possessions to the children of his brother-in-law, not having children of his own. From this we know that he married a woman named Grant, so it should be possible to discover whether Colin Campbell of Boghole married into the Grant family. Finally, it is highly probable that had the architect been a Campbell of Boghole he would have said so in his will.

We know so little about the early life of the architect that it seems a pity if he is mistakenly identified with another man.

Yours, etc.,

PETER MURRAY

London, SE19.

Mr. Goodfellow replies: Mr. Murray has looked up *The Book of the Thanes of Cawdor* and has noted that Cosmo Innes gives no references for his statement that Colin Campbell of Boghole was the author of *Vitruvius Britannicus*. This omission is of course greatly to be regretted, but Mr. Murray ought to know that Innes is regarded as a very reliable authority by genealogists. When Innes said that Colin Campbell of Boghole became an architect he was repeating what must have been common knowledge in the Cawdor family. His book ends with the death of Sir Hugh in March 1716, and I suspect that Innes knew of letters or other documents which proved that Campbell the architect was a Cawdor Campbell but which he did not insert in his book because they were subsequent to that date.

Turning to Campbell's will, I have long been familiar with this document but intended to reserve my comments on it for a future article. However it is necessary now to mention a few points. The will is dated 16th January 1721 (Old Style) and was drawn up when Campbell was living in White Hall (probably in one of the houses on the site of the royal palace) but had almost completed his new house in Great Burlington Street, in St. James's Parish. At the time of his death in 1729 his domicile was in the Parish of St. George's Hanover Square. Brook Street lies in this latter parish. That Campbell did not call himself 'of Boghole' in his will can be accounted for by the probability that by 1722 he no longer owned this small property in Nairnshire. The executrix and principal legatee of Campbell's will was his wife. (His father had died in 1680 and his mother in 1719). Mr. Murray is quite wrong when he states that Campbell married a woman named Grant. Nowhere in Campbell's will nor in his widow's will is she called anything but Jane Campbell.It was Colin's sister Henrietta (the other legatee of his will), who married a Grant.

In the *Fasti Ecclesiae Scoticanae* we read that the Rev. John Grant was minister of the Parish of Auchinleck, Ayrshire, from 1712 to 1731. On December 2, 1712 he married Henrietta Campbell, daughter of Donald Campbell of Boghole and Elizabeth Innes. They had eight children, including a Colin who is mentioned in his uncle's will. Mr. Murray may remain unconvinced that Colin Campbell the architect was a nephew of the laird of Cawdor, but it would be a great pity if he was to leave the impression that the assertion is unsupported by evidence.

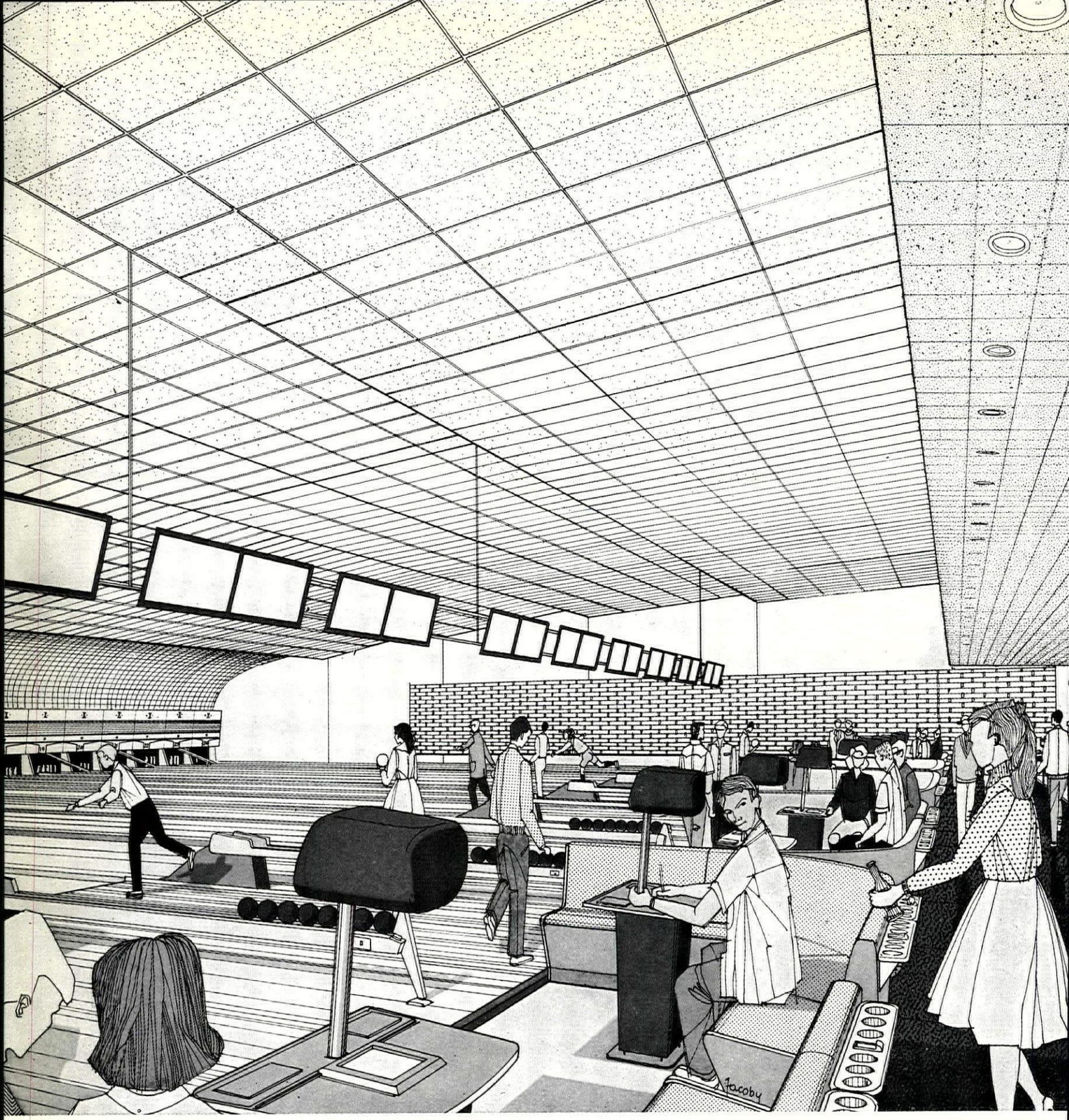
COLONIALISTS

To the Editors.

SIRS: In your October issue you published an illustration of the proposed Governor's mansion in Harrisburg, Pennsylvania, with a text which seems best interpreted as sarcastic criticism. The building, though obviously unoriginal, hardly seems worthy of your malevolence. Its style might better be called 'Virginia Georgian' than 'Pennsylvania Georgian,' but the relation between the two is closer than that between popcorn and Quaker oats, to use your coyly American analogy. As for pretension, most of the existing authentic Pennsylvania Georgian mansions are somewhat more grandiose than this project. More to the point, the proposed design will fit very well into its surroundings in Harrisburg, which, like most cities and towns in south-east Pennsylvania, is very much a red-brick city, where colonial building practices persisted well into the nineteenth century. It is difficult to imagine then what other form the building might take, once the decision had been made to build it in a traditional style. The validity of such a decision is, of course, a matter quite apart from the merits of any particular building.

To label a reasonably dignified project

Pacific Dining Room, 'Reina del Mar'—British and Commonwealth Line.



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like this one 'pastoral-comical' is to fall from responsible criticism into sneering reflex anti-Americanism. It is not that there is nothing in this country to criticize, Lord knows, but too many British publications regard everything American with a distaste which is too often a substitute for objective comment. There is too much architectural ghastliness being foisted upon both England and America these days for a magazine like yours to indulge in ill-informed parochial snobberies.

Yours, etc.,

JOHN J. MCFADDEN

Bloomsbury, Pa., USA.

The Editors reply: Mr. McFadden calls the Harrisburg design 'reasonably dignified'; but we would say 'unreasonably,' unless the Governor of Pennsylvania is given to a life of knee breeches and candlelight. Far from being anti-American, we were merely distressed at a repetition in the States of the phony gentility which we have for many years attacked in our own country—see THE ARCHITECTURAL REVIEW, 1930–1955, *passim*, or the 'Stop Press' pages in any current issue.

book reviews

ENGINEERING OF MYTHS

THE CONCRETE ARCHITECTURE OF RICCARDO MORANDI. *By Giorgio Boaga and Benito Boni. Tiranti.* 90s.

Vers une Architecture brilliantly sustained the myth that the monuments of our age belong to engineering; that the nineteenth century produced no architecture to compare with the Halle des Machines or the Tour Eiffel and that the often anonymous designers of the ships and silos of the twentieth century are the true heirs of Vignola and Michelangelo. Since then few professors of architecture have dared to discuss history without passing reference to such things. The Crystal Palace, the Britannia Bridge, the Orly hangars are bathed in a far more romantic light than touches Garnier's Opera or Sullivan's Guaranty Building—which is all the more poignant because, if not yet destroyed, nineteenth century engineering achievements are often hard to find. More prone to obsolescence than buildings, they yet appear to be freer from fashion and possess an innocence that architecture lost centuries ago.

Le Corbusier as prophet was usually right and, as the visual vitality of engineering increases, that of architecture seems to diminish. Buildings get bigger and duller, bridges more elegant and imaginative; while with few exceptions we grow increasingly bored with new buildings, we are seldom unmoved by the engineering civilities which seem alone to glue the crumbling fabric of our man-made world together.

Yet the case for the engineer is unproven. Time and again—witness the buildings in contrast to the structures of Luigi Nervi—when faced with the same problem as the architect, the engineer fails even more dismally. In his introduction to the Museum of Modern Art's slim publication, *Twentieth Century Engineering* (one of the few picture-books of the last year or so one can return to without a yawn or a crane!) Arthur Drexler, ranging widely over the problems of engineering and architecture writes 'the architect sees the engineer as a clumsy technician. The engineer sees the architect as a wilful aesthete' . . . He continues 'A more useful debate for the development of architecture in what is left of this century would have to do with the relevance of those forms engineers give us. For the engineer working to enclose space the most challenging problem is the clear span at giant scale. The vaults or domes that usually solve the problems most economically seldom answer the formal requirements architects are likely to have in mind.' Riccardo Morandi, like Luigi Nervi, working largely in Italy where the distinction between engineer and architect is hazy, is one of those of whom Drexler writes so perceptively. His bridges without exception are superb, his buildings almost always banal or worse. In their opening paragraph Boaga and Boni write 'too much architecture today seems to be tending towards an expressionism which, turning its back on post-war structuralism, has become purely decorative.' I don't really know what this means but it represents the confused and somewhat pretentious writing which otherwise mars this admirable, if expensive, book. It is in strong contrast to Morandi's own modest and searching introduction, but I quote it because I am convinced that this expressionism is as much apparent in Morandi's as in other modern buildings. As for the purely decorative in engineering, Drexler observes that Nervi uses heroic forms and quasi-structural embellishments to solve relatively simple problems and Morandi seems to do likewise.

It is of course the grandeur of scale on which the engineer works which marks his structures for admiration: seldom do they relate to their environment in the Wrightian sense; indeed, as Drexler points out, 'If architects have not always succeeded in providing satisfactory solutions to these problems engineers have too often been altogether indifferent to them. The majority of their new buildings, being defaced by amateurish architectural details, some so gross as to make an appreciation of structural merit an act of charity.' This harsh judgment can be made of Morandi's buildings. Although the engineer and others have taken over most of the activities once belonging to the architect, he, the architect, is still unique in his concern for the formal problems and scale of the human environment; and more so now than ever with the growing conflict between the traditional scale of cities and the new scale of our technical apparatus. Is this then all that is left peculiar to him? Possibly, unless one counts for much his aesthetic sensibilities which may soon only find expression in some restatement of Ruskin's depressing conclusion of architecture as the decoration of structure.

In consolation one must add that books such as this, as *Twentieth Century Engineering* and the Architectural Press's *P. L. Nervi's New Structures*, indicate clearly that there are urgent, vast and largely unexplored problems which even engineers of the stature of Nervi and Morandi, with all their genius for throwing bridges over valleys and harnassing great rivers, are ill-equipped to deal with.

FELLO ATKINSON

BERKS & WARKS

THE BUILDINGS OF ENGLAND: BERKSHIRE. *By Nikolaus Pevsner.* 25s. WARWICKSHIRE. *By Nikolaus Pevsner and Alexandra Wedgwood.* 30s. *Penguin Books.*

Berkshire has riches of many ages: Windsor, Abingdon, Ockwells Manor House, Great Coxwell Barn, that splendid Georgian mansion Basildon Park, that elephantine Victorian mansion Bearwood. It has some strange and lonely monuments: the stark Combe Gibbet on a primeval hill; a symposium of seventeenth-century sculptured gateposts bereft of their houses; the Home Countified ruins from Africa at Virginia Water (where Thomas Sandby's troubles embanking the lake earned him the nickname of Tommy Sandbanks, or so it was said).

Dr. Pevsner's survey of the county is a welcome addition to his series. Both Foreword and Addendum indicate the growing indebtedness of these volumes to co-operation by fellow scholars in the field of Victorian architectural history, which is in an especially lively state just now.

One of the most interesting features of the book is the 32-page tour of Windsor Castle and the contents of its Park; a surprising number of English artists have been involved in the long palimpsest of Windsor. There is also, as always, opportunity for quarrying out unsolved problems. For example, it might (or might not) be rewarding to investigate the background of John Shaw's 'Wren' revival at Wellington College in his years as architect, succeeding his father, to Christ's Hospital in London—a long schooling in schools design, at any rate. One may wonder too—in Mansart's tercentenary year—if Ashdown Park may be, not entirely Dutch in type but Gerbier's version of Balleroy in Normandy. Although in general this series cannot record demolished buildings, the engraving of Hugh May's wonderful chapel at Windsor is a welcome exception.

The dedication of *Warwickshire* to the printers of these volumes makes appropriate a small tribute to what, these days, seems no small achievement: the almost complete absence in the series of printer's errors, a disease to which even the most august presses are subject today and for which both publisher and printer must stand jointly responsible; it is sad that a high level of proof-reading should be a matter for special congratulation, but so it is. While on this practical plane, could one make a general protest at the insertion of an illustration section bang in mid-text of a major building (Coventry Cathedral; Westminster Abbey) instead of 32 pages farther back or forward?

This is a roundabout way to arrive at the major tour-de-force of this volume: Mrs. Wedgwood's survey of Birmingham, more than 100 pages representing what appears to be a masterly harvesting of material, for which the business of selection and assembly must have been far from easy. This reviewer, not having tackled Birmingham itself yet, is rather glad to have waited; the prospect of Birmingham is much less daunting now.

There are of course many other riches in this diversely rewarding county. There is Kenilworth, that superb red sandstone mixture of Norman, fourteenth-century and Elizabethan work, and then Stoneleigh, 'an adventure in piecing together architectural evidence'. In the case of Arbury Hall, 'one of the finest examples of the early Gothic Revival in England', it is a pity that movable paintings cannot be part of the inventory when Devis's portrait of Sir Roger Newdigate sitting in his new library is still, I think, in the family's possession.

At Stratford, the hallowed Birth Place is unemotionally described for what it is architecturally worth and no more, thank goodness; for what such holy places can do to the spirit of their keepers, see Henry James's tale, *The Birth Place*—although James nowhere mentions Shakespeare, the year of its publication, 1903, was the year Andrew Carnegie donated neighbouring houses to enlarge it.

With the new buildings of Coventry we are on more interesting, more debatable ground. While grateful for Dr. Pevsner's full and sympathetic description of the Cathedral—including a few minor cavils with which one must agree, such as the over-brilliance of the clear-glass entrance wall—it does seem there was no need to waste space tilting at other, more wholesale criticisms of the building. As for the shopping precinct, I think he was right to concentrate on its functional advantages and, rather than roundly condemning its architecture as such, simply to remark that this can be overlooked; England is still too full of murderous high streets for us to be too hard on pedestrian precincts that work. The splendid new baths, completed too late for this edition, will deserve commendation on both counts in the next.

At Warwick, 'this perfect county town', described as the outstanding visual treasury it is, there could be one little addition: a vertical perambulation up the parish church tower, for a mapmaker's view of what appear to be partially medieval back yards behind the post-fire houses, and some information as to whether they are so.

PRISCILLA METCALF

SLEEPING BATHS

LIVING CLOSE TO NATURE: FINNISH PRIVATE HOUSES AND SAUNAS. *Edited by Anna-Liisa Ahmavaara. Helsinki; Otava Publishing Co.*

An anthology of the type of small house the Scandinavian countries do so well and photograph with a cunning eye for their landscape setting. Twenty houses are illustrated (town, suburban and summer cottages), plus a few examples of the self-sufficient *sauna* that can also be used as a base for excursions into the wilds, providing overnight sleeping accommodation on its benches. Several of the best Finnish architects are represented by typical examples of their work, including Aarno Ruusuvuori, Aulis Blomstedt, Osmo Sipari and Erik Krakström.

The photographs are accompanied by a very brief text and good plans and sections. All text is in Finnish, but at the end of the book is an English summary of the description of each house.

J.M.R.

However well designed they are individually, a town composed of nothing but modern buildings is duller than one in which the survival of buildings of many periods means that its history is visible for all to see and in which the old serve as foils to the new. That such foils need not themselves be good architecture is shown by this photograph (by Penelope Reed) of the Market Square at Aylesbury, in which a Victorian clock-tower stands in splendid relationship to the new county offices. These, designed by the county architect F. B. Pooley, of precast concrete elements with vigorously modelled ranges of bay-windows, make up the first, and tallest, phase of a central-area reconstruction now in progress. A rerouting of traffic will also allow the Market Square to be made pedestrian and the motor-cars that clutter it up in the photograph to be removed. It is to be hoped, however, that redevelopment will not sweep so much away as to destroy its present varied and idiosyncratic character.

James Marston Fitch

UTOPIA REVISITED

THE BAUHAUS AT DESSAU FORTY YEARS ON

The Parthenon must have represented, to the young architects of Byron's day, much the same sort of Utopian landscape as did the Bauhaus at Dessau to my generation. Like the young men of that earlier time, our knowledge of this remarkable institution was at once vague in its details and yet wonderfully accurate in its broad essentials. No one in my immediate circle had even visited it, much less studied there. Our knowledge of it—its buildings, curriculum, teachers and students—was at first pieced together from random books and periodicals. Then came the great exhibition at the Museum of Modern Art called *The International Style*. Finally there were lectures by people like Lewis Mumford and the late Catherine Bauer Wurster. Out of such fragmentary material, my generation of architects built the Bauhaus into the radiant symbol of a whole new way of life.

The propaganda which encouraged us to read such extravagant potentials into the fragile edifice of the Weimar Republic, itself so soon to vanish in the smoke of the burning Reichstag, was not political but artistic: the dancing of Mary Wigman, the *Beggars' Opera* of Brecht and Weill, avant-garde cinema like *Dr. Caligari's Cabinet* and *Metropolis*, the novels of Werfel and Mann, the great *siedlungen* of Frankfort and Berlin. We made the Bauhaus into the capital of this imaginary country.

Though Gropius had completed the buildings in Dessau by 1926 (he had established the school seven years earlier in Weimar), news of it was slow in reaching America. Most of us had just begun to hear about it when, in cold fact, the local Nazi party was closing it down in 1932—a sinister event which, as far as I recall, was hardly noticed at the time. The full enormity of Hitler was not yet comprehended and we knew that—Gropius having meanwhile resigned—Mies van der Rohe was moving the Bauhaus to Berlin. In any case, the seismic waves which the Bauhaus set in motion were to rock the world of design long after Hitler had extinguished the school and scattered its faculty and student body into exile or death. But an exact knowledge of its small size (it had less than 500 graduates in its entire history) or precarious fate (it was to last only 15 crisis-ridden years) would not have dismayed us. We would have been confident that such statistics were no measure of its stunning significance. And we would not have been mistaken. In a most literal sense, the Bauhaus did indeed reshape the visual world.

In the summer of 1966, more than a third of a century after it had exploded in my own field of vision, I went to visit the Bauhaus. In all the years that had intervened it had never occurred to me to try to visualize the city of Dessau, which for a short time had been so hospitable to Gropius. I did not even know precisely where it was located (if asked, I would have guessed it almost a suburb of Berlin; in fact, it lies some 160 kilometres to the south-west). I knew that Gropius had built the Bauhaus in a sunny open meadow and that, in a nearby grove of pine trees, he had erected the famous houses for himself and the faculty. I knew too that his Municipal Employment Office was near the town centre and that, somewhere in the suburbs, was the *siedlung* named Töerten, with the shopping centre and elegant little block of flats which became the very prototype of such developments.

But into what kind of social landscape he had inserted them, or what kind of urban tissue connected them, I had never paused to wonder. Decades of

Fascism and Cold War had excised the town from my imagination and it was now far too late for any foreigner to reconstruct that vanished landscape. Years of savage Allied bombing had levelled all but a few fragments of the central city (Hitler had concentrated military aircraft production here) and Communist reconstruction has altered even its street-pattern. Today, new blocks of high-rise apartments and low shopping districts are being constructed here, all of them, in this post-Stalin era, designed in a thoroughly international (and mediocre) idiom. Nevertheless, around the periphery, I saw a few fragments of late nineteenth- and early twentieth-century working-class housing. Soot-stained and mean, for all their Prussian solidity, they were a chilling reminder of the lithographs of Käthe Kollwitz. Life for the German workers, even in the Weimar Republic, could not have been too easy.

One end of town was largely untouched by the bombing. Here are the middle-class suburbs where the mill and factory managers lived. Once these districts must have glowed with that immaculate housekeeping which still marks the bourgeois suburbs of the Federal Republic. Today they exhibit the seediness of mild disrepair. Though many of the houses are still privately owned, they have all been subdivided into apartments; as such, they resemble nothing so much as the older sections of Larchmont or The Oranges. It is in this end of the town that the Bauhaus buildings stand, including the faculty houses. (Gropius's own house in this group was, ironically enough, the only one destroyed by aerial bombardment. It has been replaced by a tidy cottage in the urban folk vernacular.)

As with most of the monuments of modern architecture, our mental images of the Gropian work are based upon a unique set of original photographs, those classic views invariably made under the architect's direct supervision when the buildings were brand new. Naturally, they were taken from the architect's chosen vantage point—that is, from those positions in time and space as would most clearly dramatize the architect's visual ambitions for the structure. Such classic views no longer are possible, or course. Fascism, war, occupation end social revolution have altered beyond recognition the landscape in which the Bauhaus stands. The adjacent streets are lined with row housing from the Nazi years, with the vaguely baroque doorways and steeply pitched roofs which Dr. Rosenberg's theoreticians required as a proof of the 'Germanness' of German architecture. And nature herself has leant a reshaping hand—the saplings of the photographs are now huge, lushly-foliaged trees.

But the classic views cannot be recaptured for another reason—changes in the physical state of the buildings themselves. At first glance, these struck me as almost unbearably poignant, like the ravages of age and illness in the face of a dear friend. I say 'at first glance' because, after only a little time in the presence of this splendid building, one begins to see that the effect is largely superficial—cosmetic, so to say. For the Dessau buildings, like the modern European architecture of that period generally, were originally surfaced in—of all improbable materials!—smooth white stucco. This material was chosen by the great architects of the 'twenties for very specific reasons: it was the only one available which provided the kind of wall they aspired to—a flat, seamless, two-dimensional membrane that seemed to them mimetic of the smooth and perfect flow of industrial processes.

The paradox was double. On the one hand, stucco was a *handicraft* technique (usually applied over another handicraft element, brick masonry); on the other, it was very vulnerable to the attack of the cold wet winters and sooty atmospheres of North European cities. Architects like Mies, Le Corbusier and Gropius must have known this. They must have known, too, that their whole aesthetic implied an immaculate and faultless maintenance which only peace and prosperity would afford. The assumption was not altogether preposterous. A society which could afford to bury a million young men at Verdun could, in theory at least, have afforded a coat of white paint every second year. Optimists (as all good architects must be), they gambled on such a future. They lost; but surely it was not their fault that these beautiful buildings were doomed to age prematurely through decades of depression, civil strife and war. No material on earth could have completely escaped the ravages of such attrition.

For me, standing before it, the Bauhaus soon re-established its astonishing durability, in both a formal and a functional sense. The soiled stucco encloses volumes of still faultless balance and articulation; and these volumes shelter no fewer than five separate schools today. As I walked through and around it, I became more and more impressed at how up to date it is, stylistically. Restored to pristine condition, it would command front-page attention from any architectural journal in the world today. And—happily for our story—it *is* being restored to that state. Thanks largely to the efforts of a young Dessau architect named K. Schlesier, the Dessau city council several years ago declared the Bauhaus an historic monument and began financing its resurrection. The interiors of the academic wing have already been restored; renovation of the exteriors is now under way, including the restoration of the original epochal glass-and-metal curtain wall of the shop building and the removal of later excrescences like the external downspouts. Ultimately, the entire complex will be restored to approximately the state in which Gropius left it. (There is not, so far as I could learn, any plan for re-creating the Bauhaus as a school.)

That this relict of German bourgeois society, itself the very symbol of all the contradictions of the Weimar Republic, is being restored in the most doctrinaire of all East European countries is, I believe, very significant. Herr Schlesier himself, as the protagonist of its restoration, is symbolic of a new stage of development of the Communist East. A man in his early thirties, he is a graduate of that same school which Gropius left behind him in Weimar when he moved his staff and student body to Dessau in 1925. It was there that Schlesier first became interested in the legendary figure of Gropius, fogged

though the image must have been by decades of violence and Hitlerian bombast. His campaign for the Bauhaus building is an outgrowth of this student interest. It is obviously, in a broader sense, a step toward the restoration of the historic continuity of German culture. A post-Stalin-style designer (he graduated in the late 'fifties and speaks of that earlier style in the same way that we might speak of the dress styles of the Coolidge era), Schlesier belongs to the very first age-group that can look back, across the dreadful chasm of the recent past, with any degree of balance or detachment.

Since most of the original documents, including plans filed with the building department in Dessau, had vanished in the holocaust, Herr Schlesier undertook a thorough historical analysis of the building and a complete physical survey. (His work was completely independent of Gropius, whose own immense documentation—which ironically lacks working drawings —will go to the Bauhaus-Archiv in Darmstadt, for whose proposed new headquarters Gropius is the architect.) This study included a meticulous documentation of the construction, checked by the original contractor of the building, and complete measured drawings of every element down to the smallest—stair rails, cabinet work, lighting fixtures, etc. These new drawings, prepared by the students of the Weimar school, make explicit what is everywhere apparent in the building itself—the splendid tradition of craftsmanship among German workers upon which the Gropian aesthetic was so firmly grounded.

And one needs only to compare the details of this forty-year-old building with those of the new buildings in downtown Dessau to see the extent to which this tradition has been coarsened and impoverished by the events between. The workmen who built the Bauhaus must by now be either old or dead. Their sons would have been largely swallowed up in the battlefields of Stalingrad, Africa and Normandy. Thus the present generation of craftsmen, like the present generation of architects, is the victim of a discontinuity as much technical as intellectual.

For it should be remembered that, in addition to its other vicissitudes, German architecture in the East has experienced yet another destructive force—that of design by political *diktat*. The first was Hitler's, demanding an architectural idiom expressive of that mad Wagnerian nightmare of blood-thinking and *herrenvolk*. And this was followed by the Stalinesque *ukase* requiring an architecture that would be 'socialist in content, national in form.' (Plausible as a slogan, the Stalin formula seemed always to end up as a kind of bathetic Italo-Muscovite Renaissance—no worse, perhaps, than our own Wrigley or Woolworth Buildings but certainly no closer than they either to Germany or socialism.) Both of these aesthetic codes were enforced with typical Prussian thoroughness. They have left German architecture quite visibly shaken to its roots.

In this current condition of aesthetic disequilibrium, the rediscovery of the Bauhaus is a fortunate development, for its most impressive quality today is precisely its equilibrium, its effortless mastery of the means at its disposal. Nominally a mere technical fact, the rational balance of the Bauhaus is actually the secret of its aesthetic survival. An urbane justice marks every decision: the absolute clarity with which plan is expressed in volume; the simple assuredness of the concrete frame; the wide smooth flow of the stairs; the detailing of the light fixtures—even the considered placing of the exposed heating and plumbing pipes.

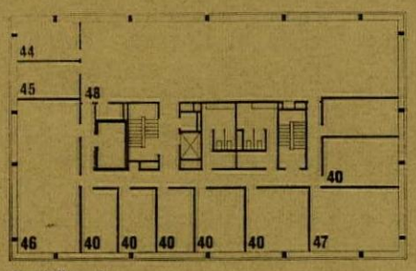
This kind of equilibrium was, of course, the precise goal of that galaxy of men that Gropius gathered around him—Moholy-Nagy, Klee, Kandinsky, Schlemmer, Breuer and the rest. The fruitful application of science and technology to the architectural needs of industrial democracy implied a responsible handling of material resources. On the plane of formal design, this attitude produced an elegance of the economical; functional yet never rudely utilitarian; moral without being either hortatory or platitudinous. No country has a nobler artistic inheritance than this. The people of Dessau are wise to have reclaimed it.

It would be fatuous to suggest that only Communist architecture is in disequilibrium or that only the architects of Dessau need to restudy the lessons of the Bauhaus. The architecture of the whole world is in crisis and it is substantially the same crisis, East and West. And our present troubles are not due to our having followed too closely the Bauhaus doctrine, as a self-styled *avant-garde* would now have us believe. On the contrary, they stem from our having completely abandoned the broad lines of theoretical development which the Bauhaus projected.

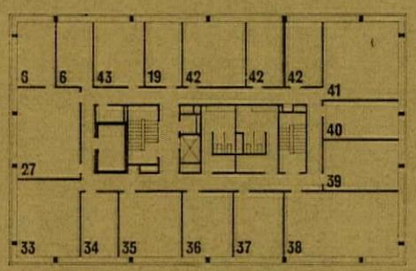
That programme was based on a principled analysis of a century's experience with industrialism. It reflected the thought of great theoreticians like Ruskin and Morris but it wisely avoided their errors—Ruskin's hostility towards science and democracy, Morris's attempt to build modern socialism upon a base of medieval handicraft. Some of the Bauhaus programme has, of course, become bedrock of modern design theory; no one today will question the postulate that 'the machine is our modern medium of design.' But central to that theory was the concept that social utility and functional effectiveness must establish the parameters of aesthetic decision. The designer must be socially accountable; and this implied a new kind of education—one that would heal the rift between theory and practice, classroom and shop, designer and artisan. Only thus would technical expertise be brought to the professional and aesthetic maturity to the craftsman; and this, in turn, was the indispensable base for a solid, viable and widely shared standard of taste.

These questions have not been satisfactorily solved, and least of all in the United States. One need only to look at the shoddy frivolity of industrially produced artifacts, or the self-indulgent idiosyncrasies of our leading architects, to see what was lost when we abandoned the Bauhaus perspectives. No one could argue that such a programme would be easy to effectuate. But it demands no more rigorous an intellectual posture than the conquest of cancer or the conquest of space; and it is certainly no less important.

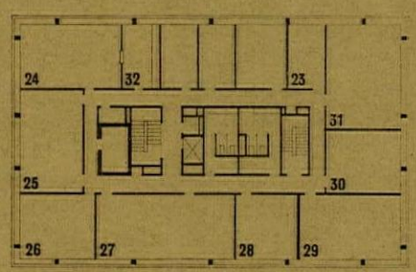
key
1. reception
2. bailiffs
3. records
4. fisheries' officer
5. pollution prevention officer
6. typist
7. deputy PPO
8. reference room and district inspectors
9. laboratory office
10. laboratory
11. general office and chief clerk
12. clerk
13. deputy clerk
14. assistant solicitor
15. conveyance clerk
16. estimating clerk
17. estimating surveyor
18. conference room
19. waiting
20. pollution clerk
21. chairman
22. rating
23. store
24. staff common room
25. drainage charge
26. treasurer
27. general office
28. deputy treasurer
29. accounting machines
30. cost and stores
31. wages
32. kitchen
33. chief engineer
34. secretary
35. deputy engineer
36. chief assistant engineer
37. IDB engineer
38. gauging staff
39. hydrologist
40. assistant engineer
41. chainmen
42. surveyor
43. plant
44. draughtsmen
45. printing
46. plans and records
47. engineering laboratory
48. drawing office



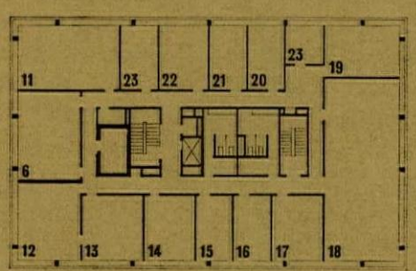
fourth floor plan



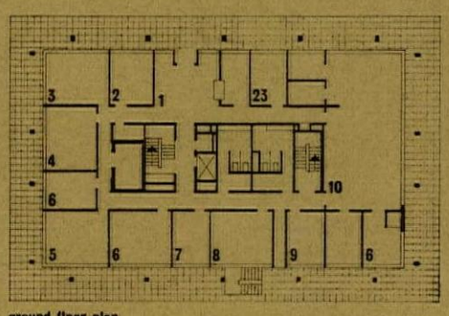
third floor plan



second floor plan



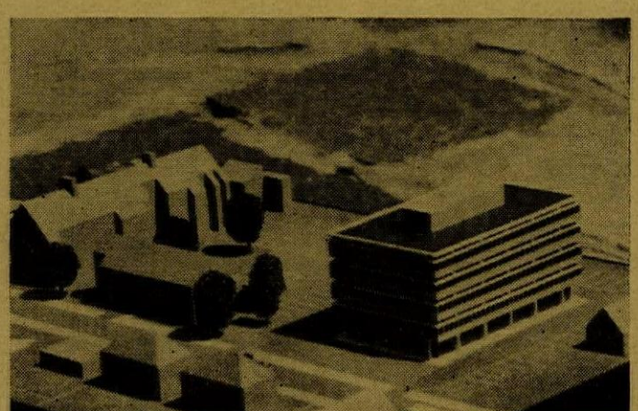
first floor plan



ground floor plan

20 0 10

This is a new headquarters for the Great Ouse River Authority, containing administrative offices, drawing offices and laboratories. It is sited near the railway station in Clarendon Road, off Brooklands Avenue.
The accommodation is on four floors with, in addition, a small basement housing boiler room, fuel tanks, electricity intake room and drying room. The offices are planned on a 3ft. 4in. module round a central core, identically planned at each level, containing staircases, lifts, lavatories, service rooms, service ducts and a strong-room for documents.
The structure consists of beamless, hollow-tile reinforced concrete floor slabs spanning from the *in situ* reinforced concrete service-core walls to reinforced concrete perimeter columns which are stiffened and tied by a cill-height concrete apron wall. Externally there are brick apron walls of 2in. facings and continuous steel windows. The upper part of the upper-floor windows is recessed by the amount of the column depth, which creates a continuous gap, reducing sky glare and adding emphasis to the modelling.
On the ground floor the walls, which are faced with reconstructed Portland stone, are recessed behind the columns, which are black. Ground floor windows only are aluminium. Heating is by a warmed air system fed from a roof plant-room through two vertical shafts in the service core. The same system provides cool air in the summer. In addition, the offices have under-cill convector heaters (skirting-level on the ground floor) and the ground-floor laboratories have above-cill convectors. The main boiler is oil-fired, with a gas-fired boiler for hot water when the heating services are not being used. Lavatories are mechanically ventilated.
Structural engineers, Kaylor & Pick. Quantity surveyors, Leslie W. Clark & Partners. For contractors, see page 164.


aerial view of model: the single block stands on a colonnade and stepped plinth, creating a sense of order between the gardens of Victorian houses in Brooklands Avenue (left) and railway yards (right)

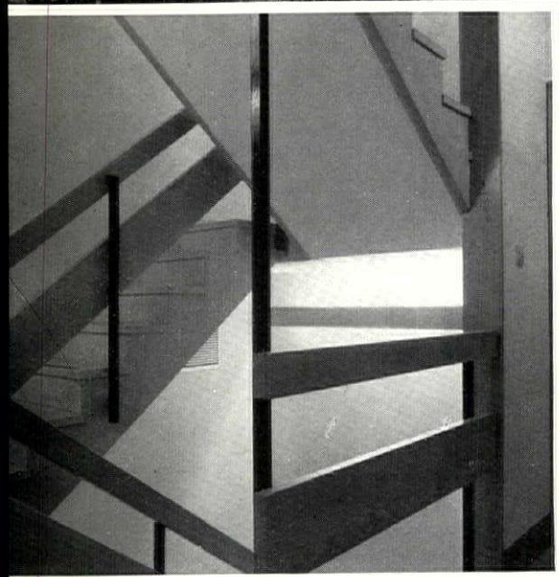
GREAT OUSE HOUSE

1. detail of south elevation, showing the expression of each office floor as a continuous glazed box, threaded through by the perimeter columns.

FFICE BUILDING, CAMBRIDGE | *architects* **EDWARD D MILLS & PARTNERS** | *photographs by H de Burgh Galwey*

OFFICE BUILDING, CAMBRIDGE

2



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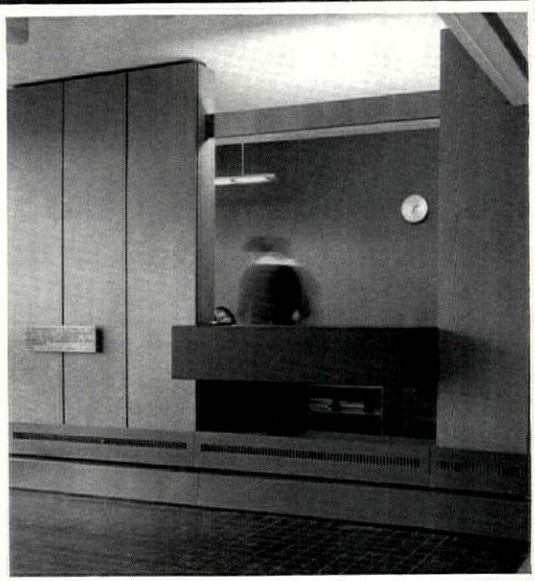

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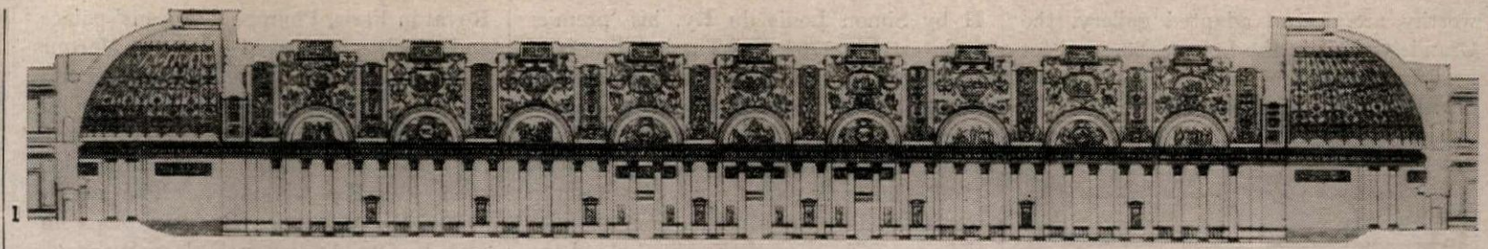
2, south-east view across Clarendon Road. 3, detail of staircase. 4, reception desk in entrance hall. 5, interior of drawing office on fourth floor, showing the clerestory recessed inwards.



THE GENESIS OF THE MUSEUM

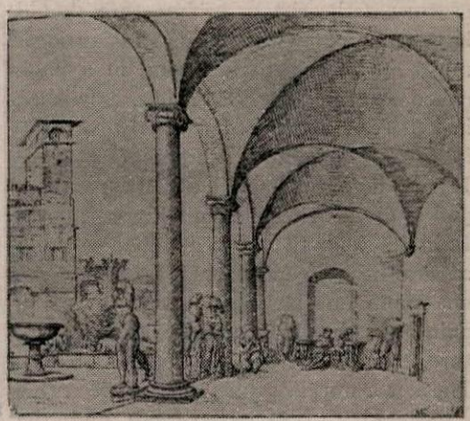
Helmut Seling

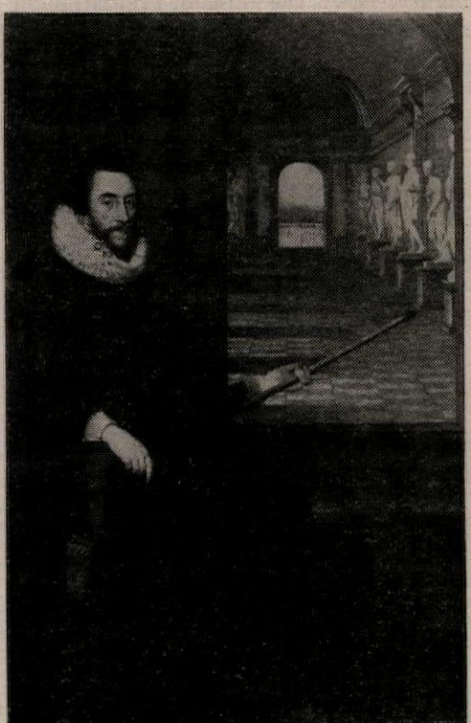
Art collecting started with the Renaissance.[1] The Middle Ages could not look at art *qua* art and hence could not collect art as such. Renaissance patrons in Italy had in their palaces plenty of paintings and also small bronzes and similar knick-knacks, but they belonged to the furnishings; they were decoration not collection. Flemish Primitives were included, but again strictly speaking not collected. Collecting proper was at first concerned with Roman statuary.[2] Figures and fragments were displayed in courtyards and loggias, 2, on terraces and in gardens. In Florence the most famous early display was that of Lorenzo the Magnificent in the garden of the Medici villa by Piazza S. Marco. Bertoldo was in charge of the antiquities, and Michelangelo received his introduction to sculpture here. The setting for statuary was very occasionally designed specially for the purpose. The most famous case is the octagonal court of Innocent VIII's Belvedere Pavilion some distance north of the Vatican Palace. It was connected with the palace by Bramante's Belvedere Court, and Bramante remodelled the pavilion itself for the display of the most celebrated antique statues: notably the Apollo Belvedere, the Laocoon group and the Belvedere Torso. In the sixteenth century works of Roman sculpture were as a rule arranged in Long Galleries.[3] Buontalenti created one in the east wing of the Uffizi Palace about 1581, where he also arranged the Tribuna, i.e. the octagon with lantern lighting through upper windows, where the finest pieces were displayed. Vespasiano Gonzaga about 1560 built a whole special gallery range at Sabbioneta, the memorable capital of his miniature principality. The gallery, 22, is about 300 ft. long.[4] Galleries for the display of works of art remained a standard feature of Italian palaces for a long time to come (Galleria Colonna, Rome, 24, later seventeenth century; Galleria Corsini, by Fuga, 1729), and they became the standard in the North as well.

To this arrangement belongs for example the first great gallery of antiques in England, the Earl of Arundel's, built before 1618, with its columns along the walls known to us only through the Mytens portrait, 3. Did it really look like that? How the Duke of Buckingham displayed his antiques we don't know. But it was he who bought Rubens's collection of Roman pieces for which, attached to his town house at Antwerp, Rubens had built a rotunda, also with lighting from above.

The earliest German gallery, and at that time the grandest of all in northern countries, was Albrecht V's Antiquarium at Munich, first designed to a plan by Jacopo Strada (1569–71) and then built by Wilhelm Eckl to a changed plan and arranged inside by Friedrich Sustris about 1585. It was a splendid, long and remarkably wide room with a big tunnel-vault and remained perfectly intact until the second World War. But a building of such grand simplicity and single-mindedness still remained the exception in Germany and the surrounding countries for some time. The rule was the *Kunst- und Wunderkammern*, where a mixture of all kinds of works of art and curiosities was displayed.[5]

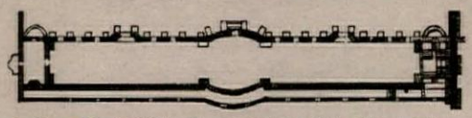
In the course of the eighteenth century galleries for paintings or statuary became a usual adjunct to palaces in all countries. They were adapted from some range in existence or from suitable stabling, or sometimes built afresh. Specially note-





1 (*titlepiece*), *Charles Normand's design for a* Galérie publique dans un Palais de Souverain, 1791. 2, *loggia, Palazzo Madama, from the drawing by Heemskerck.* 3, *the Earl of Arundel's gallery of antiques, shown in a painting by Mytens at Knole.*

worthy are, as an adapted gallery, the Grande Galérie in the Louvre, 23, used for academy exhibitions, and, as a newly built one, Frederick the Great's at Sanssouci, 4, near Potsdam. The Stallburg at Vienna of

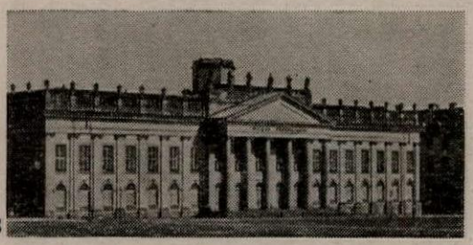


4, *plan of Frederick the Great's picture gallery, Sanssouci.*

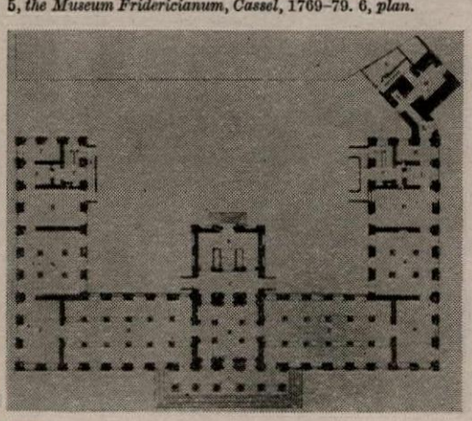
before 1684 and the Stallhof at Dresden of 1722–25 are self-explanatory—stables being *Stall* in German. Dresden also illustrated a development towards specialization. China was arranged in the Japanese Palace, statuary in the four pavilions of the Grosser Garten, arms and armour in the Jägerhof, objects of natural history, scientific instruments, etc., in the Zwinger. The collecting of prints also flourished. The cabinets of Crozet, Caylus, Mariette are familiar enough, and in the galleries of princes, special print rooms were established.

In these circumstances it is understandable that at the beginning of the eighteenth century a theorist of architecture should have come out with the plan for an ideal museum. This is to be found in a book called *Der geöffnete Ritterplatz*, published in 1704 and attributed perfectly convincingly to Leonhard Christoph Sturm.[6] It is of three storeys with a centre pavilion, and is divided in plan into three squares. Exhibits were to be predominantly from natural history, and there is no more than one room on the second floor for small paintings, drawings and works of sculpture.

There is a world of difference between this uninspired theoretical exercise and the first real building designed to be a museum —or at least half a museum and half a library. This is the Museum Fridericianum at Cassel, built for Landgrave Frederick



5, *the Museum Fridericianum, Cassel*, 1769–79. 6, *plan.*

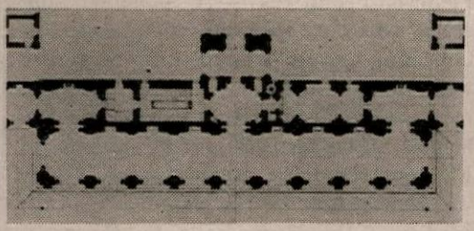


II by Simon Louis du Ry, his 'premier architecte' in 1769–79.[7] The building is of Palladian restraint, long and even in its facade, 5, with giant pilasters working up to a middle portico of six detached unfluted Ionic columns carrying a pediment. 1769 is an early date for neo-classicism in Germany. But the style harmonizes with the progressiveness of the idea behind the building. For the whole conception of a special building in a public square to be devoted to art and learning is a conception of the Goethe period or Humboldt period, of the great period of *Bildung* with its faith in the educational, elevating power of the arts in the widest sense—including, that is, the *beaux arts* as well as what comes under a faculty of arts. We shall observe the growth of this new ideal in the next pages. At Cassel it is still far from fully developed. The building was still the prince's; he had his private study in it. Also, the collections shown were still varied and even included a waxworks. On the ground floor, 6, was the Roman statuary, but also in one corner room the *Naturalien*; on the upper floor was the library, the principal apartment of the building. Of the collection Hassencamp could write in 1783: 'I cannot think of any collection to compete with it, except that of the British Museum.'

But the British Museum was at that time still housed in Montagu House and had no building of its own, and so had indeed no other collection. However, at least on paper, Cassel had been preceded by a plan for a museum for Dresden which Count Algarotti had drawn up as early as 1742. This, of which we have unfortunately only a description, is of great importance, and has so far not been done justice to.[8] Count Algarotti was an Italian nobleman, member of Frederick the Great's Round Table and an art agent for Frederick and for Augustus III of Saxony (who, for instance, bought the Sistine Madonna). He also wrote an elegant little book called *Newtonism for the Ladies*. Algarotti's taste had been formed by the mysterious Abbate Lodoli in Venice, and he was one of the earliest Italian believers in Palladio whose 'simplicity, regularity and beauty' he considers above that of any other architect. His museum, so he writes in a letter of 1759, was to be 'a square building with a large courtyard and in each range a Corinthian loggia and one room on either side of it. These eight galleries lead into four corner rooms, each lit by a small dome. A larger dome is above the centre of each range lighting the principal room behind the loggia.'

The sky-lighting for the central and corner rooms is explicitly referred back to the Tribuna of the Uffizi and Rubens's Rotunda. The eight galleries had normal side-light, not the high, slanting side-light which had been provided about 1700 in the Palais Royal in Paris, Philippe d'Orléans' palace, and which was referred to by the Marquis d'Argenson, a noted *virtuoso*, as the pattern they should follow at Cassel. At Cassel in the end a compromise was chosen.[9]

Algarotti's plan was prophetic, as we shall soon see. For Germany, where in the 1740's the Würzburg *Residenz* was completed, a building of such classicity would have been revolutionary. It even antedates the earliest signs of a change away from the Rococo to neo-classicism in Paris, though of course Palladianism had by 1742 firmly established its superiority in England. In fact, one of the finest early neo-classical interiors in England was built as a private museum of Roman sculpture. It is the annexe added *c.* 1767–76 by Robert Adam to Mr. Weddell's Newby Hall in Yorkshire: three rooms, the middle one with a dome and niches, 25, the end rooms with an apse. The architectural character seems strangely prophetic of that of the Museo Pio-Clementino in the Vatican which was made *c.* 1773–86 and became the pattern of museum rooms for the decades to come. The Museo Pio-Clementino, named after Clement XIV and Pius VI, is the work of Michelangelo Simonetti, continued by Giuseppe Camporesi. The accommodation was enlarged by the Braccio Nuovo across the Belvedere Court under Pius VII in 1806–23. The effort of Clement XIV was no doubt stimulated by Clement XII's formation of the Capitoline Museum in 1734, and even

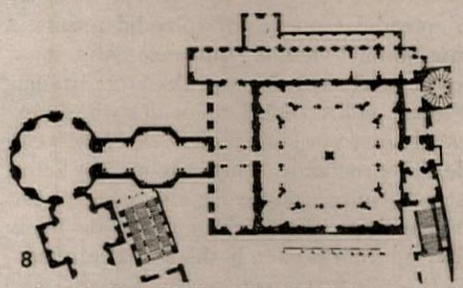


7, *plan of the Villa Albani*, 1746–63.

more by Cardinal Albani's Villa Albani, 7, built in 1746–63, largely for the display of the Cardinal's collections. The Museo Pio-Clementino, 8, lies against the west, north and south sides of Bramante's octagonal court. Access is by a monumental staircase with straight parallel flights, 10, into a room of Greek-cross shape, 9, and from there into the large Sala Rotonda, 11, a room which was to have an immense influence. Other rooms are small and plainer. The decoration is neo-classical throughout; the choice of the style, and even more of the establishment on the grandest scale of a museum of classical antiquity, was a demonstration of the Papacy claiming the lead in archeological scholarship. This lead was confirmed by the collections receiving a catalogue from the pen of the most learned expert then available: Enneo Quirino Visconti. It began to appear in 1782, and nothing could be more telling than the fact that Napoleon called Visconti to Paris to be the director of the

antiques of his museum. The arrangement of the sculpture was by subject matter, culminating in the Rotonda as the room for the major deities.

The Vatican museum was not open to the public, but it is evident from many reports and descriptions that with some introduction any gentleman could get in. The same is true of other eighteenth-century collections. Goethe, for instance, saw the Elector's gallery at Dresden in 1768, when he was only nineteen, and the Mannheim plaster casts in 1772. The collections in



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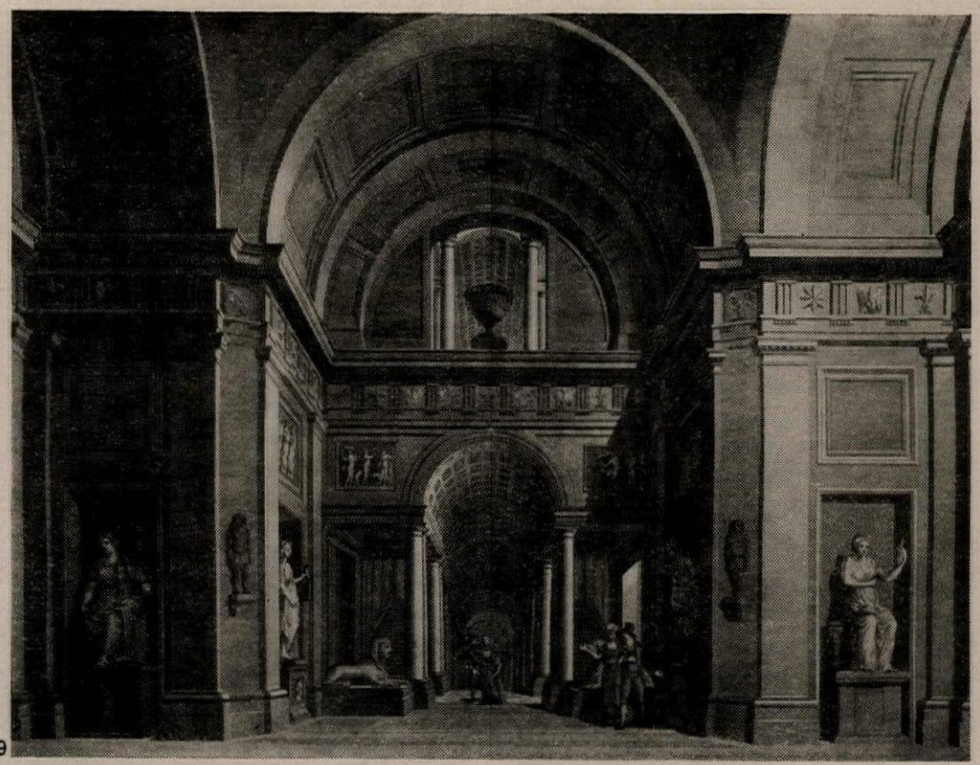

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8, *plan of the Museo Pio-Clementino, in the Vatican*, c. 1773–86. 9, *Greek salon.* 10, *entrance staircase.* 11, *the Sala Rotonda.*

Vienna were opened properly some twenty years later, in 1792, on Mondays, Wednesdays and Fridays to anyone 'with clean shoes.' At the British Museum entry was by tickets on written application, and free entry to all—also on Mondays, Wednesdays and Fridays (10–4)—was only introduced in 1810. But that represents a European change of attitude for which we are not ready yet.

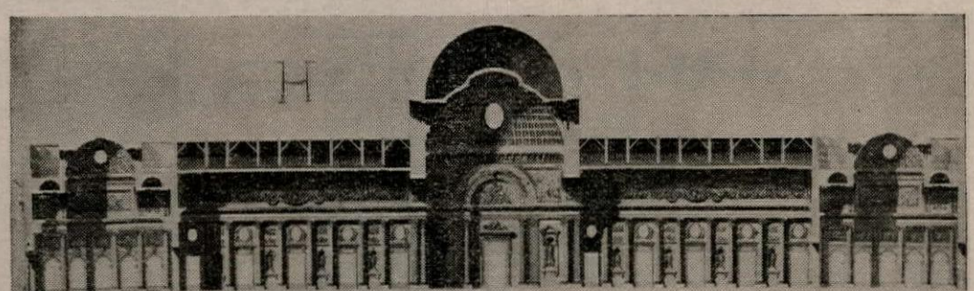
If Rome was one centre of the neo-classical movement and England another, the third was Paris, where the ideals of Piranesi—a stimulus to all who came into touch with him—had been introduced by Legeay and had caught on sweepingly. The Académie d'Architecture set the theme of a museum several times for the Rome Prize between 1778 and the early nineteenth century. They had in fact done it twice even earlier, in 1753, with a gallery as an attachment to a palace, and in 1754 with a Salon des Arts. The first prize for the gallery was given to Louis-François Trouard, and, though his design, 12, is obviously Baroque, the middle rotunda with its coffered dome, the long rows of columns without any projections in the entablature and the tunnel-vaults of the galleries left and right of the rotunda are remarkable for so early a date—though a date later of course than the return of Marigny, Soufflot and Cochin from their famous Italian journey. The Salon des Arts was won by Jean-René Billandel, and his composition has as its centre a rotunda, with six niches inside. Added to this are three arms, and the interstices filled in by triple colonnading. The whole is a decidedly Baroque conceit.

The task for 1778–79 was a museum[10] for works of art and natural history plus a print-room, a cabinet of medals and a library with studies for scholars. Two first prizes were given. One of them fell to Guy

10

11

de Gisors, 13–15, aged sixteen, the other to Jacques-François Delannoy, 16–18. Both designs consist of a square with four courtyards, the wings separating them forming a Greek cross. The facades have no windows at all, but multi-columned porticos and extra colonnades wherever possible. The scale is vast, as was to be typical of all the *grands prix* to follow and may reflect the scale of Piranesi's etchings. Gisors' rooms are mostly tunnel-vaulted, and the centre has a dome with an opening in the middle. Boullée was a full generation older than Gisors and Delannoy, and as he had been a member of the Academy of Architecture since 1762 and a teacher at the Ecole des Ponts et Chaussées from the late 'forties, it is likely that the style represented by Gisors and Delannoy, and even the megalomaniac scale of the designs for the *Grands Prix*, represent inspiration from Boullée.[11] Among the famous series of designs by



12, *Louis-Francois Trouard's design for a gallery*, 1753.

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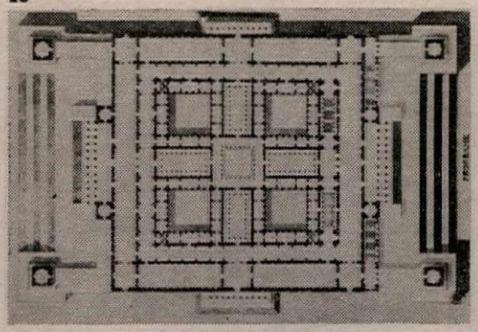

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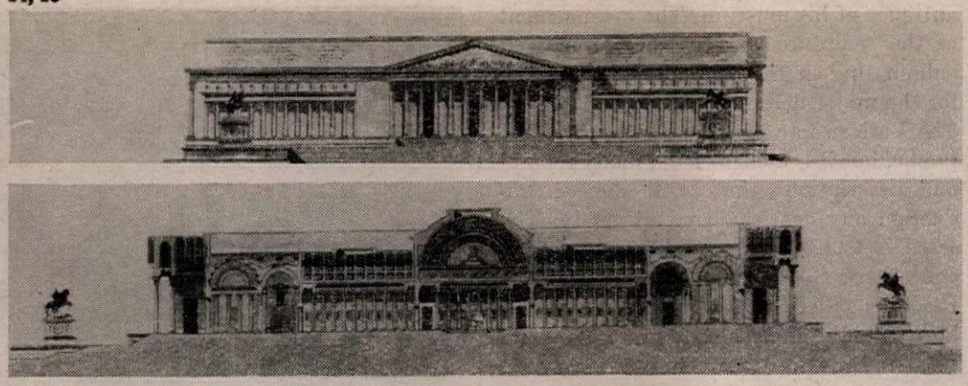

13–15, *Guy de Gisors' design for a museum*, 1778–79.

Boullée which were never even engraved, let alone published, but which must have been familiar to many, there is a Museum of which one drawing is dated 1783. This also is a square with four courtyards and Greek-cross wings leading to a vast centre rotunda, in this case called a Temple of Fame. The rotunda is covered by an entirely bare dome with an opening in the middle. The scale is gigantic, and no indica-

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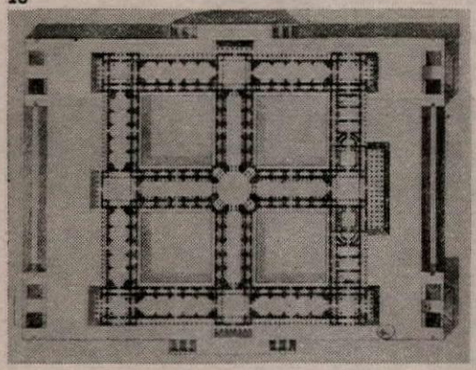

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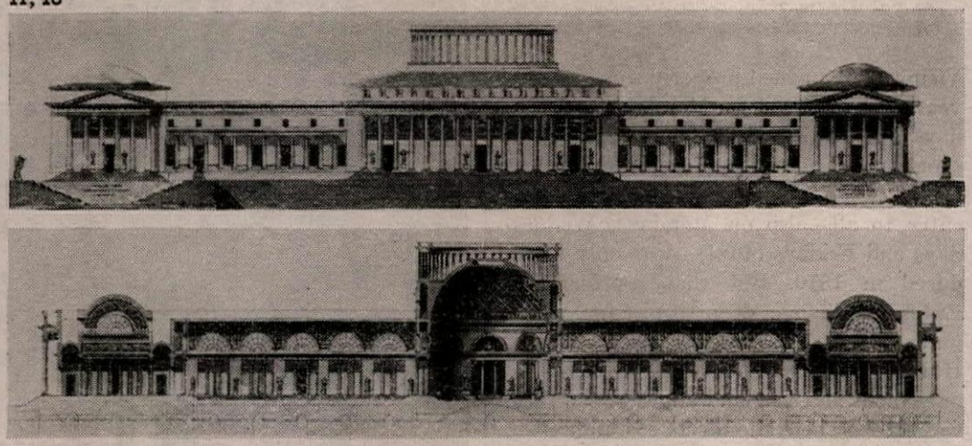

16–18, *Jacques-Francois Delannoy's design, also of* 1778–79.

tion is given as to how statuary or paintings and objects of natural history could here be displayed. Boullée's designs, 19–21, like those for the *grands prix*, are entirely innocent of utility. But what they did establish in the minds of those who saw them was the respect for such buildings serving the education, instruction and elevation of the nation at large and no longer a prince's or nobleman's private passion for collecting. In that way Boullée's Museum, like his National Library, Theatre and even the Newton Monument are indeed architecture of the revolution, i.e. the archi-

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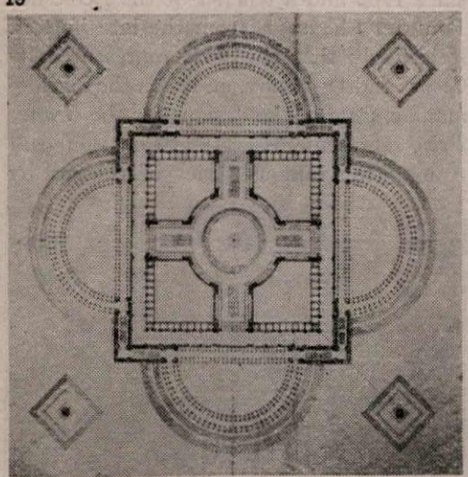

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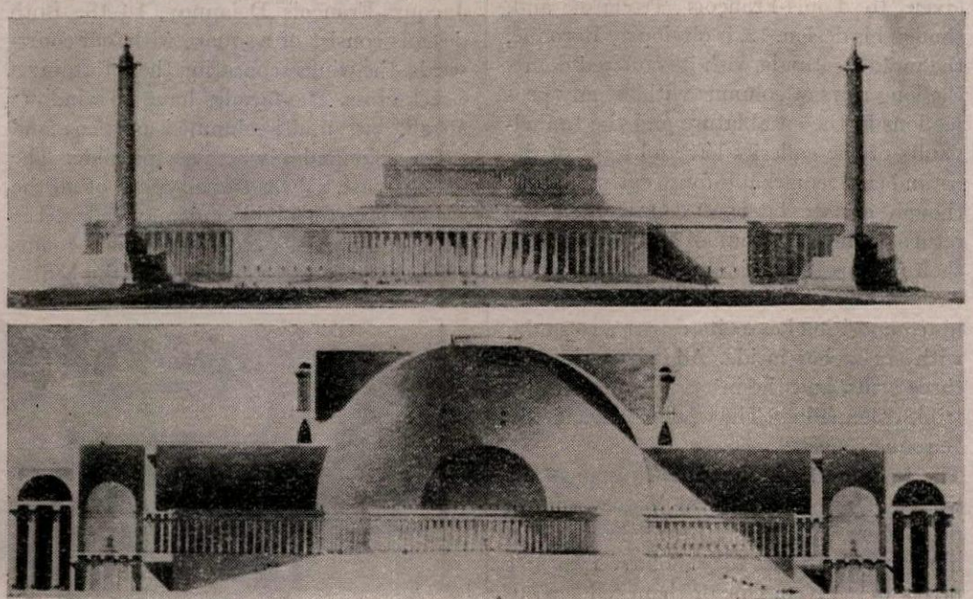

19-21, *Boullée's design for a museum*, 1783.

tecture representing the frame of mind of those intellectuals creating the mood of the revolution and ultimately that of the Humboldt era in Germany to which we shall have to turn soon.

But first the events of the revolution itself in the field of museums must be contemplated. It foretells the doom of the academy that as late as 1791 it set the subject of a *Galérie publique dans un Palais de Souverain*, though 'publique' admittedly stands for the new. The second prize this time, by Charles Normand, is more interesting than Delagardette's first. Normand is well known as the author of a standard book on the Orders (published in 1819 in Paris and in 1829 by Augustus Pugin Sen. in England) and of other books, e.g. the *Guide des Ornemanistes*. His museum, 1, is a splendid sequence of splendid rooms, a low tunnel-vaulted entrance-hall at a lower level than the rest, the large tunnel-vaulted staircase hall in which the staircase rises in one long straight flight between detached columns and ends in a coffered apse as in a gigantically enlarged version of Holkham, then further rooms on plans derived from Roman baths and a culminating Pantheon rotunda followed across the far end by the long tunnel-vaulted gallery. All this is Imperial Roman, Piranesian, Boulléean, but the exceedingly rich decoration contradicts the principles of Revolution architecure.

When this design was judged, the royal gallery in Paris had indeed been *publique* for some time.[12] It was characteristically Marigny's initiative to display the pictures

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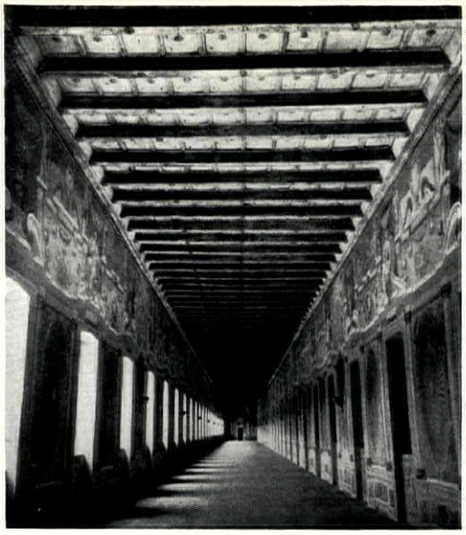

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22, *the* 300 *ft. gallery for Vespasiano Gonzaga in his planned city of Sabbioneta*, c. 1560. 23, *the eighteenth-century Grande Galérie in the Louvre, an adapted gallery used for the academy exhibitions.* 24, *the seventeenth-century Galleria Colonna in Rome.*

THE GENESIS OF THE MUSEUM

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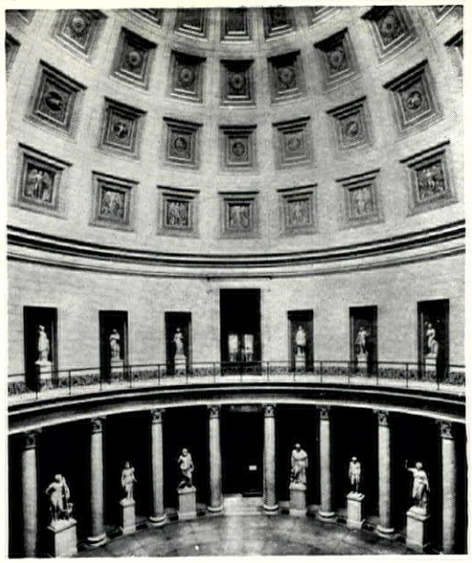
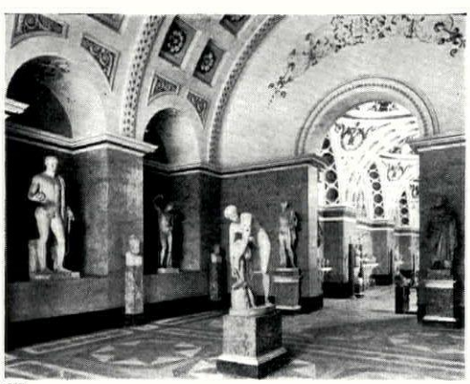


THE GENESIS OF THE MUSEUM

25, *the annexe at Newby Hall, added c. 1767–76 by Robert Adam.* 26, *the rotunda at Schinkel's Altes Museum, Berlin, 1823–30—see exterior and plan on page 113.* 27, *the Glyptothek, Munich, of c. 1816, by Klenze.*



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28, *Hubert Robert's painting*, c. 1802, *of the Grande Galérie of the Louvre, showing suggested skylights.*

belonging to the king and allow the public access. A petition had been presented anonymously in 1744. La Font de Saint-Yenne, the critic, repeated the request in 1746. In 1750 Marigny, brother of Madame de Pompadour and Surintendant des Bâtiments, made a range of rooms in the Luxembourg available, and 110 paintings and 20 drawings were exhibited and opened twice a week for three hours each. The same regulation was established for Rubens's Medici Gallery in the Luxembourg. Marigny's successor d'Angivillers suggested in 1775 that the Grande Galérie of the Louvre should be used, and the idea of skylighting it was contemplated. Designs were asked for from Soufflot, Clérisseau, de Wailly and two others, but none was accepted. The designs are preserved. In the end nothing came of it, and the rooms in the Luxembourg were closed in 1779. Realization had to wait for the Revolution. On September 27, 1792, it was decreed that a museum should be created in the galleries of the Louvre. It was to be called the *Museum français*. It was opened late in 1793 and its name changed in 1796 to *Musée central des arts*. That it was open free to the public need hardly be said. The opening hours were Saturday and Sunday, 9–4, the other days being for artists. Guide lecturing was done among the antiques. There was a cheap catalogue and the pictures had labels.

With Napoleon's campaigns and the loot of his victories the Louvre grew to be the largest and most spectacular museum ever. Moreover, new acquisitions came by purchase also, thus the Borghese antiques bought in 1808 from Napoleon's brother-in-law Camillo Borghese, and Italian primitives—a hint at the approach of romanticism—in 1811. The latter were bought by the brilliant Vivant Denon whom Napoleon had made Director-General of the museum. After the Museo Pio-Clementino the Louvre was now the second of the great European museums. Percier and Fontaine redecorated the Grande Galérie in 1805–10 and built the monumental staircase, inspired no doubt by that of the Pio-Clementino. The paintings were hung in the Grande Galérie and the Salon Carré. The Grande Galérie was, however, only partly available, as the academy exhibitions went on making use of it as well. Below, on the ground floor, were the rooms for antique statuary. The Salon Carré received skylighting shortly after 1789, the Grande Galérie only in 1938, although Hubert Robert had painted it about 1802 with a large curved skylight, following the shape of the tunnel-vaults, 28. The idea came in all probability from Boullée's drawing for a National Library which has just this motif. Percier and Fontaine used high side-lighting instead, as—it will be remembered—had already been done in the Palais Royal and at Cassel. This was also the method used for the Royal Academy in the Strand range of Somerset House, i.e. about 1780.

The paintings were arranged by schools. This innovation, demonstrating the change from entirely aesthetic to partly historical functions of the museum, was done originally by Christian von Mechel, a friend of Winckelmann who was called in at Düsseldorf and published engravings of the Düsseldorf paintings in 1778 and who was thereupon appointed to re-arrange and catalogue the Imperial collection in Vienna in 1779.[13] The building chosen to display them in was the Belvedere. Mechel's programme is formulated in the introduction to his catalogue: 'The purpose was to use this beautiful building, so suitable by its many separate rooms, so that the arrangement should be as far as possible a visible history of art. Such a large, public collection intended for instruction more than for fleeting pleasure, is like a rich library in which those eager to learn are glad to find works of all kinds and all periods.'

It was in the Belvedere that the young Nazarenes discovered the Primitives and set out on their romantic reconquest of the elementary and naïve in art, and of faith and truth. In terms of the history of the museum the Romantic Movement had made its one great contribution a few years earlier and in Paris. As not only the royal collections fell to the people at the Revolution but also the works of art in religious buildings, which were secularized or demolished, a second museum became neces-

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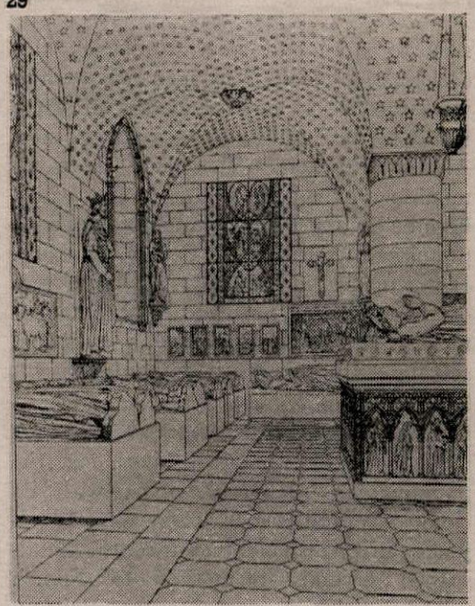
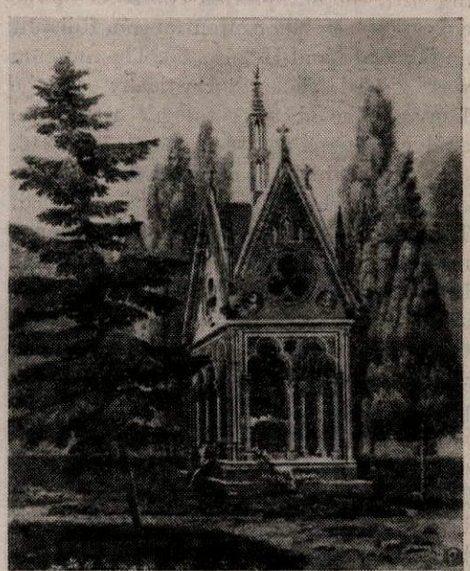


29, *Alexandre Lenoir's museum for medieval relics, opened in 1793 in a thirteenth-century monastery in Paris.* 30, *memorial to Abelard and Héloïse in the Garden of the Lenoir museum.*



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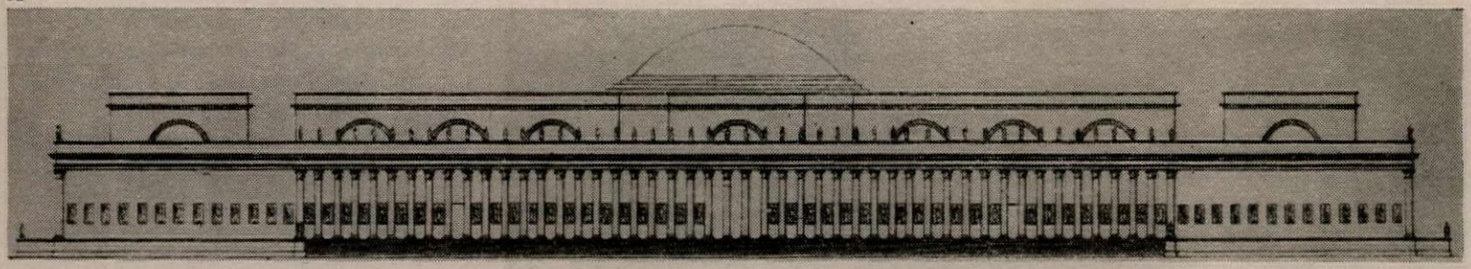
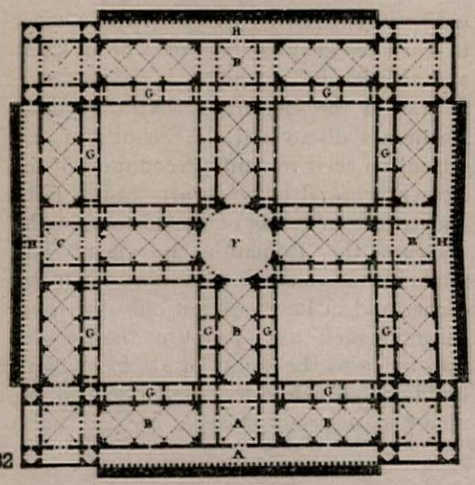


31, *Durand's design for a museum, published in his* Précis des lecons d'architecture *in* 1803. 32, *plan.*



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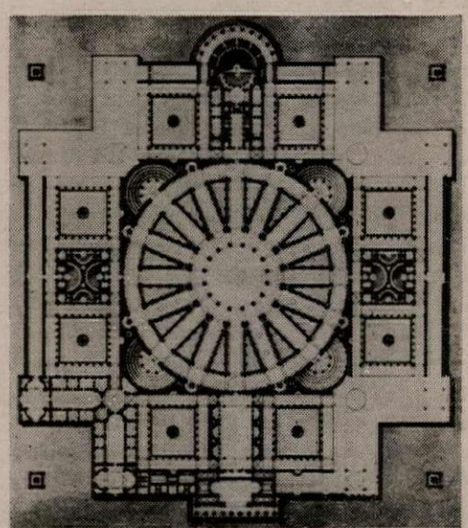
sary to store and soon to display this ecclesiastical loot. The man whose life-work was the saving of, and care for, these works of the Middle Ages was the painter Alexandre Lenoir.[14] The place where the monuments had been stored and which became the museum, 29, was the monastic premises in the rue des Petits Augustins. It was opened in 1793. By 1811 there were over 500 items, mostly funerary monuments. The rooms provided a congenial setting. Arrangement was by centuries, but behind was an extensive garden known as the *jardin élysée* where works of art were used as picturesque furnishings, e.g. the monument to King Dagobert with its canopy from St. Denis. There were also—just as in English eighteenth-century landscaped grounds—memorials to French celebrities. These were Molière, Boileau, Lafontaine, Descartes—and more in keeping with the antiquarian character of the collection—Mabillon, Montfaucon, Rohault and Abelard and Héloïse, 30. The museum was visited as enthusiastically as the Louvre. The cheap catalogue went into twelve editions between 1793 and 1816, the year in which the enterprise came to an end and all church property was returned. To kindle a romantic passion for things medieval the Petits Augustins must have been marvellous, but they were an ominous sign all the same of the passing of the time when the unity of buildings and the works of art made for them and becoming part of them was a matter of course. The nineteenth century was to disturb this unity and isolate the sculpture of the Middle Ages as ruthlessly as antiques had been isolated ever since collecting had begun.

While in the case of the Musée des Monuments Français the building was sympathetic to the works displayed, and while in the Vatican a sympathetic *ambiente* had been specially created, detached museum buildings, designed as such, were still the rarest of jobs. Only one more of the eighteenth century must be mentioned—in passing only, as it was built to display natural history, not art—the Prado, designed for the King in 1785 by Juan de Villanueva and yet another uncommonly fine example of neo-classicism.[15] Villanueva had been in Rome from 1759 to 1765. It is a symmetrical composition with two big end pavilions and in the centre a portico of Tuscan columns through which an apsed Temple of Science was reached. Entry was



33, *plan for a museum by Pierre-Adrien Pâris*, c. 1809.

from one end by an Ionic loggia *in antis* and a skylit Pantheon rotunda. The development in terms of space management between the Museum Fridericianum and the Prado is spectacular. How much, one would like to find out, did Villanueva know of the Grand Prix?

The climax of what the young architects had done about designs for museums in the competition is that by Jean-Nicholas-Louis Durand, professor at the Ecole Polytechnique, published in his *Précis des leçons d'architecture* in 1803. Durand's *Précis* was bought and used by architects in France as well as abroad. Durand suggests that in big cities there should be separate museums of art and natural science, whereas in smaller towns the two might be combined and even the library be in the same building. Of libraries he said, a few pages before, that they are 'a public treasury . . . a temple dedicated to studies.' In this spirit his museum also is conceived. The design is close to Delannoy's of 1778–79. Durand himself had gained second prize in the academy competitions in 1780. He has almost exactly the same plan, 32, but the four sides of the square have now, except for the corners, one long even colonnade each, 31. Everything is thus less articulated and more cubic than twenty-five years before. The centre is a Pantheon rotunda to be used as an assembly room.

Durand was not alone in reflecting on a fine appearance for museums. Pierre-Adrien Pâris in 1809 did a design for altering the Museo Pio-Clementino, trying to regularize the sequence of rooms and remove projections and excrescences in favour of more severely cubic masses. Of probably about the same time is his drawing at Besançon of a Museum '*où l'on réunit tout ce qui rapporte à l'étude des Sciences et des Beaux-Arts*' including a library. He calls it an 'immense project' himself. It is indeed the most sweeping of all the designs of the period for museums,

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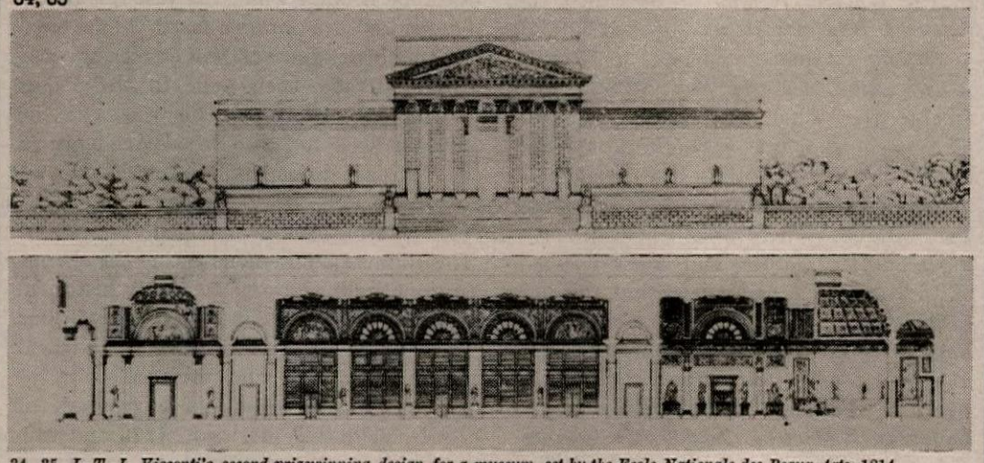

34, 35, *L.-T.-J. Visconti's second-prizewinning design for a museum, set by the Ecole Nationale des Beaux Arts*, 1814.

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36, *sky-lit gallery at the Dulwich College Gallery, by Sir John Soane*, 1814. 37, *plan*. 38, *exterior*.

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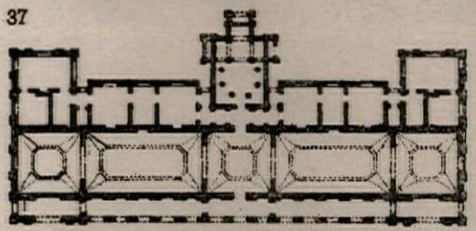

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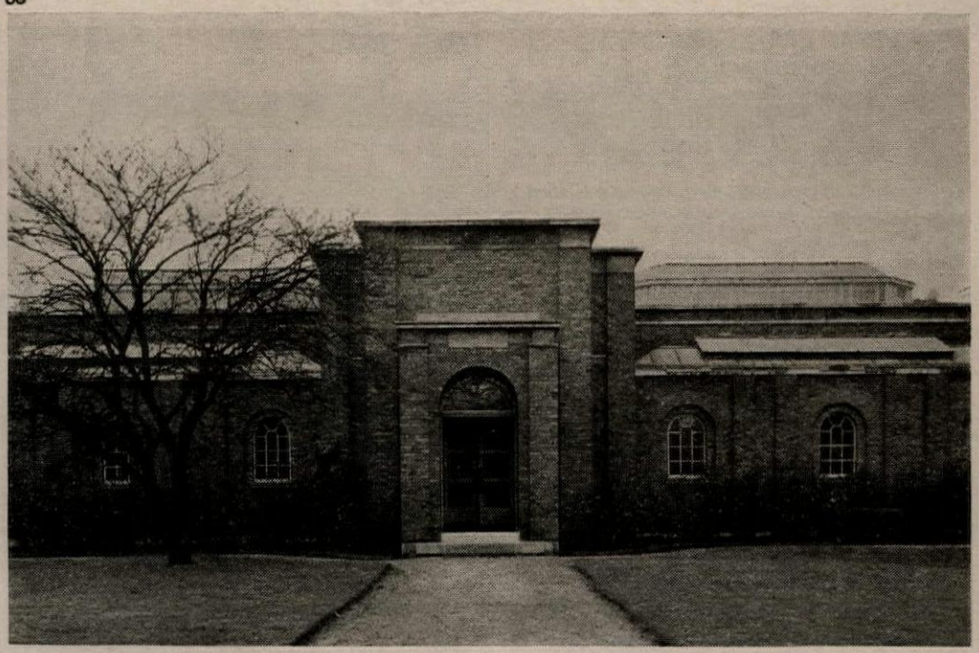


33. It consists of a circular courtyard connected by sixteen radial galleries with a ring gallery from which in the main direction four short arms extend. These arms are flanked by square courtyards and the whole in inscribed into a square with nicked-off corners. It is all utterly utopian. Pâris's design seems to have remained unnoticed. It is followed by another published one, that in C. J. Toussaint's *Traité de l'architecture*, which came out in 1812. This is patently inspired by Durand but decidedly weak in execution. Much space is taken up by rooms for an academy and even more by exhibition galleries. What is new and interesting is that Toussaint tells his readers the purposes of the individual rooms. This his predecessors, concerned solely with monumental composition, had omitted. In 1814 once again the Ecole Nationale des Beaux-Arts (as it was now called) set a museum-cum-library as its task. The first prize went to C.-H. Loudon and L.-N.-M. Destouches, the second to a more interesting design, 34, 35, by L.-T.-J. Visconti, one of the most famous Parisian mid-nineteenth-century architects. All three were pupils of Percier, and all three designs are indeed Empire and no longer Revolution in style, i.e. less radical, more ancient-Roman in the tectonic elements. A typical innovation is that now statues and even paintings are indicated in the drawings, one step beyond Toussaint's indication of at least the purposes of rooms.

1814, the year of these designs, saw the completion of the next independent gallery building—the next after Cassel—and the competition for the next after that which was going to be the key building of the nineteenth century. The former is the Dulwich Gallery, the latter the Glyptothek in Munich. The Dulwich Gallery, 36–38, was bequeathed to Dulwich College in 1811, by Sir Peter Bourgeois, RA, who had inherited a collection of pictures from the art dealer Noel Desenfans. He also left money for the building to which a mausoleum for the two Desenfanses and himself was to be added. Sir John Soane designed the gallery with five main rooms all lantern-lit on the pattern of the Royal Academy in Somerset House. The mausoleum projects at the back and was flanked left and right by almshouses. The Dulwich Gallery is memorable as the first independent building erected to be a picture gallery (even if with the few appendices just named), but it harks back to the past in still being a private man's collection and administered by a private body.

The Glyptothek, though built by the Crown Prince of Bavaria, the future Ludwig I, was from the beginning intended to be for the Bavarian people.[16] On 27 June, 1813, one year after the Crown Prince had acquired the Aegina Marbles, he wrote to Haller von Hallerstein, amateur architect and co-excavator of the marbles, asking him to make plans for 'a building suitable for arranging works of sculpture' and stipulating that it should be 300 ft. long, 'in the purest Greek style,' and with 'a portico of fluted columns in the Doric order.' Early in 1814 another letter went to the Munich Academy asking for a public competition. Here the Crown Prince demanded specifically that there should be windows only at the back. Designs were to be accepted till January 1, 1816.

Haller submitted two designs, Leo von Klenze three. Klenze was a protégé of Ludwig, became *Oberbaurat* in 1816 and in the same year *Hof-Bauintendant* (*surintendant des batiments*, as the French kings called it). Meanwhile Ludwig had written to Johann Martin Wagner, painter, sculptor, archeologist and Ludwig's *confidant*. Wagner lived in Rome and from there sent, at Ludwig's request, a memorandum on how to display antique statuary. The memorandum arrived in October, 1815, and an addendum in January, 1816. Wagner wanted an oblong building with an inner courtyard and only one large room for the Aegina Marbles, but all the rest not monumentally but functionally divided into small rooms or cells, each for only three or four pieces. The Crown Prince realized that this scheme would be lacking 'in architectural content and dignity.' So he agreed only to the general scheme of the oblong with inner courtyard and now turned to Karl von Fischer, Professor of Architecture at the Academy, to work out a plan—entirely independent of the competition, 39, 40. In the end—in the shilly-shallying way of Ludwig—Klenze was commissioned to lift the best of Fischer's plan and make final plans. Klenze's competition designs had offered one Grecian, one Roman and one Italian Renaissance version, though the so-called Renaissance one is not as truly of the Renaissance as Klenze was soon to be in the Leuchtenberg Palais and in the 'twenties in the *Festsaalbau*.

The Glyptothek as built (the name was invented by the Court Librarian Lichtenthaler) has a portico of eight unfluted Ionic columns—the lack of fluting defended by Klenze with archeological evidence from the Heraeum at Samos and the Temple of Cybele at Sardes—and windowless walls left and right decorated, instead of the absolutely plain rectangular recesses of the design illustrated, by aedicules of Renaissance rather than Grecian derivation. In fact the time of the unrelieved severity of Boullée, Ledoux and Gilly was over. Inside there is an entrance hall with a frieze just carrying the names of Ludwig, Klenze and Cornelius, the Nazarene whom Ludwig called to Munich

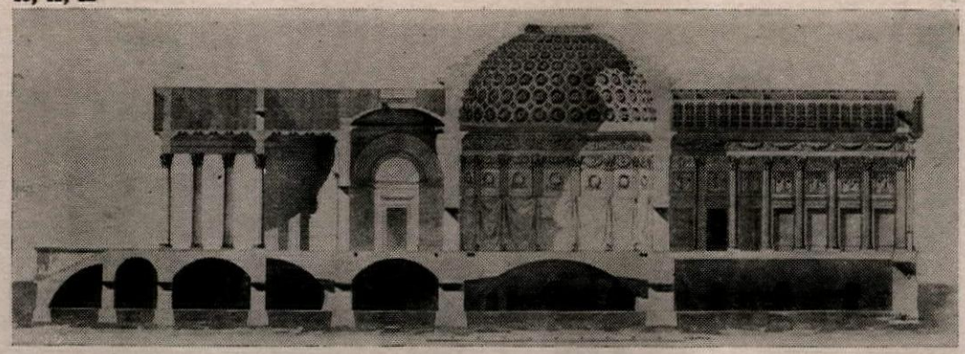
39

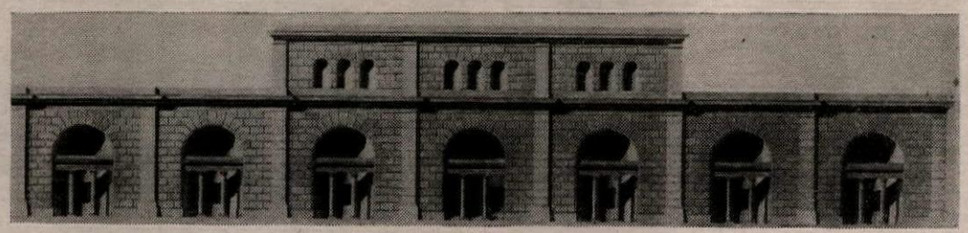
39, 40, *Karl von Fischer's design for the Glyptothek in Munich*, 1816. 41, 42, *Klenze's design for the Glyptothek.*

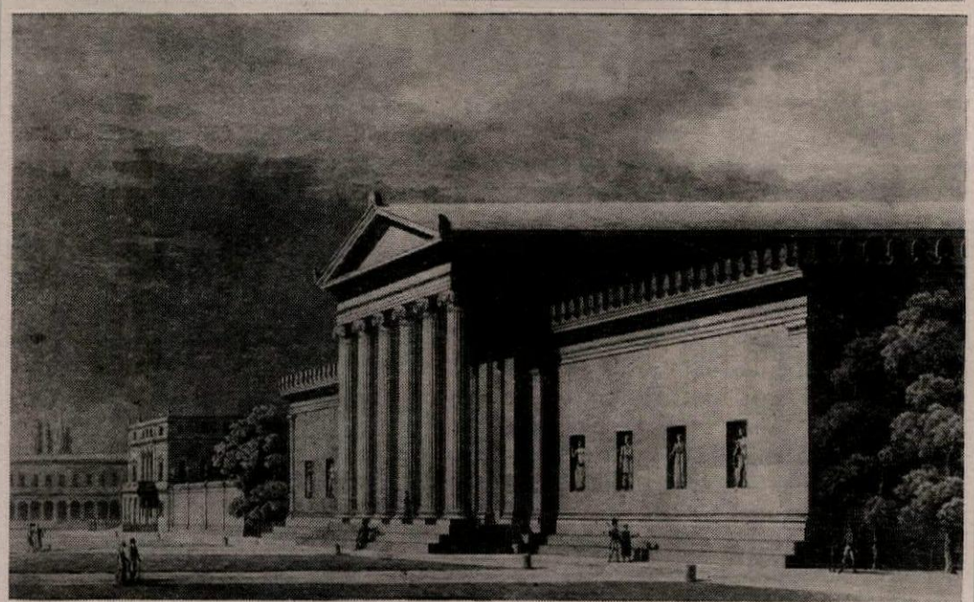
and who painted frescoes in the state rooms at the back of the Glyptothek with the avowed intention of 'reviving' that technique in the north. The existence of these state rooms for court occasions is a survival of the feudal past of museums and galleries. The gallery rooms were arranged chronologically, not, as Wagner still wanted, typologically, i.e. as had been done in the Villa Albani and the Museo Pio-Clementino. Now display started with Egypt as 'the principal basis of Greek sculpture' and ended with one Roman room and one for works by Canova, Thorwaldsen, Schadow, Rauch and others. There were other conflicts between Wagner and Klenze. Wagner, as previously in his memorandum, pleaded for the 'rigid accord of a building with its purpose.' 'It is my principle especially with regard to architecture, to prefer the useful to the beautiful, in cases where the two cannot be combined.' Klenze's answer was: 'A museum is no drawing office, academic menagerie and studio.' It exists 'for all kinds of visitors . . . more an institution for the nation than for the student of art, suited to divert art into life and mix it with life.' In reply, when Klenze used the tripartite lunette windows familiar from Roman baths (and Palladio), Wagner said: 'A museum is no bath-house.' Klenze won, unfortunately also in refusing seats as well as labels.

The controversies at Munich were paralleled in Berlin over the preparation for, and the building of, the Altes Museum.[17] Frederick the Great, shortly before he died, had allowed artists to copy in his gallery several days a week. This was confirmed in 1788 by Friedrich Wilhelm II. In 1797 Aloys Hirt, historian of ancient architecture, who had lived in Rome in the 1780's and become Professor of the Theoretical Part of Fine Art in Berlin in 1796, made a speech appealing to the King to build up one great collection out of all the scattered antiques in his possession. The new King, Friedrich Wilhelm III, answered that the scheme had to be postponed, but asked Hirt meanwhile to work out a plan. This was done, and the memorandum of 1798 is in its way as revolutionary as Boullée's and Gilly's architecture and Carstens's famous letter to Heinitz. Hirt writes that works of art should not be kept in palaces but in public museums. 'May I be permitted to say that it is below the dignity of an ancient monument to be displayed as an ornament.' The rare remains which we possess

40, 41, 42

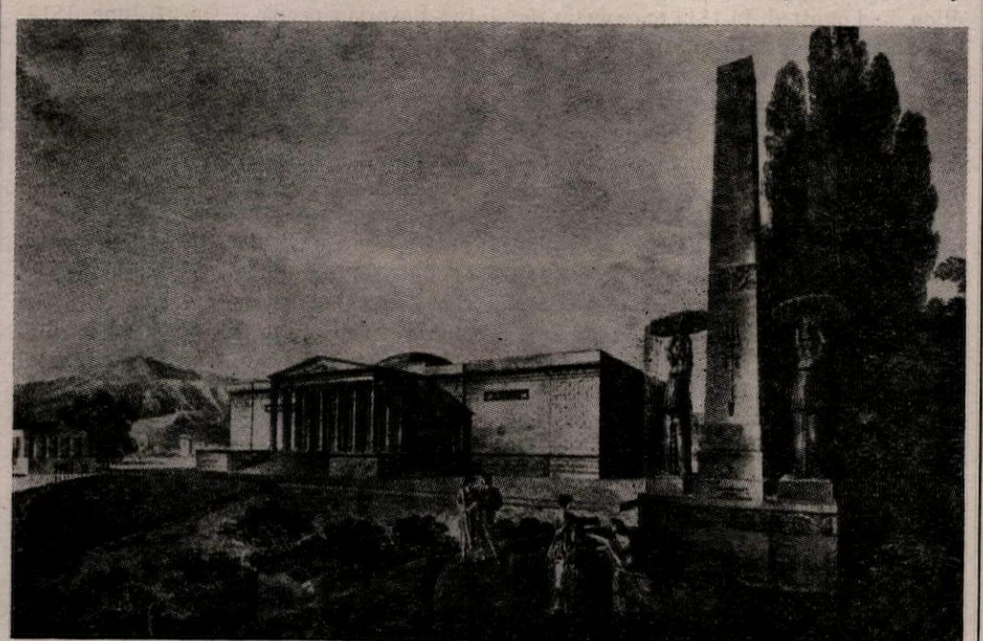






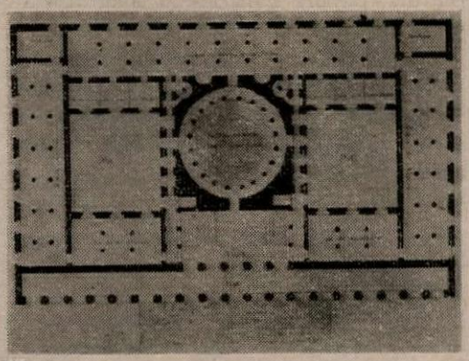
'are a heritage for the whole of mankind. . . . Only by making them public and uniting them in display they can become the object of true study, and every result obtained from this is a new gain for the common good of mankind.'

It sounds like Carstens indeed. The works of antiquity which he means are in his conviction 'the pattern for future times,' and, moreover, 'the study of the history



43, *Schinkel's design for a museum*, 1800.

44, *the Altes Museum, Berlin, by Schinkel*, 1823–30. 45, *plan* (*see interior*, 26, *on page* 108).



45

of modern art' is always extremely interesting too. Especially in painting, since no antique painting survives, 'the schools of the fifteenth and sixteenth centuries remain the precepts.' 'Genuine art can only thrive, where one has patterns, and they ought to be arranged in beautiful order, and (be) easily and daily accessible to all.' So the king ought to establish a museum 'for public instruction and the noblest enjoyment.' Hence the museum ought to be open to artists nearly the whole week and to the public on Saturdays and Sundays from 8 to 4 (on the pattern of revolutionary Paris). As for the plan, the building ought to be detached, oblong with an inner courtyard and many small rooms (i.e. not monumental but as useful as possible —cf. Martin Wagner). The arrangement would be with the purpose of 'representing the history of art,' including both the 'approach to perfection' and the decline. For this arrangement laudatory mention is made of Mechel. Antiques should be on the ground floor; paintings on the upper floor. Yet for the antiques there is still a division suggested into Upper Gods, Lower Gods, Heroes, Athletes, Portraits—as in Paris and Rome.

Nothing came of this, except that Schinkel, as a private individual, aged only nineteen, made a design for a museum, 43. Dating from 1800, it is entirely in the spirit of his master Gilly and the French architecture of the Ledoux type, very unrelieved on the external surfaces, without any windows to the outside, and with two inside courtyards and two rotundas. This motif appears here too early to derive from Durand; so the source is probably the Museo Pio-Clementino. No further move was made, until in 1807 von Altenstein, the minister, wrote another memorandum pleading for the commercial (i.e. Mercantilist) value of art and the artist, but also adding arguments 'from a higher point of view.' The spread of art 'enhances the state of mankind.' Art makes 'mankind participate in the highest goods.' Action was only taken, however, when Napoleon's loot came back. The works which were returned were shown publicly in the Academy every weekday, and enquiries were made whether a museum might be built on the academy premises. Schinkel did designs, but now, still in 1815, the Giustiniani Collection was bought and in 1821 the Solly Collection. These two new series of paintings of the highest quality (including, for example, parts of the Ghent Altar of the van Eycks) called for a special building to vie with the Glyptothek. Schinkel wrote a memorandum in January, 1823, to put forward the site, close to Palace and Cathedral, which was then chosen. Schinkel's plan, 45, was approved in April, the foundation stone was laid in July and the Altes Museum—as it was called later, when a Neues Museum had been built—was opened in 1830. The design is clearly inspired by Durand, and the Altes Museum is the only building in which the sheerness of the long colonnades so liberally put on paper by architects of the French Revolution reaches reality. The eighteen unfluted Ionic columns between the square angle piers, 44, are the noblest introduction to a temple of art. From Durand also comes the Pantheon rotunda in the centre, 26. Colonnade and rotunda are one-storeyed, but the exhibition galleries are on ground floor and one upper floor, and Schinkel's motif of the picturesquely exposed staircase between colonnade and rotunda states this fact openly. On the ground floor were the antiques, on the first floor the paintings.

Over display there was as much controversy as there had been a few years before at Munich. Wagner's part was played by Hirt. He was against all monumentality and, having lost his battle, resigned from the commission in 1829. The commission was under Wilhelm von Humboldt's chairmanship, a sign of how seriously the problems of arrangement were taken. Those responsible for the principles of arrangement were, apart from Schinkel, chiefly Dr. Waagen and Freiherr von Rumohr. Waagen, familiar in England from his travel notes on works of art in English collections, joined as assistant and then became the first director. Humboldt called Rumohr 'the first to write on the history of art in a truly historic and a truly artistic spirit.' Waagen was less fiery but more erudite, and his directorship marks the final taking over of museums by scholars. Rumohr for instance stated—in opposition to the display principle of the Pio-Clementino—that an arrangement by subject-matter would be 'to seek art outside the field of art.' So Rumohr, in advocating display according to history instead of iconography, yet means to advocate the aesthetic value of art and the importance of aesthetics for *Bildung* in the broadest sense. Here are some passages from a memorandum by Schinkel and Waagen to confirm this: 'The principal and essential purpose is in our opinion this: to awaken in the public the sense of fine art as one of the most important branches of human civilization. . . . All other purposes, concerning individual classes of the population, must be subdued to this. Among these the first is to give an opportunity to artists to manifold study; only after that comes the interest of the scholar, and finally and lastly the museum will facilitate the acquisition of information on the history of art among all and sundry.'

As for the arrangement from room to room, however, the historical point of view ruled throughout. Schinkel even designed frames in the styles of the periods of the paintings.[18] Humboldt knew that this strict adherence to history was still something exceptional and wrote: 'The gallery here is distinguished by systematically extending through all periods of painting.' Hence, he said, it was 'beneficial . . . but also necessary to fill the true and significant gaps. Many galleries, nay perhaps all, can only be regarded as aggregates assembled by degrees without definite plan.'

In Berlin paintings were divided, before being displayed, into fourteen classes according to quality. Classes 10 to 14 were not to be shown. Then Rumohr suggested that these curiosities, and also works by the 'ganz affrösen Meister' should go into the small back rooms, and with them the 'sour tit-bits' of Crivelli, Vivarini and 'similar abnormal' pieces. The paintings of Mannerism are 'tired imitation' and 'foolish crochets.' The 'reflecting painters of the seventeenth century' are called academic. Their display should start at their highest achievements in Poussin, Lairesse and Adrian de Werff. The climax of the whole arrangement is to be the High Renaissance.

In this they were all of course at one, and the most telling document of the appreciation of painting in the early nineteenth century is a memorandum by Schinkel and Waagen from which more passages must in conclusion be quoted: 'Among all pictures those which one calls classic are undeniably the most important, i.e. those where the artist not only thinks truly and beautifully according to his subject, but is also in command of all the scientific and technical means which serve art and expresses them completely explicitly in an easy and beautiful way.' The excellence resulting from all this 'convinces everybody, artist as well as layman.' The example Schinkel and Waagen offer of this perfection is Raphael, and hence, if you have ten already, you should still buy the eleventh. Rumohr expresses the same view by claiming that to recognize such artists one must be 'independent of the limiting predilection for singular trends' and able 'to comprehend the essence of art purely and survey from a common point of view its often seemingly contradictory achievements.' On the strength of this principle Rumohr could fully appreciate the Dutch of the seventeenth century and also pleaded for the inclusion of contemporary painters.

Schinkel and Waagen sum up their principal criterion thus: Is a work to be hung 'a good painting,' that is, 'a worthy representative of the time and school to which it belongs'? Once this is settled your aim should be (1) to 'display the originators of the various trends . . . as fully as possible as the true, principal and fundamental masters,' (2) 'to obtain a complete idea of those great masters who are specially noteworthy for spirited variety, as for instance Rubens,' (3) to show 'national painters who are at the same time great artists, . . . as completely as possible,' (4) 'to be saving in pictures by masters of limited individuality . . . and who tend to repeat themselves,' and (5) 'to represent only by one or two examples subordinate masters working in a peculiar trend.'

This sums up the attitude of the Humboldt period in European civilization and the spirit of Schinkel's building. At the Altes Museum for once Wackenroder's ideal had come true:[19] 'Picture Halls . . . ought to be temples, where in subdued and silent humility . . . we may admire the great artists. . . . Works of art in their essence fit as little in the common flow of life as the thought of God.'

The events of the next decades can only, in conclusion, be outlined. To do justice to them would require a second article. But the essentials were laid down, when the Glyptothek and the Altes Museum were complete. In London the British Museum was begun one year before the Altes Museum, but it received its multi-columnar facade only in the 'forties, when Schinkel's had long been published, and its central rotunda only in the 'fifties. Also it still offers—to this day—the obsolete combination of museum and library, just as the Louvre to this day combines the obsolete accumulation of painting, sculpture and decorative art. That division was made in London already, when the National Gallery was built in 1832–38 and the South Kensington Museum in the 'fifties.

Meanwhile Klenze in Munich had followed his Glyptothek by the (Alte) Pinakothek, as a museum for paintings only, as early as 1826–36. The Pinakothek set, behind its neo-Renaissance facades, the standard for the internal arrangement of nineteenth-century picture galleries: a long row of skylit main rooms and an even larger number of small accompanying cabinets with side-light. With this, and the Glyptothek to his credit, even if Schinkel was the greater architect, Klenze must be acclaimed as the most important of all designers of museums.

POSTSCRIPT
This paper is a radically abridged version of my thesis *Die Entstehung des Kunstmuseums als Aufgabe der Architektur*, Diss. Freiburg i.B., 1954. The thesis itself is unpublished. I am very grateful to my principal teacher, Professor K. Bauch, for help in many ways, and to Professor N. Pevsner for having undertaken the job of shortening the thesis.

NOTES

[1] The most important books on art collecting and museums in general are V. Scherer: *Deutsche Museen*, 1913; L. Brieger: *Die grossen Kunstsammler*, 1931; and F. H. Taylor: *The Taste of Angels*, London, 1948. A. S. Wittlin: *The Museum, its history and its tasks in education*, London, 1949, remained unfortunately inaccessible to me.

[2] On Renaissance collecting one should still use in the first place Burckhardt's *Civilization of the Italian Renaissance* and in addition his 'Die Sammler' in *Nachgelassene Beiträge zur Kunstgeschichte von Italien*, 1898. The various papers of Adolf Michaelis are indispensable for any study of the collecting of antique statuary.

[3] Serlio in 1537 still defines a gallery as a 'luogo da passeggiare' and calls it a French word. Zeiller's dictionary in 1632 already calls it 'a corridor where pictures hang,' and Shakespeare: 'For in my gallery thy pictures hang' (Henry VI, prt. 2, III, 37) is earlier still, probably of *c.* 1591. The change of meaning no doubt took place in the second half of the sixteenth century, as the inventory of antiques in the possession of Alessandro Farnese, dated 1568 (*Documenti inediti per servire alla storia dei musei d'Italia*, Florence and Rome, 1878, I, 72), says that they were placed *'nella camera grande, detta la Galleria.'* The same years seem to have established the term museum. Paolo Giovio's *Elogia literaria* of 1546 (Schlosser: *Die Kunstliteratur*, Vienna, 1924, 173) contains the 'Musaei descriptio,' i.e. the description of his museum. Immediately afterwards, in 1553, Jacopo Strada published a book on the coins 'ex- Museo Jacopi de Strada.' In 1565 von Quicheberg uses the term as well (R. Berliner: 'Zur älteren Geschichte der allgemeinen Museumslehre in Deutschland,' in *Münchner Jb. d. bild. Kunst*, 1928, p. 330).

[4] A. Puerari: *Sabbioneta*, Milan, 1955.

[5] J. von Schlosser: *Die Kunst- und Wunderkammern der Spätrenaissance*, Leipzig, 1908.

[6] R. Berliner, *l.c.*

[7] A. Holtmeyer: *Die Bau- und Kunstdenkmäler im Regierungsbezirk Kassel*, IV, Marburg, 1923.

[8] Hans Posse in *Jb. d. Preuss. Kunstsamml.*, LII, 1931, Beiheft.

[9] Holtmeyer, *l.c.*, p. 376, and O. Gerland: *Paul, Charles und Simon Louis du Ry*, Stuttgart, 1895, p. 27, etc.

[10] The Grands Prix of 1778, etc., have recently been discussed and largely illustrated by Mrs. H. Rosenau in *Architectural History*, III, 1960.

[11] See H. Rosenau: *Boullée's Treatise on Architecture*, London, 1953.

[12] For the Paris collections at the time of the Revolution and the Empire see F. Bénoit: *L'art francais dans la Révolution et l'Empire*, Paris, 1897; C. Saunier: *Les conquêtes artistiques de la Révolution et de l'Empire*, Paris, 1902; C. Aulanier: *La Grande Galérie*, Paris, 1949.

[13] For Düsseldorf see: R. Klepheck: *Die Baukunst am Niederrhein*, II, no date. For Vienna A. Stix: *Die Aufstellung der ehedem Kaiserlichen Gemäldegalerie in Wien*, Vienna, 1929.

[14] See *Inventaire des richesses d'art de la France: Archive du Musée des monuments francais*, Paris, 1883.

[15] F. Chueca and C. de Miguel: *La Vida y las Obras del arquitecto Juan de Villanueva*, Madrid, 1949, and F. Chueca Goitia: *El Museo del Prado*, Madrid, 1952.

[16] H. Kiener: Leo von Klenze, Diss. Munich, 1920; H. Kiener in *Münchner Jb. d. bild. Kunst*, 1923; O. Hederer: Leo von Klenze, Munich, 1964; W. Freiherr von Pölnitz: Ludwig I vo Bayern und Johann Martin von Wagner, Munich, 1929.

[17] P. O. Rave: *Schinkel; Lebenswerk: Bauten in Berlin*, I and II, 1941 and 1948; also *Zs. f. K. gesch.*, IV, 1935, p. 171 (review of S. Spiero: 'Schinkel's Altes Museum,' in *Jb. d. Preuss. Kst. sammlungen*, LV, 1934, Beiheft); F. Stock in *Jb. d. Preuss. Kst. sammlungen*, XXXV, 1914, Beiheft; XLVI, 1925, Beiheft; IL, 1928, Beiheft; LI, 1930; LIII, 1932; LIV, 1933; LVIII, 1937, Beiheft; LXIV, 1943, Beiheft. Also P. Seidel, *ib.*, IL, 1928.

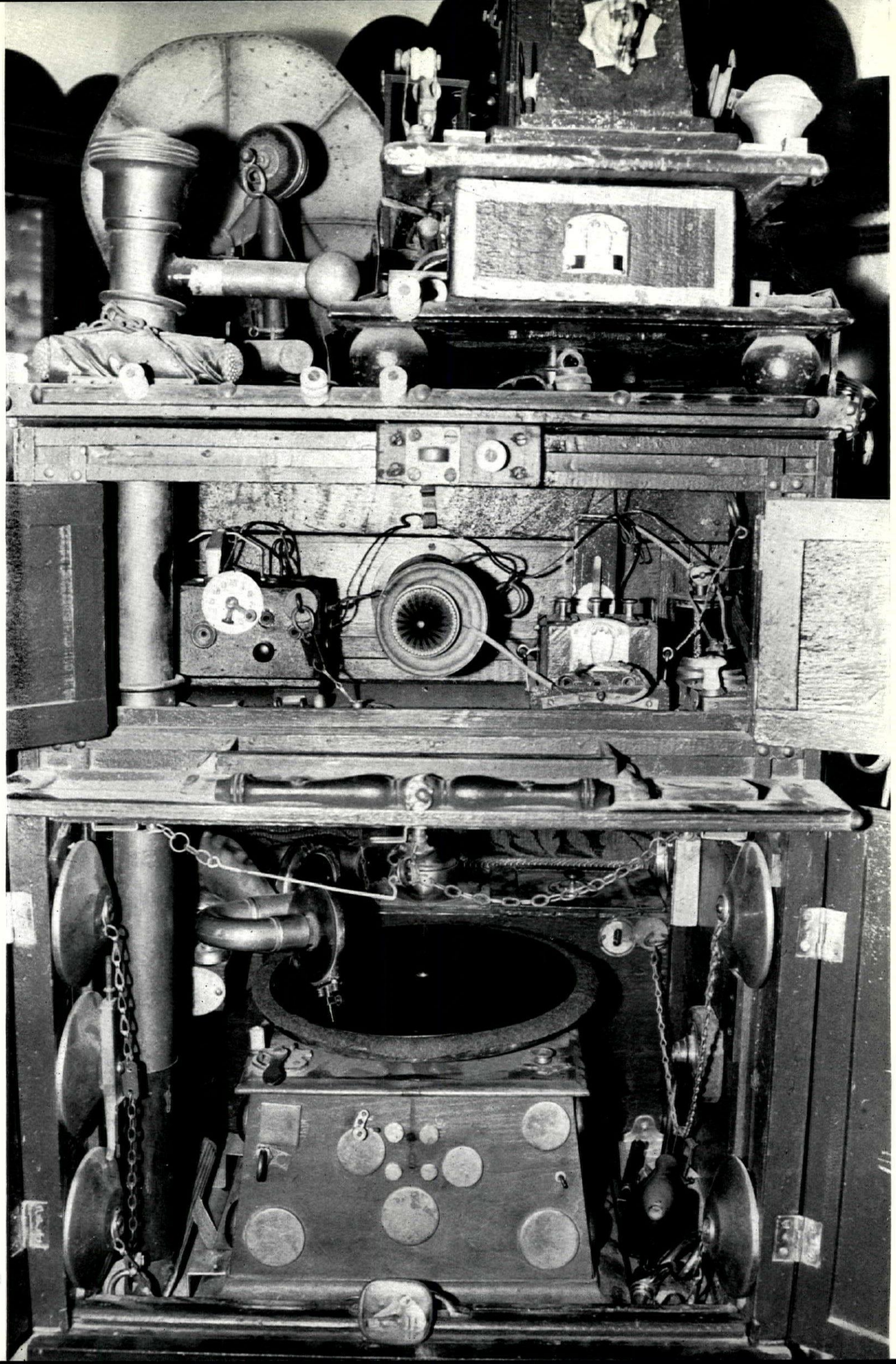
[18] J. Sievers: Die Möbel. *Lebenswerk*, Berlin, 1950, figs. 207–17.

[19] *Herzensergiessungen*, Berlin, 1797, pp. 79–80.

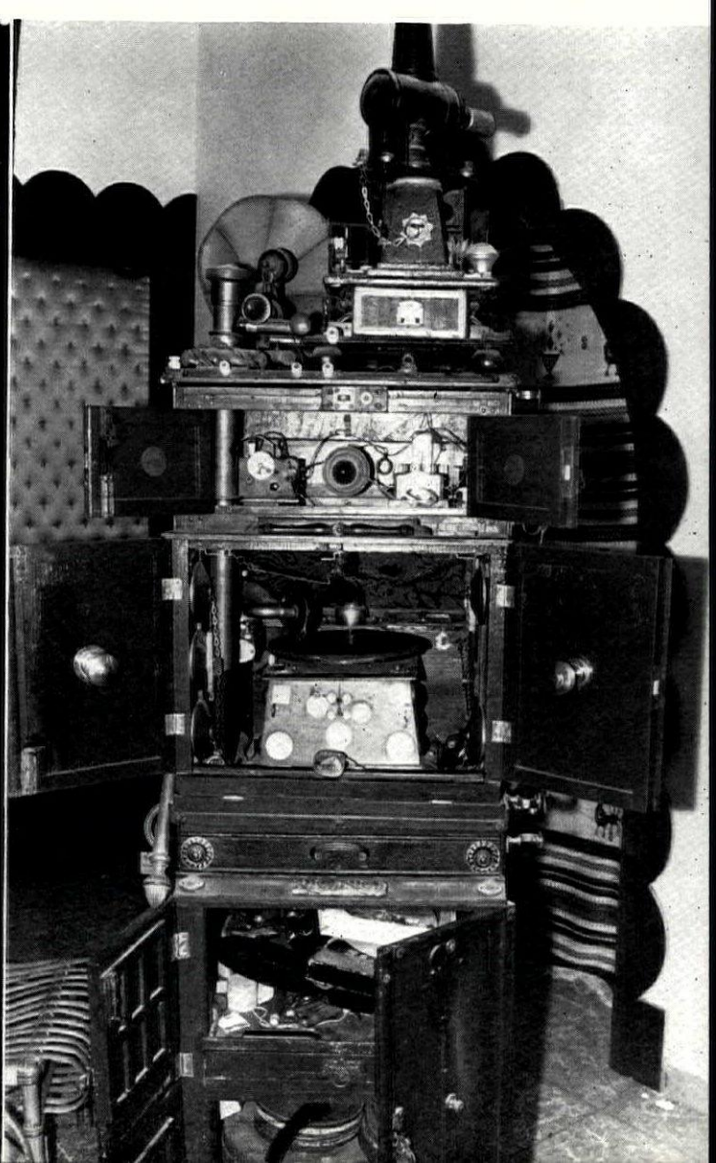
18 **SCHOOL FOR THE PARTIALLY SIGHTED, EXETER** | *architects* **STILLMAN AND EASTWICK-FIELD** | *photographs by Henk Snoek*

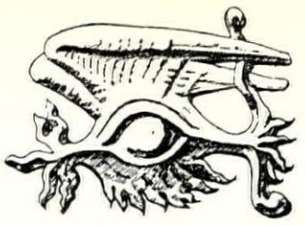
1, looking west in the central group of buildings : left, senior classrooms and assembly hall ; centre, dining hall ; right, girls' house.

photographs by Penelope Reed



2, *the back of the 'picture-palace' machine: the gramophone has two pick-up heads, one connected to the organ in front, the other to the loudspeaker on top. On each side are cymbals, possibly used for thunder noises or galloping horses.* 3, *the two projectors on top of the machine.* 4, *'Sound Film': the decorations on the front of the machine: a coloured picture of a monk praying beside a cleft rock: peasants sewing and standing in a doorway: a Christmas card, and a cigar box label.* 5, *another view of the back of the machine.*





the exploring eye

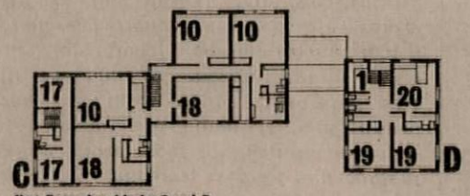
This 'do-it-yourself' picture-palace stands in a shop in Palma, Majorca, which sells baskets and cane chairs. The owner of the shop, Mr. Jose Vidal, told me he bought the entire contents of a house many years ago, and this machine was in the attic. Intrigued by it, he put it in his shop as a curiosity; not for sale, but as a conversational gambit between himself and his customers. One day a man came into the shop who remembered the machine as a child. His grandfather had been a furniture manufacturer called Signor Juncosa and his nightwatchman (whose name is not remembered) built it over a period of years. It seems he had invented a potato peeler previously, and now wanted to build a sound cinema with—this is my belief—stereophonic sound; but the problem finally defeated him, and he ended his life in the Palma lunatic asylum. I have not yet found anyone who can tell me definitely what reason the inventor could have had for putting two heads with the two needles on to his gramophone, unless he was trying for stereophonic sound. As can be seen, one head is close to a pipe leading to the loudspeaker on top of the machine, the other next to a pipe leading to the organ in front. I took the pictures to the department for early gramophones at the Science Museum, where I was told that it was impossible for them to make a proper judgment, without their actually seeing the machine and taking bits of it apart. They said that if he was trying for stereophonic sound, which didn't seem at all impossible, the inventor would not in fact have achieved it in this way, and that it appears to be the work of someone going mad. I sent the pictures also to Dr. Schulze, of the Kodak Museum in Harrow. He could give no judgment on the sound department, but said that in his opinion the nightwatchman, like so many inventors, was, in fact, a little behind his times with the projector. The first link-up of cine-projector and gramophone by electricity was achieved by Gaumont in 1889, but between motor projector and gramophone in 1906. The two projectors on top of the machine are not unusual; early films between 1895 and 1900 had no titles, so these were projected by magic lantern. Sometimes one was positioned on top of the other as in the photographs. The decorations on the picture-palace are from the furniture manufacturer's stock. There are brass pineapples, brass rosettes, castors, white furniture studs, brocade and gold lace round the organ, and chest-of-drawer handles. The structure is of wood painted to look like mahogany.

PENELOPE REED

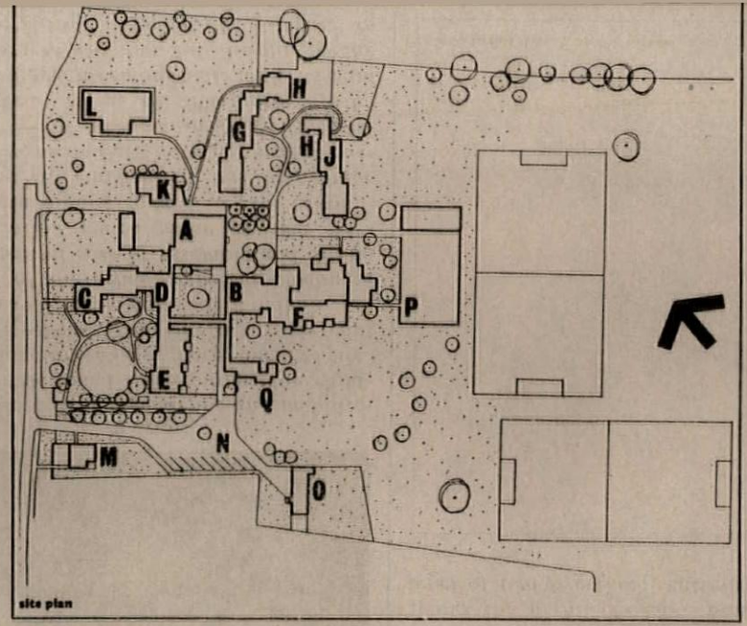
A, dining hall
B, assembly hall and gymnasium
C, junior house
D, medical
E, junior school
F, senior school
G, boys' house
H, staff flats
J, girls' house
K, boiler house
L, swimming pool
M, caretaker's house
N, main entrance and car-park
O, headmaster's house
P, play area
Q, administration

1, kitchen
2, dining hall
3, domestic staff room
4, staff sitting room
5, staff dining room
6, infants' dining room
7, workshop
8, boiler room
9, oil storage
10, dormitory
11, living room
12, play room
13, nursery
14, medical inspection
15, isolation
16, treatment
17, bedroom
18, bed-sitting room

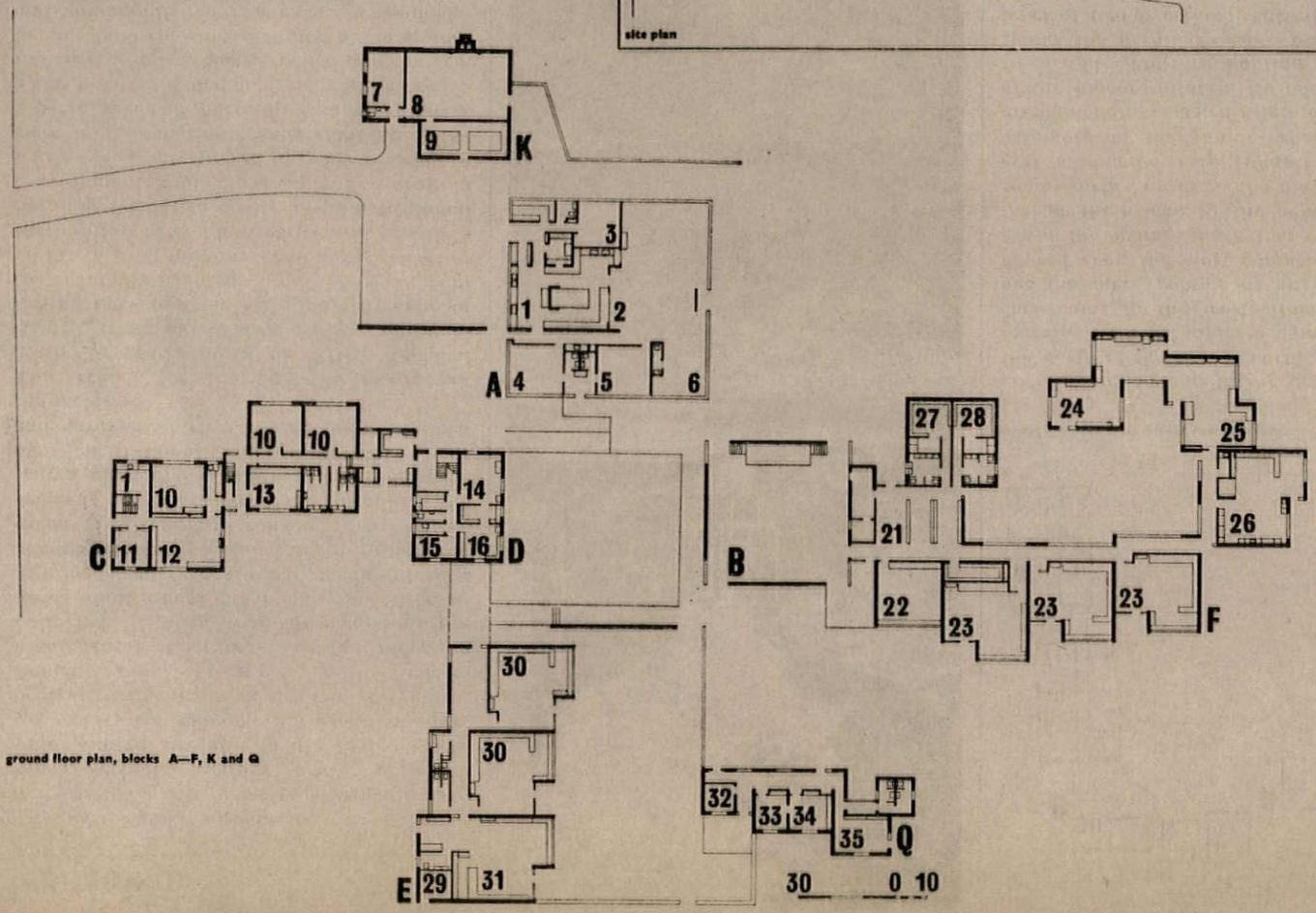
19, sick room
20, medical matron
21, entrance hall and cloakroom
22, library and committee
23, classroom
24, handicraft
25, art
26, housecraft
27, boys' changing
28, girls' changing
29, switch room
30, junior classroom
31, infants' classroom
32, matron
33, headmaster
34, secretary
35, staff



first floor plan, blocks C and D



site plan



ground floor plan, blocks A—F, K and Q

This is a rebuilding on a new site of the school previously known as the West of England Institution for the Blind, a private charity previously housed in Georgian and Victorian buildings in the centre of Exeter. The new site, of 13 acres, is 1½ miles from the centre, slopes gently from east to west and lies behind ribbon-built housing.

The school accommodates 90 children, 75 of whom are boarders, aged from 5 years to 16. These occupy three houses—one for juniors up to 11 years and the other two for boys and girls. These are separated from the teaching buildings so that the children have a sense of going from home daily to school. Only the junior house is connected to other buildings by covered way. Craft rooms are kept near the houses to serve as centres of activity at weekends. Each house contains dormitories, bathrooms, etc., clothes and linen storage, a laundry and one playroom and one quiet room. There is a communal dining hall (with separate staff dining and sitting rooms) and a combined assembly hall and gymnasium. The teaching accommodation consists of eight classrooms. Staff living accommodation is distributed among the boarding houses, but there is a detached headmaster's house and caretaker's bungalow. There are also a swimming pool, a games hut and five garages.

Construction is mostly traditional—brick and timber—with steel used in the classroom and assembly-hall roofs. Some of the individual buildings are of unusual shape because of the special lighting requirements, which are naturally complicated in a school of this kind—myopic children, for example, prefer a high intensity of light whereas albinos shun the light. Rather than provide elaborate artificial lighting devices such as illuminated ceilings, it was decided to rely on a high degree of natural lighting with artificial lighting for use only after dark, but with a high intensity (24 lumens generally with additional local lighting). General lighting is fluorescent with tungsten supplementary lights. The shape of the classrooms is designed to provide this natural illumination, acuity of vision being increased by the fact that it is directional. Venetian blinds enable variation in intensity to be obtained in different parts of the room.

Furnishings were the responsibility of the architects.

The school has been given the 1966 RIBA Architecture Award for the south-west region.

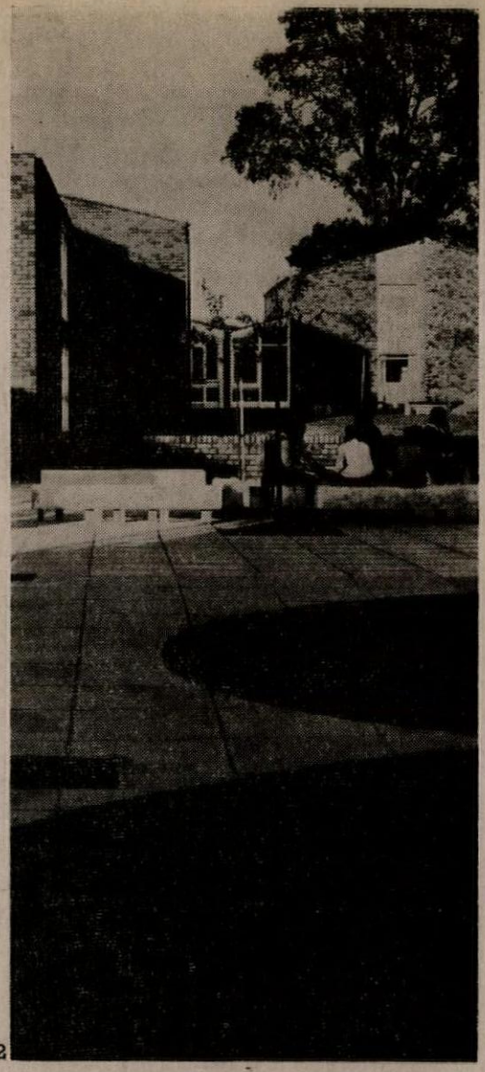
Partner-in-charge, J. Eastwick-Field.

Architect-in-charge, R. Bridges. Quantity surveyors, Davis, Belfield and Everest. For contractors, see page 164.

criticism

The barrack-like institutions for the blind and partially sighted which emerged during the nineteenth century—many of which unfortunately are still in use to-day—were the inevitable outcome of architects preoccupied with historical fashion, and educationists paying lip-service to the needy. Monumental staircases in grand reception halls led the way to overcrowded dormitories above—each filled with rows of cast-iron bedsteads. Scanty and mean interiors always religiously painted out in brown and green institutional colours were often dressed up in ostentatious facades. The spaces outside the buildings also had their own institutional identity—formal lawns and gardens which mirrored the disciplined life inside.

This school for the partially sighted at Exeter, recently given an RIBA Regional Award, is an outstanding success in establishing once and for all a public image of the partially sighted child which is both civilized and humane. From the time of their initial brief the architects in fact deliberately set out to create an uninstitutional environment, and the imaginative way in which they interpreted the brief shows a clear and sympathetic understanding of the diverse needs of partially sighted children. They have provided a variety of interlocking spaces—open, closed, paved and grassed, defined by 'explosive' planning of classrooms and communal and residential accommodation in order to achieve a domestic character and a village-like atmosphere. The school is unmistakably for children and the architecture is unselfsconcious, relaxed and content to remain subservient to the total environment of school and home. If handicapped children are later to be integrated into society, the physical environment in which they develop must be similar to that which they will experience in adult life—consequently, in this design, few architectural concessions have been made to their handicap. One interesting characteristic of partially sighted children however is that the very young are reluctant to venture outdoors; the psychological security which comes from being indoors is much more attractive than "the big wide world." The controlled discipline of the child-sized cellular spaces in this design provides an intimacy and a limitation of horizons which will surely contribute to the development of the children's independence and mobility. They were designed to encourage the children to adventure and explore, and are also splendid meeting places for a private chat with a friend, or a game of handball.



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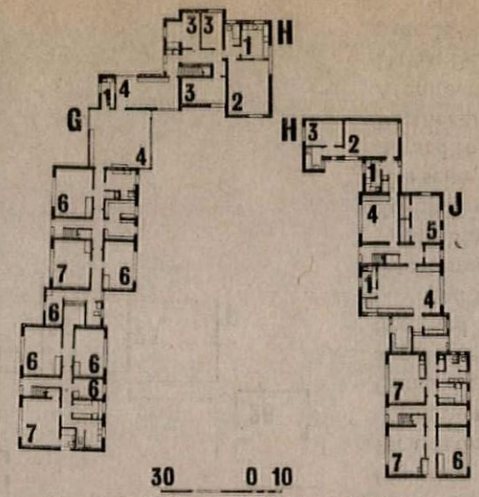
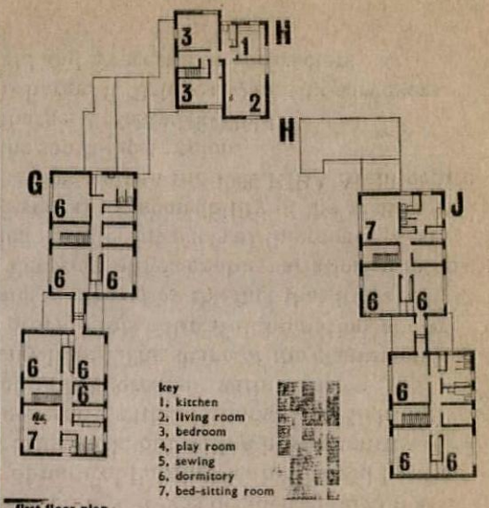


ground floor plan, block G (boys' house); H (staff flats); J (girls' house)

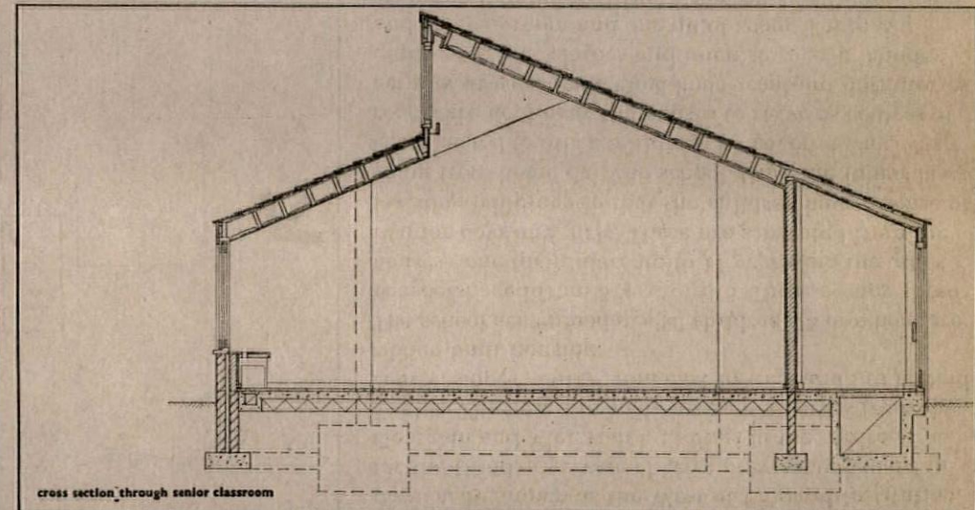


first floor plan

The plan of the school revolves clockwise round a central core of assembly and dining accommodation which make up two sides of the main village square—a real community space, 2, emphasized by three huge bricked circles and six very permanent concrete seats—not however the most comfortable material to sit on. The form of the pyramid-roofed assembly-hall, with its slim glazed corners running full height to the eaves, permitting fascinating glimpses in every direction and to the gigantic elms to the north of the site, is particularly well integrated with its adjacent wing of staggered classrooms to the west. How many times has the mere volume of an assembly hall floored even the most competent architect? From the main square two concrete paths thread their way to the senior boys' and senior girls' houses to the north, and to the east a covered way connects admin. and assembly to the junior school and living accommodation tucked safely out of the way of the bigger children. By adopting pitched roofs and clerestory lighting for the classrooms the architects have provided a high level of two-directional natural illumination which may be controlled by blinds to suit the diverse individual needs of the children. The classrooms, each with its private outdoor teaching space, are planned to permit desks and furniture to be arranged informally to satisfy different teaching methods.

Throughout the scheme there is a decisive unity of architectural treatment. The construction—"competent trad on the rocks"—is certainly appropriate for the job, and the consistently good use of materials—overburnt Sussex stocks ranging from purple to brown, softwood painted black and white, glass, and dark grey concrete slates—provides a crispness rarely found in Exeter.

EDWIN JOHNSTON



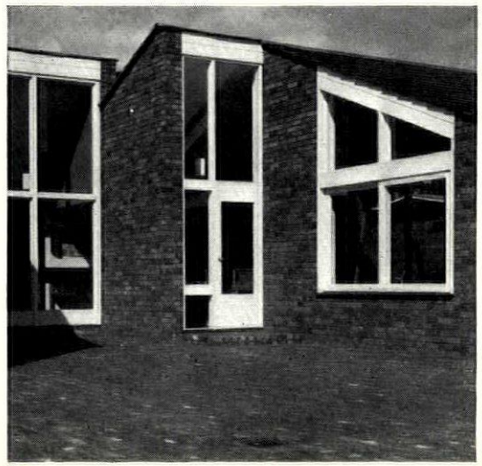
cross section through senior classroom

3

SCHOOL FOR THE PARTIALLY SIGHTED, EXETER

4

3, the south-west elevation of the senior classroom block, which is a single-storey building with clerestory windows to provide a large amount of natural lighting (see section on opposite page). 4, interior of a typical classroom. 5, the craft rooms seen from the brick-paved courtyard of the senior classroom block. 6, interior of one of the craft rooms, with view of playing fields.



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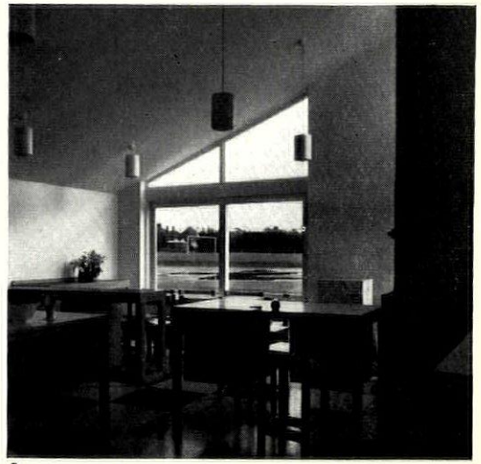

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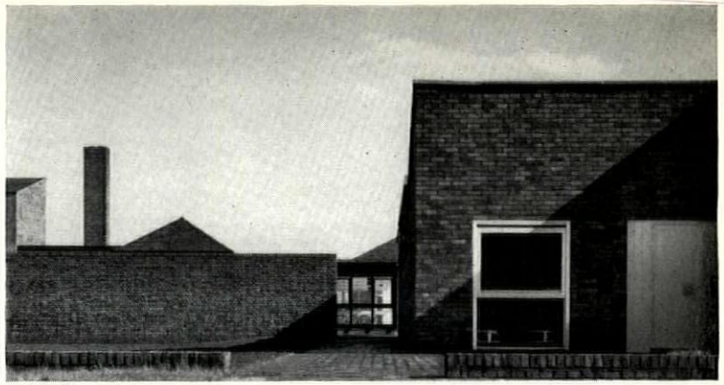

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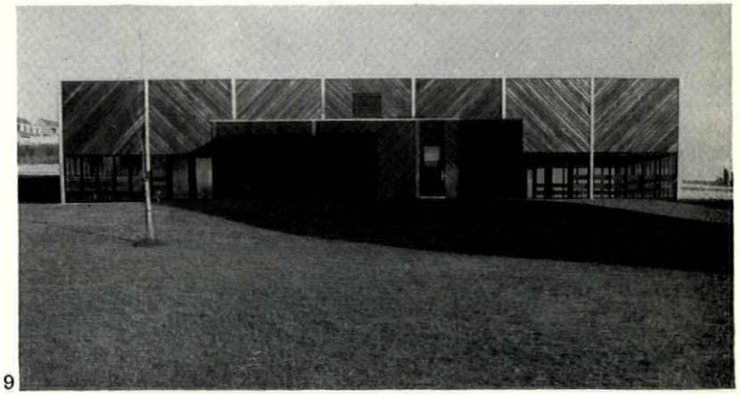


9

SCHOOL FOR THE PARTIALLY SIGHTED, EXETER

7, the senior classroom block seen from the covered way to the assembly hall. 8, from the south-west, with the administration block right, screen wall left, and pathway to dining hall centre. 9, the timber-clad swimming pool at the north end of the site. 10, interior.

wirescape

THE MARCH OF 400kV

The conflict between the escalating need for electricity and the damage to natural beauty by overhead transmission is not unlike the conflicts between the indispensability of the car and the jet and their destruction of urban convenience and rural peace. It is part of the strain of being a modern nation in a cramped eighteenth/nineteenth century setting. The solution is the price the community (if consulted) is prepared to pay for retaining some of the most characteristic, agreeable, poetic England. So far no Government of either complexion has dared or bothered to consult the community.

Since the AR took its last look at this problem ('Wires Underground,' November 1964) the Central Electricity Generating Board has continued to develop its 400kV supergrid network (see map overleaf) which is required to be in action by 1970. This network involves pylons 165 feet high, and the prospect of such pylons in West Sussex as a link in the objectionable line across the south of England from Dungeness to Cornwall produced a first-class public row in 1964. Since then there have been some signs that the Ministry of Power and the CEGB, whose genuine difficulties are fully understood, are prepared to adopt a slightly less inflexible policy towards undergrounding in very beautiful stretches of country, and that a changeover to direct current may make the long-term prospects of electricity transmission less forbidding. But the bitter and fatuous public inquiries still go on, the public remain unaware of what is going to happen until too late, and the Government, either through complacency or by design, does nothing to make the situation acceptable or even understandable. This article brings the story up to date in the form, to begin with, of a diary of events (culled mostly from 'The Times,' 'The Guardian' and 'The Daily Telegraph').

1964

AUGUST 400kV link from Cowley (Oxford) to Fleet through the Goring Gap being discussed by CEGB and Oxon and Berks planning authorities. Link involves 165 ft. pylons parallel to the Thames. National Parks Commission 'particularly concerned' about carrying line over Berkshire Downs. Pylons to be sited lower down so skyline should not be broken.

M Power gives permission for 400kV cables on 165 ft. pylons from Bolney (W Sussex) to Lovedean (Hants). Negotiations had started in August 1961.

Public inquiry April 1963. All hell breaks loose in Sussex and the letter columns of 'The Times,' which agrees (August 17) that 'it is not good enough' but suggests (September 3) after carrying two interviews with Sir Christopher Hinton, then Chairman of CEGB, that 'public opinion based on a realistic appreciation of the matter is not yet formed.'

M Power rejects Ringwood and Fordingbridge RDC's suggestion for alternatives to overhead cable between Nursling and Fryern Court, affecting part of Avon Valley, further link in Cornwall-Dungeness line.

M Power allows lines near Macclesfield but only 275kV instead of 400 'until he directs otherwise' after objections by Manchester University to possible interference with Jodrell Bank telescope.

E Suffolk planning committee 'shelve' CEGB application to run 132kV line (eventually to be 400) from Bramford near Ipswich to Stoke Holy Cross near Norwich, taking supplies from Sizewell, crossing the Gipping Valley at Darmsden and running near Bosmere Lake. Line would, with others proposed between Norwich and King's Lynn, 'provide security of supply for the whole of East Anglia.' Undergrounding would cost £1,182,000 a mile compared with £54,000 overhead. Rather a lot of high-level decision-making comes out in the peak holiday month.

SEPTEMBER Chairman of NW Electricity Board, at ceremony marking connection of 8000th Lakeland farm to electric supply, says most Lake District lines will have to be overhead if costs are to be kept within reasonable limits.

Snide advertising campaign by Gas Council showing waving cornfield under heading 'A year ago the gas underground grid was laid through here.'

OCTOBER CEGB annual report claims electricity supply, especially in south of England, is being impeded by delays in obtaining consent to erect transmission lines.

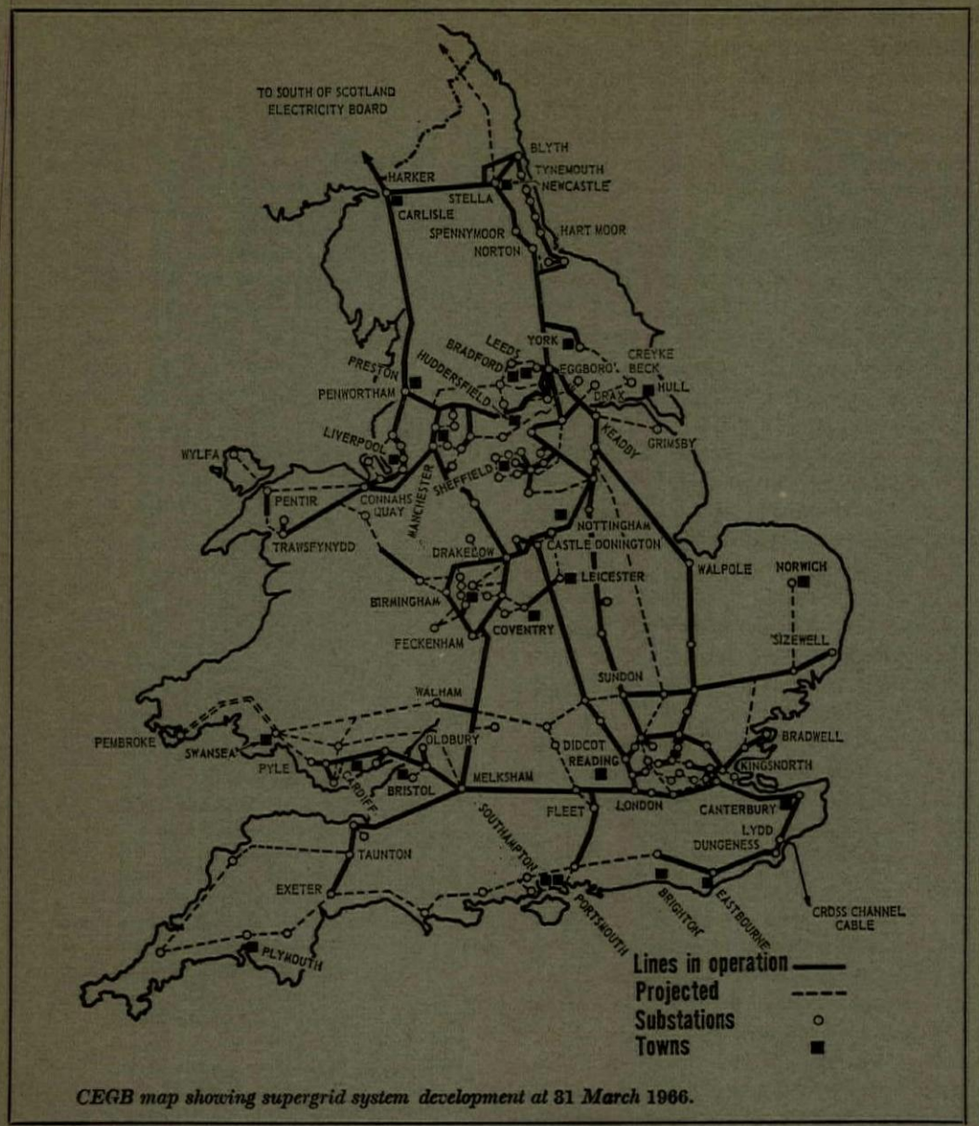
Forestry Commission's monthly newsletter sees Dungeness-Cornwall line as threat to the beauty of the New Forest.

M Power, having refused 400kV line in 1963, allows 275kV pylons for 5 years between Woodford and Winterbourne Stapleton, Dorset, 'to provide Bournemouth with urgently needed extra power.' Area includes Maiden Castle: a shorter route north of it would have meant delay for fresh application and a possible local inquiry.

Labour Government elected.

NOVEMBER Lords debate on West Sussex pylons. Lord Egremont goes to town (see Flashes on page 125). Lord Stonham stonewalls like any Conservative junior Minister; points out all objecting peers are affected landowners; quotes £1,182,000: £54,000; claims undergrounding, with trenches and access road, would sterilize a corridor of land 42 ft. wide.

Public inquiry at Waddesdon, Bucks, on proposal for 400kV line



CEGB map showing supergrid system development at 31 *March* 1966.

from East Claydon to Cowley. Mr. C. Sparrow, QC for CEGB, claims overhead wires bring no permanent damage to countryside whereas undergrounding 'could leave a scar on the face of the countryside for ever.' There would be a 20 yard wide swathe with a permanent road 12 ft. wide for maintenance.

DECEMBER Last section in Dungeness—Cornwall line agreed in principle with Devon planning committee. 46 miles, from Broad Clyst near Exeter to Plympton, going north of Exeter. Public inquiry likely.

1965

JANUARY Mr. F. H. S. Brown succeeds Sir Christopher Hinton as Chairman of CEGB.
Adjournment debate in Commons on West Sussex pylons, raised by Mr. Peter Hordern, member for Horsham. Mr. John Morris stonewalls like any Conservative Parliamentary Secretary to M Power; rejects idea that the Minister could reverse his predecessor's consent; claims undergrounding would leave a wide band right across the country, probably 57 ft. wide.

FEBRUARY Parliamentary Secretary to M Power rejects suggestion that an advisory committee should be appointed to advise the Minister in cases of conflict between provision of electricity and preservation of the countryside.

MARCH CEGB still considering alternative routes for pylons through Bronte country.

APRIL CEGB agrees to underground 1½ miles of line from Cowley to Seven Springs, Glos., to preserve view of Oxford from hills to west. Cost: £1,150,000.
Mr. F. H. S. Brown announces 500 miles of main power lines in next 3 years to be buried, at opening of Eastleigh Pirelli factory for production of 'the largest electricity cables yet considered for underground or submarine use anywhere in the world.'

JUNE CEGB submits to M Power plans to reduce clutter of overhead power lines and transmission towers round Ipswich. First ¾ mile from new sub-station at Bramford to be underground, making it possible to dismantle at least 14 existing towers and their overhead lines.
CEGB in trouble at Ross-on-Wye for apparently starting on a section of 400kV line at Cliffords Mesne, Glos., which was 'not the subject of an inquiry,' i.e. because of lack of objections. Inquiry promised. Revealed that contract for the whole line had been awarded.
Midland industry learns that its electricity supplies are so closely balanced that there is no safety margin to meet winter crises.
Negotiations with landowners for pylon sites holding up new sub-station at Bustleholm.

JULY New research centre set up by Electricity Council at Capenhurst, Cheshire, to undertake intensive research into the distribution and development of the use of electricity.

AUGUST Row over 'hearing' at Petersfield concerning 19-mile stretch near Midhurst. Society of Sussex Downsmen complain to M Power that the proceedings are to be secret. Ministry point out they are a 'hearing' not a public inquiry. M Power admits public.

SEPTEMBER M Power gives permission, a year after inquiry, for 400kV overhead lines in S Dorset through outskirts of Weymouth.
Public inquiry at Hitchin on 400kV supergrid line for London and home counties from Cottam, Notts, power station to new switching and transformer sub-station at Wymondley near Hitchin. CEGB had prepared landscaping scheme costing £99,500.

1966

JANUARY M Power gives permission for 19-mile stretch from Petworth to Lovedean after the August public inquiry at Petersfield.

MARCH New type of underground transmission cable carrying direct current to be laid from Kingsnorth power station near Rochester to Croydon and Willesden.
Alternating current generated at Kingsnorth will be converted into d.c. for transmission, then back into a.c. at Beddington near Willesden.
Cable cheaper than underground a.c. system, but conversion equipment at either end adds sharply to the cost.
South Western Electricity Board planning 11kV line across Dartmoor to supply farms, hamlets and a waterworks. Admit part would be 'visually very objectionable.'
Public inquiry at Exeter into last 400kV link (Broad Clyst to Abham, 29½ miles, over Haldon Hills). Objectors include National Trust, CPRE, Country Landowners' Association, Devonshire Association and Lady Sayer.

APRIL M Power approves 400kV overhead line from Cowley to Fleet except for 2 miles through Goring Gap, and wants an alternative for 3 miles near Hartley Wintney.

JULY National Parks Commission objects at public inquiry at Keighley to 165 ft. pylons for 400kV line across the Bronte country (Bradford to Darwen). Choice of 3 routes; route favoured by CEGB would cost £1m. less than route running nearer built-up areas.

AUGUST Public inquiry at Burford into proposal to run 400kV route across the Cotswolds from Cowley to Seven Springs, Glos. Purpose of 44½-mile line (1⅛ miles underground near Oxford) to inject more power into home counties ring which reinforces and stabilizes power in South England.

NOVEMBER M Power grants CEGB's application for overhead line from Broad Clyst to Abham except for one short stretch passing hamlet of Woodland near Newton Abbot, on which decision is postponed. 165 ft. line will run through parts of the Exe and Teign valleys and over Haldon Hills. Line needed to reinforce power supplies in south Devon and Cornwall.
M Power approves section of Gloucester to Ystradgynlais, Brecon, line crossing Monnow Valley for which he previously withheld consent. Section across Wye Valley still being considered. Application was subject of public inquiry at Ross-on-Wye, July 1965.

DECEMBER CEGB agrees to divert 400kV line between Hertford and Bramfield (3-4 miles) to save scenery of Panshanger Woods and Tewin village. Board 'could not have been more helpful' says Hertfordshire Society secretary.

This log reveals the curious mixture of care, conciliation and overriding with which the Ministry of Power and the CEGB operate. The long gestation of ministerial decisions may be due more to meticulous consideration of alternatives than to departmental congestion. The CEGB, with usually three or four simultaneous advances under fire, seems to do its best, by routing and landscaping and any method short of actually spending significant money and time on undergrounding, to minimize damage to the landscape. Both are sensitive to determined expressions of public opinion but make the minimum of concessions.

Both the Ministry and the late Chairman of the CEGB have let out some flaccid remarks about electricity being just another 'amenity.' It is not; for a modernizing country with a growing population it is a necessity. It is best to face from the start that insufficient electricity could cause national breakdown and that in winter the supply is precariously poised. And it is well known that there have been some unfortunate miscalculations of future requirements.

This being conceded, it must be said that the piecemeal authorization of the Dungeness-Cornwall line, which plays such a large part in the log, involving heaven knows how many bitter negotiations, prolix inquiries and unpopular decisions, shows the system at its worst. It is the biggest electric power line in Europe and unless you really like 165 ft. pylons in this close-knit, small-scale southern landscape it is going to be very damaging to the scenery almost throughout. Yet it was apparently designed as an emergency line that even in 1970 would be carrying only light loads during peak hours[1]. If in fact the upgrading of 275kV to 400kV is, as the CEGB have often said, mainly in the interests of amenity, having to take such a line from Dungeness at all is a pretty poor piece of country planning, especially as it appears that the planning permission for the Dungeness power station did not take into account this long overhead link to the west[2]. If so, then the whole thing seems to be one of the major post-war planning gaffes.

However, it is useless to argue the toss too much in the present crucial position of both power supplies and the country's finances. The three important questions are:

How prohibitive IS the cost of undergrounding?

The CEGB have always used the 20 or so to 1 cost-ratio of overhead to underground as a knockdown argument at inquiries, and of course the economic position, plus the rise in the price of copper, has reinforced it—so much so that one wonders why at the end of 1965 they (or the Ministry?) bothered to trot out the argument that undergrounding would leave an indelible scar on the countryside, particularly as this was, according to Mr. Edward Hyams[3], 'a misunderstanding.' (If so, it seems rather deplorable that it was used so specifically in two debates and an inquiry.) Mr. Hyams, not a man, one would think, to have wool pulled over his eyes, concluded after investigation that the Board's figures for the cost of undergrounding were both honest and competitive with other countries'. Yet there has been a quiet drumfire of dissent from some consulting engineers on the grounds that the Board's figures don't allow for the capital value of certain advantages of undergrounding, that it works on a standard capacity that is not always necessary and that it assumes the worst possible conditions everywhere[4]. And the Board is fond of arguing that undergrounding all future transmission lines would add about 20 per cent to the bulk tariff when no one but maniacs has suggested that it should, without apparently noticing that if so undergrounding 1 per cent would add only 0.2 per cent, which quite a lot of people might pay cheerfully and that undertaking to underground even 1 per cent would probably ease progress in obtaining consents.

Flashes

'The transmission line is, in fact, considered in absolute terms, quite beautiful.'
Sir Christopher Hinton (quoted in *Design*, July, 1964).

'I wish that pylons were not necessary and that we could put the lines underground. Unfortunately that is impossible.'
Sir Christopher Hinton, August, 1964.

'It is sentimental to glorify pylons. . . . The reason is money. It is not likely that a Ministry which will not even put low tension wires underground will bury large cables.'
John Betjeman, August, 1964.

'Sitting at lunch on a Welsh mountain today, my son and I saw them as a graceful addition to the landscape.'
Letter in *Times*, August, 1964.

'How many of those who protest against pylons would prevent them being erected if by doing so they had to deny themselves electricity in the home?' *Times* leader, September, 1964.

'There is money to be made out of pylons, there is none or scarcely any to be made out of scenery.' E. M. Forster, September, 1964.

'E. M. Forster has at last put the literary point of view against pylons. . . . I, too, was in East Suffolk recently and . . . I was impressed by the dramatic way the new swooping wirescape actually improves scenery I have always liked. At one time I was really taken in by the gloomy pictures in THE ARCHITECTURAL REVIEW *. . . But I suddenly realized what emotional nonsense this anti-pylon campaign is when I saw, last week, a late-night television programme trying to prove that the scale of the proposed Sussex pylons was wrong for the Sussex villages. What the programme writers seemed to be saying was that little pylons would be quite all right.'*
Architect and Building News, September, 1964.

'I once raised the question with the predecessor of the present Minister of Power. I was met with a look like a stone wall with broken glass on top. . . . I am making a fuss about it now and if the Board's wayleave officer comes to see me at Petworth I shall throw him down the stairs.'
Lord Egremont, debate in Lords, November, 1964.

'These great and powerful public institutions seem to think it is unnecessary for them to make any effort to justify their actions to the public.'
Lord Salisbury, debate in Lords, November, 1964.

'It must be recognized that the countryside is not a trippers' playground but a workshop.'
C. Sparrow, QC for CEGB, at public inquiry, November, 1964.

'The Board (CEGB) is a commercial organization and does its best to think and act commercially.' F. H. S. Brown, CEGB Chairman, January, 1965.

'Let me emphasize again that the construction of the planned 400kV network by 1970 with only limited undergrounding is absolutely necessary.' Lord Hinton of Bankside, The Citrine Lecture, 1965.

'The beautiful world of the Cotswolds, a lively, vigorous and prosperous part of the country, is not a museum and cannot opt out of the nation's electricity grid power system.'
C. Sparrow, QC for CEGB, at public inquiry, August, 1966

What is the position of research?

No one gets much joy out of asking about this. Ministers and others are fond of saying 'no promising project of research on underground cables is being neglected'[5] or 'all the evidence available shows that we are well up in the field of research',[6] but of course the evidence isn't available. Sir Christopher Hinton told 'The Times'[7] that the CEGB spent about £4½m. a year on 'improving methods of generation and transmission of electricity' and that private research and development 'in electrical engineering, excluding electronics' has been given as £36m. a year. Which all adds up to a row of beans. Peter Hordern MP complained in the Commons debate early in 1965 that only three-quarters of the CEGB's annual research budget was spent on transmission. However, certain projects are known to be on foot and they were discussed in the AR November 1964 article. Since then Dr. Kurti of the Clarendon Laboratory has been quoted in the Lords debate[8] as saying 'superconductivity was feasible in 5 years or so but it was not known at what cost,' while Sir Christopher (now Lord) Hinton, in his Citrine Lecture, June 1965, refers to 'the unfortunate publicity given to superconductivity cables. They can, at present, be envisaged only for direct current transmission.' He goes on to describe the most fancied alternatives to the traditional oil-impregnated paper cable, polythene and compressed gas, as 'a long term development' and involving 'formidable difficulties' respectively—so not much comfort there. Nor in the CEGB's Annual Report 1965-6, which merely states that improvement and economies in underground cable designs continue to be sought by these methods.

But a slight note of cheer is struck by the announcement of the urban d.c line from Kingsnorth to Willesden, which will cost less to underground than a.c. would (air-blast cooling is to be used on one stretch) though the equipment for converting it from and to a.c. adds sharply to the cost. In addition d.c. overhead transmission does not need towers nearly as high as a.c., and, from Mr. Hyams's information, d.c. is the method of the not-so-distant future and is in fact held up only for want of an effective and cheap converter. Mr. Hyams sees the supergrid coming down and undergrounding going up after 1980, and one hopes he is right. But till then? What effect if any will the gas strikes in the North Sea have? And what about the 750kV network that has been threatened?

What should be done?

This country's peculiarity is that while demand for electricity is roughly comparable to that in other countries, the power density is ten times what it is in the US and eight times what it is in France. We suffer from being a small, congested, flattish land in which it is comparatively easy to transmit power. So the CEGB, the largest single investor in Britain, can hardly avoid a Big Brother impact on our surroundings, however good the resolutions it may make[9]. In 1964-5 it spent £106m. on transmission, £11½m. of it on undergrounding, mostly in urban areas. Expenditure in 1965-6 was £131m., and in 1966-7 is likely to be some £167m. It constructed 203 miles of 400kV in 1965-6[10], and the approvals mentioned in the log (which may not have caught anything like everything that went through) must be for at least another 150 miles; of this it proposes apparently to underground (apart from urban undergrounding) 1½ (or 1⅛) miles near Oxford, ¾ mile from Bramford sub-station, and possibly 2 miles through the Goring Gap, while alternatives are being sought on 3 miles near Hartley Wintney and a short stretch near Newton Abbot, and across the Bronte country. Even if this is not the whole story, it is a minute fraction, especially set against the new Chairman's promise of 500 miles of main power lines to be buried in the next 3 years. (How much 275kV? How much of it in urban areas?).

There are some traces of a war between the Ministry and the CEGB on this matter. Compare Lord Hinton's remark about the 'unfortunate publicity given to superconductivity,' and a further remark of his in the same lecture that 'misguided reticence has stopped them (CEGB) from emphasizing that these plans also involve undergrounding more than 600 miles of 132kV.' Is that the same as Mr. Brown's 500 miles or different? And couldn't we be told? Where is Old Sealed Lips? In the Ministry of Power? Certainly the deadpan uncommunicativeness about the progress of research and the impact of future plans suggests that it may be so.

If it is the result of a Cabinet decision some years ago that the supergrid is to be pushed through regardless (and after all governments don't pick up many laurels from power breakdowns) then we are probably wasting our breath if we expect anything drastic to happen. But all the people who write to the papers and make a nuisance of themselves are not doing so in vain if they succeed in gaining even a marginal increase in the amount of landscape saved and in showing how stupid, time-wasting and anti-democratic, for all its facade of full consultation, the present system of obtaining consents is.

'The CEGB' Lord Stonham told the Lords in November 1964 'consult county authorities and the National Parks Commission and other interests, and the Minister consults the Minister of Housing and Local Government.' Exactly. And no one ever knows about it until he is asked for a wayleave across his land or finds his favourite stretch of country is going to be disfigured, and there is another lengthy, futile and expensive public inquiry with, after the inevitable delay, the virtually predictable result. As the supergrid grows no one breathes a word about the problems of maintenance and danger to aircraft, especially training planes, and vandalism and, if it ever came to it, defence of vital supplies. Yet if the Government, which is being pressed to come clean on aircraft noise, took a manly line and said to people at large, 'our problem is this and this, the wheels of industry must be kept turning, the home fires burning, but we are men of like passions with yourselves and love to ramble in the Cotswolds and holiday in places like the Scillies, and x per cent of Britain's landscape is too good to be marched over by these monsters, even when designed by Lord Holford, and, brothers, you haven't seen nothing, wait till 750kV gets weaving, this being so, we will pay for the undergrounding of power cables over this x per cent, and ask the Chancellor to get it back by those painless graduated methods you are coming to know so well' . . . well, it probably wouldn't do them any harm.

As to the x per cent, this journal has suggested more than once that a sensible and not too pompous committee, including people who even walk in the country, should be appointed to examine the problem and relieve successive Ministers of Power, however well qualified, of being the final arbiters of amenity over the whole countryside. It is nice to find this view broadly supported by Mr. Harold Wilson (no less) in a letter he wrote to Breamore (Hants) Parish Council (no greater) at the strategic time (no other) of September 1964.[11] He said: 'The decision whether the amenity of any particular area should be preserved is clearly not one that can be taken by an interested party, such as the electricity board concerned, and I would have thought an objective assessment and conclusion could be reached only by an independent body of qualified and detached persons . . . I know that provisions exist under statute for local public inquiries, but if these provisions are inadequate, and independent and qualified persons are not engaged to make an assessment, I would be happy to consider appropriate amendment of the law.' It would be interesting to know whether he still thinks the same.

FOOTNOTES

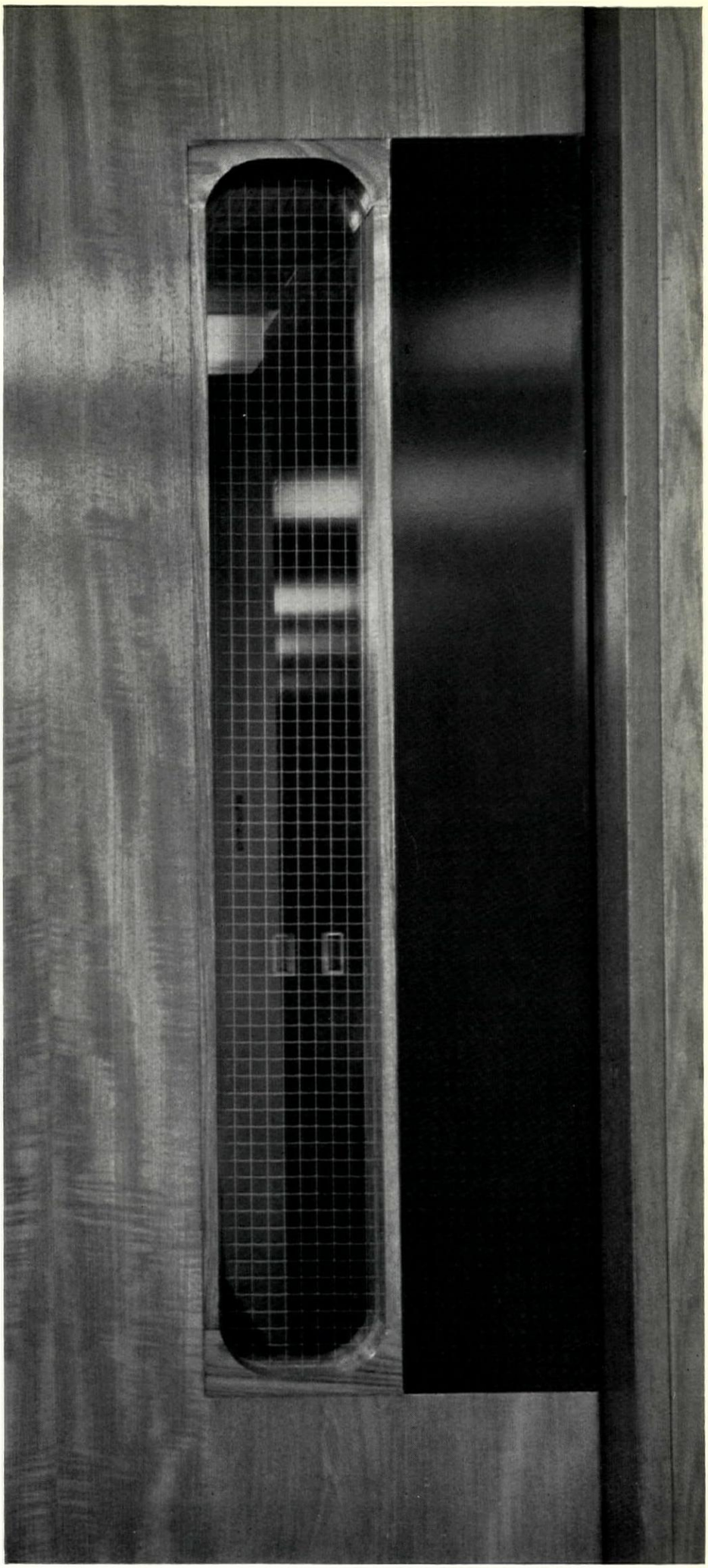
[1] G. C. Gracey in *Design*, July, 1964.
[2] Gracey.
[3] *New Statesman*, 10 December, 1965.
[4] E.g. Mr. I. M. E. Aitken at British Electric Power Convention, 1961; Mr. K. H. Tuson in *The Times*, 5 September, 1964.
[5] Parliamentary Secretary, M Power, 16 February, 1965.
[6] Mr. C. Sparrow, QC, at Cotswolds inquiry.
[7] 2 September, 1964.
[8] By Lord Stonham.
[9] Cp. Mr. J. R. Herbert, one of CEGB's landscape architects, writing in the Board's journal *Electricity*, 25 September, 1964. 'Much has already been done towards improved siting and design, and a start has been made on removing old eyesores. Much more still remains to be done to achieve a standard of excellence, and to apply it throughout the full range of the industry's activities. . . . In other industries it has been shown that failure to achieve the highest design standards produces "hidden costs" in production and operation. The electricity supply industry is already having to face costly delays due to public opposition slowing down the issue of statutory consents.'
[10] Annual Report, 1965–66, p. xii.
[11] Quoted by Peter Hordern, MP, in Commons debate 22 January, 1965.

Offices, Tower Place, London

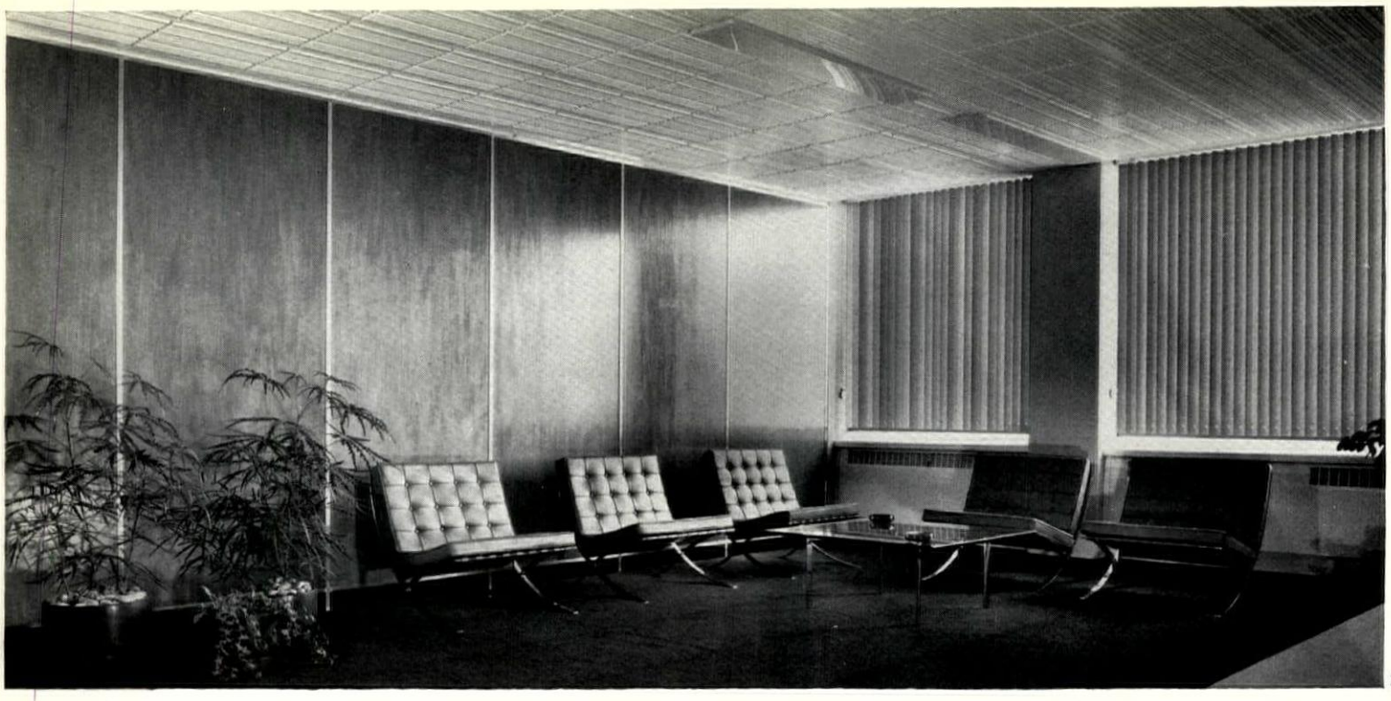
designer: Robin Moore Ede

photographs by W. J. Toomey and Sydney W. Newbery

These offices on the eleventh floor, one of four which make up the headquarters of the City of London Real Property Company, are situated in Vincula House, the sixteen-storey block in the Tower Place precinct (see AR June 1966). They consist of senior executives' and secretaries' offices, reception area, boardroom and subsidiary conference rooms. The reception area divides the floor into two halves. One of these is subdivided by a standard 2¼in. demountable partitioning system of aluminium channels with teak, clear glass or obscure glass panels and solid core, flush-fitting, teak-faced doors. The other spaces required a higher sound insulation, and a non-standard but still demountable system is used, the teak facing panels being separated by a black anodized aluminium U channel.
The building, interior planning and design, and where possible, the furniture, are related to a 3ft. 4in. grid running in both directions. This is established in the 1ft. 8in. ceiling tiles which are common to the entire building.



1, *push-plate and window in reception area door.*



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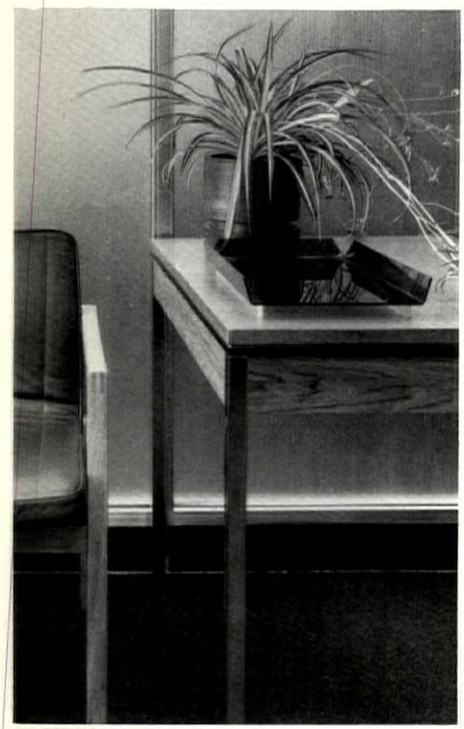

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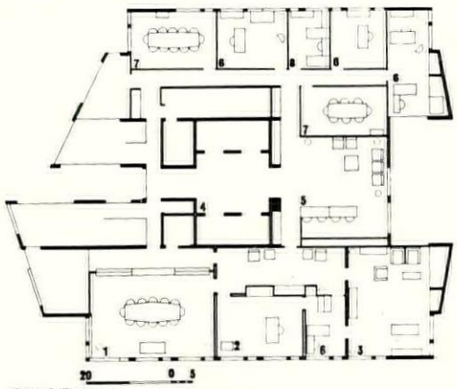


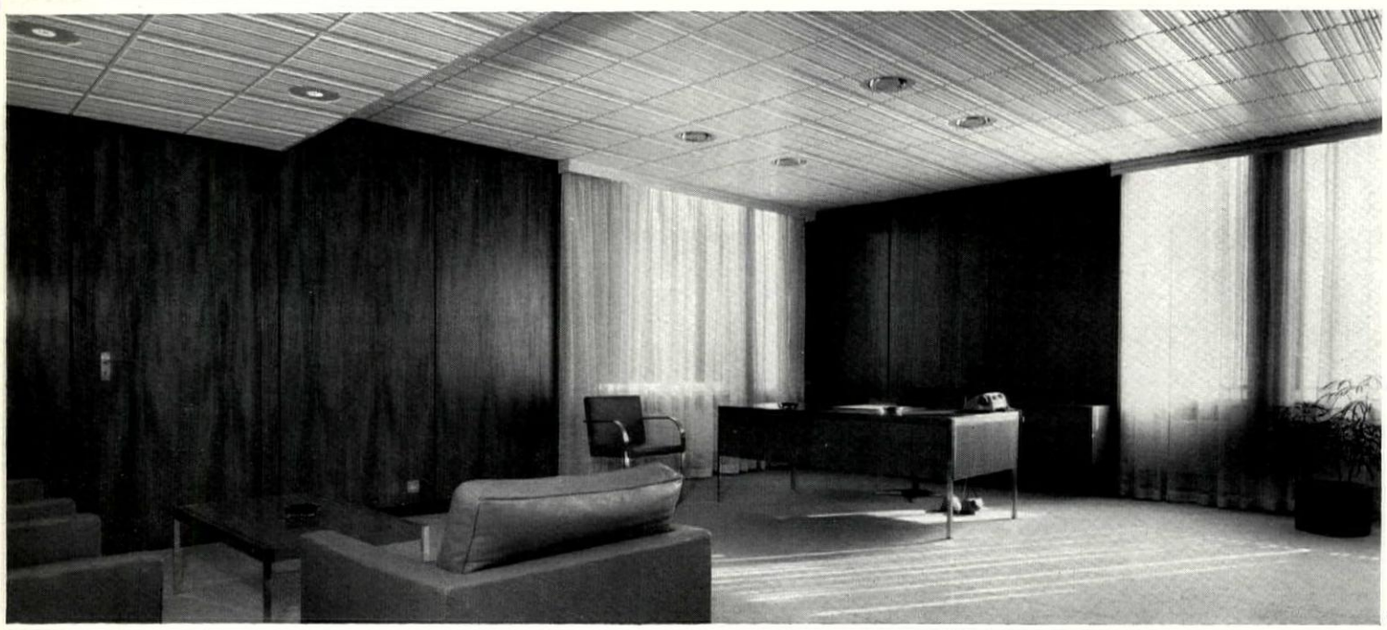
eleventh floor plan

key

1. boardroom
2. chairman
3. managing director
4. lift lobby
5. reception
6. office
7. conference room
8. secretaries

2, reception area. This shows standard partitioning and ceramic floor planters. Carpeting is dark blue curl pile. 3, teak and bright metal table, teak and black hide oriana chair, clear grey acrylic letter tray and table version of the planter in secretaries' office. 4, office with non-standard partitioning and top-lit curtains. Furniture is of teak, bright metal and black or natural hide. Cube chairs are by Knoll, the desk by Schultz. The carpet is a light stone colour. 5 (opposite), standard partitioning. Right, *swivel chair by Interiors International.*

Offices, London



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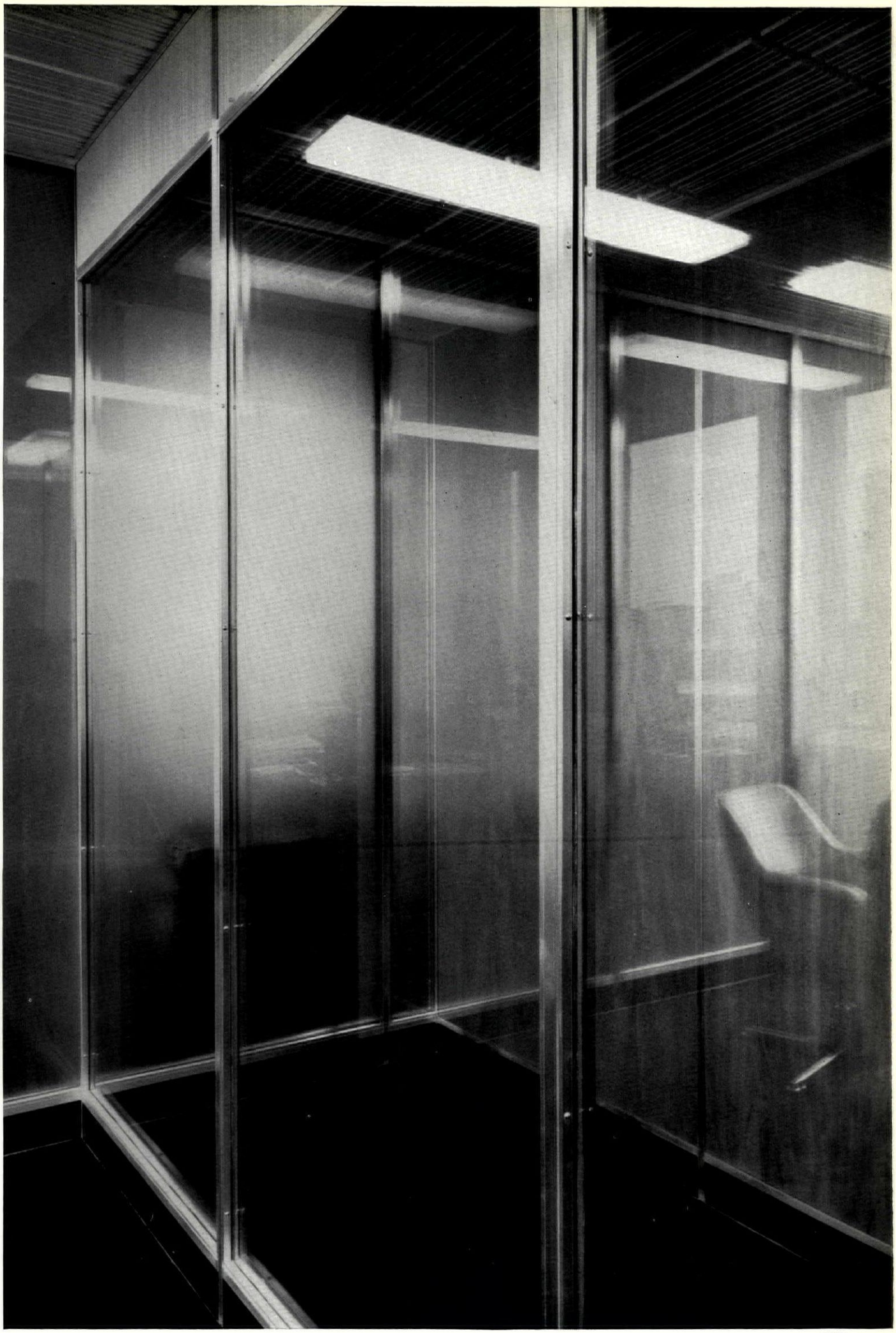

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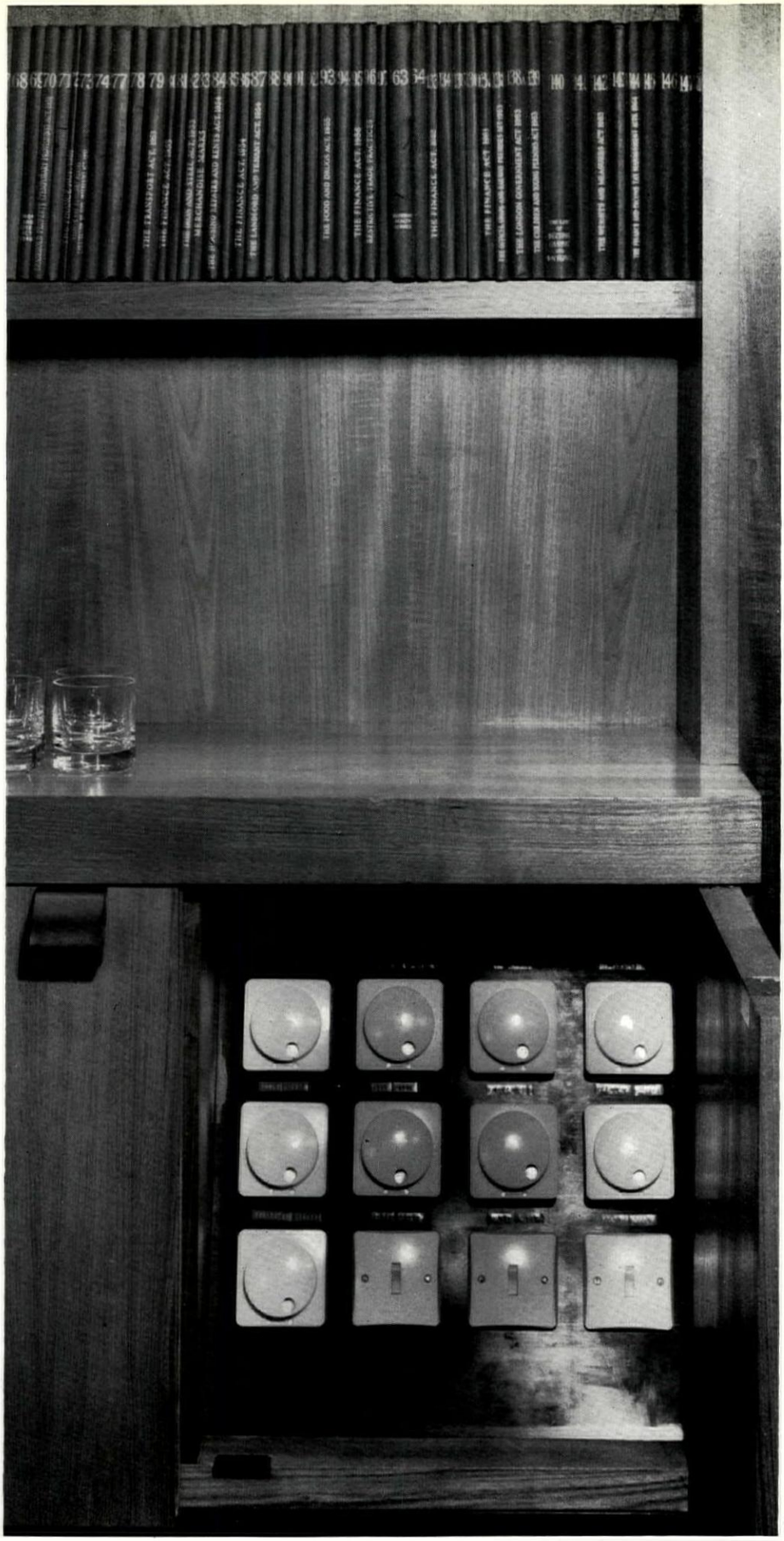


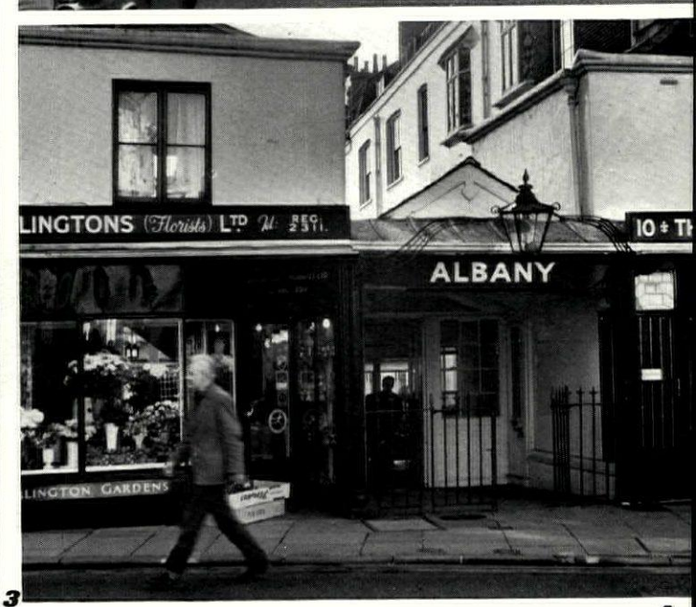
7

Offices, London

6, *detail of instrument and telephone unit used in architects' office. Specially designed, this unit is of mild steel, teak and plastic laminated blockboard.* 7, *teak wall unit in boardroom, showing lighting control panel in cupboard.* 8 (*opposite*), *reception area desk.*

1

2



3

4
5

Facets of Mayfair:
1, *tree filled square (Berkeley Square).*
2, *luxury shopping street (Bond St).*
3, *arcade (Piccadilly Arcade).*
4, *street ending in a square (Hill Street).*
5, *secluded world (Albany).*

WEST END 5

TOWNSCAPE

MAYFAIR

Kenneth Browne

CHARACTER

The word Mayfair suggests leisure, elegance, pâté de foie gras, and gracious eighteenth-century squares. But times have changed and the large-scale swing from aristocratic residence to business use has modified the picture; the private house has given place to the flat and the glossy advertising agency; day-life has speeded up and night-life slowed down.

But despite change of use and much rebuilding*, Mayfair still retains a distinctive flavour; it still demonstrates certain principles of civilized urban life. At the same time, money and prestige ensure that its buildings are kept in first-class repair. Fortunately the GLC and Westminster City Council seem intent on holding the present character as far as possible, on resisting rebuilding and even on encouraging a return to residential occupation.

FORM

Though Mayfair is based on a gridiron plan, this does not become obsessive for several reasons. Firstly, on account of the townscape interest which occurs when two gridirons intersect at an angle, as in the Berkeley Square area, resulting in strange places like the charming little garden behind the Grosvenor Chapel in South Audley Street. Secondly, because of the variety provided by pedestrian streets, notably Shepherd Market where the original May Fair was held, and the arcades leading from Piccadilly, the latter spick and span, dead straight and gleaming like well-oiled rifle barrels. Piccadilly Arcade in particular, ***3***, is splendid with its gleaming ripple of full height bow windows. But mainly the grid works because, while giving an appropriate sense of order, it is relieved by the squares and the proximity to the royal parks. These squares, the great English contribution to urban living, are essentially domestic rather than grand manner, designed as terraces of private houses standing round a central green space, the houses forming the neutral frame to a well-treed communal garden. Though today all too many of the surrounding buildings in Mayfair squares have been replaced (unlike Bedford Square, Bloomsbury, which retains its original appearance), the central oasis of forest size trees nearly always holds the environment together and goes far to mask discrepancies in scale and detail. For instance Berkeley Square, ***1***, is still fine despite the fact that both the east and south side are now occupied by ponderous and undistinguished buildings. In summer at any rate the mass of foliage is still the dominant factor. In fact in the gridiron of streets there are few places where you are out of sight of the trees of at least one square.

THREATS TO SQUARES

What happens when the earlier thick planting is disturbed is only too sadly demonstrated in Grosvenor Square. Here the original William Kent landscaping was replaced, as a setting for the Roosevelt memorial, by a dreary layout of rigid paths and axial planting. Over sixty fine mature trees were felled in the process of turning this from a 'square' into a 'municipal garden.' This mistake should be rectified and great care taken that it does not happen elsewhere. But coupled with the danger of unsympathetic replanting is the constant pressure to build car-parks under squares. Here is space free of buildings, the argument runs, so it is the obvious place; furthermore, the work can be done with little disturbance to present appearance. But this is quite certainly untrue. Plausible, tempting, but one of those short-term traffic expedients which must be resisted for the sake of environment. The effect on large trees of interference with drainage is unforeseeable and the chance of such trees surviving slight. And in the case of Berkeley Square, which has the most beautiful tree-cover of any square in London, it would be impossible to put a car-park underneath without destroying a large percentage of the trees, and hence the whole magnificent effect. For an awful warning look at Cadogan Place. Rebuilding around squares also needs the most careful control, especially regarding height.

ACCESS TO PARKS

An attractive feature of Mayfair has always been its proximity to the royal parks, giving a welcome contrast of intensely built up environment and the illusion of countryside (even to sheep in Hyde Park). This immediacy has been eroded by the ever-increasing traffic along the dividing lines, culminating in the massive widening of the Park Lane Improvement Scheme. This, despite careful landscape treatment, remains a piece of ruthless and ill-judged traffic engineering, and forms a great barrier between Mayfair and Hyde Park, ***6***. Undoubtedly this road, or part of it, should have been sunk to preserve the link between the two.* Indeed, the whole practice of slicing off the edges of the royal parks for road widening must be deplored.†

EROSION

Mayfair can be taken as a good example of an environmental area subjected to an unacceptable level of traffic, much of it bound elsewhere and taking a series of zigzag short cuts. In addition, one-way traffic systems have turned squares into race circuits, cutting off the buildings from the central space and made the crossing of shopping streets, notably Bond Street, almost impossible.‡

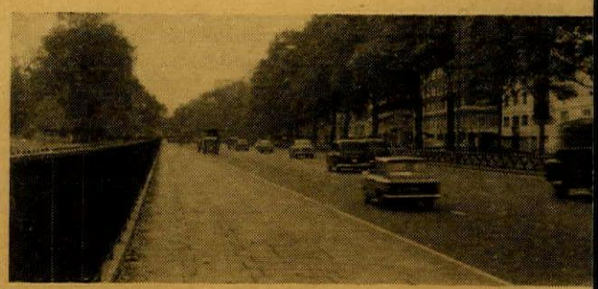
SCALE

The satisfactory contrast in scale between house and mews flat or between say Albany Chambers, ***5***, and the Royal Academy next door, has in many

* Especially in the 'twenties when many of the great private houses were ruthlessly torn down some to make way for giant hotels named after them.

† The south side of Hyde Park is also threatened in this way.

‡ See AR, December, 1966, page 395: 'Bond Street Relieved.'



6, *Park Lane today.*

cases been wrecked, the most brutal example being the bludgeoning effect of the Hilton Hotel which makes its neighbours in Park Lane look like dolls' houses. In fact Park Lane has been ruined by unsuitable building while from the north side of Mayfair Oxford Street threatens to encroach with massive faceless slabs.

ACTION

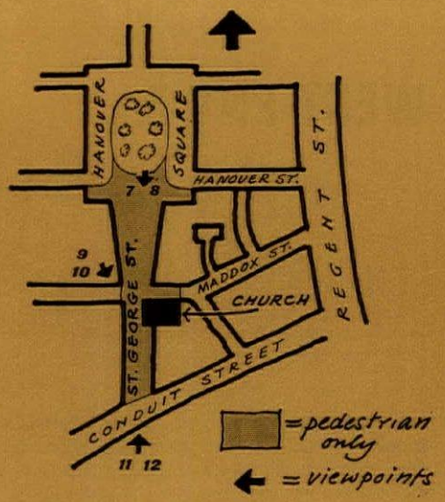
It is important that the present character should be held and reinforced. This means restraining rebuilding and somehow draining extraneous traffic from the area, particularly from the squares. If these cannot become entirely pedestrian, then the central space might be linked on at least one side to the surrounding buildings as ***8***. And somehow the present trend for traffic to take over all available ground space must be reversed so that inside Mayfair walking routes can be re-established. This need not necessarily mean closing whole streets but choosing those places which best lend themselves to pedestrianization. This will have to be determined by careful survey and will entail such measures as blocking the ends of streets and turning small streets into arcades.*

If we apply this sort of thinking to actual places we might take the short section of Bond Street where it widens out at the junction with Burlington Gardens. A small pedestrian square here would seem natural and conveniently connect with the Burlington Arcade and the Albany.

EXAMPLE

Or to give an instance of a pedestrian route, some of which already exists while the rest is in embryo, we might take the route (followed in ***7-21***) which angles across from Hanover Square to Shepherd Market. Hanover Square today is perhaps the worst example of a central space divorced from its buildings by traffic. But standing

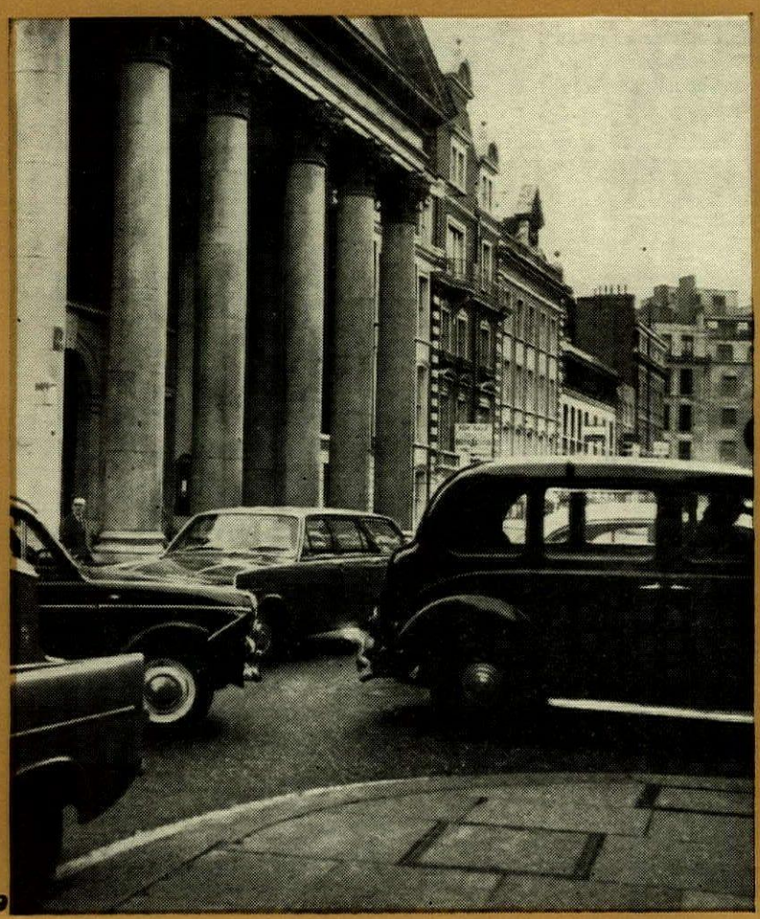
* Here the new Economist building in St. James's Street should be mentioned as a rare instance where pedestrian space has been increased by the imaginative provision of a small pedestrian square raised up from the surrounding streets.



Plan showing St. George Street pedestrianized

7 View S. down St George St no

8 Hanover Square as it could be (View South)



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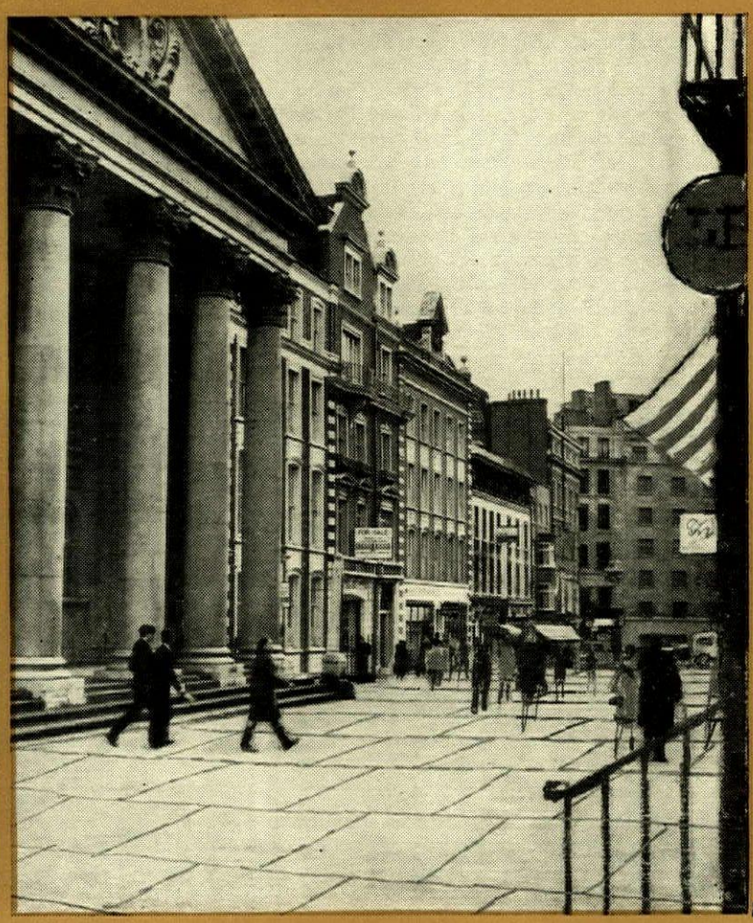


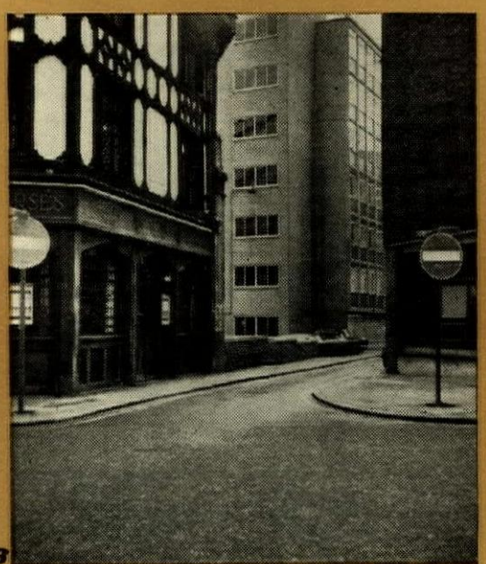
10

As it is . . . . . ST. GEORGE STREET Looking South . . . . As it could be

11

12

As it is . . . . . ST. GEORGE STREET FROM CONDUIT ST. . . . . As it could be



13

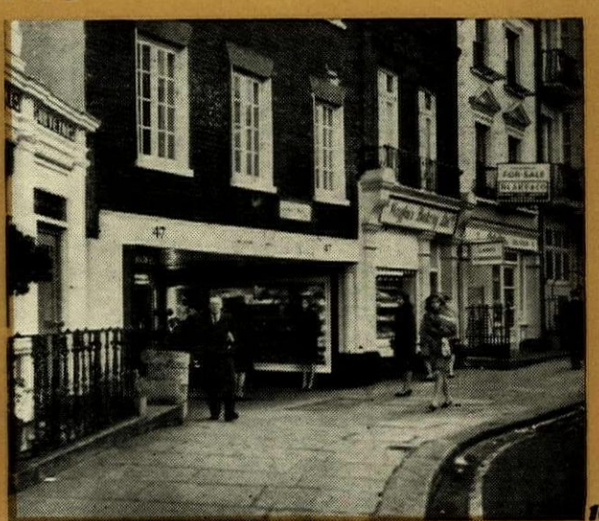
14

near the Chantrey statue of William Pitt, the view looking south down the funnel of St. George Street is potentially one of the best in London, with the portico of St. George's, Hanover Square, projecting out into the roadway, ***7***.

This Italianate vista is now seen across a torrent of traffic from nearby Regent Street while St. George Street itself is almost solid with parked cars. But if the traffic could be taken out of the south side of the square and St. George Street, this could become a fine start for a series of linked pedestrian spaces, ***8***, with the trees of the square perhaps carried on to soften the rather bad corner buildings. But even if the whole street cannot be pedestrianized then the south or narrower end seen in ***9***, ***10*** including the church certainly should be. This tapering street is excellent townscape and just right in scale for the pedestrian. Also pave over the eastern half of the upper stretch and a short length of Maddox Street beside the church. Here note the fine three-quarter view of the church from Regent

As it is . . . . . BRUTON LANE . . . . . As it could be

15



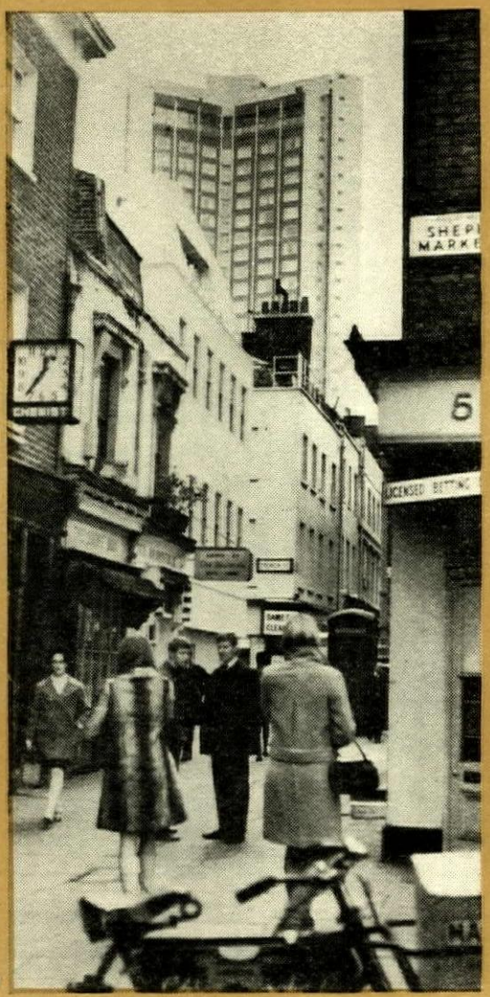
16

LANSDOWNE ROW

Entrance to Shepherd Market from CURZON STREET

17

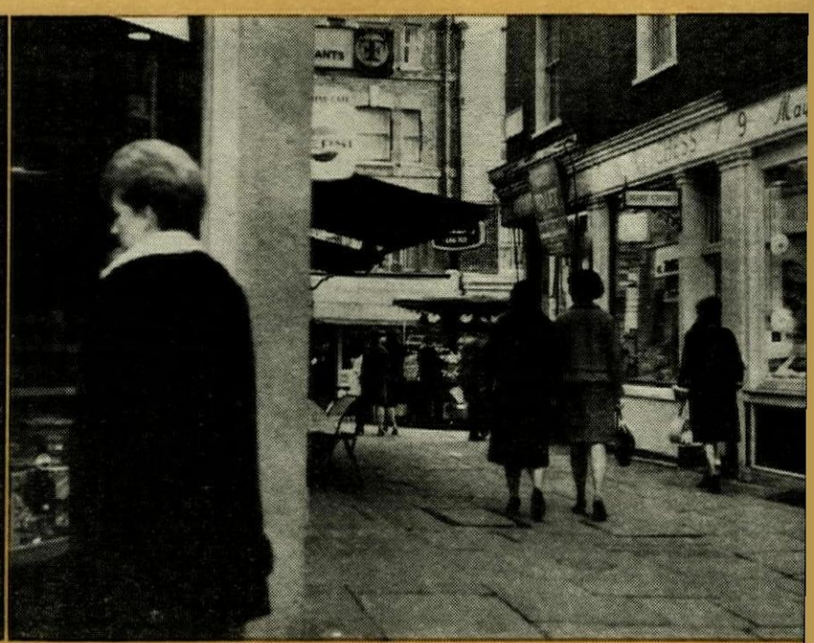
18



19

SHEPHERD MARKET

20



21

Street. Conduit Street would still carry traffic and the view back from it now traffic filled, ***11***, would look like ***12***. From Bruton Street the walk might continue down Bruton Lane by the Coach and Horses, ***13***. Narrow and zigzagging, this lane is today a gap-toothed mess. Why not improve it as ***14***?

We come out at the bottom of Hay Hill which falls steeply down from Dover Street. Here it would be possible to deck over the junction with Berkeley Street in a rebuilding of the north side of Hay Hill; a deck reached on the level from Dover Street and linking over the traffic to the south end of Berkeley Square.

We cross Berkeley Street into Lansdowne Row—an existing pedestrian street with small shops on either side, ***15***. Single storeyed, they are rather mean in character and give insufficient feeling of compression. However they provide a welcome refuge just the same. At the far end where the row joins Curzon Street there was, until recently, a flight of steps, a familiar and precious piece of pedestrian articulation between differing levels. This has gone, presumably sacrificed to gain road-width—a typical example of the way in which the rights of the walker are whittled away to ease the traffic.

Further on along Curzon Street the footpath suddenly angles left and tunnels through an archway, ***16***, into Shepherd Market. Immediately the mad rush of traffic outside gives place to a quiet world of small-scale buildings, a little square and a criss-cross of pedestrian alleyways, ***17*** to ***21***. The pressure is off, you can go slow, shop off a barrow, ***18***, eat out on the pavement, ***20***, or just watch other people. In fact you are in the kind of intimate, human scale environment which must be included in any future development of Mayfair and which here must be safeguarded at all costs.*

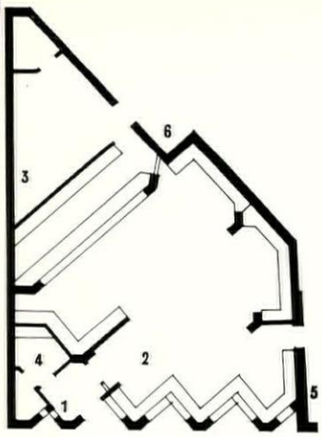
* The pedestrian route might continue south from here under Piccadilly to Green Park.

BAR AT BELFAST

architects **ROBERT McKINSTRY AND PARTNER**

photographs by Robert J Anderson

1, Albertbridge Road façade of the bar.



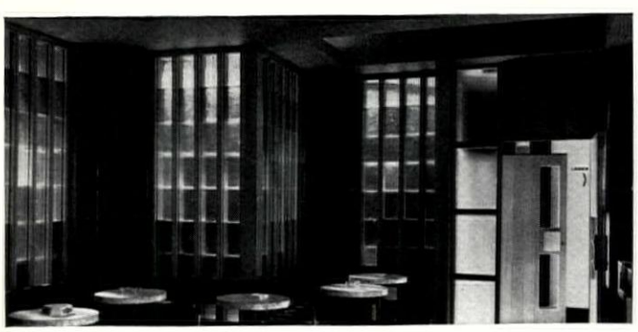
floor plan
key
1, entrance porch
2, lounge bar
3, store
4, ladies
5, adjoining public bar
6, service entrance

BAR AT BELFAST

The Albert Bar is a single-storey extension to a three-storey nineteenth-century public house in Albertbridge Road, Belfast. Its character is that of a lounge bar. The clientele are mostly dockers, their wives and their girl-friends.

The street façade is heavily moulded and has been given additional height by carrying the columns up above a crenellated parapet. The exterior is of precast concrete, with an exposed aggregate, painted. Inside, the cranked columns have a similar finish and are placed clear of the walls to give a series of bays for seating. The dominant colour is red—orange-red to deep red in the thick cast-glass panels, and dark red in the carpet, the fabric-covered walls and the fixed seating. The plaster ceiling is painted a light red.

Partner-in-charge, P. D. Burnett.



2

3

2, interior showing the cast-glass window panels. 3, detail of entrance. 4, street façade with the old public bar on right.

4

THE HUMAN ELEMENT

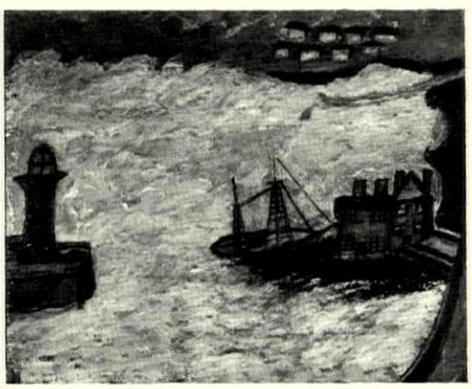
Robert Melville

The recent exhibition of paintings and drawings by Ben Nicholson, Christopher Wood and the Cornish primitive Alfred Wallis at the Crane-Kalman Gallery was intended to illustrate 'the kinship between their work,' but the only sign of kinship was between the two highly sophisticated professionals, who shared an unattainable desire to paint like an ignorant, devious and malevolent old man who was blessed with a touch of genius.

They discovered him by chance on a day-trip to St. Ives in 1928, when the open door of a hovel in Back Lane West revealed to them a wall plastered with childlike paintings of ships and houses. Nicholson was thirty-four at the time and already had a cool, subtle recognizable style of his own. Wood was seven years younger and was still trying out one contemporary idiom after another. They were both thoroughly involved with the *Ecole de Paris*, and there was no better preparation for discovering a modern primitive: ever since Picasso and his friends arranged their famous banquet in honour of Rousseau, Paris had been finding contemporary primitives and applauding their efforts, and only two months before Nicholson and Wood introduced themselves to Wallis, Diaghileff had staged *Apollon Musagète* with decor by André Bauchant. Nothing as sensational as that happened to Wallis, but the painters introduced his work to some of their friends, and the modest sums they paid for parcels of his pictures took the edge off his poverty in the last years of his life.

People who make a cult of naive painting have never really taken to Wallis. The drawing is so to speak illiterate enough to be quaint, but not amusingly quaint. The colours aren't bright, and in some of the pictures there's too much sea and not much else—and the sea is cold, muddy, inhospitable-looking stuff, without even a storm to reduce the emptiness and melancholy. There's no doubt at all that Nicholson and Wood had a warm appreciation of his work, and in the long run they both benefited from his sense of colour; but they were never in vital contact with his vision, and although they took to painting Cornish subjects they responded to his simplicity with artful simplifications and evoked a prettier and more innocent world than he had ever dreamed of.

There was a small undated watercolour by Wood in the show which must have been made soon after he met Wallis and, at a first glance,

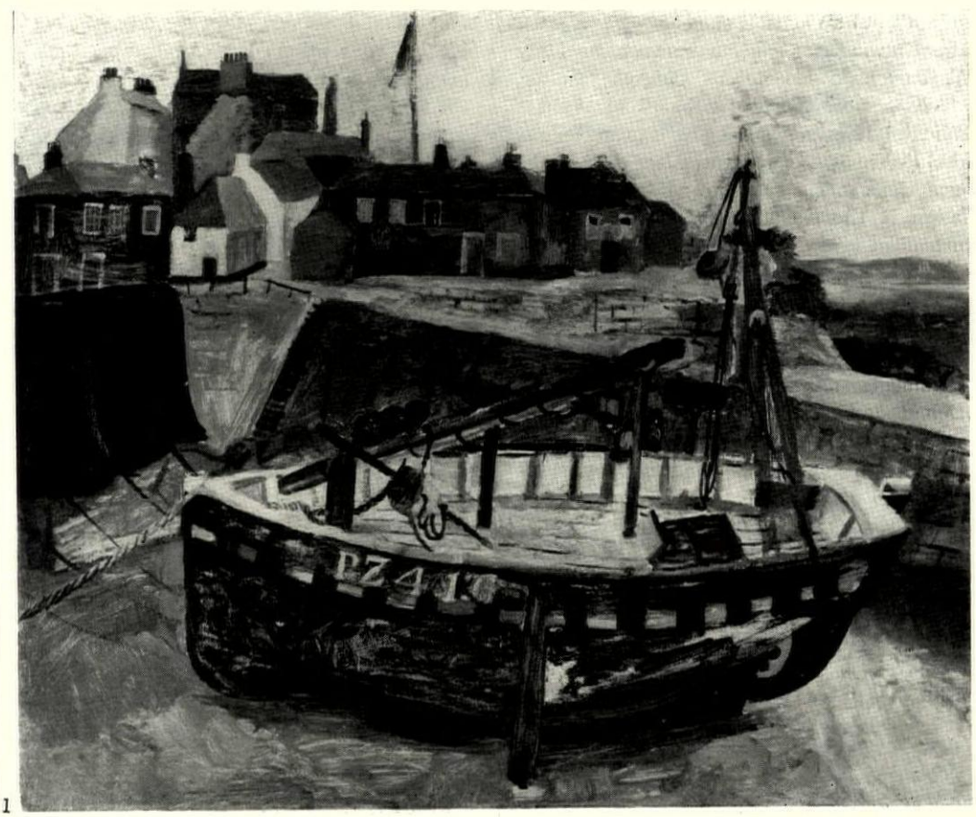


2

2, *Alfred Wallis: 'St. Ives'. Oil on board.* 10 *by* 12 *in.*

it looks naive enough to be from the old man's hand; but in fact Wallis would never have drawn neat, wavy lines to represent the sea and would never have been silly enough to think that a steamer could practically touch a skyscraper with its prow whilst poking its stern into a Cornish cottage. All the same, it was the example of Wallis that led to Wood's best work, to the group of pictures devoted to coastal scenes in Brittany and Cornwall which he painted in 1930, the last year of his life. 'PZ416 Cornwall,' 1, typical of his style, is poetic topography which reveals his nostalgia for 'the simple life.' It's an illusion of course that peasants and fishermen lead simpler lives than other people, and Wood's Cornwall is merely that of a sensitive visitor. It has none of the fierce involvement of Wallis's 'St. Ives,' 2.

Nicholson is a much more important artist than Wood, but I don't think he has ever been thoroughly at home with landscape. His well-plotted 'Cornish Landscape,' 3, is too clean, too simplified, too much like a poster for a 'Come to Cornwall for a quiet holiday away from it all' campaign. It was painted a few years after his first meeting with Wallis, but in its cool and circumspect way still acknowledges Wallis's primitive pictographs in the drawing of the cottages and the out-of-scale animal. Yet how innocent they look beside the cunning, evil-minded cottages in the Wallis picture, where one of them is trying to nudge the other off the quay. I am reminded by these two cottages that Wallis led a cat-



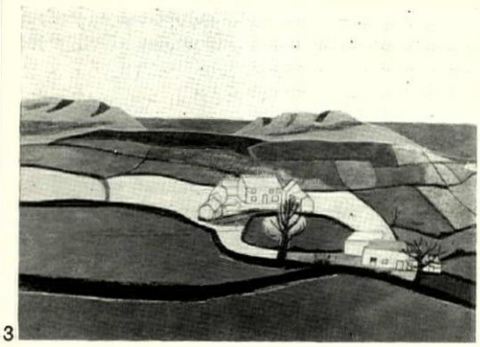
1

1, *Christopher Wood: 'PZ416 Cornwall'*, 1930. *Oil on board.* 20 *by* 23¾ *in.*

and-dog life with his wife; and one doesn't need to be too close a follower of Freud to see that the lighthouse stands for a man living alone and preferring it, and that the treatment of the sea discloses the uneasy nature of his freedom. Because he visualized his scenes instead of observing them, all Wallis's best work has a rich, dark latent content, as if he were capturing the look of his dreams.

In Nicholson's later work, Wallis's influence is distilled and refined and can't be disentangled from his own style. Some of the slate-greys and seaweed-browns in Nicholson's recent abstract reliefs remind one of the colour of Wallis's seas, and the complex architectural themes which he renders in exquisite outline, and which are the subjects of the superb suite of etchings just issued by Ganymed and Marlborough Fine Art, seem to me to be the elaborate final outcome of his little pictographs of cottages.

The Print Room of the Victoria and Albert Museum recently displayed a selection of drawings for sculptural projects made by sculptors working in England between 1680 and 1860. They came in the main from the Museum's own collection of over a thousand such designs, and by far the greater number were for church monuments. Several were by Rysbrack, whose drawings are well known to collectors, and his design for the monument to the 2nd and 3rd Dukes of Beaufort at Badminton in Gloucestershire, 4, with its elegant, Manneristic figures and its effective panel of indecipherable script, was one of the outstanding exhibits. Another thing of immense charm was the Nollekens, depicting a busy little putto chiselling a medallion portrait of the very feminine-looking Sir Robert Cunliffe.



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3, *Ben Nicholson: 'Cornish Landscape'*, 1940. *Oil on board.* 10¾ *by* 14¾ *in.*

Many of the names of the artists and subjects were unknown before the publication in 1953 of *The Dictionary of British Sculptors* 1660–1851 by Rupert Gunnis. Since then, there has been a fascinating two-way traffic in definitive attributions between the Dictionary and the Museum Collection. Unsigned drawings have been found for many of the signed monuments reproduced in the book, and some of the signed drawings have turned out to be designs for monuments to which Gunnis couldn't put an artist's name.

4

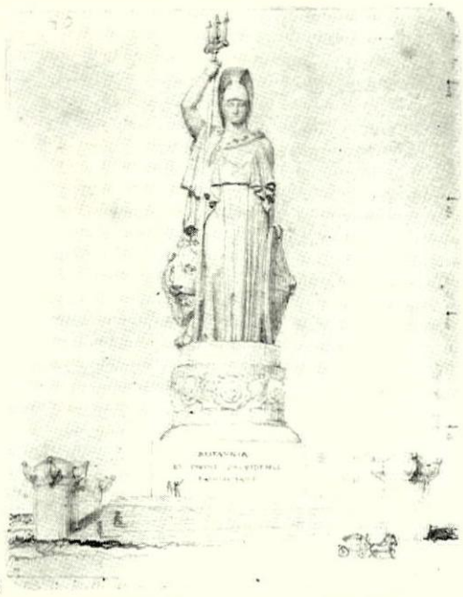
5

4, *John Michael Rysbrack: 'Design for monument to 2nd and 3rd Dukes of Beaufort'*, 1754. *Pen, ink and wash.* 5, *John Francis Moore: 'Design for monument to Jonas Hanway. Pen, ink and watercolour.*

The drawing for the monument to Lady Warburton in St. John's Church, Chester, which was previously attributed to William Talman is now known to be by Edward Pierce, who died in 1695, two years after the lady he memorialized. The interesting thing about this design is the skeleton representing Death. Instead of being in the more usual reclining posture, it's standing and holding up a winding sheet which only leaves its skull and ankles exposed, as if it were overcome by modesty.

A number of the photographs of the actual monuments revealed departures from the original designs which were sometimes improvements and sometimes not. The putto in Sir Henry Cheere's design for the monument to Captain de Sausmarez RN (1710–1747), in Westminster Abbey, points a conventional finger at the medallion portrait head, but in the monument itself the putto covers his eyes with his hand in a charming gesture of grief. But in the case of the monument to Sir John Roberts (died 1692) in St. Mary's Church, Poplar, it's disappointing to find that a deliciously plump angel in the drawing has become a figure of more academic proportions.

John Francis Moore's highly finished design for the Jonas Hanway memorial in Westminster Abbey, 5, was done before the end of the eighteenth century, but the figures, which include Britannia without her helmet, look oddly Victorian; but this is perhaps because I associate Britannia with the Great White Queen herself. For the same reason I could have mistaken Flaxman's project for a colossal statue of Britannia for a mid-nineteenth-century conception, 6. Flaxman also made a peculiarly horrible little model of it in which the folds of the gown were so badly arranged



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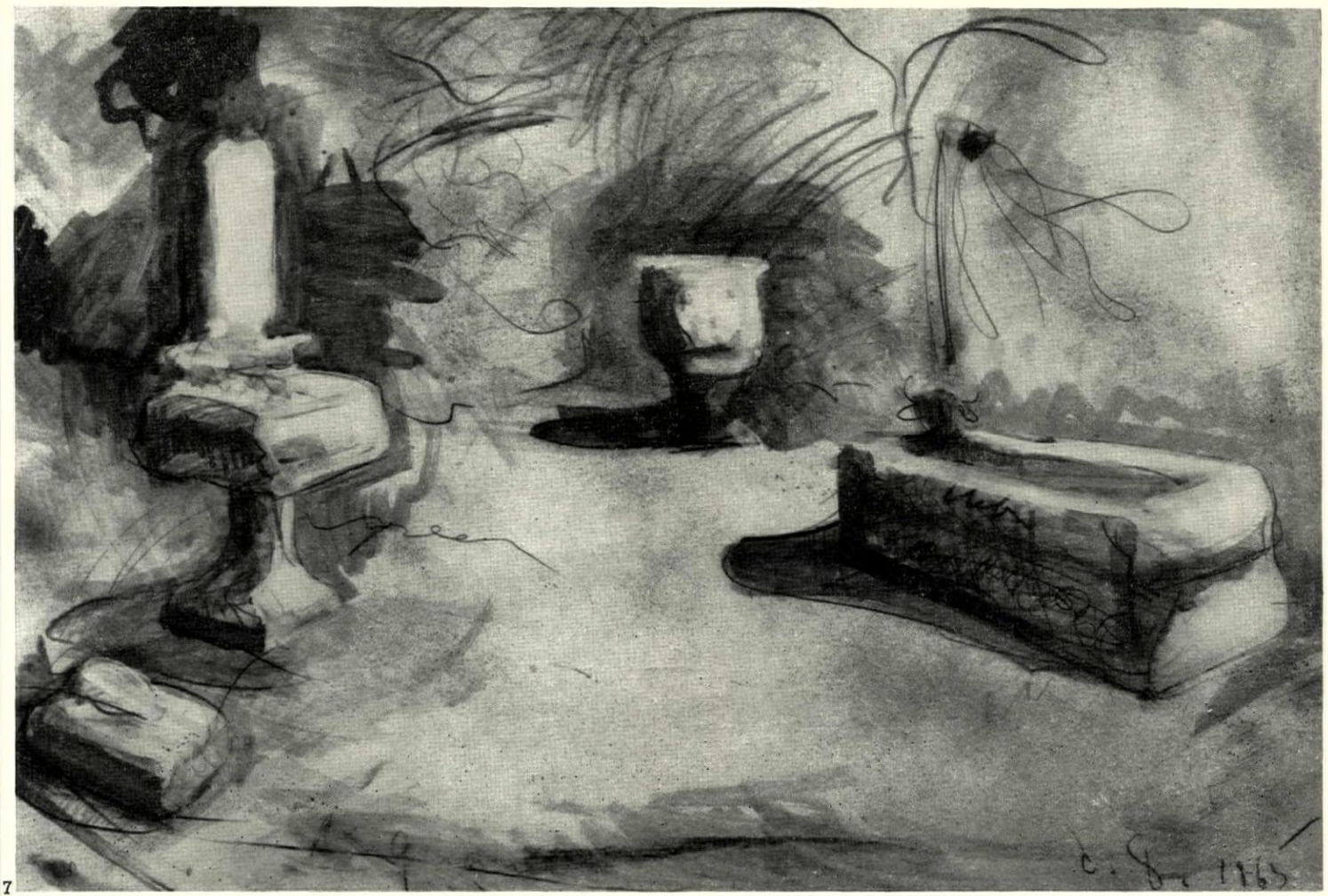
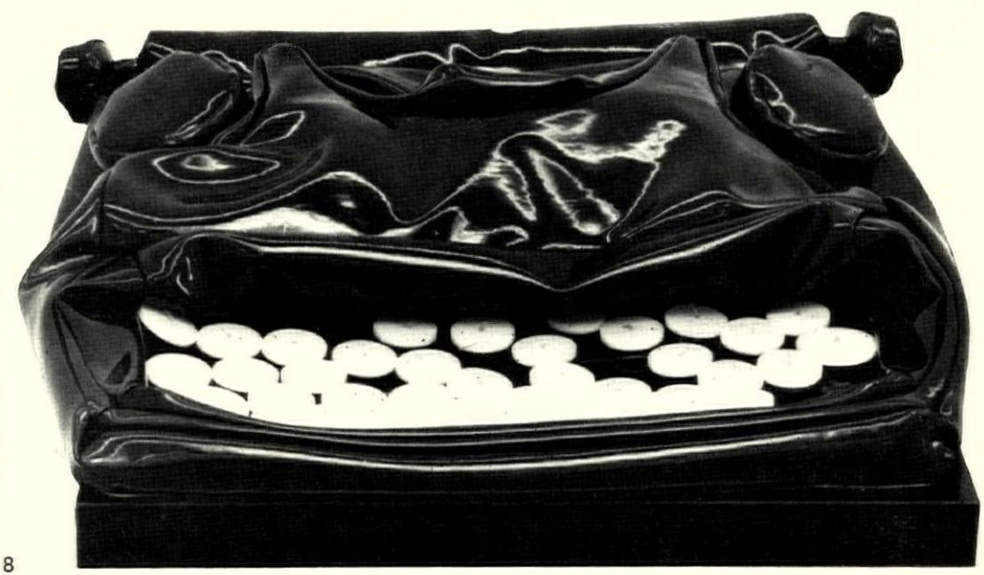
6, *John Flaxman: 'Design for statue of Britannia; memorial to naval victories over the French,'* 1800. *Pencil.*



7

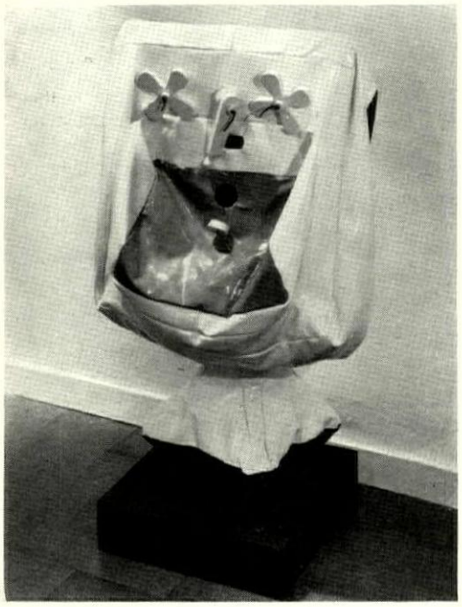
7, *Claes Oldenburg: 'The bathroom in a garden setting,'* 1965. *Wash and watercolour.* 26 *by* 40 *in.*
8, *Claes Oldenburg: 'Soft typewriter.' Vinyl and kapok.*



8

that Britannia appeared to be exposing two stick-like legs. The statue was to have been 230 ft. high, surveying London from Greenwich Park, and the only pleasant thing about the project is that it fell through.

Some of Claes Oldenburg's projects for colossal monuments in London are very much nicer. They're conceived as temporary structures, like the giantess who enlivened Stockholm last summer, and would probably be executed in plastic over a metal frame. Large coloured sketches for them were included in his recent exhibition at the Robert Fraser Gallery, and I was particularly attracted by a giant cigarette-end to replace Ariel, a lean, dramatically angled gear-shift to replace Nelson's column and a splendidly monumental drum-set for the South Bank, suitable for a jazzman about the height of the chimneys at Battersea Power Station. There's a good deal of truth in his contention that very few people notice our public statuary, and the idea of expendable monuments in the centre of the city should not be too lightly dismissed. If they were entrusted to an artist as brilliant and sensitive as Oldenburg I am convinced that they would assume a mysterious dignity without losing their association with contemporary living. The romantic drawing in crayon and wash called



9, *Claes Oldenburg: 'Soft washstand,' 1966. Vinyl plexiglass and kapok. 55 by 36 by 28 in.* 10, *Edwin Landseer: 'Lambkin.' Pastel.*

'The Bathroom in a Garden Setting,' 7, conveys some sense of his ability to transform objects without suppressing their identities.

The most remarkable things in his exhibition were the examples of his soft sculpture, and it was altogether appropriate that one of his drawings was an impressionistic study of a pillow, for the way in which a pillow is constructed is basic to his approach to sculpture. He starts by making stencils of the forms of an object, then cuts then out of canvas or vinyl like a dressmaker, and sews the parts together to form a complicated bag which he stuffs with kapok. Some parts of the bag are more fully stuffed than others, and in the hands of Oldenburg the act of stuffing is equivalent to modelling. It's the means by which he gives objects their organic connections. His gigantic soft model of an electric light switch brings out its relationship to the female breast. An elderly car-engine made of stencilled canvas lies spark out on the floor like a man who has had 'the stuffing knocked out of him' by life. There is a wicked old toad of a typewriter, carried out in black vinyl, 8, and an irresistible blue and white soft washbasin all muzzy and bemused like a girl in love, 9. Oldenburg is one of America's finest artists, and one of the very good reasons why the anxiously awaited demise of Pop art has been indefinitely postponed.

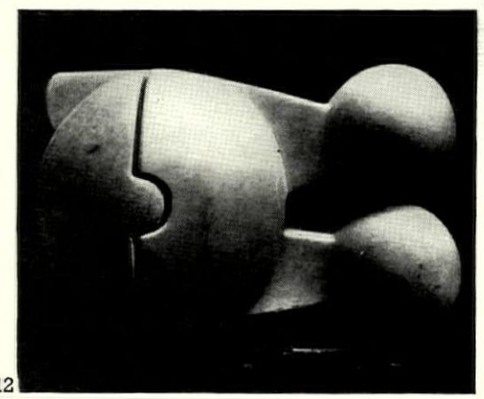
The sixth exhibition of works from the Royal Collection held at the Queen's Gallery was for animal lovers. The high standard set by the earliest painting in the exhibition—Van Dyck's oil sketch for the equestrian portrait of Charles I—was immediately abandoned, and a long succession of race horses, farm animals and Royal pets, diversified here and there by a tiger or a giraffe, took over the walls. Boys and girls must have been pleased to see Landseer's pastel of a Maltese dog called 'Lambkin,' 10. They wouldn't fail to recognize the likeness to Dougal, the star of the BBC's 'Magic Roundabout.'

ANDREA CASCELLA

Andrea Cascella is an unusual phenomenon—an architectural sculptor who has become a major international figure. He first gained international recognition by winning the Auschwitz competition with a project on which he co-operated with an architect and his sculptor brother, Pietro, and he has since worked extensively on architectural commissions including very large reliefs for Olivetti buildings in Dusseldorf and Buenos Aires. In 1964 he won a first prize for sculpture at the Venice Biennale and afterwards exhibited with great success in New York.

Cascella is exclusively a carver who constructs his sculptures on the 'unit principle' of several independent parts making a whole. He finishes his work with an exactness of craftsmanship, crispness of outline and close fitting joints worthy of the most complex modern machinery and differentiates textures with a most sensitive regard for the different qualities of his stones—varying from the mountainside roughness of 'Jupiter' of 1964, 11, to the machine-like smoothness of 'Come due astri desolati,' 12, of the following year. His range of scale is almost unlimited, extending from the few inches of 'Come due astri desolati' to the dozens of feet of the great Olivetti reliefs. In spite of its abstraction his work displays an immense humanity and can suggest organic, sexual, anatomical or mechanical relationships with equal facility and within the same piece of sculpture. Finally his sculpture, like a tree or mountain or like the stepping-stones in a Japanese garden, becomes a part of Nature itself—unlike them, however, it remains a careful and exact work of man. By combining man, Nature and the machine Cascella has created a bridge between modern man and his environment which is highly appropriate to an architectural setting.

JOHN HOPE



Design Review

New products chosen and annotated
by Ronald Cuddon

DR

Furniture

To predict far in advance the quality and significance of the furniture exhibition which takes place this month at Earls Court is no easy matter. If the form is to be judged by comparison with preceding years then we can expect little that will advance the cause of good design. The situation is aggravated by the tendency of the more progressive manufacturers to move outside the exhibition in order to display their goods in isolation or more congenial surroundings. This is an unfortunate development, and yet the visual indigestion and ennui—the inevitable by-products of a visit to a large trade exhibition—are perhaps sufficient reason for those who take their design seriously to contract out.

The photographs on these pages are chosen to indicate (at the time of the Earls Court exhibition but independently of it) the general direction that furniture design seems at present to be taking. The chairs (1,2,4,5,6) are from Milan. They are imported by Finmar, sold by Vasa and can be seen at their showroom at 31, Lowndes Street, London, SW1. These chairs have an exuberance that is essentially Italian, though they are not Italian design at its best. Their style may well be seized upon by the fashionable and interpreted as an avant-garde formula, and it is disturbing to contemplate what would happen to this 'comfort concept' if misunderstood and perverted by sections of the furniture industry. We would then see the return of the banal standards typical of the mid-thirties, and the wheel would have turned full circle in the space of three decades. In a period of confused values the lay public are understandably perplexed by the alterations of fashion, but one detects that designers themselves are ceasing to have any clear-cut philosophy, without which their work becomes superficial and fails to have any long-term impact on the social scene. This lack of purpose, a fairly accurate reflection of the attitudes of mid-twentieth century society, is expressed by skin-deep veneers, highly finished glossy surfaces and graphic symbolism replacing the language of material and structural expression. It is the new language of private affluence, contrasting with the increasing visual squalor of our public environment.

While it would be unfair to say that these Italian chairs mirror this point of view entirely, they are dangerously mannered and marginal in their contribution to design values. The best of them is the Elda 1005, 1 and 2, designed by Joe Colombo. It is a fibre-glass shell structure formed in one piece and contains the heavily upholstered separate leather cushions—attached by straps to the concave surface of the shell—and conceals the revolving mechanism supporting the chair. It is comfortable and stable but is difficult and heavy to move and suggests therefore a specialized use as befits some complex industrial, medical or guiding operation. Moreover there is a mixture of ergonomic rigidity and empiricism revealed by the shell form on the one hand and the cushions that mask it on the other. Maybe it is a valiant attempt at reconciling a conflict in the demands of comfort just as the cartilage in a joint

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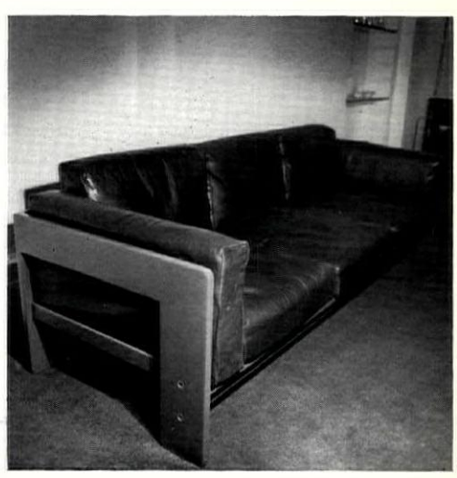
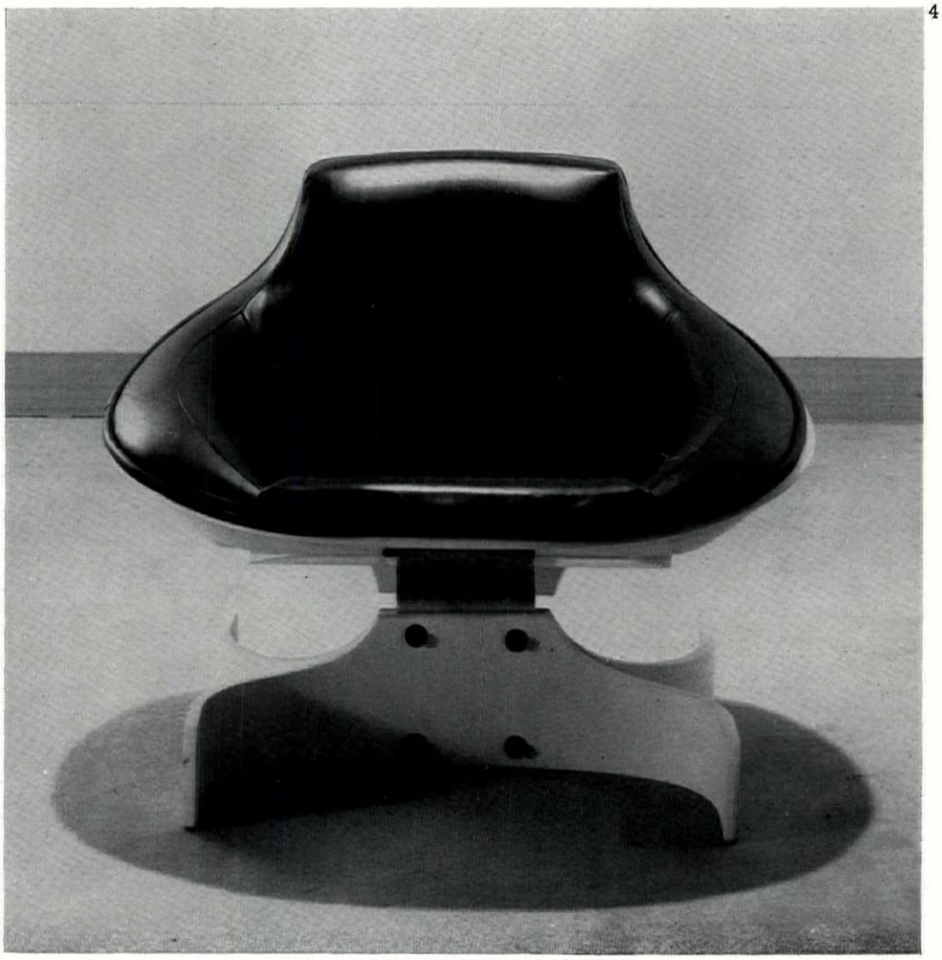


3

takes up and allows for the more vigorous movements of the body.
Tobia Scarpa's Bastiano settee, 3, also from Italy and imported by Aram Designs Ltd., is basically a simple wooden frame, albeit a massive one, supporting large down-filled cushions which entirely acquiesce to any demands the body makes on them. The Sella 1001, 4, is another chair designed by Joe Colombo. It was still in transit when this review was written but from the photographs it would seem that the bent plywood base is unnecessarily contrived and crude in contrast to the well formed plywood cradle seat lined with leather upholstery. The relationship of these two elements also appears unsatisfactory and the steel spring acting as the connecting link seems to be visually and mechanically stressed to the utmost.
The Alda 1003 chair, 5, and the Simone 1004 sofa, 6, were designed by Cesare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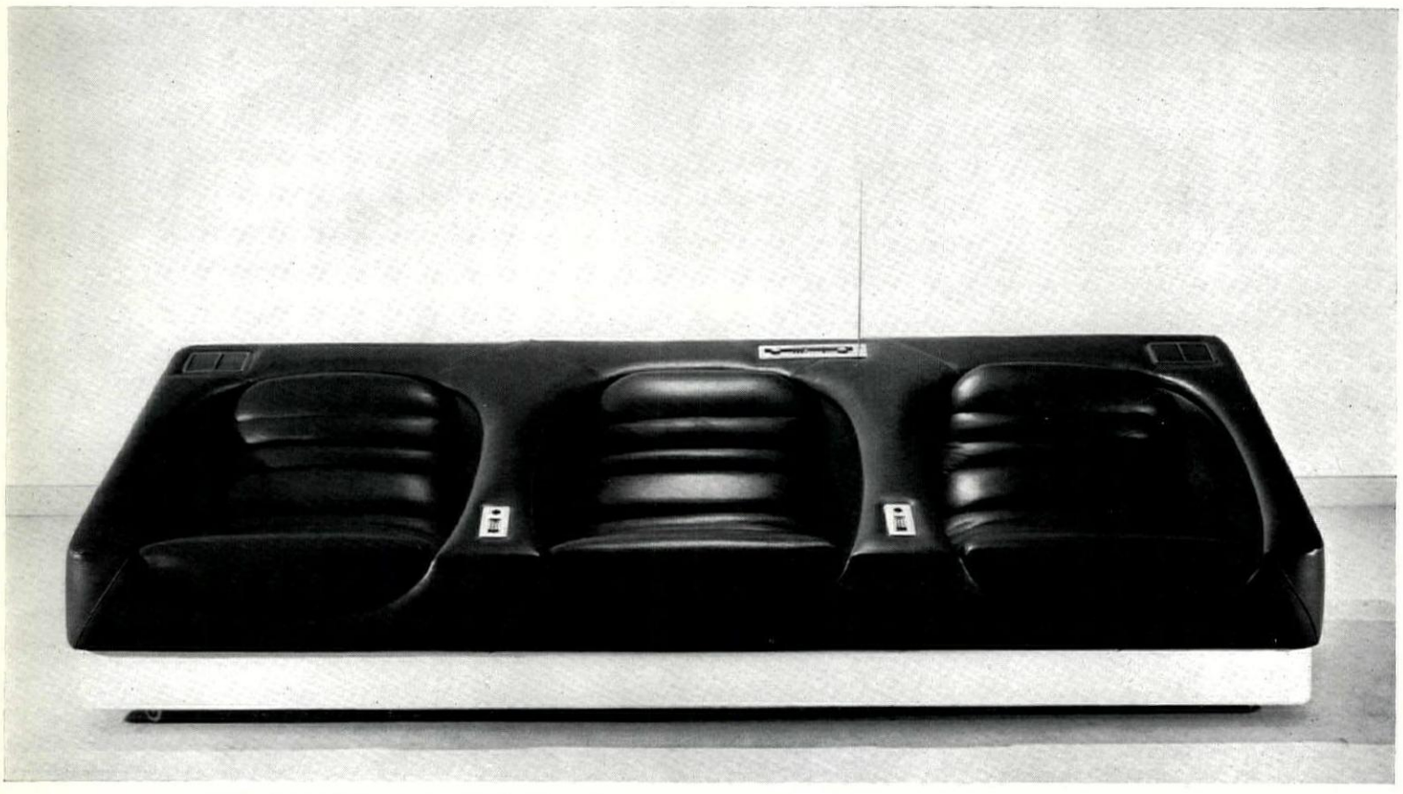
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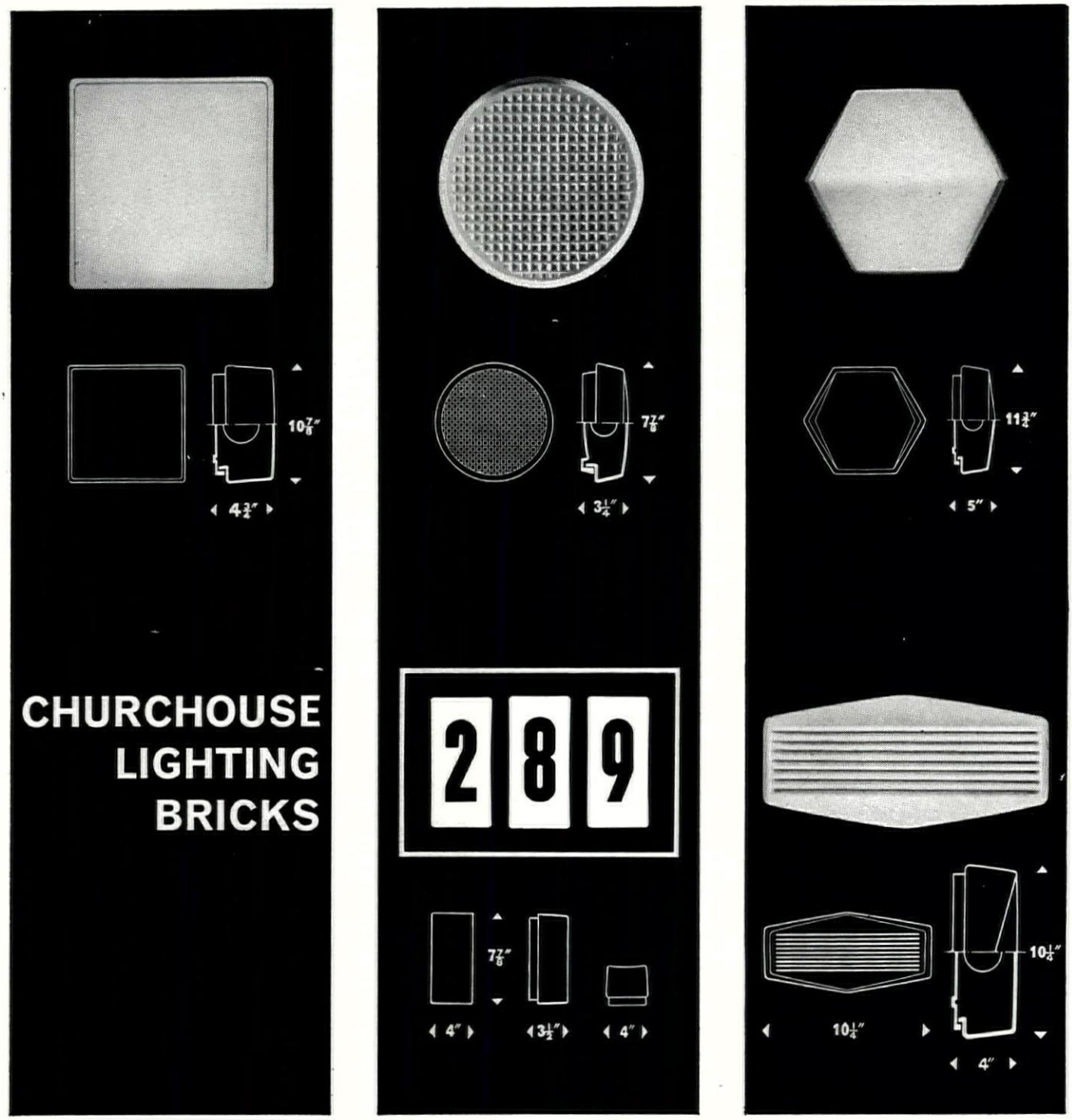

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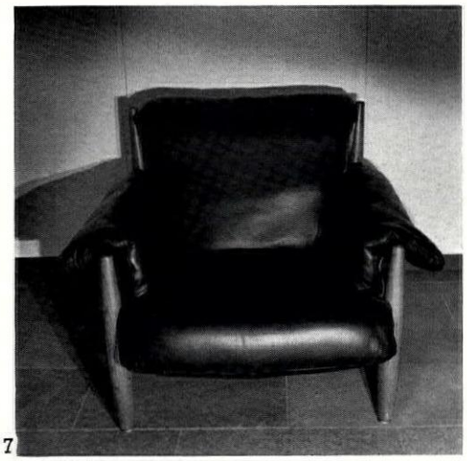
Casati and Enzo Hybsch. The revolving plastic body of the former shares many of the technical characteristics of the Elda chair but lacks its design discipline and quality. The seats of the Alda chair and the Simone sofa are upholstered in black leather and embrace built-in ash trays, cigarette boxes, lighters and (in the case of the sofa) stereophonic radio. The manufacturers claim that this sofa gives people sitting together the comfort of an individual armchair. This is doubtful, since in domestic situations few people wish to be crated like eggs, comfortable though the straw might be; and furthermore, if one egg happens to be missing, the totality of the image is upset. The mobility provided by the castors and swivel mechanism does nothing to reduce the inflated bulk of this furniture nor lessens its slick, ' Bond '-ish appearance. The paint surfaces associated with throw-away furniture are not in this case supported by a similarly throwaway price.

The Sheriff chair, 7, designed by Brazilian architect Sergio Rodriguez, can also be seen at Vasa. It has a timber frame made from traditional turned sections, with leather straps interlaced to form a basket-like cradle with adjustable tension. The cushions are of calf-skin in one single element mounted on the structure like a saddle, giving the chair a romantic ranch-house image—an anachronism, when one considers that the skills required of manufacture are now highly sophisticated, and the rarity value of the materials from which the chair is made make its cost acceptable only to a Texan millionaire. However, in spite of the slightly swollen legs it has a certain robust fascination.

Another interesting chair is that designed by Danish architect Arne Jacobsen, 8. This was photographed at Vasa but it is also imported and sold by Peregrine Willcocks. It has a strange Shaker look and is in fact rather uncomfortable for those who need props and other devices to achieve reasonable equilibrium. For the straight-backed and fit this chair would be a handsome acquisition whether used singly or as a group for dining. Formed in one piece, the plywood seat and back are padded and covered with black leather and supported on a metal pedestal base. This chair can be obtained with arms, and there is also a low-backed version.

The new Hille Axis chairs designed by Robin Day were conceived for use in foyers and reception areas and had therefore to be strong and maintenance-free. Another requirement was that they should be formed of flat elements which could be stored economically and packed in boxes for dispatch, that they could not be easily and quickly copied by competitors. The chair exploits a simple structural principle in which the framework is resolved into two polished pressure die-cast aluminium members, which when attached with machine screws to the sides of the seat and back form a strong assembly. It is possible to link together seats, backs and aluminium frames in rows in such a way that only one side frame is shared between adjacent chairs making for economy and good appearance when the chairs are used together, 9. The frames have been exploited to produce two versions of the chair with or without arms, and the seats and backs are available upholstered, 10, or of formed laminated timber, 11. The upholstered units employ Pirelli webbing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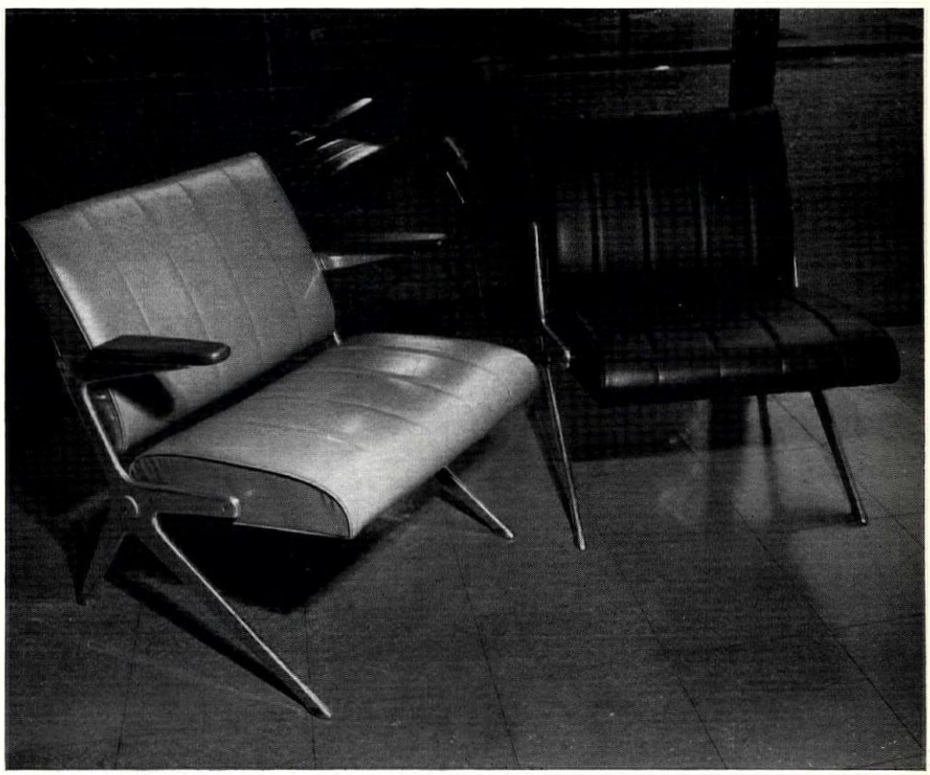
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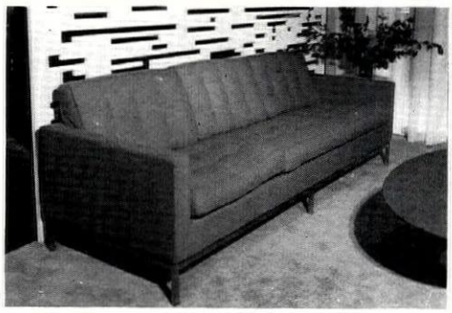
and foam rubber with a top cover finished in ribbed or panelled treatment, so breaking up the surface to avoid creasing and sagging when the chairs are subjected to hard use. The formed timber version is deeply shaped for comfort and veneered in either teak or rosewood, and a table top may be attached between any two of the chairs. It is a simple refreshing design, clearly the result of much thought, design-skill and understanding of manufacturing processes.

The sofa, 12, is an Interiors International design; this and its companion armchairs have been on the market for the last year. The Conran sofa, 13, is more recent. Both these sofas are large and their bulk is such that they can only have been designed for very large rooms or public spaces. If extensive areas have to be sub-divided to form intimate enclosures then these are useful pieces of furniture. However, their slab-like upholstered forms are again reminiscent of the 'thirties and the difficulty of tailoring and articulating them diminishes their essential geometry.

Conran have also produced a new range of furniture suitable for students to work at or for children to play on; of these the children's bunk bed and boxes are shown here. The bunk bed, 14 and 15, is made of solid beech with back and end rails forming head and sides in natural finish or stained red or blue. The rails adopt a new retaining method so that the beds can be located firmly one on another either way round. The mattress is polyether and is covered in cotton fabric. The children's boxes, 16, are also made of beech, of dove-tailed construction with base stained bright red or blue inside and out. They are a general purpose device for storing toys or using as toys, and can also be employed as simple seats and tables. This range is moderately priced, basically traditional in feeling, simple and direct in design. It has a sunny quality ideally suited to family and student needs. All the Conran furniture shown here is knock-down for ease of transportation.

Product: Furniture
Manufacturer: Finmar, Vasa, Peregrine Willcocks, Aram, Hille, Conran, Interiors International.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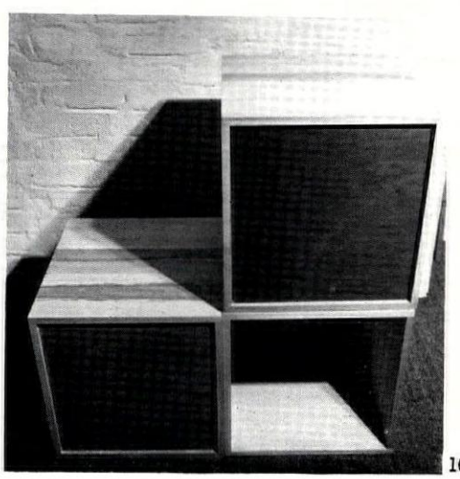
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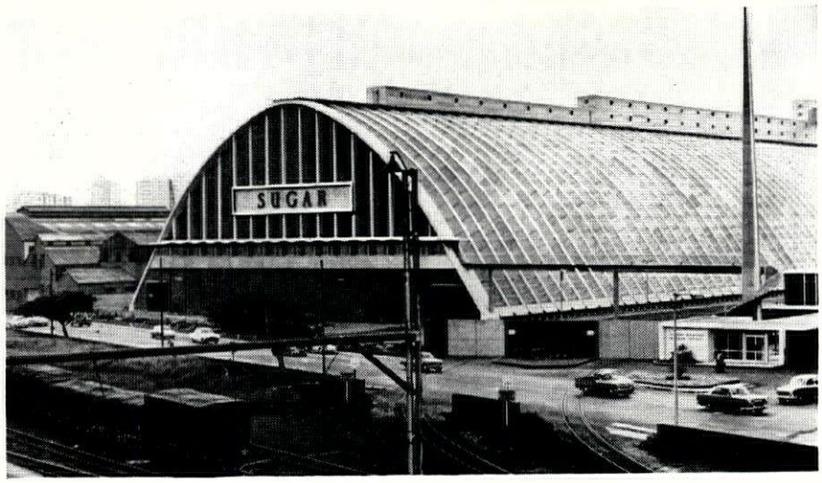
Versatile NEOPRENE solves damp-proofing and sealing problems at a South African sugar warehouse



Storing 200,000 tons of sugar poses many problems, especially when the warehouse is only 12 feet above sea level. Foundation waterproofing must be 100% reliable to prevent the sugar from dissolving into syrup. And the roof structure needs equally reliable weather sealing.

Du Pont Neoprene helped solve these problems in a new sugar warehouse at Durban, South Africa. The four acre floor has a Neoprene membrane (148,500 sq. ft. of it) which acts as a moisture and water barrier and absorbs mechanical and thermal movements in the double slab flooring. The roof has nearly 6,000 butt and parallel joints which are sealed, bonded and painted with Neoprene (nearly 8 miles of Neoprene strip). Even the gutters are made of Neoprene sheeting.

Engineer R. Colin Handley of the designers, Moreland Technical and Engineering Consultants Ltd., gave a number of reasons why Neoprene was used. It was considered tough and flexible enough to be spanned across the joints between concrete castings which are subject to considerable movement, both from the sugar itself and from thermal effects within the structure. It was also acknowledged to be capable of withstanding long-term exposure to weather, atmospheric ozone and the ultraviolet attack of the semi-tropical sun. But the most important factor, Handley emphasised, "was that the supplier of the Neoprene sheeting gave us a 20-year guarantee and the assurance that Du Pont Neoprene has a possible life expectancy of 50 years".

Neoprene was also used for the bearing assemblies—each group of four roof arches rests on an edge beam which is supported by steel rollers bearing on a common pile cap. Between the soffit of the edge beam and the top plate of the bearing assemblies is a Neoprene pad which smoothes out the dimensional differences in the bearing settings. Another application, where the fire resistance of Neoprene proved a major advantage, is in the conveyor belts which distribute the sugar. All 21 are made of Neoprene — a total length of 8,188 ft.

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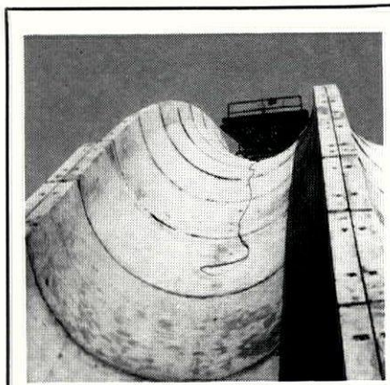
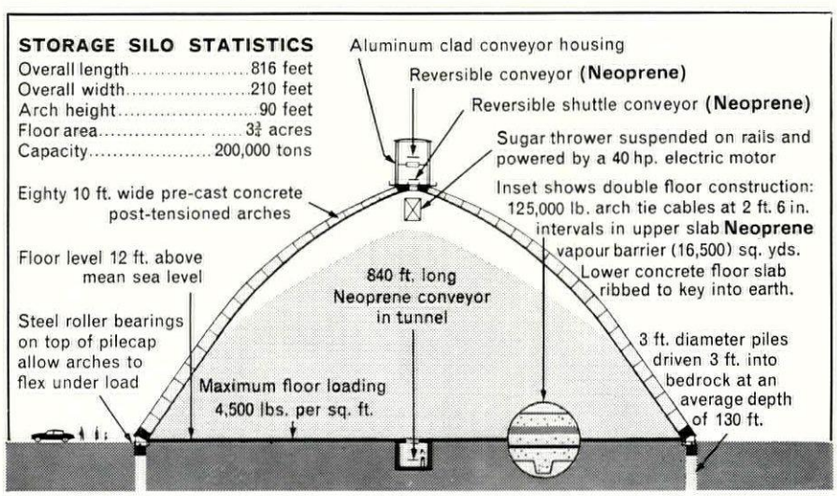


Pre-cast concrete roof sections of Durban Warehouse required nearly 8 miles of weather-resistant Neoprene strip.



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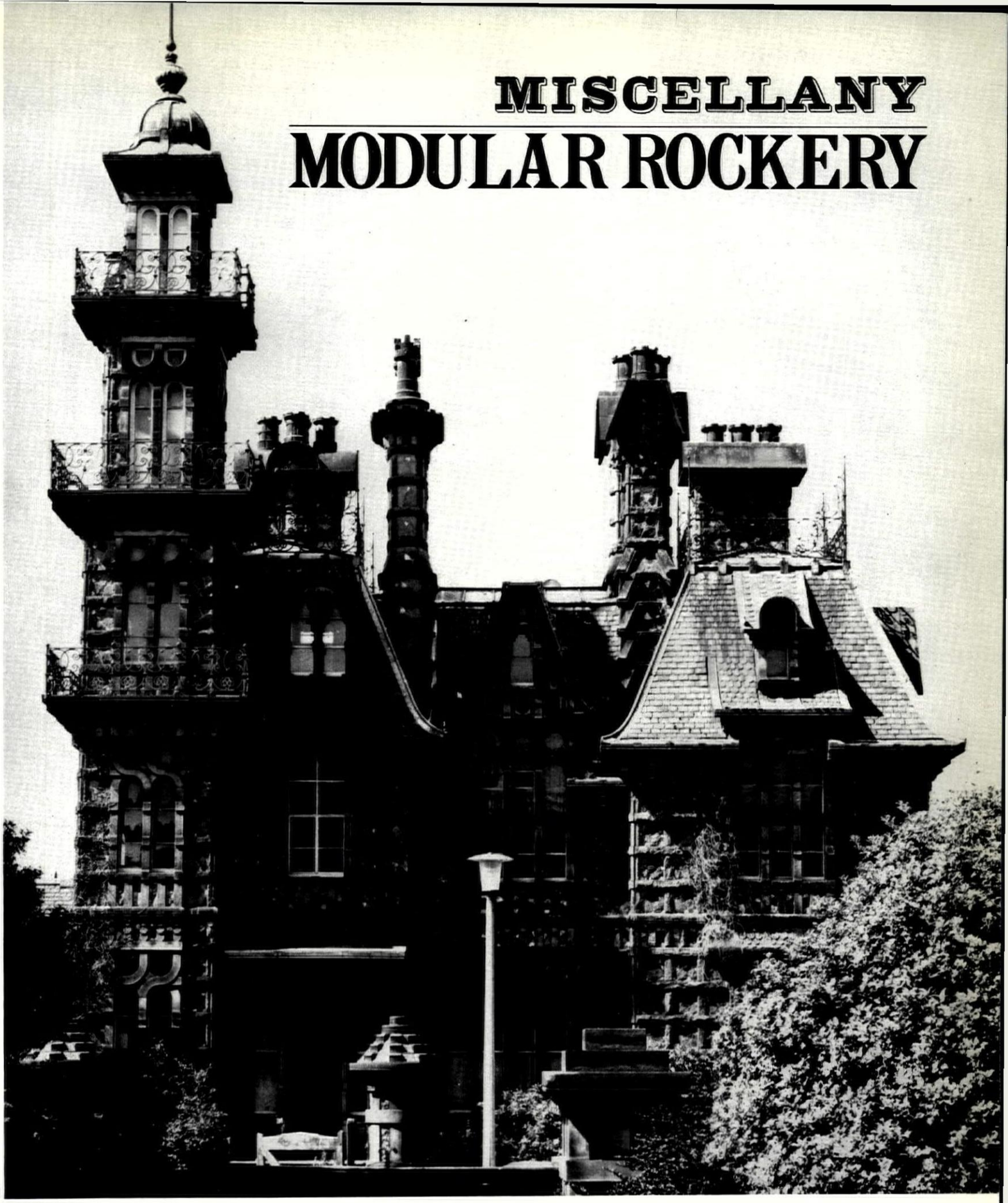
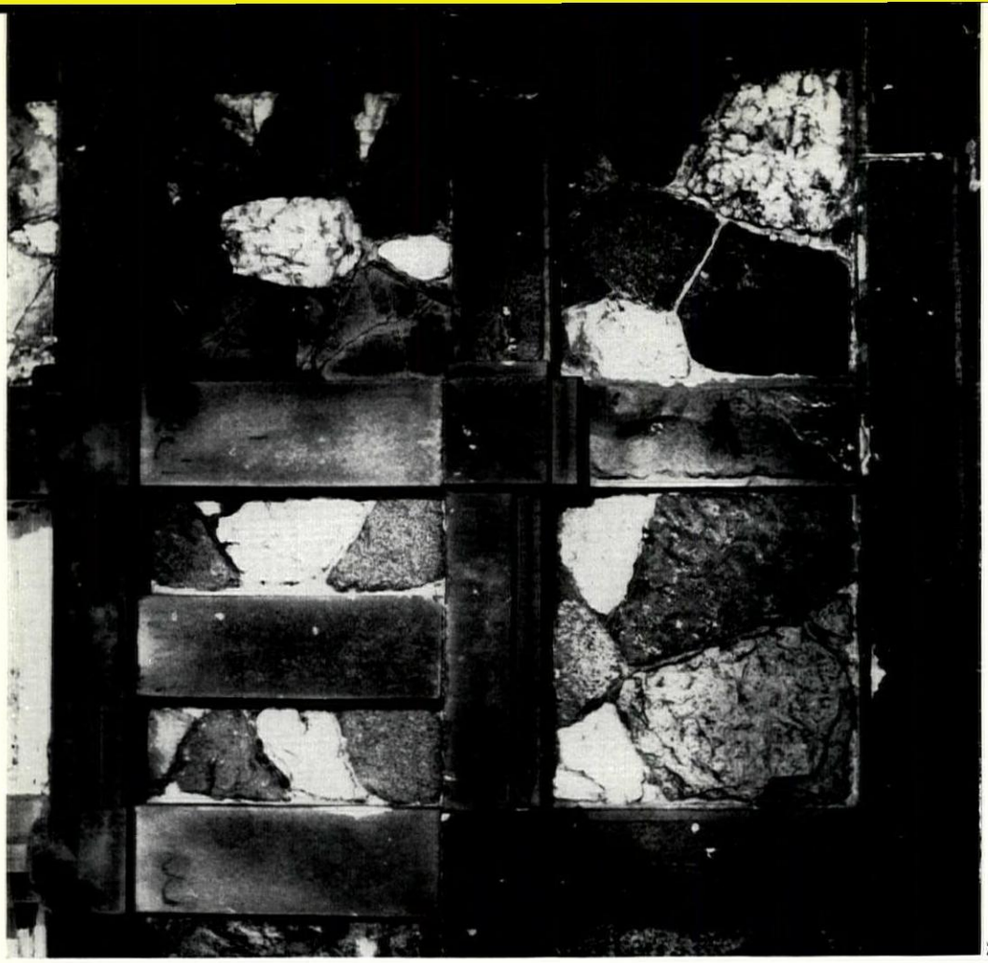


1

A hundred years ago Geology detonated public argument as Sex does today—from the redating of Creation by Sir Charles Lyell to the Alpine prose poems of Ruskin to the polychromatic vocabulary of Butterfield. The most outré of all geological 'happenings' took place in a sedate southern suburb of Edinburgh, Merchiston Park, where in 1858 a young building contractor, James Gowans (1821–90), later Sir James, built a house for himself to his own design in Napier Road, called Rockville. Until its demolition last year it was a breathtaking apparition, 1. Gowans had been trained as an architect under various minor practitioners (Moffat, Milne, and Paterson of Stockbridge) and also under David Bryce, the Scottish



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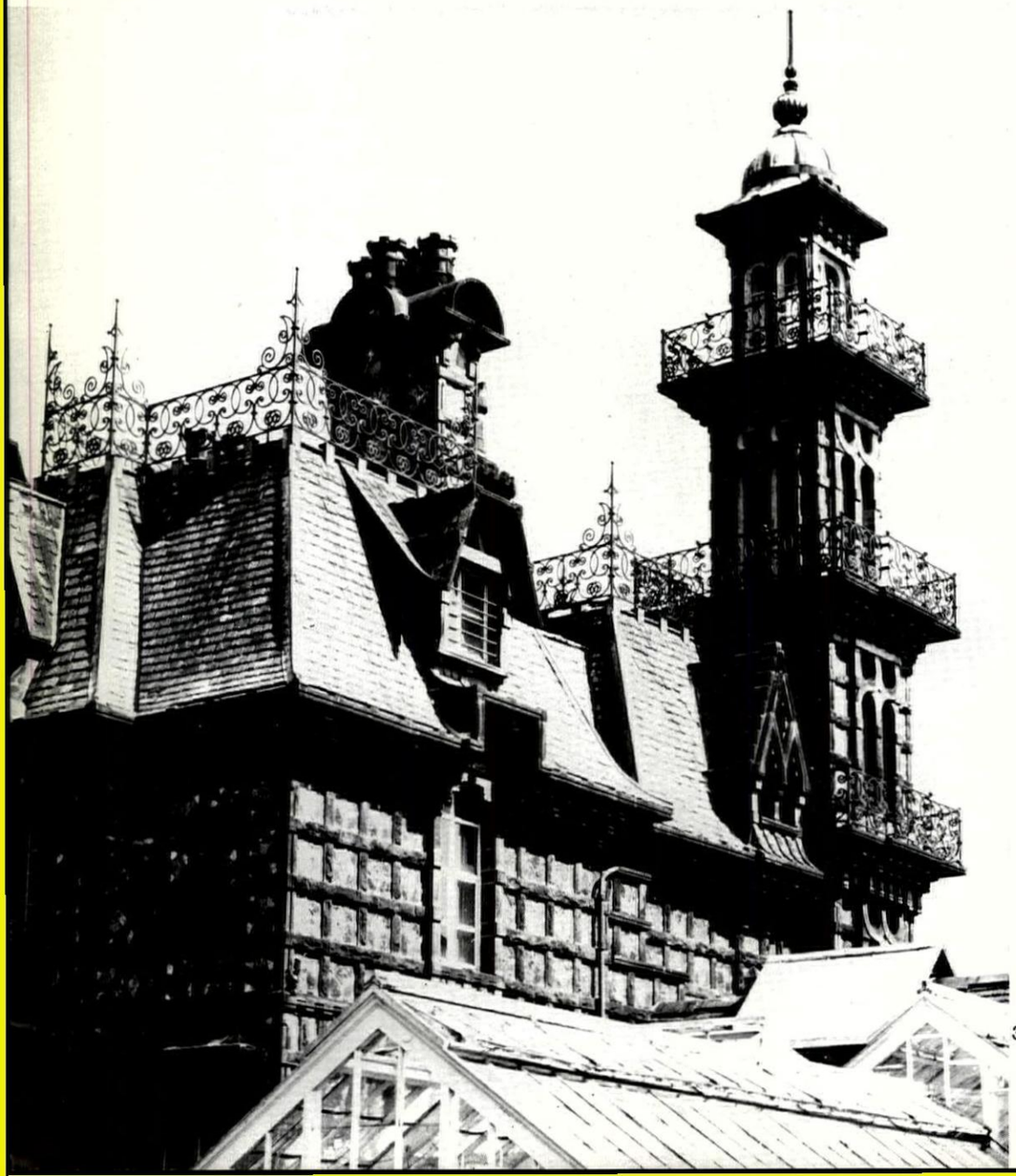

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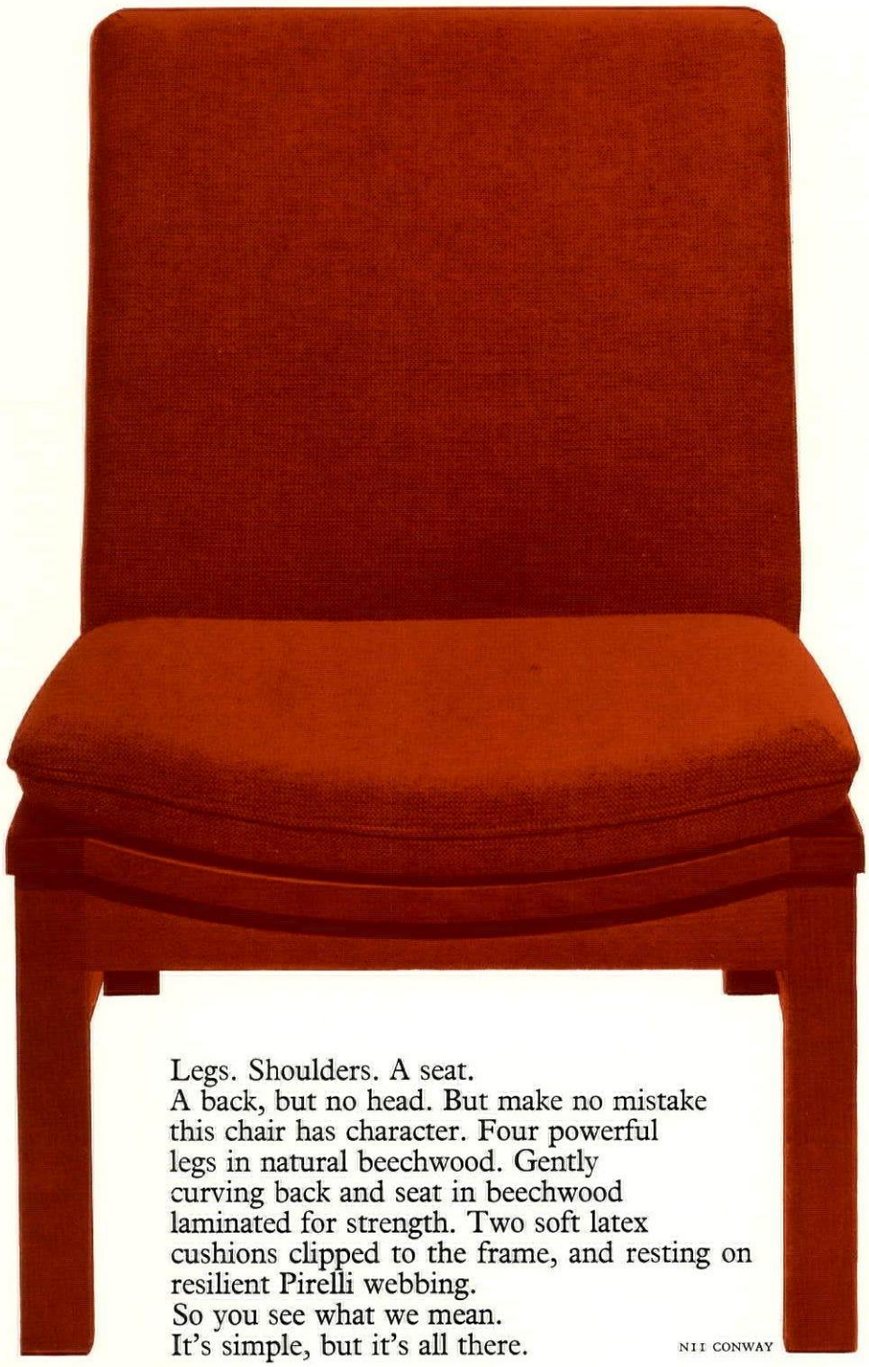
baronial expert, whose nationalistic mixture is clearly apparent at Rockville in the clustering of chateau roofs and in the tapering galleried silhouette of the corner tower, derived from the Merchants' Steeple of 1665 at Glasgow. In 1846 Gowans rejoined his father's contracting firm, Walter Gowans & Sons, and proceeded to make a fortune. As his navvies on the Highland Railway hacked their way through the virgin rock between Dunkeld and Ballinluig, between Dalwhinnie and Boat o' Garten, his training as an architect evidently effected a strange marriage in his visual imagination between practical skill and patriotic rock-worship. He decided to make his own house a poem in local North British stone, every inch of wall surface displaying in random abandon a gorgeously tactile mosaic of quartz and granite and hard sandstone, from brilliant white via blushing pink to nutty brown. Over it all, 2—and this is where the self-taught scientist took charge—he imposed a rigid 2 ft. module in the form of a lattice grid in the local freestone. Since 1847 he had owned extensive quarries nearby at Colinton, where he put up four cottages in *c.* 1855 and a house for the quarry clerk shortly after 1863, all in his distinctive manner. Other examples of his work at Edinburgh survive in the house built in 1859 for his daughter on the other side of Napier Road, in Rosebank Cottages near Gardner's Crescent, and in a long block in Castle Terrace. His more correctly monumental Synod Hall façade of 1875 also disappeared last year.

Within Rockville's modular grid and random rockery, Gowans introduced a wide range of personal motifs. The crazy trellises of iron on the roofline, which consist of interlocking 'Gs,' 3, and the hooped glazing of the greenhouses below were light relief compared with his obsessional fenestration. He particularly favoured a curious kind of window in which the mullions intertwined pincer-wise and 'looped the loop' so as to enclose bull's eye tracery above round-headed lights. The effect of this was perhaps Italianate (slightly Cinquecento), but its native 'Norman' origin was shown clearly in the interlacing tracery à la Christchurch Priory of the main hall window on the ground floor. Everything was crotchety: mullions were given little set-offs as though they were buttresses (E. B. Lamb used this motif at his Englefield Green church a year later, in 1859), gables had chevroned edges, cornices were bracketed, chimney pots were castellated, gate piers had stepped ribs on top, joints in the grid were everywhere expressed with little square projections as though a close-knit concrete frame were poking through. The six different chimneys, some cruciform,

The simpleton:



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A back, but no head. But make no mistake this chair has character. Four powerful legs in natural beechwood. Gently curving back and seat in beechwood laminated for strength. Two soft latex cushions clipped to the frame, and resting on resilient Pirelli webbing.
So you see what we mean.
It's simple, but it's all there.

N11 CONWAY

N13 HIGH CONWAY

The softhead:

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And a head this time. The style again is simple,
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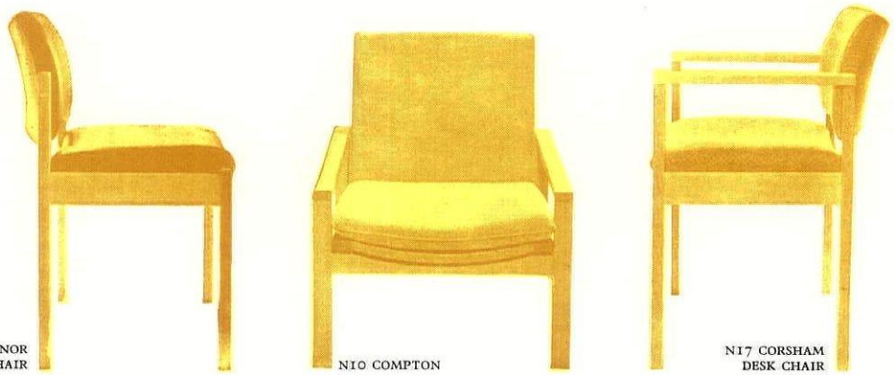
workmanship to withstand the wear and tear
of the featherweights or the heavyweights.
The price makes sense too. All in all it's
a great comfort to the hard-headed business man.

N12 HIGH COMPTON



N18 COPNOR
DESK CHAIR

N10 COMPTON

N17 CORSHAM
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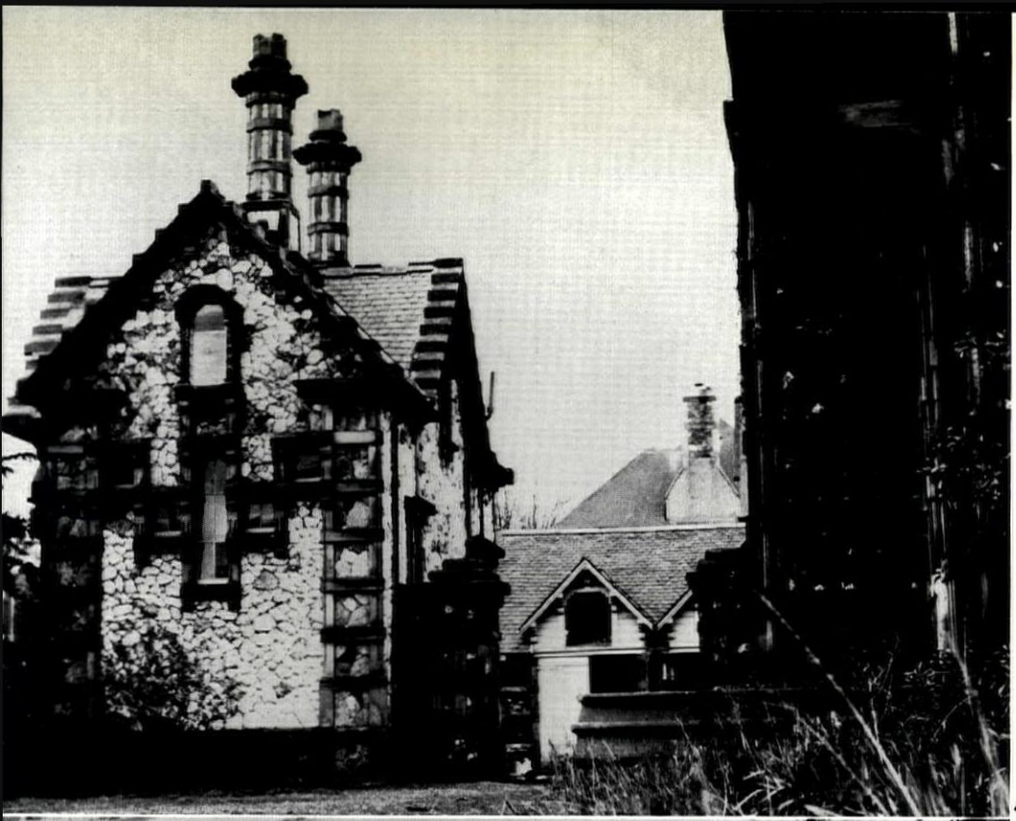

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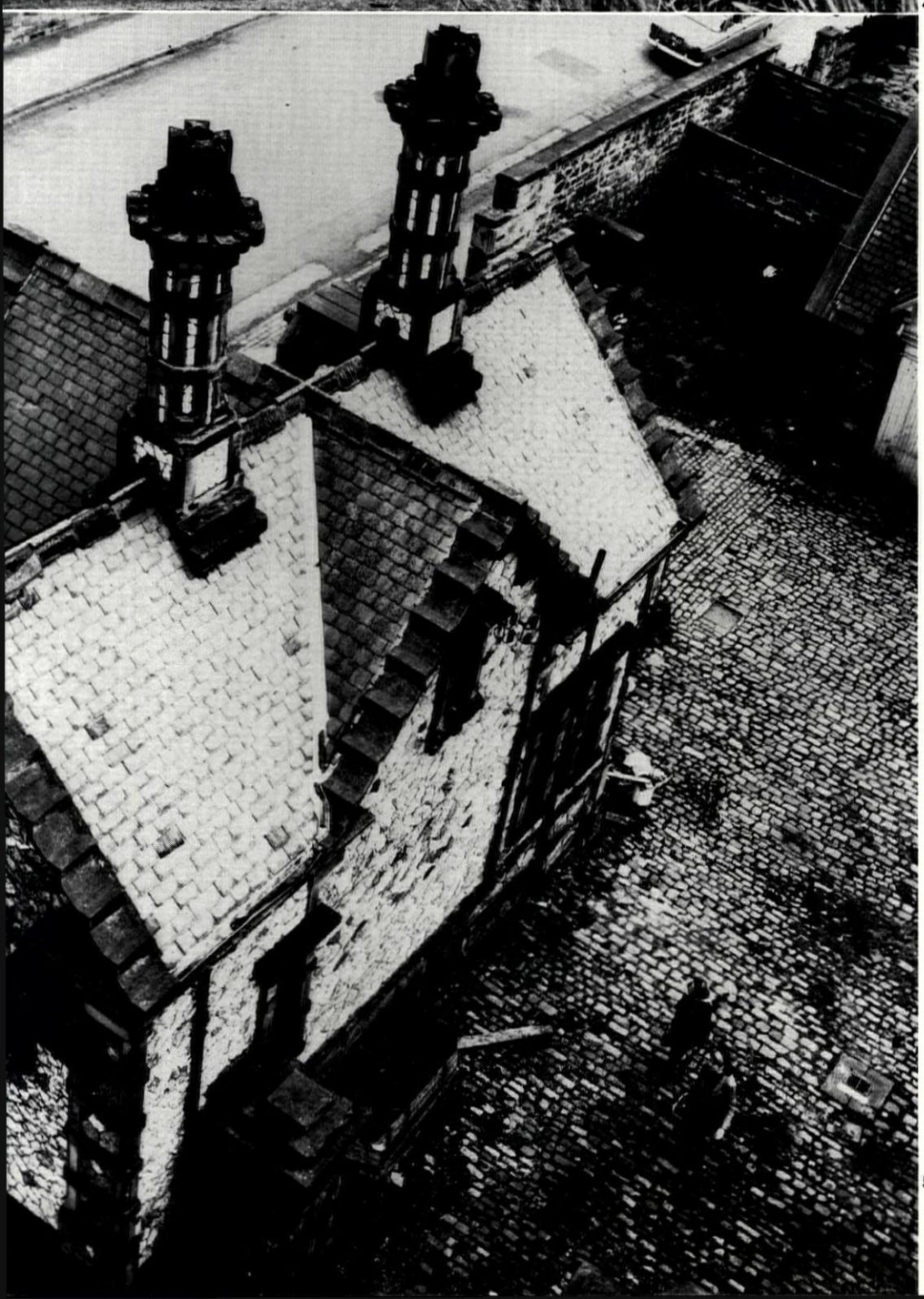

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some with rounded ends, had a mixture of Gothic gables and semicircular pediments, the horizontals binding together the verticals like a bunch of sticks. There was throughout a curious analogy with timber framing, closer to American 'stick style' than to English Tudor. Craziest of all perhaps were the lodge, 4, with its indescribable 2 ft. square window patterns, and the heavily timbered stable and

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storage wing which enclosed a cobbled courtyard beyond, 5.

By contrast a statue of 'Mother and Child' which perched among the rhododendrons in the garden was conventionally academic—one of two made for Gowans by the Scottish Academician William Brodie (the other now stands in West Princes Street Gardens). Far stranger was the garden table, 6, formerly the hall table, which was set on stone pillars like a miniature temple, each panel ornamented with a little daisy (a 'gowan' in Scottish vernacular). The stepped shape of its arches, with a curious roll moulding on the 'tread' of each step, appeared in two upper windows on the entrance front and was the theme for the fireplaces inside, including the giant kitchen fireplace, 7, with its stern superscription. There was

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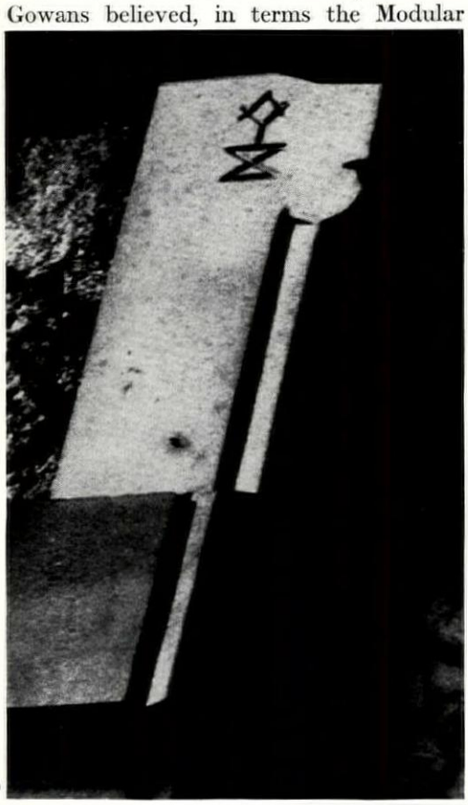
also one memorable outburst of stained glass in the main hall window, 8: a wickedly Landseerish griffon, the Gowans family crest, encircled by the motto *Quod Ero Spero*, against a background of thistles, roses and shamrocks, with a vivid border of 'gowans.'

In a lecture to the Scottish Architectural Institute (used by George Godwin as the lead story in *The Builder* for 17 March, 1860) Gowans described the layout of his house with perfect logic. He innocently proclaimed he 'had no desire in designing his house to create a novelty' and set forward clear principles of layout, based entirely on functional considerations. Then why the craziness? The clue can be found in odd little symbols, 9, incised on the mullions—traditional 'masons' marks.'* For Gowans regarded himself as a craft-conscious master-mason. On a relief high up on the garden front of Rockville he had himself depicted, 10, in the traditional mason's coat, poring over geometrical patterns set out on sheets of paper (nearby his brother was shown? sculpting a portrait bust—see the cover of this issue).

Gowans believed, in terms the Modular



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Society might equally admire, that he had found the key of medieval master-masonry: not only that it had an overall module of 2 ft. squares, but also that 'the external features and outlines of the building are brought out by the semi-circle and the angles of 22½ degrees, 45 degrees, and 67½ degrees.' This technique, based on the apparently natural diagonal movements of the eye, was also used by the English church architect William White (1825–1900). Did they have a common source?

It might have been Imre Henszlmann (see Anna Zádor's article in last December's AR). 'The idea of designing upon squares and fixed angles,' said Gowans, 'although new to me, must have been, I am convinced, known to the master masons who produced the best examples of those styles of architecture which we so much admire. These lines are more observable in the Gothic than in other styles: the more rich and elaborate the design, the easier it is to trace the leading lines of the structure. From the experience I have had in drawing out the details of this building, I can understand how our old master masons were able to revel in endless design and combination of figures.'

But there is another, still more surprising side to Gowans's thinking. From 1868 he served long periods on the Edinburgh City Council, his politics swinging from 'ardent Conservative' to 'Advanced Liberal' and back again to 'staunch Conservative.' He inaugurated the Public Health Committee and actively promoted ventilation, sanitation and working class housing under the slogan 'Space, Light and Air.' Rockville was actually seen by him as a prototype. Godwin in *The Builder* drew particular attention to the ventilated void of four or five feet beneath the house, which prevented the stonework sucking moisture from the soil, and to the stackpipe as high as the chimney shaft, which was erected because Gowans was 'impressed with the importance of *ventilating the drains*' (Godwin's italics—for his views, see AR, December, 1964). Furthermore, the choice of a module resulted in 'bringing out all the doors, windows, and finishings of one uniform size, and so admitting of their execution by machinery, at a considerable reduction of cost' (so much for the medieval master-mason). Even the crazy stonelaying was based on economic logic: 'In the country where small houses suitable for agricultural labourers and others have to be provided, and where economy in the use of material is a chief requisite, it is of the first consequence that the truthful application of the material in the district should be scrupulously adhered to. . . . When an architect is employed to design a building and furnish specifications, he too often adopts some favourite style of building and a stereotyped specification, which, not being applicable to the district from which he has to get his material, involves a great and unnecessary

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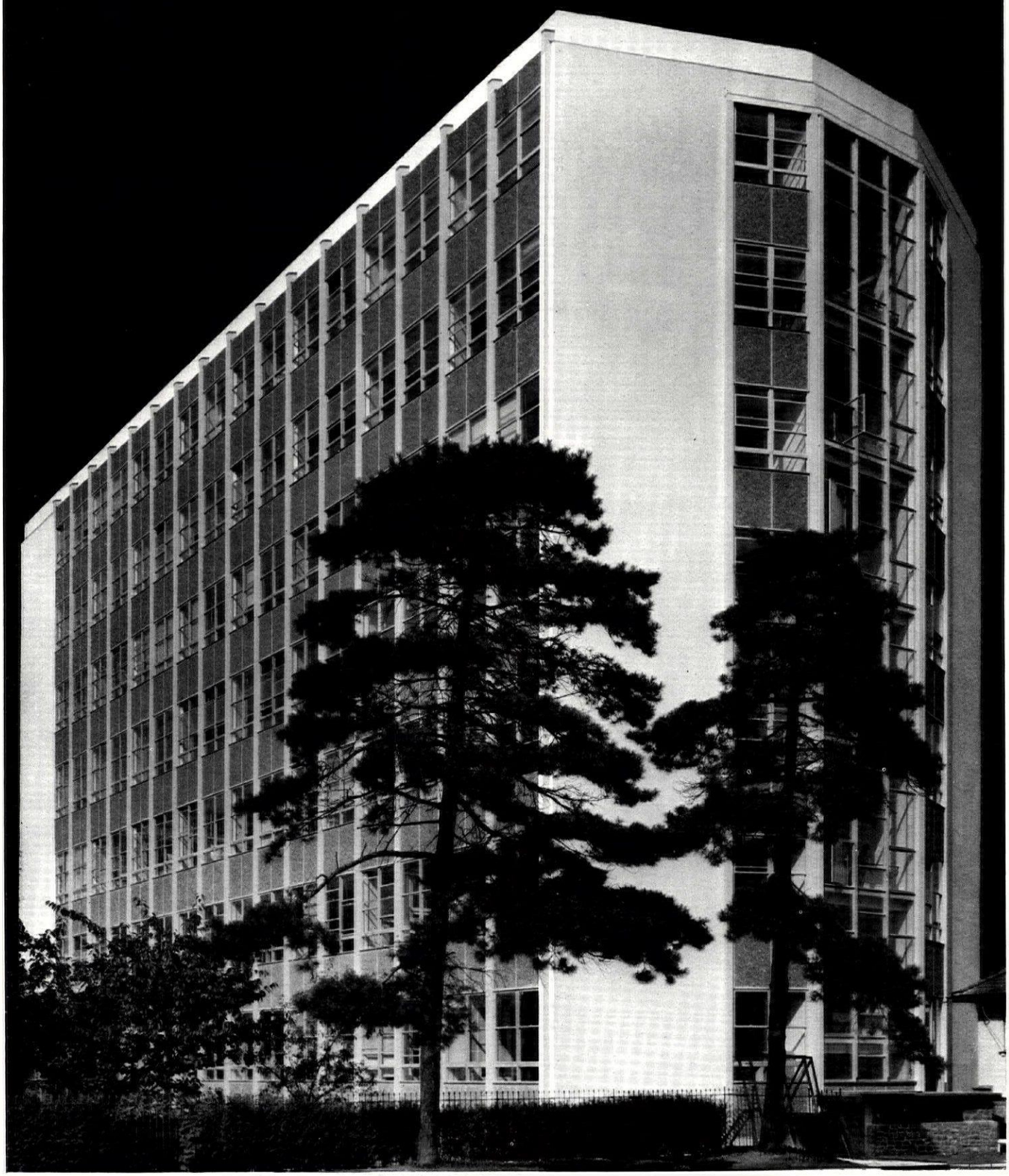
expense.' So much then for the local myth, perpetuated by an unkind comment in *The Builder* five years later, that Rockville exhibited 'stones from all nations.'

'Clothing over in this way the framework of the building,' Gowans concluded, 'and where it would enhance the constructive effect, I have given prominence to certain leading or radical lines of the skeleton'—a skeleton which, one has to admit, is prolonged in a merely applied lattice. Goodhart-Rendel pointed out how illogically the pavilion roof covered only part of the 'business room' on the right of the entrance, and how the corner tower, 'according to accepted Victorian tradition . . . rises above the w.c., but where is its back wall, what supports its internal corner?' Gowans, however, had the courage to practise what he preached. In 1885 he became Edinburgh's Dean of Guild, responsible for the construction and materials of all proposed building works in the city. In that capacity he attacked 'the use of bricks and cement gradually creeping in on Edinburgh buildings,' the array of outside pipes on the rear walls behind the façades and the use of paint on good stonework. He advocated pithead baths

* In the book on *George Heriot's Hospital*, by Gunn, Blanc and Bedford, 1902, there is an appendix, compiled from Gowans's researches, with several sheets of genuine seventeenth-century examples of these abstract doodles.



and baths for paraffin workers. As chairman of the executive council of the Edinburgh International Exhibition of 1886, he built out of his own pocket a model tenement for four working class families as an exhibit (as well as allegedly designing the gate piers which still survive in The Meadows). In the years 1885 and 1886, he wrote three pamphlets: 'Edinburgh and its Neighbourhood in the Days of our Grandfathers,' 'The Maintenance of the Health of the People and Beauty of Our City,' and 'Model Dwelling Houses' (illustrating his own). He died in 1890, knighted for his Exhibition work, but worn out physically and bankrupt because of the neglect of his business.

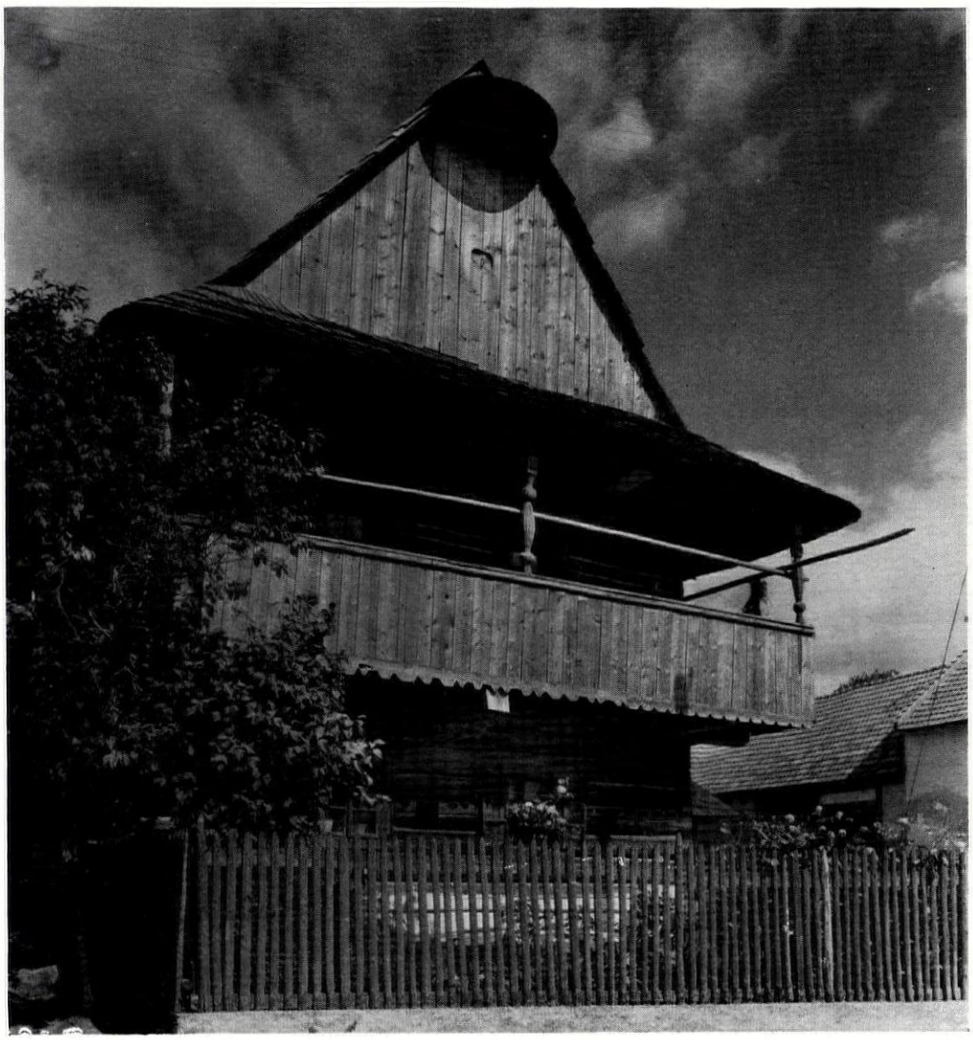
NICHOLAS TAYLOR

ACKNOWLEDGMENTS
This article owes a great deal to Edwin Johnston, Raymond Morris-Fraser, Colin McWilliam and the staff of Edinburgh Central Library. H. S. Goodhart-Rendel was as usual the first to 'discover' the house, though without having seen it —see *How Architecture is Made*, 1947, pp. 98–100.

PEASANT ARCHITECTURE OF SLOVAKIA

The farmhouse and village buildings of Slovakia, of which many surviving examples are now being restored and cared for, reflect in their style the numerous outside influences to which the country has been subject—Magyar and Croatian in particular. The earlier Slovaks were a religious people, which influenced the decoration of their vernacular architecture, and here again there was a mixture of influences. In the main the country—one of the last bastions against the Turkish invasion—was Roman Catholic, but since the Reformation there have also been members of the Augsburg confession and a few Calvinists; certain parts were Greek Orthodox and there were Jewish enclaves.

Slovakia is not only a country of eventful history, being at the crossroads of east-west and north-south migrations, but of climatic and geographical diversities. It lies in the embrace of the Carpathian range, which is broken up into many mountain groups. The highest are the rocky Tatras



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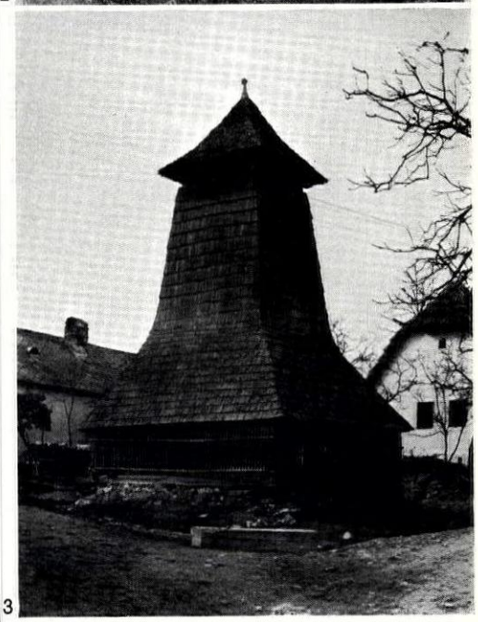

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1, log house for a small farmer in the village of Horné Jaseno. 2, wooden church in the village of Vysny Hrabovec. 3, belfry covered with wooden shingles at Janovce.

with their summer snows; more to the south are hills covered with vineyards and plains with areas of almost sub-tropical character; but on the whole a mild continental climate predominates. Typical of central Slovakia are the basins and long valleys, with rivers flowing through the southern plains.

The Slovaks were a quiet, settled and hard-working people—pensiveness is the characteristic note of the Slovak folk-songs—and socially they were democratic with no rich classes and with an ancient farmers' culture. The higher mountains were chiefly used for pasturage and the seasonal work of forestry which had its own social organization; from ancient times also there existed mining and metallurgy.

The original social unit of the Slavs was the clan; villages came into existence in about the eighth century. The principal types of settlement were:

(*a*) Dispersed or yard villages, with houses and yards situated at the centre of each plot.

(*b*) Concentrated or round villages, with the houses grouped in circular or polygonal form—the origin of these is the camps of the clans, laid out for defence. This is a form incapable of growth.

(*c*) Longitudinal villages, with houses built

along streets. This type arose both from the subdivision of plots in the dispersed villages and from natural growth along the lines of communication.

The principal peasant buildings are dwelling-houses, farm-buildings and public buildings such as the wooden churches. Rich pinewoods in the centre of the country were a source of easily workable material, and the usual type of construction is log walls and post and beam. In the plains and the areas of deciduous forests clay is used in various forms, dating from long before the Slav settlements; there is evidence of the survival of the Roman *opus spicatum*. The oldest clay technique used monolithic blocks with cut-out openings; also primitive sun-dried bricks. Later there occurred clay walled buildings with a wooden frame. A special ancient Slav type of clay building was the so-called *socha* construction, with the crown of the roof supported by a single wooden pillar. Roofs are normally thatched on the plains and hills and shingled in the higher mountains. Reed thatching is used in parts of the plains near the rivers.

Most of the buildings have only one floor, but there are some with ground floors used for living in and store-rooms above them, reached by an outside stair. The ground-plans of dwelling-houses are generally oblong, with rooms added successively. There are usually three or more rooms in the later houses; the more primitive ones had only two rooms or, exceptionally, only one. A feature of the earliest houses was the so-called 'black room,' where the

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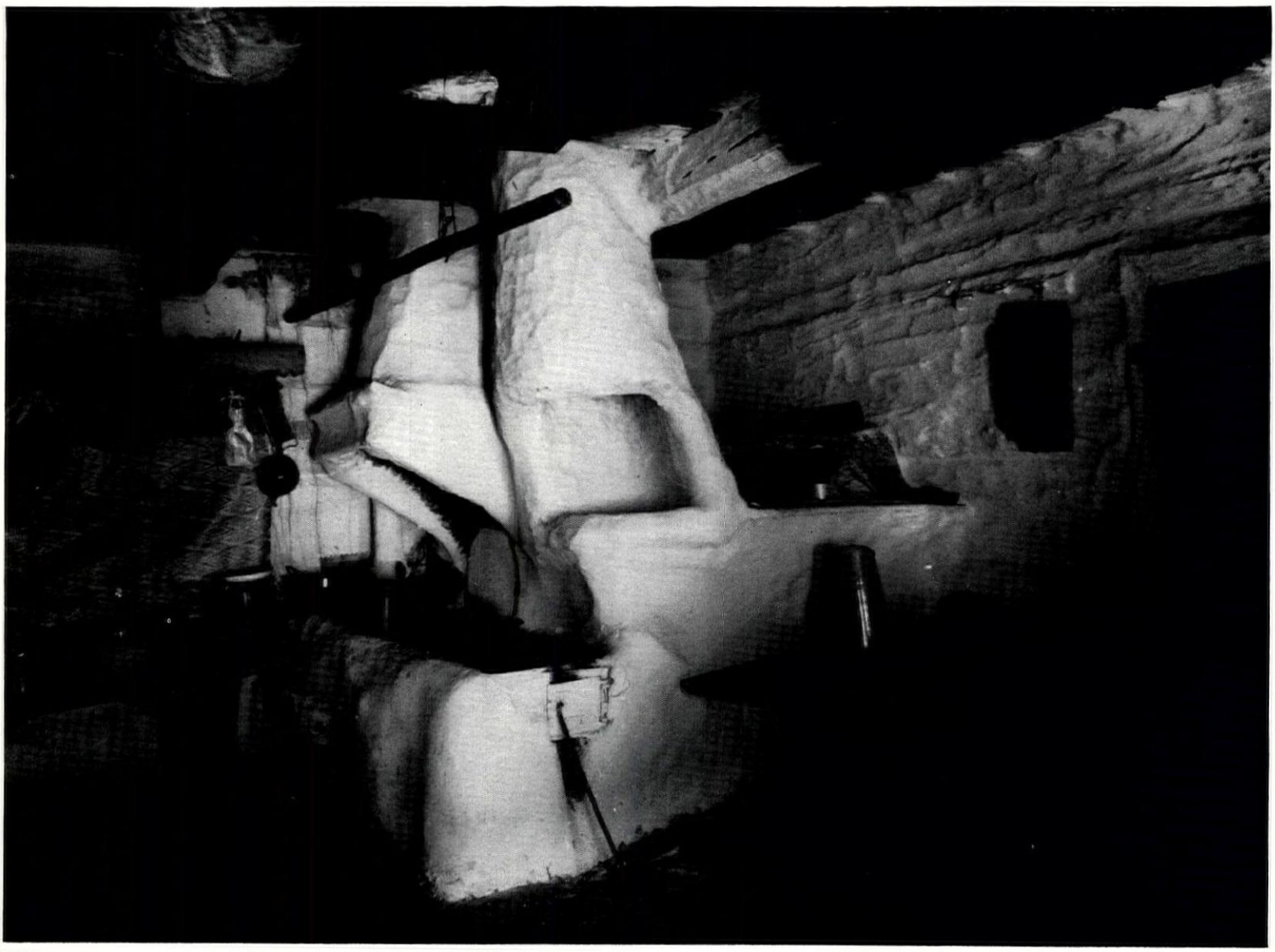
4, the yard village of Zdiar in the High Tatra mountains. 5, ancient stove in the living room of a log house at Pobisovo.



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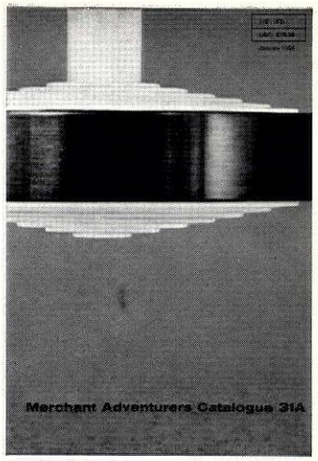

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6, *farmer's yard at Litava.* 7, *farmer's house at Zibritov.* 8, *log cottage and barn with thatched roofs at Strihovce.* 9, *granaries at Lukavica.* 10, *farmers' houses at Zahorska Bystrica.* 11, *house at Velké Levare.* 12, *house of 'socha' construction in the Slovak-Magyar town of Sala.* 13, *painted log house at Cicmany.* 14, *log houses and balance-well at Orava.*

smoke from the fireplace found its way out only through the doors and windows or through chinks in the construction. The houses are normally placed at right-angles to the street, though in western Slovakia there is a practice of uniting houses into long rows parallel with the street. The houses are sometimes associated with enclosed yards and—again in west Slovakia—there also occur 'common yards' with one common gate and with the entrance to the houses from the yard rather than from the street.

IMRICH PUSKAR
IGOR THURZO

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sculpture by the yard

Until the middle of this month there is an exhibition with the above title at the American Embassy in London illustrating the unit sculptures, covering large (external and internal) walls, which have become a speciality of the American-born sculptor Mitzi Cunliffe. The materials Mrs. Cunliffe uses include concrete, a form of brick-dust terra-cotta, fibre-glass and anodized aluminium. The exhibition consists of enlarged photographs of nine of her walls,

A MAJOR ADVANCE IN FOOD FACTORY FLOORS

In food factories where a very high level of hygiene must be maintained clean floors are vitally important. Minute surface defects, or joints between sections of tiles, however narrow, can harbour bacterial growth, the by-products of which can cause serious floor deterioration by penetration below the surface. A jointless floor is, therefore, demanded, and the self-hardening epoxy-resin floor supplies this requirement.

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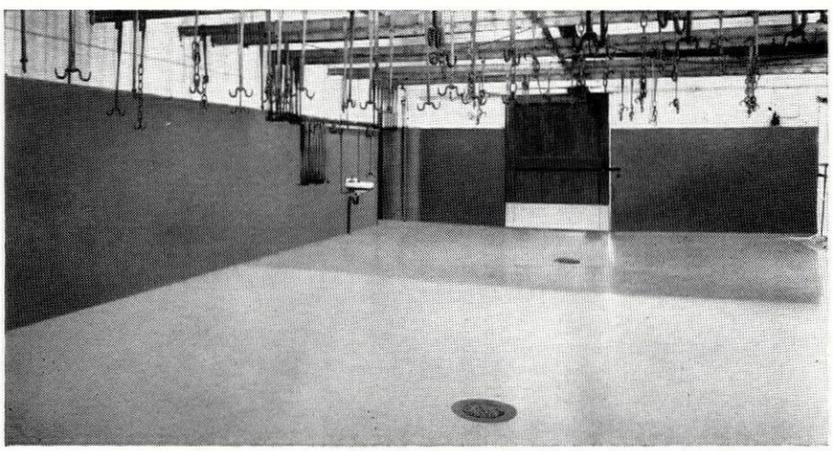
The savings effected by the elimination of floor maintenance, together with the incalculable economic value of vastly improved hygiene so vitally important in food manufacture, far outweigh the cost of installation.

Mr. D. L. Airey (Liverpool Central 6671) of J. Bibby & Sons Oleochemicals Division, will be pleased to discuss all aspects of these important new floorings with architects and factory managements in the food and allied industries.

ABOVE. *This high-gloss, non-slip hygienic floor was laid by Protective Materials Ltd. of Birmingham at the Aintree factory of a leading biscuit manufacturer, using Bibby Merginamide in the epoxy-resin hardener.*

LEFT. *The Carborundum Company Ltd. of Manchester laid this grey, non-slip, self-levelling epoxy floor at a new meat processing factory of Lockwoods (Liverpool) Ltd. at Bootle Industrial Estate. It is fully resistant to the effects of animal fats.*

BELOW. *Bibby Merginamide was used in the curing agent for this self-levelling epoxy floor laid by the Carborundum Company Ltd. at an abattoir at Shipley, Yorks. It is unaffected by wide temperature variations from below 0°C to the temperature of hot water used for hosing down.*



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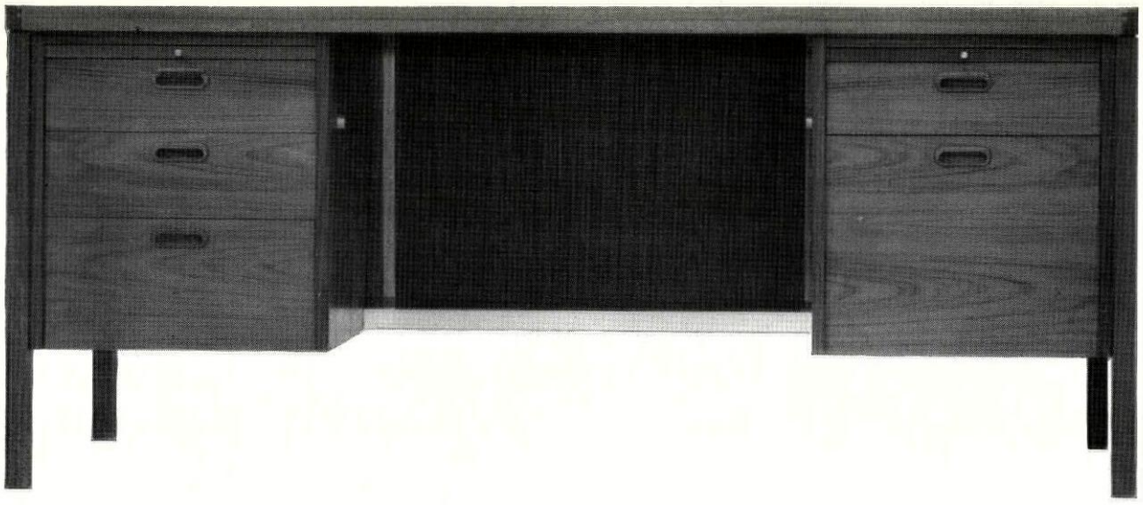

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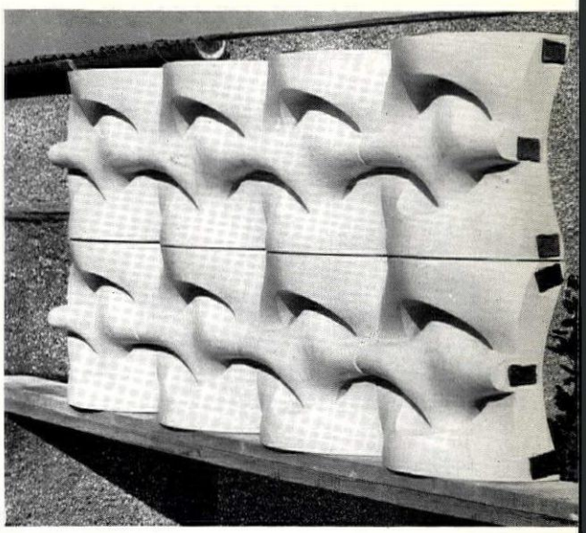
with sample units of each. Accompanying this article are photographs of some of the walls, shown in the buildings for which they were designed. They are also, however (with the exception of the trellis wall-unit, 4, commissioned by the Cement and Concrete Association for their demonstration grounds at Wexham Springs), in ordinary production, priced by the yard or the unit, and the units can be produced in large or small quantities. They are mass produced in factories specializing in casting the particular material (but which have never previously executed art work) and there is practically no handwork involved except at the stage of installation.

2 shows a concrete example—an end wall of Cater Bros.' office building at Chelmsford, completed last year. The sculptured wall was commissioned by the architects of the building, Shaw and Lloyd, and is composed of six different units (of three different sizes, each with high and low relief). The units are shown in close-up in 1.

3 is a detail of wall in bronze fibre-glass completed last year at Southampton for the River Test Supply Scheme building (L. Berger, city architect). It is composed of four units, each 2 ft. by 1 ft. and a 1 ft. by 6 in. end unit.



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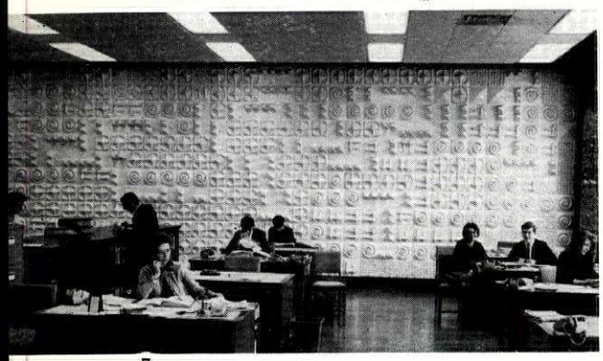
4 shows a block of eight units (in plaster)

of the Trellis design commissioned by Jellicoe and Coleridge, architects, for the Cement and Concrete Association at Wexham Springs. This block is included in the Embassy exhibition in advance of the eventual construction at Wexham Springs in the form of a wall, probably 60 ft. long and 10 ft. high, in terra-cotta. The units are 20 in. square and 9 in. thick. They are double sided, designed as a self-sustaining building unit for walls, pierced and sculptured on both sides.

5 shows a white fibre-glass wall in the Eagle Star Insurance Co. building at Leeds (architects, Charlton and Crowther) completed in 1965, and 6 shows the same wall in close-up.

7 shows an external wall in concrete, 37 ft. high and 28 ft. wide, at Sunderland technical college (Harvey C. Bishop, borough architect), completed in 1964.

Mrs. Cunliffe was born and studied in New York but has lived in England since 1949. Besides the unit sculpture illustrated here she has designed individual works of sculpture for buildings at Leeds and Liverpool Universities and at schools at Liverpool and Manchester. She has had an exhibition at the Hanover Gallery, London, and at various American museums. She says that, in working on these unit sculptures, her greatest problem technically has been to find materials which are not only inexpensive but will wear and weather well without upkeep. The fibre-glass is very easy to install: it can be mounted on a framework of battens and its packing and transportation are relatively simple and inexpensive. The concrete is no more expensive and obviously more suitable for outdoor use, but only the finer and more expensive grades present a colour and surface that will remain attractive after many years. The original designs are loose compositional ones, which are then reduced to a grid pattern with a colour key equating colour value with texture. Mrs. Cunliffe's starting point was the fact that modern buildings must be sheathed with some material, and this offers an opportunity for decorative textures that are not simply applied. Hence a unit that is both sculptural and intrinsically a structural block rather than a facing one.



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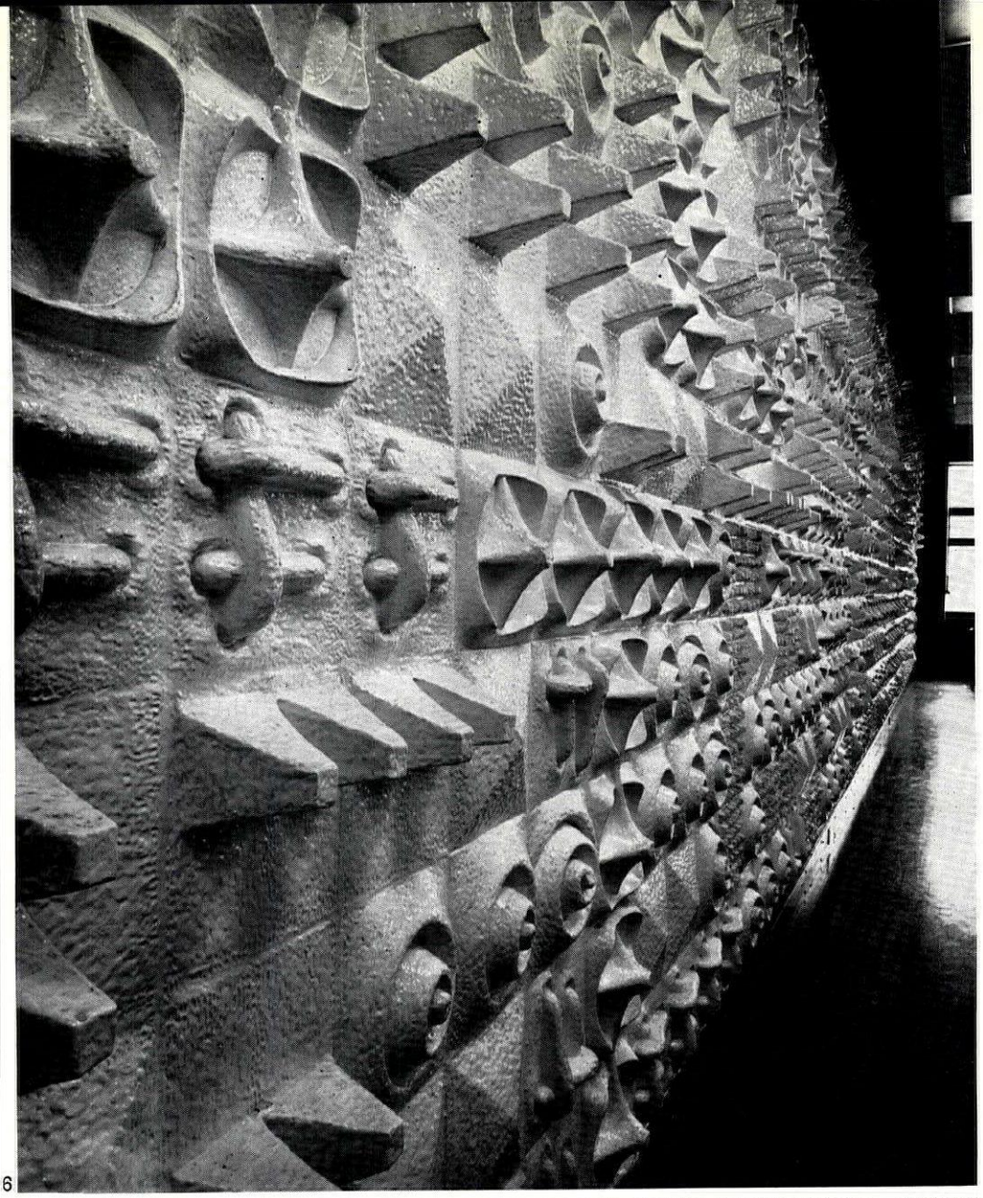

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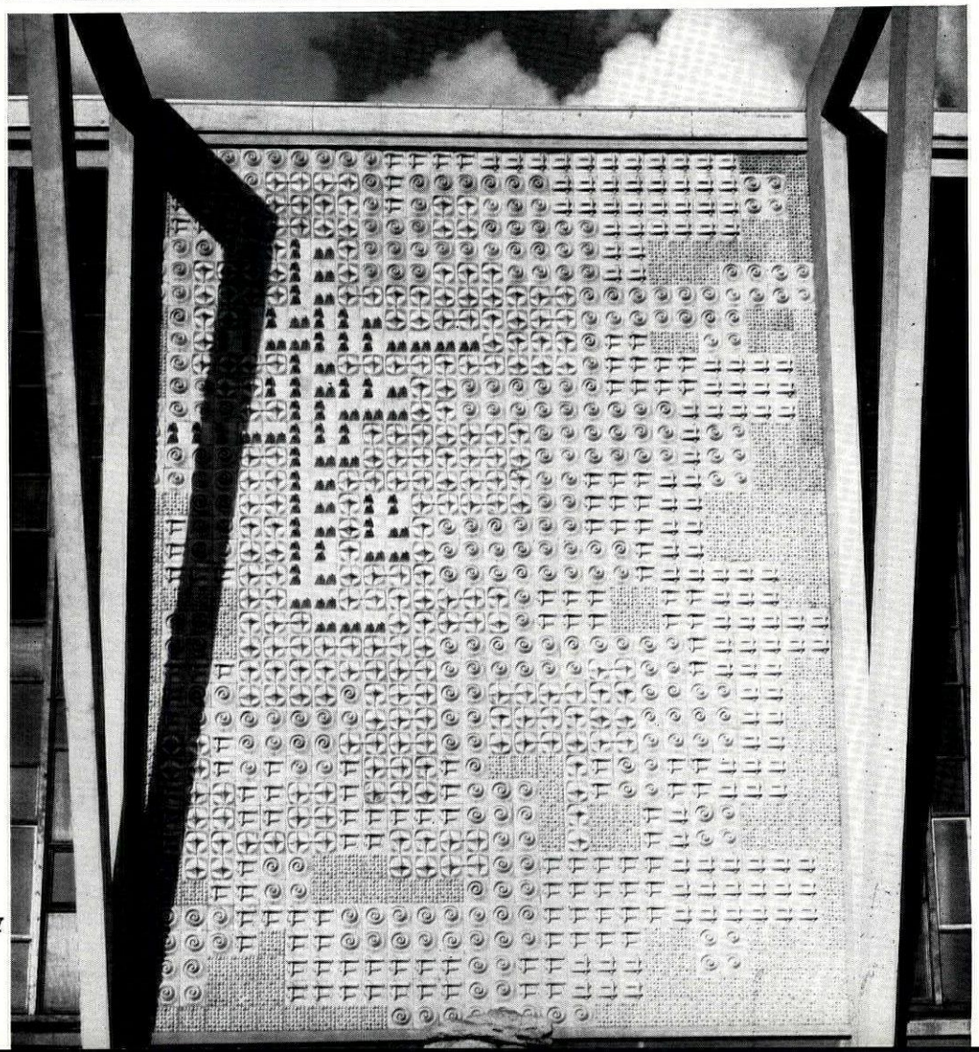

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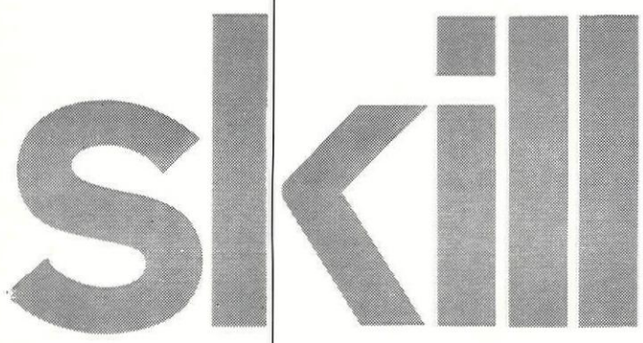
Campus competes

The new LM Campus Group has been designed with the University Grants Committee foremost in mind. Furniture worthy of the name LM was the brief - but with the added proviso that it must be within the U.G.C. Budget. Impossible? At one stage we thought so as well - but our designers and some new machinery got together and did it. A complete range including items not illustrated in this advertisement. If you don't believe us, why not ask the University of Leicester, the University of Essex, the University College of South Wales & Monmouthshire, the University of Strathclyde, the University of Warwick, to mention only a few - or better still, don't bother them, just ask our London Showroom to send you full details.

If you have not yet received a copy of our mailing 'Fire and Plague' please write to our London address

Inside housing: a problem for the furniture industry

What is the matter with popular furnishing? Why is it that relatively high design standards in dress reach the un-wealthy section of our society much more readily than high design standards in furnishing? In this article Kenneth Agnew and Patrick Purcell, both of the Royal College of Art, confront the problem of the furniture equivalent of the Parker Morris housing standard.



The technique of industrialized building, and its impact on the problem of low-cost housing is engaging many of the best minds in architecture. The transformation of this housing into homes is an operation which should be engaging the energies of industrial designers: product, interior, furniture, textile and many others.

Unfortunately this seems unlikely to happen on any significant scale even though small numbers of these designers are already working directly with architectural groups. Studies in planning, ergonomics, sociology and many other fields are being conscientiously conducted. As in the design of hospitals and schools, full size mock-ups will be used. Performance specifications will be published for furniture and equipment, perhaps even design recommendations and model layouts will appear. This work will undoubtedly prove to be quite well done. Unfortunately it cannot reach far enough. We are seeing a non-architectural problem being approached in an architect's way.

The insides of homes do not set the same problem as the insides of hospitals or schools, and the difference goes very deep. Its importance rests on the largely unknown relationship between people's happiness and their homes. It would be foolish to deny that a home that is mechanically adequate, efficient and comfortable makes a considerable contribution and it would be equally foolish to overstate the potential of perceptual and aesthetic amenities. But it would be ludicrous if half the design fraternity were to be left out of a project of environmental design vaster and socially more valuable than any yet attempted.

Urban neuroses seem to increase steadily. Affluent overcrowding produces the same stresses in the Netherlands as in California. The two kinds of LSD are found together surprisingly often. In Western Europe at least, the increasing frustrations of personal transportation, over-use of public open spaces, unavailability of private gardens, the falling off in live audiences for sport, seems to show that increasing amounts of our increasing leisure are liable to be spent inside homes, whether our own or other people's. In this context the Parker Morris report itself contains discouragement. It observes, for example, that flat dwellers need as much floor space as house dwellers, whereas most people, including all mothers with young children, would claim that they need considerably more. So how are these mini-homes to be finished, furnished, and equipped?

At first sight the problem looks like a meeting between a lethargic industry, a poor merchandising set up, an unprofitable customer, and an out of touch designer. The furniture industry is more handicapped than most others in taking a design initiative, due to its lack of coherence. The big makers admittedly employ known designers, and do not entirely confine them to prestige ranges and contract furnishing.

The three biggest makers, however, between them account for only 8 per cent of the industry's output. The bulk of the industry relies on home grown staff designers for the solid and very slowly evolving middle market and, with the partial exception of the whitewood trade, treats the low income customers as a depressed sector:

'Small firms relying less on quality, who supply the limited market for very cheap furniture.' *Consumer Council Study*. HMSO 1965.

The design breakthroughs to combine high appeal, low cost, and high performance to new specification, will not come from a horde of small family firms, all saving hard for their dolls house stands at the Furniture Exhibition, and in many cases having their design done for them by the retailer.

Merchandizing

The inside of any home consists, apart possibly from some of the kitchen and sanitary equipment, of an extensive, only partially organized collection of fashion objects. It is an interesting anomaly that popular dress fashion among young people does not differ greatly from the dress fashion of groups more sophisticated in other ways. The comparatively high general standard of clothing design is based upon chain retailing which can combine the economics of bulk ordering of styles, with the wide consumer choice from the numerous styles to be seen in any one showroom. In addition there is the fact that dress design ideas and fashion motifs are propagated extremely easily via news media and television quite apart from actual advertising. Jackie Kennedy has been a taste leader from the front pages of the *Daily Mirror* more than once. A Hille polypropylene chair has to do this from the works canteen. Dress in fact has a better merchandizing system than furniture.

The formation of popular taste in furniture and furnishings is not at all broadly based as far as communications media are concerned, being confined largely to the mail order catalogues or those sections of the popular press which advertise three-piece suites and government surplus asbestos hen houses in the same column inch. There is almost no in-context advertising of low price furniture or furnishing.

One partial exception is the well illustrated 'Electricity' supplement to *Woman* which is being given away to people as they pay their electricity bills. This shows numerous interior schemes photographed and reproduced in good colour and, while not being aimed at the 'Parker Morris Market,' it gets into 'Parker Morris homes.' It at least stimulates.

While the furniture industry's current publicity drive is welcome in principle, it will have little impact on the cheap furniture problem until it recognizes that very much cheaper furniture should and could exist if design talent were appropriately mobilized, and included this in its campaign.

The customer

The putting together of a home is a design act of the most difficult kind. It is usually co-operative, extended in time, subject to personality pressures, and simultaneous with use. It calls on complex skills, user requirement specification, value analysis, estimation of wear and ageing characteristics, plus all the obvious visual judgments. Many Parker Morris home makers have less opportunity or less ability to develop these consumer skills.

Education

The less affluent home users may need far more from their dwelling

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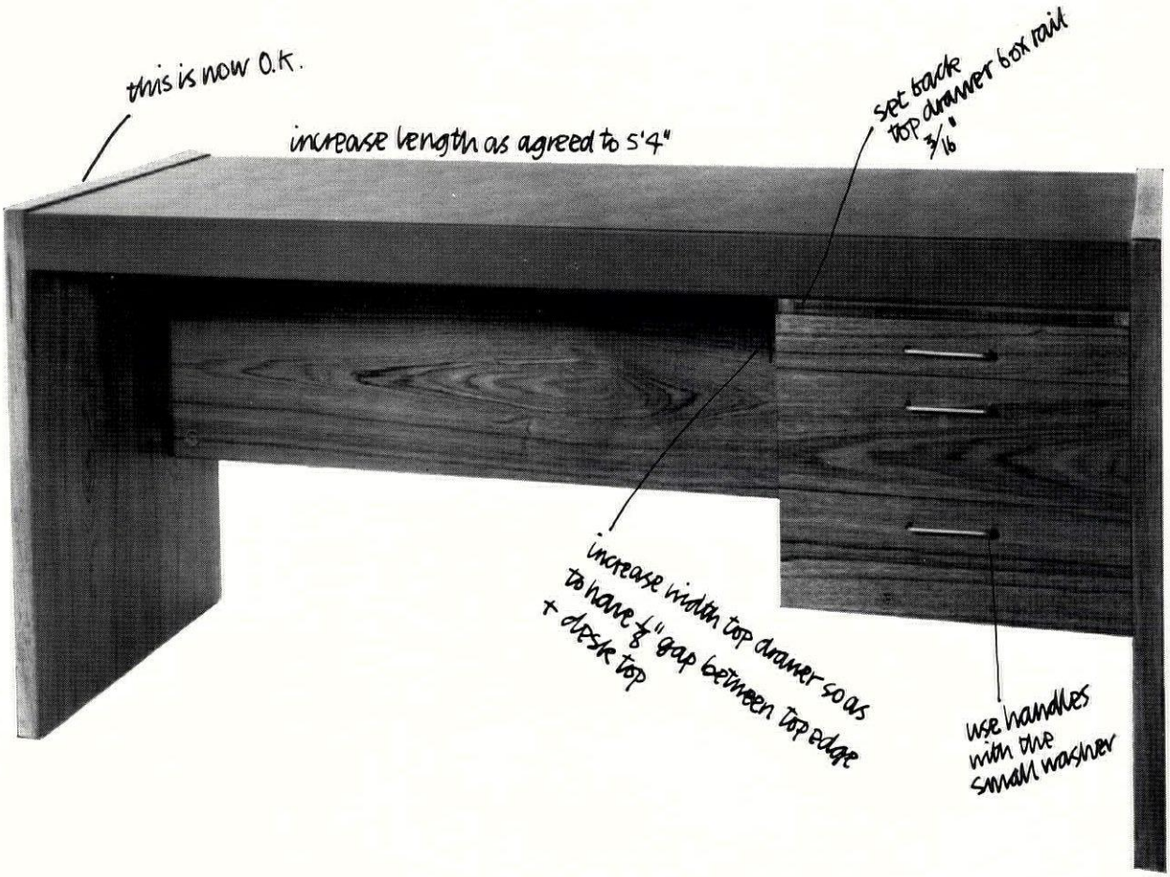
LM Furniture Ltd

43 Earlham Street London WC2 Telephone Covent Garden 2577

Wallingford Berkshire Telephone Wallingford 2258

LM furniture structures and interiors



We're working on it

The LM Designers are at it again!
The pace was set by our Campus furniture - now we are working on new ranges of desks, seating, chairs, outdoor furniture, unit seating and tables to be made in Ash, Teak, Rosewood and Iroko (for outdoors).
They are all Top secret of course but we are letting out this photograph from the new Quorum II desk range to give our competitors a chance! Our Managing Director has as usual scribbled all over the photograph and you can now see the final versions in our London showrooms.

If you have not yet received a copy of our mailing 'Fire and Plague' please write to our London address

1, *popular taste leader.* 2, *bed-sitting room at Leith Fort, Edinburgh.* 3, *dining room at Stevenage.* 4, *popular print of* 1965 (*'Minsmere' by Rowland Hilder*). 5, *public ornament (mural on the Brandon Estate, Southwark).*

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than any other group in the population. Floor space is tighter, particularly when heating is economized on, the breadwinner is more likely to work shifts, the wife, particularly when there are young children, may be a so-called 'outdoor worker' operating an electric sewing machine for hours per day in the living room of the family flat. Again, much of the new industrialized accommodation will be taken by elderly people whose problems of physical activity and perception might be ameliorated by skilled choice of furniture, fittings and finishes.

It may seem irrelevant to comment on the need for design assistance in the essentially private process of home making, particularly for those who could never afford such assistance. After all, the mock-up studies inevitably lead to 'show flats' and other design examples. Unfortunately the ill educated user is all too prone to take components from the example, assemble them with others in the same old way, and arrive at the same old result. Assistance is needed, but one should question whether the present-day designer would actually be much help.

Remote designers

Most qualified designers are isolated from this end of the home-making market. Between the consumer and the designer of any object of high aesthetic content, whether a house or a hair-style, there exists a relationship based on a mutual acceptance of certain fashion values plus a common background of perceptual experience and even of perceptual need. Neither of these requirements is satisfactorily met when the client is the least sophisticated and most numerous sector of the population.

Uninhibited and unsophisticated private taste is, and probably always was, bizarre. It operates exclusively inside the home and may not be predictably affected by public design. The current cool aesthetic which is common ground among all young architects and most designers is confined to a certain social lamina and is believed to owe a lot to Scandinavia. The continuing restriction of this taste to similar social levels in Sweden and Denmark may indicate that the modern style is still irrelevant to the mass of modern people.

It may seem that there are designers in Detroit or Luton, or among the prolific artists of the print textiles industry, with much understanding of mass needs. The failure of the Ford Edsel 'market researched motor-car' and the 'success imitation' policies of the British car industry, underline the patchiness of this understanding in the motor world.

In textiles, a print designer may be serving a wide choice, low cost market, and may be turning out a high proportion of selling patterns, but the situation has elements of what Bruce Archer has described as 'chimp art,' where the stores buyer snatches away the saleable pieces from a profusion of slightly random design activities. The designer is answering a point of sale requirement rather than the needs of an environment and user he may seldom if ever even see.

The designer is thus in a variety of ways isolated from his client, and this may partly account for the poor downward dissemination of the widely, but thinly, spread international aesthetic. There may, however, be a more solid reason. The designer's tacit assumption that all human beings have similar perceptive needs could be entirely wrong.

Men who mind capstan lathes, or women who pack eggs, spend much more of their lives under conditions of numbing visual monotony. This is not true of the designers, nor is it true of the architects, painters, doctors, engineers and executives among whom he finds his friends and for whom modern interior design, reduced to its essentials, is little more than an exercise is visual variety reduction. This is not to justify the present ill-considered combination of ill-considered motifs in the machine-minder's flat, but the designer of his furnishings may one day have to acknowledge that he is dealing with a valid perceptual bias.

One example may suffice: any general improvement in the standard of design of low cost home-making components must wait upon changes in the industries and possibly in the design world, in some ways comparable to the rationalization that is making industrialized building possible. And these changes must wait upon the much more accurate

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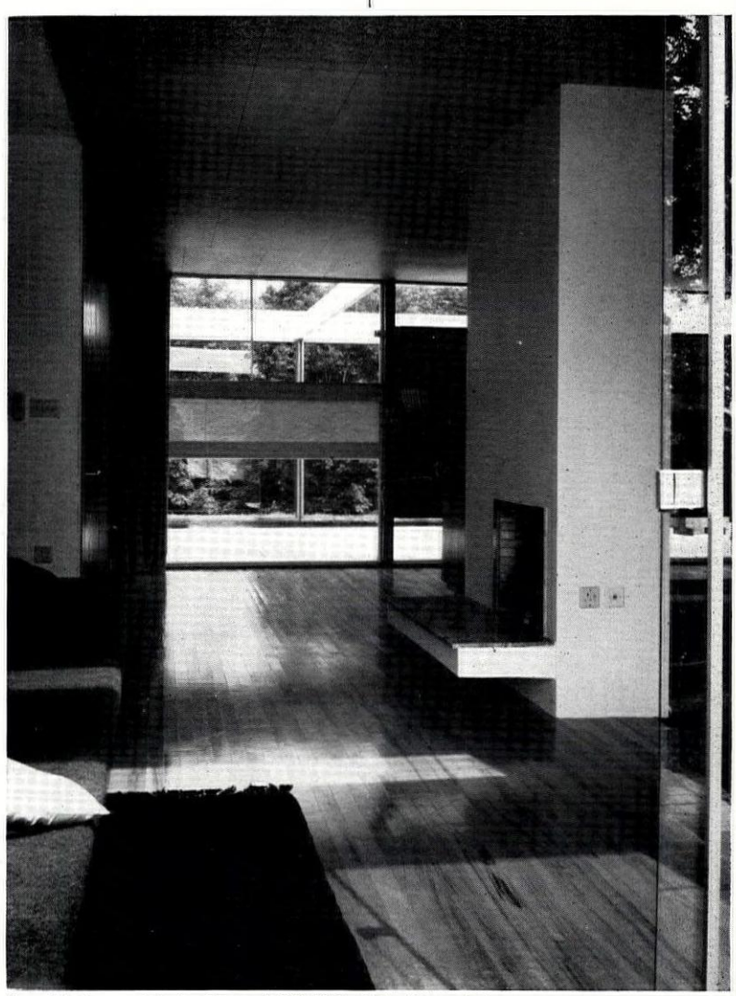

6

6, architect's own interior (house at Selkirk by Peter Womersley).

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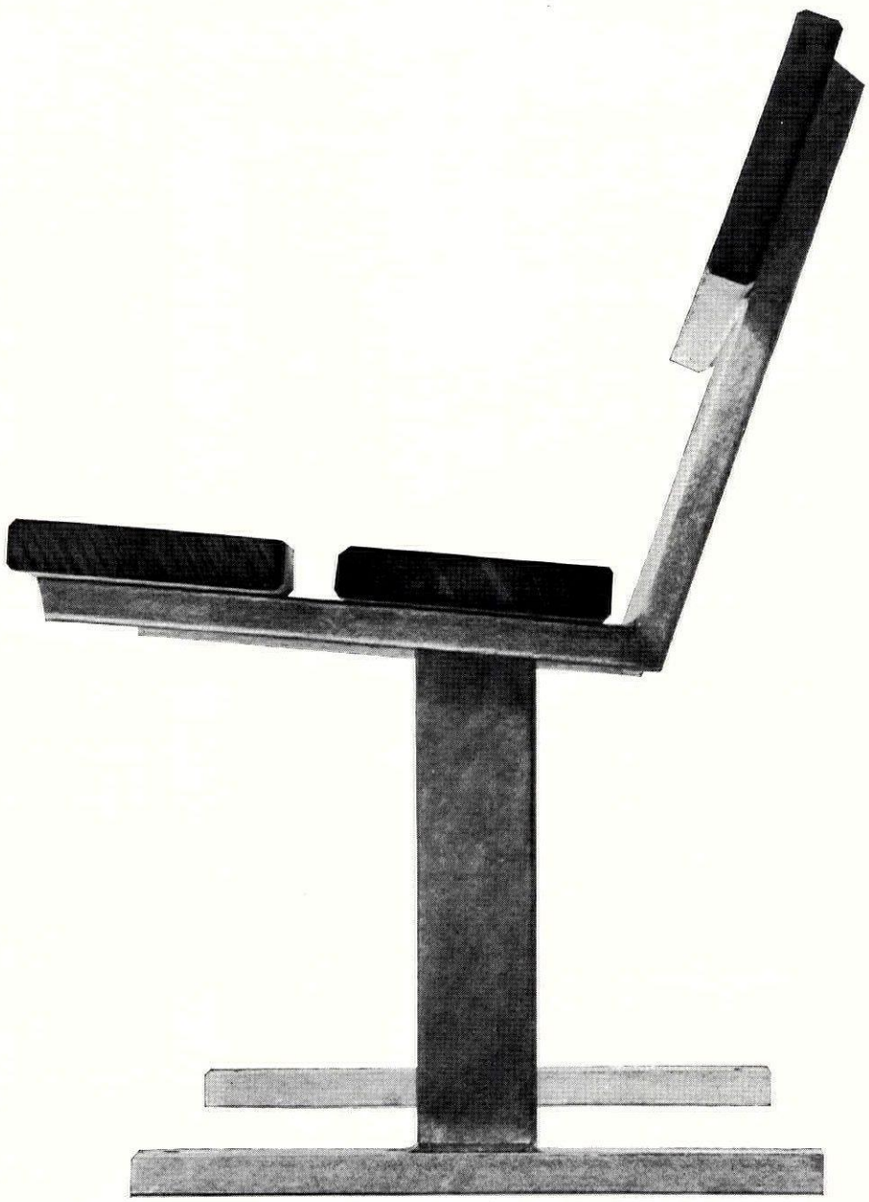
LM furniture structures and interiors



LM Outdoor Seats have become part ot the Landscape.
We are proud that at London Airport and Gatwick they may be the first and last impressions of Britain to a visitor. Also that they are used by the National Trust and many Cities and Towns such as Windsor, Canterbury, Coventry, Oxford, Birmingham, etc.
Unusual attention has always been given to comfort and maintenance free strength.
We now introduce this entirely new design intended to provide the toughest and most seat, for the least money.

Everything points to Pointer

If you have not yet received a copy of our mailing 'Fire and Plague' please write to our London address

7, *built-in furniture designed by R. L. Carter for Consort.*

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understanding of user needs of every kind that the various low-cost living studies will have to provide.

It will be a long time before the shops are full of a great variety of well designed and really cheap furniture, carpets and curtains, and if there is to be any immediate contribution by the design fraternity it must involve assistance in consumer choice—the first step in the creation of a more sophisticated market. Even this limited objective seems impossibly complicated when considering such a multitude of products, people and interests.

A game approach

Such a situation can sometimes be simplified by treating it as a game and giving the players one or two simple rules intended to enable 'moves' or decisions which are good in principle.

In this case the game would be concerned with the discovery of useful combinations to achieve varied ends and would rest on three principles.

(i) the moves are marked on the pieces;
(ii) designers put the marks on;
(iii) anyone can play.

Two well-known examples of this kind of game come to mind. The first is Jock Kinneir's hospital signing system, where the self-spacing letters are so presented that they settle themselves comfortably into words, and the words into legible and professional looking signs and notices, without calling for skilled judgments from the user. Arrows, asterisks and symbols are similarly co-operative. This is a very simple game but it has an extra feature. It is open ended. New 'pieces' can be introduced.

The second example is more complicated and is psychological rather than graphic, a game in the form of a book *Meet Yourself as you Really Are* by Leopold and Gerhardi. This sets out to give an individual personality analysis. It operates on the marshalling yard principle with an elaborate judgment problem at each set of 'points' which, when resolved by the player, directs him onward to the next problem, and ultimately to his own unique 'personality siding.' It is not simply fantasy to suggest that in a perfectly free market a 'game' of this kind could be played between numerous designers and the entire public. The 'pieces' would be existing or newly designed manufactured objects of every kind, from a particular 'put-u-up' to a wall-paper pattern. Each piece would somehow carry with it its 'move' based upon a qualified designer's opinion of the character or 'combinableness type' of the particular piece. The actual marking of the pieces might pose a nice problem in semiotics.

The customer would find that articles, patterns or colourways bearing the same symbol were likely to relate well to each other. It would not lead to automatic design; simply to a semi automatic second opinion.

The game—'homey homey'?—could be started quite simply by any designer at any point with any piece or range of pieces he is asked to look at, but thereafter any other designer would have to be aware of the developing situation. This communication aspect of the game, in its uncodified form, is at present called fashion. The game might get pretty complicated for the designers and might imply a progressive recasting or even co-operation in design-approach, sales-presentation and publicity on the part of the various 'domestic environment' industries and retail associations. The emphasis would be on making the home-making game easier to play—this after all is what matters to the customer, even the poorest of whom likes to do it for himself. The designers simply ought to be in there adding to the fun.

The Industry

Prefabricated bathrooms

Two polyester resin glass-fibre bathroom units were announced at the end of last year, the Reff, 1, made in Canada, and the Rollosrank, 2, made in Grimsby, the former costing about £300, the latter from £170 to £250, according to the quality of the fittings. There is, of course, nothing new in the idea, which dates back at least as far as Buckminster Fuller's design of the mid 1930's. This was a unit which stopped short at dado height, whereas ICI showed a full height unit with ceiling, all in Perspex, at the first IBSAC exhibition two and a half years ago.

Fully prefabricated units such as these have considerable advantages, as the whole assembly, which includes bath, shower, basin, w.c. (generally ceramic) and flushing cistern, with cupboards, mirrors, light fittings and extract fan, need weigh no more than 300 to 350 lb. and is thus easy to install with a minimum of pipe and service connections. Overall dimen-

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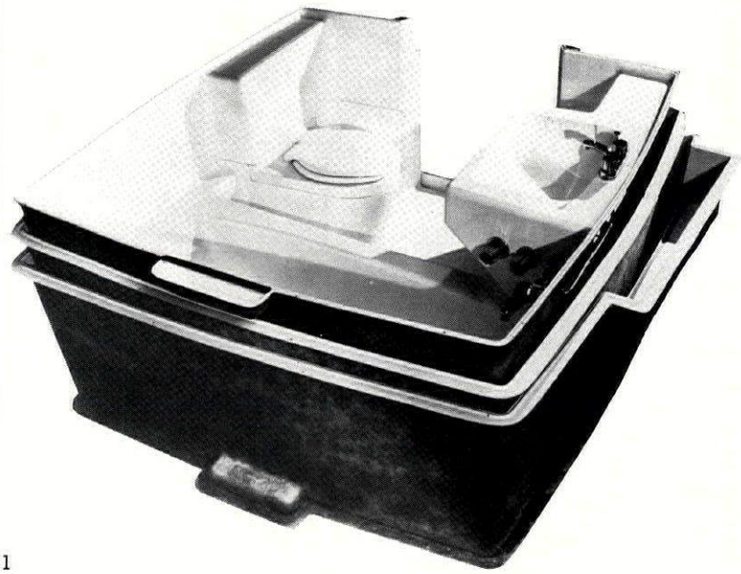

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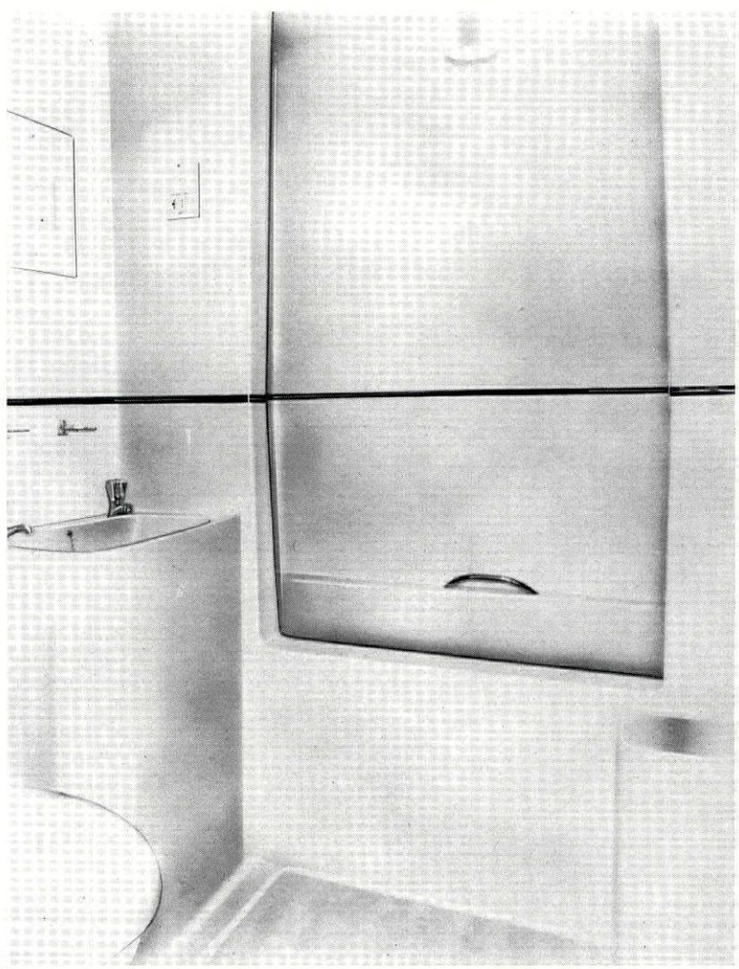


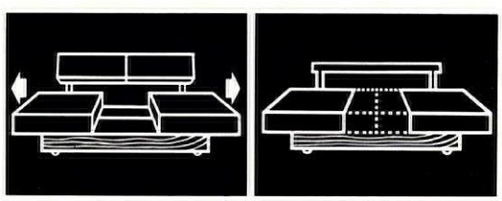
2

Fabulous New Furniture from Peter Pan

"Convertible 67"

STAND 127C

A settee-bed with a simple but ingenious conversion. Seat cushions slide to reveal spacious blanket box - the backs are then placed in aperture forming a luxurious bed. Two settees and an attractive table to match form a room setting or corner unit. Framework in polished Afrormosia.



"High Society"

This exciting new design in soft flowing lines, with unbelievable smooth "rocking" and "swivel" action combines generous sitting proportions with all-round neatness from any angle. This beautiful chair induces the weightless feeling of the SPACE AGE, a floating sensation of sheer relaxation. Beautifully tailored in Cirrus Vinyl simulated hide effect or Washable Brushed Nylon in an attractive selection of colourings.

STAND 127C

GRIEVES & ELLIOT LTD.,
Stoddart Street,
Newcastle upon Tyne, 1.
Telephone 24287

skill

continued from page 162]
sions of the Rollosrank bath are 5 ft. 8 in. by 6 ft. 4 in., with a height of 7 ft. 4 in., and it is made in two halves, factory assembled. The Reff is delivered in four sections for site assembly with tongued and grooved joints, and all the sub-assemblies will pass through a 30 in. wide door. Access to the bath and basin taps is through a detachable panel.

Little is known about the probable life of fittings of this kind, though most manufacturers point out that ships' lifeboats and yacht hulls have survived ten years of hard use. The Building Research Station, which has considerable experience in the interpretation of artificial weathering tests, suggests a life of thirty years for polyester glass-fibre sheeting used externally. The chief source of trouble seems to lie in exposed ends of glass filaments allowing the entry of water into the body of the sheet. Given care in manufacture, and a thick coat of resin, there seems little reason why bathroom units of this kind should not last as long as external sheeting, particularly since repairs can be made without much difficulty. It must, however, be remembered that burning cigarette ends will produce an unpleasant brown mark, and this will be a disadvantage if the units are used for hotel work.

The suppliers of the Reff units are Fulbora Ltd., 9a Central Parade, Hendon, the Rollosrank being made by Rollosrank Ltd., 3 Church Row, Wandsworth Plain, London, SW18.

Wiring systems

The Ampolex system of wiring, 3, makes use of skirting, architrave and ceiling units, all in p.v.c. covered galvanized steel sheet, behind which is run the wiring. The units are made up in standard lengths, all based on the room dimensions of the flat or house, and are supplied in sets, each labelled for the appropriate room. Cover and corner pieces are used to join the units, the wiring being joined by spade type push-in clips which are covered with p.v.c. sleeves. Alterations and additions can be made to the system without any difficulty: cooker and immersion heater circuits are generally separate from the lighting points and sockets. There is a range of switches and sockets, and the consumer units are fitted with circuit breakers. The whole system has been evolved with industrialized housing systems in mind, and the skirting units form a useful method of finishing the joint between structural floors and internal partitions and should save a good deal of time on site. Sockets and switches can be placed as required, and the system should be more flexible than the casting of conduit into concrete panels. Material cost is about the same as for conventional systems, but fixing costs are considerably reduced. The p.v.c. covering the skirting lengths can be in virtually any colour, or painted if necessary.

Aircraft-Marine Products (GB) Ltd., Terminal House, Stanmore, Middlesex.

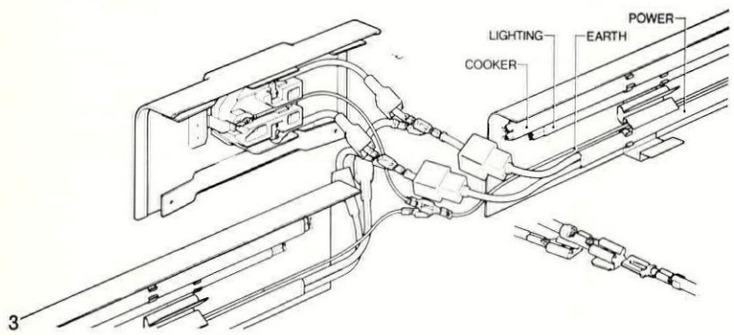
Garden lighting

Frederick Thomas's mushroom type lamps, 4, were first developed for use on Span estates among shrubs or in gardens. The mushroom has a 30 in. diameter shallow dome on a

4

stalk of 1½ in. diameter steel tube, both units are stove enamelled green. The fitting stands just over 3 ft. high and the stalk has an 18 in. root for embedding in concrete with a junction box for cable entry. The two 100-watt lamps are in porcelain holders and a lamp-locking device and guard can be provided to discourage vandals. Price of the standard unit is £14 15s.

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



3

Contractors etc

Office Building, Cambridge. *Architects:* Edward D. Mills and Partners. *General contractor:* Johnson & Bailey Ltd. *Sub-contractors: Mechanical and heating:* G. N. Haden & Sons. *Electrical works:* Eastern Electrical Co. *Landscaping:* B. & N. E. Tacchi. *Railings and gates:* Allen & Greaves Ltd. *Coat of Arms:* Gillian Maddison. *Engraved signs:* Design Engraving Ltd. and British Engraving & Nameplate Co. *Ironmongery:* Yannedis Ltd. *Roller shutters:* Haskins Ltd. *Lighting fittings:* Merchant Adventurers, Atlas Ltd. *Suspended ceiling:* R. M. Barton Ltd. *Partitions:* Tenon Contracts Ltd. *W.c. partitions:* Williams & Williams Ltd. *Venetian blinds:* Venetian Vogue Ltd. *Sanitary fittings:* Stitsons Sanitary Fittings Ltd. *Precast stone:* Atlas Stone Co. *Asphalte:* The Rock Asphalte Co. *Facing bricks:* Hall & Co. *Metal windows:* Crittall Manufacturing Co. *Lift:* Hammond & Champness. *Flush doors:* F. Hill & Sons. *Aluminium entrance doors:* Ajax Aluminium Ltd. *Special doors:* Fire Proof Shutter and Door Co. *Strong room doors:* Chubb & Sons. *Drainage goods:* Broads Ltd. *Floor and wall tiling:* Cope & Co. *Terrazzo paving:* Marriott & Price. *Window boards, etc.:* G. R. Speaker & Co. *Vinyl asbestos flooring:* Anglia Flooring Co. *Electronic internal telephone system:* Pye Telecommunications Ltd. *Laboratory furniture:* Armstrongs (Hull) Ltd. *Drawing office furniture:* E. N. Mason & Sons. *Board room and common room furniture, staff office furniture:* G. A. Harvey Office Furniture Ltd. *Filing cabinets:* Flexiform Ltd.

Offices, Tower Place, London. *Designer:* Robin Moore Ede. *General contractor:* William Verry Ltd. *Sub-contractors: Sub-contractors: Ironmongery:* G. & S. Allgood Ltd., Wehag (Alfred G. Roberts [Exports] Ltd.). *Carpeting:* Thomson Shepherd & Co. *Electrical dimming units:* Standard Telephones & Cables Ltd. *Cooling units:* R. E. A. Bott (Wigmore St.) Ltd. *Executive call system:* Sterdy Telephones Ltd. *Automatic map rollers:* J. Avery & Co. *Furniture:* Couran Contracts Ltd., Interiors International Ltd., Hille of London Ltd., LM Furniture Contracts Ltd., Ian Audsley Workshops. *Glazing and special obscured panels:* T. & W. Ide Ltd. *Light fittings:* Rotaflex (Great Britain) Ltd., Trilux (BBI Lighting), Allom Heffer & Co., Stewart Griffith Ltd. *Partitioning:* William Mallinson & Sons. *Sanitary fittings:* Adamsez Ltd. *Acrylic desk trays:* Xlon Plasties. *Ash tray:* Old Hall. *Planters:* Ceramic Consultants. *Special clocks:* Gent & Co. *Glassware and china:* Rosenthal China (London) Ltd.

School for the Partially Sighted, Exeter. *Architects:* Stillman and Eastwick-Field. *General contractor:* T. B. Keate & Co. *Sub-contractors: Mechanical:* G. N. Haden & Sons. *Electrical services:* Duncan Watson (Electrical Engineers) Ltd. *Steelwork:* Steel Scaffolding Co. *Lettering:* Design Partners (Exeter) Ltd. *Roof tiling:* W. J. Etherington Ltd. *Floor tiling:* Universal Parquetry Ltd. *Plastering:* Stuarts Granolithic Ltd. *Road surfacing, playground surfacing:* Constable Hart (Western) Ltd. *Swimming pool:* Gilliam & Co. *Games hut:* Robert Hall & Co. (Kent) Ltd. *Flooring (wood block):* J. A. Hewetson & Co. *Patent glazing:* Henry Hope & Sons. *Gymnastic equipment:* The Olympic Gymnasium Co. *Double glazing:* Mackenzie (Glass) Ltd. *Glazing:* Andrewartha Ltd. *Roof decking:* H. Newsum Sons & Co. *Planting:* Hillier & Co. *Lightning conductors:* J. W. Gray & Son. *Television engineers:* Peter Scott (Exeter) Ltd. *Sanitary fittings:* Stitsons Sanitary Fittings Ltd. *Stage curtain track:* Hall's Stage Equipment Ltd. *Catering equipment:* James Stott & Co. (Engineers) Ltd. *Bricks and glazed bricks:* Sussex & Dorking Brick Cos. *Concrete slates:* Robert Abraham Ltd. *Fire extinguishers:* George Angus & Co. *Louvre windows:* N. V. Appleton (UK) Ltd. *Window gear:* Arens Control Ltd. *Acoustic tiles:* Armstrong Cork Co. *Window blinds:* J. Avery & Co. *Ironmongery:* H. & C. Davis & Co., Alfred G. Roberts (Exports) Ltd. *'Letraset' lettering:* William Chudleigh & Son. *Clocks:* English Clock Systems Ltd. *Doors:* Gliksten Doors Ltd. *Window ventilators:* Greenwood & Airvac Ltd. *Fire doors:* Haywards Ltd. *Sign:* The Lettering Centre. *Lighting fittings:* Lumitron Ltd., Merchant Adventurers, Churchouse Lighting Ltd., Frederick Thomas, Rotaflex, Coughtrie. *Garage door:* Portal Engineering Co. *Chalkboards:* Wilson & Garden Ltd. *Window balances:* Westland Engineers Ltd. *Rooflights:* Cordar Ltd. *Rainwater goods:* AB Plastics Ltd. *Mosaic (floor):* Pilkingtons Tiles Ltd. *Floor tiles:* Richards Tiles Ltd. *P.v.c. flooring:* James Halstead Ltd. *Furniture, curtains and carpets:* Design Furnishing Contracts. *Carpeting:* Tapper & Sons (Exeter) Ltd. *Kitchen furnishings:* Staines Kitchen Equipment, Grundy (Teddington) Ltd. *Floor cleaning equipment:* Floor Treatments Ltd. *Chinaware:* J. Abrahams & Sons. *Electrical equipment:* Peter Scott (Exeter) Ltd. *Doormats:* City of Exeter Workshops for the Disabled, Cunex Ltd. *Flatware:* Boots the Chemists. *Ophthalmic equipment:* C. Davis Keeler Ltd. *Bed linen:* Druce & Co. *Gym. equipment:* Lillywhites. *Ceiling airers:* MM (Plastics) Ltd. *Mirrors:* Mackenzie (Glass) Ltd. *Fire grates:* Rowe Bros. & Co. *Towels:* Rowland Brothers Ltd. *Porter's truck:* H. C. Slingsby Ltd. *Projection screen:* Andrew Smith Hackness. *Stage lighting:* Strand Electric Ltd. *Mower/cultivator:* Stanley A. F. West Ltd. *Litter bins:* White & Carter (Councils) Ltd. *Plastic tableware:* A. Yeates & Sons.

Ian Nairn

STOP PRESS

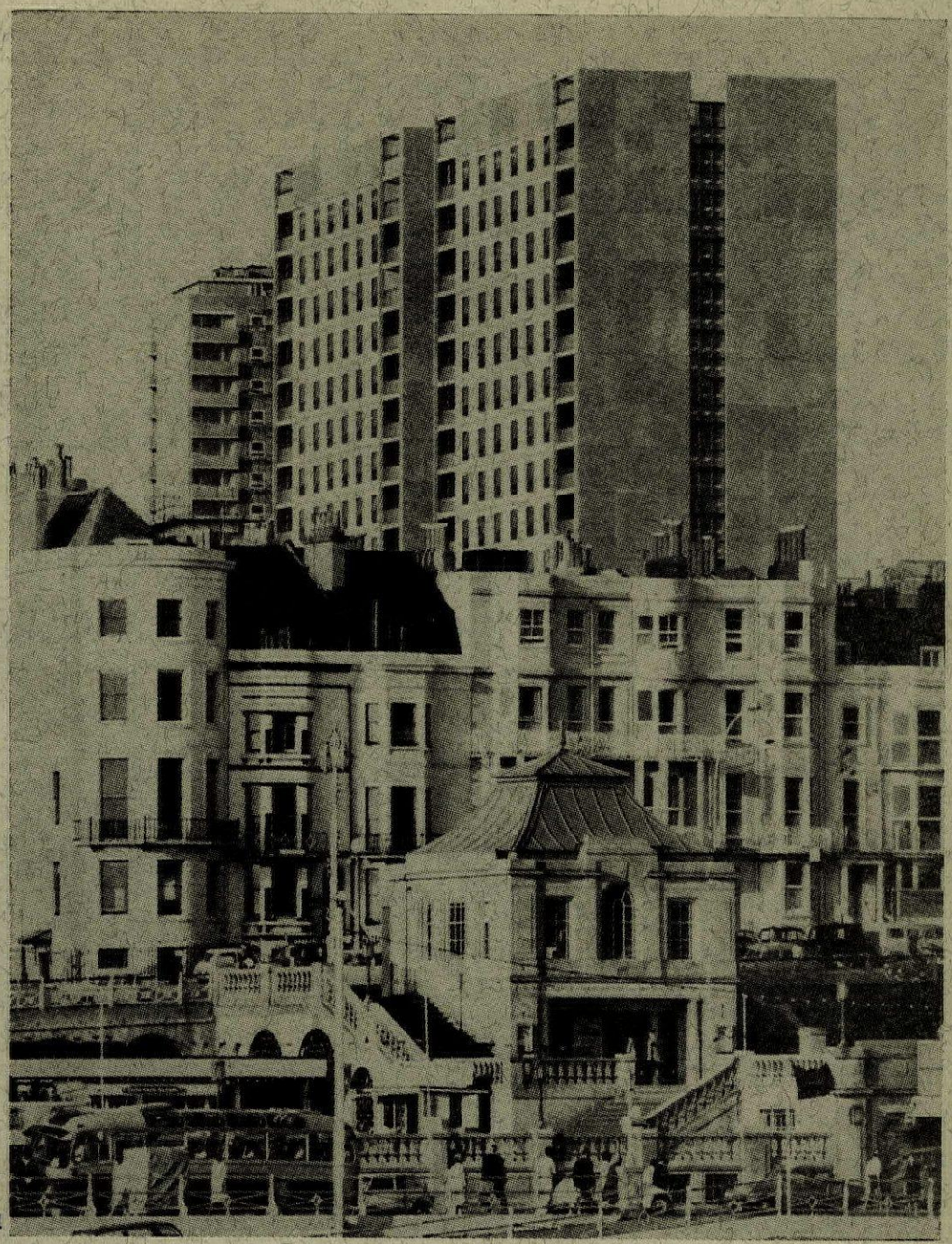
A monthly anthology from all over Britain of townscape problems, outrages and opportunities, compiled by Ian Nairn with drawings by G. J. Nason.

OUTRAGE

BRIGHTON
A few months ago we reprinted an illustration from Cubitt's magazine showing how they had constructed a new and inglorious skyline for Bristol. Now it is Wates' turn: here is what they call a Brighton's-eye view of Wates, 1, from *The Architects' Journal*. Not quite what Nash meant.

DICKLEBURGH, NORFOLK
A County Surveyors' department still on the old road-widening trail in a pretty village, 2, on A140 between Norwich and Ipswich. A spokesman, to quote a recent issue of the *Eastern Daily Press*, said 'some of the buildings in the street would have to be demolished and he thought that all the buildings opposite the church would have to come down. It was all part of the comprehensive improvement.' Ten-year-old talk about environmental areas doesn't seem to have reached this far end of East Anglia yet. Nor apparently the simple conception of a by-pass.

CARMARTHEN
We illustrated a new school at Pont-y-berem under this heading in August. The County architect has told us that it is not so new—it certainly looked like it—being finished in 1959. He says it



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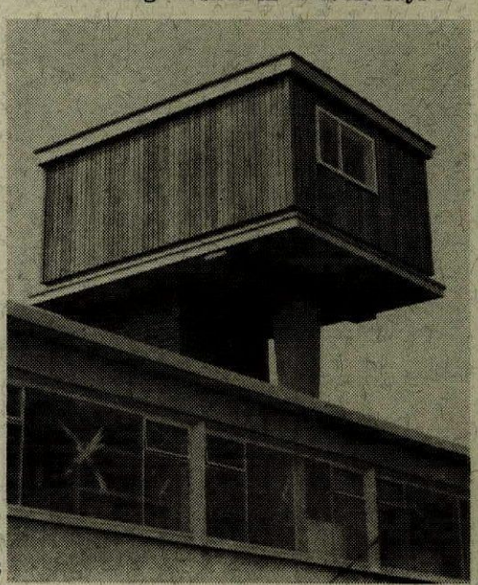
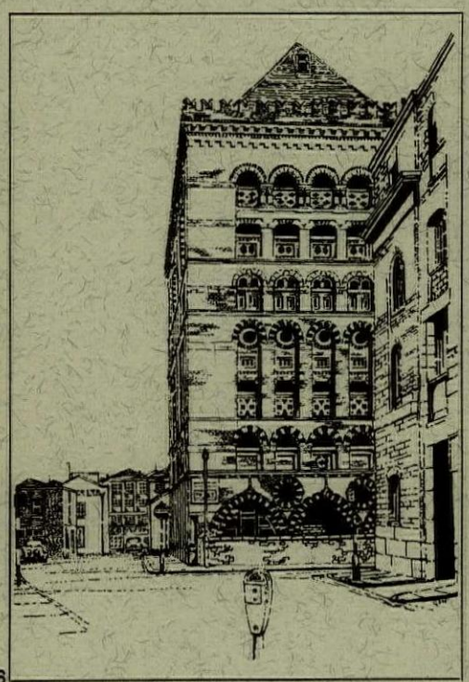


3

is not at all typical and encloses two photographs of the county's modern style, 3 and 4.

S.O.S.

BRISTOL
Two warehouses in imminent danger; one severe and classical, 5, which is to be demolished even though it is not quite on the line of a realigned ring road. The other is a wild and famous Victorian folly, 6, on Welsh Back which is now empty. In this case the City Engineer would like to preserve the building, but



6

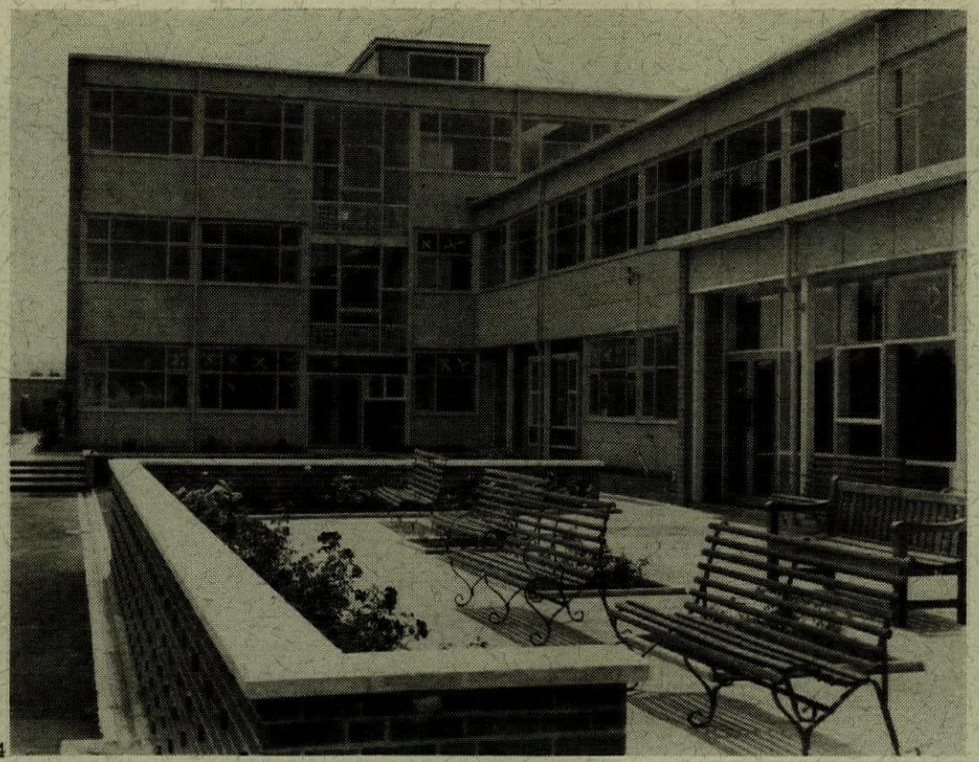
a suitable tenant is needed urgently. This part of the ring road has two more sad features: it will seal off the Welsh Back and its warehouses from the river, and take away the last bit of Bristol's city-and-boat relationship, and in spite of the fact that it is supposed to be a relief for Queen Square, traffic will run diagonally across it.

CREDIT

WARDOUR CASTLE CHAPEL, WILTS
A thanksgiving service for the restoration of this superb building, 7 (Paine, altered by Soane), was held last November after an appeal which raised £30,000 in three years. Well done.

TAILPIECE

WIRRAL
From a recent Wirral evening paper 'Applying for permission to erect a filling station near some seventeenth and eighteenth century buildings at Irby (including Irby Hall), a barrister said his client would be willing to use local sandstone in the premises' construction and would also be prepared to throw in a bit of imitation Tudor.
'This offer was apparently in response to opposition from Wirral Urban Council who feel a filling station on this site would be out of character with surrounding property.'



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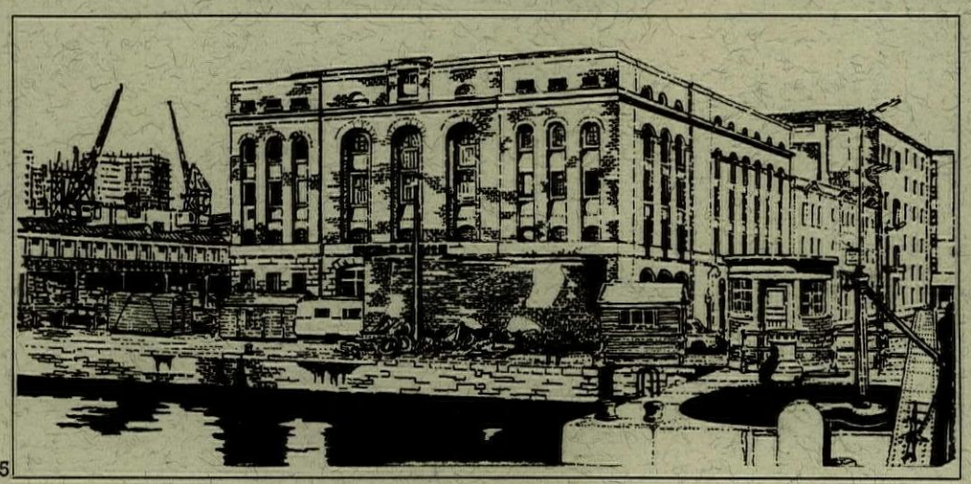

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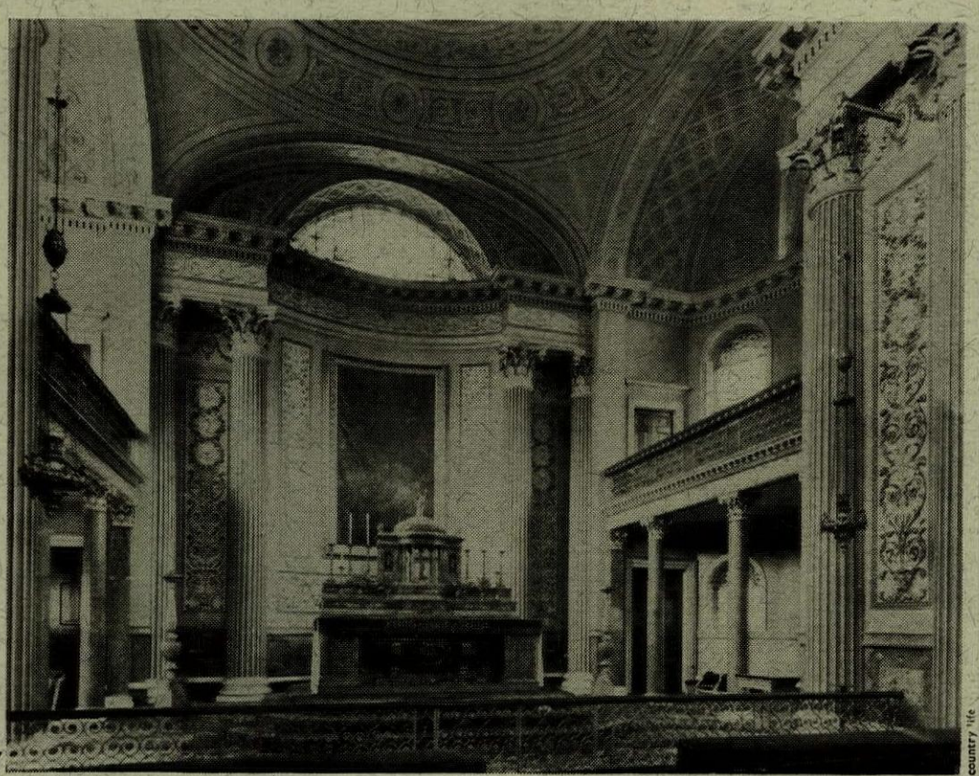

7

Owners: Tower Hill Property Co. Ltd. Architect: George Trew Dunn. Windows: Crittall.

Alcan suits the mood of the building

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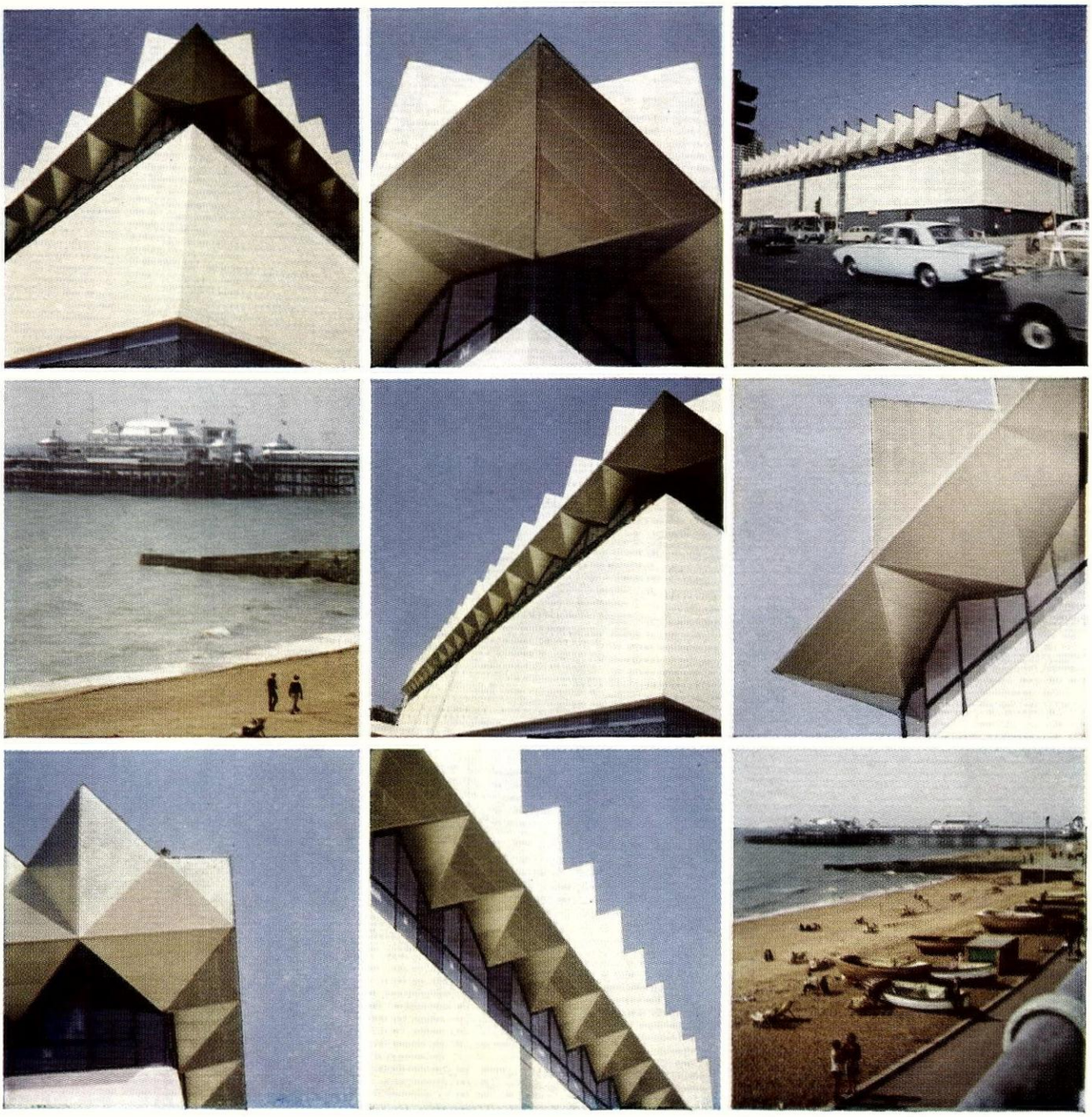
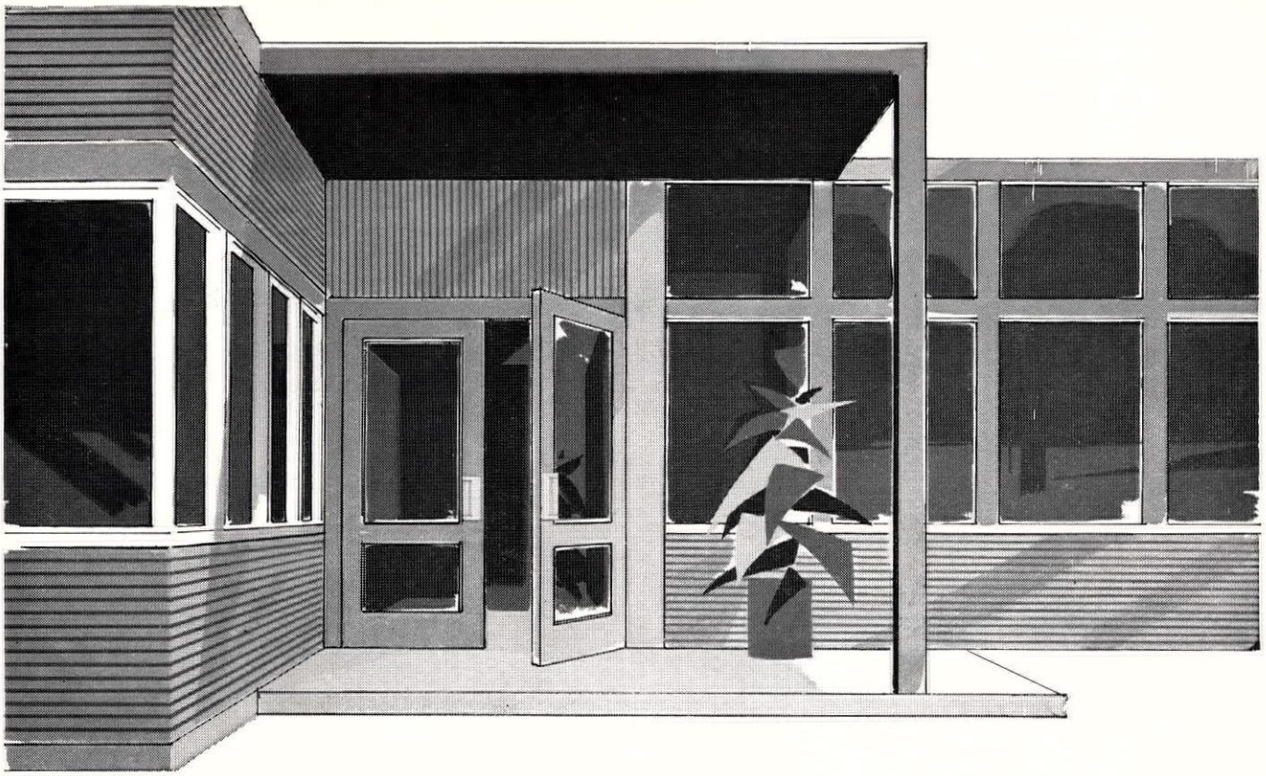
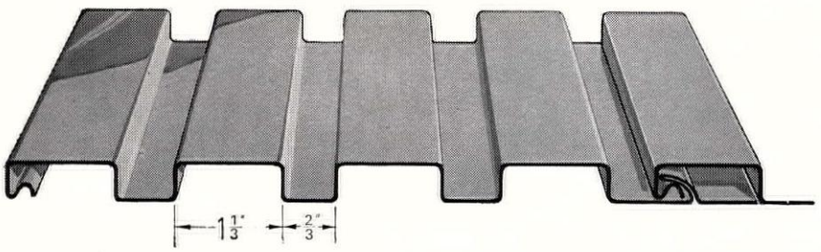


The Entertainments Centre, Brighton, photographed as it neared completion.
Contractors and Developers: Myton Ltd. Architects: Russell Diplock Associates. Engineers: Phillips Consultants Ltd. Alcanodox feature: Marsland and Company Ltd.



New coloured slimline "Fascia Rib" makes a big deal out of small surfaces

(with no visible means of support)*



Formed from Duralcote permanently coloured aluminium, Fascia Rib can be fixed vertically or horizontally—according to need. *The panels are interlocking, no fixings are visible to mar the overall cladding effect.

You can get lengths of up to 16' 6" on an 8" wide panel—the slimline ribs being only 1⅓" wide. All Fascia Rib is maintenance free, and comes in Off White, Fawn Grey, Dove Grey, Charcoal and Blue.

Fascia Rib is manufactured by:

JAMES BOOTH ALUMINIUM

James Booth Aluminium Limited, Kitts Green, Birmingham 33. Telephone: Stechford 4020

Fascia Rib is supplied and fixed by the following. Write today for further details.

Sevenoaks, Kent: Lansmar & Co. Ltd., Vestry Road, Sevenoaks, Kent. Tel: Sevenoaks 54927/55642.
New Malden, Surrey: A. W. Banks Roofing Ltd., 61 Blagdon Road, New Malden, Surrey. Tel: Malden 7307/3900.
Stourbridge, Worcestershire: Monoclad Systems Ltd., Audnam, Stourbridge, Worcestershire. Tel: Stourbridge 6255.
Manchester: E. R. Dyer Ltd., South Street, Levenshulme, Manchester, 19. Tel: Rusholme 2812-3-4-5.
Bristol: Baileys (Bristol) Ltd., "Brookland House" 89 Lower Ashley Road, Bristol, 2. Tel: Bristol 51436.
Sheffield: Allclad (Roofing & Engineering) Ltd., Monksbridge Road, Dinnington, Sheffield. Tel: Dinnington 2406.
Newcastle-Upon-Tyne: D. W. Tilley (Newcastle) Ltd., 2 Eslington Terrace, Jesmond, Newcastle-Upon-Tyne, 2. Tel: Newcastle 810892.
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on and on (we've already planned 250 different bays)

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Patent and Design Application Nos. 38967/63, 39072/63, 39073/63, 50956/63, 29658/954, 913733.

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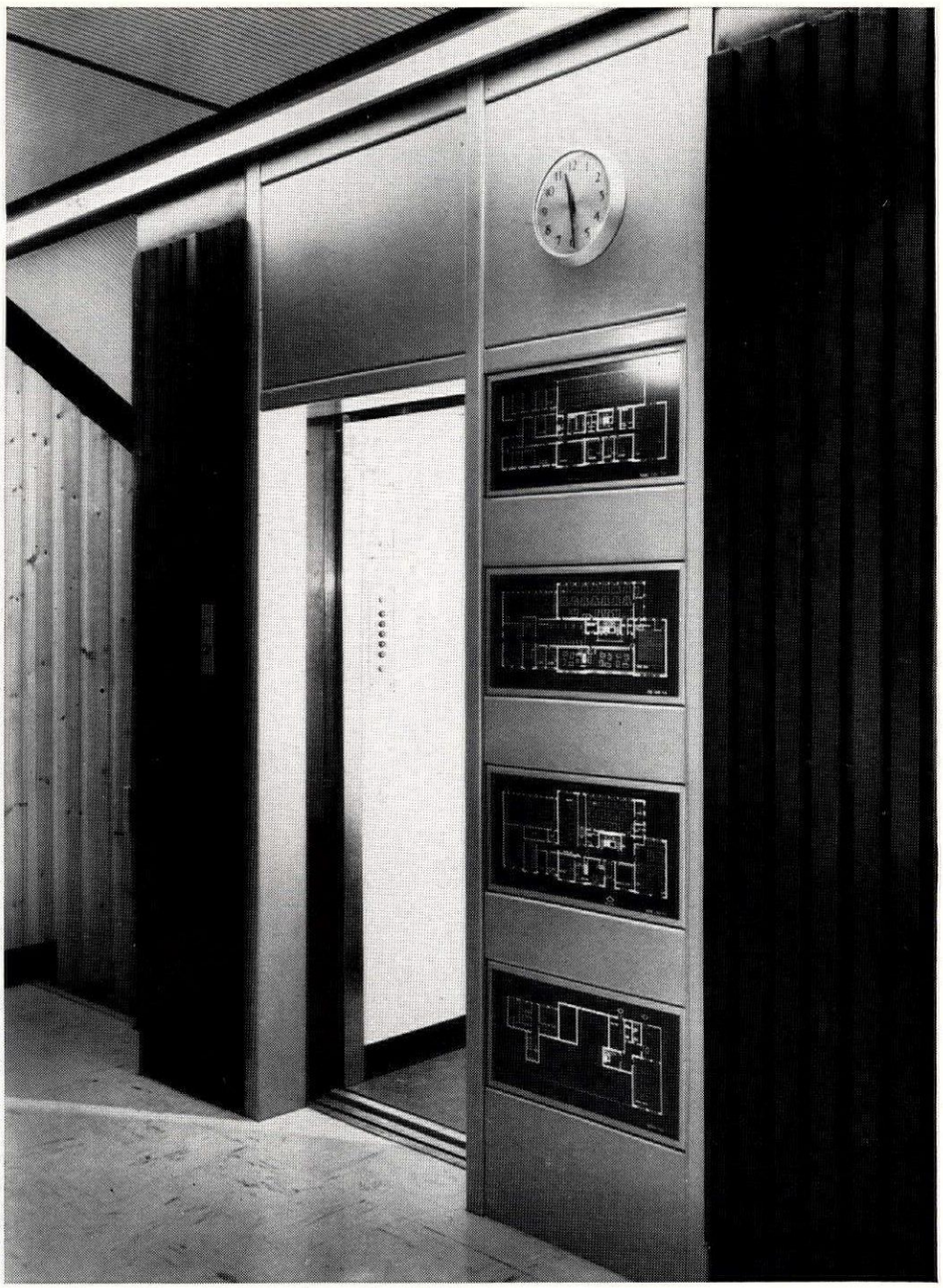

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