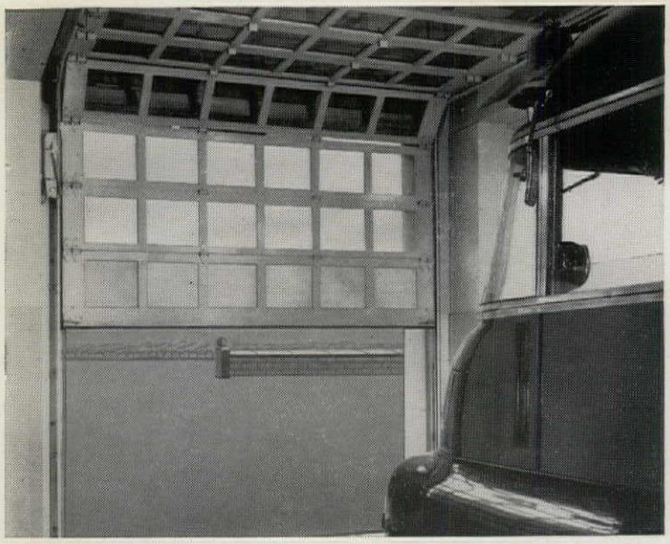

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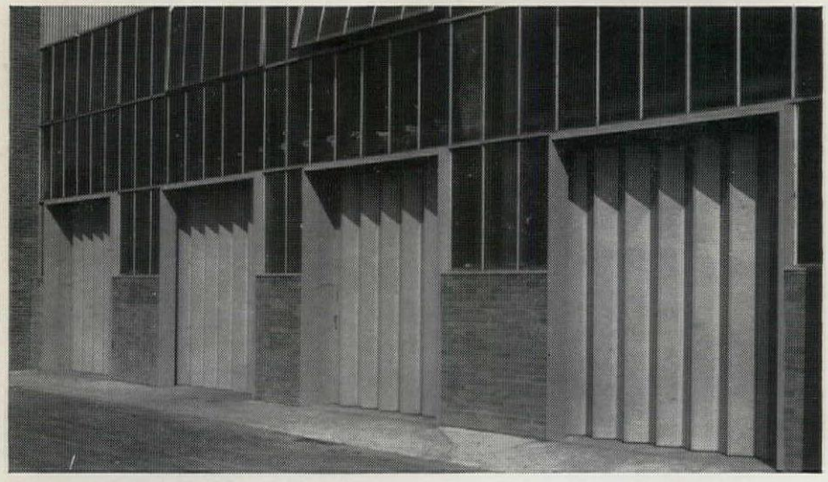

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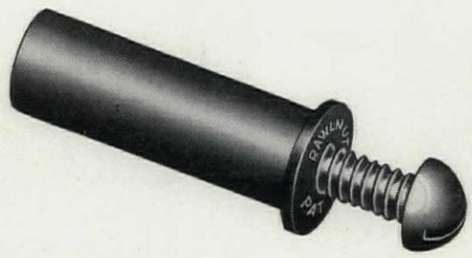

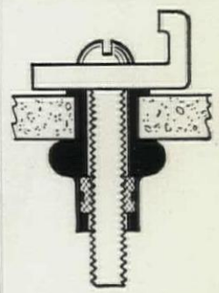

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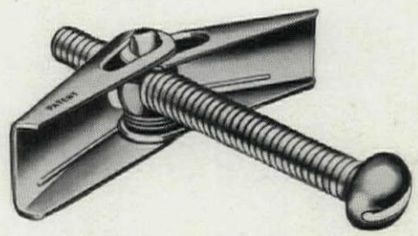
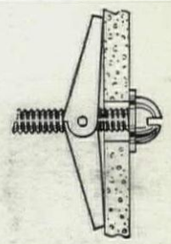
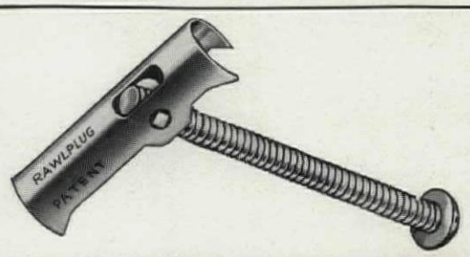
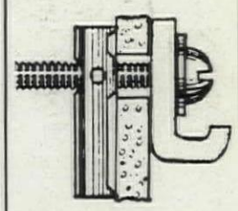




GRAVITY TOGGLES

A device in which the toggle falls vertically into position inside the cavity. It is then pulled back against the inside face by being tightened from the front. For hollow walls, doors, etc.





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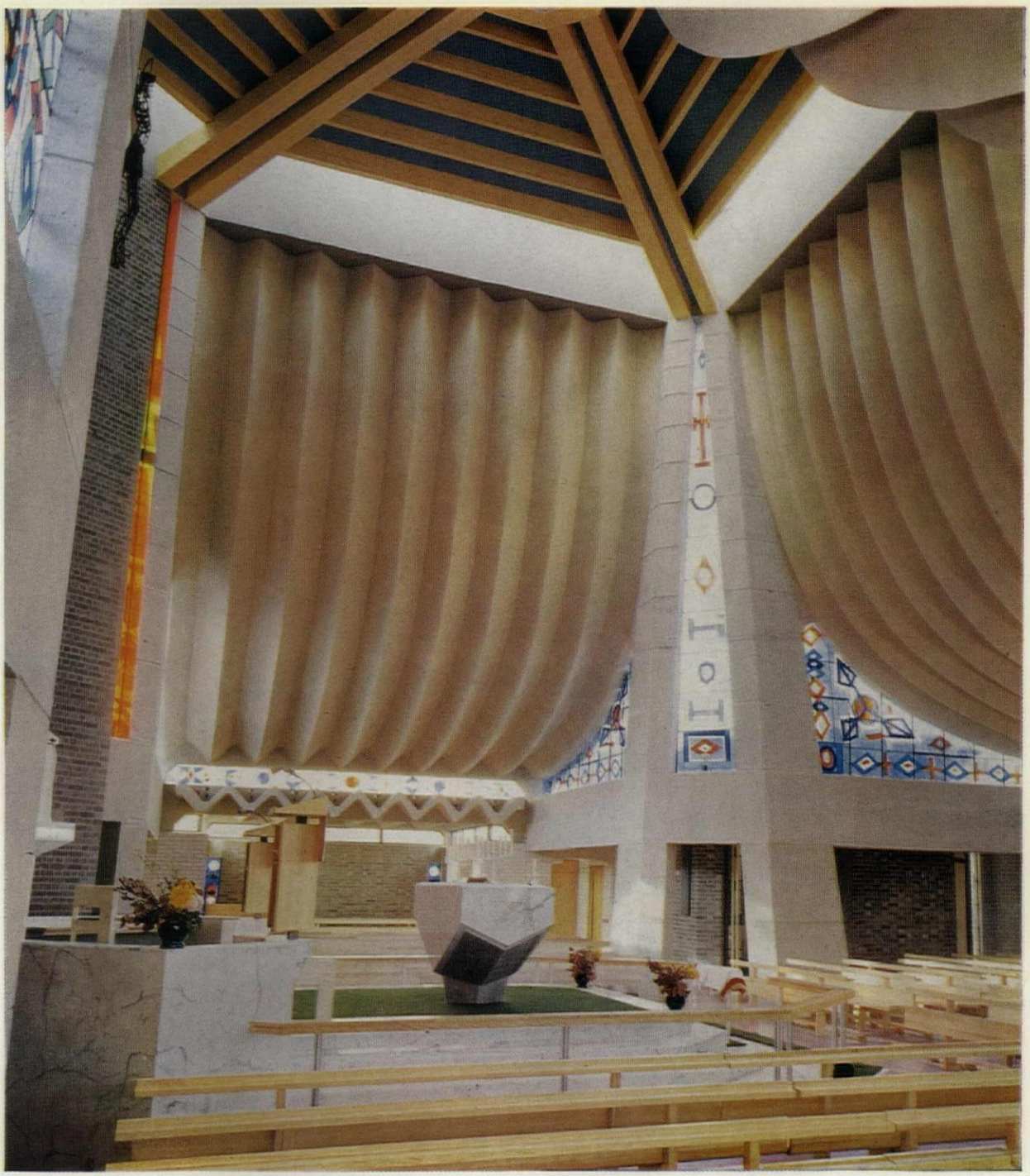

Sprayed LIMPET Asbestos

For acoustical purposes at the new Church of Our Lady, Help of Christians, Tile Cross, Birmingham, Sprayed LIMPET Asbestos was applied, in a coloured stipple finish ¾ in. deep, to the curved and fluted roof. Similar applications were also made to the Narthex, Choir and Confessional area.

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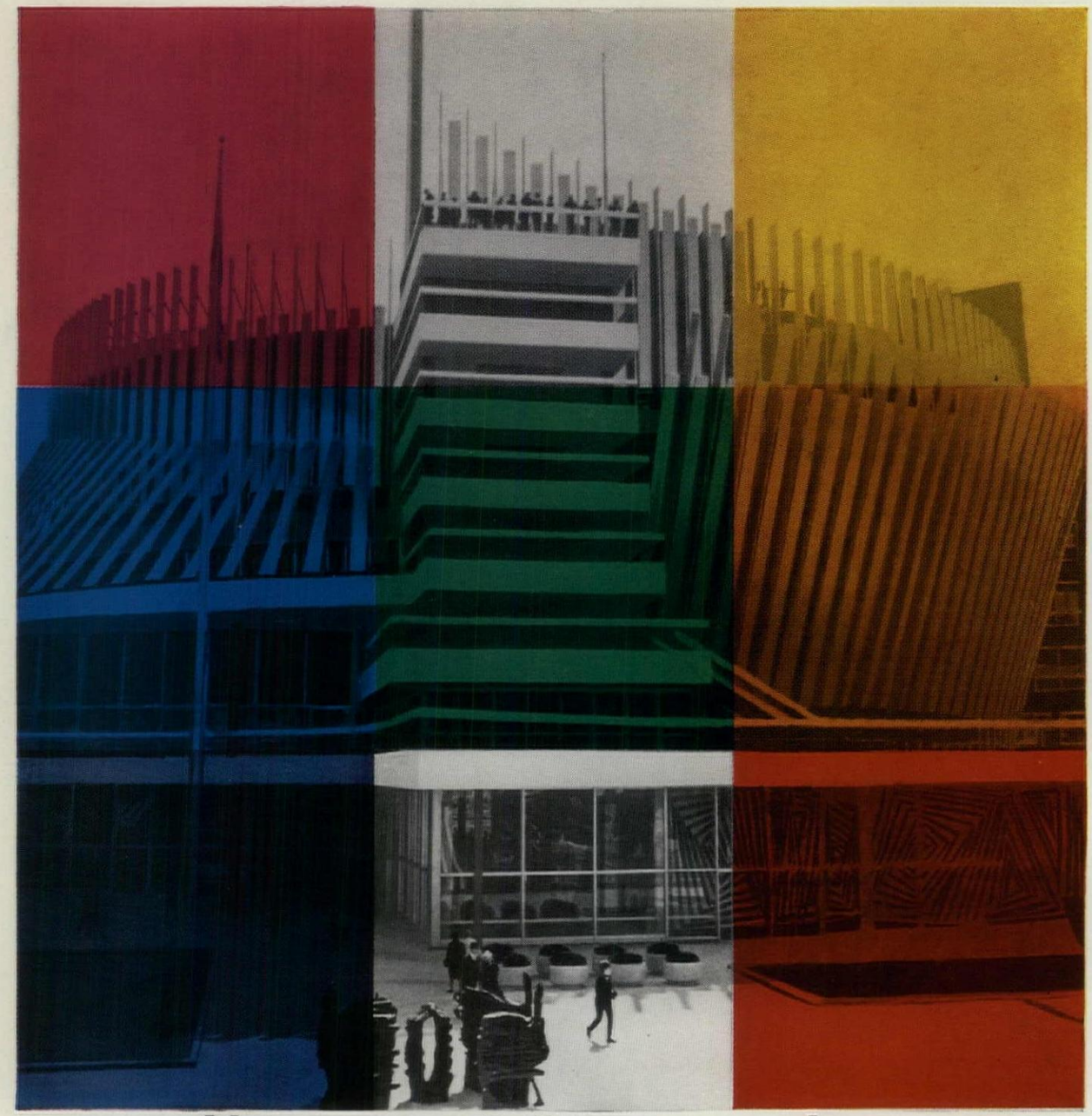

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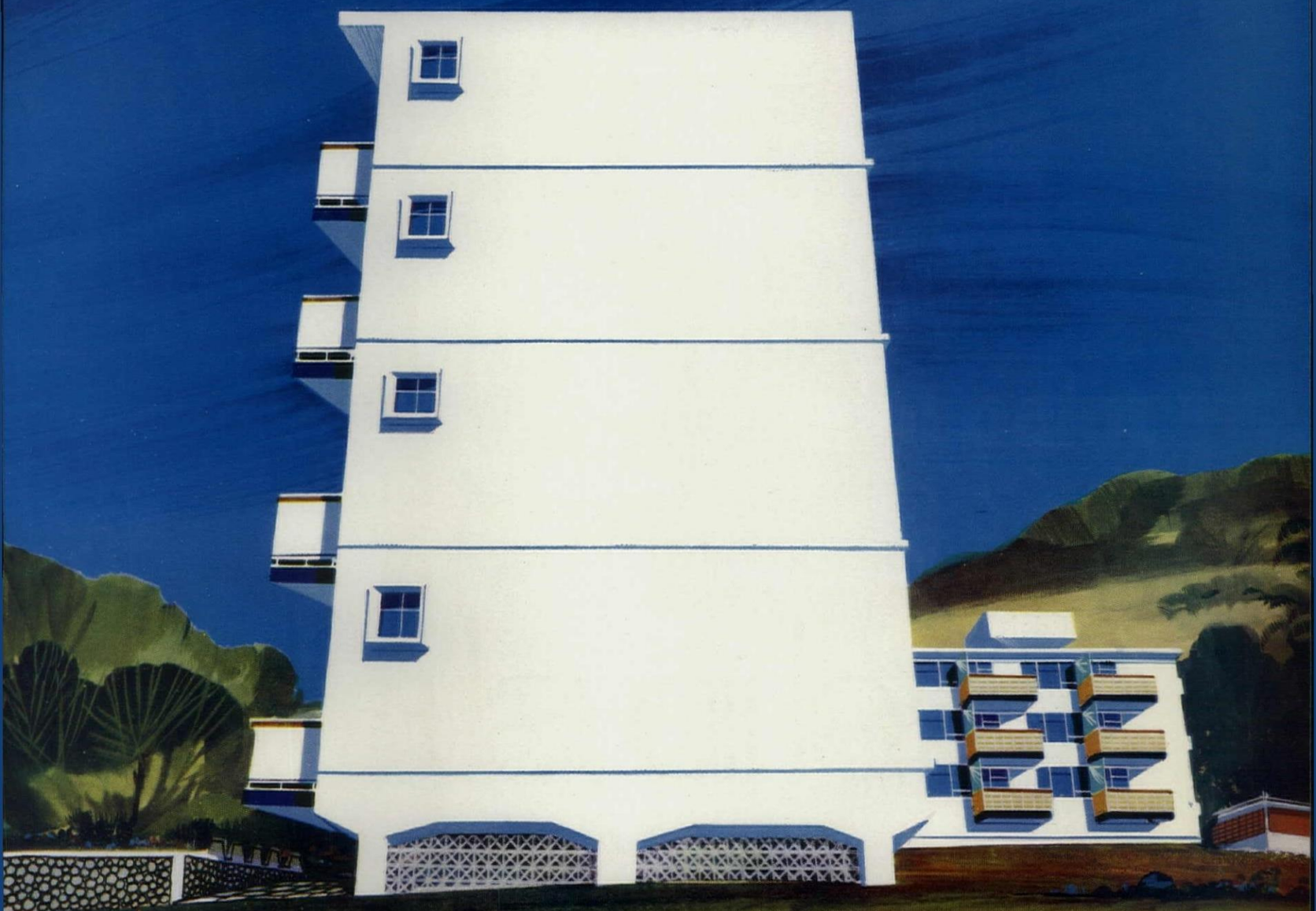
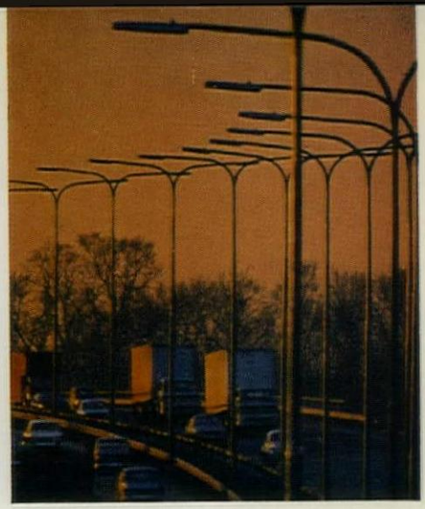
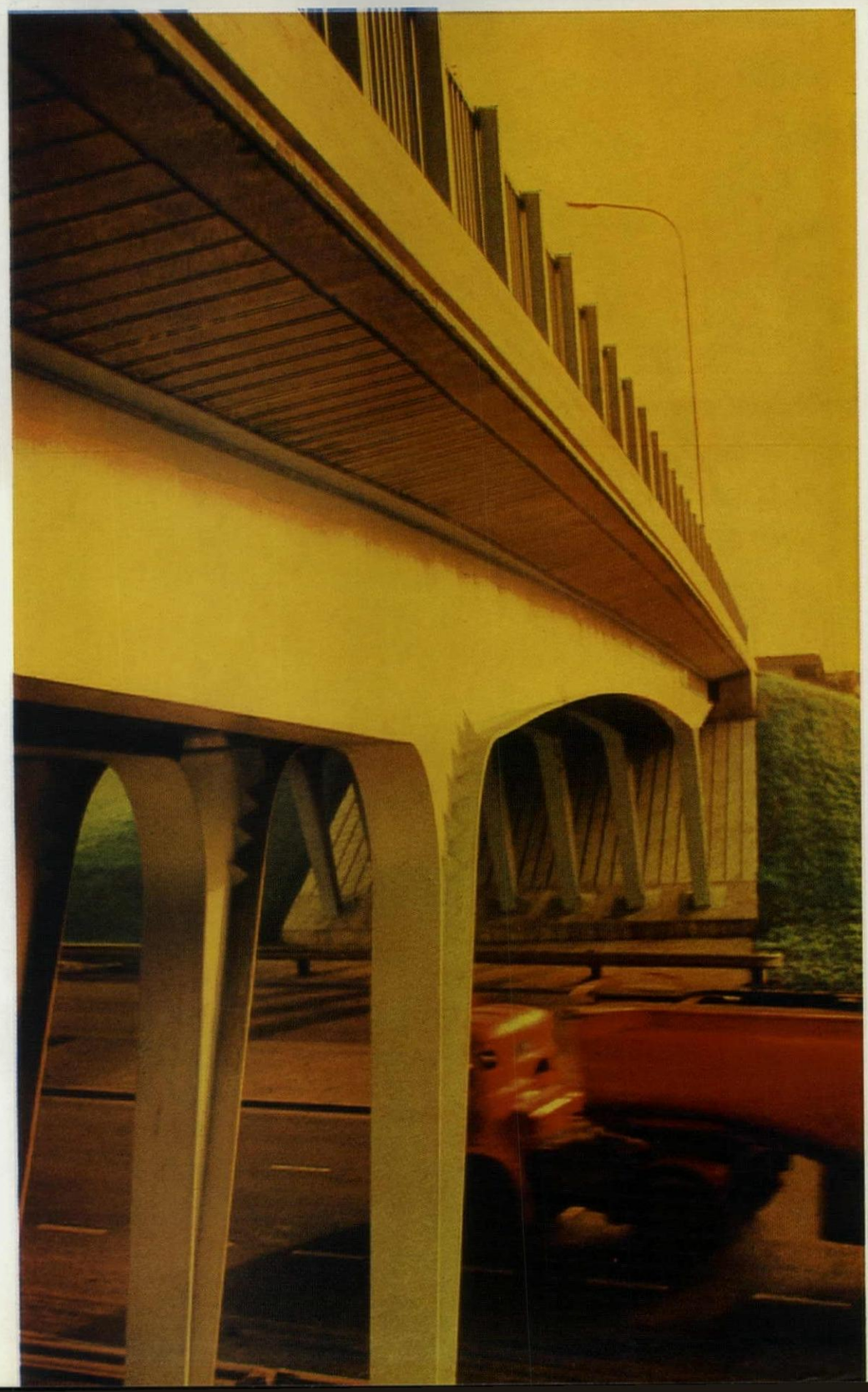


New Polycell Cement Paint is the paint to order less of. Less often. Weight for weight, it gives 50% more coverage than other quality cement paints. It is extremely durable and virtually free from cracking and flaking. And it is the only cement paint which is easy to spray. All these virtues stem from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

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

NEW Polycell cement paint





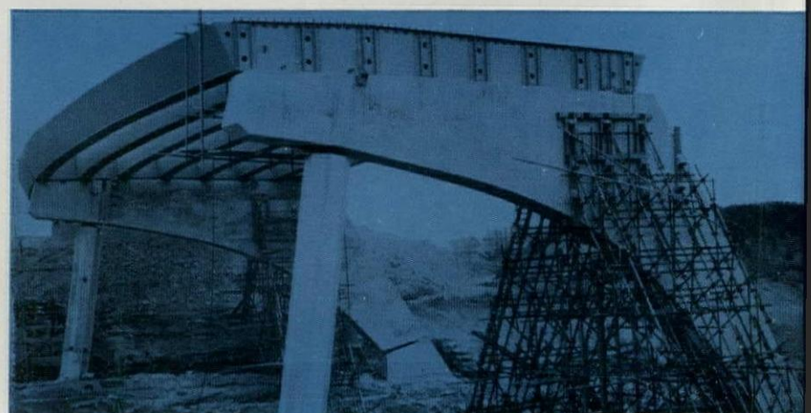
Design in Steel to keep traffic moving

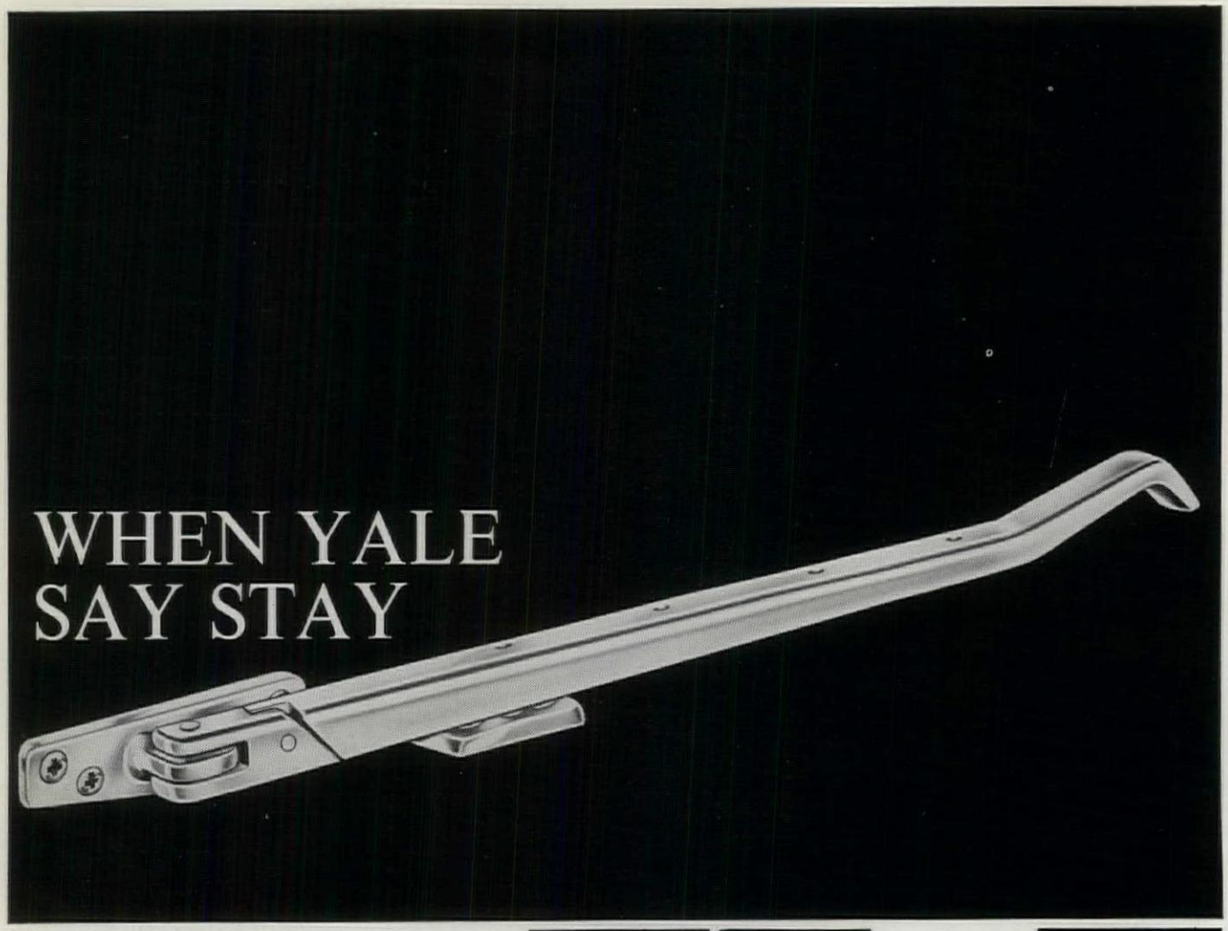
Modern structures in steel, new steels, advanced design and construction techniques, are helping to forge important new links in Britain's road network, and are contributing to our economic development by providing swift, cost-saving solutions to today's traffic problems.

British Steel Corporation

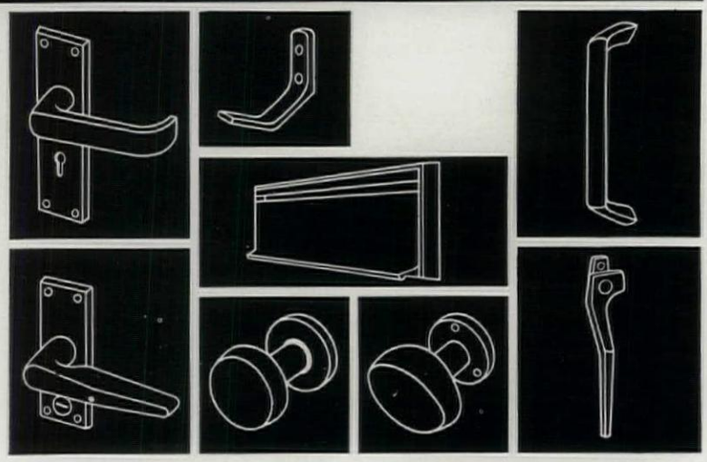
Main cover illustration:
Hall Lane Bridge, Upminster.

Lofthouse Motorway Interchange involves a complex of eight bridges, and forms the important intersection between M1 and the future Lancs-Yorks M62 motorway. One of its four interesting roundabout bridges is shown at right. These all have a composite deck containing eight curved steel box beams of trapezoidal section. Beams are friction-grip bolted at ends to steel cross-beams mounted on sliding bearings with longitudinal forged steel link connections between decks, stressed by Macalloy bars to the novel banana-shaped 3-hinge propped piers. These can take up two-dimensional movements due to the sharp 400-ft radius of bridge decks. Agent for MoT: County Council of West Riding of Yorkshire. Engineer: S Maynard Lovell. Main Contractors: A Monk & Co Ltd. Steelwork: Robert Watson and Co (Constructional Engineers) Ltd. Steel protective treatment by Metalife Ltd.





LOOK OUT FOR ACTION



YALE have been busy at the drawing board. This stylish new casement stay is one of a series of sparkling designs from David Carter, F.S.I.A. created for the Yale Architectural Hardware range. This range combines flair and design with an immaculate YALE finish in high quality silver anodised aluminium, giving the discerning Architect the finest selection of Architectural Hardware available today.

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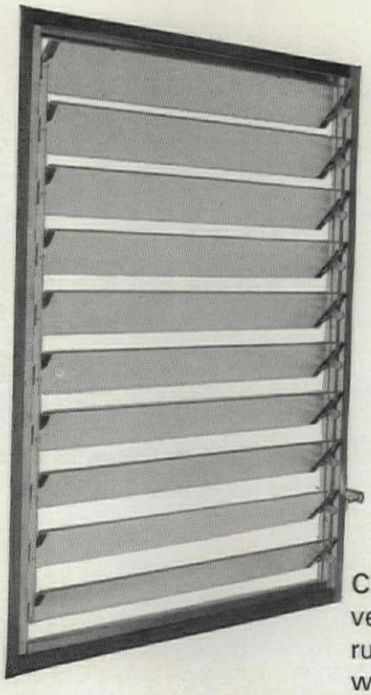

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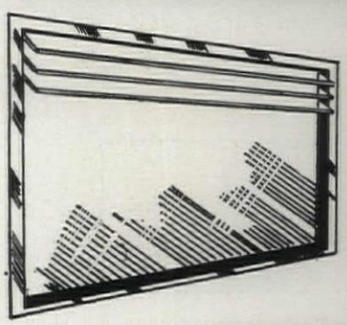

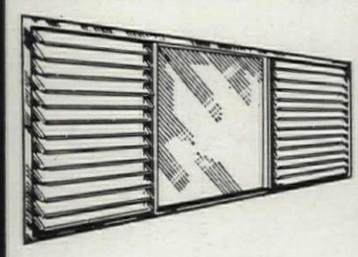

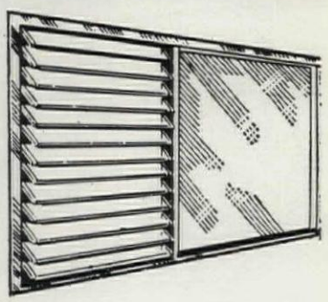

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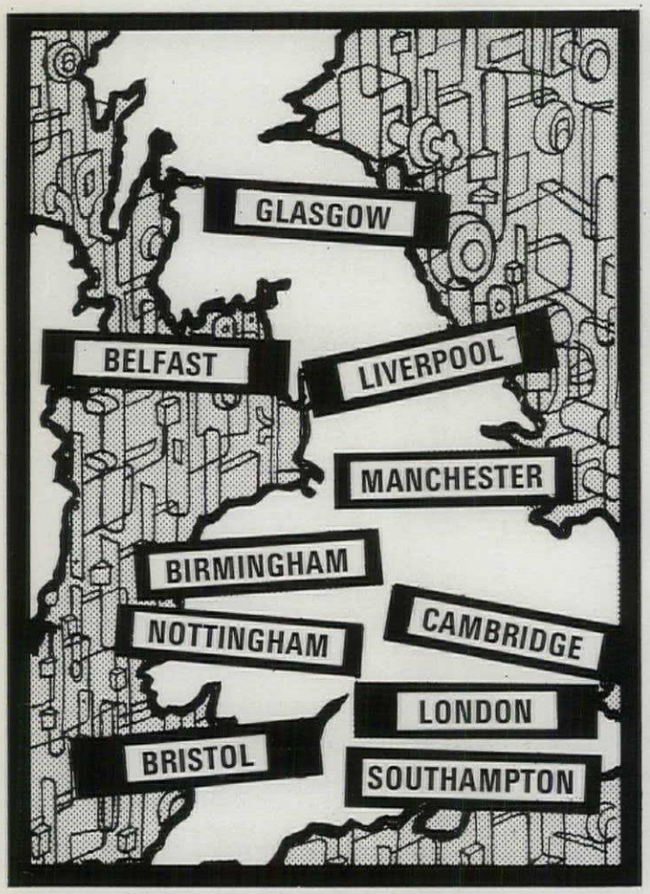

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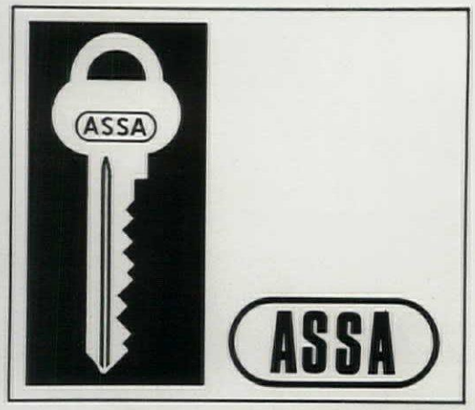

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Quite a few Shanks pieces offer no visible means of support and therefore embody all the foregoing features.

Our man is happy to talk (and quote) on them all. But perhaps his favourite example is our Belgrave suite. In this suite only the bath touches the floor. Everything else gets hung. And, to his vast amusement, as a final touch, the cistern is sealed up in the wall.

Call in the man from Shanks

Entrance elevation of the passenger reception hall

Timber-engineered building forms exciting centrepiece for Southampton Docks Scheme

The important new £2¼ million Southampton Docks scheme that entailed land reclamation, dock widening, construction of new jetties and provision of container and car parking facilities is playing an important role in the operation of drive on/drive off ferry services to Spain and France.

Since its erection, the central feature of the project—a two-storey timber-engineered reception hall—has been acclaimed as the most visually exciting aspect of the whole development. The hall's splendidly unusual design can be seen in our photographs.

Interior of reception hall showing second storey

167ft long, 108ft wide

The structural framework is provided by laminated timber arches, beams and columns. Parabolic arches span 75ft of the 167ft x 108ft hall and provide the main structure; beams and columns provide the framework for the second storey at one end of the building. The laminated timber arches and beams were manufactured from Douglas fir and the columns from opepe.

34ft arches

The arches (18in x 7¼in in section) rise to a height of 34ft and are designed as three-pinned arches with 4in diameter split ring connectors forming the apex joints. Seven of the twelve arches spring from the reinforced concrete slab which takes the horizontal reaction. The remaining five arches spring from the second storey with the horizontal reaction being taken by a one inch diameter mild steel tie-bar concealed between the floor beams.

Second storey

The second storey area of the building is supported on laminated timber columns cast 2ft into prepared pockets in the reinforced concrete pad foundations. These columns support twin floor beams which run for a continuous length of 108ft, spliced at mid-length only. Douglas fir joists positioned at 16in centres between the main beams carry a floor of half-inch thick tongued and grooved plywood.

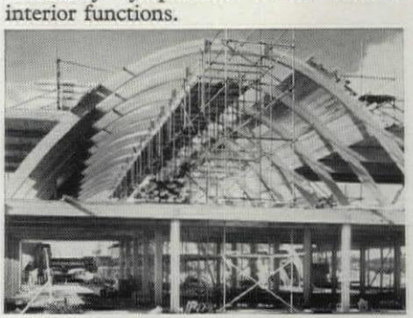
Acoustic pattern

Western red cedar decking, 3in thick double tongued and grooved, provides the main roof structure and ceiling, and gives the building its longitudinal stiffness. The use of a machine-grooved acoustic pattern in the decking has eliminated any obtrusive effects from the parabolic shape of the building having an acoustic focus at first floor ear level.

Timber canopies

All the entrances to the main hall have attractive canopies of Western red cedar supported by cantilevered laminated timber beams. Access to the second storey from inside is by a main staircase of afrormosia treads supported on laminated Douglas fir stringers. Afrormosia is also used for the doors and all visible joinery. Panelling in the bar and throughout the first floor is of elm; in the mens' toilets New Guinea walnut panelling is used.

Aim of the decor was to give a feeling of light and space to welcome the traveller. The exterior treatment of the building is noticeably sympathetic to its various interior functions.



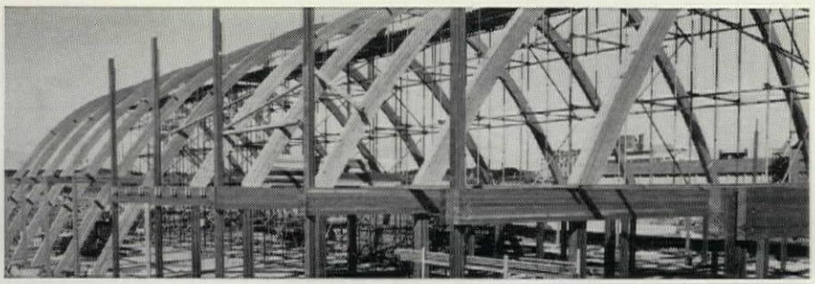
View from dock end shows cedar decking of roof structure partially completed

The layout

The first floor lounge has a gallery overlooking the hall and a balcony that allows views of the ferries and shipping in Princess Alexandra Dock and the River Itchen.

On the northern side of the main hall are a refreshment buffet and bar, toilets, control office, bookstall, writing corner, telephone kiosks and island stands with counters for shipping lines and travel agents.

A room for the reception and storage of passengers' baggage is nearby. In addition, the baggage hall has under-floor heating and there are hot air curtains at entrance doorways.



During erection of main structure

Why timber?

There were many good reasons for constructing the hall from timber. First and foremost was the speed factor. The structure was completed right on time, just eight months from the commencement of the design stage and despite difficult site conditions. Savings both in time and cost were possible since the low structural weight allowed simple slab foundations to be used instead of piling. Another consideration was the need for minimum maintenance. Building in timber has ensured low remedials and eliminated the possibility of corrosion in a sea-air environment.

Similar savings resulted from the arch and shell form requiring no lining or decoration beyond its natural appearance. Aesthetic considerations had to be met as well, of course. The building had to both visually complement the rest of the docks scheme and provide a light and airy atmosphere for holidaymakers. The hall is an unqualified success on both counts. In fact it is difficult to imagine any other building that could so well express the thought 'Your holiday starts right here'.

Congratulations

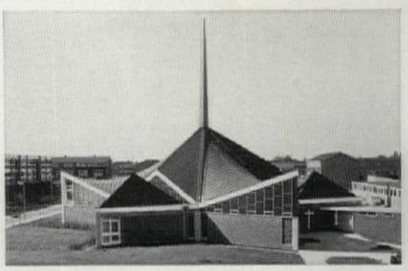
The overall design and supervision of the project were carried out by the staff of the Chief Docks Engineer at Southampton, Mr. D. J. Doughty, C.Eng., M.I.C.E., A.M.I.W.E. The structural timber was designed on behalf of the specialist timber engineering fabricators by E. W. H. Gifford & Partners, Consulting Engineers of Southampton, who also designed the foundations. The main contractors were Reed & Mallik of Salisbury.

The New World of Wood congratulates all concerned in designing and constructing this outstanding example of the sheer versatility of timber, a material used to advantage right from the hall's painted plywood fascia down to the laminated beech door handles.

Timber engineering meets many needs

Timber engineering techniques are meeting the needs of projects of every kind from public buildings and other prestige projects to office buildings, factories and warehouses. Timber is an efficient, reliable, economical material. It is stronger, pound for pound, than any other structural material, allowing buildings to be designed with a very low deadweight, enables wide clear spans to be incorporated in buildings, and greatly speeds up construction and reduces costs. Its many natural qualities include excellent fire resistance.

New methods of timber lamination and the use of box beams and other plywood-based techniques enable members to be constructed to immense dimensions, satisfying both aesthetic and practical requirements in buildings of every kind. Whatever your building needs, it pays you to consider the New World of Wood.



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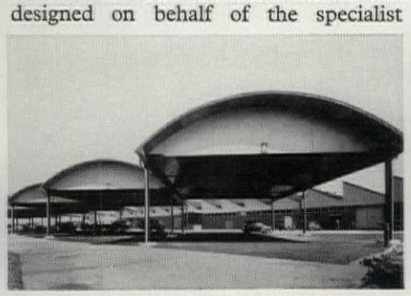

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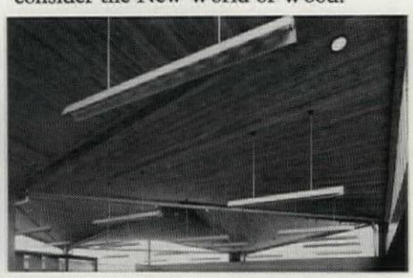

3.

1. *The plan form of this church at Ham Common, Surrey, is based on the six-pointed Star of David. Three points are roofed with timber hyperbolic paraboloid shells and three with prefabricated panels and laminated beams.*

2. *Vehicle repair and parking building at Hull, incorporating laminated timber edge beams and roof members, and plywood panels. The total area covered is 19,200 sq. ft.*

3. *Interior view of the hyperbolic paraboloid timber shell roof of the new Fire Station Central Stores building at Belper, Derbyshire.*

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PROGRAM-H is economical
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PROGRAM-H is visually attractive
Timber based PROGRAM-H can be used with virtually any cladding material—timber, brick, tiles, plastics, etc. This flexibility enables PROGRAM-H to be designed into any environment, blending naturally with landscape or existing buildings to produce an attractive integrated feature.

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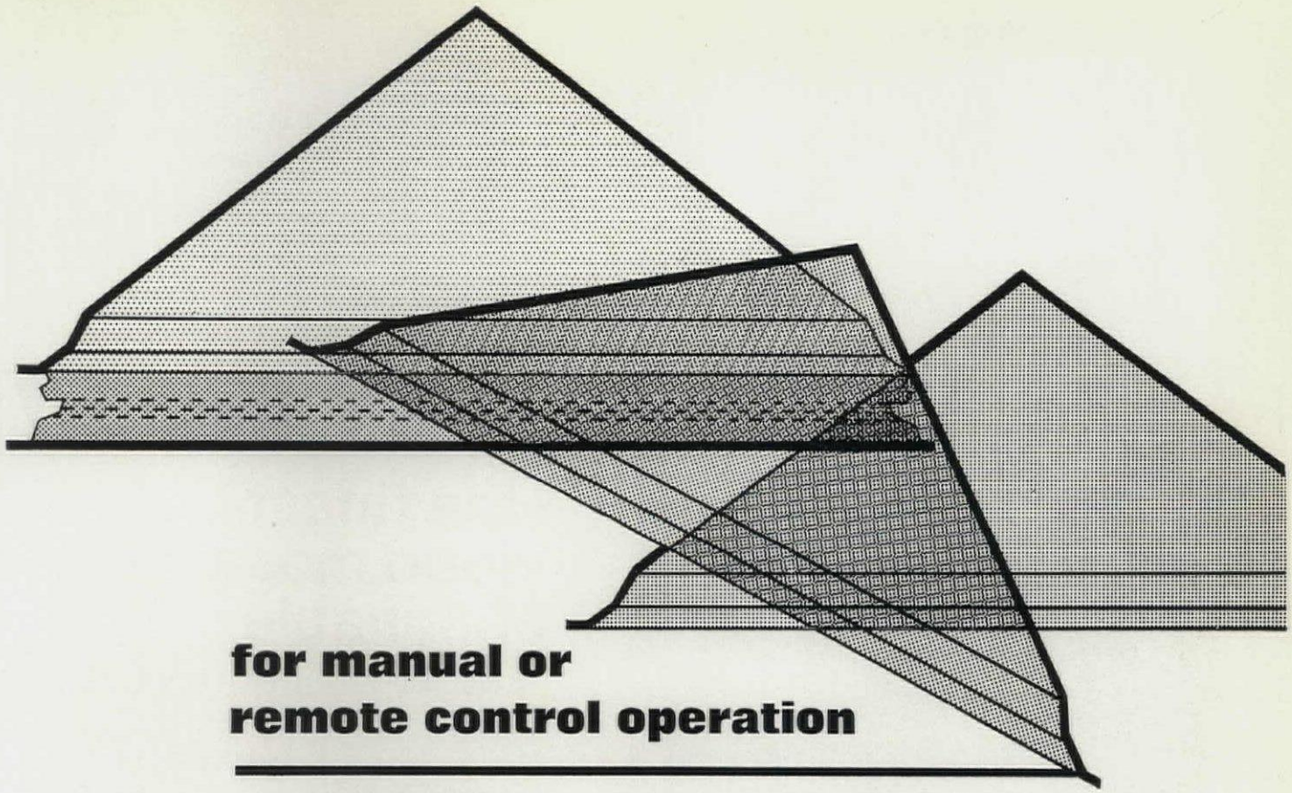

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This new range of free flow ventilators uses a low line upstand that for the first time allows you complete design freedom to mix ventilated and non-ventilated skylights in a roof without destroying the purity of an overall roof-line.

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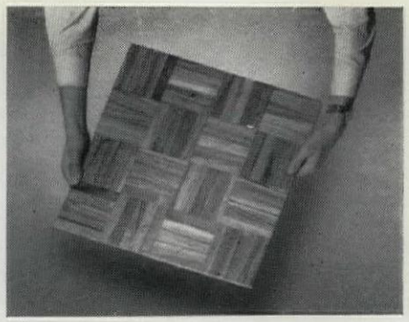

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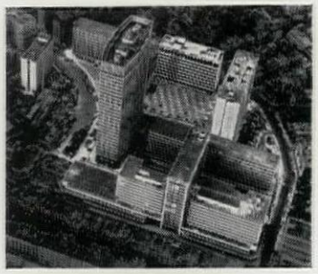

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Ford knew this. That's why they're using Kalcolor aluminium from James Booth for their new-projects building at Warley. By 1978, they'll get the full benefit. Kalcolor aluminium has colour built right into the aluminium. So it won't flake off. Can't rust off. And its five modern-living colours are permanent and lightfast. With the colour built in by a unique process Kalcolor aluminium makes ordinary coloured aluminium *look* ordinary. That's why so many important buildings use Kalcolor aluminium.

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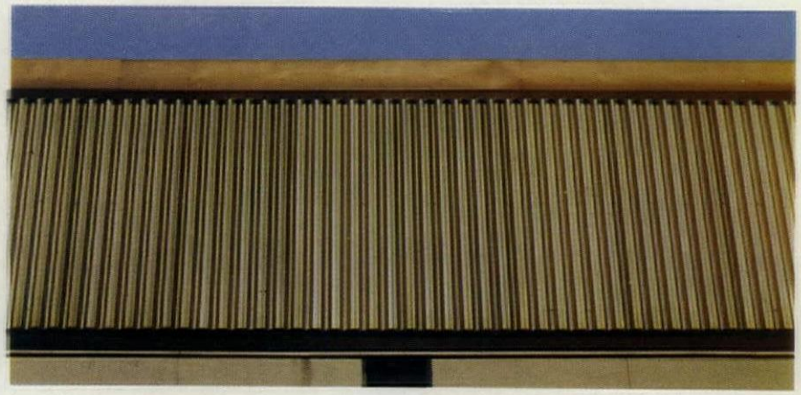

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Part of the big development carried out at Kingsdown, Bristol, by the City and County of Bristol.
City Architect: Albert H. Clarke, F.R.I.B.A., A.M.T.P.I.
Housing Manager and Secretary: John Fleming, F.R.I.C.S., F.I.H.M., M.R.S.H.
Builders: John Laing Construction Company Limited

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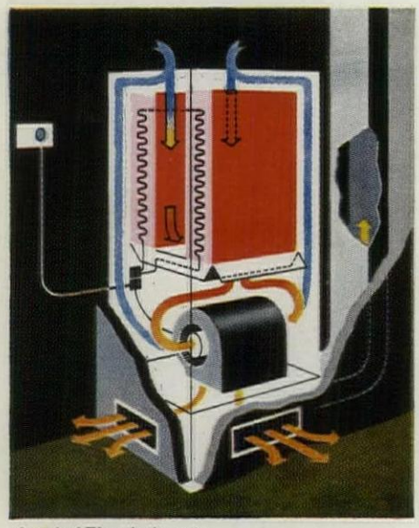
Electric warm air central heating. Easy to install...easy to control... economical to run

It fits your existing plans! It's easy to install! It runs on half-price electricity! These are just a few of the many reasons why Electricaire is today setting a new trend 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 efficient and economical central heating.

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 electricity used.

3. Electricaire runs on half-price, off-peak electricity. The running costs are competitive with all other central heating systems.

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 and pays for the level of heating he selects.

6. Electricaire minimises condensation.

Unobtrusive outlet register near the floor

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

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

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

Better things are electric

Issued by the Electricity Council, England & Wales

347 Council Flats in Bristol are fitted with Electricaire!

One of the most impressive developments in the South of England has just been completed at Kingsdown, Bristol. This development consists of 347 modern flats which are extremely well designed both inside and out. There are five types: bed-sitting rooms, one and two bedroomed flats and two and three bedroomed maisonettes. Each flat and maisonette is heated by Electricaire, warm air being supplied to living room, hall, one bedroom and in most cases the kitchen, by a 6kW Creda Simplex Unit. Each tenant has full control of the heating in his flat. The cost of the Electricaire System (excluding builders' work) averaged £122 per dwelling. Off-peak water heating is also provided. The first 115 tenants started moving in on the 10th July, 1967, and the flats are now completely occupied.

The City and County of Bristol had already installed and approved Electricaire in a number of smaller developments. The simplicity of installation, low running costs and complete tenant satisfaction experienced in every case, were the main reasons why they specified Electricaire at Kingsdown. Based on previous experience, the running costs over a full year are expected to average 14s.0d. a week for heating and 4s.6d. for hot water—per flat.

Arborite have five grades in all their 52 plain colours. Nobody else has.

That's just the start. Actually, Arborite's five major grades: standard grade, solid grade, post-forming grade, bending grade and fire-retardant grade laminate are available in over 150 colours, patterns, woodgrains and marbles in all. 52 are plain colours and 42 of those are exact or close matched to BS colours.

But there's a lot more to Arborite than that. There are thicknesses and special grades to meet practically every kind of application. In addition to standard thicknesses of $\frac{1}{16}$" and $\frac{1}{32}$" – Arborite manufacture solid plastic laminate from $\frac{1}{8}$" to $1\frac{1}{4}$" thick. Also Post-forming grade for finely contoured working surfaces. Bending grade for forming larger radii. And Fire-retardant grade to comply with the surface spread of flame regulations. Standard sheet sizes are 10′ x 4′ and 8′ x 4′ with others, including 12′ x 5′, available. Arborite comes in three finishes: high gloss, furniture finish (semi-matt) and texture finish.

If you need any kind of information or advice, please call our technical service. They'd be delighted to help.

Please send me Arborite literature and samples.

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COMPANY _____

To: Arborite Ltd., Bilton House, 54/58 Uxbridge Road, Ealing W.5. Tel: 01-567 0116

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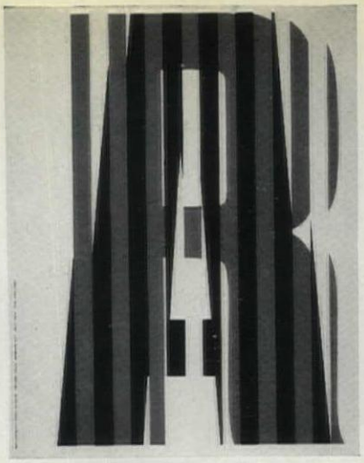

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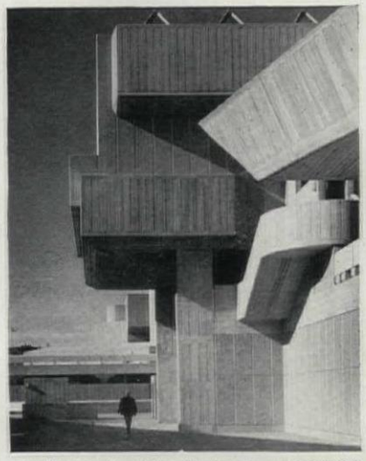

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THE ARCHITECTURAL REVIEW

JULY 1968
VOLUME 144 NUMBER 857
FIVE SHILLINGS

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On the bicentenary of Canaletto's death it seems fit that the AR should pay tribute to the greatest TOWNSCAPE artist of all time. All the elements of townscape familiar to readers of the AR can be seen in his pictures, and it makes a fascinating study to spot them. For instance, in the detail opposite, taken from a painting of Whitehall made by Canaletto in 1746, we can easily identify: in the foreground, ENCLOSURE and a strong demarcation of INSIDE and OUTSIDE space — then definition of PEDESTRIAN TERRITORY (casually observed in a pre-Buchanan age) by a line of posts which register DEFERENCE as they curve away to form a turning circle in front of the gates of Richmond House. Then DEFLECTION, on the left WING (the butt end of Whitehall Palace) and finally END STOP and TUNNEL.

PLUS ÇA CHANGE...

5

READERS WILL FIND THIS MONTH'S 'ARCHITECTURAL REVIEW' SOMEWHAT DIFFERENT IN FORMAT. ITS NEW LOOK IS NOT DUE TO ANY CHANGE OF POLICY BUT TO A RESHUFFLING OF FEATURES IN ORDER TO EXPLOIT THE VISUAL POTENTIALITIES OF ITS MATERIAL TO THE FULL. SURPRISE, CONTRAST, CHANGE OF COLOUR AND DENSITY ARE JUST AS IMPORTANT A PART OF THE EXPERIENCE OF TURNING OVER THE PAGES OF A MAGAZINE AS THEY ARE OF EXPLORING A TOWNSCAPE, AND A MAGAZINE DEALING WITH VISUAL MATTERS HAS AN OBLIGATION TO TRY TO PRACTISE WHAT IT PREACHES BY APPLYING TO ITS OWN LAYOUT, AND TO ITS HANDLING OF TYPE AND PHOTOGRAPHS, THE SAME DESIGN STANDARDS THAT ITS CRITICAL ARTICLES DEMAND OF ARCHITECTS. THE 'REVIEW' IS ALSO EXTENDING ITS CRITICAL CONTENT, ESPECIALLY IN THE FORM OF COMMENTS—SEE BELOW—ON CURRENT ISSUES; ALTHOUGH WORLD AND MARGINALIA HAVE DISAPPEARED FROM THE FRONT OF THE MAGAZINE, THEY WILL STILL BE FOUND AT THE BACK.

THE LONG HAUL

LONDON'S SOUTH BANK IS A NATIONAL ARCHIVE FOR THE SOCIAL AND ARCHITECTURAL HISTORIANS OF THE FUTURE. THROUGHOUT THE LAST TWENTY YEARS THIS AREA HAS BEEN THE SUBJECT OF ENDEAVOUR AND INDECISION, COURAGE AND COWARDICE, CONVICTION AND NEUTRALITY. BANAL BUILDINGS THAT HAVE NO PLACE ON A SITE OF SUCH MAJOR IMPORTANCE HAVE BEEN ALLOWED

THERE. BUILDINGS THAT SHOULD BE THERE ARE NOT. FOR A BRIEF PERIOD ONLY, DURING THE FESTIVAL OF BRITAIN, THE SOUTH BANK WAS THE SCENE OF FRENETIC AND SPONTANEOUS GAIETY. THE FESTIVAL HAD BEEN CONCEIVED WHEN NATIONAL MORALE WAS LOW, PROMISING A BETTER WORLD ROUND THE CORNER IF ONLY WE COULD LIFT OUR HEADS FROM WAR-TIME AUSTERITY AND UNCERTAINTY. THE BOMB-SCARRED BANKS OF THE THAMES WERE INDISPUTABLY THE PLACE FOR SUCH AN EXPRESSION OF NATIONAL RESURGENCE, AND THE FESTIVAL HALL WAS TO BE ITS LINCHPIN, UNREPENTANTLY MODERN IN ITS ARCHITECTURE. LOOKING FURTHER AHEAD THE SOUTH BANK WAS TO BECOME—IN SOME WAY THAT WAS NEVER VERY CLEARLY DEFINED—A PERMANENT EMBODIMENT OF THE BEST OF 1951, ARCHITECTURALLY AND IN ITS CAREFREE DEVOTION TO GAIETY BY THE RIVERSIDE.

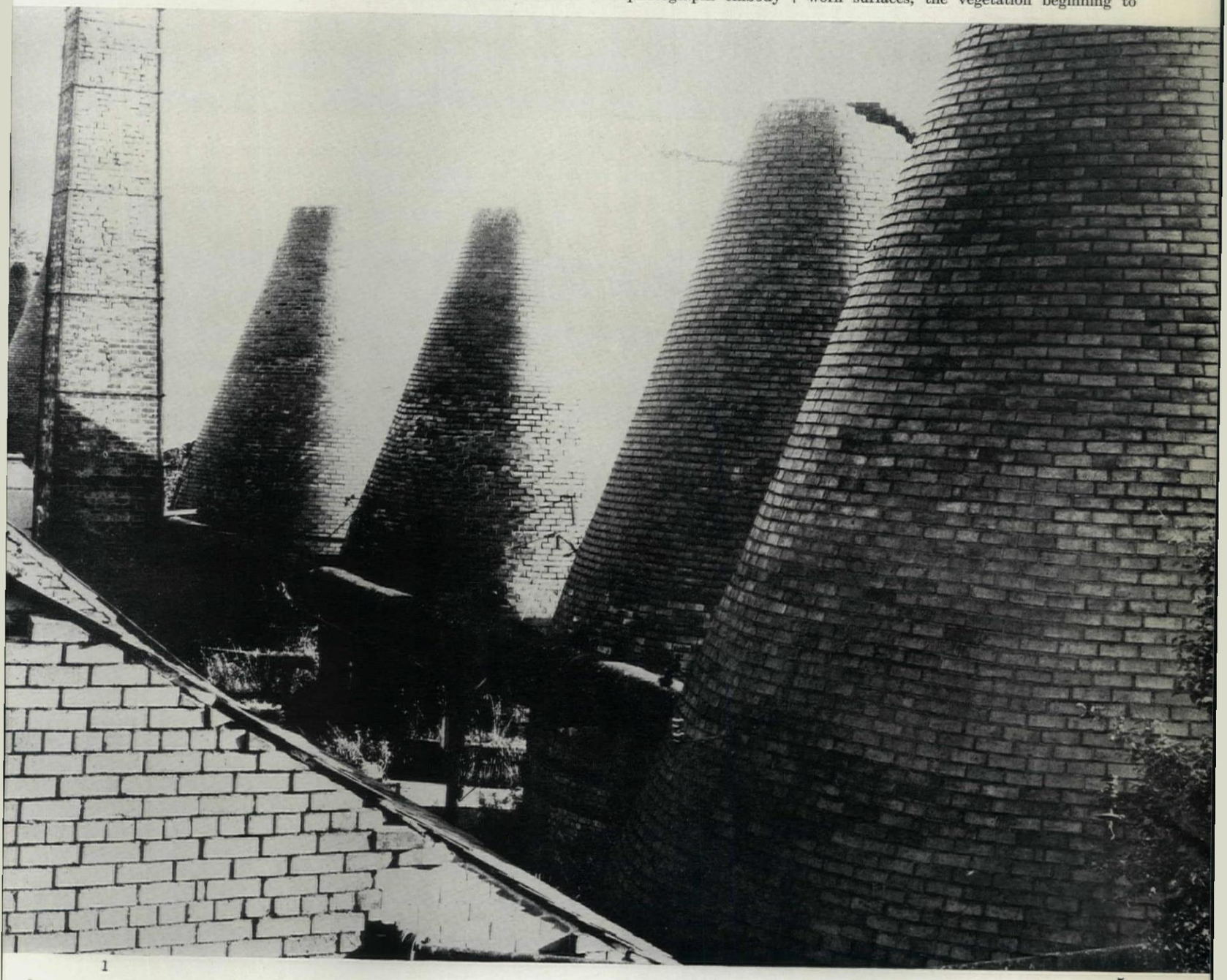
IN THIS ISSUE OF THE AR THE NEWLY COMPLETED SOUTH BANK ARTS CENTRE IS ILLUSTRATED. ITS EXISTENCE SIDE BY SIDE WITH THE NATIONAL FILM THEATRE AND THE FESTIVAL HALL; TOGETHER WITH THE BELATED ANNOUNCEMENT OF A FIRM AGREEMENT, MATCHED WITH HARD CASH, TO BUILD THE NATIONAL THEATRE, MAKES THIS AN APPROPRIATE TIME TO PAUSE AND ASK TO WHAT EXTENT THE ENDEAVOUR OF 1951 HAS FULFILLED ITS PROMISE.

IT HAS TAKEN SEVENTEEN YEARS OF UNSTINTING COMMITTEE WORK TO GET THIS FAR. AND THIS SURELY IS ONE OF THE MOST REVEALING AND DISTURBING ASPECTS OF OUR NATIONAL CAPACITY FOR DELAY AND COMPROMISE. PICCADILLY CIRCUS, THE OXFORD MEADOW ROAD, THE BRITISH MUSEUM ARE OTHER MANIFESTATIONS OF AN EFFETE NATIONAL WILL. THE DAYS OF GRAND DESIGN SWIFTLY AND BOLDLY EXECUTED ARE FINISHED, AND IT IS DOUBTFUL WHETHER NASH COULD HAVE ACHIEVED ANYTHING ON THE SCALE OF REGENT'S PARK, PORTLAND PLACE AND REGENT STREET TODAY. OUR ENERGIES SEEM INSTEAD TO FIND SATISFACTION IN PROPPING UP HIS FACADES, BUILDING THE OCCASIONAL MONUMENT AND ENDLESSLY PUBLISHING PLANNING REPORTS. EVEN THE LONDON COUNTY COUNCIL'S ARCHITECT'S DEPARTMENT, WHICH WAS RESPONSIBLE FOR THE SOUTH BANK ARTS CENTRE AND WHICH, WITH ITS OUTSTANDING TRADITION OF LARGE SCALE THOUGHT AND ACTION, DID SO MUCH TO WIDEN THE POST-WAR CONCEPTION OF ARCHITECTURE INTO SOMETHING MORE THAN A SERIES OF ISOLATED MONUMENTS HAS, SINCE THE DESIGN FOR THE ARTS CENTRE WAS MADE, BEEN DISMEMBERED AND ITS POWER TO OPERATE AT CITY SCALE GREATLY DIMINISHED.

BEFORE THIS HAPPENED THE LARGEST SINGLE LOCAL AUTHORITY IN THE WORLD HAD ALLOWED SHELL TO FRUSTRATE ITS OWN IMPROVEMENT PLANS AND HAD STERILIZED ONE OF ITS BEST ASSETS BY BUILDING FOR CULTURE ONLY INSTEAD OF FOR LIVING. COUNTY HALL IS NOW RULED BY NEW MEN, AND IF CULTURE IS TO BE RESCUED FROM ITS ISOLATIONIST PEDESTAL AND PLANTED WHERE IT BELONGS —IN THE HEARTS AND MINDS OF EVERYONE—THE ADMINISTRATORS' URGENT TASK MUST BE TO GIVE THE SOUTH BANK A TRANSPLANT OF LIVING TISSUE. THE TRAGIC INSULARITY OF THE LINCOLN ARTS CENTRE IN NEW YORK IS SURELY A LESSON AND A WARNING. TO THE SOUTH BANK MUST NOW COME THE HOUSING, THE HOTELS, THE SHOPS, THE CAFES, THE THROB OF METROPOLITAN LIFE, WHICH HAVE LONG BEEN PROMISED IN SUCCESSIVE DEVELOPMENT PLANS AND ARE STILL ATTAINABLE, BOTH IN THE NEWLY REBUILT AREAS AND IN THOSE NEXT TO BE REBUILT—THE SEMI-DERELICT AREAS DOWNSTREAM FROM THE NATIONAL THEATRE SITE. HERE LONDON CAN STILL SHOW DECISION, IMAGINATION AND EXPEDITION.

GEOMETRY OF BRICKMAKING

The group of photographs reproduced here was taken by Mr. N. Groves-Raines at a derelict brickworks on the edge of a moor in western Scotland. The photographs embody many of the characteristics we admire in early industrial architecture as well as the romanticism associated with decay: the time-worn surfaces, the vegetation beginning to



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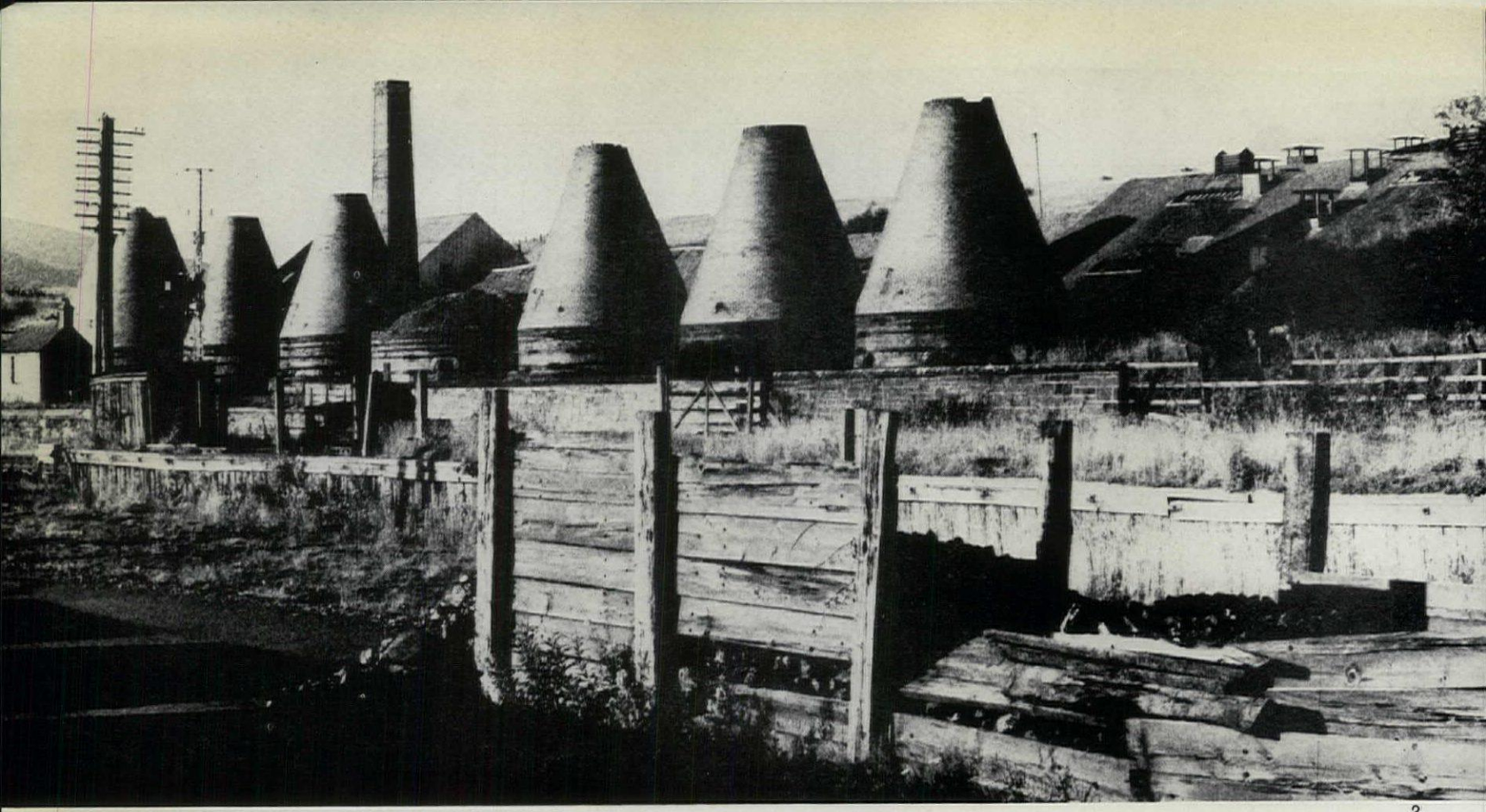
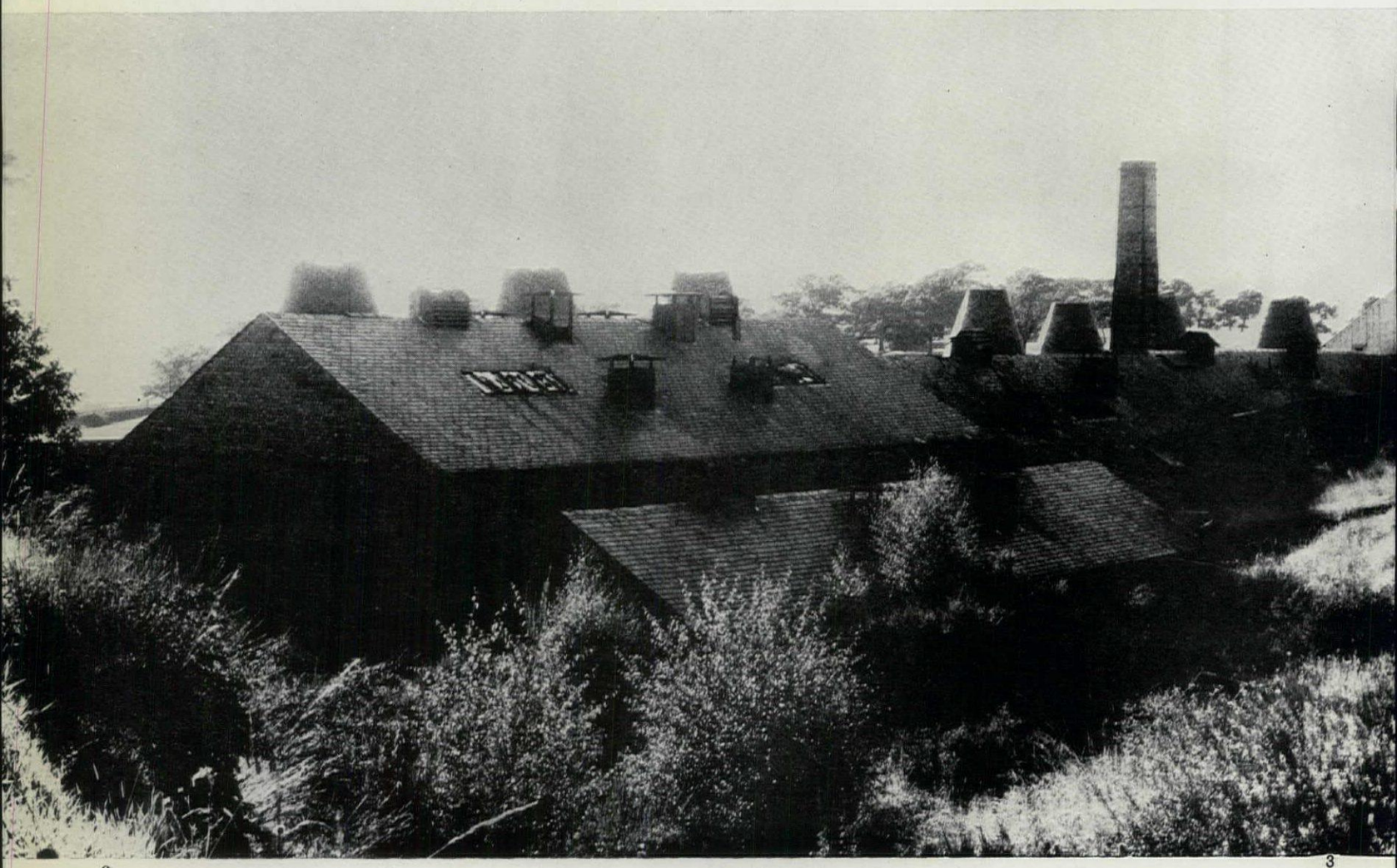


2

take a hold in likely and unlikely places. The fundamental characteristics are those of the functional tradition, in which the emphasis is laid on simple geometry rather than on the conventions of style, and on the use of building materials in a way that brings out their intrinsic qualities. Architecture belonging to this tradition is a product of the hard-headed relationship of ends to means which the word



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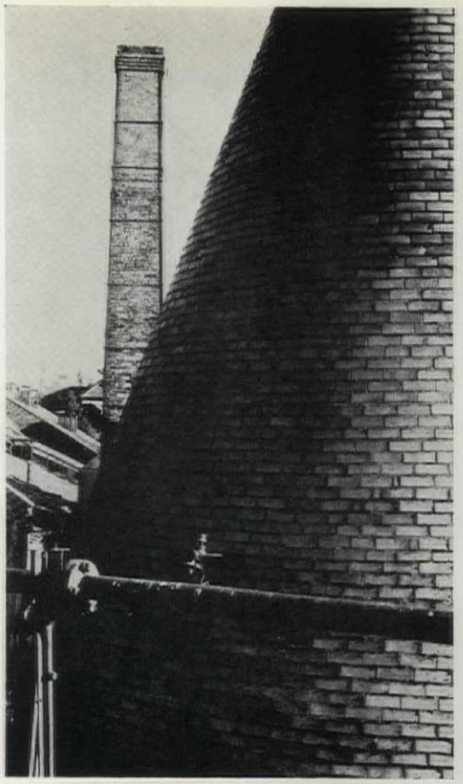

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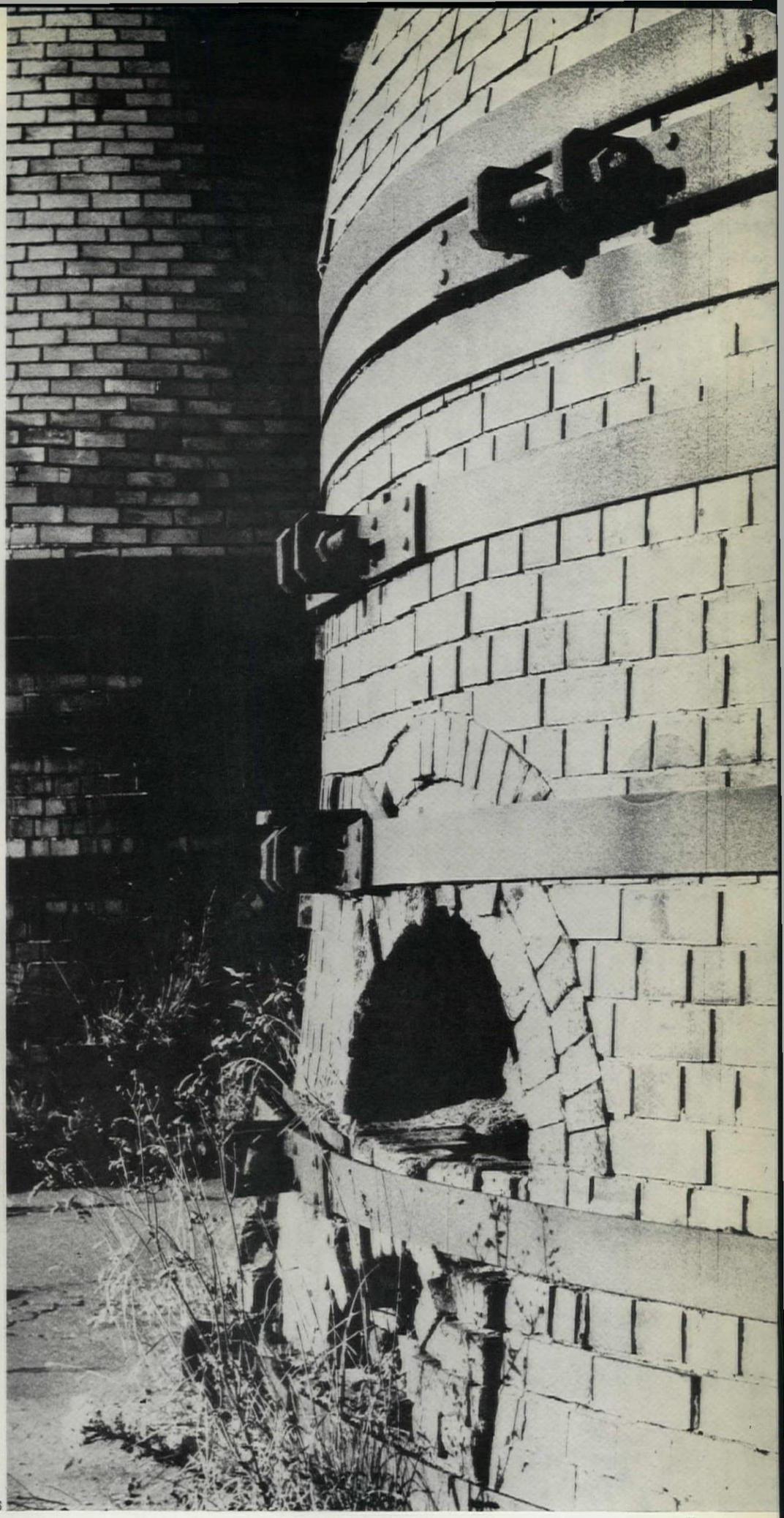
functional implies, and creates drama solely by meeting the challenge of the building's function fairly and squarely. The use of such an unselfconscious idiom need not, however, lack subtlety, and here the idiom is given a wider geometrical range by the rounded and conical forms the process of brickmaking requires.

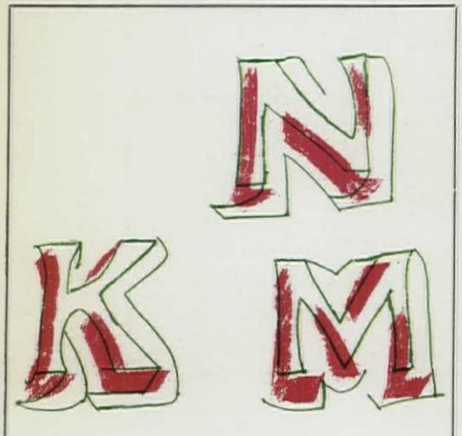
5



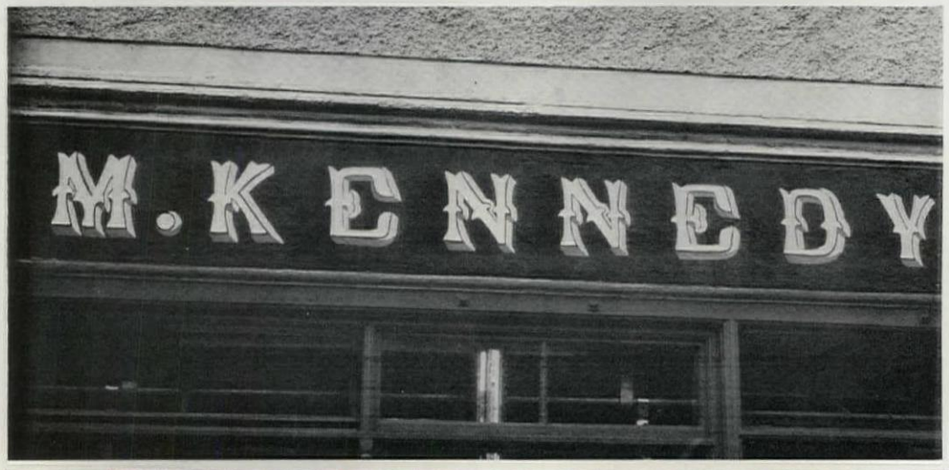
6

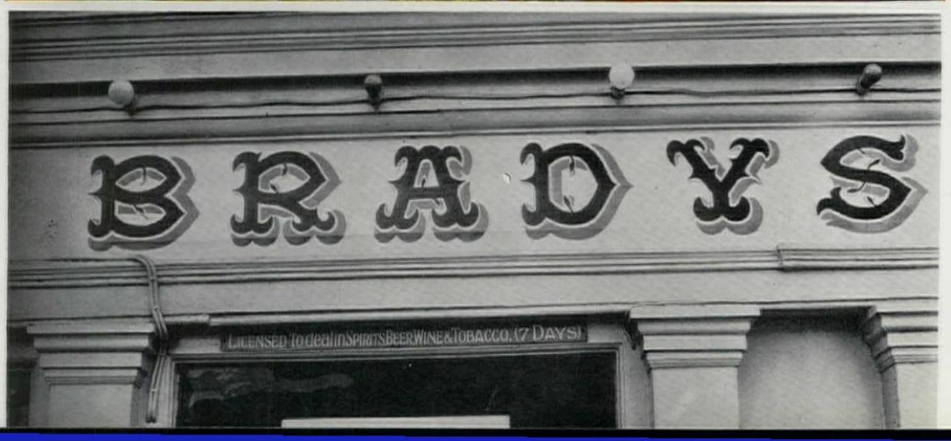
IRISH SHOP LETTERING

Two or three years ago the KINEMA (*sic*) at Caherciveen, County Kerry, was burned down. It was adjacent to a convent, and was a shack-like, temporary-looking, converted type of building, totally unmemorable except for one feature unusual to English eyes: its undistinguished white walls were lettered with startling wit, imagination and artistry. To call this merely signwriting would be to ignore the skill and love and years of experience put into it by local craftsman Tommy Moore. The painted shadows followed no logic of directional fall of light, the scrollwork came from no book, the fount followed no classical precedent. Tommy Moore and his son are still talked of with respect in some of the 70 odd bars of Caherciveen, coloured and patronized by themselves when they were alive. For they were masters of a craft which gives life and colour and character to many small Irish towns. For how long will that statement be true? The Kinema has been rebuilt, Cinema now, its identity established by polished metallic highlights of international anonymity as undistinguished as the building itself. It is worth nobody's while to spend evenings grinding powdered pigments into oils and varnishes, days on ladders with brushes and handrest repainting from year to year the shadowed and gradated curves, the 3D fullstops and commas, that are part of the tradition of colour and quality in the Irish town, part of the whole painted shopping-street facade of butchers, drapers, bars, grocers. The painted third dimension is now being replaced by the real raised screwed-on chromed sans-serif or cursive lettering of the self-service take-over, demand-



Some of the letter-forms used on the Kinema at Caherciveen





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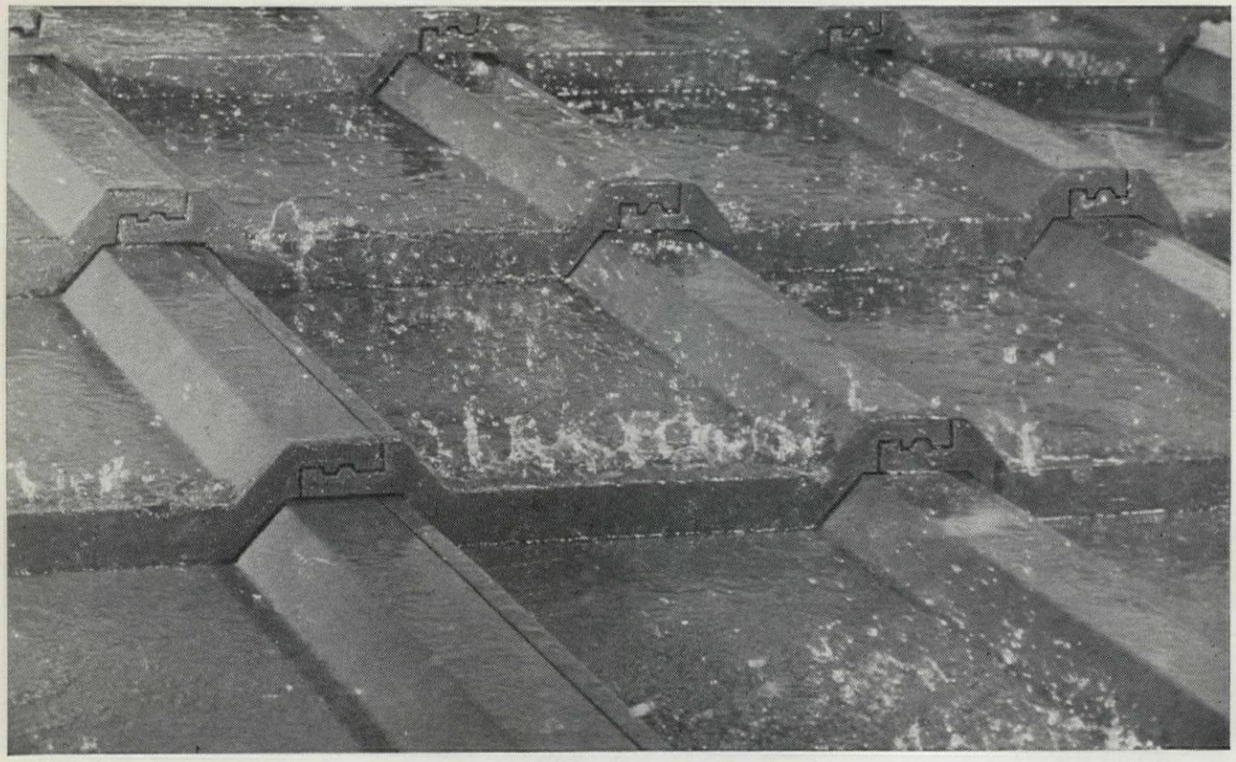

Here's a Marley Wessex roof* at 15° pitch in a gale force wind

with a rainfall of 2"/hour

... and here's the inside story of this remarkable tile.
Marley Wessex tiles were introduced four years ago after extensive research into the efficiency of existing interlocking roof tiles when used at low pitches. This showed that, at pitches below 17½°, water found its way into the weatherlock in quantities far greater than the capacity of the channels.

So Marley developed the Wessex with raised sidelocks. The flat area on either side of the weather groove is only 15% of the tile area and the small amount of water that falls there is soon diverted into the wide trough, as our picture shows. None of the water contained in the trough can ever reach or enter the weatherlock during its flow down the roof.

But there's more to the Wessex than that:
A special weather check is formed by three ribs on the underside of the tile. The deep grooves between them, running the FULL WIDTH of the tile, act as turbulence cavities and are a double check against capillary action.

Special clips to offset the effects of wind suction are supplied for installations exposed to extreme conditions.

That's why the Wessex is the first tile to be successfully used at 15° pitch.

Perhaps you should look into it? Ask for the technical leaflet.

** Photographed on a test rig in the Marley laboratories, where extreme weather conditions can be accurately simulated to prove the effectiveness of roof tile designs.*

Included in Barbour Index

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THE QUEEN'S AWARD TO INDUSTRY 1967

MRTI

1

WALLS OF WHITSTABLE

The return of sailing boats—small weekend dinghies—to Whitstable has meant that the town is assuming something of its former character as a small boat haven on the north Kent coast.

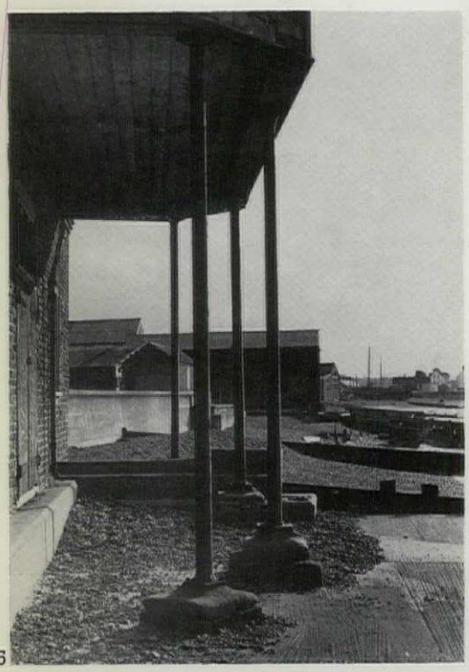
The boat building community that constructed wooden hulled yawls, 1, in the second half of the nineteenth century was situated along the pebble shore on Island Wall, Middle Wall and Sea Wall. There is no longer any trace of the original Middle Wall built in 1589, but there are groups of fishermen's houses (that survived the fire of 1869 and the flood of 1897) crouching behind the walls added in the eighteenth and nineteenth centuries. Standing on the prominent site of the Old Neptune Inn, a victim of the flood, the present inn is still fighting the encroaching sea, 2. But the sea has also yielded the oysters that the fishermen of Whitstable have dredged since pre-Roman times.

The Company of Free Fishermen, who acquired the Sea Manor of Whitstable in 1792, also retained the royal oyster fishing rights. The newly-elected Freemen drew up thirty-eight rules to preserve their rights. One rule stated 'No Freeman has to dredge for oysters before daybreaks or after sunsets.' Those caught stealing from the royal oyster beds were liable to a maximum penalty of seven years transportation. The present Whitstable Oyster Fishery Company is housed in the Royal Native Oyster Stores, 3, built in 1898, that stands on Sea Wall. From the tile-hung gallery, 4, a strict watch was kept on

2

3

the oyster beds extending seven miles out to sea. Supporting this gallery are four delicately thin cast-iron pillars, 5, that now show signs of erosion by sea-water. The gales in February dislodged many of the tiles on the facing panels of the gallery. The catches of oysters, landed in barrels and sacks, were brought up the beach and auctioned from the steps below the gallery. The west entrance, 6, leads into



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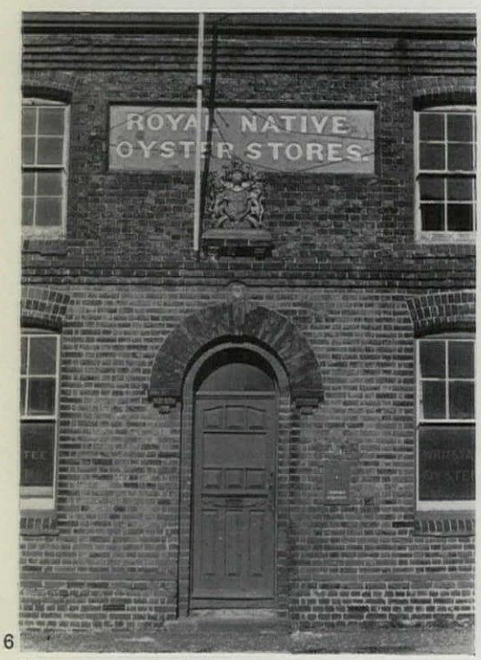


6

4

Return of the Romans?

A refreshing change from the plainness of the strokes and symbols of recent years, is provided by this clock with elongated Roman numerals. Unadorned satin-finish case and sunburst dial are in natural colour aluminium. Alternative design has black dial, white numerals and white hands. Available for either A.C. mains or Master clock operation in 9″, 12″ and 18″ dial diameters. Most models obtainable ex stock. Please ask for Publication 57 (A.C. Mains clocks) or Publication 51 (Master Clock operated) which show the whole range.

the hall where the Freemen hold their courts. Outside the cottages that surround the oyster stores, the bright modern yachts sharply contrast with the remaining yawls. Still heavily tarred after their last days in the water, the yawls are now shored up on the beach at Island Wall, 7, 8, where more and more of the cottages are being bought up by the weekend sailors.

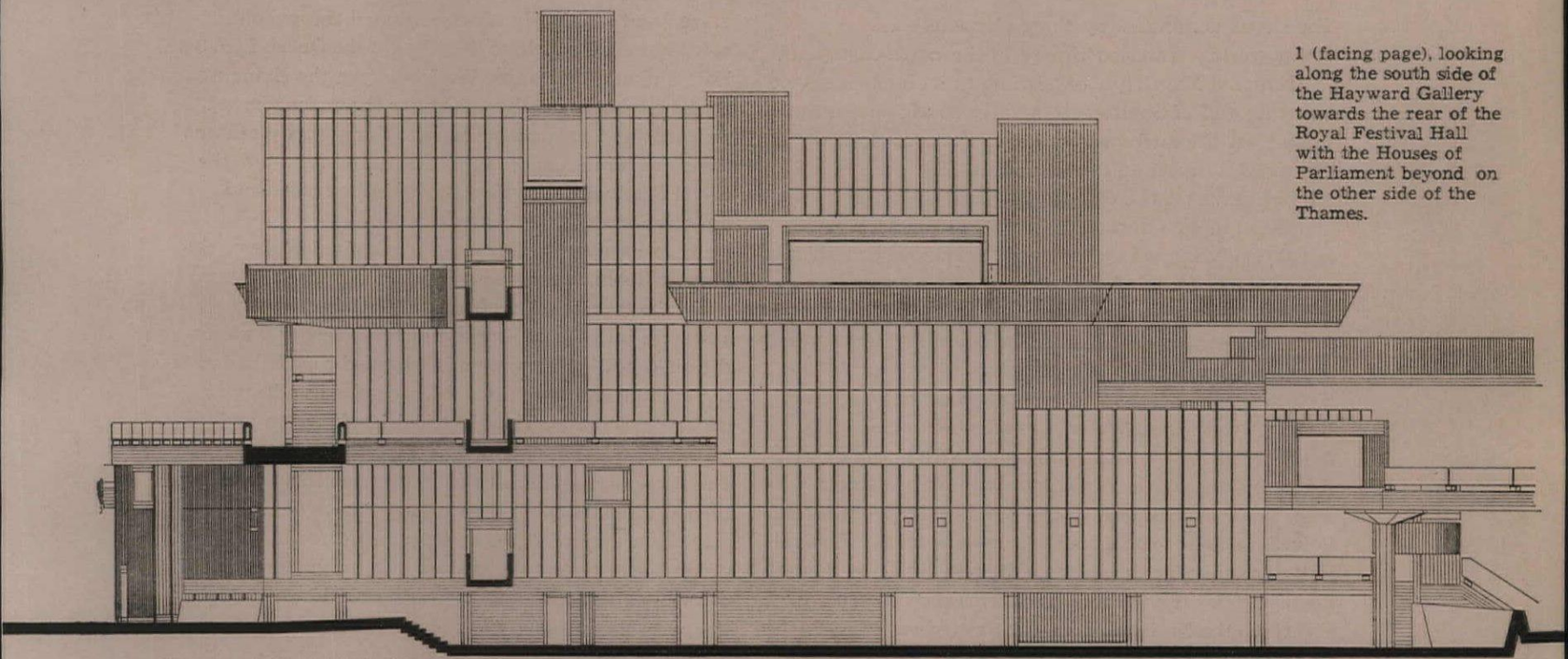
The town that appears to have missed the first half of this century is again enlarging its harbour to cope with North Sea shipping. This has brought an influx of light industry to the harbour and the Walls locality which also supports the needs of the weekend sailors. The Island Wall, Middle Wall and Sea Wall can again claim to be a seafaring community.

PETER BAISTOW

7

8

SBAC



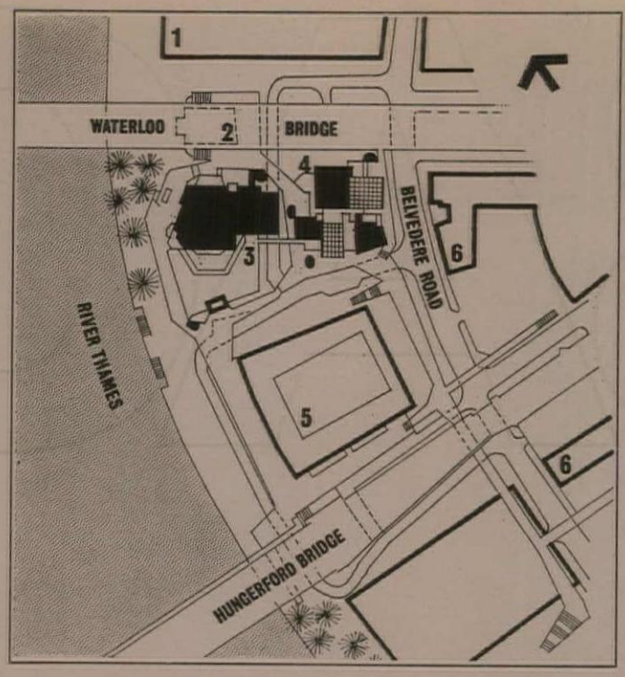
1 (facing page), looking along the south side of the Hayward Gallery towards the rear of the Royal Festival Hall with the Houses of Parliament beyond on the other side of the Thames.

east elevation of Hayward Gallery (scale 1/24 in: 1 ft)

SOUTH BANK ARTS CENTRE | *architect to the GLC* HUBERT BENNETT | *photographs by Richard Einzig*

A small concert hall on the Belvedere Road frontage was part of the original conception for the Royal Festival Hall. But when the Festival of Britain opened in 1951, there had been barely enough time to complete the main hall, so its unfinished eastern flank was given a temporary cloak of decency. By the middle 'fifties the conception had changed and the National Theatre had been pushed upstream (it was later repushed downstream), leaving vacant an inviting site between Waterloo Bridge and the Festival Hall, a site that is now occupied by the buildings illustrated here. The brief for these buildings was provided by a committee set up by the Arts Council, which established that a complementary hall for 1,100 would be required, with a smaller recital room for 372 to meet the recommendations of the former Queen's Hall Committee. At the same time, the Arts Council itself expressed a desire for a new gallery for its travelling art exhibitions. In 1961 the London County Council approved a scheme for these three new elements and for the completion of the Festival Hall. The Festival Hall was completed in 1965 (see AR, May 1965), the Queen Elizabeth Hall and the Purcell Room in 1967 and the Hayward Gallery in May of this year, these last three comprising the Arts Centre.

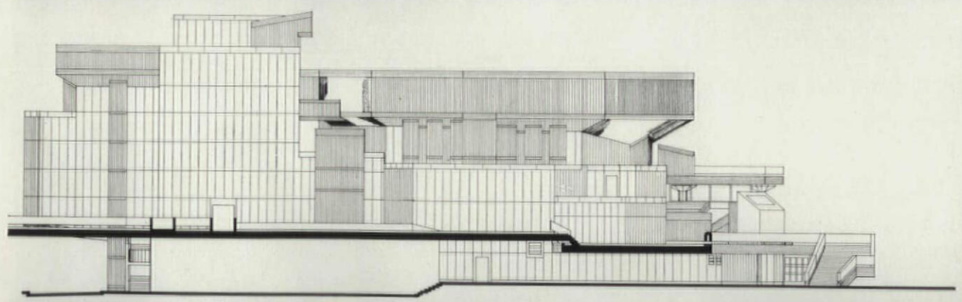
site plan: key
1, National Theatre site
2, National Film Theatre
3, Queen Elizabeth Hall and Purcell Room
4, Hayward Gallery
5, Royal Festival Hall
6, Shell Centre



The site is dominated by three elements—the overpowering Waterloo Bridge to the north-east (with the National Film Theatre nestling in its haunches), the towering cliff of Shell's offices to the south, and to the south-west the monumental Royal Festival Hall.
The exacting brief and these dominating features led to the decision that the component parts should be expressed in an informal structure which itself was considerably shaped by the need to separate pedestrians and vehicles. Coupled with disciplined detailing throughout and the use of one material (in-situ concrete) for all three component parts, the overall effect is of a complex labyrinthine unified mass.
By a system of terraces and footbridges, the pedestrian is free to walk from Waterloo station or the bridge to the Festival Hall, the Queen Elizabeth Hall, the Purcell Room and the Hayward Gallery without crossing a road. Vehicles approach from a single entrance point off Belvedere Road on to a double loop—one for the Festival Hall, the other for the Queen Elizabeth Hall, the Purcell Room and the Hayward Gallery. This second loop will also serve the National Film Theatre (when its extension, now starting, is complete) as well as a car park under the Hayward Gallery for 150 vehicles.
THE QUEEN ELIZABETH HALL: The hall seats 1,106 people at one level on a stepped floor, and although designed primarily for concerts is equipped for conference use. The stage is in eleven sections and automatically operated. The sections nearest the audience can be dropped to form an orchestra pit or raised from the instrument store below to bear pianos and other heavy equipment. The rearmost section houses a chamber organ, which can similarly be made to appear and disappear at will. The walls and ceiling around the platform are exposed concrete. The auditorium, without the disadvantages of galleries forming difficult acoustical 'shadows', is relatively simple to control acoustically. Helmholtz resonators line the walls to absorb low frequency sound and the ceiling has a similar function with its fibrous plaster infill panels in the concrete beam and box structure. The box beams house the air-conditioning ducts. The seating is purpose designed and consists of leather squabs fixed to aluminium shell seats. The hall is fully equipped for television.
Performers have dressing-rooms off the stage—soloists on the riverfront and orchestral players on the Belvedere Road frontage. The orchestral players are provided with a small bar.
THE PURCELL ROOM: This recital room holds 372 people, with a stage suitable for small chamber groups. The construction, seating, acoustical and air-conditioning arrangements are similar to the Queen Elizabeth Hall. It is also designed for conference use.
THE FOYER: This links and provides the entrances to the two auditoria and cloakroom and refreshment facilities for both. Pedestrians and car-users alike are controlled at an outer lobby, which simplifies stewarding and managerial control. Its walls and floor are both clad in crystalline white Macedonian marble. The ceiling expresses the mushroom column and flat beam construction in finely shuttered concrete, and the voids between are filled with a series of truncated pyramidal forms made of sound-absorbing planks of perforated aluminium. They also house and conceal the cold cathode tubes used to light the foyer. Door, window and other trim is all in anodized aluminium. The foyer has magnificent views of the Thames and is double glazed and separately air-conditioned throughout.
ADMINISTRATION: Behind the stage of the Queen Elizabeth Hall, and at a mezzanine level between the changing rooms for both, are the offices for the management, stewards and programme sellers. For security reasons these are connected by an underground tunnel to the Royal Festival Hall where the main box office and financial arrangements are handled.
PLANT AND SERVICES: The main plant room is above the Purcell Room, supported on an independent structure to avoid the transmission of sound through the main structure into the auditoria. The main feeder duct for the air-conditioning system is wrapped round the top of the auditorium structure, which results in a heavy cornice externally. The electrical intake room and refrigeration plant are under the terrace on the riverside. The foyer bar is similarly serviced from this level.
THE HAYWARD GALLERY: The gallery is a two-level exhibition area of 20,000 sq. ft., planned around a vertical service and circulation core with stores, workshops and a loading bay beneath. The gallery can be approached from ground level or from the pedestrian network linking the Festival and Queen Elizabeth Halls. Three artificially lit galleries lead off the foyer at terrace level and the other two, naturally lit, off the upper level. From these upper two galleries access is gained to three open-air sculpture courts with views over the Thames and the City. The upper galleries are top-lit with glazed pyramids. Baffles exclude direct sunlight and the amount of light is controlled by electrically operated blinds.
Four of the galleries have been designed to accept a demountable display screen system based on a 4ft. module. Sockets in the floor and bosses in the ceiling receive the aluminium posts and also provide lighting points where necessary. The walls are plastered and the floor tiled except in one gallery where maple is used.
Off the foyer are the director's and administration offices. The box-type structure consists of walls acting as beams, the lower walls being supported on columns and carrying the floors above. The upper walls carry the cantilevered air ducts and the lattice beam roof. The sculpture courts are reinforced two-way slabs partly cantilevered.

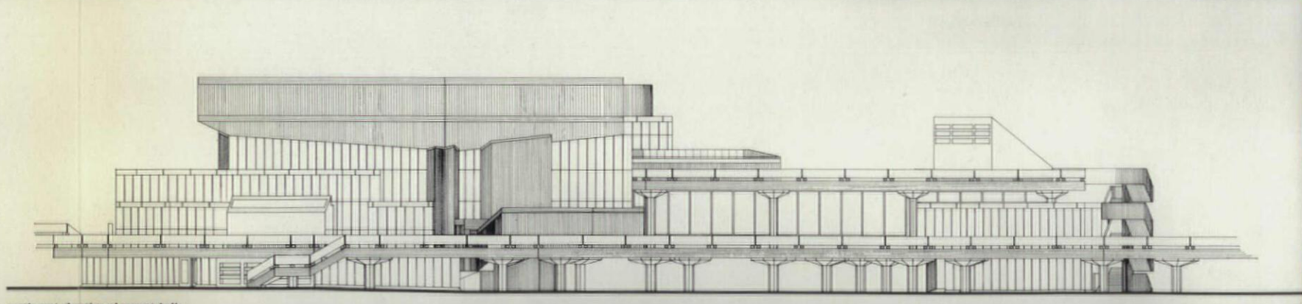
SOUTH BANK ARTS CENTRE

2



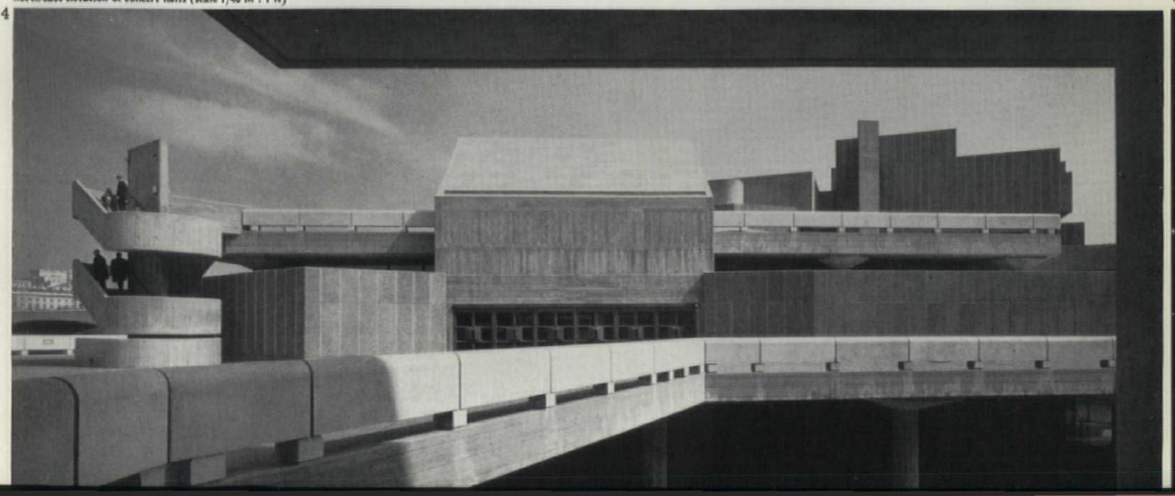
north-east elevation of concert halls (scale 1/40 in : 1 ft)

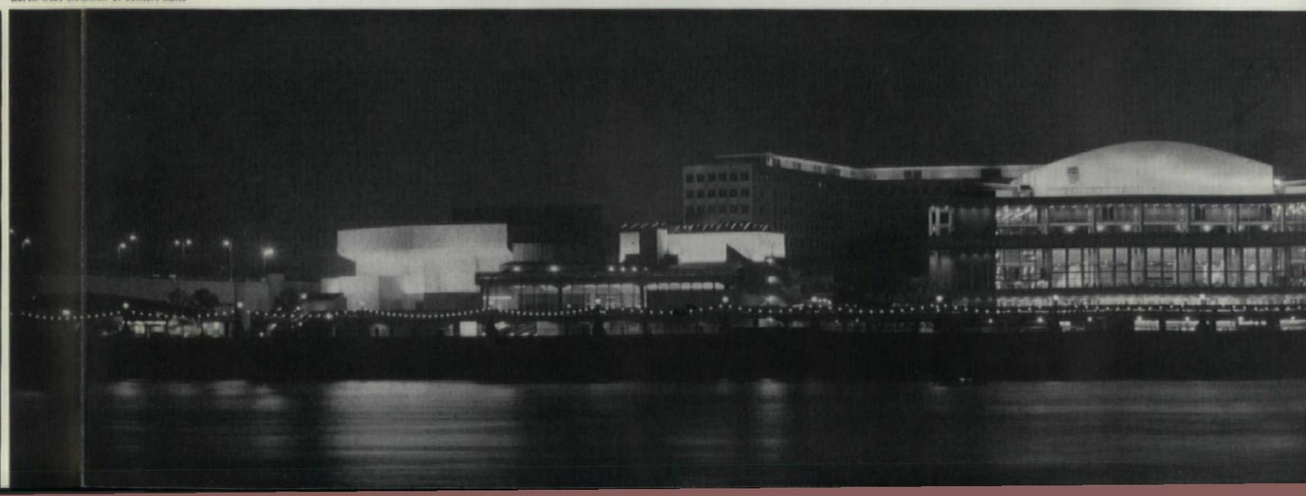
2, the arts centre seen from the footbridge between the Festival Hall and Belvedere Road. The Hayward Gallery is on the right and the Purcell Room and Queen Elizabeth Hall are on the left. 3, the pedestrian entrance to the foyer of the concert halls. 4, the arts centre from the north bank of the Thames, with Waterloo Bridge on the left and the Festival Hall on the right.

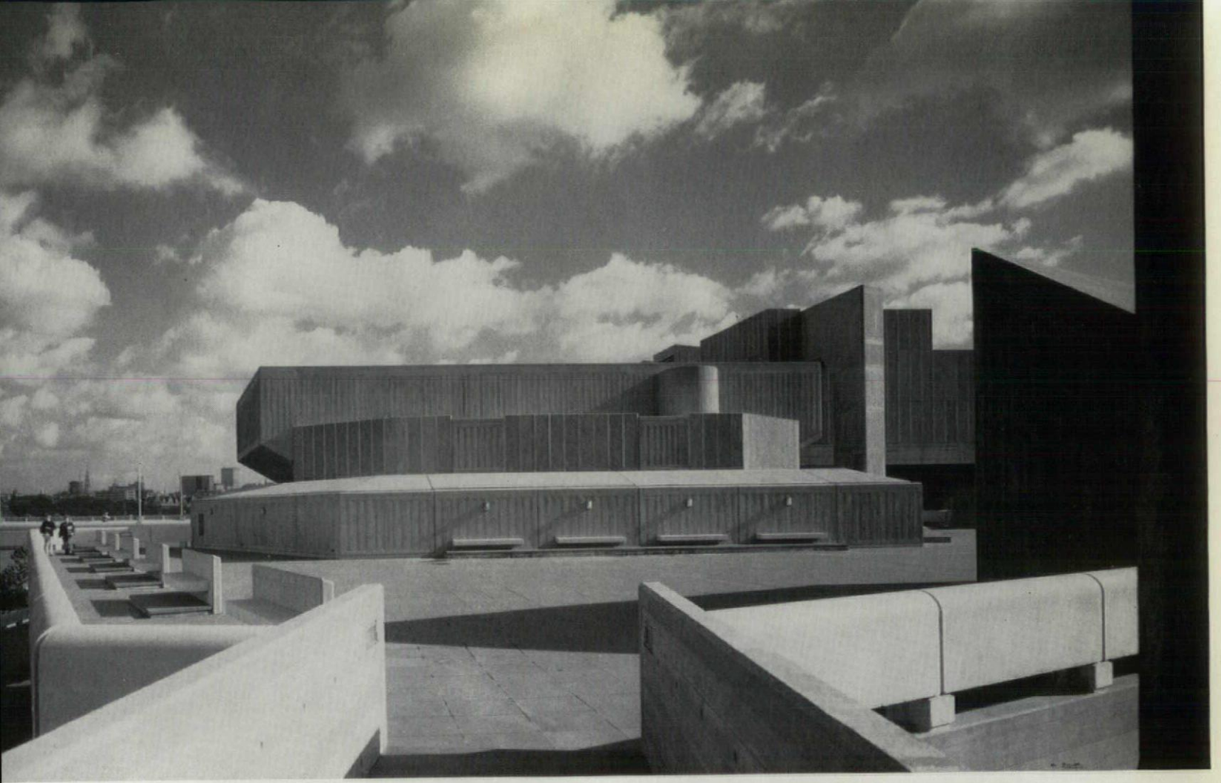


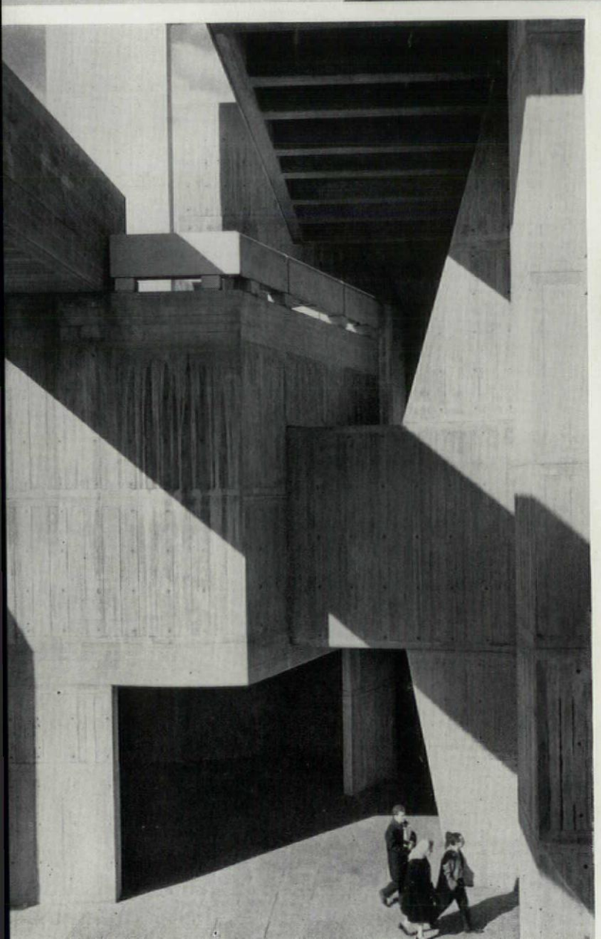
north-west elevation of concert halls

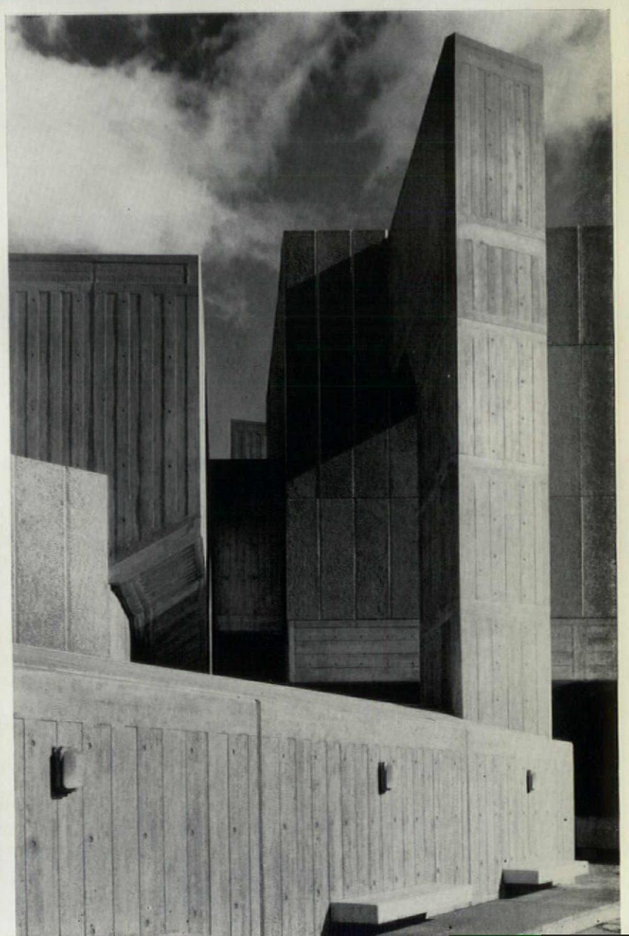
3, 4

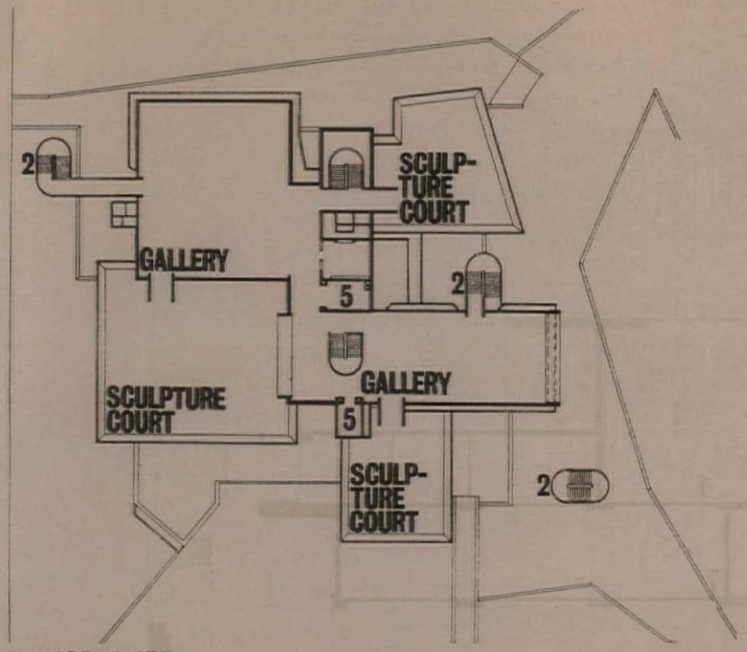




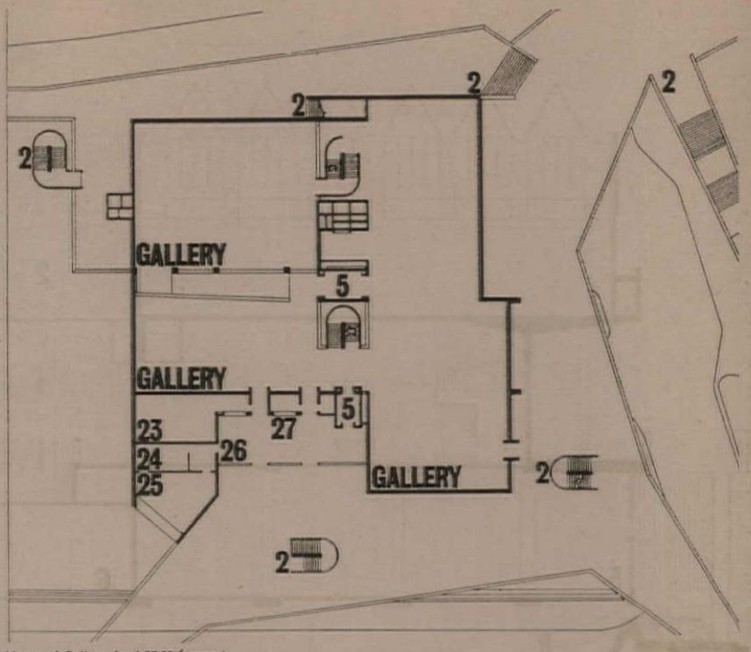




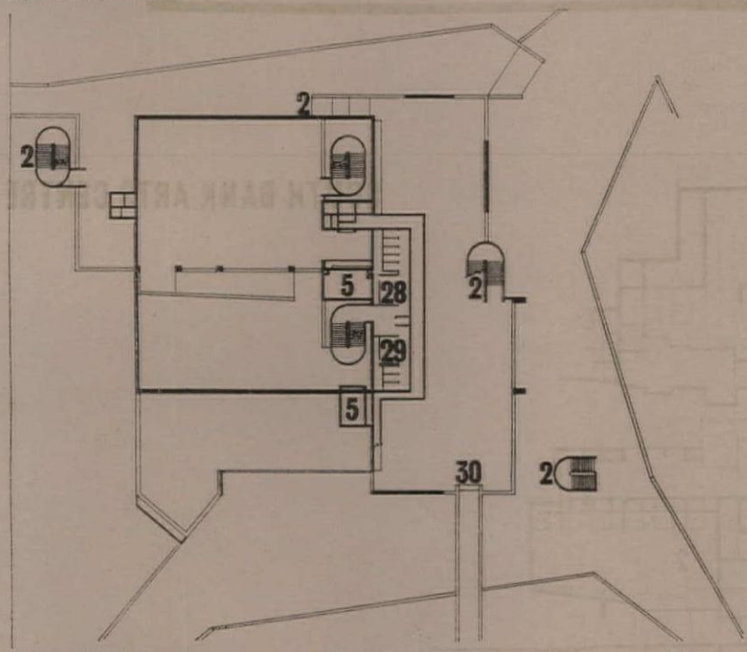




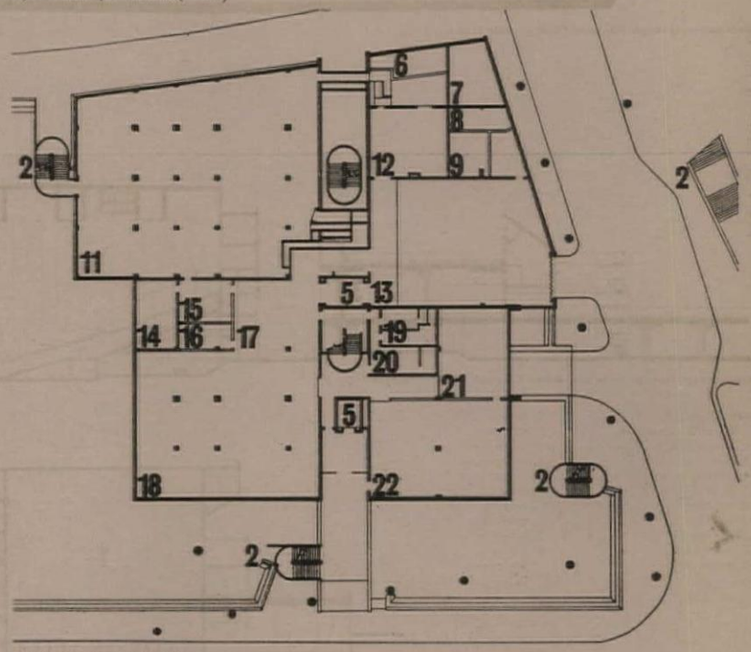
Hayward Gallery: level 57.00



Hayward Gallery: level 37.00 (terrace)



Hayward Gallery: level 47.00



Hayward Gallery: level 19.00

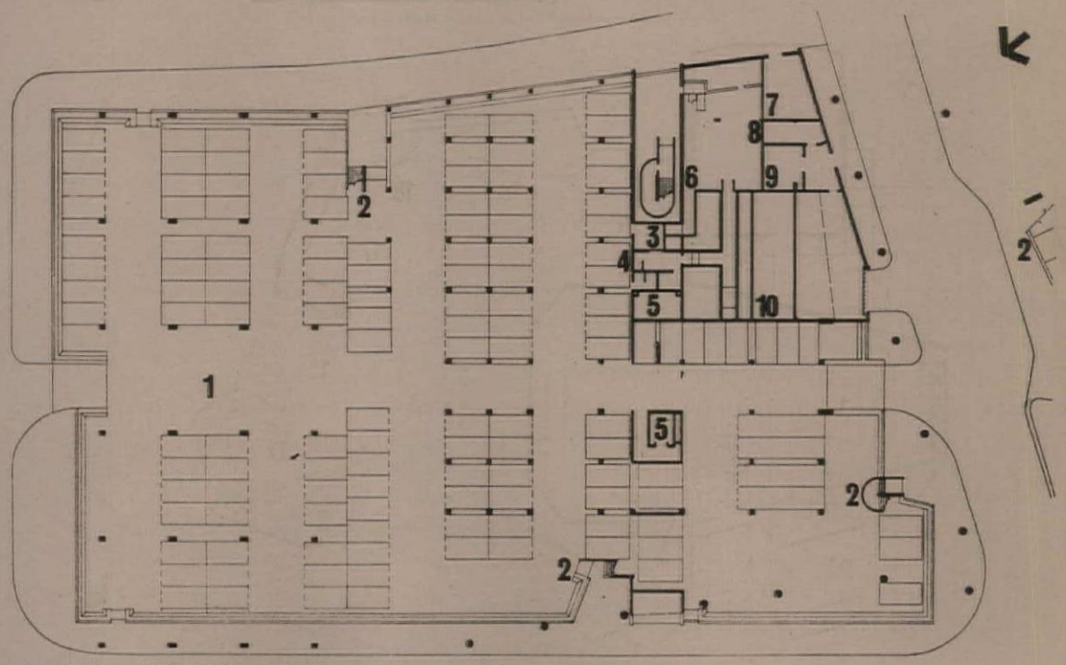
key

1, car park	16, office
2, external stair	17, inspection bay
3, GPO	18, store
4, boiler room	19, lockers
5, lift	20, staff mess, kitchen
6, refrigeration plant	21, screen store
7, LEB	22, workshop
8, battery room	23, cloakroom
9, switch room	24, secretary, waiting
10, void	25, director
11, plant	26, lobby
12, packing case room	27, cash desk
13, loading bay	28, female w.c.
14, strong room	29, male w.c.
15, security office	30, link bridge

SOUTH BANK ARTS CENTRE

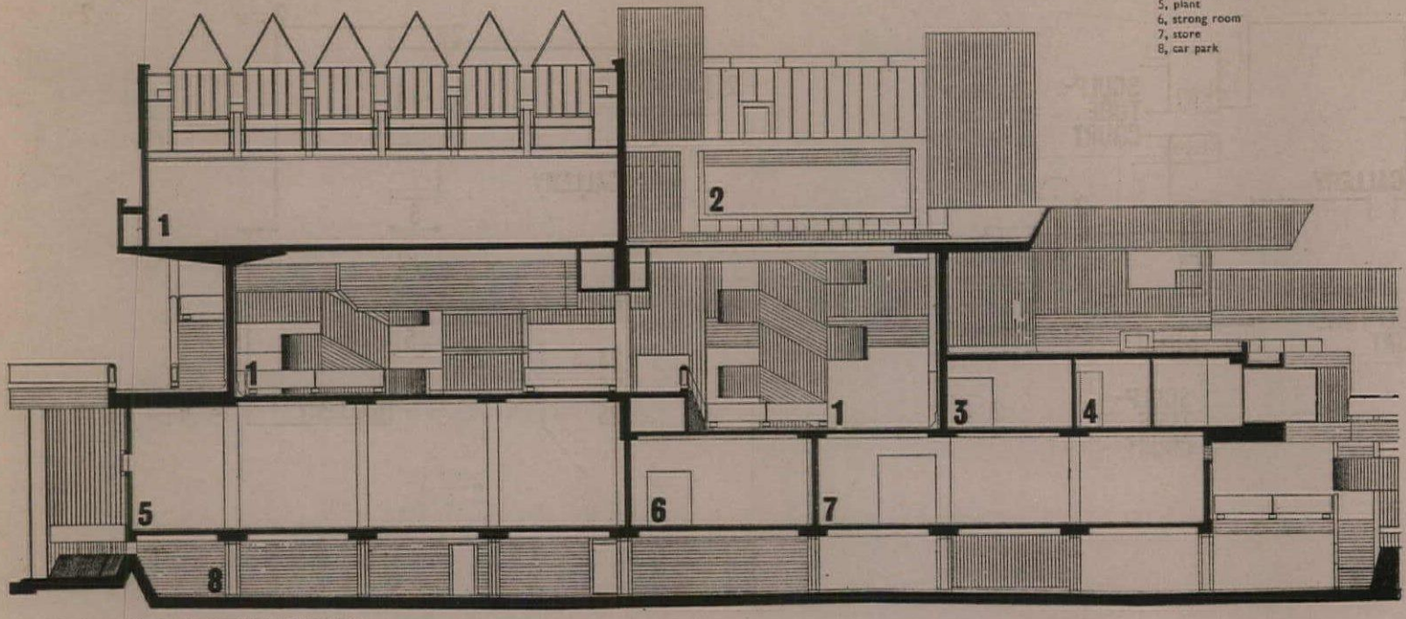
	5	
6	7	8

Fold-out pages, opposite: 5, the terrace over the foyer of the concert hall, looking towards the west end of the Queen Elizabeth Hall. 6, junction between the foyer (left) and the Purcell Room (right), with the cantilever of the main plant room overhead. 7, junction between the Queen Elizabeth Hall (left) and the plant room (right). The shaft contains the air-conditioning duct for the foyer. 8, the south side of the Hayward Gallery, with one of the sculpture courts projecting on the right.

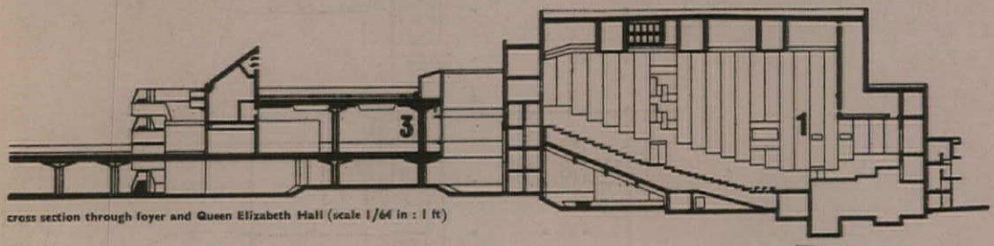


Hayward Gallery: level 13.00 (scale 1/64 in : 1 ft)

key
1, gallery
2, sculpture court
3, cloaks
4, administration
5, plant
6, strong room
7, store
8, car park

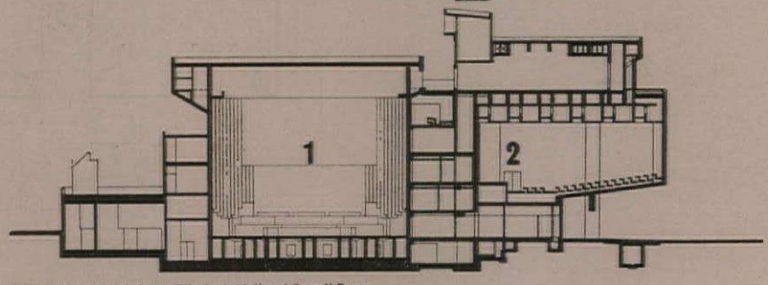


cross section through Hayward Gallery (scale 1/24 in : 1 ft)

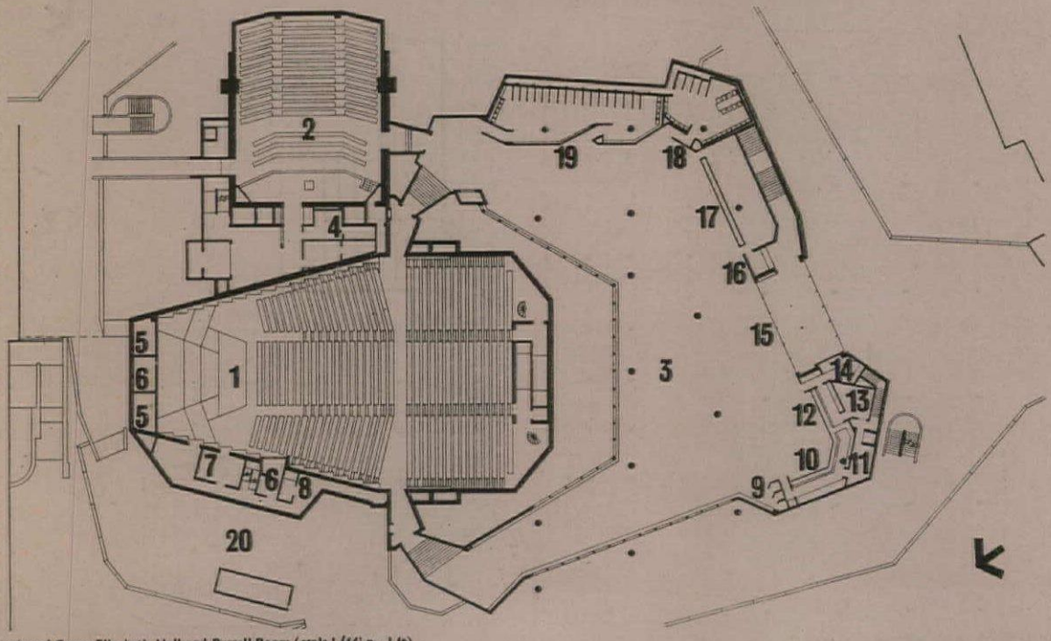


cross section through foyer and Queen Elizabeth Hall (scale 1/64 in : 1 ft)

key
1, Queen Elizabeth Hall
2, Purcell Room
3, foyer
4, dressing rooms
5, plant
6, t.v. camera, public address speakers
7, t.v. sound
8, sound lobby
9, telephone
10, bar
11, bar store
12, coffee bar
13, preparation
14, switch room
15, lobby
16, booking office
17, cloakroom
18, male w.c.
19, female w.c.
20, backstage



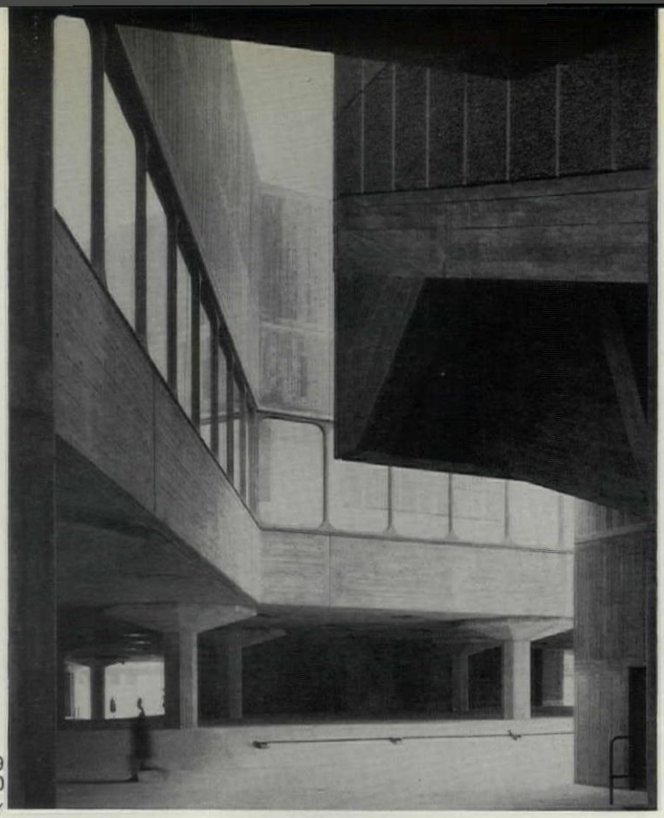
cross section through Queen Elizabeth Hall and Purcell Room



plan of Queen Elizabeth Hall and Purcell Room (scale 1/64 in : 1 ft)

SOUTH BANK ARTS CENTRE

Architect to the Greater London Council: Hubert Bennett.
Deputy architect: Jack Whittle.
Senior architect, Civic Design and General Division: Geoffrey Horsfall.
Group leaders for project: E. J. Blyth and N. Engleback.
Job architects (concert halls): J. A. Roberts and W. J. Sutherland.
Job architect (art gallery): J. W. Szymaniak.
Quantity surveyor, Department of Architecture and Civic Design: M. F. Rice.
Quantity surveyor: Harry Trinick & Partners.
Director of Mechanical and Electrical Services: C. A. Belcher.
Divisional engineer, Electrical Services Division: P. C. Hoare.
Divisional engineer, Mechanical Services Division: R. J. Dickson.
Structural consultant: Ove Arup & Partners (*partner in charge*: P. Duncan.
Acoustic consultants (concert halls): Hugh Creighton, P. H. Parkin, Building Research Station, DSIR.
Main contractor: Higgs & Hill Ltd.
For sub contractors see page 74.



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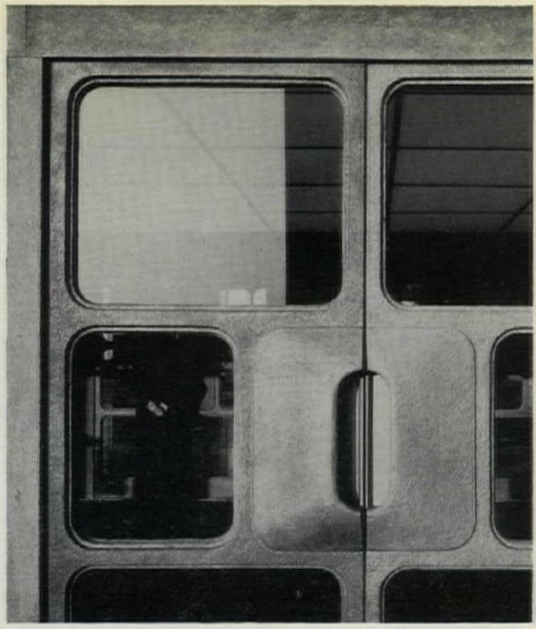
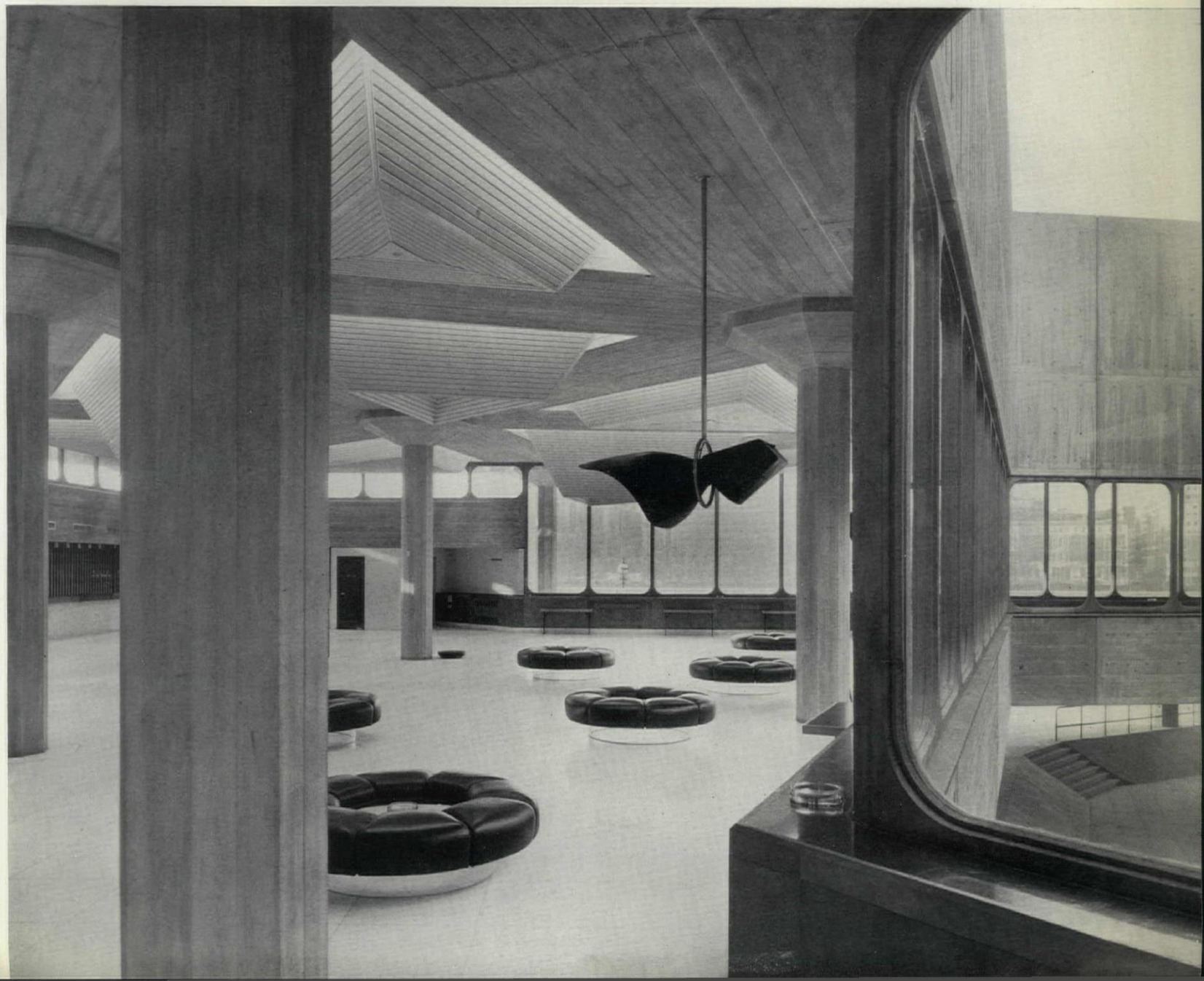


11

9, the gap between the foyer of the concert halls (left) and the auditorium of the Queen Elizabeth Hall. 10, interior of the foyer. The walls and floor are clad in crystalline white Macedonian marble. 11, detail of the foyer doors, which are of cast anodized aluminium.



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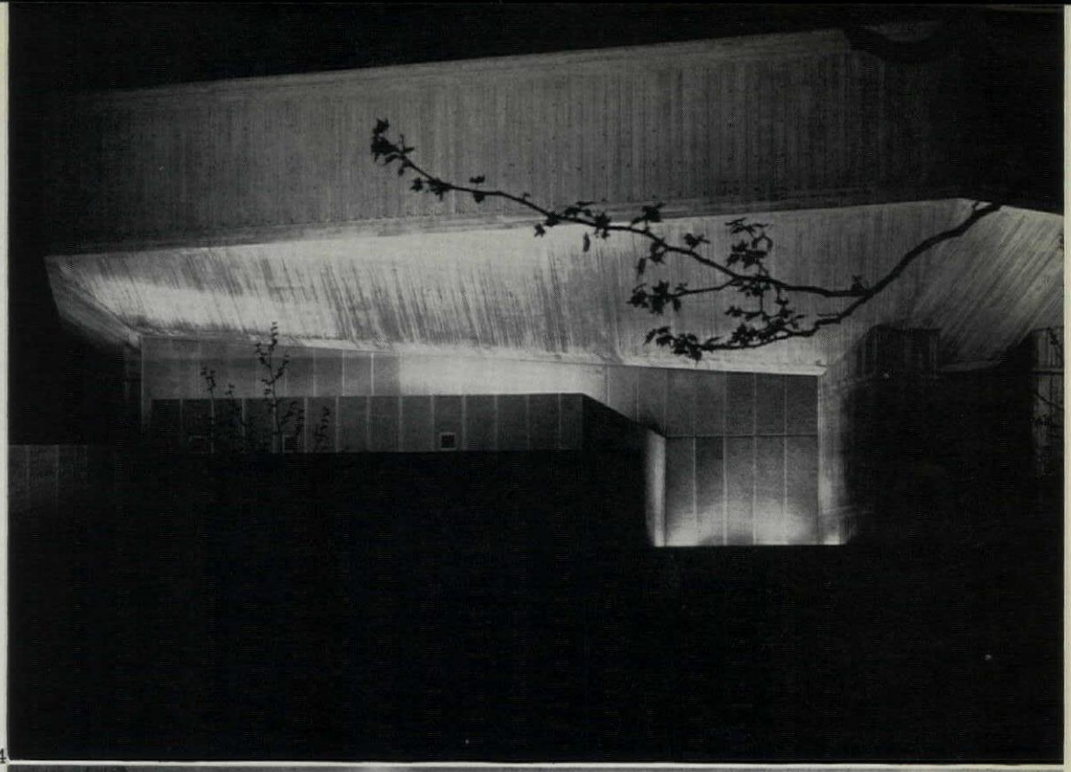

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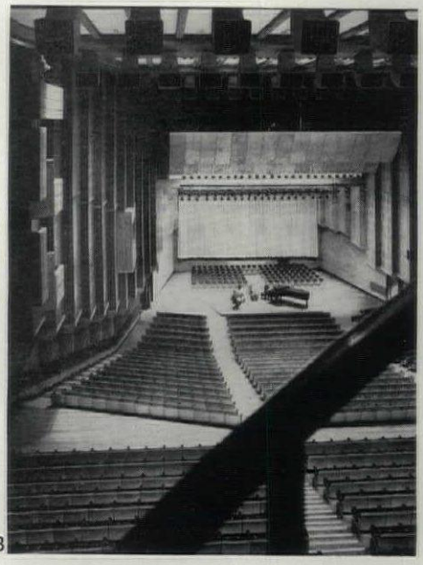
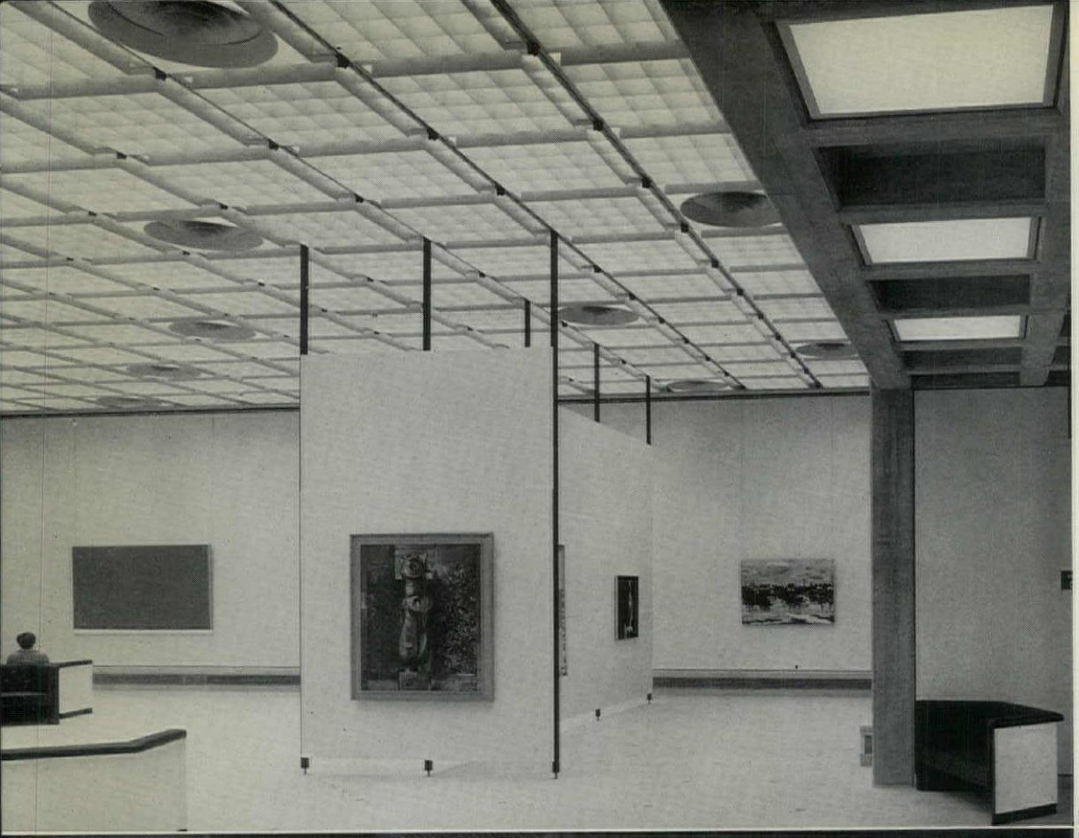


13

15

12 (opposite), the auditorium of the Queen Elizabeth Hall. The spiral staircase leads to the projection room. The walls are lined with Helmholtz resonators. The aluminium shell seats have leather squabs. 13, looking from the spiral staircase towards the stage of the Queen Elizabeth Hall. 14, the floodlit exterior. 15, the Purcell Room, showing the faceted timber panelling of the rear wall.



16

17

16, the upper level of the Hayward Gallery, which is top lit by the glazed roof pyramids. 17, two of the artificially lit galleries which are entered at terrace level.

criticism

Charles Jencks

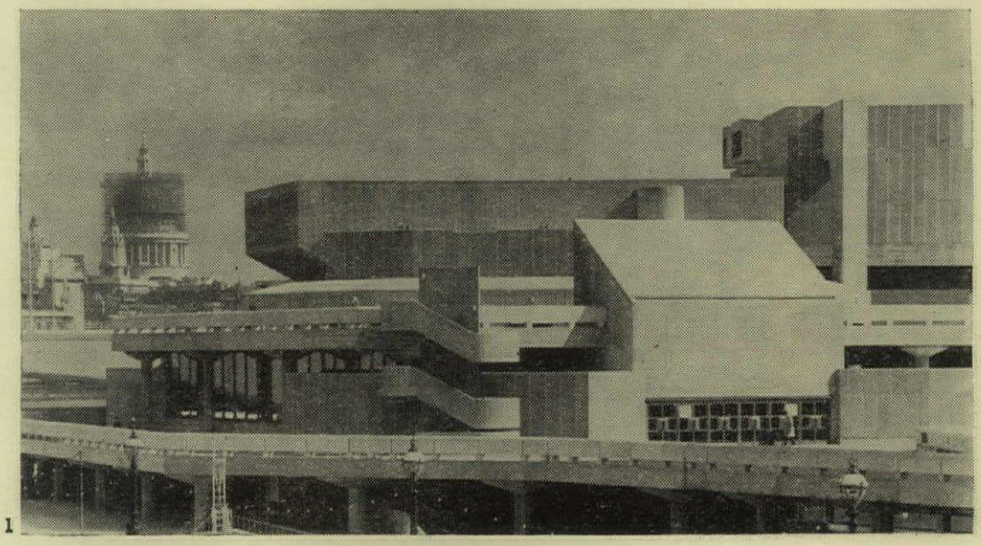
ADHOCISM ON THE SOUTH BANK

There is a story, with its many variants, about two Asians who hear a performance of Western music, the grandiose works of Beethoven. After the concert a Western gentleman, who is exultant over the performance, demands without a touch of uncertainty: 'What did you think of our Beethoven!' The Asians, slightly annoyed at the pomposity of the demand and not wishing to betray their preference for atonality, answer: 'Beethoven was Beethoven, but by far the best piece was the orchestra tuning up.' This story, which is often told to illustrate the truism that one man's meat is another man's poison (or in more general terms that one man's nature is another man's culture), has implications for the cultural centre which is now developing on the South Bank, if only because this centre has received such opposite judgments. It is symptomatic of a pluralist age. Yet I think it has further implications than that, because it illustrates a method of design which is analogous to the orchestra tuning up; that is, *adhocism*. This method results in the fragmented totality produced when each expert, each specialist, each violinist performs at his peak with little regard for the whole; and it thus results in a kind of music or architecture which is particularly suited to a pluralist age when no explicit, whole philosophy is shared by all. But before discussing this method of design (which over a period of time must form any city), it is necessary to outline the variety of judgments on the South Bank Arts Centre. To begin with a statistical survey, the Queen Elizabeth Hall was voted by forty-six per cent of five hundred engineers as 'Britain's Ugliest Building.'* Whether this judgment 'ugliest' will be taken as a compliment or insult depends again on the philosophy of the individual, but what is immediately significant to my purpose is the consensus of the engineers' view. They responded to this complex with a high consistency and the reasons are not hard to find. First of all, there is no apparent structural logic which engineers would like to find: there are at least four different structural systems; and, worse from a purist point of view, all seem to be unrelated. The mushroom columns which support the circulation deck set up no clear rhythm, the bearing walls occur at arbitrary points, the cantilevers of the auditoria are compromised by heavy box columns and the mechanical equipment on the top has yet another independent system.

All this of course could be justified functionally. But what is unjustifiable to the rationalist is that there is no underlying coherence, no visual logic which helps explain the functional logic. If anything, the appearance confuses the function. Thus what one might take as the cantilever of the auditorium turns out to be the mechanical equipment, 1; what one regards as a casual fire escape turns out to be the main entrance from car level. In fact anyone who tries to read off each function separately is completely baffled by the confusion of shapes and ambiguity of forms. The same form, exposed concrete, is used as wall, support, roof or floor. Furthermore, the precast siding which might have been used to clarify the difference between one function and another by contrast is wrapped around from one thing to another, indifferently. Common sense is further annoyed by the dark, useless space beneath the circulation deck, where even cars cannot drive. And every time there is a change of level, the stairway, instead of turning out and expanding in a gesture of welcome, turns inward and pinches. To further the condemnation, the rationalists (including the social critics) might object that there is no provision for daytime social activity. The whole complex, especially when the National Theatre is added, will just be one more post-war cultural ghetto. And, to add the final blow, the humanitarians might insist that the project dramatizes movement and mechanical equipment rather than art, which it does everything to hide behind a confusing, hostile pile of jagged, in-situ sludge.

All this criticism which has occurred, while understandable, is slightly beside the point. First of all because there is a sensible answer to each objection, and secondly because the architects were not trying to create a building in any conventional sense, but rather a sequence of extended places and events on a route. And where they were trying for a building, it was probably intended to be conventionally ugly. So while the critics may have reacted in the right way, they have drawn the wrong conclusions. It is rather as if the critic reacted correctly to a gargoyle, a grotesque or a Francis Bacon only to reject them as unbeautiful. This mistake, while common to all ages, is particularly acute in a pluralist age, because then most people are too uncertain to enjoy that which

1, *ambiguity of forms exists throughout the Arts Centre, but is particularly apparent in the cantilever of the cornice and the box to its right. These can be read as the slope of the auditorium and the fly tower to a stage; in fact both house mechanical equipment.*



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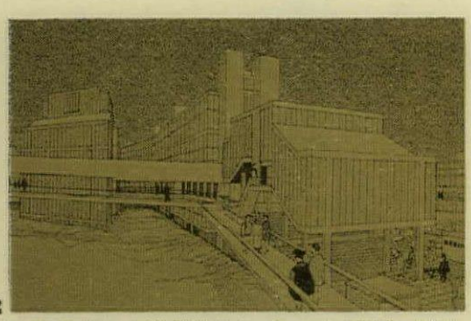
* *Daily Mail*, October, 1967; *Design and Components in Engineering.*



2, *the Smithsons' Sheffield University project,* 1953. *All the major elements of the Arts Centre are found here, as well as the dead-pan veracity.*

does not confirm their expectation of enjoyment. They cannot say 'I like it because it's ambiguous, because it's bloody minded, because it's ugly.' But some such attitude is necessary to understand this complex as well as its progenitors.

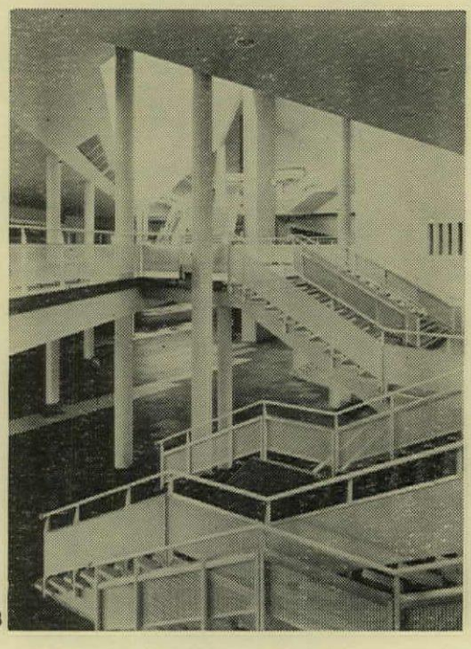
The most immediate ancestor, whether conscious or not, is the Brutalist work of the Smithsons—more particularly their Sheffield University scheme of 1953, 2, which was the first really blunt expression of a non-building, organized on non-formal principles by means of a circulation deck. This scheme also shares the same matter-of-fact attitude toward mechanical services (they are simply there) and the exterior cladding (which remains just exterior cladding). When a window is needed it is punched through, when a door is needed it is simply put on. The Smithsons have characterized this scrupulous process in this and their Berlin scheme as the 'open aesthetic for the open society.' What they have in mind is a loose, polycentered arrangement which is organized as a series of fixed places on a route for movement, as well as an ad hoc arrangement of elements. The whole effect would imply openness (since one cannot destroy a non-formal arrangement by changing an element) and it would show openness (since there is no final centre).

The architects of the South Bank complex have acknowledged the influence of the Berlin scheme, and it is clear in the meandering arrangement of the pedestrian routes which circle around these fixed 'places' as if they were so many beached whales. However this metaphor seems immediately wrong; particularly because the architects have consciously avoided all references except to the literal and prosaic; a fact which can be tested by trying out metaphors suggested by other critics, which seem to rebound off this complex. 'Quasi-fortified; neo-Antheap; mini-Ziggurats; bunker; an army of centipedes carrying off the dried carcass of a broken turtle.' None of these metaphors really holds except possibly the first one, quasi-fortified. This is a plausible suggestion due to the pugnacious and fractious forms. One is slightly stirred to find out what's hiding behind the parapets—storm the walls, leap the moats, cross the forecourt, jump the crossbridge, dodge the columns and burst through those fifteen inches of solid concrete to find out what needs so much protection and sanctity in the middle of the twentieth century. A concert hall and art gallery. Perhaps. In any case the forms *are* fractious and relentless. And this kind of embattled image is altogether more appropriate to a cultural centre (in its present state of pluralist struggle) than that of most others around the world which tend towards the static smugness of classical works (which implies that the art is both removed and accepted).

An extreme example of the latter is the Lincoln Centre in New York, which is a wonderful specimen of a closed and moribund aesthetic. It implies an attitude toward culture which is very nineteenth-century; as if the culture celebrated within were commonly recognized as eternally valid. Thus the tendency toward dignity, monumentality, restraint, and the concommitant behaviour which is awed, hushed and above all correct. There is no chance of an accident, much less a planned accident. Not so the South Bank scheme, where one can imagine deliberate acts of burlesque.

Probably the only comparable work which manages to convey more surprise is Scharoun's Berlin Philharmonie. Here also the drama of movement and discovery becomes the major image, 3, but the forms seem to be able to take on further musical metaphors without becoming implausible. They surround the performance in a series of waves, of tiers, of row on row of crescendi; they meet the rhetorical level of the programme rather than trying to become self-effacing and merely dead-pan. Bringing up Scharoun in this context is not altogether inappropriate, because it is his work in the 'fifties which is really brutalist and ad hoc in a way similar to the

3, *circulation is also the framework and background against which various* ad hoc *accidents happen in Scharoun's Berlin Philharmonie. The concept is similar to the Smithsons' mixture of 'route and pavilion' or 'movement and fix.'*

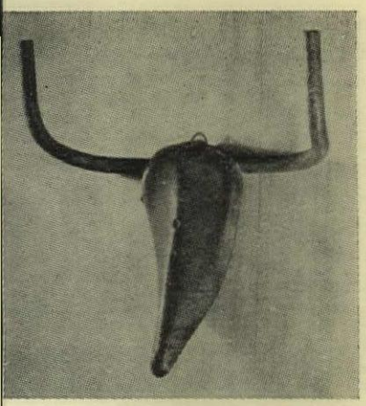


South Bank. In his Loenen School of 1953 he lets the circulation space become the generator, then cuts into this with a series of rooms, fragments the space with different structural systems jammed right through each other, paints the concrete in different pastel shades (clearly ugly), applies the flashing in a non-formal way, lets the vegetation grow indiscriminately everywhere and really has the courage to create an all-around, consistent maze (which makes the British Brutalists look rather fastidious by comparison).

But what is the underlying justification for this (since it is all too easy to create an unfruitful maze); in short what is the justification for adhocism? Basically there are three propositions which are mutually related and support this philosophy.

Bricolage, not Invention. The first assumption which underlies the South Bank Arts Centre is that in an advanced, electronic society with a superabundance of means, it is a waste of time and energy for most architects to invent new forms. Rather, it is the architect's prime duty to make the best from what already exists; for creation is superfluous in the face of our industrial cornucopia. Invention is conspicuous waste; time should rather be spent cataloguing our resources, learning our area of choice. Because in any typical building situation there are already ten good solutions for any one problem, and if the architect is not aware of these, not only will he miss the opportunity of selection but invariably create what already exists. Design becomes leafing through catalogues or magazines, or in the not too distant future asking a central storage bureau what resource already exists which can do the job. This (ideal) computer would have every product in a society on tape and the architect could just specify price, usage and a schematic design, whereupon he would instantly know the ten possible solutions. Presently this retrieval of information is a tedious and ridiculous chore, but the spirit of *bricolage* will have to become more cultivated to keep pace with an increasing profusion of choice.

Bricolage, Lévi-Strauss's term for what the handyman does, refers to making one solution do for another: using a wedge for a door-stop, a bicycle-seat on a motorcycle. Perhaps the most conspicuous exemplar of this kind of transformation is Picasso who made the 'Bull's Head,' 4, from a bicycle-seat. This is the usual kind of artistic *bricolage* which relies on the multivalence or redundancy of objects. But a more adhocist use of the bicycle-seat is that of the surgeons who have thrown together an 'Operating Chair-Stool' from pre-existing parts without any attempt, 5, to transform the elements metaphorically or unify them visually. This is the more radical *bricolage* because it relies very closely on necessity and possibility; it



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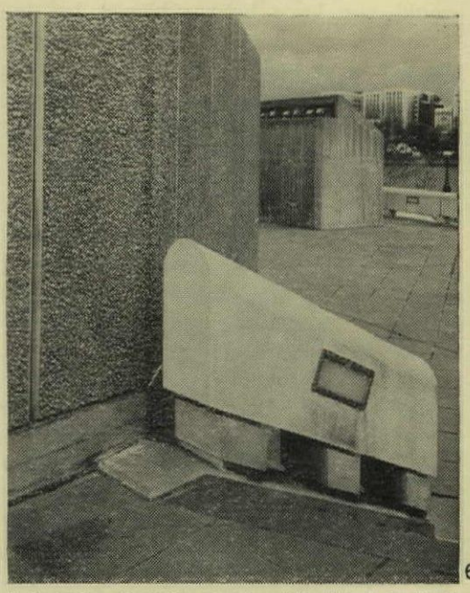
Because forms are multivalent one can always find a new use for them whether metaphorical or functional. Picasso uses the bicycle seat as a 'Bull's Head,' 4, *and the surgeons as part of an 'Operating Chair-Stool,'* 5. *The surgeons' use is more typically adhocist because it grew from necessity. The chair must be able to be pumped up and down, swivel, lock into various positions and give stability while the surgeon is operating; each function is served by a pre-existing part.*

asks 'What do we need and what exists?' and does not ask 'Is it new or is it unified?' In this sense it is very close to being the method which forms most of our cities, because they are largely created through piecemeal shuffling and tinkering by unconscious designers. But it is also a method used by most conscious designers who readily admit that they rely on past conventions and do not 'rethink through' every new problem as the cyberneticist should, or follow an integrated design process as, for instance, the Bauhaus suggested. The adhocist designer is as much opposed to the radical invention which results in a space capsule as he is to the tenets of 'good design' or 'modern architecture.' What he proposes is a lively and fumigated eclecticism.

That this was part of the process which underlay the creation of the South Bank scheme was made clear by one of the designers who freely admitted that the major parts all came from former sources: the different levels of movement came from the Berlin schemes of 1958; the acoustic geometry from the long, straight halls of the Continent; the exposed concrete and precast slabs from former LCC work; the mushroom columns from Sir Owen Williams; the heavy balustrades from Japan, etc. One could say without exaggeration that there is nothing new in this scheme except the whole (which isn't a whole). Yet each pre-existing part has been slightly altered and put in a new context, so that the addition is quite refreshing and free from cliché: for instance the meeting of the balustrade and the front of the concert hall, 6, a confrontation which shows the latent humour in ad hoc usage. Yet the architects have sometimes avoided this witty clash. They have consciously tried to unify the scheme with similar materials. And in so far as they are successful in their integration, they are clearly not adhocists.

Best part for the particular job. The second underlying assumption is really deducible from the first and is variously called expediency, economy, or efficiency; it refers to the idea that for every particular problem, at one moment in time, there is a best solution (best in the sense of expending least energy). And it also assumes that, in a specialist age, the best way to proceed on a problem is 'to divide and conquer'; analyse it into its parts as a scientist might and then hand each part over to the specialist. Yet here again the adhocist stops short of rigorous analysis and relies on past conventions to predetermine his analysis. Also he allows each member of this specialist team a certain amount of autonomy. Thus the structural engineers of the GLC worked fairly independently of the mechanical engineers, and they in turn worked rather loosely with the acoustic experts, who were fairly separate from the electrical specialists, and so on. Of course all of these experts were constantly referred to the basic principles; but they were also subdivided into their traditional disciplines, in order to suggest the efficient part for the particular requirement. An example of the semi-autonomy is the way the mechanical services have been designed and projected on to the top of the concert halls, 7. The whole mechanical system is structurally separate from the auditoria, in order to mix air with music while unmixing the noise. And for this difficult demand (to keep people sufficiently hot or cold without letting them know this) every specialist trick is played. The main plant room sits above the Purcell Room, with its high-speed airways (or supply ducts) snaking back and forth into a large enough number of coils so that the distance from the noise can be increased. The coils can then be bushed with pre-formed cages constructed from 4-in. thick rock-wool mattresses in order to further trap the noise. Still more traps were constructed, such as spring-



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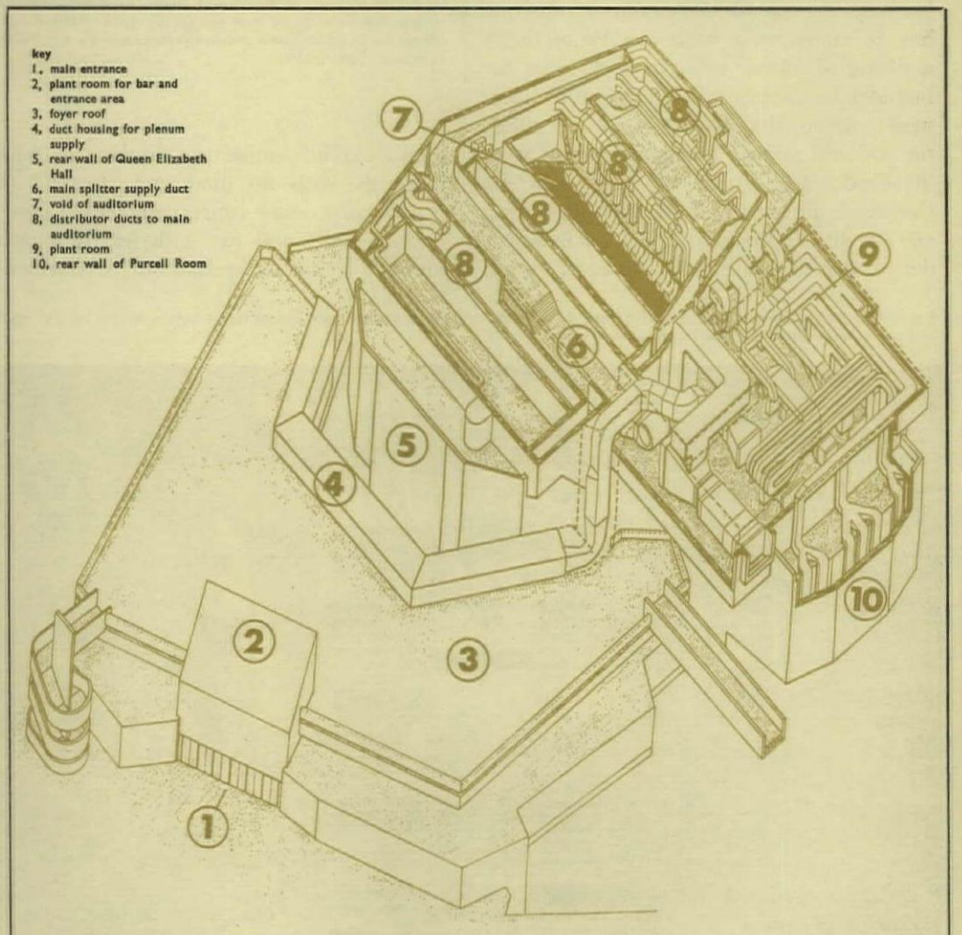
6, *fantastic confrontation of scales at the Arts Centre due to* ad hoc *use of balustrade.*



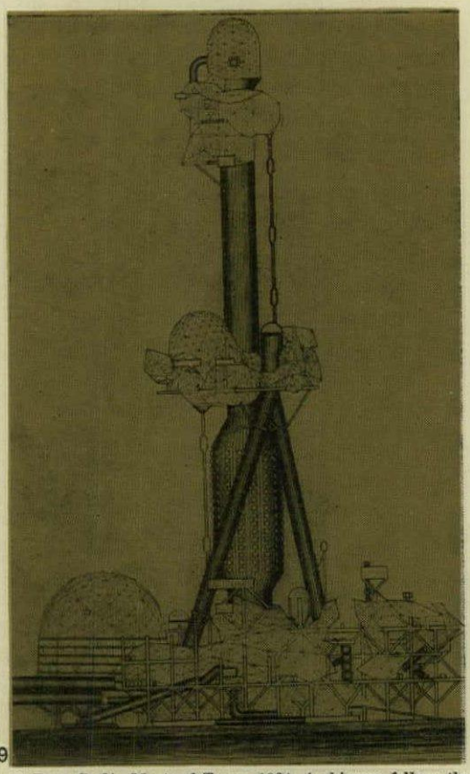
7, *isometric of Queen Elizabeth Hall and Purcell Room showing mechanical services built into roof. (Drawing by Mary Banham from the forthcoming* The Architecture of The Well-Tempered Environment *by Reyner Banham; Architectural Press.)*

7

loaded, anti-vibration units, flexible pipelines, and vacuum-sealed air spaces of sheet-steel plate. Thus when the 'conditioned' air was finally strained through its last obstacle, a series of supply louvres in the ceiling, 8, it had been completely stripped of all noise.

Naturally all this professional ingenuity could not have been achieved by one architect, not even a maxi-technologist, because it relied on the existing skills known only to the professional current with his trade. The same is true of the acoustic refinements introduced to lower the reverberation time in the auditoria—'Helmholtz resonators,' which are really semi-enclosed boxes which suck up the undesired frequencies and keep them from reverberating around the concrete hall for more than 2.2 seconds. Or the battery of specially designed electrical controls—designed by 'the Director of Mechanical and Electrical Services of the GLC'—which can lighten or dim the halls according to infinite requirements (including a power failure). In short, judging by the list of credits, the South Bank scheme was put together by semi-autonomous teams of no less than seventeen different specialists. The implications of this are those of the city: it is created by a series of ad hoc forces which reach some kind of political compromise.

Agnostic and Ethnofugal. The integrity of compromise is the last principle of adhocism. To see what it amounts to one has to compare it with the Promethean attitude of former modern architects; for instance Le Corbusier's absolute unwillingness to accept the *Unite* at Marseilles unless no political strings and compromise were attached. Any work of Mies and Le Corbusier during the heroic period, during the 'twenties, proclaims its utter independence. It is absolute, final, once and for all; it is a prototype meant to be perfected and repeated. The South Bank scheme, on the other hand, is not meant to be the last word in cultural centres, or even the second to last; for it implies that development extends infinitely backwards and forwards with no final end. Instead of proclaiming some universal tenet about concert halls and art galleries, it avoids all such claims as pretentious, unwarrantable, unscientific. Instead of being ethnocentric, it is ethnofugal. It is non-repeatable, provincial, embedded deeply within a few traditions among many.

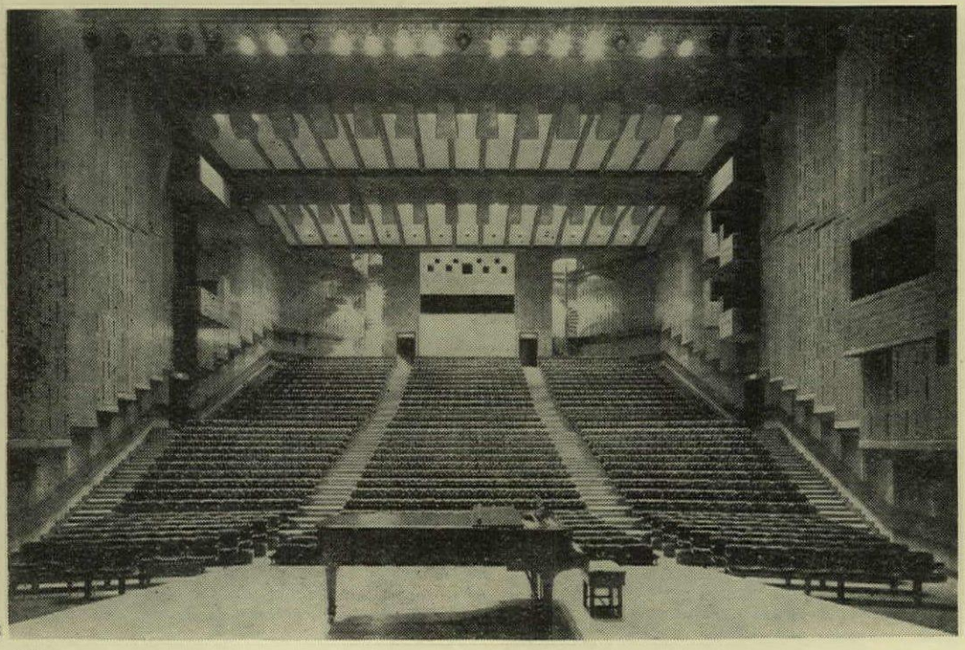


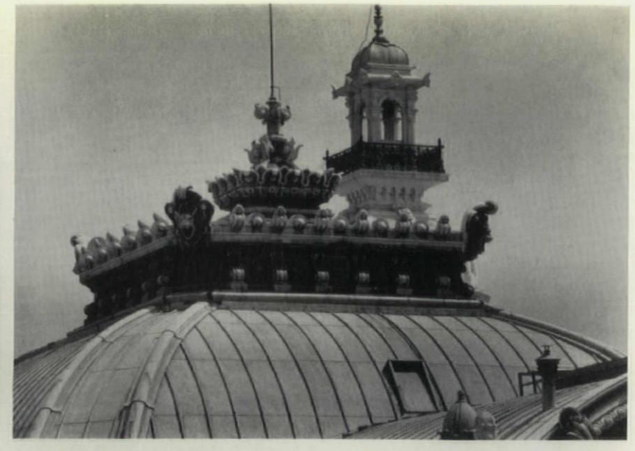
9, *Peter Cook's Montreal Tower*, 1964. Archigram *follows the first adhocist proverb to an extreme: the bad poet borrows, the good poet steals. In their case the plunder extends from comic books through spaceware, computer nets, soap bubbles to even the flexing tentacles of the octopus. While no doubt there is a certain invention in the new juxtaposition, the parts always remain identifiable: here a pneumatic tube, geodesic net, Fuller dome and plastic bubble.*

An indication of this comes from one of the designers, Warren Chalk, who points out the 'preoccupations' or current traditions which influenced the design. The choice of words is significant in its opposition to the 'twenties term, 'ideals.' Not only does it frequently appear in *Archigram's* language (of whom Chalk, Herron and Crompton, three of the designers, are members), but it underlies the design process here. Instead of universals, we now have fashions. Architecture, embedded in the market place, in the opinion and the cultural situation of the moment, has marched out of Plato's Ideal Realm right back into his Cave. But this, according to adhocism, is much more realistic and honest; for that is exactly where it has always been. And this can be seen by the process of design. For one thing, the form of a building is always shaped by the climate of opinion. Here, the designers first conceived the whole non-building in exposed concrete. But then social pressure was brought to bear and precast slabs of Cornish granite aggregate were duly added. Or the doors were first conceived in standard steel sections; but the Taste crystallized and they suddenly became sandcast aluminium. Or at first the circulation deck swung way out, almost into the Thames, until political pressure and a former Act of Parliament pushed it back into its present place.

The list of pressures could be multiplied indefinitely—probably over a million, if one calculates each decision made by the teams over eight years. But it is clear that the chief protagonists, Norman Engleback and John Attenborough as well as the others, operated within these pressures and accepted them as positive constraints. For any large building is subject to conventions of the moment; and when these buildings become bigger and bigger, the conventions grow exponentially. One way of coping with them is forced denial: to hide them behind a curtain wall as in the Shell building. Another way is to sacrifice them to some shared belief in universals. A third way, as on the South Bank, is to accept compromise and conventions as universal and then steer through and combine them as well as they can be. The virtue of adhocism is the virtue of ninety-nine per cent of the environment: it is lively, pluralist and immediately expedient. But the fault of adhocism is that it is not expedient in the long term; it is not radically inventive and searching for ultimate truth. It remains content tinkering with its own conventions, its own tool box, from which the ideal scientist is always trying to extricate himself with a new theory.

8, *auditorium of the Queen Elizabeth Hall. Supply ducts, battery of lights, acoustic clouds, Helmholtz resonators, aluminium shell seats and stairs; an architecture made up of* ad hoc *accessories.*





the exploring eye

In 1856 the Prince of Monaco authorized the opening of a gambling house in Monaco to raise revenue. It was set up in a small way, in what was then the outskirts of the principality, and was not a success. Then Monsieur Blanc, director of the casino in Bad Homburg, took over the concession, founded the Societé des Bains de Mer in 1866 and commissioned Charles Garnier (architect of the Paris Opera House) to design the new casino shown here. It was completed in 1878 and Monte Carlo was built up around it. Later the building was added to; the latest parts date from 1910.

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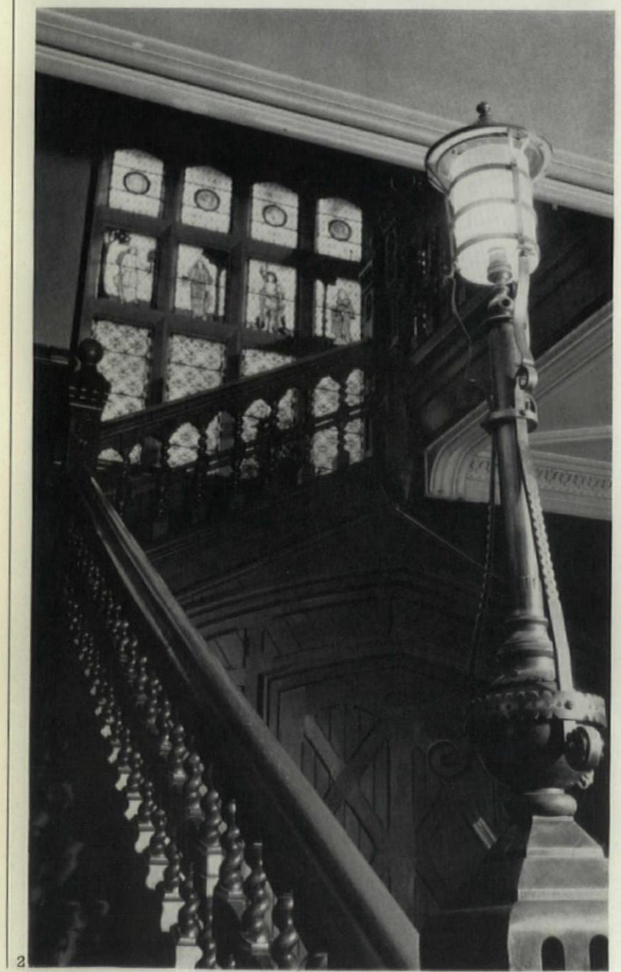

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Garnier roofscape | *photographs by Penelope Reed*

Nicholas Taylor and Anthony Symondson

BURGES AND MORRIS AT BINGLEY: A DISCOVERY

Opposite page, some of the recently-discovered work done by William Burges and William Morris for the interior of Oakwood, in Yorkshire: 1, a pair of lions from the overmantel of the drawing room fireplace, which is now derelict in the garden of the house. 2, the staircase, looking up to the stained glass windows by Morris & Co. (see 7 and 8 below). 3, carved imp on the fireplace in the dining room. 4. This page: 5, Thomas Garnett, the original owner of Oakwood, which is shown in 6 with the country club extension on the left. Also found at Oakwood was Burges's Book of Drawings for the interior, several of which are reproduced in this article.

5

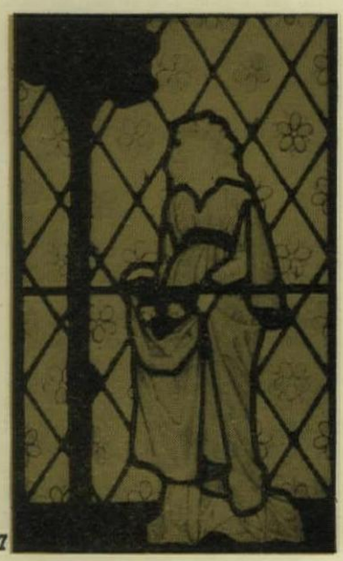
6

A mile out of the Yorkshire mill town of Bingley, 700 ft. up on a south-facing flank of Bronte upland, stands Oakwood, a dour but competently detailed Gothic villa of medium size, designed in 1864 by two Bradford architects, George Knowles and William Wilcox, for a local cloth merchant,[1] Thomas Garnett, 5. The site was chosen for its superb view across Airedale to distant hills. Garnett was aged thirty-two and had just married.[2] His family were a characteristic combination of old landowning traditions and new industrial wealth. There was a strong interest in literature: one of his uncles, Jeremiah, was co-founder and second editor of the *Manchester Guardian;* another, Richard, was a famous Keeper of Printed Books at the British Museum.[3]

For advice on the interior decoration of his new home, Thomas Garnett turned to his cousin, Charles Beanlands (1823–98), one of the Rev. A. D. Wagner's curates at Brighton (see AR, March, 1965), who had become the founder-vicar of St. Michael's, Brighton, that remarkable polychromatic early work (1861–62) of G. F. Bodley. Beanlands recommended not Bodley, who had since swung away from High Victorianism, but his other two employees at St. Michael's: William Burges and William Morris.[4] Morris and his fellow-artists had done a series of windows in Bodley's church, and Burges had designed vestments and plate (which still exist), furnishings (mainly unexecuted) and a very large new church to go alongside Bodley's (eventually built, shorn of its campanile, in 1893–95). Oakwood is the only other place, apart from Waltham Abbey, where Burges, the most lavish High Victorian, and Morris, the so-called anti-Victorian, can be seen side by side—blending perfectly.

Oakwood is now the Oakwood Hall Country Club,[5] the Garnetts having left as long ago as 1915.[6] The north-facing entrance front, 6, is still the same, terraced out of the hillside and built of the local millstone grit, with little ornament except a French-looking oriel to one of the bedrooms. Apart from the country club's recent work to the south (a pleasantly modest design by R. A. Singleton), the only change to Knowles and Wilcox's plan is an extension to the kitchen wing; it hardly looks like Burges's work. Over the door is the first apparent sign of his hand, a characteristically gabled Gothic gas lamp. Above it is the large window with two transoms, lighting the staircase, which contains, 2, some of the finest early domestic stained glass by Morris & Co. that has yet been discovered. Its colours are still in mint condition. The lower zone of the window is filled with a diagonal grid of quarries, outlined in green and pale yellow, and filled with flower patterns in yellow, brown and violet, 8. Mr. Sewter calls them 'especially pleasing' and although they are undocumented, they could well be from Morris's own designs. The two upper zones have a background of quarries with a floral motif in yellow, with much clear glass. This successfully gives a diffused glow, in spite of the dimness of north light. Against the quarries are the five main panels: St. George in the centre is from a design by Burne-Jones, made shortly before 1865[7] and it is flanked by female figures of the Four Seasons, 7, attributed by Mr. Sewter to Morris himself[8]: from left to right, Spring, Summer, Autumn and Winter. Above the transom are five small panels, containing a head of Chaucer in the centre, flanked by four heads of Chaucerian heroines, from a series of five also designed by Burne-Jones just before 1865[9]: from left to right, Dorigen, Griselda, Cresyde and Constance (the absent fifth in the series was Penelope). The dominant colour of the figures is yellow of various shades, though Winter has the typical Morris & Co. wine colour. On either side of the main window are two straight-headed lancets (one of them facing at right angles across the half-landing); these contain the same quarries below, with a white rose and a red rose in the two upper lights—indicating that the Garnetts lived in both Yorkshire and Lancashire. The whole series, Mr. Sewter thinks, is probably datable to *c.* 1873, but a date as early as 1865 is just possible and is borne out by the dates of Burges's work at Oakwood and of other Morris glass in the neighbourhood.[10]

Burges concentrated on the two main rooms facing south, although he also designed a table, seats and a cabinet for the hall (whether these were carried out is uncertain—his suggested panelling was evidently not). By good fortune, his Book of Drawings[11] survived at the house and, besides the intrinsic beauty of his fantastic draughtsmanship (and that of his



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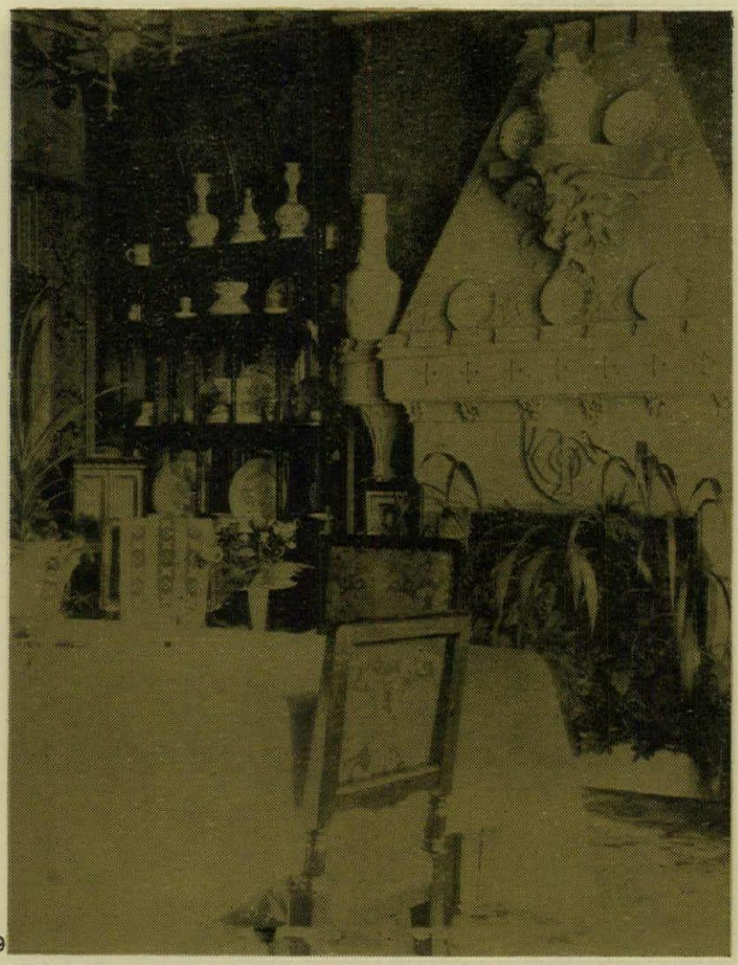

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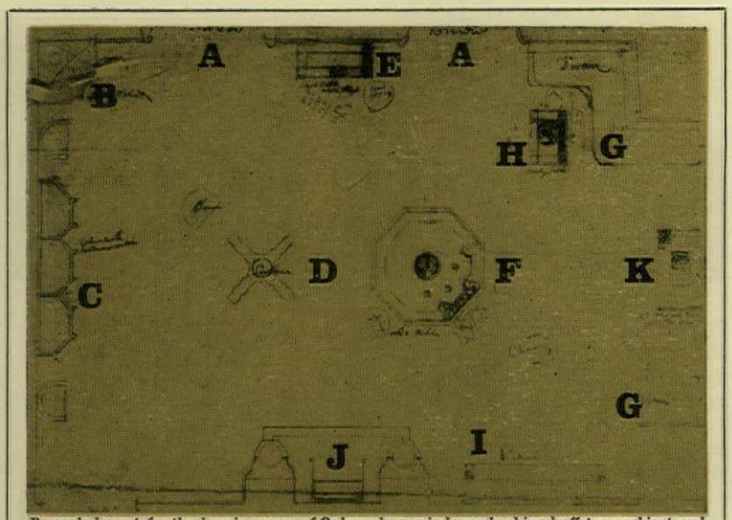
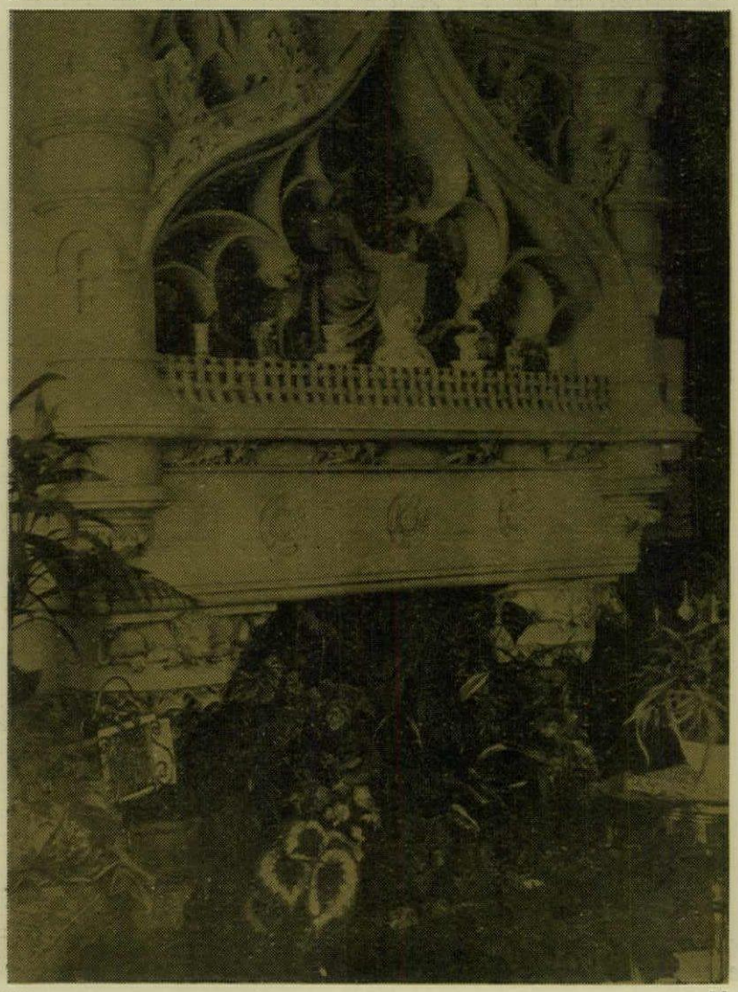


Burges's layout for the drawing room of Oakwood; a, windows; b, china buffet; c, cabinet and bookcase; d, settee; e, card table; f, 'loo table'; g, divans; h, writing table; i, piano; j, fireplace.

9, the dining room of Oakwood as it was in Thomas Garnett's time, looking towards the fireplace bearing his initials. 10, the overmantel of the drawing room fireplace, which has since been broken up and the pieces scattered around the garden. 11, 12, designs for the overmantel, from Burges's Book of Drawings.



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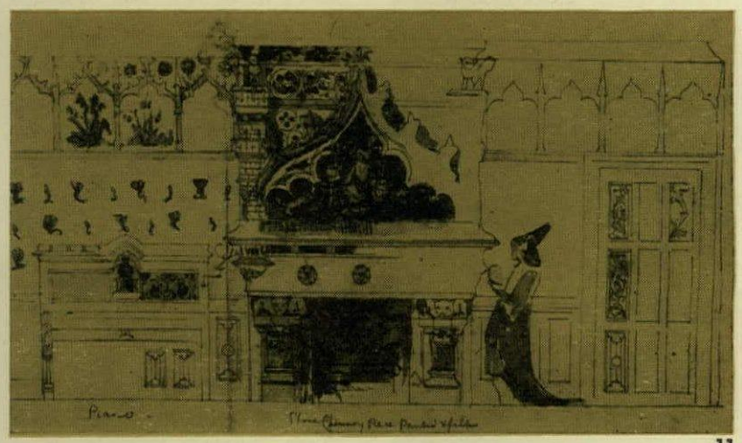
assistants), it helps to piece together the present sadly damaged remnants of his work. The *pièce de resistance*, the fireplace in the drawing room, carved by Burges's favourite sculptor, Thomas Nicholls, now lies shattered in three places in the garden. At the foot of the steps off the terrace, next to the country club's recent extension which replaces the drawing room bow window and the south side of the dining room, stand the marble shafts supporting pairs of lions, 1, from the top corners of the overmantel. Behind the garden seat is the central panel of the overmantel, its soft sandstone weathered beyond repair but still tantalizingly rich in relief. In the stable yard are the piles of mossy stone which represent the remainder; visitors can scrape away debris to reveal poignant fragments of carving for which some local museum might still find room.

The principal survival in any real sense is the dining room fireplace, 4, now the ornament of the club's bar and a much less impressive piece. It has a conventionally gabled overmantel and a castellated mantelpiece with incised crosses, flanked by curious tourelle brackets on fan tracery corbels. In the centre are the initials TG on a shield. Against the gable is a spirited figure of the Lincoln Imp family, 3, presumably carved by Nicholls and set against a background of columbine leaves. Burges's first design, in the Book of Drawings, was for a monkey and it is this design, also illustrated in his Notebook for 1865 in the RIBA, which gave him the idea for his famous monkey chimneypiece in the Tower House nursery more than ten years later.

Apart from this, the dining room's only Burgesian feature was to be a panelled ceiling with a diagonal grid of crosses and floral cusping, which was evidently not carried out. An old photograph,[12] however, 9, shows a great deal more



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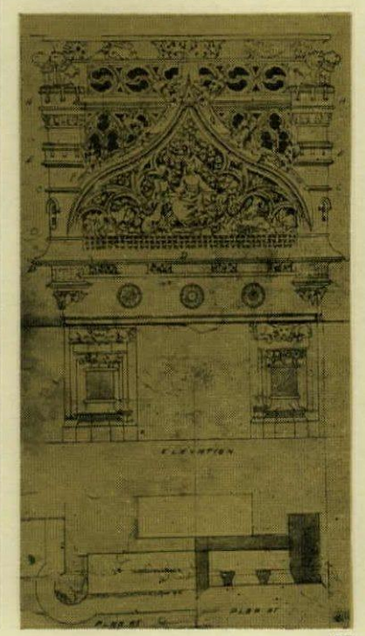


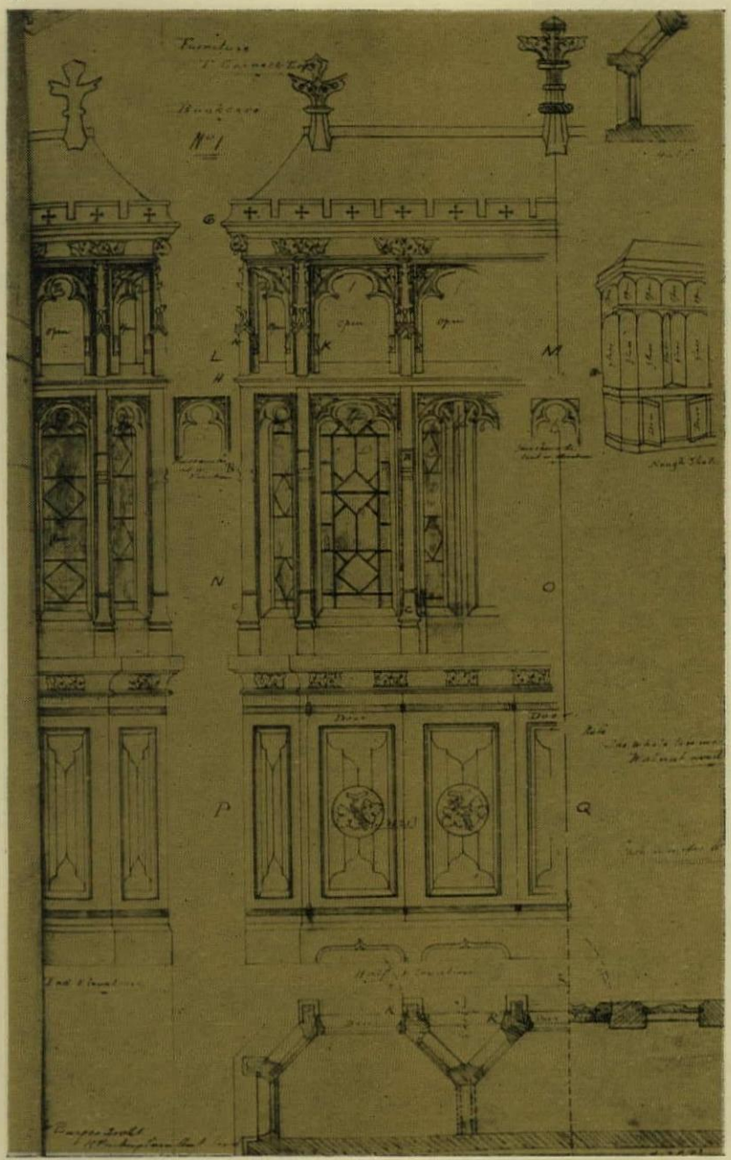
12

furniture: the table with some nondescript chairs, some interesting floral wallpaper and embossed ceiling ornament, and an excellent Gothic cabinet to the left of the fireplace (by whom?).[13] This cabinet and the fireplace itself display Thomas Garnett's main artistic interest: ceramics, of which he had a large collection, including some by de Morgan.[14] The traceried brackets of the fireplace were probably designed by Burges specifically for the giant vases they support.

The drawing room was designed as a complete ensemble (see plan) and shows how Burges related the kind of dream world he created for the fabulously rich (Lord Bute or Lord Ripon) to the less spacious circumstances of the mill-owner. The fireplace stood to the right of the door, an element of shock to the unsuspecting visitor who would not see it until he reached the centre of the room. The only surviving picture of it in situ, 10, shows it luxuriant with natural as well as artificial foliage, besides some more of Garnett's collection of ceramics. Its heavy sarcophagus-shaped mantel (shown in the Book of Drawings as painted pink with red-and-yellow medallions), 12, stood on short thick columns (red) with foliated capitals (blue). The colouring was never carried out. The iron grate, with encaustic tiles on the hearth in front of it, was silhouetted against a diaper of red and yellow bricks in vertical chevrons. On the corners of the shelf were written DILIGENTIA / ET HONESTAS in Gothic capital letters. The overmantel, completing the impression of an elevated tomb, was enclosed within a vast red-and-yellow, cusped and crocketed ogee arch, with a central panel showing a noble lady, dressed in yellow and seated amongst green foliage in rich relief. She held a red shield with a rampant lion in her left hand and a helmet on a post in her right. To her right stood two hounds, to her left three hares. In Burges's first coloured sketch, 11, a 'genuine' lady in medieval vesture was seen standing alongside. The real Burgesian *tours-de-force*, however, were the two battlemented castle towers on each side of the arch, each surmounted by a ring of heads and pairs of lions. The spandrels were filled entirely with flamboyant tracery. In the book there is a note 'Mem Mr. Nicholls to do the little heads in the castles, the lady, the dogs, the Hares, the two animals on capitals of columns, and the lions.'

The walls of the drawing room were divided into three zones: panelling below (still partly in position, though painted over), main walls spattered with painted roses, and frieze of ogee arches enclosing painted panels of naturalistic plants of different kinds. To the left of the door was a combined cabinet and book case, 13, the three glazed half-octagons of the two-storeyed cabinet being glazed in green and projecting over the flat-fronted bookshelves below. A profusion of fleurons and vine leaves and cusping culmi-

13

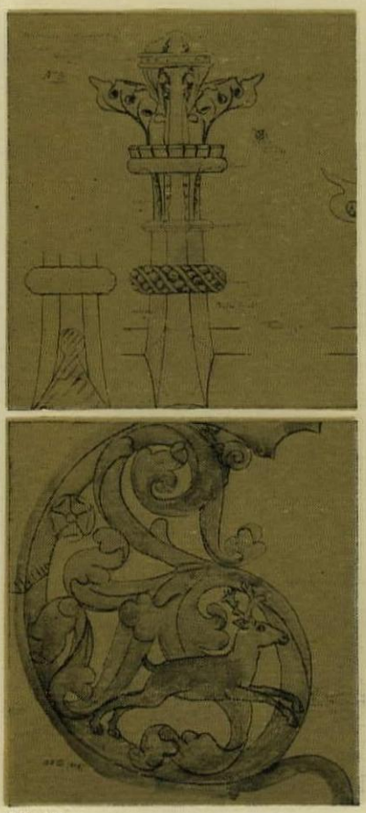


13, 15, Burges's drawings for the combined cabinet and bookcase which stood in the drawing room of Oakwood. 14, 16, Burges's drawings for the china buffet.

17, 18

17, the 'loo table' in the drawing room. 18, 19, decoration details for the table.

14



15, 16

19

nated in rich finials, 15, and a statue of St. George on top. In the adjoining corner stood a fantastic buffet, 14, its base with medallioned panels supporting two storeys of vaulted shelves supported on lushly foliated capitals. The side brackets to the vaulting had openwork foliage with a sprightly deer, 16, and a bird feeding her young. Next to the fireplace was the piano, left in 11; above its keyboard was a tall panel of a seated lady with other figured paintings on either side in red, green, and blue on a yellow background. As far as Mr. Handley-Read knows, this is the only piano Burges ever designed. Against the two window walls stood the movable furniture: a card table, with a chessboard top and the symbols of the suits (hearts, spades, diamonds, clubs) on the drawers; a writing table, with a marquetry dog amid a fantastically oversized floral pattern; and an occasional table, again with chessboard marquetry. In the centre of the room was an eight-sided 'loo table' (Burges's own inaccurate term), 17, with thickly moulded legs and a cusped pattern on top enclosing a glorious peacock, 18. A mass of beasts and beings, 19, including the Garnett family arms and crest, filled smaller panels of the table. There was also to be a curious cruciform settee and eight chairs (though there were no detailed drawings of these). Altogether it would have been a crowded room, but it is doubtful how much of the furniture, apart from the fireplace, was executed. Members of the Garnett family inevitably remember little fifty years later; the Oakwood family furniture, Burgesian or not, seems finally to have been dispersed at the Sidmouth sale in 1950. For example, the ceiling still has the simple panelling of Knowles and Wilcox (their design is included in the book), not Burges's richly floral enclosure of square and rectangular panels, including a central scene of knights and ladies. It also seems doubtful if any stained glass was made, although Burges's sketch of the room includes two specimen upper lights of red-and-yellow medieval figures against green foliage, very similar to Morris & Co.

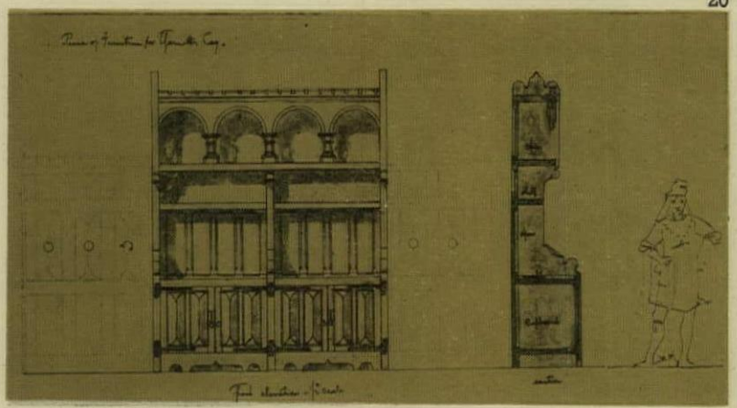
In the hall, besides the conventionally Gothic seats and table, and the cabinet, 20—a fairly plain piece with an open arcade of Romanesque appearance in the top level—there was to be some remarkable wall decoration: a pattern of rising suns (red, yellow and blue) arranged diagonally and separated by horizontal bands in red. This pattern seems closer in spirit to work of over a generation later, Baillie Scott for example. The post at the foot of the staircase, foreground in 2, supports a stand for a gas lamp, which looks Burgesian; neither this nor the lamp over the door is in the Book of Drawings, so they might be designs Burges had already used elsewhere.

One final detail makes the most attractive single sheet of draughtsmanship in the whole book: the design two years later (May, 1867) for an elephant inkstand, 21. This is the second design of this curious type by Burges: the other plainer example, for his own house at Melbury Road, is illustrated in Pullan's book, *Architectural Designs of William Burges*, 1883–87. Burges was fascinated by oriental art, and was one of the first people in England to collect Japanese flower badges. The Oakwood elephant consisted of three detachable parts. The elephant itself, of bronze, stood on massively stubby legs, bedecked by trappings with embossed rosettes and containing the ink well in his belly. He supported a hollow golden orb encrusted with foliage, forming a box for lucifers; it had four lions at its base and projecting tendrils spotted with globules of aquamarine, coral, enamel, amber and 'agate or cornelian.' Finally, there was a foliated capital forming a candlestick, ringed with red coral and sparkling with white pearls. In spite of much research among the Garnett family, this delicious object has not yet come to light, but it still may.

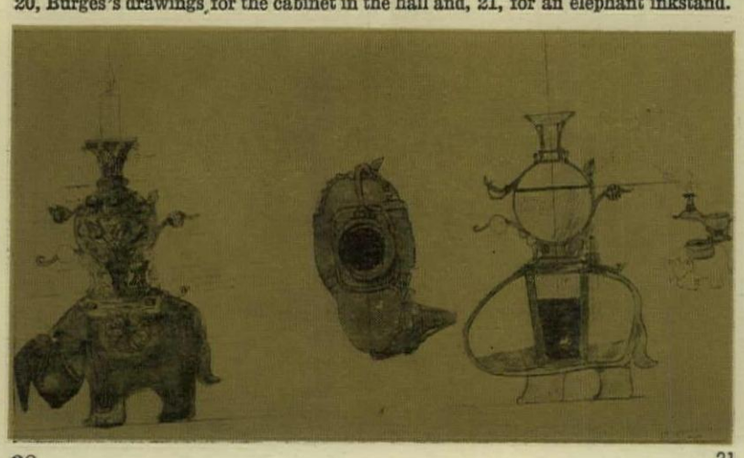
The importance of Oakwood, according to Mr. Handley-Read, is that it is the earliest of Burges's comprehensive schemes of domestic design that we yet know, and that it provides the first exposition of the Gothic themes which preoccupied him in the 'seventies. Previously his decorative work had been diverse in character: *Francois-Premier* at Gayhurst (1859), Italianate at Worcester College Chapel (1864) and elaborately painted furniture at the 1862 Exhibition. Oakwood, with its emphasis on joinery, carving and marquetry rather than on painting, was foreshadowed in the octagonal table, designed by Burges and made by J. G. Crace for Colonel Cocks, which was exhibited in 1862 and has since disappeared. This was, in Mr. Handley-Read's words, 'distinctly Puginian in design and construction.' The Oakwood 'loo table' repeats its design with only slight variations.[15]

The Gothic style for furniture had been carefully studied by Burges for his Lille Cathedral design with Clutton (1855). At Oakwood he extends it to the painted decoration of walls and ceilings. If the painted flower panels of the drawing room have their precedent in the *Francois-Premier* milieu of Gayhurst, the Gothic arcading points forward clearly to the designs for Knightshayes (1873) and Tower House (1875 onwards). The great chimneypiece, faintly reminiscent in its lower parts of that at Gayhurst, introduces in its corner 'castles' the motif later made famous in the banqueting hall at Cardiff Castle and in the library—the chimneypiece with the dropped 'H'—at Tower House. The buffet similarly introduces the openwork tracery of scrolls and animals which, carved by Thomas Nicholls, was to reappear on Burges's cabinets and dressing tables during the next fifteen years. Oakwood is thus a modest forecast on a middle-class scale of the giant aristocratic triumphs for which Burges is chiefly remembered.

20



20, Burges's drawings for the cabinet in the hall and, 21, for an elephant inkstand.



21

ACKNOWLEDGMENTS

This article relies for its judgments chiefly on Charles Handley-Read, who most generously made available to us his incomparable knowledge of Burges in advance of its full publication. We were also kindly assisted by A. C. Sewter (the expert on Morris glass), by Miss Horatia Garnett (Thomas Garnett's grand-daughter), by Miss Elizabeth Aslin of the Victoria and Albert Museum and by the RIBA Drawings Collection.

NOTES

[1] The firm he founded, Gillies Garnett (today Horsfall & Garnett), dealt principally abroad.

[2] His family later included three sons and three daughters. According to Miss Horatia Garnett, the eldest son died in 1864, just after they moved into Oakwood. There is some doubt about the precise dates here, because the two drawings by Knowles and Wilcox bound into Burges's Book of Drawings (see below) are dated July, 1864—presumably before the house was built. It would have to have gone up quickly for the Garnetts to move in (and their son to die there) before the end of the year. Again, there is a family tradition that Thomas Garnett had the house built *before* he was married, but that would mean before 1862, which also seems unlikely.

[3] His son, Richard, followed him there as Keeper of Printed Books; the second Richard's son, Edward, was the greatest publisher's reader of his generation; and Edward's son, David, is the Bloomsbury Group critic and novelist. On this side of the family, there is a recent book: Carolyn G. Heilbrun, *The Garnett Family*, 1961.

[4] The discovery of Oakwood came incidentally in a letter written in 1913 by Beanlands's nephew, Canon Arthur Beanlands, to Mr. W. W. Begley, who was then preparing a history of St. Michael's, Brighton. Mr. Begley deserves our gratitude.

[5] We owe thanks to the club's director, Mr. G. L. Greenwood, and in particular to the manageress, Miss Audrey Ashton, for their generous co-operation with our search.

[6] Thomas Garnett died in 1915. His eldest son, Harold, who was a bachelor, sold Oakwood to another manufacturer, Jonas Hanson, and moved, presumably with any Burges furniture, into the former vicarage of Norman Shaw's Holy Trinity, Bingley (see 10, below). After a sale of furniture in 1919, he moved down to Sidmouth, where a second sale took place after his death in 1950. It has not yet been possible to trace the whereabouts of any Burges furniture.

[7] It first appeared at Beaudesert church, near Henley-in-Arden (Sewter).

[8] Other sets of the Seasons exist in the Birmingham City Art Gallery and at Shaw's Cragside (Sewter).

[9] Examples of this series, says Mr. Sewter, also exist elsewhere: for example, three in the Birmingham City Art Gallery, one at the Victoria and Albert Museum and four at Thornbridge Hall.

[10] It was not difficult for Thomas Garnett to have heard of Morris & Co.; Mr. Sewter has generously given us details of the firm's other work at Bingley. In 1861, its first year of existence, three small stained glass panels had been made for Woodbank, a house at Harden just outside Bingley, to the design of Rossetti, who had painted a portrait of the wife of the owner, Adam Heaton. In 1862 Walter Dunlop of Harden Grange had commissioned fifteen panels of stained glass (thirteen of them depicting the story of Tristram and Iseult), all of which are now in Bradford Art Gallery. Bingley also received two Morris & Co. windows later than that at Oakwood: the remarkably monumental east window of the Crucifixion and the Sacrifice of Isaac at Norman Shaw's famous church of Holy Trinity, in 1874; and the three Burne-Jones angels in memory of the Fothergill children in the medieval parish church of All Saints, a year earlier. With each of these latter commissions Thomas Garnett could have been directly or indirectly involved; Miss Horatia Garnett tells us that he and his family worshipped at All Saints until some time in the 'seventies or 'eighties, when they transferred to Holy Trinity. All this work by Morris in Bingley itself was in addition to other major commissions in the near neighbourhood, including the famous east window at Bradford Cathedral.

[11] *Detail Drawings of Furniture, etc., etc., for Thomas Garnett, Oakwood, Bingley, Designed by William Burges, Architect*, 15 *Buckingham Street, Strand, London*, 1865. It has now been bought from the club by the RIBA Library, where it may be inspected. We are grateful to the RIBA for their permission to reproduce pages from it. The drawings are of two kinds: impressionistic sketches in pencil and vivid watercolour, dated 23, 24 and 29 August, 1865; and scale drawings, including full-size details, dated October, 1865. The elephant inkstand drawing is dated 18 May, 1867. The full-size illustrations of the openwork carvings of scrolls and animals, 17 and 18, are the finest in the book: freely drawn with a brush and lightly tinted, they are, according to Mr. Handley-Read, reminiscent of those of the previous year for the Worcester College candelabra and lectern, also to be carved by Nicholls.

[12] This photograph, together with those of the drawing room fireplace, 9, and of Thomas Garnett himself, 5, was kindly lent to us from the family album by Miss Horatia Garnett.

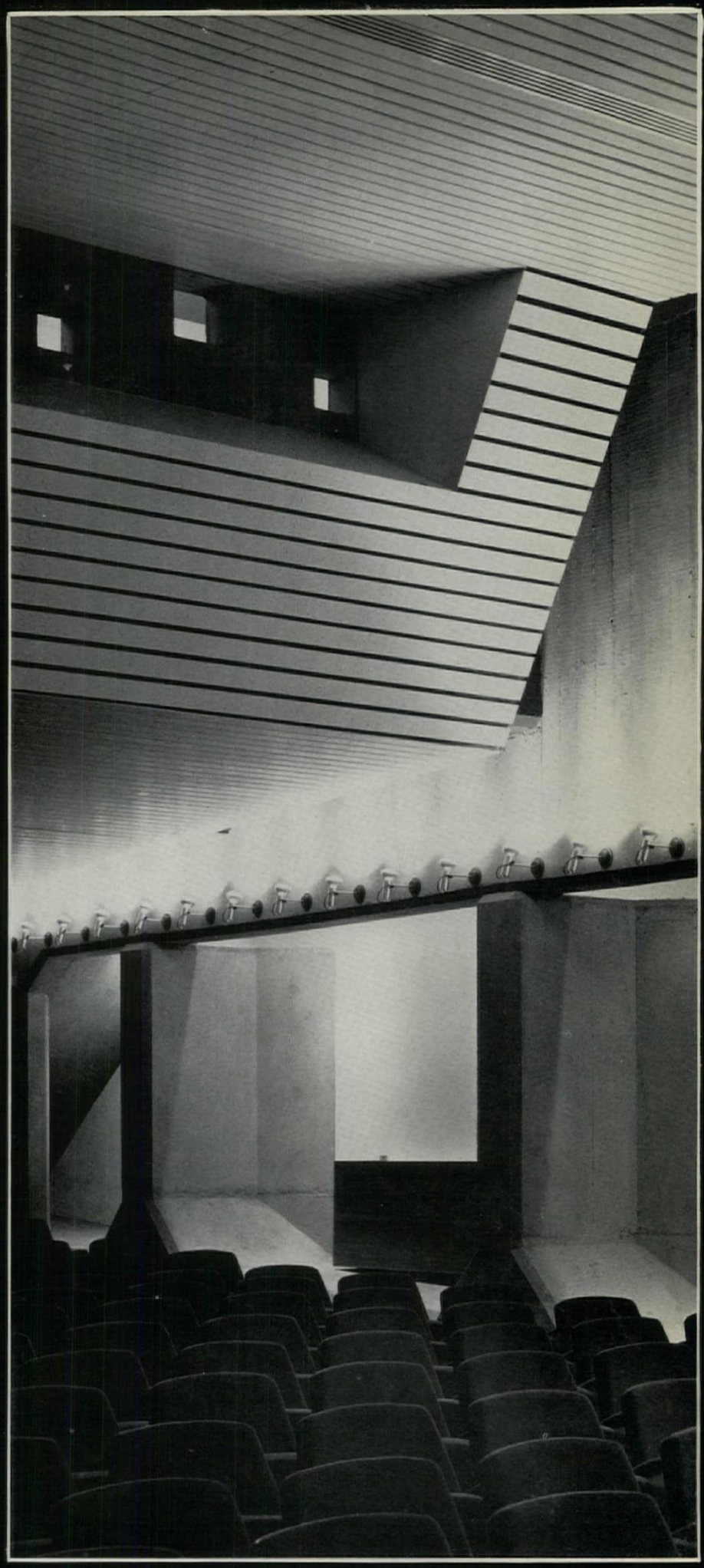
[13] Miss Elizabeth Aslin suggests that it may have been designed and made by Marsh, Jones and Cribb of Leeds, who did some similar furniture at Bingley in Milner Field, the house of the Salt family (of Saltaire fame), which was designed in polychromatic Gothic by Thomas Harris, also in 1865. Unfortunately, Marsh, Jones and Cribb retain no records from that time. The ebonized woodwork is of the sort that came into fashion immediately after a cabinet by T. E. Collcutt was exhibited in 1871.

[14] He inherited a collection of blue china (and a picture of St. John Baptist) from Charles Beanlands of St. Michael's, Brighton (see above).

[15] The Cocks drawings are at the Victoria and Albert Museum's Department of Prints and Drawings.

ID
INTERIOR DESIGN

CONTENTS



1, the auditorium of the Nash House theatre. The exposed concrete structure supports the Duke of York steps alongside. The ceiling is suspended asbestos planks backed with a black glass-fibre membrane over quilting or plywood, according to acoustic requirements.

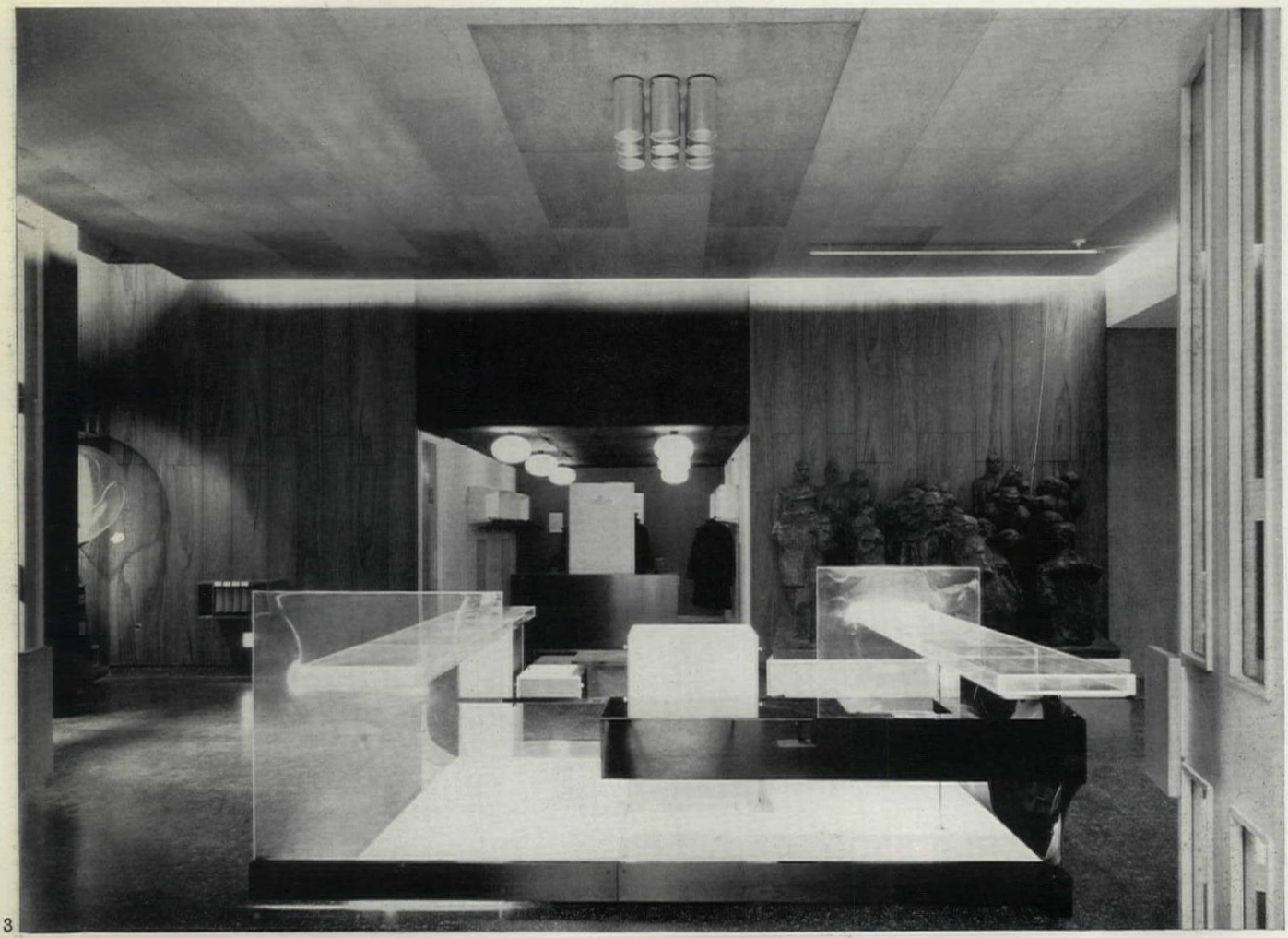
2

Art gallery and theatre, Nash House, London

Architects: Fry, Drew & Partners

The original intention of the Crown Estate Commission was to make both the Nash podia facing the Mall (formerly servants' quarters to the houses in Carlton House Terrace) into garages, and the west podium is in fact so converted. But thanks to an inspired idea of the First Commissioner, Lord Perth, to artists, collectors and galleries who gave works of art for auction to raise funds for the Institute of Contemporary Arts, and to the devoted efforts of many individuals, the major part of the east podium has instead been converted into an art gallery (mainly for ICA use) and a theatre. A

2, the auditorium with the cinema screen in position. The Race seating is upholstered in grey, The curtains and carpet are mustard yellow. On the left is a piece of wall, lifted out of Professor J. D. Bernal's flat, on which Picasso drew. 3, the foyer with walls lined in Muninga planks and ceiling of Finnish birch plywood. The floor is a dark green terrazzo tile. The island reception desk, in acrylic sheet, was designed by David Colwell a student at the Royal College of Art. 4, a corner detail of the desk.



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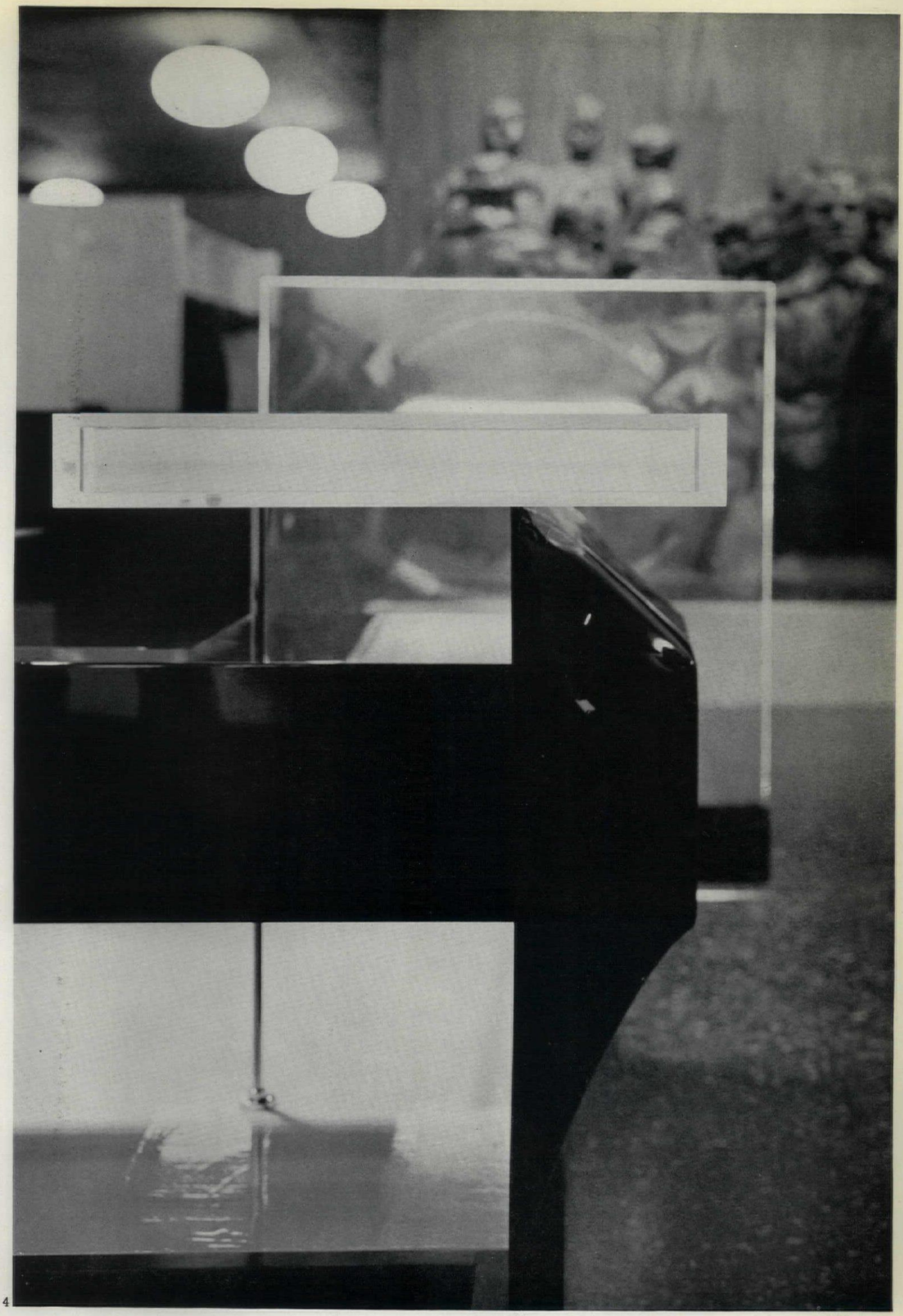
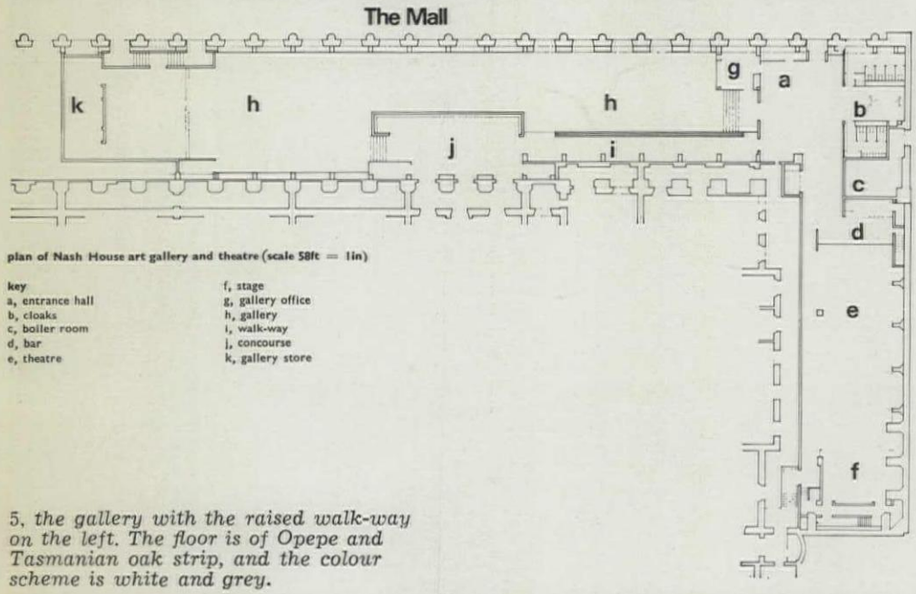


4

second phase will connect this area to 12 Carlton House Terrace providing offices, club rooms, a library and a cafeteria, and the whole will house a group of societies connected with the visual arts (called the Association of Societies of Art and Design and comprising: the Institute of Contemporary Arts, the Design and Industries Association, the Designers' and Art Directors' Association, the Institute of Landscape Architects and the Society of Industrial Artists and Designers).
In the face of so much charity, criticism tends to be silenced, and certainly the exposed steel joists, ordered for the garages, and the painted brick walls in the gallery seem adequate for a space in which the exhibit will always provide the main point of interest. Considerable excavation took place to increase the height of such a large room, providing at the same time a welcome change of level. A raised walk-way, housing services, permits views of the Mall and park, and ends in a platform which will eventually connect with the cafeteria in 12 Carlton House Terrace. Day-lighting seems admirable, with large roof lights of translucent double-skin fibreglass and long windows near the Duke of York's steps to provide the essential side-lighting for sculpture.
During the final stages of the conversion, the Crown Commission gave permission for two extra bays to be added, so that what is now a store at the end of the gallery could form a central foyer to an immense gallery stretching from the Duke of Yorks steps to Admiralty Arch. This accords with the tendency for art to be getting larger, though the problem of providing satisfactory access for large works has still to be faced, no delivery from the Mall being permitted.
The ramp from Waterloo Place is a good idea, but the hoist to which it leads is not high enough because it had to comply with external height restrictions; and the access for large pictures down the area steps in Carlton House Terrace and through a secret slot in the foyer panelling is ingenious but tortuous. The doors into the gallery, conforming with the hoist height, are similarly low (the panel over the doors is fixed) and large pieces of sculpture have to be turned on their side. The most serious criticism, even with the shortage of money in mind, is the fact that there is no provision for a suspended track for moving heavy sculpture mechanically and this was never included in the brief.
Permission for a Mall entrance was obtained with considerable difficulty, but is unlikely to prove very convenient unless parking restrictions in the Mall are relaxed. This entrance leads to a foyer which serves both the gallery and the auditorium, though the part nearest the auditorium which leads to a small bar, is divided by a screen. The architects acknowledge the inadequacy of this entrance, with its cloakroom and lavatory accommodation, and hope that it will be possible to provide other entrances along the Mall in the future. The form of the auditorium, seating approximately three hundred people, was decided to some extent by the existing structure (which had to be largely remodelled) supporting the Duke of York's steps and the need to construct a ramp above. Here, too, excavation was needed to achieve the necessary sight lines. An upper floor houses stores and mechanical equipment as well as the projection room for the auditorium and a few dressing rooms connected by a staircase to the small stage.



plan of Nash House art gallery and theatre (scale 58ft = 1in)

key
a, entrance hall
b, cloaks
c, boiler room
d, bar
e, theatre
f, stage
g, gallery office
h, gallery
i, walk-way
j, concourse
k, gallery store

5, *the gallery with the raised walk-way on the left. The floor is of Opepe and Tasmanian oak strip, and the colour scheme is white and grey.*

5

Group practice surgeries
1 Chinnor

architect: Peter Aldington

2 Birmingham

architect: John Winter

The surgery at Chinnor is designed to serve up to 5,000 patients with two doctors and a practice nurse. The surgery at Birmingham (see page 47) is twice the size—four doctors and a nurse for up to 10,000 patients. In any comparative assessment this factor must be borne in mind, as the larger the surgery the more difficult it will be to cater for the individual from an environmental point of view. At Chinnor the site is semi-rural with a common on the other side of the road. There is little danger of neighbours overlooking, though a recent development has come dangerously near to doing so. The Birmingham site is suburban, and the back wall almost touches the garden of an adjoining property. The Chinnor surgery solves the problems of privacy more satisfactorily with its carefully thought-out windows for the doctor and patient sitting by the desk, 6, and at high level behind the patient lying on the examination couch, 3. It is true that the Birmingham surgery

1

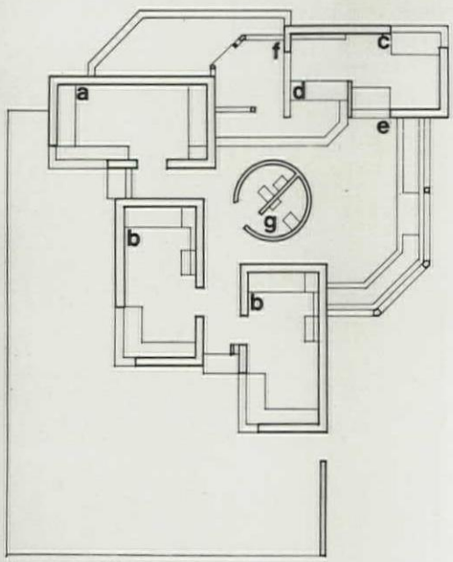
1, *the wall by the front entrance of the surgery at Chinnor, with a viewing window for the receptionist, a rack for prescriptions and a letter box.* 2, *the waiting room from the reception desk with the round service core on the right.*

2

has separate examination rooms lit by sky-lights only, but the large areas of glass in the consulting rooms, 8, is likely to make a nervous patient feel exposed. In the treatment room, 10, where the large window faces a block of flats, curtains have to be drawn.

The two buildings show some fundamental differences of conception. Peter Aldington started off with no preconceived idea about form, though his dislike of what he calls 'the mere sub-division of a box into the requisite number of spaces to satisfy the functional requirements,' suggests that his approach was not quite as unprejudiced as he would like one to think. John Winter reveals a Miesian bias in his formal and structural preconceptions of a cube sub-divided into a lucid pattern, and of a space uncluttered by supporting structure. The main beams span between outside walls, so that all partitions can be knocked down and the building adapted to other uses. In this sense the conception of the Chinnor surgery is more rigid, the building being suitable only for what it was designed.

The two factors which most influenced Aldington's design were sound-proofing and providing an interior in which patients can feel relaxed (precluding a series of rectangular rooms). The requirements of sound-proofing became a basis of structure, the consulting, treatment and reception rooms being enclosed in cavity wall construction and separated from one another by circulation or waiting spaces. With the introduction of an appointments system (both surgeries operate this), the problem of waiting rooms—rows of patients facing each other in glum silence—has been eased considerably. Usually not more than two or three people are waiting at the same time, although on rare occasions there may be as many as eight. Yet at Chinnor there is a generous space with a long cushioned seat under a window which is double-glazed for additional comfort, 2. The round service core forms a pivot around which all the circulation takes place; it also acts as a visual barrier, enabling patients to leave the building after seeing the doctor without passing through the waiting area, something that half the patients in the Birmingham surgery cannot do except by using the courtyard. In both buildings the doctors can enter or leave without being seen by patients. In the consulting rooms at Chinnor there is, in addition, a very clear

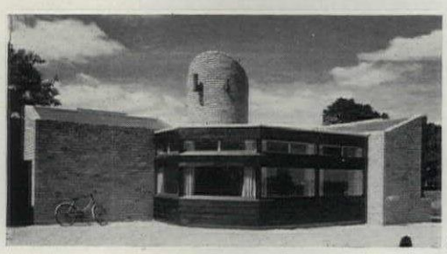


plan, surgery at Chinnor

key
a, treatment
b, consulting and examination
c, secretary
d, reception
e, waiting
f, entrance
g, service core

3, the examination couch in the consulting rooms at Chinnor. The drawer units containing drugs and instruments are in pine. The high-level window is behind the patient lying on the couch.

4



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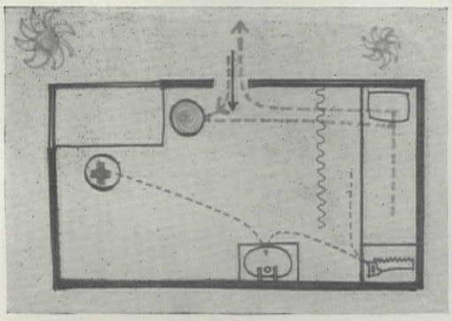
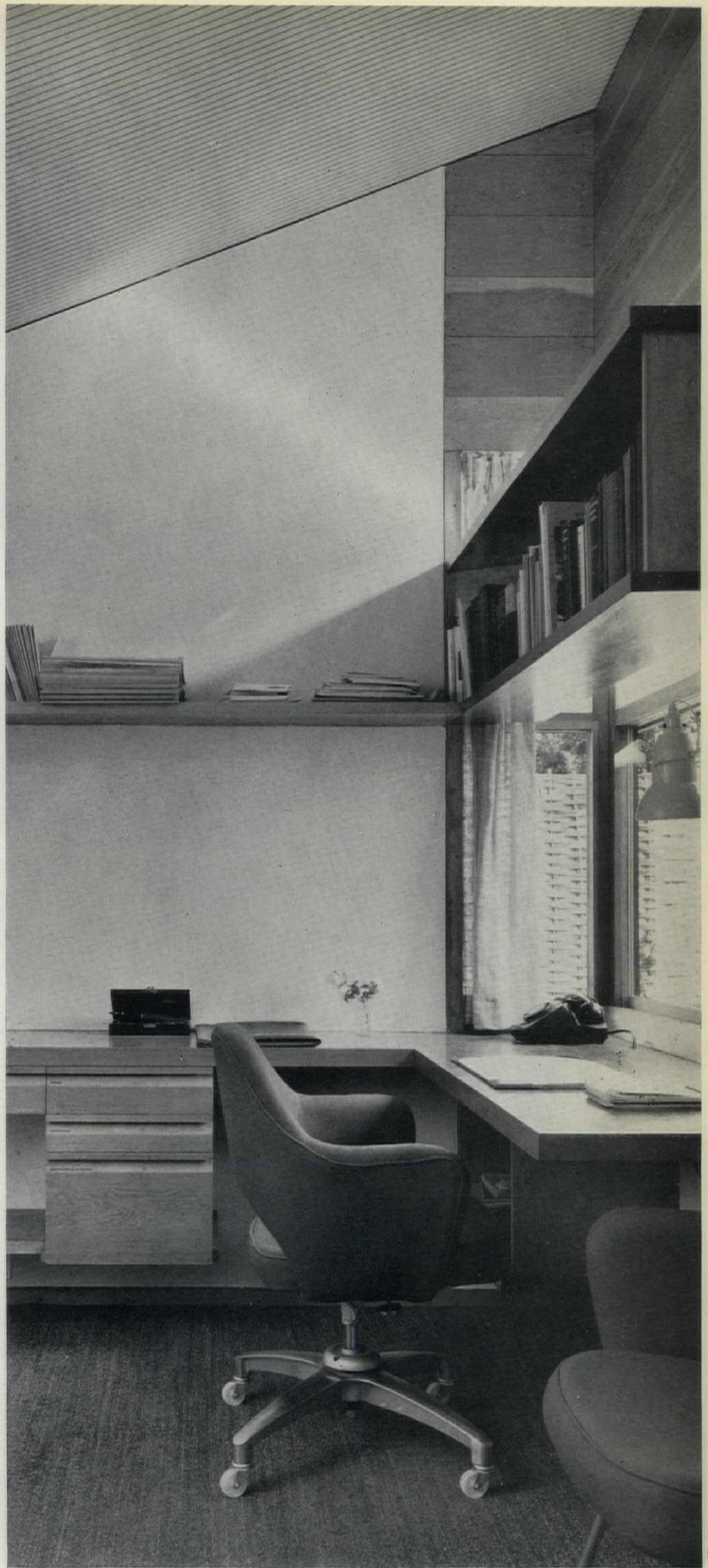
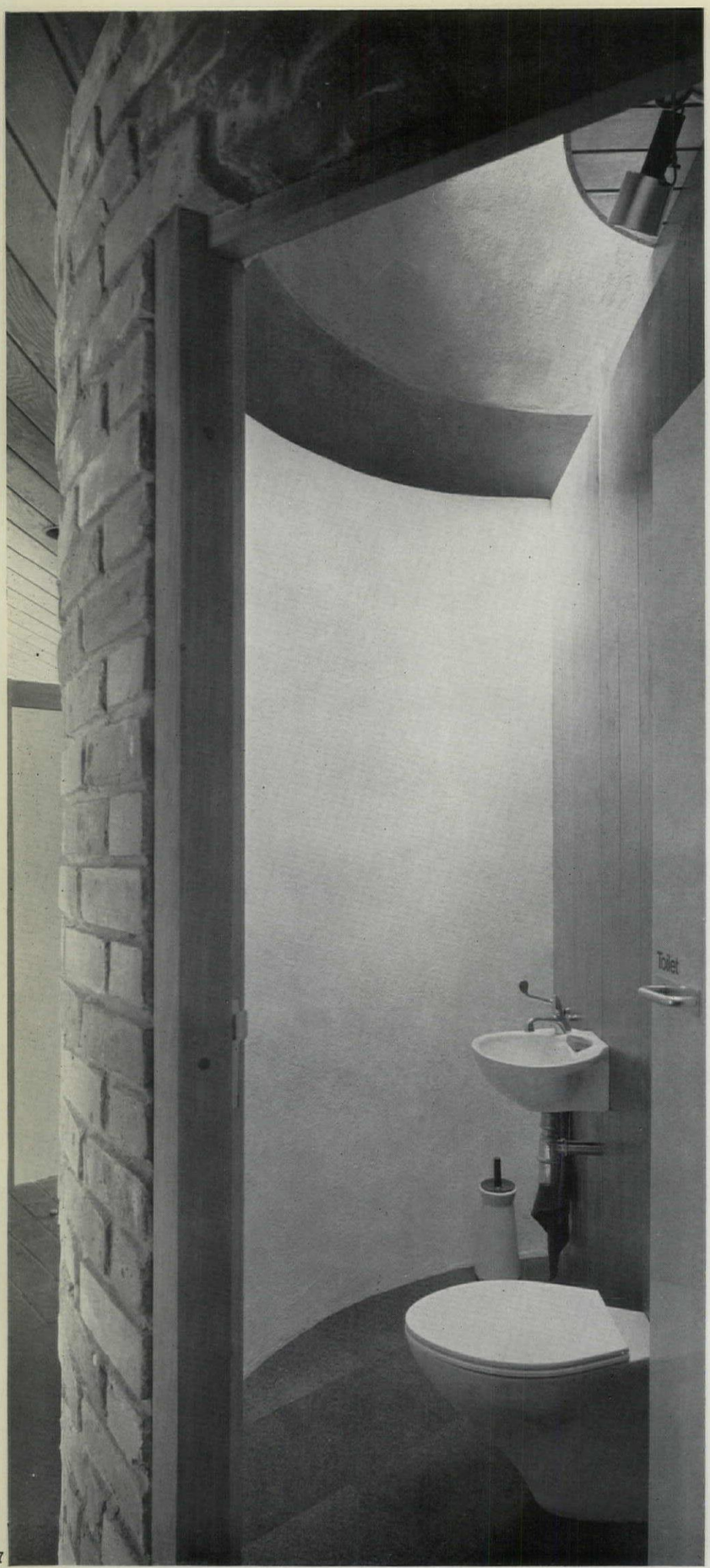


doctor and patient circulation at Chinnor



6

4, 5, two views of the exterior of the Chinnor surgery. Solid areas of yellow brick are linked by glazed and timber-boarded sections. 6, the desk and storage unit in the consulting rooms. The furniture is fully integrated into the form of the building. It would be hard to say where the window ends and the furniture begins.



7

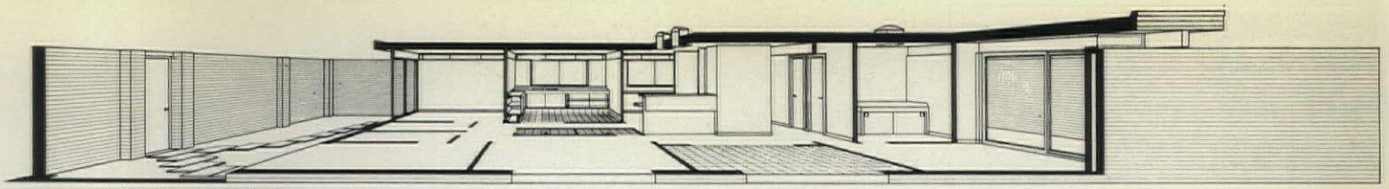
separation in the circulation patterns of doctor and patient (see page 45), a refinement which was able to take definite form thanks to the lavish built-in furniture.

The finishes in the waiting and circulation areas of the Chinnor surgery—cork flooring, timber boarding for the ceiling and brick walls—contrast with the plaster surfaces and fitted carpets of the consulting rooms. The character of both is essentially domestic and unclinical. This is also true of the Birmingham surgery where the form of the building, however, precluded the need for any contrasts, and where all the walls are plastered and all the floors carpeted (except in the treatment room and lavatories, where they are tiled).

An important difference between the two buildings is the absence of separate examination rooms at Chinnor, despite the recommendations in the Ministry of Health's *Design Guide for Medical Group Practice Centres*. This has avoided the problem of a patient in the examination room overhearing what is being said in the consulting room. The consulting rooms at Chinnor include an examination couch at one end, screened by a curtain. Besides the psychological disadvantages of separate examination rooms, the doctors wished to avoid the temptation of dealing with two patients at the same time, believing that every consultation should, if possible, remain an entity. The Birmingham doctors argue that dealing with two patients is no problem in the majority of instances (they would not do so if the case was complicated), and that everyone benefits because more patients can be seen. This last is the most convincing argument and complements the architect's statement that the most important part of his brief was to keep the distance between the waiting area and the consulting rooms to a minimum. It also suggests that the Birmingham surgery has been designed more as an operational unit than as an environment.

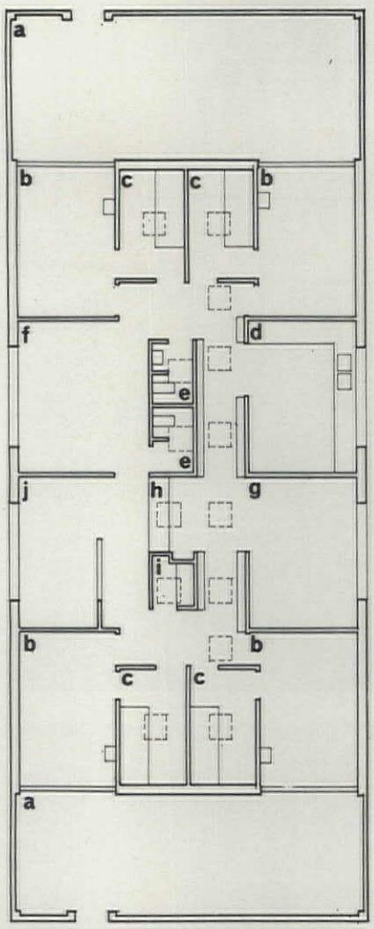
Peter Aldington has called the outside form of his building a direct expression of the arrangement on plan. Perhaps because this expression remains unresolved, the different parts with their big scale do not fuse into an indivisible whole. From the outside the waiting area, which is meant to act as a link, seems to separate the different parts, whereas from the inside the same space with its rugged textures, 2, brings them together. Despite the strong feeling that this space belongs to the outside, there is very little relationship between interior and exterior. Paradoxically John Winter's neatly symmetrical cube provides this relationship with its fully glazed walls between consulting rooms and courtyards, and with its continuous articulation between wall and roof by means of the main beam structure and coinciding clerestory, 10 and 11.

7, the lavatory in the round service core of the Chinnor surgery. An appointments system made it possible to have only one, when the Ministry's recommendations are five.



cut-away perspective of surgery at Birmingham

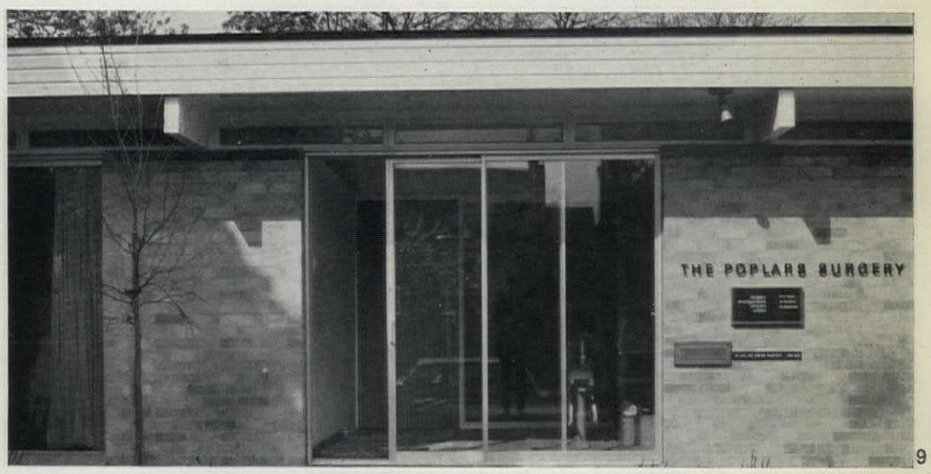
8



plan, surgery at Birmingham

key

a, courtyard
b, consulting
c, examination
d, treatment
e, w.c.
f, waiting
g, office
h, reception
i, cleaner
j, prams



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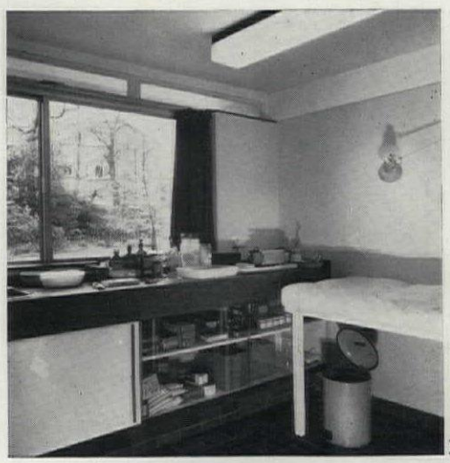

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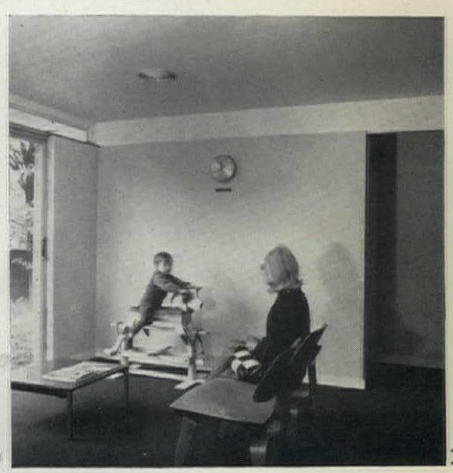


11

8, *one of the consulting rooms of the Birmingham surgery, seen from the courtyard.* 9, *the front entrance. The lobby is used for hanging coats and for children to play in.* 10, *the treatment room.* 11, *the waiting room.*

Interior components

Bill Fisher

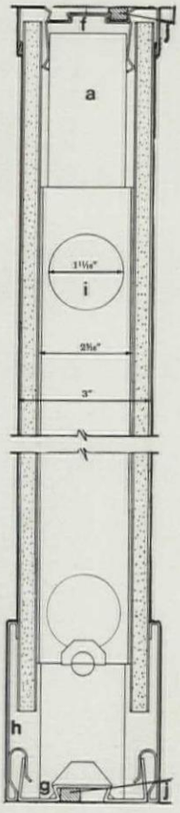
The Ministries, with BSI and the industry, are aiming to arrive at a situation in which whole buildings can be assembled from ranges of catalogued components. It is argued that by these means it will be possible to meet the repetitive requirements of mass-production, while retaining a degree of choice for the designer, and achieving variety in the consequent environment. The change to metric measure is being used as an opportunity to effect standardized requirements. Components of this type have been available for some years for the 'fitting out' of buildings. Due largely to the emphasis on speed of erection towards the end of a building programme, manufacturers have evolved partitioning, ceiling and wall lining systems, and even suspended floors. We already have the catalogue environment, 1. In America there is now less interest in complete flexibility, which has often turned out less useful than expected. It is argued that it is cheaper to knock down and replace. Even so, one of the most successful systems to be developed in recent years is American—the Schools Construction Systems Development (SCSD) in California, for which the Hauserman Double-Wall was developed. This is a post-and-panel system, with panels of light steel sheet and plasterboard sandwich with rolled interlocking vertical edges, 2 and 3. Panels are manufactured in 40in. widths and in heights up to 12ft. They are delivered to the site ready for cutting to finished heights, and are then snapped into place against the profiled metal posts. The weight of the plaster board and four skins of steel are claimed to have very good sound-insulating properties. Vertical tolerances appear to be taken up in the skirting detail, and non-modular horizontal dimensions by the junction details: with adjacent walls, at corners or against door frames.

A British system of exceptional simplicity is Lockwall demountable partitioning which consists of standard units with an expanding spring-loaded mechanism which releases a continuous recessed channel at the top. It is designed for quick and easy fixing by the operation of a detachable lever, 4. The units are removed by the same method and can be re-erected in an alternative position or stacked and stored. Combinations of standard widths (4ft., 3ft., 2ft. and 1ft. 4in.), together with flexible packing strips at the end of each run, can be used to obtain any length of wall. The height of the units is special to each job, with the mechanism taking up a tolerance of + or − 1in. Where sound insulation is particularly important, heavier units are available, or a double wall can be provided. Finishes are generally p.v.c. or timber veneers. Class 1 and Class 0 spread-of-flame gradings are available, as is a half-hour fire-resisting construction.

This partitioning is intended primarily for use in hotels, restaurants, schools, etc. where there is a need for the erection of temporary walls or screens by non-specialist labour. It serves a similar purpose to sliding-folding doors, but with obvious advantages in flexibility. Units are supplied completely finished, wrapped in polythene, and can be delivered and fixed after the completion of all finishes and furnishings.

1

1, offices for Tate & Lyle at Bromley, by Hille. 2, vertical section and, 3, horizontal section, through Hauserman metal stud partition. 4, Lockwall partition. 5, 6, Lait Interwall system left, in 5, storage unit; right, post-and-panel partition.



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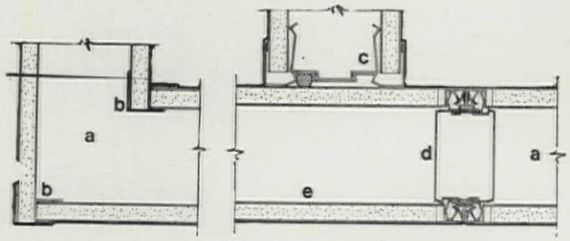
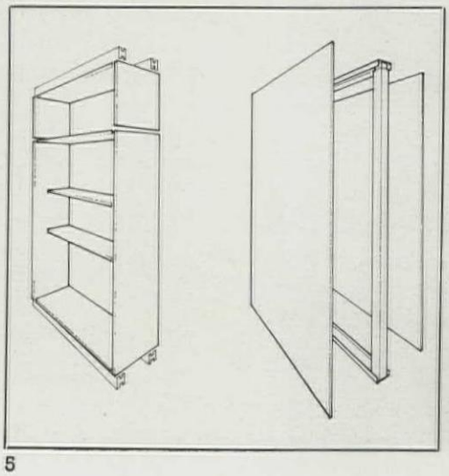


3

key
a, void
b, corner trim
c, edge channel
d, metal stud
e, plasterboard and steel sandwich
f, top channel
g, bottom channel
h, clip-on skirting
i, hole for services

4



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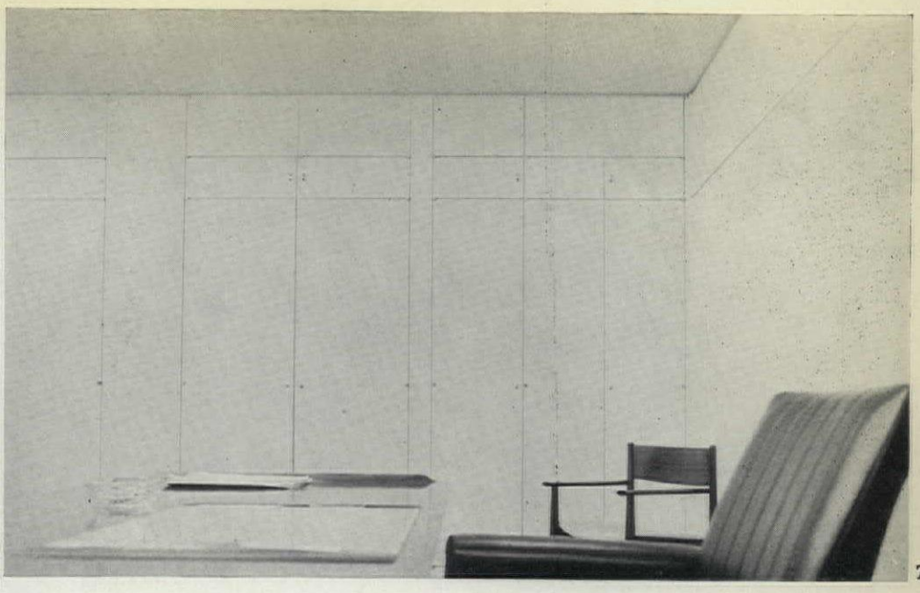
6

Jointing, often considered to be the stumbling block of component building, is no problem when components are available in sets. The manufacturer of a partitioning system must design all specific junctions within the system leaving only the floor, ceiling and adjacent wall faces for generalized and recommended solutions. Interwall, a partitioning and storage system by Christian Holzäpfel KG in Germany, and about to be manufactured under licence by Lait Interwall Ltd. in this country, consists of elegant off-white plastic-faced chipboard panels, machined with engineering precision easily assembled and locked together with patented fastening devices, 5, 6 and 7. Originally designed as a storage system, a partition wall version is also available. Storage units are formed as a series of vertical boxes braced by back panels, whereas the partition is of post and panel construction with snap-fit fixings on the back of the panels. The success of this system also depends on the accurate adjustment of the closure pieces at head and sill and at all junctions with adjacent structure, and on well-organised packaging and delivery to ensure that the parts are available in the correct sequence. Details are particularly elegant, for instance, the problem of lipping panels and providing a cupboard door trim and dust seal is solved with one part-flexible part-rigid p.v.c. extrusion. Frames for pass doors are also in plastic, 8. Most of the problems likely to be encountered seem to have been solved, although any services required within the cupboards for lights, lavatory basins, etc., may need to be surface mounted. Horizontal runs are easily accommodated below the lowest structural shelf, and vertical ducts can be formed within the cupboard. Access is possible, but only by removing semi-structural panels.
Interlocking Grid by Cape Building Products Ltd. is a new suspension system. It consists of a simple, rolled mild steel tee section with a white enamel factory finish, incorporating punched holes at modular centres and interlocking pressed ends, 9 and 10. Cutting is only required for non-modular dimensions, generally at perimeters and around columns. An alternative form is available incorporating concealed expansion joints for fire resistant ceilings.
A variety of acoustic panels can be laid into the flanges of the tees, secured with clips. Two recent designs are intended to enhance the appearance of exposed grid ceilings by incorporating rebated edges. One eliminates the shadow line normally associated with this type of detailing, and the other, emphasizes the panel with a coffered effect. These panels are moulded mineral fibre with a vacuum-formed white p.v.c. finish which is rated as equivalent to Class 1 spread-of-flame.
A range of modular recessed fluorescent lighting fittings, 11 and 12, is available also from Cape Building Products for use with Interlocking Grid and other exposed or concealed ceiling suspension systems. The fittings are designed to permit installation of the basic shell as part of the ceiling erection process, leaving electrical control gear, fluorescent tubes and diffuser to be fitted and connected by the electrician at a later stage inside the shell, without disturbances to adjacent ceiling panels. If required the shell may be inserted in position and fixed from inside after completion of the surrounding ceiling area. Versatile fixing lugs resting on the grid eliminate problems of location.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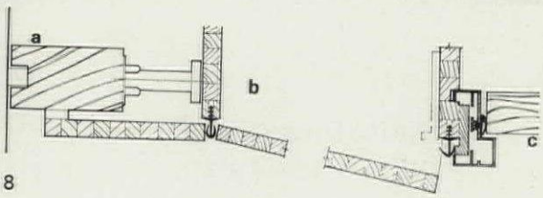
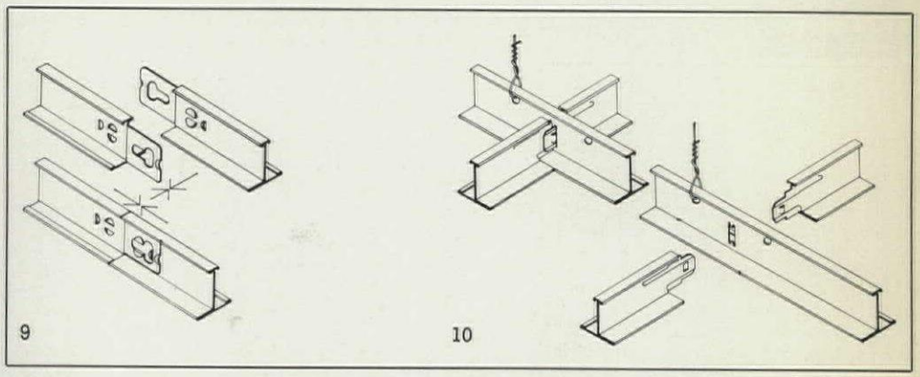


key
a, closure piece
b, storage units
c, pass door
8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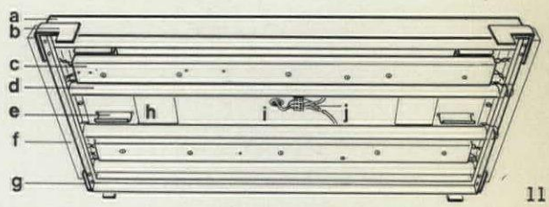
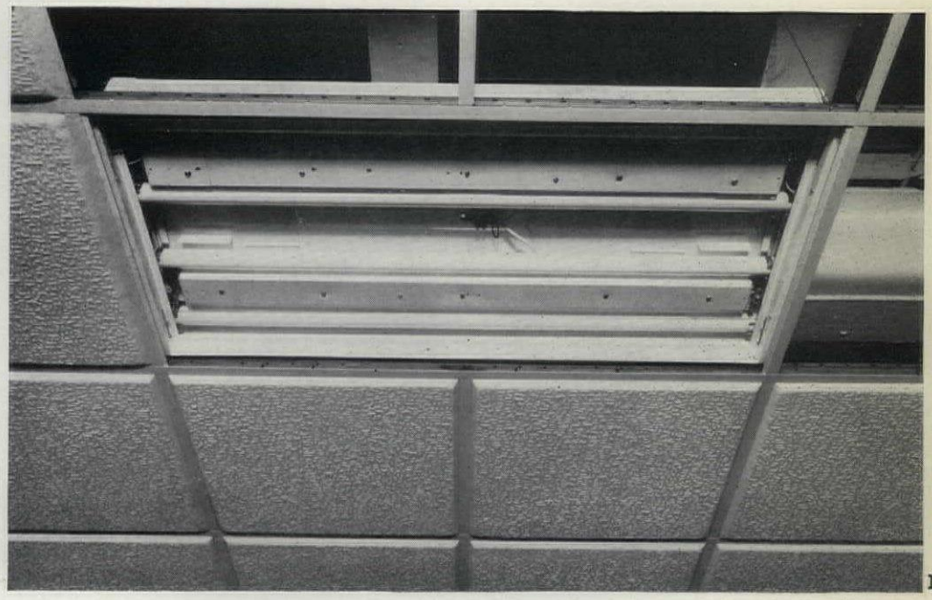


key
a, mild steel shell
b, flange fixing strap
c, gear tray
d, lamp clips
e, gear tray hooks
f, tube end covers
g, flange fixing strap
h, cover plate
i, wiring tails
k, terminal block
11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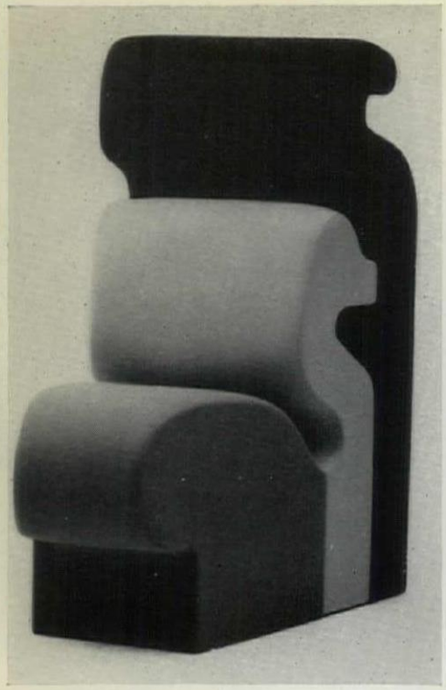
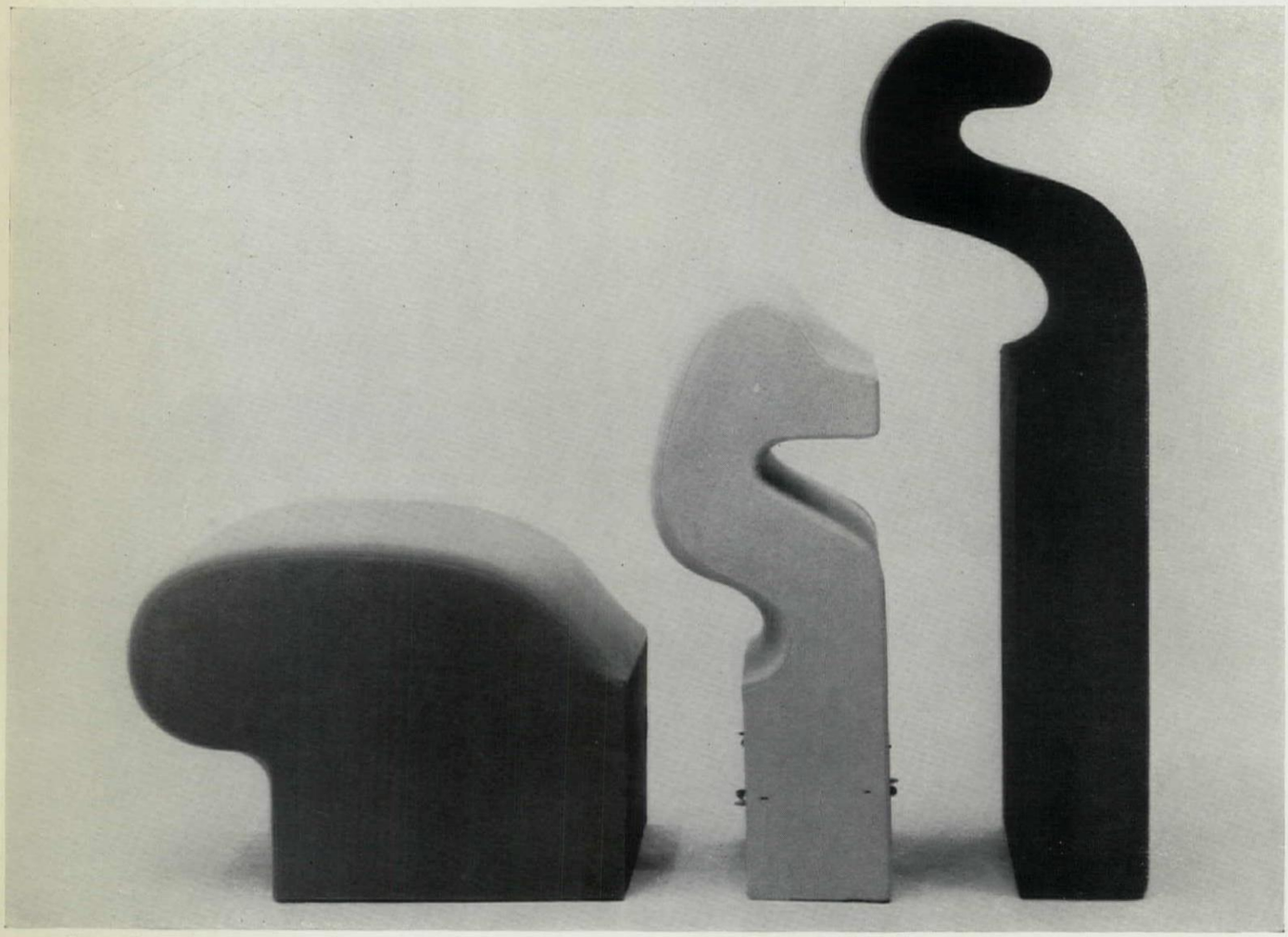
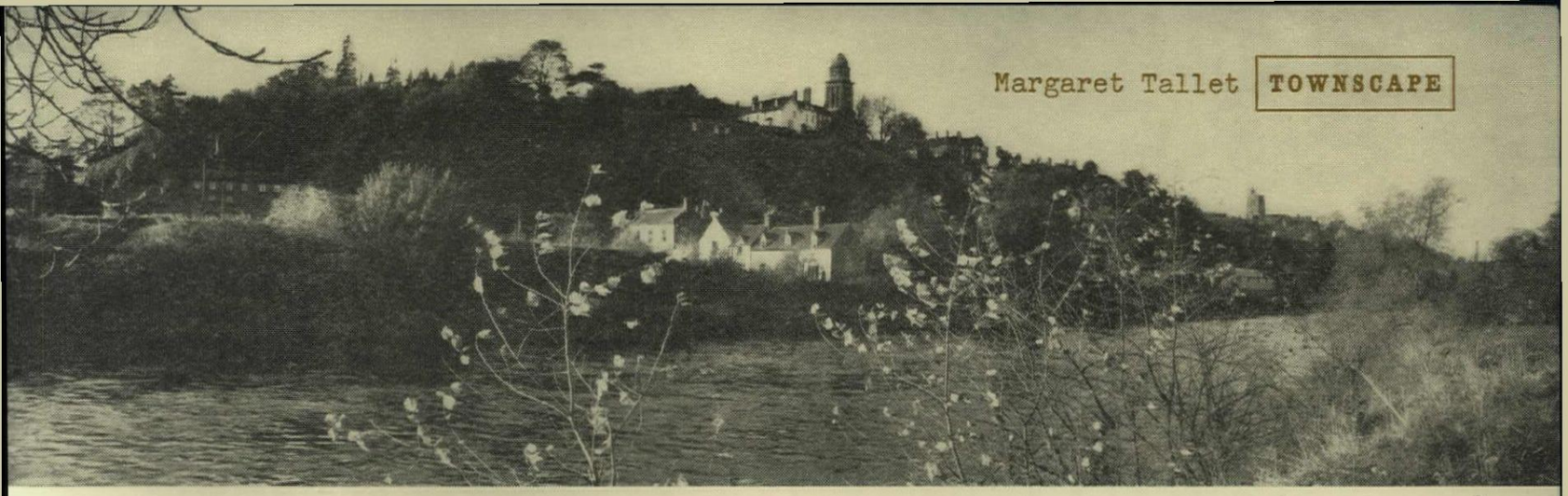
7, Lait Interwall system. 8, horizontal section through Lait Interwall system. 9, 10, Interlocking Grid, by Cape Building Products. 11, 12, Cape-Lumitron integrated light fitting.



Sculptured furniture by Jorn Utzon

Utzon's new system consists of four seat elements and two backs. The standard width of the seat and back elements are 60cm. and all curves used in this system are based on the angle of 22½ deg., thus making it possible to use as many curves as required within an overall shape. The sculptured effect is now possible because of the technical advance of the hardening process of polyurethane. This liquid is placed in a mould and under forced air pressure is enlarged to 40 times its original size, taking only 10 minutes to set. The cover at present being used is stretch felt and comes in various co-ordinated colours, but washable covers are also being considered.
The furniture is available from Oscar Woollens, Hampstead.

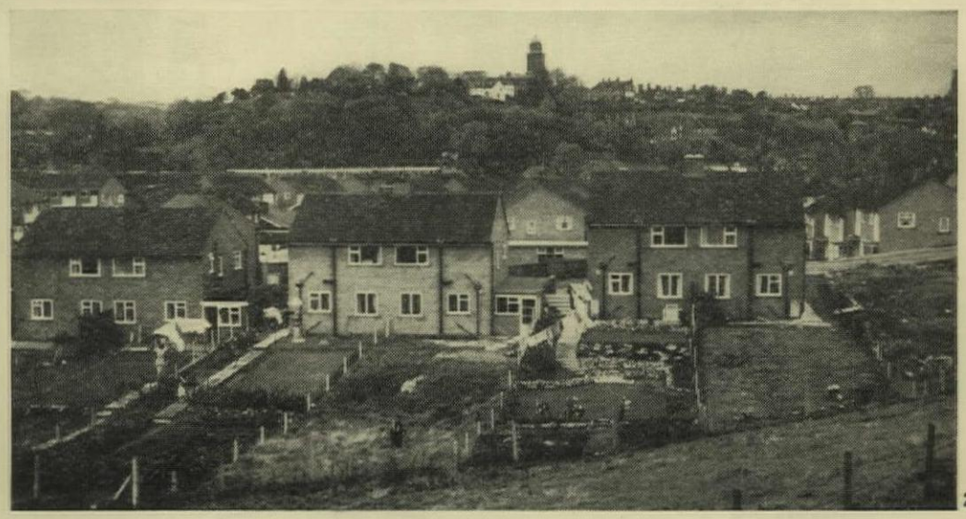




1

BRIDGNORTH

Bridgnorth, Shropshire, is a splendid hill town with a memorable silhouette, yet its special character is threatened with suffocation. Since the last war low-density housing has spread field by field around the town, often ruining the silhouette and spoiling the views outwards. Too often these are no longer of green fields but of semis creeping up over the skyline. From the river bank the views to the town are still good, 1, but further back, from the Kidderminster approach for instance, you see the town over a foreground of subtopia, 2. It is high time this sprawl was curbed, yet no Town Map exists nor has any plan been made public.

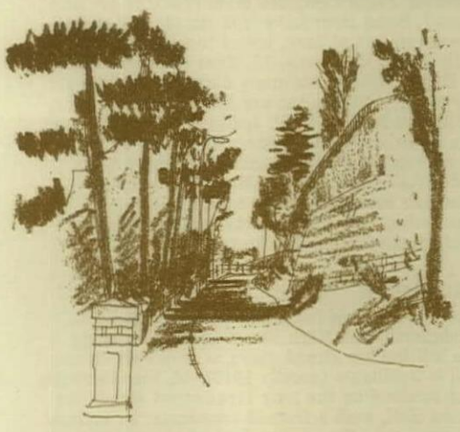


2

1 (*top*), *the hill-town image: Bridgnorth High Town seen from the east bank of the Severn.* 2, *seen from further away, on the Kidderminster road, the approach to the town is ruined by a sprawl of new housing.*

SILHOUETTE

The town is sited on a steep V-shaped sandstone cliff on the west bank of the Severn, and approaching the town from the south and east there is a splendid element of surprise in its hill-town silhouette above the river. New Road up to High Town is cut into the sandstone cliff, winding round under what was once the castle, 3, now a public park. Cliffs and park are well wooded and above them rises the classical tower

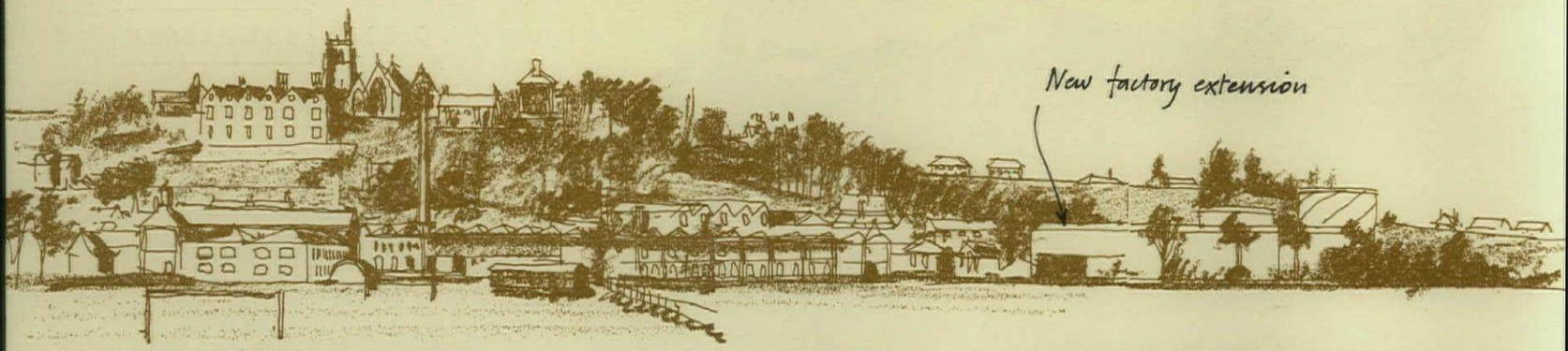


3, *New Road, cut into the cliffside.*

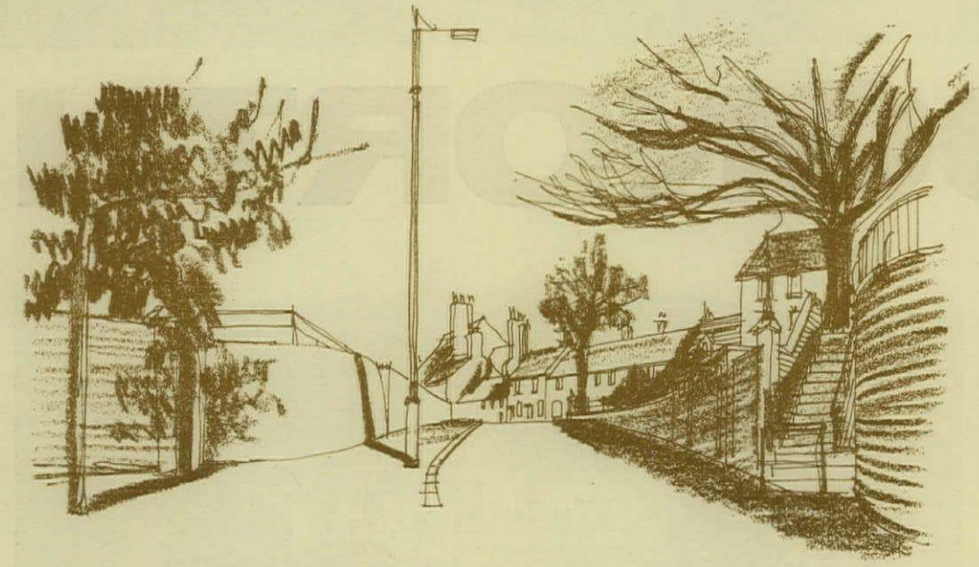
of Telford's church of St. Mary Magdalene. The view of this group is quite superb from the low ground to the south and good also from the east riverbank, 1.

At the northern end of High Town are the red sandstone church of St. Leonard (rebuilt 1860-2 in the gothic style) and the 1629 Grammar School

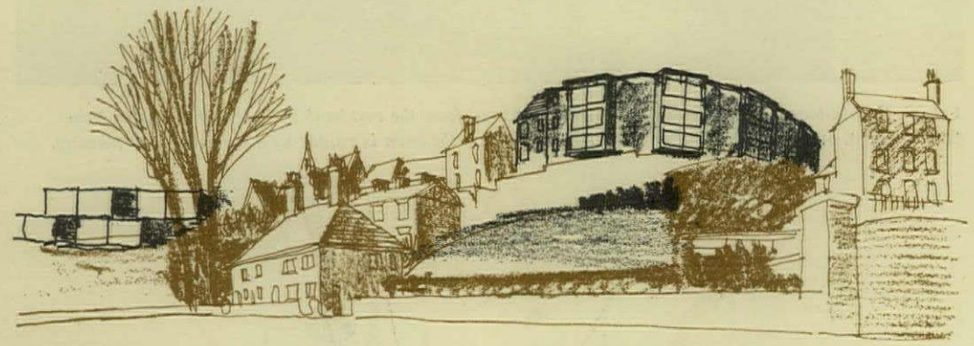
Map A *the growth of Bridgnorth.*



4, *the northern end of High Town, dominated by St. Leonard's church, from the east river-bank.*



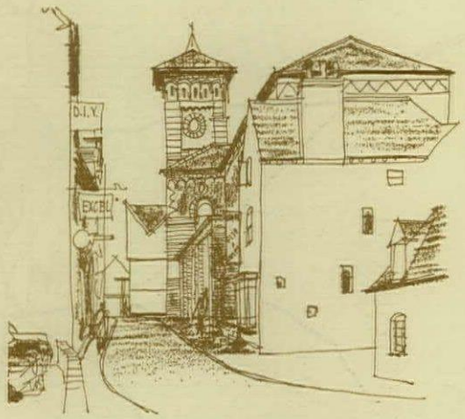
5, *the junction of New Road and West Castle Street.*



6, *suggested development on and below Listley Street, adding height to the Town Wall.*

Buildings in Church Close. Seen from the east riverbank, 4, these stand out as a cluster of gables with the church tower as the climax. The land below them is terraced and wooded while below that again is the riverside carpet factory—another group of gables in the local dark brick (the factory chimney features in the silhouette). Unfortunately these two splendid groups of dark gables have been spoilt by a large, flat-facaded and asbestos-roofed extension to the factory, and also by recent housing snaking over the skyline. The woods here are vital as they serve to contain the old part of the town and they must feature in any Conservation Area. The factory also should be included for the importance of its riverside frontage in the silhouette.

On the western side of the town, the tower of St. Mary's is important and below it the stepped roofline and twisted chimneys of Ebenezer Row cottages, 8. These terraced cottages rising up a steep path, and also those up the narrow valley called Railway Street, are well worth retaining visually but, as with so many buildings here, they back on to the cliff and are badly in need of improvement. In Listley Street the Victorian school (now a branch of the College of Further Education), grey brick, stone-quoined with quirky gables, stands silhouetted and glinting on the cliff top. Below it the slope down to the access road could well take some new housing, while nearby the Listley Street parking area above the Town Wall should be developed with housing—adding height to the wall and interest to the site, 6. Perhaps Railway Street could also be rehabilitated at the same time.



7, *looking up Listley Street to the tower of the 'new' Market Hall.*

Within the town there are two more marked vertical features. First the 'new' Market Hall on the corner of Listley and High Street, built in 1855 in striped blue, yellow and red brick, Italianate and of powerful character. Its tower is most important as it marks the southern end of High Street and it is visually a very good feature; however, the ground floor has deteriorated into multiple uses and the first floor into multiple dreary offices; it desperately needs a new use commensurate with its scale and a ground floor face-lift externally, 7. The second feature is the Town Hall itself; this stands centrally in the wide High Street and is a good half-timbered building raised on brick and stone arches, 15 (originally a barn it was rebuilt here after the fire of 1652 then Victorianized); its two cupolas are points of reference in views across the town from the higher land to the west.

STAIRCASES

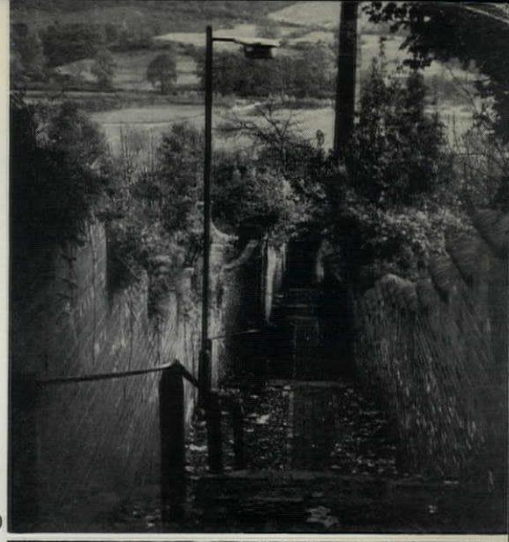
Moving closer in, the many stepped paths up the south and east cliff between Low and High Towns are a striking feature of the place. All these steps are a delight. Brick paved and with good cast-iron detail and well-built Victorian walling, and with views up to the gabled silhouette of the town or down to roofs, river and Severn Park (20 acres of public park on the east bank), 21. Unfortunately, however, these views are often spoilt by housing sprawl. Some steps have iron strings and risers precast in sets of four, bolted together and laid with blue brick treads, 13. Four staircases arrive at Castle Walk, with many houses overlooking the river, but these too are falling into disrepair, while two lead up to St. Leonard's Close, 11, and two more south and westwards to New Road. Here steps connect to another of Bridgnorth's Industrial Age features: the 1895 footbridge, 12, spanning Hollybush Road in the valley and connecting with the Railway Station. There is also an excellent cliff railway.

ENCLOSURE

There is a strong feeling of enclosure in Bridgnorth, and High Street which runs along the hill top has closed views at each end. At one end is Northgate (mostly 1910), 14, then centrally and subdividing the long broad street stands the Town Hall, with a framed view under its arches. At present traffic goes under and to one side of it. The building at the southern end, 16, could be improved in proportion if the three old roof gables were again exposed. This is a pleasant street (really a long market place) with considerable unity; the width and enclosure creating a feeling of 'centre'. It is the climax of the town with the two churches, in their enclosures, at either end. The whole of East Castle Street is pretty well unspoilt late eighteenth and early nineteenth century, with the view southwards closed by the excellent Telford church, which faces south to achieve the axial composition, 17. The enclosing curve at the northern end is very good visually and trafficwise it helps to preserve a quiet enclave, 18.

Cartway curves around and up before finally arriving alongside the raised Waterloo Terrace to face a good nineteenth century classical bank in High Street, while Whitburn and Church Street are both closed by views of St. Leonard's Church. Approaching Low Town from High the view

8



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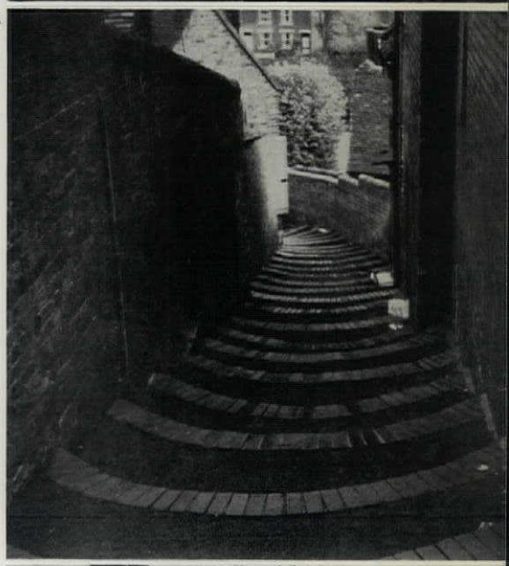

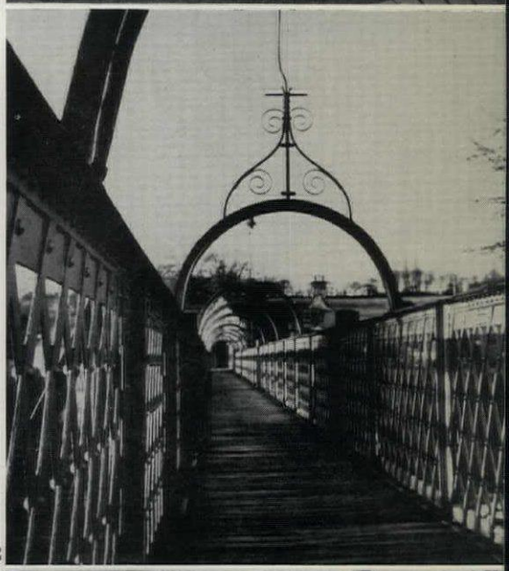

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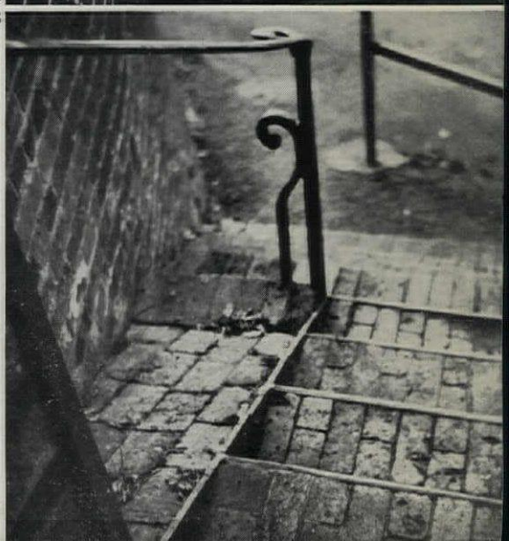
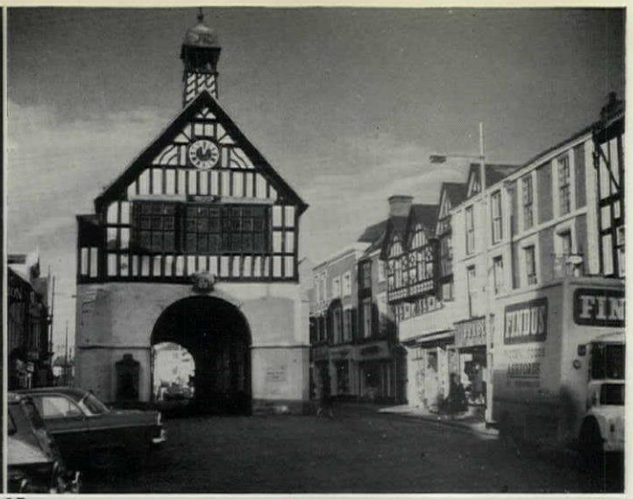
13



Changes of level 8, *the west side of the town is dominated by the tower of St. Mary's, with the stepped roofline of Ebenezer Row cottages below.* 9, *Stoneway Steps.* 10, *St. Leonard's Steps.* 11, *Bank Steps.* 12, *the footbridge spanning the valley.* 13, *stepped path with iron strings and risers and blue brick treads.*

9

14



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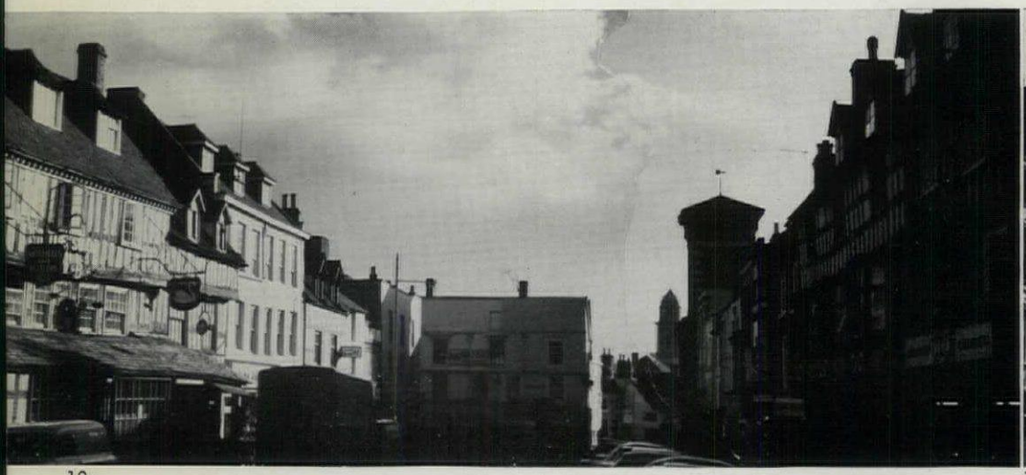


16

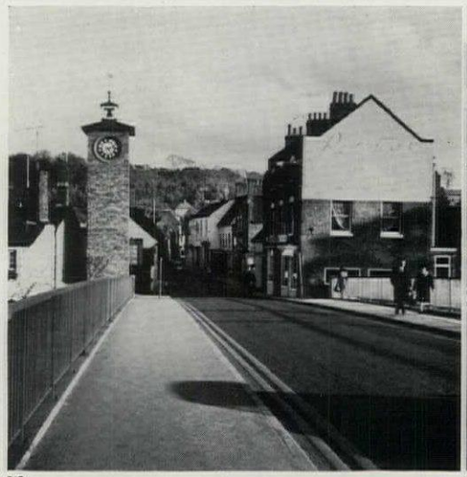
17

Bridgnorth enclosure

14, *the North Gate in High Street, framed by the arch of the Town Hall.* 15, *the Town Hall seen from High Street.* 16, *the south end of High Street.* 17, *in East Castle Street the view south is closed by Telford's church, while looking north* (18, *opposite page*) *the view is sealed by the curve of buildings.* 19, *the entrance to Low Town, on the east side of the bridge.* 20, *looking back to High Town* (*note effective lettering on gable wall*).

Views out

21, *looking down from Castle Walk to Severn Park on the other side of the river.* 22, *the derelict site of the old boat-building yard, seen from Library Steps.* 23 (*opposite page*), *the filling stations which spoil the entrance to the town.*



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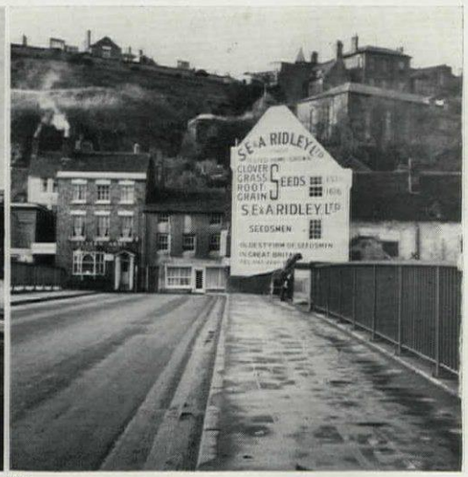

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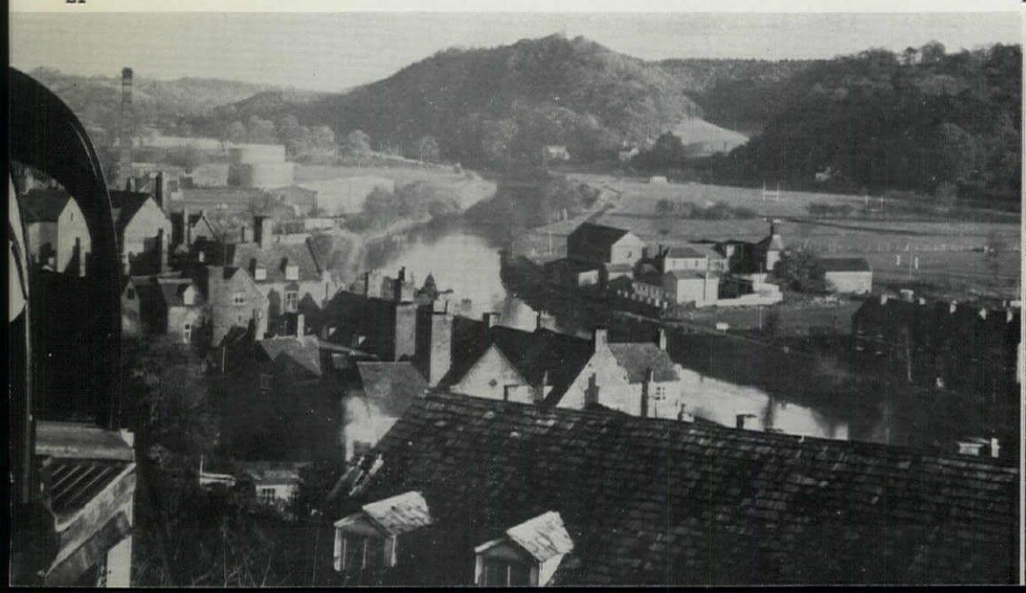

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northwards along Underhill Street is contained by a seed merchant's brick warehouse and a small shop with a splendid facade of posters; then over the bridge (reconstructed 1823) to the real entrance to Low Town . . . a good 1930'ish design clock tower opposite a gable wall, 19. Looking back, the seed merchants with its excellent lettered gable wall marks the entrance to High Town, 20. The Fox Hotel now closes both the view along St. John's Street and the view northwards along a three-storey terrace now unfortunately isolated by road works. Again, the vision splay opposite is filled with arty flower beds in front of arty, intrusive lavatories; while nearby the new entrance to the town from the Wolverhampton Road is spoiled by dual petrol filling stations with garish advertising.

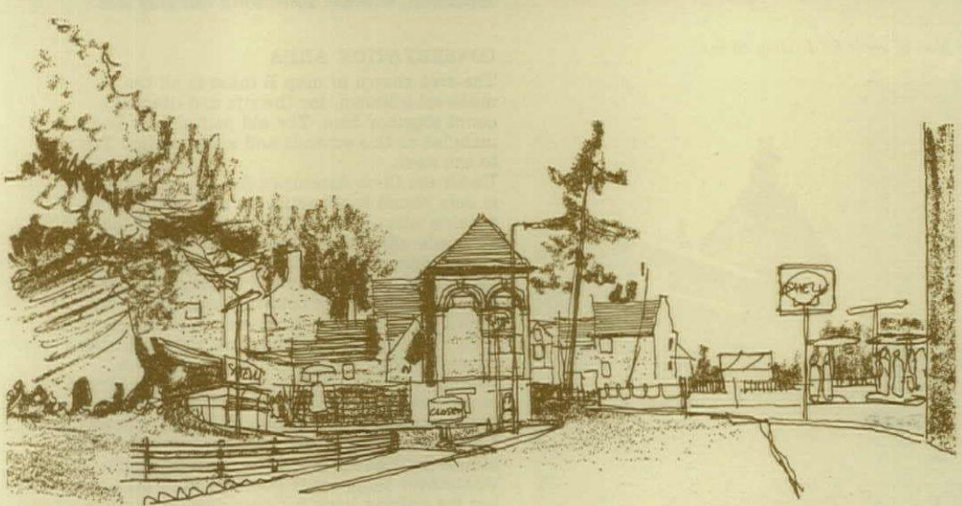
18

VIEWS OUT

The views directly up and down the river are still good, 21, but westwards housing has been creeping outwards and upwards since the 'thirties and has already crossed the skyline at two points. To the east, the same pattern has been repeated since the war, though the long, wooded ridge has not been broken. If development had been contained and kept to the density of Low Town there would have been no aesthetic problem, but now the only way to alleviate the situation is by the skilful planting of tree belts. Looking down from Castle Walk, the little valley beside the railway contains a recent factory and garage; screened by Scots pines, these are probably acceptable. Since the 1963 closure, the railway has been bought by a Railway Society, but one wonders what will happen to the railway land if it ever closes permanently; it would be fatal for industry to spread here. Above the railway, the valley slope facing the town could be developed as high-density housing, enclosed by the tree belt to the south and linked by the footbridge. Below Castle Walk on the eastern side is a long triangular strip of flat land by the riverside which was once built up with warehouses. The northern point (part of the old Town Wharf) now boasts a municipal garden with garish multi-coloured paving. Next to it is a filling station with jarring signs and fencing which, together with its offspring across the road, forms an appalling entry to the town, 23. Here also are two small factories, a coach terminus, several derelict cottages running down to the water's edge, and a two-acre site of rough grass that was once a boat-builder's yard, 22. The river's edge is overgrown, the walk no longer there, while a hoarding proclaims the old boat-building yards as 'Industrial Estate.' There is no Town Map so each of these new uses must have been decided on its merits . . . but surely if there was ever a site for high-density housing and a landscaped riverside walk it was this ?

THE SHOPPING CENTRE

In the High Street the buildings are not outstanding, but there are nevertheless about 26 grade II buildings. They are mainly eighteenth and nineteenth century with two seventeenth-century timber inns and two or three new shops. The best part of the street is south of the Town Hall, and the least good the north-east side. There still remain some good nineteenth-century shopfronts and bold lettering, 24-26, but jazz modernity is taking over. How, for instance, did a shopfront such as 27 ever get planning permission between its two neighbours, and in a building described by Pevsner as 'the most notable in the street'? Again, look on the other side of the road, 29. Currently there is an application to rebuild the small Woolworths and expand it into the Crown Hotel 28. If this is allowed in the standard Woolworth style the result will be a long facade grossly out of scale, and unrelated to the verticle emphasis of the rest of the street. High Street is bound to remain the main shopping area. It is wide enough to allow some servicing and short term parking (as a pedestrian precinct it could become rather dead). On the west side back-servicing can be provided, but not on the



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24

25

26

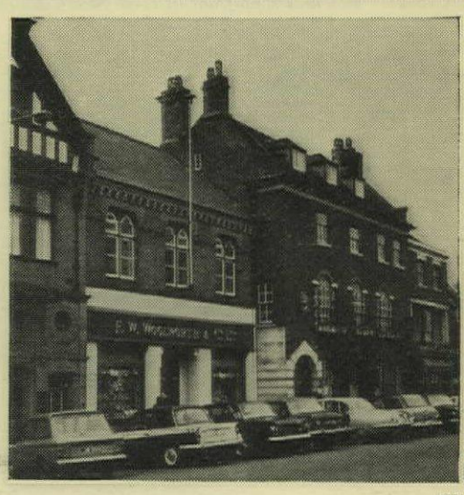
Signs to save

24, 25, 26, good examples of nineteenth-century shop lettering and direction signs in Bridgnorth.

Intrusion

27, a bad shop-front which defaces one of the best buildings in High Street. 28, the Woolworth's store in High Street, which threatened the Crown Hotel on the right.

27



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Map B *suggestions for new housing and shopping areas (blue), and conservation area (outlined in brown).*

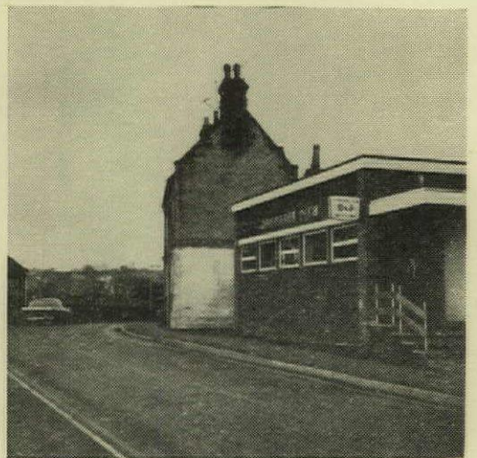
road lines

high-density housing

shopping area

29, *another atrocious shop-front in High Street.* 30, *complete loss of scale in Listley Street.*

29



30

east which is just the area which could gain from redevelopment. Back servicing is bound to create demands for rebuilding in depth, with the concomitant sop of preserving old facades above shop level. There is a risk that if a service road is run parallel to High Street the lengths of street furthest from the centre will deteriorate. Shown on map B is a service road, parallel to St. Mary's Street, which will not destroy the environment, and St. Mary's Street, which is narrow, could then become pedestrian and be closed at its western end by a new building.

The only sure way to avoid spoliation of architecturally good centres (at least until our architecture improves in social conscience and respects the ambience), seems to be to plan either district or out-town centres to attract the supermarkets and chain stores and for the old town centre to become a more specialized one. This might have been possible in Bridgnorth, for the next largest centre is Wolverhampton, and a new centre might have tapped both populations. With no plan, Bridgnorth centre is feeling the impact of the town's new growth.

In Low Town centre, all the streets are beginning to run down, shops are empty, pavements extremely narrow and traffic heavy. When the by-pass is built and through traffic diverted, the strip of land behind Bridge Street and St. John's Street could be developed for new shopping and parking, with perhaps a riverside restaurant. At present old Low Town needs maintenance to tide it over until the new bridge is built; then it could once again become an attractive minor centre serving the eastern part of the town.

TRAFFIC

The County Map proposes a by-pass for the Birmingham-Shrewsbury traffic. There is no official proposal for a town relief road, nor to divert the heavy Wolverhampton traffic on to the new bridge (a suggestion for this is shown in map A). With through traffic diverted, the central roads could be designed for slow, town traffic and a mainly one-way system devised. In the case of Bridgnorth the problem will be to provide access for the new, large articulated service vehicles on these steep streets; this again might be a reason to encourage chain stores in district centres.

GROWTH

The population of Bridgnorth Borough has grown from 6,250 in 1951 to about 9,800. Shropshire County Council suggest that the town could grow to about 15,000 by 1981. This major town growth which has taken place since the war must have formed a substantial departure from County Map. As such it would have been advertised and put to the Minister. It seems hard to believe, for visually one has the feeling that the layout can only be based on a sewerage scheme, stopping at the ridges for this reason only. The views of recent housing to the east, as seen from Castle Walk, are disastrous and any further growth should only be undertaken within a landscape architect's scheme. It seems a great pity that one of the few hill towns that England can boast should be ruined by such low-density sprawl. Admittedly it is only 25 miles from overspilling Birmingham and, more telling, 14 miles from Wolverhampton, for which it is becoming a dormitory. Still, one suspects that there must be other towns which could be improved by expansion, whereas Bridgnorth can only lose.

CONSERVATION AREA

The area shown in map B takes in all the medieval hilltown, for the site and silhouette count together here. The old part of Low Town is included as this extends and anchors High Town to the river.

Under the Civic Amenities Act, a local authority is only bound to advertise an application to develop when it would 'in the opinion of the authority affect the character and appearance of the Conservation Area.' Often, however, a planning authority may not employ architects (and in the case of a county borough may not even have a borough architect). It seems essential then that in a conservation area the applications should be seen by an architect as well as a planner, and that local opinion should be tapped at an early stage (as the PAG Report and the Town and Country Planning Bill 1967 suggest). Unfortunately in Bridgnorth the population has almost doubled since 1947 without any plan whatsoever being made public: a draft plan exists but the citizens have not been involved despite an active civic society.

MEDICAL CENTRE, UNIVERSITY OF MALAYA | *architects* JAMES CUBITT AND PARTNERS

1, the ward block, from the visitors' car park, with the ambulance entrance on the left.

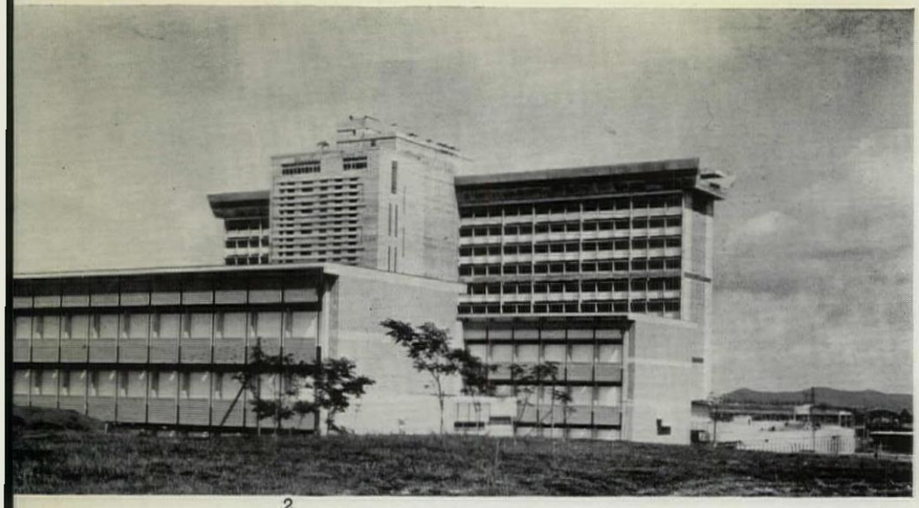
MEDICAL CENTRE, UNIVERSITY OF MALAYA

This is a 750-bed teaching hospital, with a medical school and all the research facilities such a school requires, at Kuala Lumpur, on a sloping 90-acre site south of the main campus of the University of Malaya. Financed by the Government of Malaya, through the Ministry of Health and Education, it has been completed in stages. In May, 1965 the Faculty buildings were occupied, and in January of this year, the final phase of the hospital, including the nurses' quarters. The hospital itself has been occupied in successive stages throughout 1967.

The group of buildings has a linear plan which reflects both the sequence of the building programme and the progress of a medical student through his years of training. The student starts at the north with the basic medical sciences (anatomy, physiology, biochemistry), proceeds next to the paraclinical departments (including pathology), then to the wards and their related operating, treatment and other departments and finally to the maternity block.

The teaching accommodation is planned to serve a multi-disciplinary system, with permanent laboratory space allotted to each student for each of the two years of his basic training, the staff coming to the students instead of (as is usual in this country) the reverse. The buildings are planned for a maximum intake of 128 students per year. Their first year of pre-medical studies takes place in the university.

The height of buildings rises from north to south, culminating in the main fifteen-storey ward block, south of which are the lower maternity and pediatric blocks.



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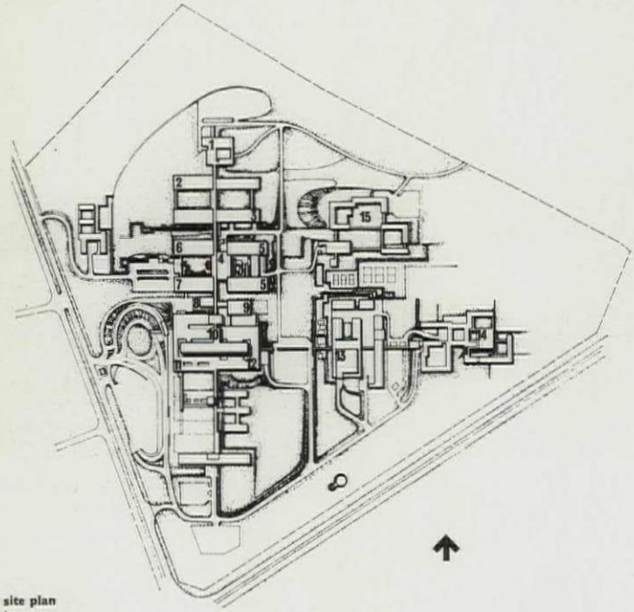
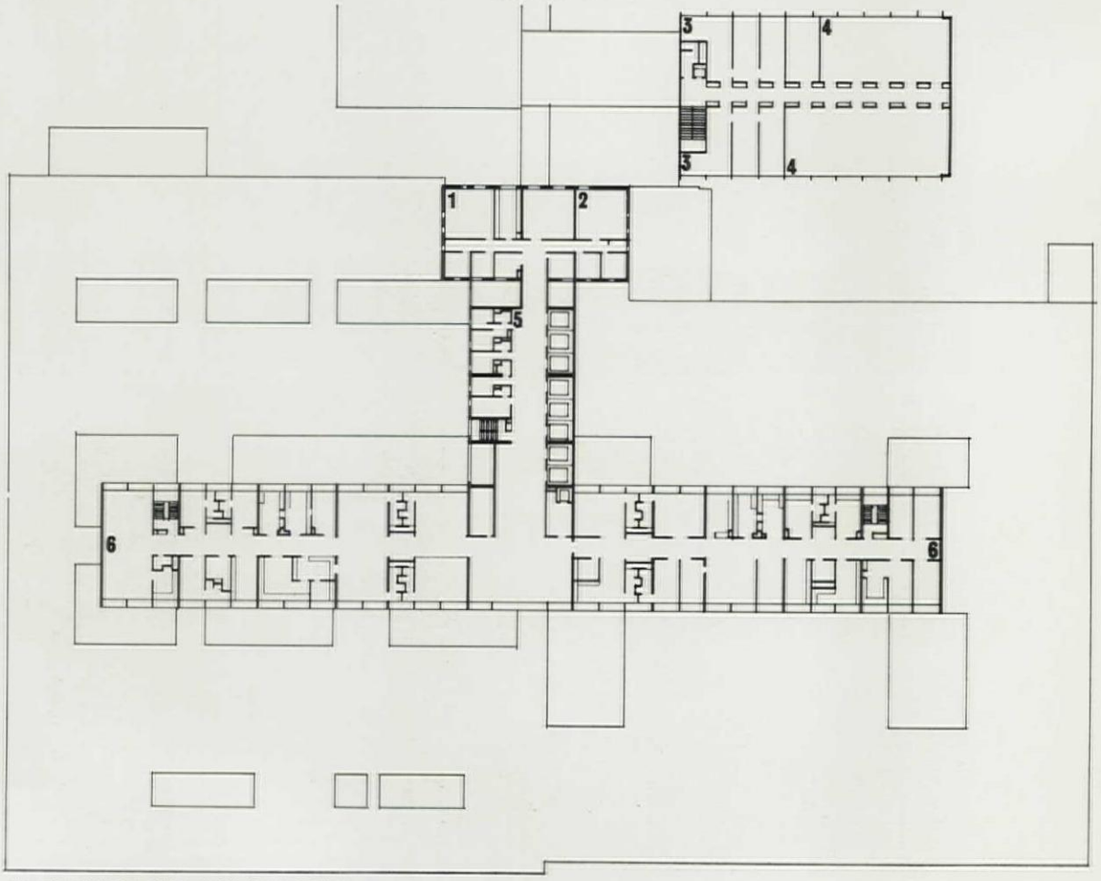


site plan key

1. administration
2. anatomy and physiology
3. multi-discipline laboratories
4. lecture halls
5. library, museum, laboratories
6. social and preventive medicine, bacteriology, and post-graduate institute
7. parasitology, bacteriology, pathology and post mortem and mortuary
8. amphitheatre
9. clinical research laboratories
10. patient care and diagnostic research laboratories
11. administration, out-patients, accident and emergency
12. operation theatres
13. central services building
14. nurses' quarters
15. residential college for clinical students

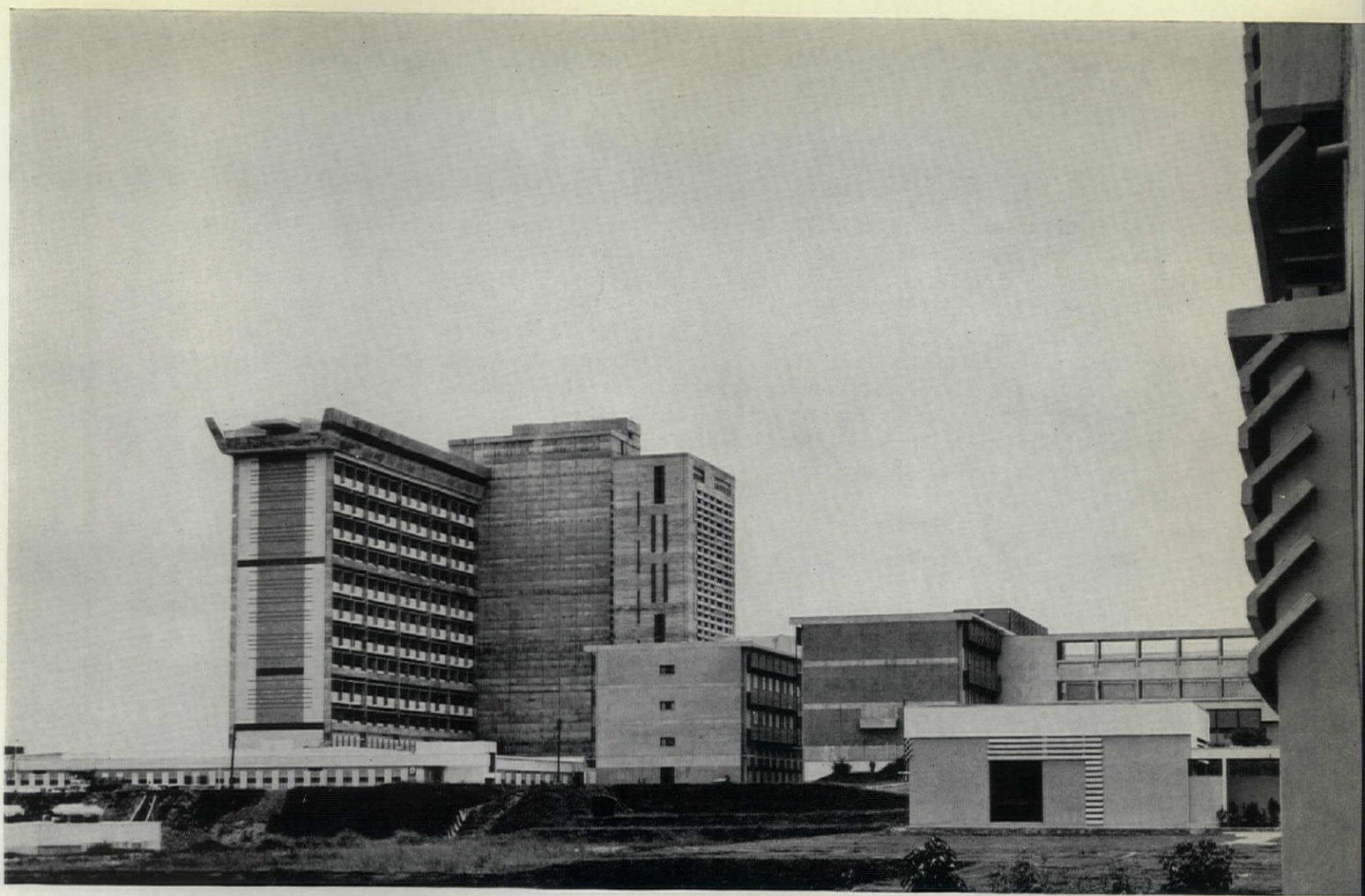
2. the basic medical science buildings on the northern rise of the site. 3. the library, museum, and laboratories situated between the residential college on the right and the ward block on the left.



ward block, teaching and clinical research laboratory: key

1. students' work room
2. doctors' work room
3. professor
4. laboratories
5. night staff
6. wards

plan of ward block, teaching and clinical research laboratory



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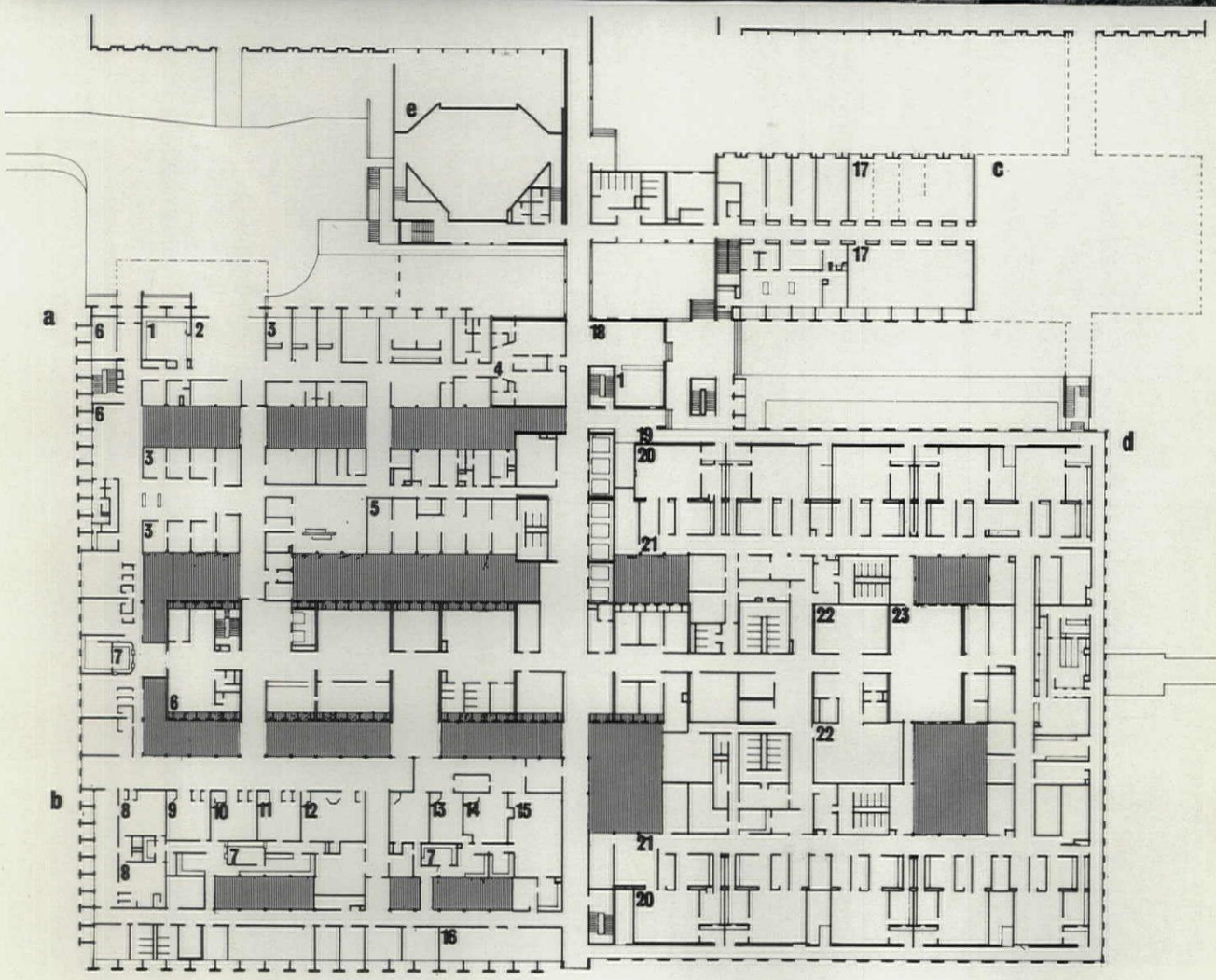


plan at entrance level: key
a, accident and emergency
b, diagnostic x-ray
c, clinical research
d, operation theatres
e, amphi-theatre
1, reception
2, ambulance casualties
3, examination
4, minor theatres
5, observation wards
6, waiting
7, darkroom
8, fluoroscopy (barium)
9, fluoroscopy (general)
10, general
11, orthopaedic
12, pyclography
13, neuro-radiography
14, augeography
15, cardiovascular
16, library
17, laboratories
18, staff entrance
19, dirty corridor
20, operating theatres
21, clean corridor
22, reception ward
23, recovery ward

The standard ward has 28 beds, comprising two single rooms, one double room, four 4-bed rooms and one 8-bed room. The nurses' quarters and training school accommodate 460 nurses. There is a residential college for 256 clinical students and 4 Fellows and, in the main block, quarters for 50 housemen and 4 medical officers.

Construction is reinforced concrete throughout, with large areas of exposed fairfaced surface. The lower buildings use orthodox post and beam systems, but the main ward block, with its great height and exposure to wind, employs a 'diaphragm' system, consisting of full-height concrete walls, running the width of the block and spaced at 21ft. or 31ft. 6in. intervals. The block is T-shaped, the cross-bar having wards on either side and the stem (which also has diaphragm walls, at right angles to those in the ward) containing eight bed-passenger lifts and the teaching accommodation associated with the wards. Planning generally is based on a 10ft. 6in. one-way modular grid. Floor-to-floor heights are 14ft., to keep the interior spaces cool in the hot and humid climate. Roofs are metal decked on concrete slabs with insulating screeds. Windows are galvanized steel.

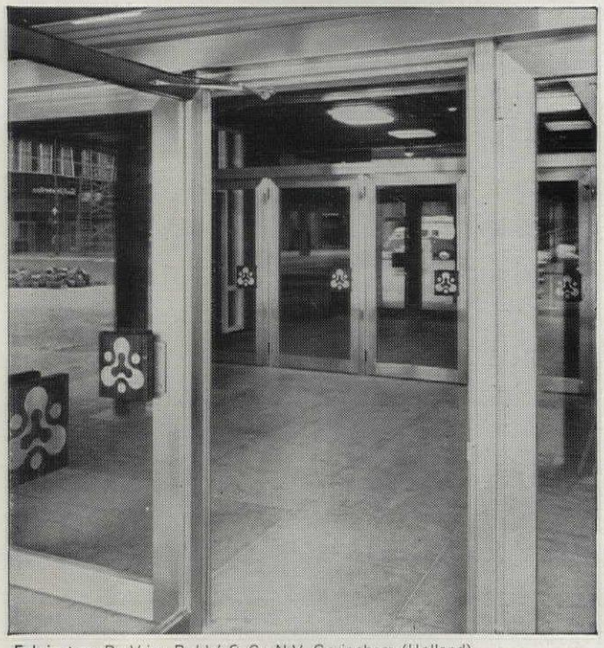
The hospital is served by piped medical gases, normal and emergency lighting, hot and cold water, normal communication systems including staff-location systems and piped steam for sterilizers. The whole technical area area is air-conditioned, as is the clinical amphitheatre, but in each of the twenty wards only the two single-bed rooms are air-conditioned.

Structural engineers, Steen Sehested and Partners. Mechanical and electrical engineers, Thomas Anderson and Partners. Quantity surveyors, Langdon and Every.

MEDICAL CENTRE, UNIVERSITY OF MALAYA

4, the fifteen-story ward block from the west, looking towards Kuala Lumpur.

4



Fabricators: De Vries Robbé & Co N.V. Gorinchem (Holland)
Architects: H. M. Kraaijvanger, Ir. E. H. Kraaijvanger, R. H. Fledderus

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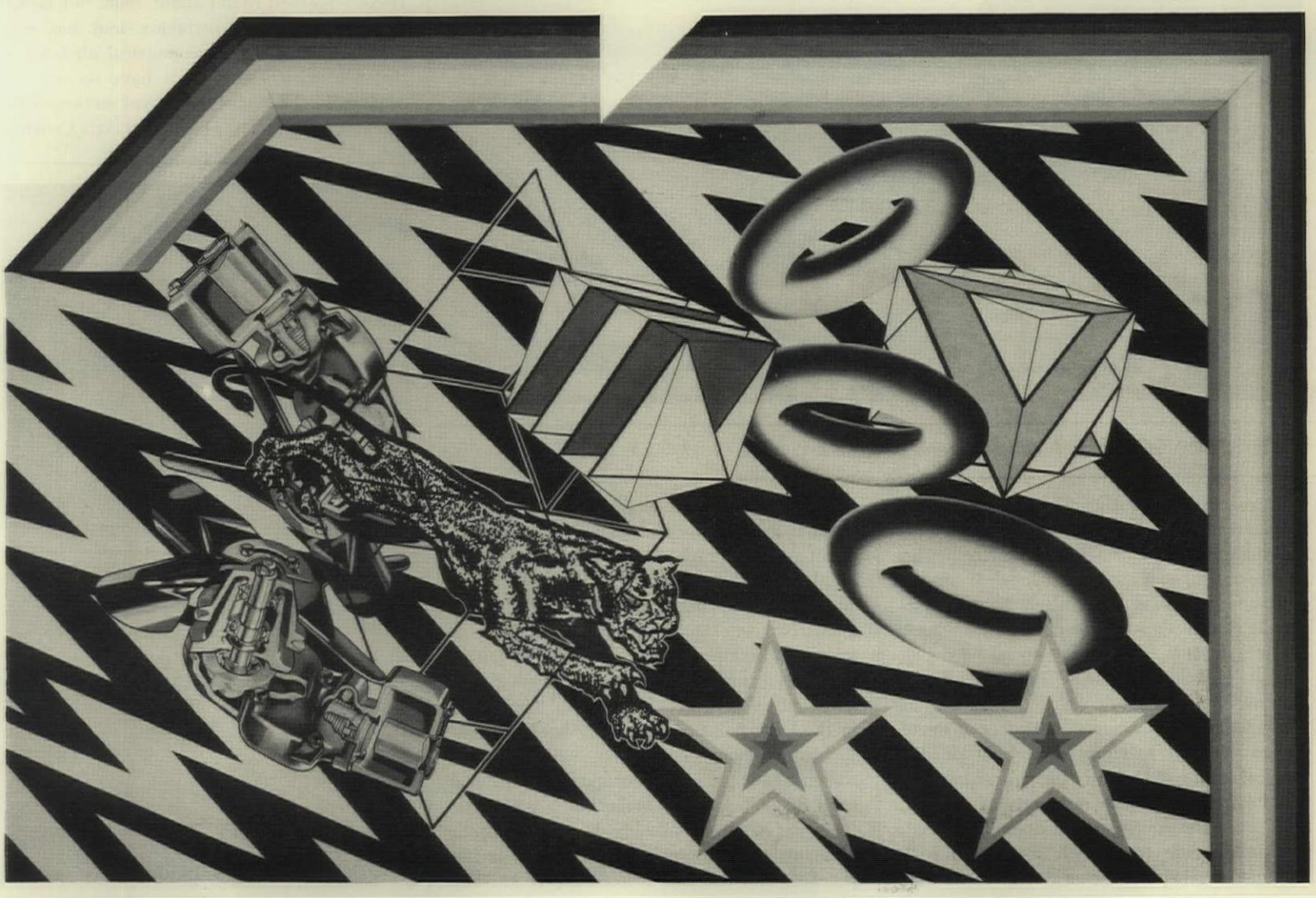
THE YOUNG CONSOLIDATORS

Robert Melville

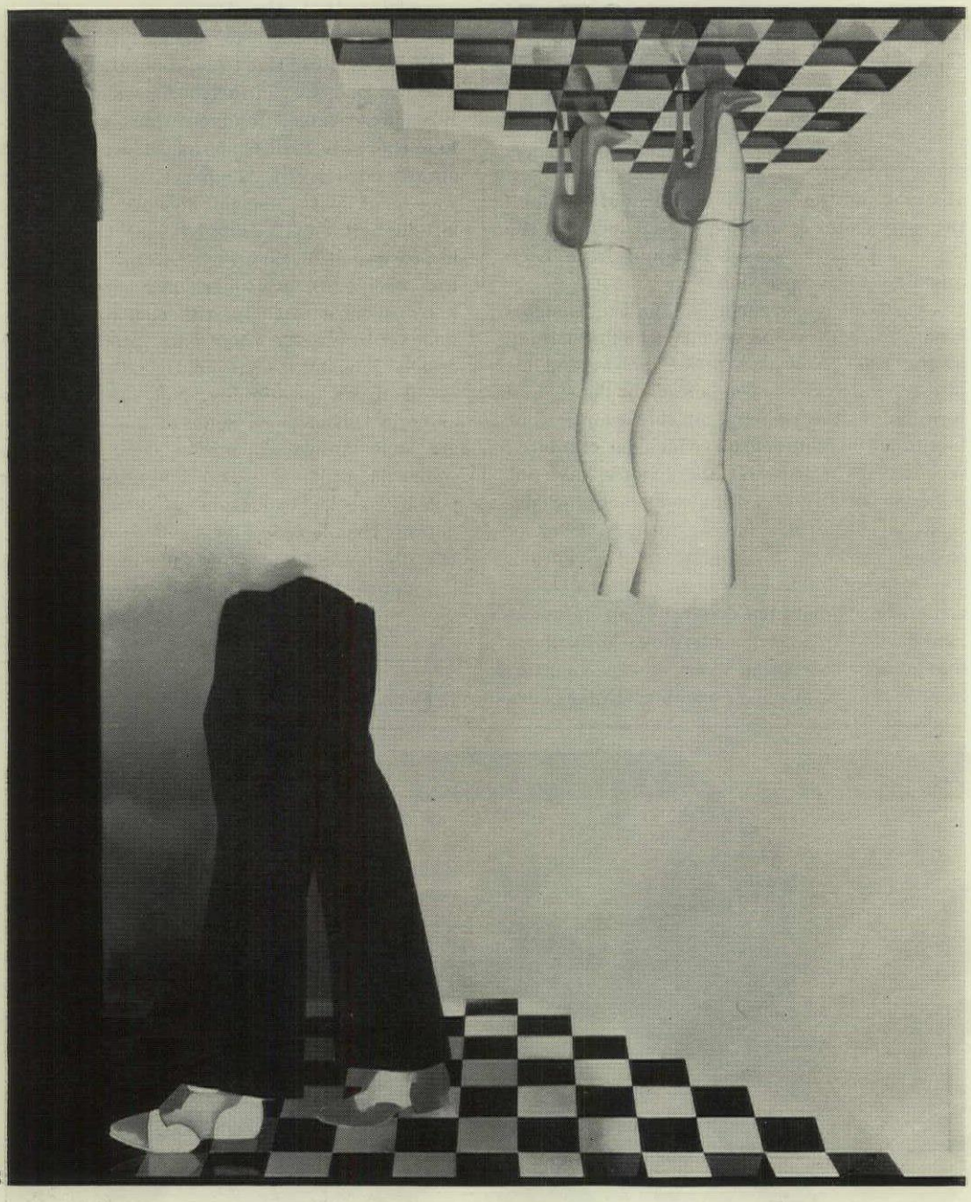
The 'Interim' show recently held at Whitechapel was the result of Bryan Robertson's wholly admirable intention to bring together one new major work by each of the artists who took part in the three 'New Generation' exhibitions which he organized at the gallery in 1964, 1965 and 1966. With four exceptions, the artists entered into the spirit of the project and for the most part exhibited new works which justified Robertson's belief in their staying-power and ability to develop. Of the four who didn't play, two of them, Phillip King and Tim Scott, were represented by early works, and the other two, Patrick Caulfield and Isaac Witkin, were not represented at all. They all had moderately good excuses for spoiling the idea of the show, but one of Caulfield's recent paintings might have provided a link, noticeably absent, between the abstract and the figurative work, and although the early example of King's obsession with the cone is pretty enough, it could have been mistaken for a regression.

It's very much less effective than the 'Genghis Khan,' which was so evidently the finest thing in the 1965 'New Generation' show, and his latest works are even more brilliant and formidable; the presence of the complex but monumental conic form which he exhibited recently at the Rowan Gallery would have put a flicker of emotion into one's acknowledgment of 'Interim's' above-average level of elegant workmanship and tasteful invention. The original intention was to make the 'New Generation' an annual event, but no show was held last year, and it's obviously difficult to find a new generation every twelve months, but I am wondering whether Robertson's complaint that the 1966 one was 'limply received by the critics' had anything to do with his decision not to hold another in 1967. The last one was, in fact, a *limp* show, full of tidy, presentable, unadventurous works. Unlike the two earlier shows, it was devoted almost entirely to young artists whose work was making its first public appearance, and although it can be argued that the general improvement disclosed by 'Interim' confirmed the percipience of Robertson's choice of unknowns, most of them still seem to me to be unadventurous; content to produce neat design jobs and consolidate positions they ought to be questioning. Not that they are alone in this respect. Some of the artists who are well known appear to be exercising a somewhat dubious restraint by giving greater polish to the execution of little pictorial notions that look like yesterday's left-overs.

It's disappointing to find, for instance, that the picture Peter Phillips completed this year, 'Syncrojector RAMA,' 1, looks like the



1, *Peter Phillips: 'Syncrojector RAMA.'*



2

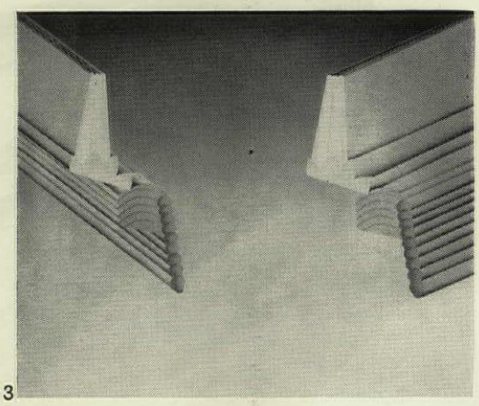
2, *Allen Jones: 'A Matter of Fact.'* 3, *Antony Donaldson: 'Alex Glendale.'* 4, *D. Binder: 'Ruins.*

pictures he was painting five years ago. The technical improvements are obvious, but he is still making the same schoolboyish responses to technology and the imagery of quick-starting and jazzy decoration that had a certain charm when he was fresh out of school: it's jejune stuff for a grown-up to be doing, and it makes him the Peter Pan of the English Pop movement.

I think that Allen Jones's 'A Matter of Fact,' 2, may be an attempt to get inside the magical terrain of the early Chagalls, where the people, freed from the restraints of gravity, glide over the rooftops. He doesn't succeed. The images are too closely associated with the alien world of the comic-strip to be able to assume the poetic licence of the Chagalls without looking facetious. They might pass in a suite of lithographs, but not in a full-blown painting.

Antony Donaldson, who used to be the young gentleman of Pop and included nice pale images of bikini girls in his canvases as purely decorative units, is now, I suppose, an adherent of abstract illusionism. The forms in the large painting he calls 'Alex Glendale,' 3, are vaguely connected with building materials—angle iron, corrugated roofing and such like. They don't make much sense, but their appearance of being very high up is pleasant, the grading of the shadows is impeccable and the pale colours are beautifully applied. Another accomplished adherent of the practice is Douglas Binder whose 'Ruins,' 4, is as pale and pretty as the Donaldson, but his subject-matter is more explicit and this might well be considered a flaw in the conception. Knighton Hosking's four-part, free-standing screen plays rather more adventurously with illusionism, 5. He has shaped the top half of two of the panels and painted them in a way that creates the illusion that they're bent and, using a formula that interior decorators have been playing with for centuries, he has painted the bottom half of all the panels to convey the false impression that the flat surfaces are projecting. An old-fashioned dealer in trompe l'oeil would probably find it interesting if Hosking applied the paint more carefully. As it is, the illusionism only operates here and there.

Robertson claims that abstract illusionism is an English invention, and it's likely to remain an English speciality. On present showing, there isn't much likelihood that artists elsewhere will be jumping on to such a flimsy band-wagon. A much more clever and subtle use of it was made in the pictures Paul Huxley painted round about 1963, but he has now become more orthodox and has contributed a large, flat geometrical abstract to 'Interim' which would not have seemed out of place in the slightly heretical section of the recent De Stijl show at Camden Arts Centre.



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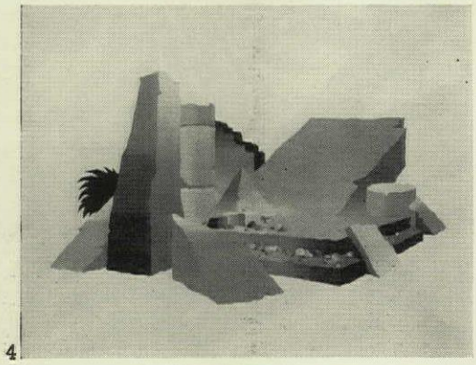
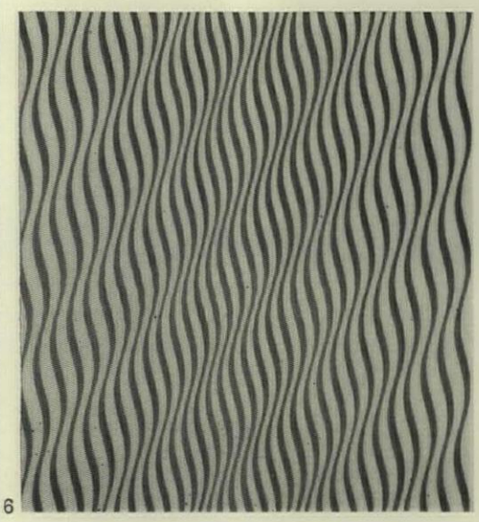


4

Bridget Riley, like Op artists everywhere, is an abstract illusionist, and 'Cataract,' 6, with its illusion of rhythmical surging movement, is altogether more powerful than anything by the members of Robertson's new school. She has used the design repeatedly. The hard glitter of the early black and white version was bad for the eyes, but when she uses colour the optical flick is reduced, and in terms of colour she brings something new to the design every time she uses it. In the present version the outer lines are composed of two juxtaposed colours, a dark red and a dark blue, so closely related in tone that they appear to be one. As the lines move inwards the colours gradually become distinct and at the centre they separate into bright blue and red. It's a faultless achievement.

5



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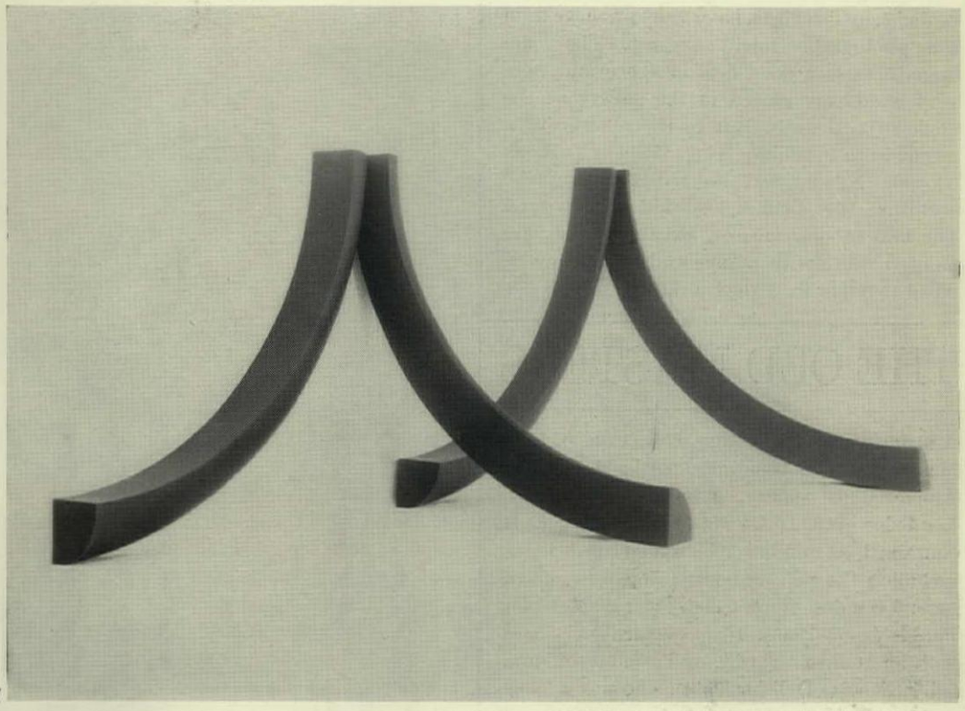

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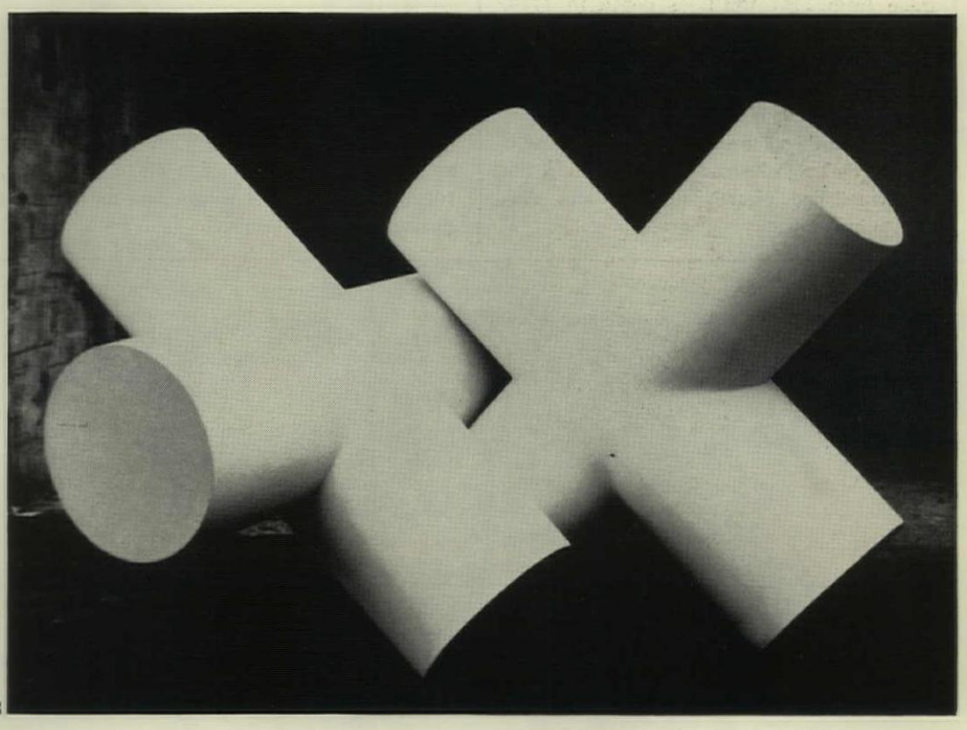


8

5, *Knighton Hosking: untitled.* 6, *Bridget Riley:* '*Cataract.*' 7, *Derrick Woodham:* '*Four Maroon Quadrants.*' 8, *William Tucker:* '*Double X.*'

In his general congratulations to the artists taking part, Robertson announced that 'the constraints of English tonality are still happily jettisoned with that accompanying absence of nostalgia which is the essence of modern art,' and I fancy that he is aiming a blow at the work of Peter Blake, who is probably the best painter of his generation.

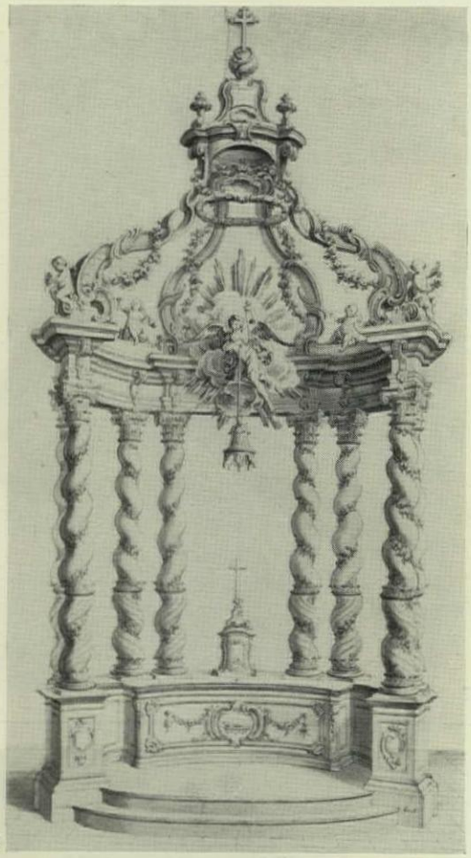
But, be that as it may, Bridget Riley's 'Cataract' is the result of her subtle feeling for tonal values, and as far as nostalgia is concerned, Binder's 'Ruins' is an eligible enough example and even Paul Huxley's painting seems to signify a longing for the golden age of geometrical abstraction.

Derrick Woodham's 'Four Maroon Quad-

rants,' 7, in fibreglass, have more presence than the photograph might suggest. They are large, occupy a good deal of space and were very effectively placed in the gallery at the angle of two walls. But in the absence of a recent work by Phillip King, William Tucker's 'Double X,' 8, had no rivals among the sculpture. It is, I think, his finest work to date. The two tubular crosses, identical twins, are painted white with mauve ends, and they lie down together in perfect amity.

THE OLD MASTERS

An unusually interesting collection of Old Master drawings was presented in May at the Alpine Club gallery, London, by W. R. Leudwine and *L'Art Antique* of Zurich. It contained a number of architectural items including the pen and wash drawings shown here: 9 is a design for a high altar by Melchior Paulus (1669–1745). 10 is entitled 'A saloon with an arch to a garden and a fountain,' and is by Nicholas Dall (or Dahl), who was a Dane and worked as a scene designer at Covent Garden from 1757 until his death in 1776. The play for which this was the set has not been identified. There were also a Flemish-school drawing of St. Peter's, Rome, of about 1530, showing the old basilica from the spot where Bernini's colonnade now stands, and a study by Federigo Zuccaro for a fresco in the now demolished church of S. Maria Annunciata in Rome.



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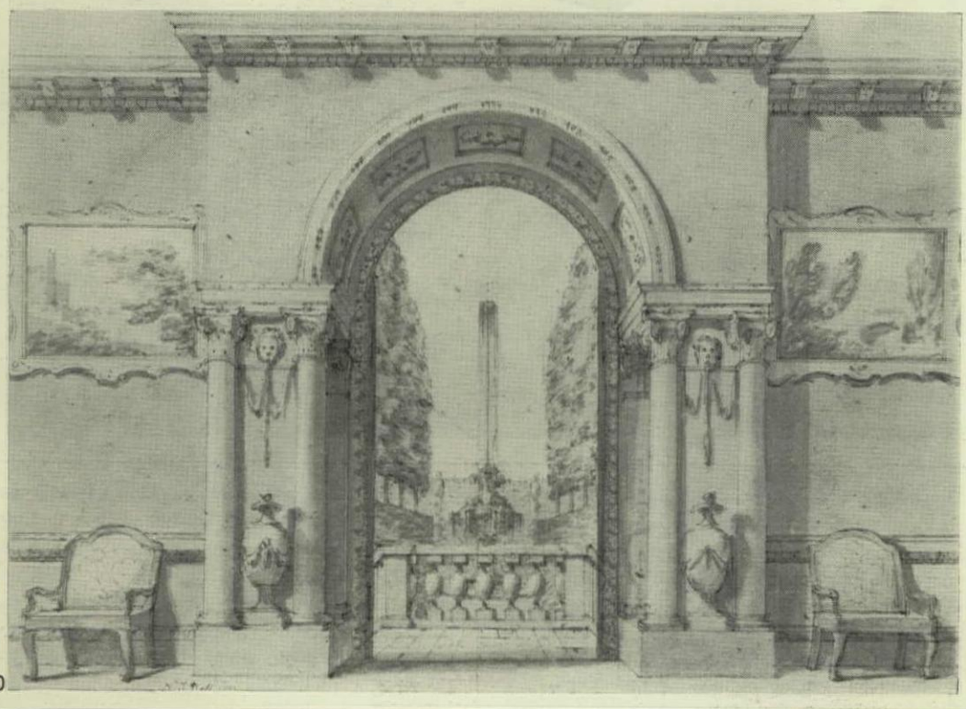
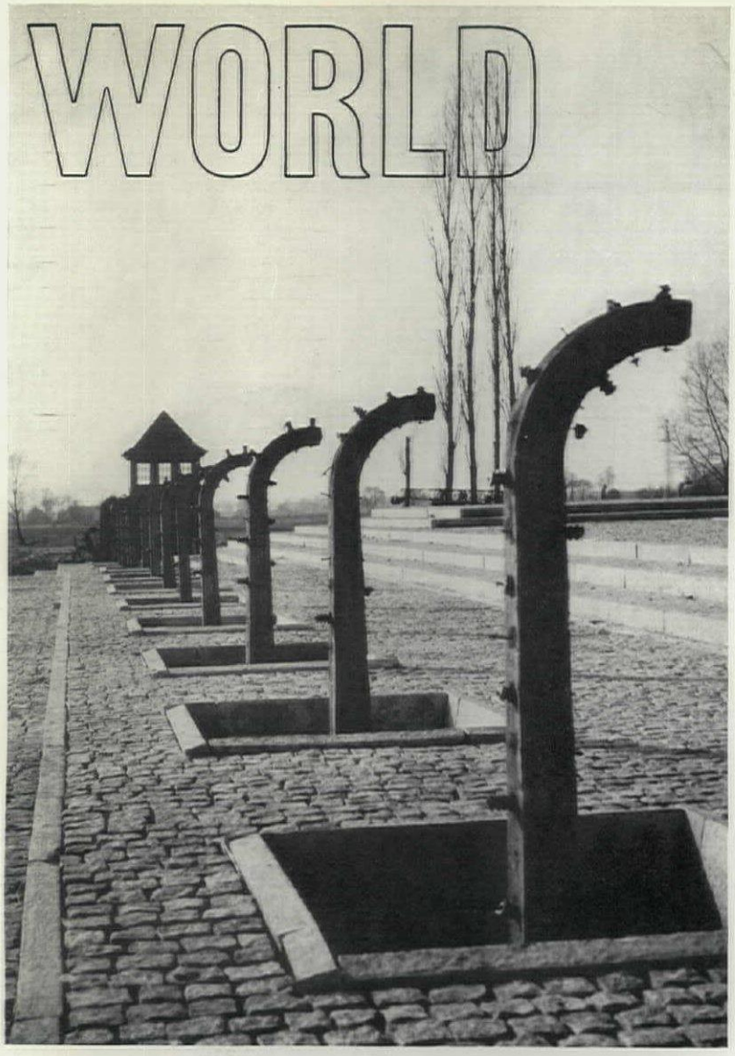


10

9, *Melchior Paulus: design for a high altar.* 10, *Nicholas Dall: 'A saloon with an arch to a garden and a fountain.'*

WORLD

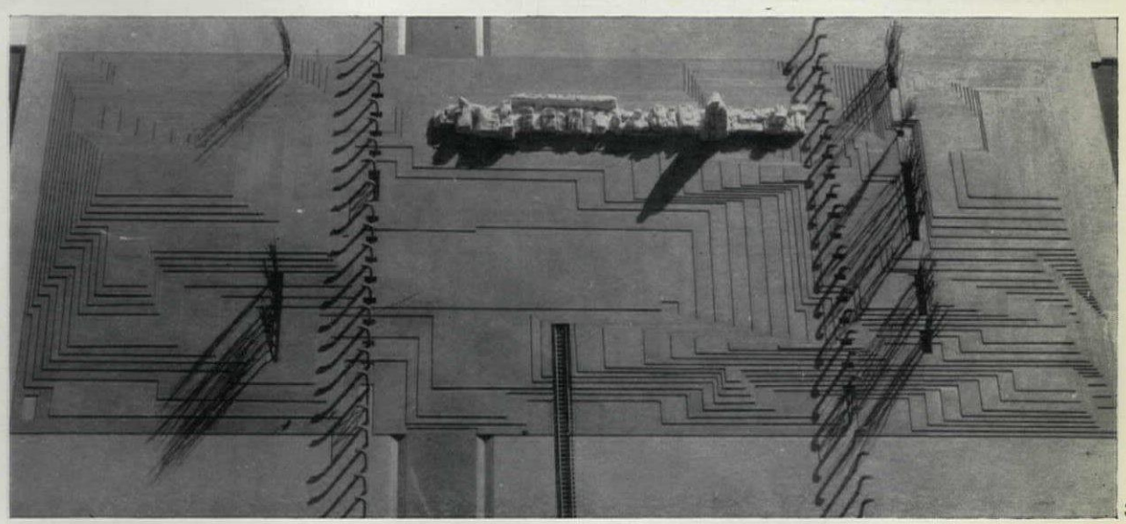


1

2

SIMONCINI'S AUSCHWITZ SYMBOL

Like Dachau (World, AR December, 1967), Auschwitz has now built its memorial, 1, to remind us, as Mauriac said in an appeal to raise funds, how the worship of race can turn human beings into ferocious beasts. Unlike Dachau, Auschwitz is just a symbol, a passive memorial without even a chapel. Its architect, Giorgio Simoncini, has had recourse to the age-old and unfailingly effective device of a monumental platform, 2, 3, raised well above ground level for viewing the ruins of huts and crematoria, 4. Its intrusion is intended as a symbol of protest, and its ruggedness (it is built of granite setts) makes a powerful statement in the context of the whole camp, while the free arrangement of steps contrasts with the regimentation of the camp ruins. At the same time the emptiness of the platform allows the concrete posts, the railway line and the wispy trees (planted by the Nazis) to have their say. The platform is cut away to allow these shadowy but poignant relics to maintain their relationship with the old ground level,



3

4

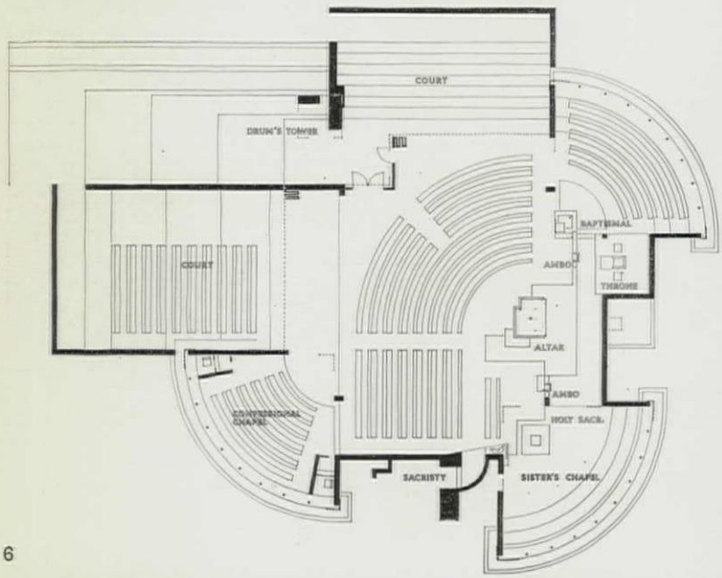
DAHINDEN IN MITYANA

5

AUSCHWITZ SYMBOL

while in contrast Cascella's massive sculpture sits firmly on top of the platform as a symbol of new life, 5.

Dr. Dahinden's book *New Trends in Church Architecture* (Studio Vista) has conveniently just been published and helps to explain some of the ideas behind his pilgrimage and parsonage centre at Mityana in Uganda, 7. European forms should never be imposed on communities possessing indigenous cultures, and his reason is not just a political one. 'What western civilization considers to be witchcraft,' he writes, 'may actually be the spontaneous expression of a people for their God.' At a new convent in Cameroun, the nuns have successfully revived a liturgical dance to the rhythm of the tam-tam. Although there is no dancing yet at Mityana, the traditional drum tower, 9, has been incorporated (and, significantly, instead of the European bell tower). Bantu philosophy, in so far as it treats of the universe as a whole and regards each part as dependent on the other, is reflected in the plan, 6. A central space with an altar is surrounded by an informal group of chapels and open-air courts, the latter separated from the central space by folding partitions and communicating directly with the village square. Everything in the plan is calculated to make active participation



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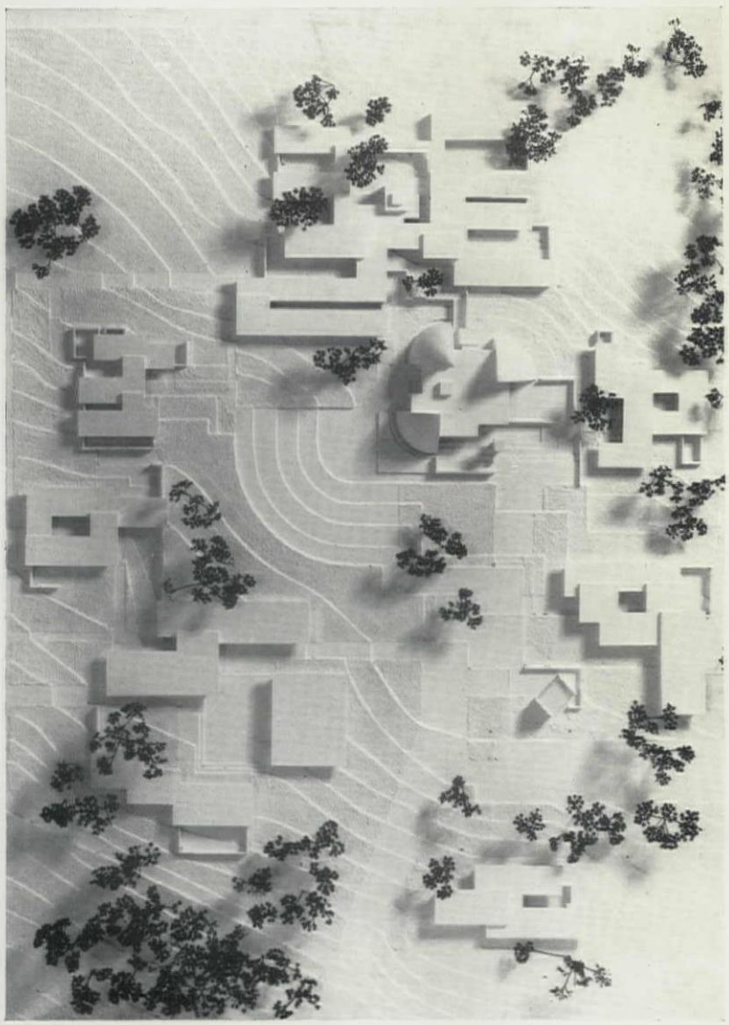

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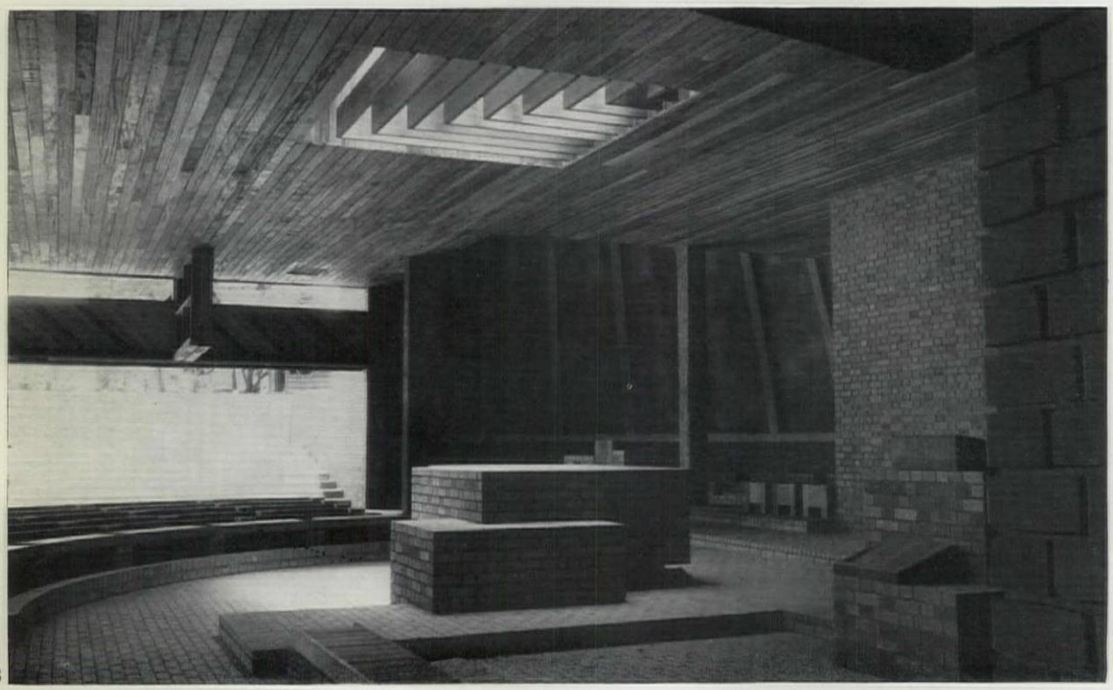

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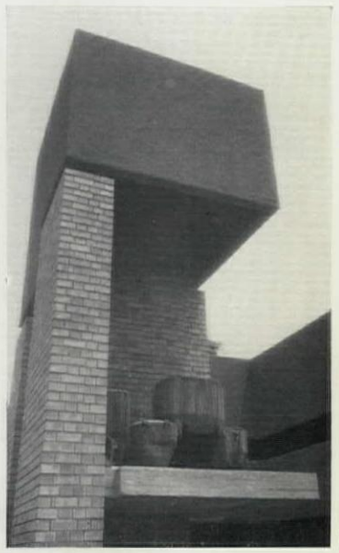
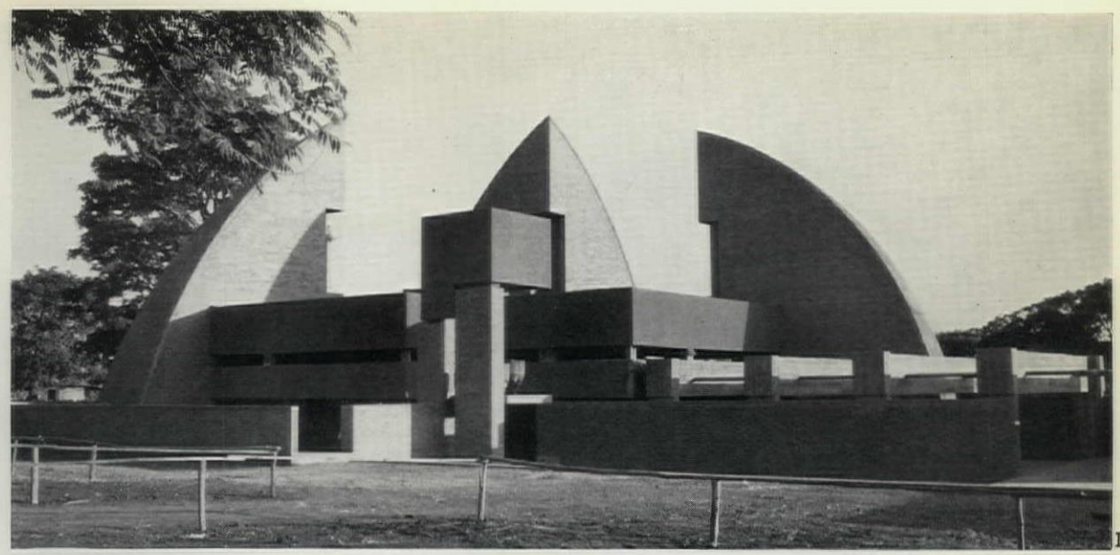


9

in the liturgy—something which comes naturally to an African—as easy as possible. There are many entrances and the intention is that people should come upon the church in a casual

DAHINDEN IN MITYANA

manner. The interior, 8, is deliberately undramatic—a timber ceiling and the same brick for floors, walls and even the altar, which is discreetly top lit for emphasis. By contrast, the extravagant exterior, 10—three spherical segments derived from traditional Bantu forms and familiar natural features such as banana leaves—are intended to provide the emotional climax necessary for a religious centre. At the same time, the materials are none other than those used for the lesser buildings around—red bricks made from local clay—so that the church, no less than the primitive hut, should appear to grow out of the ground.



10

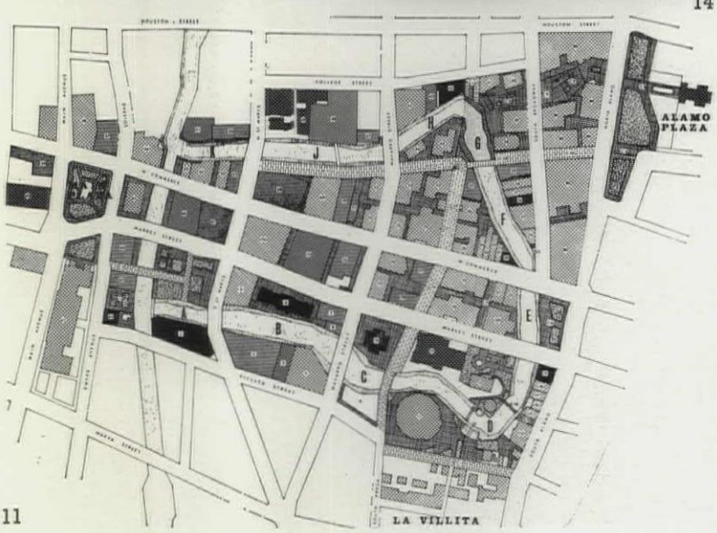
FAIR ANTONIO

Because it twists, the Indians called the part of the river which is now downtown San Antonio (Texas) 'Drunken-old-man-going-home-at-night.' 11. In the last four years its banks, which had become mere backland with the gridiron expansion of the city, have been transformed into a delightful river walk, providing a pedestrian link between the three main centres, Alamo Plaza, Main Plaza and the old Spanish village La Villita. With Cy Wagner's master plan as a basis, societies were formed and individuals encouraged to rehabilitate buildings, and now there are bars, night-clubs and shops to distract the many visitors. Curved staircases, 12, descend from the streets to a river bank of dense foliage and of bridges standing cheek-by-jowl, 13. A theatre stage faces the La Villita bend in the river, and on the opposite shore stepped seats lead up to the old village, 14. An artificial extension of the river penetrates the grounds of Hemisfair '68 (to the right of, but not shown on, 11), an official World's Fair which has provided the main encouragement all along.

12

14

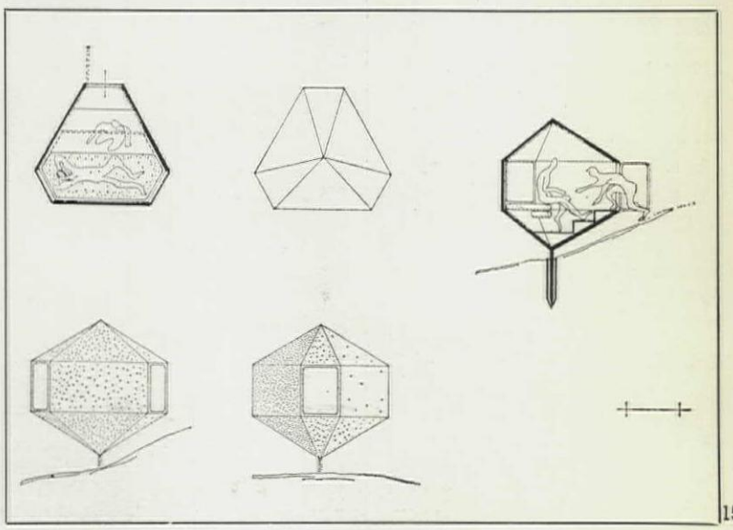
13



11

PAC-A-VAC

As tourism expands, so more and more people will try to reach wild and inaccessible places. Selfishly, one looks with dismay at the ingenious way in which architects and engineers have been experimenting with small prefabricated structures, light and easy to transport, and easy to assemble and dismount. A Polish design (by Mankowski, Gawor, Nowakowska and Meissner) consists of an 18-sided figure, 15, which can be combined to form larger units, 16. These space-age prismatoids, tethered like tents or supported by a single central post, are suitable for any kind of site, and perch

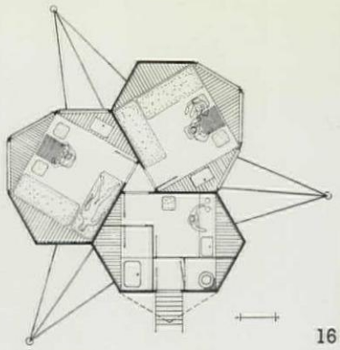


15

PAC-A-VAC

delicately in the landscape like so many spinning tops, 17.

In Italy, Roberto Menghi, continuing his research into holiday housing (see AR February for his 'Castelletto' house), has designed and marketed an elegant cabin, 18, suitable for hot and cold climates, with walls, doors and roof of thin fibreglass sandwich panels filled with expanded polyurethane, and shutters, windows and jointing fillets of mahogany. Although the cabin is square on plan, the roof panel is octagonal, so that several units can be joined along their diagonal axes. As in the Polish design, services can be incorporated, though this seems to imply a degree of permanence which is out of step with the basic conception. The snug look of the cabins—they look equally well under trees, 19, and among rocks, 21—belies a spacious interior which can accommodate up to four beds, 20. They should really be regarded as a superior form of tent which needs no foundations and which can be assembled by two people in seven hours. This compares rather unfavourably with the 90 minutes it takes to bolt together the twelve orange-peel-shaped fibreglass sections of a Canadian version designed by Cohos, De La Salle and Avamy, which appears to have no floor and can evidently be moved about by four people in its assembled form, 22.



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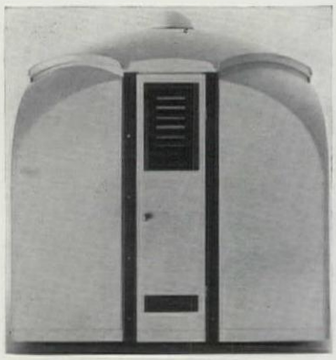
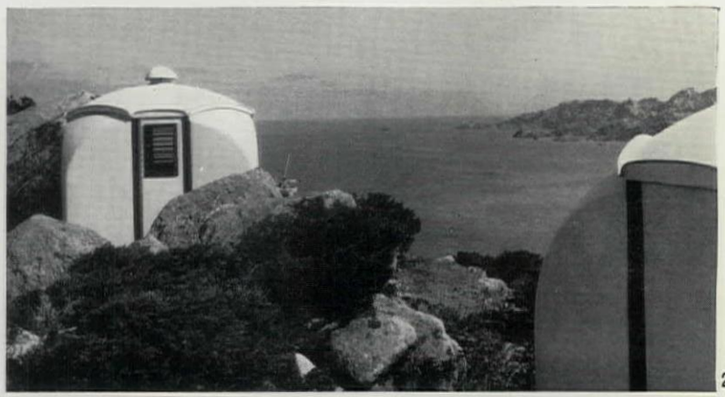
17



18, 19

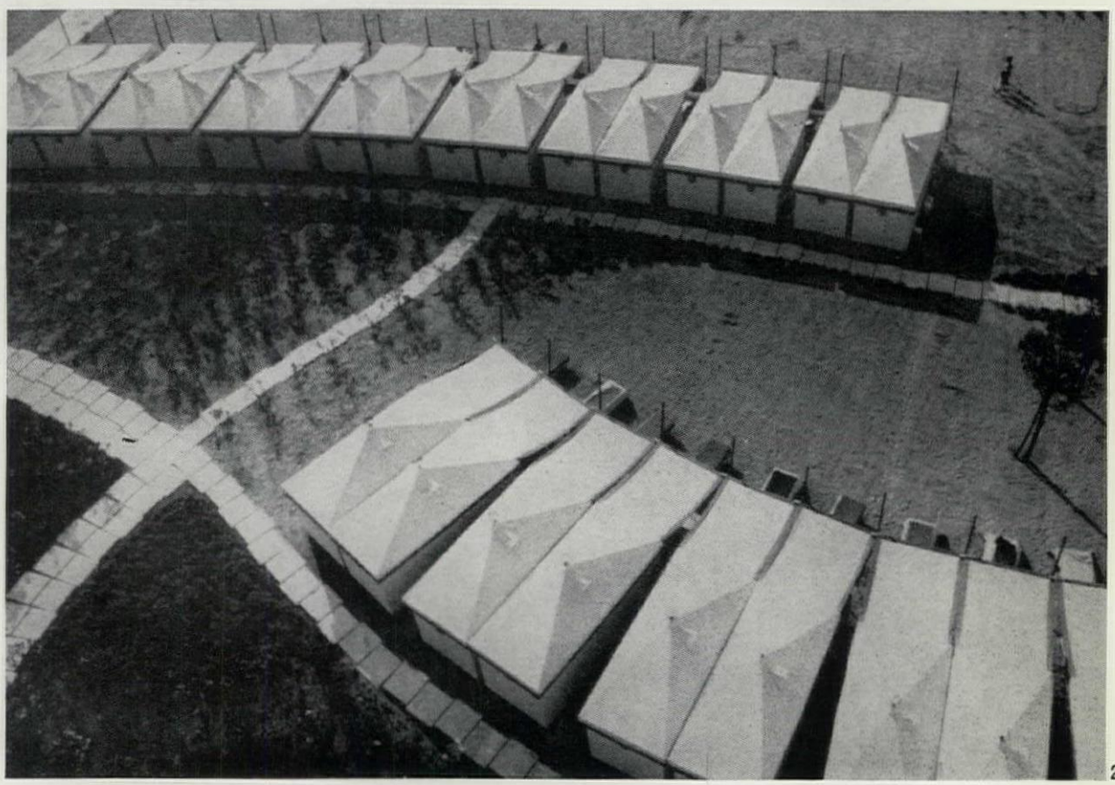


20, 21

22

MOOR LIDO

Robert Menghi again, this time with Ignazio Gardella, has remodelled the beach of the Excelsior Hotel on the Lido at Venice, after damage in the 1966 floods. Instead of the old wooden cabins, there are now 300 canvas tents with pyramidal roofs arranged in crescent formations, adobe-tile paths and plenty of low shrubs, 23. Each tent is luxuriously fitted out with a wooden floor and a veranda facing the sea and covered by an awning. The faintly Moroccan flavour is intended to be in sympathy with the neo-Moorish hotel.



23

SEGRATE

The architects for the civic centre at Segrate, published in World, AR April, were Achilli, Brigidini, Canella and Lazzari.

VIEWS AND REVIEWS

marginalia

MUSEUM FOR MOVABLES

In spite of all our efforts to preserve, passionate or calm, voluntary or official, our building heritage disappears at the rate of at least one historic building a day. The reasons given or the excuses made are as numerous as the losses. Of those 400 or so victims of change, a handful may be rescued in a reincarnated form, moved to another site and given a new lease of life, but although there is a long continuing history of buildings having been moved, there is a very wide divergence of opinion as to the rights and wrongs of such desperate solutions. The Society for the Preservation of Ancient Buildings, unable to quote its master William Morris specifically on this particular issue, in practice uneasily judges each case on its merits and in principle dearly wishes that it could condemn outright such pagan practice.

Those that accept the need for desperate measures in desperate situations, by and large agree that some building types move better than others. Timber-framed houses in particular lend themselves more readily to this abrupt process of resuscitation, and by the same token only the most ardent and insensitive advocate of moving buildings would attempt to move one of John Piper's monuments to 'pleasing decay.'

In the pressure areas where the rate of change to the urban fabric is on an unprecedented scale, a body of opinion has come round to the view that, as a last resort, moving a building may be the only way to preserve some shred of an area's historic roots. In Coventry one whole street, Spon Street, is becoming a reception area for incurables. The buildings will be consciously sited in a medieval street pattern and given uses suitable to their form. In a sense they will be a living and working museum of Coventry's past. The architect responsible for the project is F. W. B. Charles who is Worcester County Council's adviser on historic buildings.

Charles, with the backing of an energetic local committee, has also been the moving spirit in every sense in the Avoncroft Museum of Buildings at Stoke Prior near Bromsgrove in Worcestershire. The genesis of this museum lay in his strenuous efforts to save a fifteenth-century timber-frame house in Bromsgrove. It was a hall-house of two storeys, with a solar wing and a later service bay with a rear wing. In 1962 it was demolished in spite of vigorous protests by local and national organizations, but Charles, in the face of considerable odds, saved most of the timbers and the timber-frame chimney stack all in one piece. Although the house had been carefully surveyed and drawn, half-way through demolition none of the timbers had been numbered. A second contractor was persuaded to take down the solar wing with a view to its possible rebuilding, and the bones of the entire building were delivered to Avoncroft College. At that point it was decided to make this the nucleus of an open-air museum for timber-framed buildings. The house has now been erected on a 3-acre site leased from the College and negotiations are in hand for several unwanted structures. The most spectacular is the ill-fated fourteenth century Guesten Hall roof from Worcester Cathedral, which in the nineteenth century was moved and adapted as the roof of a Victorian church in Worcester. Now the church, like much else in that ravaged city, is to be swept away and the roof must find a third home. The Museum aims to assist in the restoration of timber-framed houses generally and as a first step will establish a school of carpentry to teach the craft of timber restoration. In March this year a full-time director was appointed, and the Association hopes to move forward and provide a permanent resting place for other homeless historic buildings. While critics cavil, Avoncroft purposefully pursues one form of preservation for posterity.

PATTERN QUEST

Christopher Alexander, with a handsome send-off from the Edgar J. Kaufmann Foundation, has set up a Center for Environmental Structure in California where he is currently Associate Professor of Architecture. The Trustees are all Alexander's colleagues with the exception of Martin Meyerson from the State University of New York. Meyerson provides a direct link with our own Centre for Environmental Studies of which he is the Ford Foundation nominated trustee. Both centres were set up early in 1967 and have simultaneously announced their first projects. Alexander's outfit aims to create 'an environmental pattern language.' Its British counterpart plans to study 'patterns of urbanisation.' London has nine staff; California five. But there the similarities end. London uses its staff largely to service and grant-aid research by universities and other bodies. California will start by doing the research itself, and hopes to find finance by undertaking specific projects.

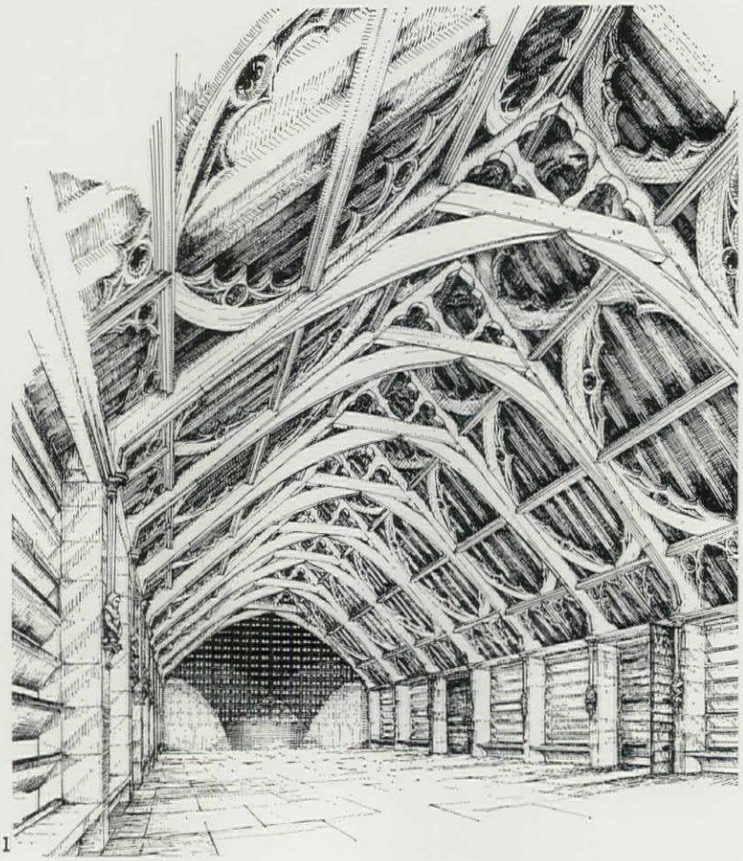
Alexander aims to inform research workers and public alike by distributing regular research summaries. Chilver in London has so far issued only brief announcements of what his centre is doing. Those who want to learn more about the California centre can join its mailing list at 2701 Shasta Road, Berkeley, California 94708. Over here the policy seems to be wait and see.

US AT OSAKA

The newest information to come out of Japan about buildings proposed for Expo 70—the next international exhibition which is to open at Osaka two years from now—concerns the US pavilion. This is to be an air-dome 340 ft. high. Its designers are the New York architects Davis and Brody, winners of a competition limited to seven architectural firms.

The dome itself will be 260 ft. in diameter and will rest on an 80-ft. high platform with several internal levels, connected by escalators. The total cost of the US pavilion will be 30 million dollars.

1, *the fourteenth-century Guesten Hall roof, which is to be re-erected at the Avoncroft Museum.*



1

SEEING

There is at present on view (until the end of this month) at the College of Art, Middlesbrough, an unusually comprehensive exhibition on the subject of Foundation Studies in the teaching of art and design. Called 'Seeing' (*Sehen* in German) the exhibition, comprising something like a thousand items, is based on the fifteen years' teaching experience of Oskar Holweck, head of the relevant department (*Grundlehre*) at the Staatlichen Werkkunstschüle in Saarbrucken.

The exhibition has been brought to this country by the College of Art with the support of the Northern Arts Association, having been previously shown at Cologne and Zurich. After leaving Middlesbrough it will be at Manchester College of Art and Design in September and October and at the Central School of Art and Design, London, in November and December. There it will most appropriately follow the 'Graphics of the Bauhaus' exhibition which has been planned to supplement the important Bauhaus exhibition at Burlington House—appropriately because foundation courses originated at the Bauhaus where they were first introduced by Johannes Itten.

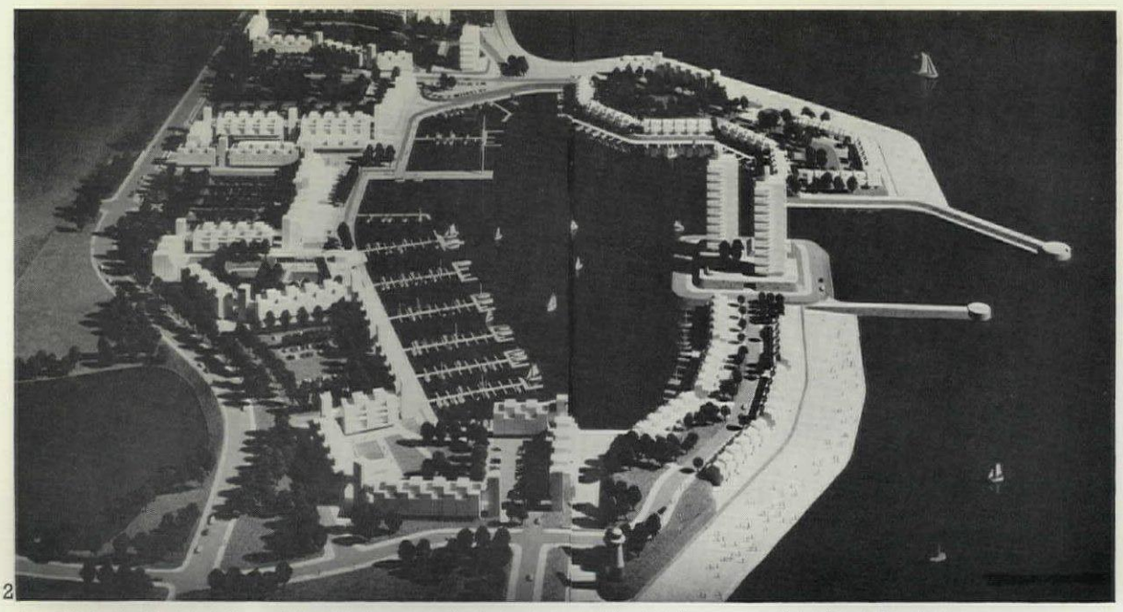
HALPRIN IN A HURRY

On 11 August, 1967, Mayor Lindsay of New York announced that Lawrence Halprin would study 'six key city-aided urban renewal areas with the goal of recommending sweeping changes to improve the architecture and urban atmosphere in this city.' By 11 April, 1968, the office of the Housing and Development Administration was sending out Halprin's well-produced 120-page printed report—something of an achievement in itself. But the introduction to the report ends by stating: 'All of us who have worked on this report regret the necessity to bring our studies to such an early conclusion. We feel strongly that this is only a beginning.'

And only a beginning it is. Harried by the politicians, Halprin has nonetheless produced some interesting sketch designs. The study areas are all south of those chosen by the Metropolitan Museum of Art in conjunction with the City by Columbia, Cornell, Princeton and MIT (AR, June 1968). And whereas these university teams were allowed to kite-fly, Halprin strictly limited himself to six projects actually built, building or firmly proposed. The result is a series of limited but perceptive proposals for improving other people's under-nourished creations. The pity is that Halprin was not given more time—or better still—firmly locked into the team way back at the design stage.

ANNADALE-HUGUENOT

An encouraging instance of co-operation between planners on either side of the Atlantic, is the report on Annadale-Huguenot recently prepared by the London firm of Shankland, Cox and Associates in collaboration



2, *model showing Shankland, Cox and Associate's proposals for the development of Annadale-Huguenot, on Staten Island, New York.*

with Raymond and May Associates of New York. Annadale-Huguenot is a residential district in the south-eastern part of Staten Island. The planning study was carried out for the City of New York and covers an area of 1,080 acres on Raritan Bay, at present largely undeveloped. The site has physical assets in the way of streams, woods and a shoreline but, left to the usual development pressures, it would be covered by a gridiron of identical houses, as at nearby Eltingville. Trees would be felled, lakes filled in and the shorefront squandered. By contrast, the consultants put up four alternative concepts of how things might be, ranging from an upgraded gridiron system, relieved by some housing clusters, loop streets and parkland, to a maximum permitted density scheme which results in an emphasis on tall apartment blocks. However, the third concept (which they recommend themselves) is undoubtedly the most desirable. It consists of a broad variety of housing types; single family houses set in woodland, town house clusters, point block apartments and also terraced apartments and tall towers on the shore of the bay.

By relocating a proposed expressway inland instead of along the water's edge they are able to design a community closely related to the sea. Houses are in neighbourhoods free of through traffic and each with its open space system leading to schools, parks and shops. Existing streams and ponds are landscaped and form part of the parkland winding through the entire community and culminating in a major shopping and residential centre on the bay, around a forty-acre man-made lagoon, 2. K.B.

MORE SPANISH TOWNS

Handy architectural guides to towns, including their recent buildings, are at last getting more frequent. We in this country have half-a-dozen for major cities, there are several for American cities and now Spanish ones. A guide to buildings in Madrid was noticed in these columns in May, and now the same authors, Carlos Flores and Eduardo Amann, have brought out Barcelona and Toledo. Toledo is rich in early buildings and devoid of anything of interest after the Napoleonic time; Barcelona is extremely rich throughout, from her Roman walls and Romanesque churches to her glorious bare Gothic and so on to Gaudí and a good deal of International Modern from 1930 onwards. The arrangement is roughly chronological, but each volume has a map with the numbers given to the buildings in the text. There are illustrations of most of the buildings; only their arrangement is not what it might be. As there are no captions, one is often in doubt as to which building a picture actually refers.

obituary

SIGFRIED GIEDION: 1888-1968

Only persons of the highest calibre, only a movement of the most altruistic nature, could have attracted, and throughout its working life have indissolubly attached to itself, a secretary of the quality of Sigfried Giedion. He was a secretary of genius because his genius as an historian was employed upon the subject matter of the revolution he superintended. I must speak of him first as a secretary because his fame as an historian, resting upon the value of his epochal works, may obscure an equally monumental work the true value of which is apparent only to the dwindling number of those who took part in the International Congresses for Modern Architecture which upheld and directed the movement.

The characters of its leaders, now seen to be so disparate and particular, were less so in the days of their leadership, as is commonly the case. They were nonetheless a formidable assortment, not given to compromise. Nor yet was compromise in Giedion's nature, but rather the reverse. A fiery soul, passionate of feeling, trenchant of speech, he was so utterly devoted to the cause he believed in, that to see him turn from argument, from denunciation even, suddenly to pleading; to behold a face inflamed with wrath suddenly crinkle into a smile—a quizzical smile maybe—was to realize how deeply he felt for a work that no personal considerations had the right to impede. It was indeed this single-heartedness that made him the focus of a movement of ideas and ideals.

This is as I saw him at the first CIAM congress I attended in 1928 at the château of La Sarraz in Switzerland, a small, inevitably Napoleonic figure, authoritative under the command, as Le Corbusier was, of responsibilities greater than himself, which to break from for some lesser obligation flooded him with unexpected kindliness. The advance of the movement was consolidated by the writings of both Le Corbusier and Giedion, but while those of the former were prophetic, the latter's work was much more than a record. Giedion wrote in his first work, *Space, Time and Architecture*, that 'history is not a compilation of facts but an insight into a moving process of life' and this book, that was read all over the world, made modern architecture understandable, and more acceptable, by connecting it with history.

The story he told, from a background of scholarship and aesthetic interest, of the evolution of city form, made no break with the past, but connected across the nineteenth century to the alarming and revolutionary ideas of the new leaders, which he called 'a new tradition.' But he was aware of the blind forces impeding the acceptance of new ideas, and in his second and more challenging work, called *Mechanisation Takes Command*, he accepted the more difficult task of tracing the growth, power and influence of the machine civilization we live in, 'an anonymous history of our period' as he called it. The tone is different. 'Men have become frightened by progress, changed from a hope to a menace,' he wrote. 'Faith in progress lies on the scrap heap, along with many other devalued symbols. . . . And it all began so marvellously.'

So this remarkable work, drawn from the uncharted sources of the American technical revolution, from old catalogues, advertisements and the flotsam of a remorseless and unregarding tide, brings its readers to the present dilemma with no more than the hope that 'the split between thought and feeling' may be mended by man's need to find the means of successful survival. As Le Corbusier shed most of his preoccupations with industrialism as he grew older, so Geidion, in lectures originally entitled 'Constancy and Change in Early Art and Architecture' went in search of the origins of form in the civilizations of Sumer and Egypt. Dying on the day before his eightieth year, he had the day before completed the last volume of the trilogy.

And so I return to the man I knew, historian and the maker of history, in the days when he compressed these offices into a life devoted to the search for an harmonious adjustment with the circumstances of the century; and not finding it before his end, yet died, as he lived, in hopes of a new birth. E. MAXWELL FRY

correspondence

HIGH-RISE AT KINCARDINE

To the Editors.

SIRS: In your November 1967 issue, when dealing with Glasgow Red Road, Balornock, you refer to that scheme as the 'climax of a veritable orgy of tower buildings in the Glasgow suburbs for the last five years.' This 'orgy' is now spreading outside Glasgow, and there is a very real danger of 'off the peg tower blocks charging' not only across a city site but across the face of the countryside at large.

Fife County Council are only awaiting final approval of tenders by the Scottish Development Department before commencing the construction of three fifteen-storey blocks at Kincardine-on-Forth, by Bett Bros. (a sort of smaller Scottish version of Wimpey). They proudly boast that this is their first venture into the field of high-rise housing, and have so far ignored arguments against the proposal presented by myself acting in conjunction with a representative group of 20 or so local residents. I am now engaged in fighting a deperate last-ditch battle, on behalf of a representative group of Kincardine residents, to try and persuade the Scottish Office to exert pressure on the Scottish Development Department to reverse their original approval of the principle of high-rise housing in this context.

In the face, however, of council complacency, and what appears to be deliberate suppression of our protest by the Council officials, with the additional pressure of 'commitments' entered into with the contractor, it seems to be a doomed cause, unless informed public opinion can be whipped up quickly against the proposal.

I enclose a sketch of typical village architecture at Kincardine, which still possesses a rich stock of seventeenth, eighteenth and early nineteenth century buildings, which a local councillor has said he will 'gut' and replace with new. The proposed flats are in the north-

3, *Kincardine-on-Forth, which is threatened by three 15-storey tower blocks.*

east corner of the village, on rising ground. This is an urgent appeal for help and for an indication that outside opinion also deplores the project.

Yours, etc.,

THOMAS D. CHRISTIE

Kincardine-on-Forth.

book reviews

ALMQVIST ASSESSED

OSVALD ALMQVIST: EN ARKITEKT OCH HANS ARBETE. *By Björn Linn. AB Byggnädstarens Förlag and Sveriges Arkitekturmuseum.* 27 *Kr.*

Osvald Almqvist (1884–1950) belonged to the generation of Asplund, Lewerentz, Gropius, Mies van der Rohe and Le Corbusier. Although he did not achieve the international fame of his great contemporaries and never handled a large practice, he made a valuable contribution to the revolution of the 'thirties in Sweden and was highly regarded by his peers. This well-wrought monograph on his life and work is therefore overdue.

Almqvist's first major work, accomplished in his thirties, was the model village of Bergslagsbyn, built for the employees of an ironworks on a free plan with houses designed in the traditional but functional timber vernacular. At this time he also designed a hydro-electric power station which received acclaim as the first industrial Swedish building of architectural note. Later he produced several more power-stations, expressing that consistently rational approach which made him a ready exponent of international functionalism from the start; indeed it reflects the puritan integrity and dedicated perfectionism of this tall, spare bachelor. (Such traits are more common than is often supposed, particularly among professionals, in a nation renowned for its general hedonism.)

Apart from a number of unrealized projects and competitions and many published writings on subjects ranging from town-planning to standardized kitchens, Almqvist's other works comprise two austere vocational schools and several villas, flats and town plans, including the plan for Årsta, one of Stockholm's new dormitory satellites. He contributed to the seminal Stockholm Exhibition of 1930, notably in furniture and in a design for a standard terrace house which, as the photographs reveal, has hardly dated at all. For the exhibition he also originated that conical concrete flower pot which has become a standard item in urban decoration throughout the world. In 1936 Almqvist was appointed the first chief of Stockholm's Parks Department. He created some excellent precedents, but he was no administrator and soon relinquished his post to Holger Blom, devoting the rest of his life mostly to town planning.

Almqvist's work, though purist in the extreme, never lacked grace and sometimes it achieved what architecture now so singularly lacks—charm. That charm is evident in his drawings, a number of which are reproduced in this welcome paper-back, which, incidentally, contains captions and a useful summary in English.

ERIC DE MARE

SHINING REFLECTIONS

REFLECTIONS ON THE NUDE. *By Adrian Stokes. Tavistock Publications.* 18*s.*

Adrian Stokes has produced another slim volume that is slim only because it wastes no time establishing the ground on which he meets his reader. He meets him expecting an intelligence as sharp and an experience as rich as his own, if not the same as his own, and then (as he would say) 'makes some suggestions' about the nude and the all-importance of the 'whole-object,' about Michelangelo's sculpture, the Romantic Movement, collage, abstract art and especially (and over and over again in different forms) about one's understanding of people being the final measure of one's understanding of art.

His observations about collage are so original and constructive that they could only be the result of a distinguished intuition working with an almost physical understanding of the particular creative act. The same remarks apply to his exposition of works by Cézanne, Matisse, Hobbema and Rembrandt. Reading him, one suddenly sees a picture shining with a new brilliance.

He has somewhat modified the intense 'personality' of his writing, which some conventional readers have found 'difficult' in the past; if anything, this has increased his directness and vigour. For me, this is a book to read and read again. It is well printed and produced, but I wish the publishers had provided some first-class illustrations —especially in the section adapted from a lecture given with slides.

JOHN PIPER

BOSTON STYLES

HOUSES OF BOSTON'S BACK BAY. *By Bainbridge Bunting. Harvard University Press.* 100*s.*

The Back Bay was one of the numerous bays surrounding Boston on all sides. It was reclaimed in the 1840s and became the fashionable quarter of the Victorian decades. As one walks (if one walks) the three miles from the centre to the Gardner Museum, past Richardson's Trinity Church and McKim, Mead and White's Public Library, the one of 1873–7, the other of 1888–95, one sees houses in Commonwealth Avenue, in Beacon Street and the other streets which make one want to know a good deal about them. Mr. Bunting has now supplied all the information one could wish to have, from the draining of the area to the table of rising land values and building costs.

The architectural story which unfolds in his book is this: Georgian traditions and Georgian bow-windows went on, used quite unselfconsciously, to about 1860, the Georgian Revival, i.e. McKim, Mead and White's Classical Re-Revival, started already about 1885. In between lie the other styles and motifs: mansard roofs as a sign of Parisian Beaux-Arts inspiration as early as a group of houses by the French-trained Richard M. Hunt in 1859, occasional Gothic aberrations from 1869, occasional Tudor gables from 1871, the Richardson Romanesque, after his Trinity Church, from 1879, and the Loire style (of the New York Vanderbilt houses on Fifth Avenue) from 1881, with the climax 314 Commonwealth Avenue of 1899. Interiors were originally not very grand, and more than once they were made grander some years later (306 Dartmouth Street; 211 Commonwealth Avenue). Mr. Bunting's table of styles used gives for 1885–1900, 42.6 per cent to 'Queen Anne (all varieties),' 26.3 per cent to Richardson Romanesque, 15.1 per cent to McKim Classical; but for 1900–17, 37.6 per cent American Adam, 25.5 per cent McKim Classical and 22.9 per cent High and Late Georgian. The book has 250 illustrations but is emphatically a book to read. It succeeds in placing the Back Bay development in the general American and also the English and French context.

N.P.

LEBANON LORE

L'HABITATION AU LIBAN: PART I, ESSAI DE CLASSIFICATION. *By H. Kalayan.* PART II, LA FORMATION DE LA TRADITION ET SON EVOLUTION. *By Jacques Liger-Belair. Beirut: L'Association pour la Protection des Sites et Anciennes Demeures. No price given.*

These two volumes do an impressive job in disentangling the continuous story of house building in the Lebanon from its complex background in a country where successive civilizations have overlaid each other for two thousand years. The text has the form of a running commentary on an excellent series of photographs and plans, dealing in the first volume with the various house-types that emerged over the centuries, and their construction and decoration, and in the second volume with the chronological development of a vernacular style, related in the text to the history of the country.

The architecture shown has much in common with what is found elsewhere in the Arab world, but one element characteristic of the Lebanon is the external arcade, which was particularly elegantly developed in Beirut in the form of the triple-arched window, high up on the wall and giving as often as not on to a balcony, which until recently was to be seen all over that city and gave its domestic buildings unusual interest and consistency. Some good examples of the triple window are illustrated but its origin (Turkish and Greek, presumably, more than Arab) is not fully explained —is a pity in view of the rapid disappearance of this type of house which ought to be more highly valued.

J.M.R.

THROUGH ITALIAN EYES

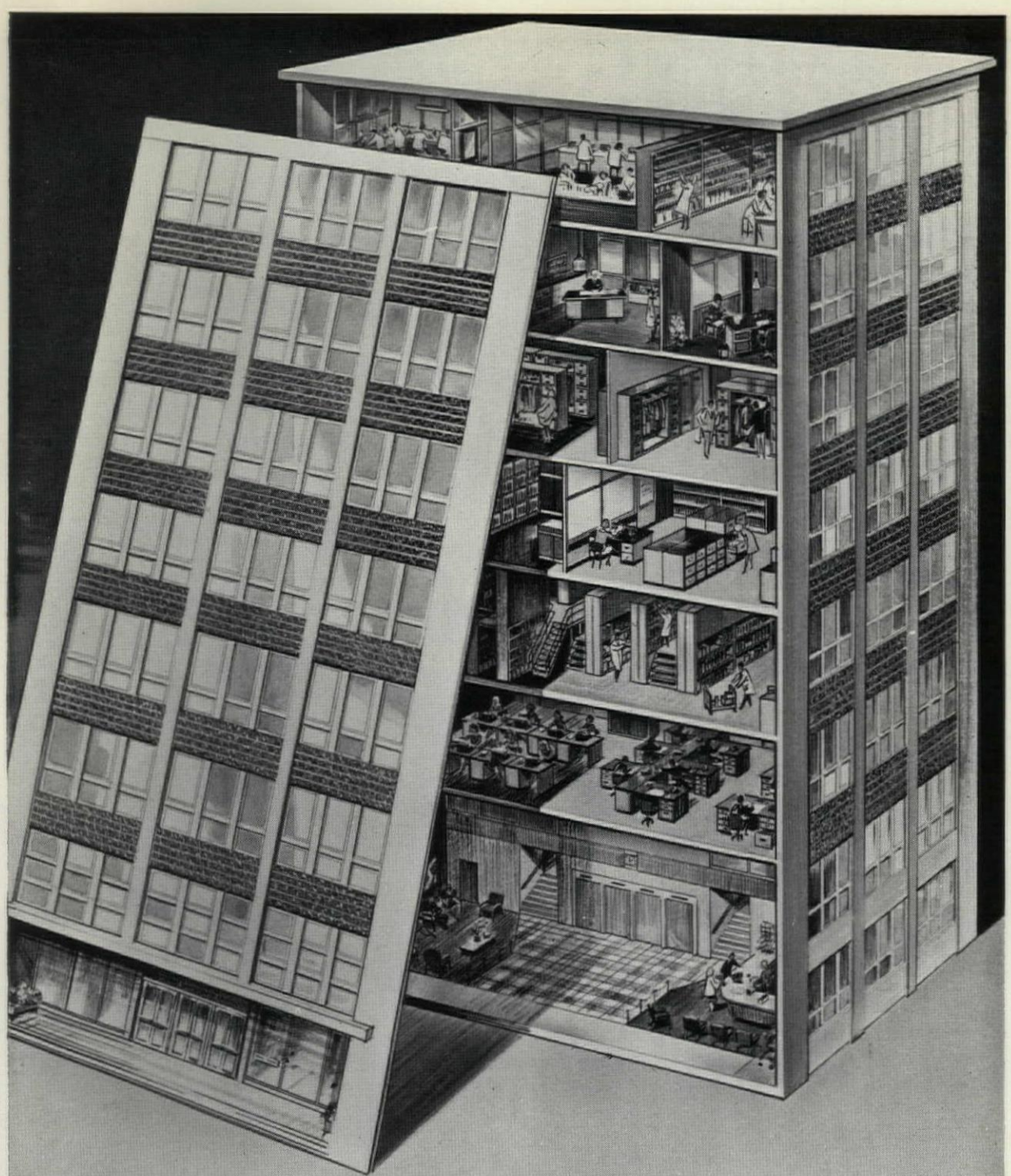
ARCHITETTURA E CITTA IN GRAN BRETAGNA. *By Massimo Teodori. L. Cappelli. L.* 1,300.

This is a very remarkable book to find published in Italy. For an upper-level paperback price it offers amazingly complete information on English town planning and architecture. It tells of the nineteenth-century prehistory including 'Sir Titus Saltus,' Howard, Bournville *et al*, the London Plans of 1943 and 1944, the New Towns, the new universities, etc., right to the Land Commission Bill of 1967 and James Stirling's History Faculty at Cambridge. The bibliography, of twelve closely printed pages, contains, it seems, the collected papers of the Smithsons as well as the Manchester Education Precinct and 'Reinher Banham' on Clip-on Architecture.

Who in England would have the curiosity and the stamina to do likewise on Italy or, for that matter, on Germany or France? Moreover Signor Teodori is not just a reporter; he takes sides, fairly, it is true, but with conviction. On the planning side, *à propos* the new towns, you read that 'the specifically English culture showed itself in a preference for a sane mediocrity over the brilliant and isolated bursts one finds on the Continent' (127). But Roehampton comes in for high praise as 'the best example of the typically British mixed development' and as 'the most English quarter, yet participating in the international culture' (166). However, Park Hill and Hyde Park are praised with more enthusiasm: 'one of the most stimulating architectural creations which may now exist in the world' (199).

The tendency of the judgments is the same in architecture. James Stirling has evolved 'an absolutely original language among the most interesting today' (174), Denys Lasdun is 'the most mature contemporary English architect' (191), yet his Fitzwilliam House has features of a 'folkloristically oriented aspect' (187). Only churches are entirely missing—which is curious. Errors are not absent, but they are nowhere of any importance, as far as I can see. I was not born in Hungary nor did I come to England in 1936, Sir Hugh Casson's firm is not called Casson Neville & Partners, and so on. The book is No. 7 of a series in which, unnoticed over here, volumes are out on modern architecture in Japan, Scandinavia, France, Russia, Germany and the United States. The editor of the series is Leonardo Benovolo, whose two-volume history of modern architecture is familiar.

N. PEVSNER



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The Industry

Stacking chairs

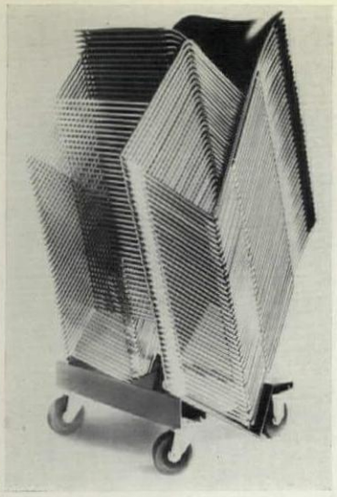
John Perring are now importing the American-made 40/4 chair, designed by David Rowland and awarded a Grand Prize at the Milan Triennale. The name of the chair is based on the fact that 40 chairs can be stacked one over the other, 1, within a height of four feet, including the dolly cart, each chair adding approximately half an inch to the height of the stack. The frames are made of $\frac{7}{16}$ in. steel rod, chromium plated, and the back legs have stiffener members to restrict lateral sway and provide a means of joining the chairs in rows. Seat and back panels are formed metal pressings with a beaded edge for safe handling and finished in a textured baked-on vinyl in a choice of colours. The chair is intended for use in schools and universities and costs £5 7s. 6d. in quantities of 120 or more. There is also a model with a tablet arm wide enough ($11\frac{1}{2}$ in.) to take textbooks and writing materials. This is carried on a 1 in. tubular frame which is anchored to the chair.
John Perring Ltd., Contract Furnishing Division, 26–27 Sloane Street, London, SW1.

Chairs for the new Cunarder

Chairs for the first class and tourist restaurants for the new Cunarder, 2, have been designed by Robert Heritage for Race Furniture. The frame is in aluminium alloys either die cast or extruded which are bonded with an epoxy adhesive, the first time, it is believed, that this kind of construction has been used in the furniture industry, the advantages being that a stronger and cheaper joint can be made without using mechanical fastenings, which often work loose and lead to maintenance problems. In any event it has been tested and approved by the Furniture Industry Research Association. Seat and back are in preformed laminates upholstered in specially developed fire-retardant cushions and covering materials.
Race Furniture Ltd., Sentinel House, New Road, Sheerness, Kent.

Aluminium windows

The new Archital Two Stage window, 3, consists of a continuously weather-stripped aluminium panel incorporating a top hung vent and sliding over the outside of the fixed pane so that anything between maximum and minimum ventilation can be achieved very easily. At the same time all weathering details are confined to the exterior of the windows. The window is set in a timber frame which is precision squared and braced and acts as a template for building in. Aluminium guide rails are factory-fitted in protected positions and after the frame is built in the fixed pane is putty glazed in the usual way. The second closing-in is very quickly done by removing two screws from the bottom aluminium guide rail to allow the factory-glazed aluminium panel to be inserted. The screws are



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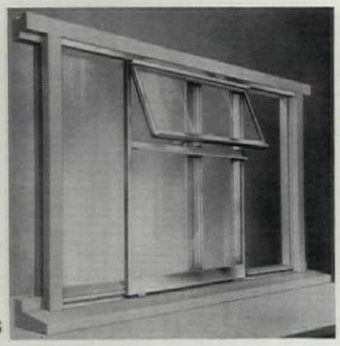
replaced to secure the panel and no sealing mastic is required at any stage. The range covers a large number of sizes and the cost is only 7s. 9d. per sq. ft. glazed.
Archital Ltd., Western Road, Wymering, Portsmouth, Hants.

Prefabricated hospital corridors

Prefabricated link corridors to bridge between detached hospital buildings are now being made by Metropolitan Cammel. The corridors are made in completely decorated sections 30 ft. long so that installation work is kept to a minimum, and they can be adapted for other applications with wide variations in external and internal fittings. Support can be provided by concrete posts or other types of framework. The first units have been developed by J. F. Watkins & Partners and are being used to provide an overhead link to a new operating theatre block at the Radcliffe Infirmary, Oxford. The units are supplied complete except for interior panels at the joints, and are fitted with windows, finned tube radiators and fluorescent lighting fittings. External wall faces are in aluminium sheet and are insulated with fibreglass. Interior surfaces conform to hospital hygiene requirements and are designed for easy cleaning, while timber rails are fitted along the walls to prevent damage from trolleys. Floors are plywood covered with vinyl flooring and the skirtings are coved into the p.v.c. wall finish. The floor panels are removable for access to services, which are carried in troughs. Each corridor section consists of a main bottom frame, two side frames and a roof to carry radiused steel panels.
Metropolitan Cammell Ltd., Engineering Division, Washwood Heath, Birmingham 8.

Roll-up garage door

The Expamet roll-up garage door, 4, is made from a single fluted panel of tight-coat galvanized steel sheet. In appearance it is very like a conventional slatted roller door, but the sheet is flexible enough to roll up into a 12 in. diameter coil. There is a



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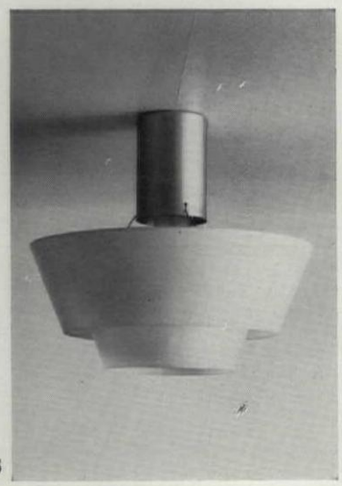

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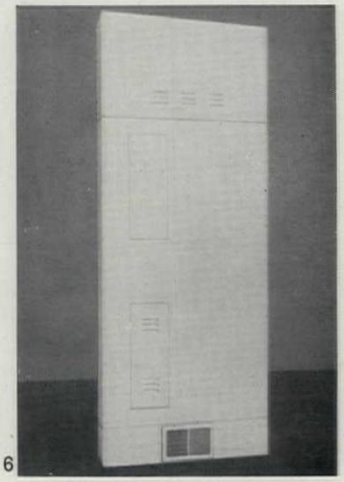

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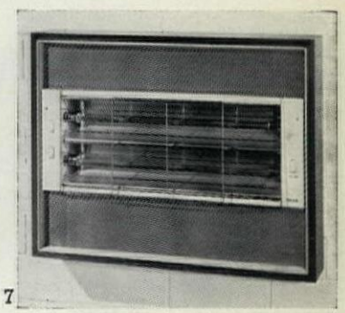
torsion spring to counterbalance the weight of the sheet so that the door will remain in any intermediate position. Standard doors are 6 ft. 6 in. high and are made in widths of 7 ft., 7 ft. 6 in., and 8 ft., though special widths can be made to order.
The Expanded Metal Co. Ltd., 16 Caxton Street, London, SW1.

Lighting fittings

Falks have recently introduced a new Isis lighting fitting, 5, which has a light output of 92 per cent. It is intended mainly for schools, but should be equally suitable for other types of building. The shade is 12 in. diameter and consists of two concentric inverted cones which are suspended from the ceiling metalwork by ball chains. Price is just under 35s. and the fitting takes a 200-watt lamp.
Falks Ltd., 91 Farringdon Road, London, EC1.

Electric fires

Revo's new Adelphi wall-mounted electric fire, 3, has a timber surround finished in sapele veneer treated to resist heat and scratches



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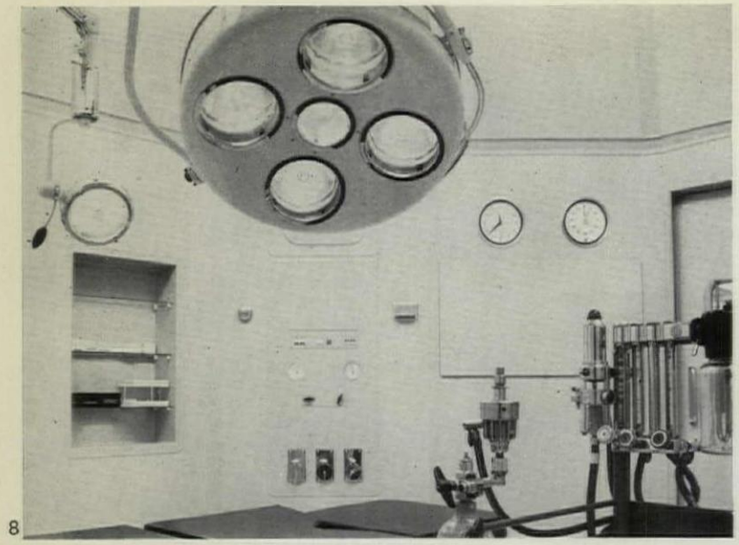
with a coating of transparent melamine. On the face is a main switch which also turns on the background lighting, and two further switches for the heating elements, 1 kilowatt each. Dimensions are 26 by 20 in., with a 5 in. projection from the wall face, and the price is £19 18s., including purchase tax. There is also a freestanding model with feet.
Revo Domestic Appliances Ltd., East Lancashire Road, Liverpool 10.

Warm air-heaters

The Aerialite group of companies, who make, among other things, the Nettle range of switchgear and wiring systems, have recently formed a subsidiary, AGC Heating, who are making gas-operated warm-air heaters for domestic work. There are two models with outputs of 28,000 and 35,000 Btu per hour, and both provide internal space for mounting an Ascot or similar circulator for heating domestic hot water. The gas burners can be converted for use with any gas group by a change of jets and the warmed air is circulated by a five-speed centrifugal fan. There is a further ceiling height model only 8 in. wide, 6, but with the depth varying in different models from 23 to 32 in. if a water heater or a rising duct is required to provide warm air on an upper floor.
AGC Heating (Manufacturing) Ltd., Congleton, Cheshire.

Floor coverings

Burmatex is a tough non-woven synthetic fibre floor covering which is recommended for use in schools, offices and other types of public building as its wear resistance is claimed to be ten times that of an all-nylon tufted carpet. It is made up from a fibrous lap of nylon and polypropylene fibre in a 6 in. thick mat which is then compressed to a thick-



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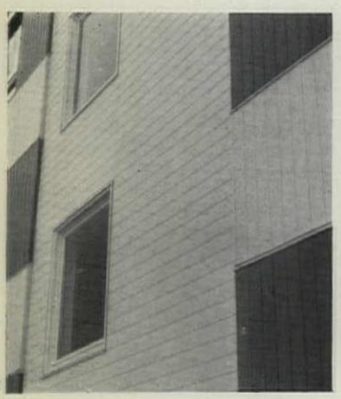
ness of 5 mm. It is afterwards needle punched through hessian and resin impregnated. It is supplied in 9 ft. wide rolls 25 yds. long and is laid with adhesive, the edges needing no stitching or binding, though it can also be laid free in corridors or tacked. The carpet can be cut with scissors or a sharp knife and needs no underlay, though the sub-floor should be reasonably flat. There is a choice of nine quite good plain colours and the trade price is about 30s. a sq. yd. *R. & B. Textiles Ltd., Victoria Mills, Ossett, Yorkshire.*

Finishes for hospital theatres

Six new operating theatres for Moorfields Eye Hospital contain large areas of Warerite decorative laminates for surface fitments and vertical panelling. The theatres are octagonal on plan, with anaesthetic and preparation rooms, and are built from modular units designed by the medical division of Honeywell Controls. The theatres 8, have closed circuit television systems to relay operations to post-graduate students in adjacent lecture halls. All building materials were chosen, as one would expect, to meet the strictest hygiene requirements, and the wall panels have an extruded polythene core sandwiched between layers of hardwood which are



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in turn surfaced with grey Warerite. *Bakelite Xylonite Ltd., 12–18 Grosvenor Gardens, London, SW1.*

Plastics cladding panels

Westbrick plastic cladding panels, 9, are made in interlocking plank-like p.v.c. sections with a cover width of 6 in. and in lengths up to 20 ft. They can be used either horizontally or vertically and are easily sawn to length for trimming round windows or door frames, and there is a full range of weatherings for internal and external corners and also a two piece expansion joint. Standard colours are white or grey, but other colours can be considered if the areas are large enough. Fixing is by plastic clips nailed either to timber framework or to battens spaced at a maximum of 2 ft. centres. Thermal movement is catered for in the design of the trim, interlocking side laps and clips. The system provides an insulating air space but extra insulation, such as expanded polystyrene, can readily be incorporated. *Westbrick Plastics Ltd., Edison Road, Churchfields Industrial Estate, Salisbury, Wilts.*

Modular switchgear

Reyrolle are now producing a modular range of medium voltage switchgear which can be built up in various combinations to form large distribution boards, 10. The switch cubicles are made in standard widths of 15 and 20 in. and are divided vertically into three or six compartments to take different sizes of fuse switch units. When the switches are off the doors can be opened for fuse replacement or the units can be slid out for any necessary adjustments without shutting down

10

the board. There is also a range of large circuit breakers in similar cubicles. When old-established firms produce new designs they all too often have a tendency to use as many existing components as possible. Messrs. Reyrolle have started with a blank sheet and produced a series of units which build up into a handsome and coherent whole. *A. Reyrolle & Co. Ltd., Hebburn, Co. Durham.*

Contractors

South Bank Arts Centre. *Architect to the GLC:* Hubert Bennett. *General contractor:* Higgs & Hill Ltd. *Subcontractors: Heating and ventilation:* G. N. Haden & Sons Ltd. *Electrical installation:* T. Clarke & Co. *Cast aluminium:* H. H. Martyn Ltd. *Tiling:* A. H. Herbert & Co. *Public address system:* Tannoys Products Ltd. *Ironmongery:* James Gibbon Ltd. *Sanitary appliances:* Shanks & Co. *Ductwork:* J. Gardener & Co. *Acoustic treatment:* Burgess Products Co. *Air filters:* Vokes Ltd. *Air heater batteries:* Wellington Tube Works Ltd. *Automatic controls:* Thermocontrol Instrument Co. *Cooking extract fans:* Woods of Colchester Ltd. *Electric motors:* Bull Motor division of Turner of Ipswich. *Electric motor starters:* Brockhirst & Ingrame Ltd. *Forced and natural air convectors:* Copperrol Ltd. *Indicating instruments:* Negretti & Zambra Ltd. *Refrigeration plant:* York Shipley Ltd. *Supply and extract fans:* Mathew & Yates Ltd. *Thermal insulation:* Kitsons Insulation Products Ltd. *Valves:* Hattersley (Ormskirk) Ltd. *Ventilating grilles:* Waterloo Grille Co., Anemostal (Scotland) Ltd. *Water pumps:* Holden & Brooke Ltd. *Switchboards:* G. P. Dennis Ltd. *Auditorium, platform lighting and dimming equipment:* Strand Electric & Engineering Co. *Cold cathode lighting:* Ionlite Ltd. *Fire detector system:* Minerva Detector Co. *Impulse clock system:* Gent & Co. *Secondary lighting and battery charging unit:* Electric Power Storage Ltd. *Goods lift:* Otis Elevator Co. *Light fittings:* Allom Heffer & Co., Holophane Ltd., Conglectric Ltd., C. M. Churchouse & Co., Ecko-Ensign Electrics Ltd., Revo Electric Co., Rotaflex (Gt. Britain) Ltd., Atlas Lighting Ltd., Philips Electrical Ltd., Merchant Adventurers Ltd., General Electric Co., Wardle Engineering Co., Major Equipment Ltd. *Plumbing:* J. Martin (Brockley) Ltd. *Scaffolding:* Acrow Engineers Ltd. *Plastering:* Thompson Bros. (London) Ltd. *Glassfibre suspended ceilings:* Darlington Insulation Co. *Catwalks, handrails and ladders:* T. W. Palmer & Co. (Merton Abbey) Ltd. *Polysulphide pointing:* M.R. Mastrics. *Boilers:* Thomas Potterton Ltd. *Special aggregate precast concrete units:* John Ellis & Sons Ltd. *Convector panels:* Wellwinch Engineering Ltd. *Handrails and corners:* J. Starkie Gardner Ltd. *Translucent ceilings and panels to galleries:* Isora Illuminating Ceilings Ltd. *External grilles and ventilators:* Harvey Fabrications Ltd. *Asphalt:* Amasco. *Pointing:* W. J. Brooker Ltd. *Polishing:* J. R. Beadon Ltd. *Lightweight screeds:* Celcon Ltd. *Lettering:* The Lettering Centre. *Paving:* London Paving Co. *Specialist metal work:* J.R.F. Panel Ltd. *Tarpaving:* Val de Travers Asphalte Ltd. *Suspended plaster ceilings:* BCL Ltd. CONCERT HALLS ONLY: *Stage canopy and equipment:* Hall Stage Equipments Ltd. *Closed circuit television:* Pye TVT Ltd. *Timber:* Samuel Elliott & Sons Ltd. *Bar equipment:* Gaskell & Chambers (Southern) Ltd. *Cinema equipment:* J. E. Brockliss Ltd. *Auditoria seating:* Vickers Ltd. *Air coolers:* F. H. Biddle Ltd. *Air filters:* Ozonair Engineering Co. *Anti-vibrators (pipelines):* Andre Rubber Co. *Anti-vibrators:* Absorbit Ltd. *Instrument panel motor and starters:* Peppers of Woking Ltd. *Electric cables and telephone system:* AEI Ltd. *Service lifts:* Evans Lifts Ltd. *Light fittings:* Courtney Pope (Electrical) Ltd., Harris & Sheldon (Lighting) Ltd. *Bar grille:* Mole Richardson (England) Ltd. *Glassfibre t.v. cases:* Allan Blunn Ltd. *Cradle equipment:* Palmers Travelling Cradle & Scaffolding Co. *Cork tiles:* Cork Insulation & Asbestos Co. *Veneers:* Howard Bros. (Veneers) Ltd. *Acoustic ceilings:* Thermal & Acoustic Installations Ltd. *Flexible tank liners:* Plastic Liners Ltd. *Dishwashing machine:* Dawson Bross MMP Ltd. ART GALLERY ONLY: *Strong room door:* John Tann Sales Ltd. *Roller shutters:* G. Brady & Co. *Roof trusses:* Carter Horseley Ltd. *Blinds and control system for blinds:* J. Avery & Co. *Hollow glass brick roof lights:* J. A. King & Co. *Glazing aluminium windows:* Crittall Manufacturing Co. *Roof lights and gutters:* Henry Hope & Sons Ltd. *Floor tiling:* E. Hawkes & Co. *Suspension system to ceilings and galleries, floor sockets and ceiling bosses:* Wellwinch Engineering Co. *Aluminium ceiling trays:* Marsland & Co. *Sliding picture storage racks:* G. Johnson Bros. Ltd.

Group practice surgery, Birmingham. *Architect:* John Winter. *General contractor:* Geo. Stubbings Ltd. *Subcontractors: Electrician:* J. F. Williams. *Roofing:* Ruberoid Co. *Sliding aluminium doors:* Domestic Aluminium Windows Ltd. *Planting:* Woodfield Nurseries Ltd. *Ironmongery:* James Gibbons Ltd.

Art gallery and theatre, Nash House, London. *Architects:* Fry, Drew & Partners. *General contractor:* John Mowlem & Co. *Sub-contractors:* G. N. Haden & Sons Ltd. T. Clarke & Co. Rotaflex Ltd. Beck and Pollitzer. Clark & Fenn. Conways (Tile & Terrazzo) Ltd.

Acknowledgments

FRONTISPIECE, page 2: The Medici Society. GEOMETRY OF BRICKMAKING, pages 5–7: N. Groves-Raines. IRISH SHOP LETTERING, pages 8–10: Humphrey Spender. WALLS OF WHITSTABLE, pages 11–13: Peter Baistow. SOUTH BANK ARTS CENTRE, pages 14–26: Richard Einzig. CRITICISM, pages 27–30: 1, 8, Sam Lambert; 3, Reinhard Friedrich; 6, Richard Einzig. THE EXPLORING EYE, pages 31–33: Penelope Reed. BURGES AND MORRIS AT BINGLEY, pages 34–38: 1–4, 6, Galwey Arphot. INTERIOR DESIGN, pages 39–50: Art gallery and theatre, Nash House, Richard Einzig. Group practice surgery, Chinnor, Richard Einzig. Group practice surgery, Birmingham, Galwey Arphot. Interior components, 1, Dennis Hooker; 4, Ron Francis. BRIDGNORTH, pages 51–56: Margaret Tallet. GALLERY, pages 61–64: 2, John Webb; 7, Tony Allen; 9, 10, Tomorrow's News. WORLD, pages 65–68: 1, 5, Adam Kaczkowski; 14, John Poindexter; 15–17, *Architektura;* 18, 20, Aldo Ballo; 22, 23, *Architectural Forum.* THE INDUSTRY, pages 73–74: 5, Allardyce Palmer; 7, John Mills. STOP PRESS, pages 75–76: 2–4, 6–8, Nairn Arphot.

Ian Nairn

STOP PRESS

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

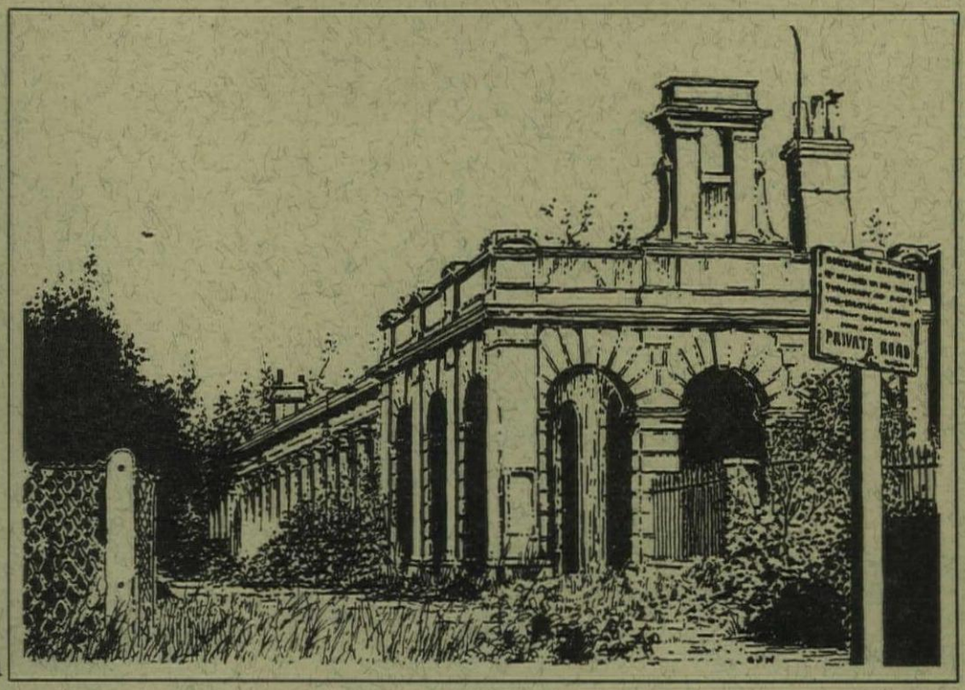
S.O.S.

GOSPORT, HANTS
The railway station, by Sir William Tite: one of his best buildings, 1. The trains have gone, the building is disused. It needs help before it joins the long list of old building demolished in Gosport, which has one of the worst records in the country. The quality, dignity and subtlety of Gosport's rebuilding can be seen in 2.

SCOUT HALL, NEAR HALIFAX
Long empty, now tottering towards collapse, 3 and 4. What is needed is not restoration, but simply enough first aid to keep the structure sound—it makes a splendid ruin—and not allow it to go the way of the seventeenth-century farmhouse nearby.

OUTRAGE

ROMSEY, HANTS
Precinctual architecture as she is spoke: a new hall in front of Romsey Abbey, 5.



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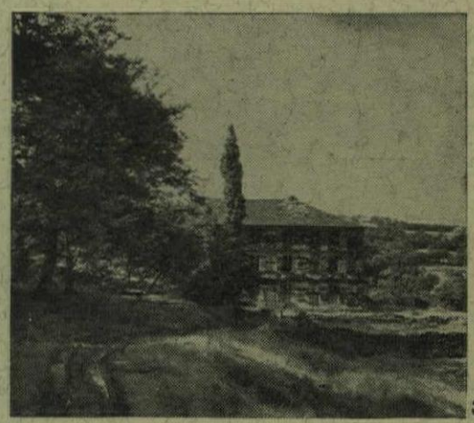
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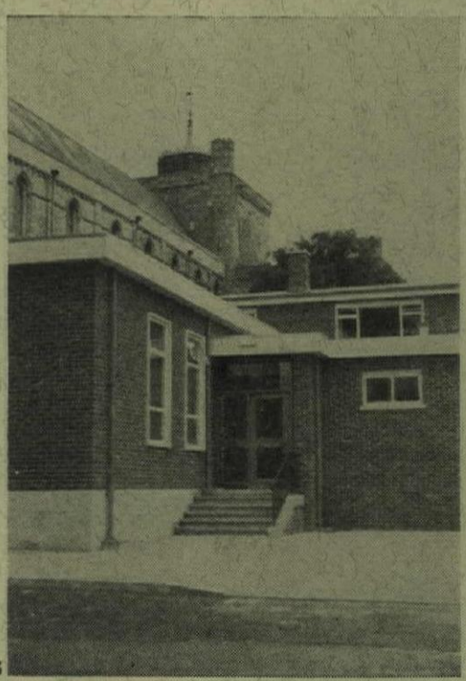
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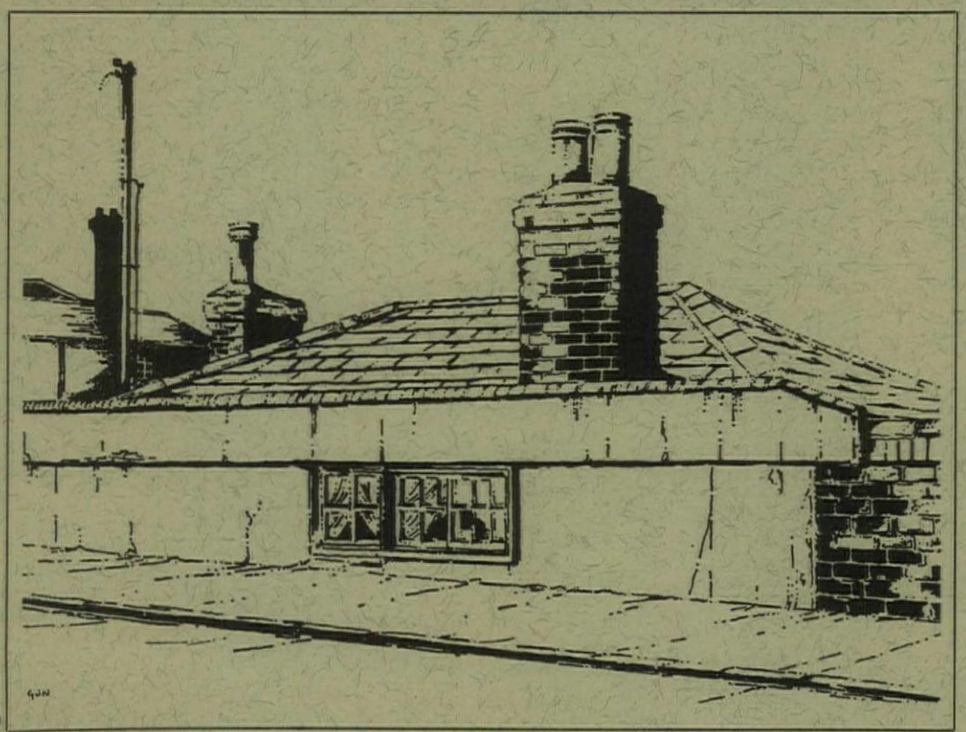
6

NEWHAVEN, SUSSEX
The rape of the Downs goes on. This was a field on the western edge of Newhaven, 6: a town which shares with Tilbury the wooden spoon for England's entrances. This is just the scribble of the 'thirties over again.

OPPORTUNITY

WATERLOO, LONDON
The vast bleak underpass-roundabout, 7, into which pedestrians are forced between Waterloo Bridge and the station, incorporates an impressive piece of concrete underpinning at one end, 8. Why not fit a pub in and allow cafe tables to spill out into the space in good weather?

7



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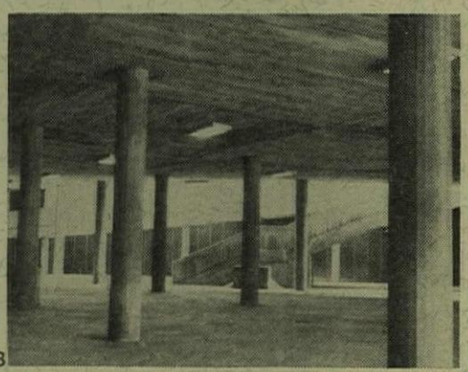

8

CREDIT

SAFFRON WALDEN, ESSEX
The credit here is for not demolishing something that is a bit different—the same thing at Godalming, Surrey, disappeared a couple of years ago. This house, 9, has a narrow first floor to the street and two storeys to the garden side, downhill. It may not be Parker-Morris but it's certainly an interesting place to live.

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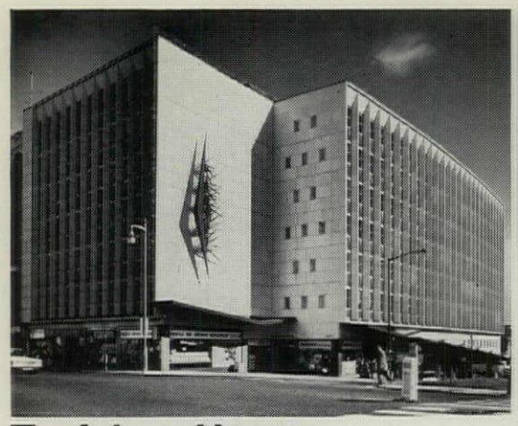

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