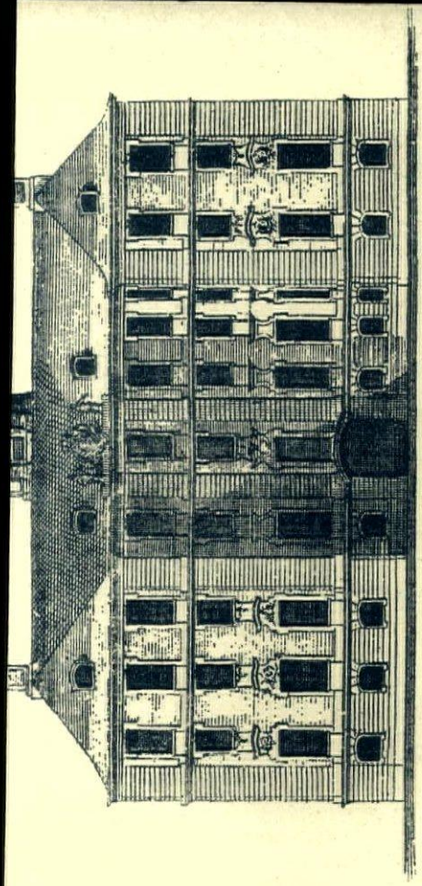
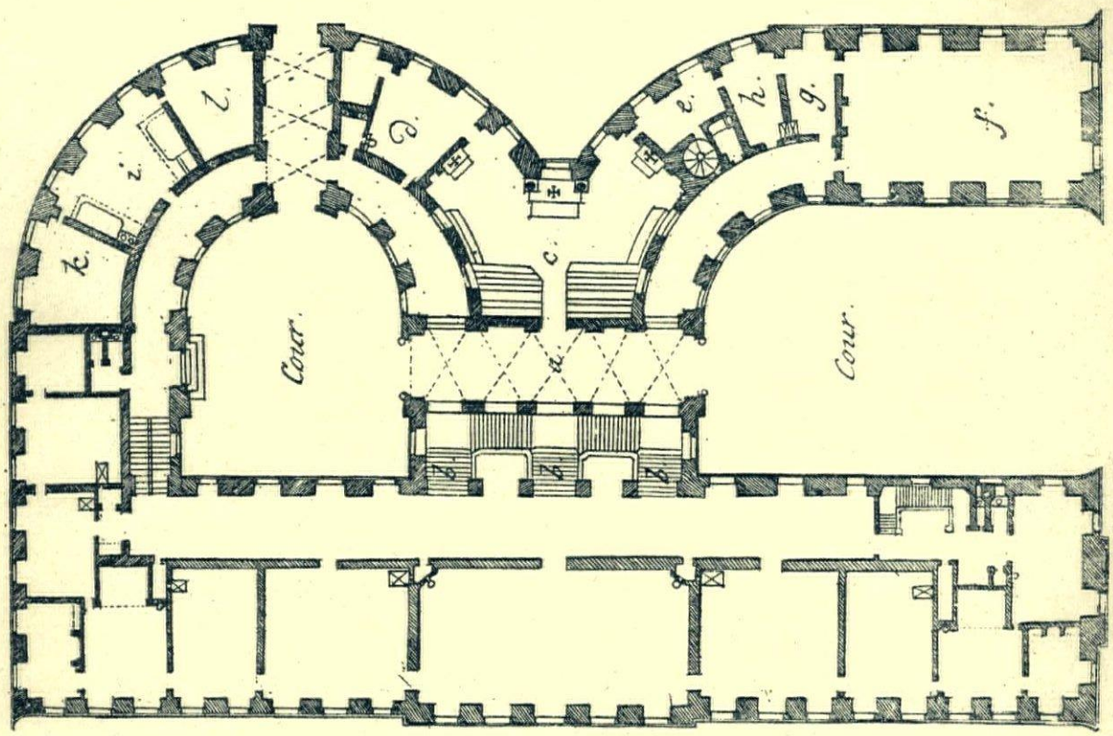
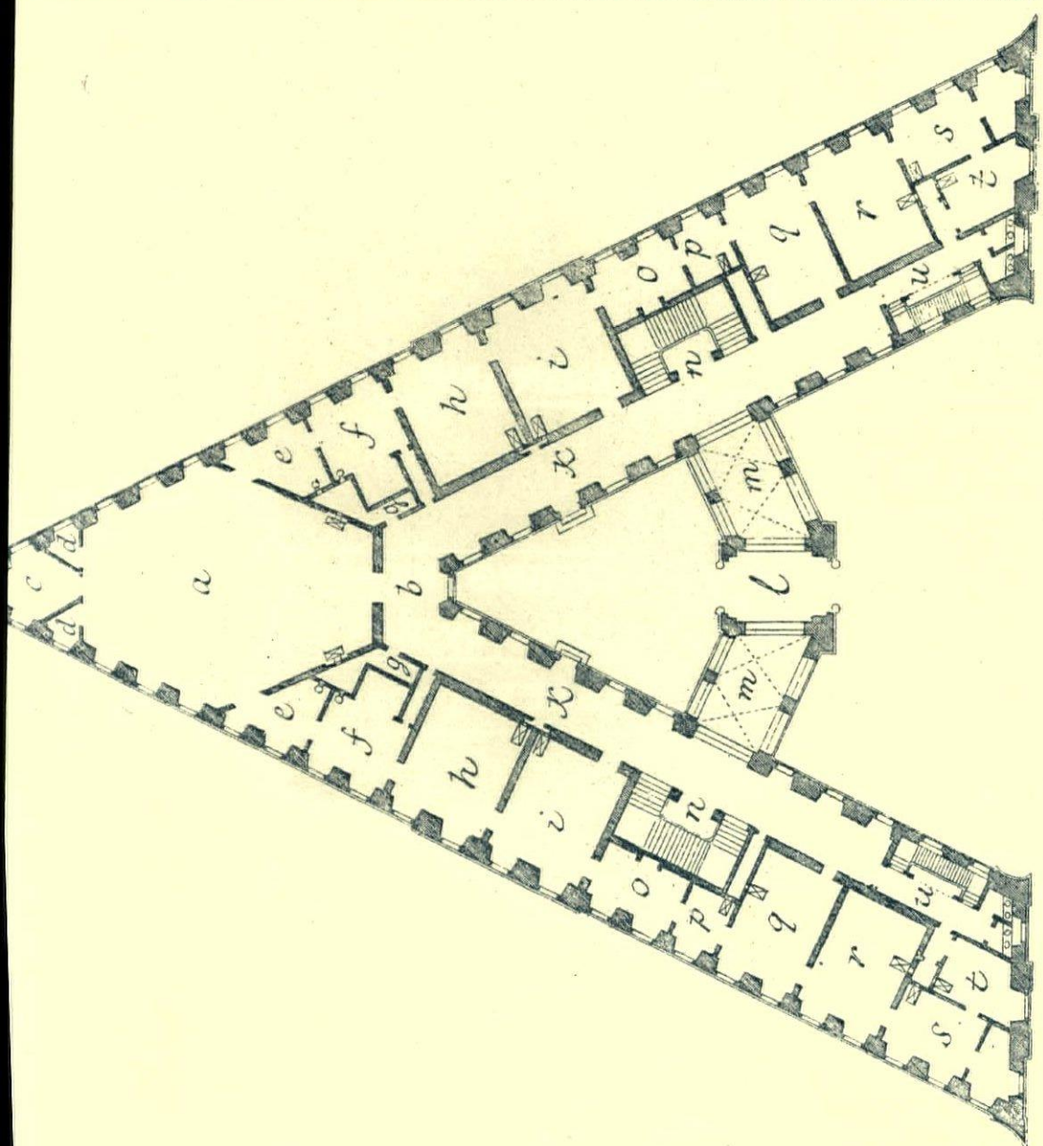
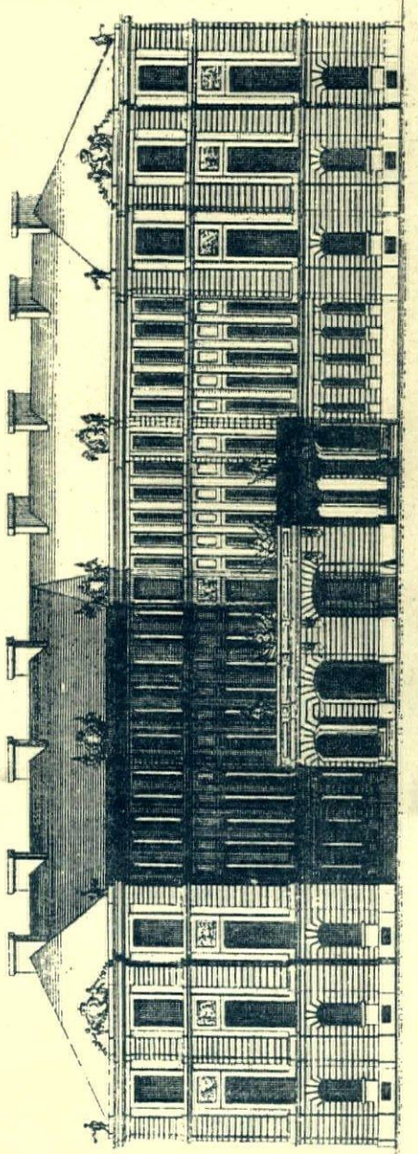
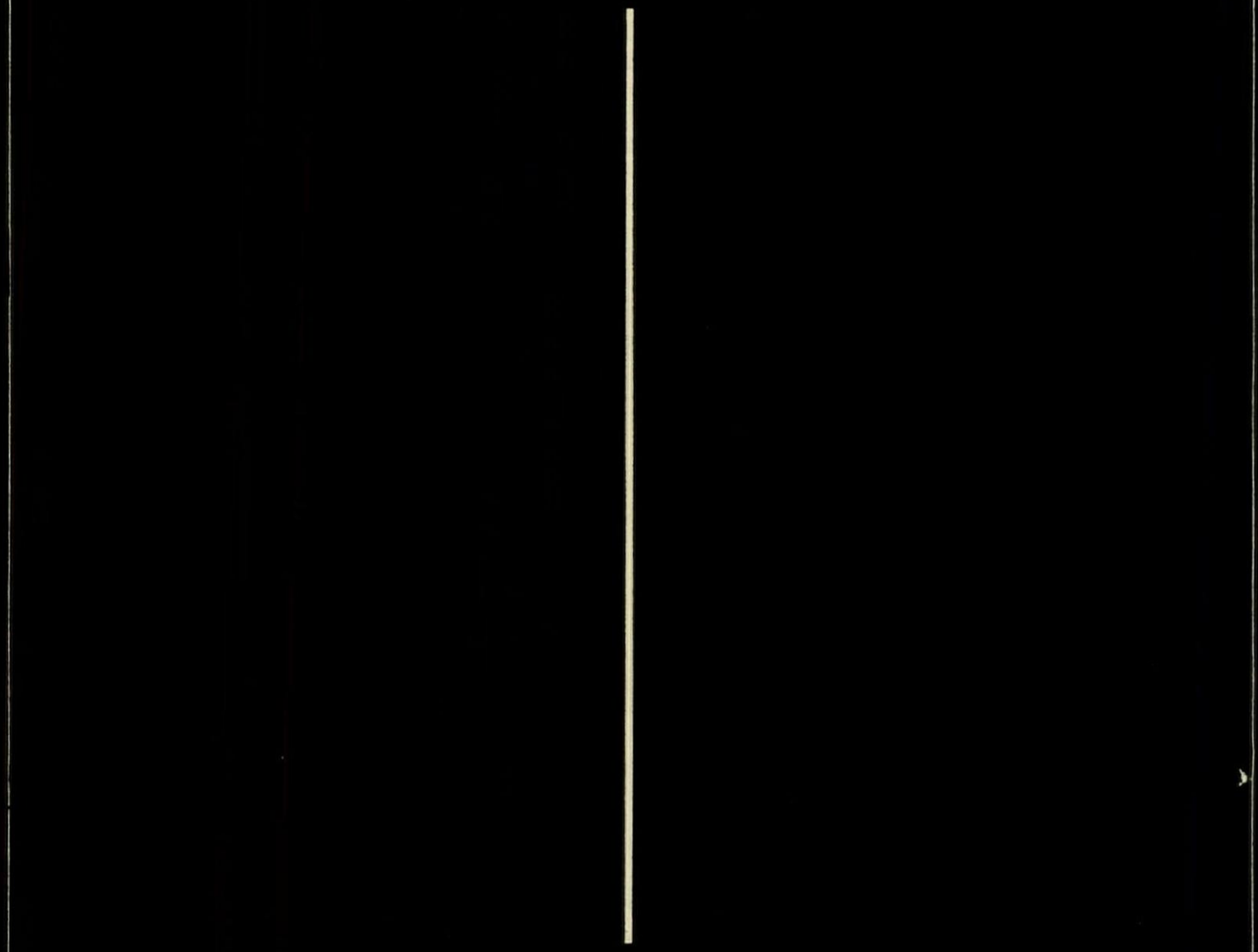




RCHITECTURAL REVIEW VOLUME CXXXIX NUMBER 829 MARCH 1966 FIVE SHILLINGS







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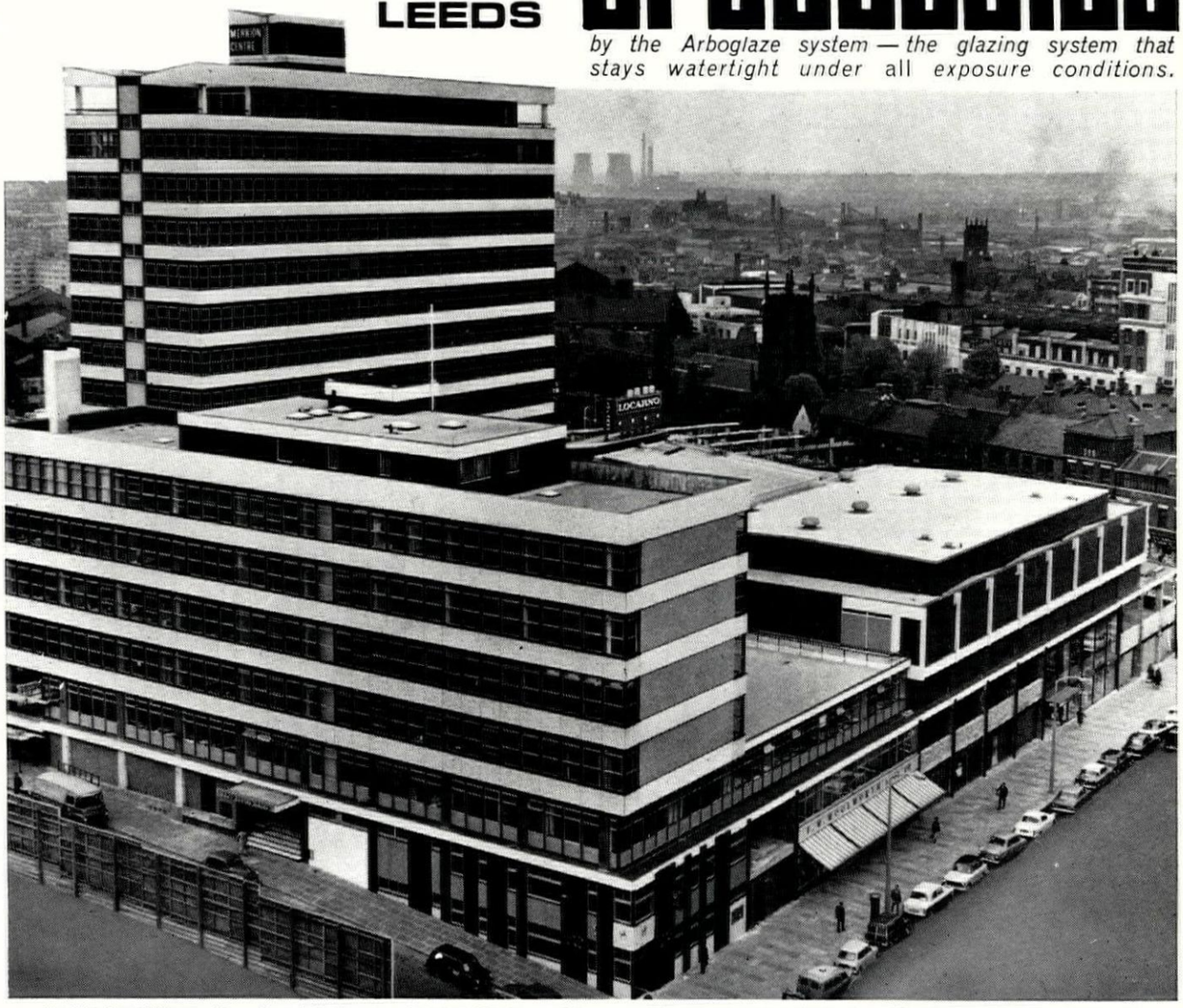
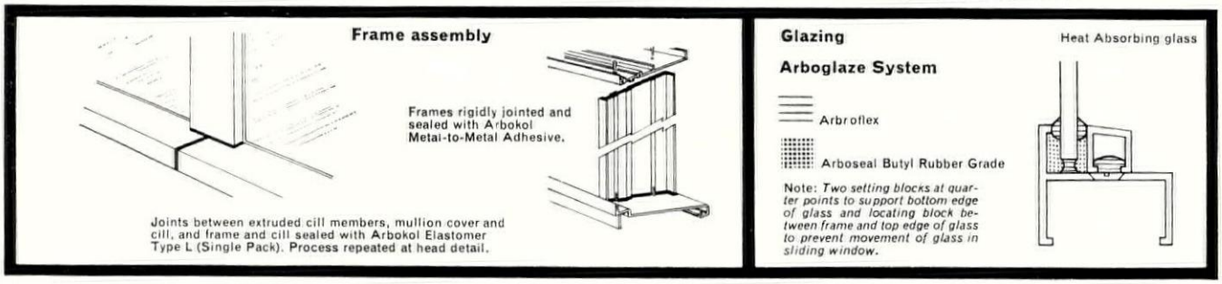


Architects: Gillinson, Barnett and Partners Quantity Surveyors: Trower and Partners Main Contractors: Sir Lindsay Parkinson & Co. Ltd
Glaziers: Cyril Isaacs & Co., Leeds Anodised aluminium sliding windows supplied and fixed by Heywood-Helliwell Ltd.



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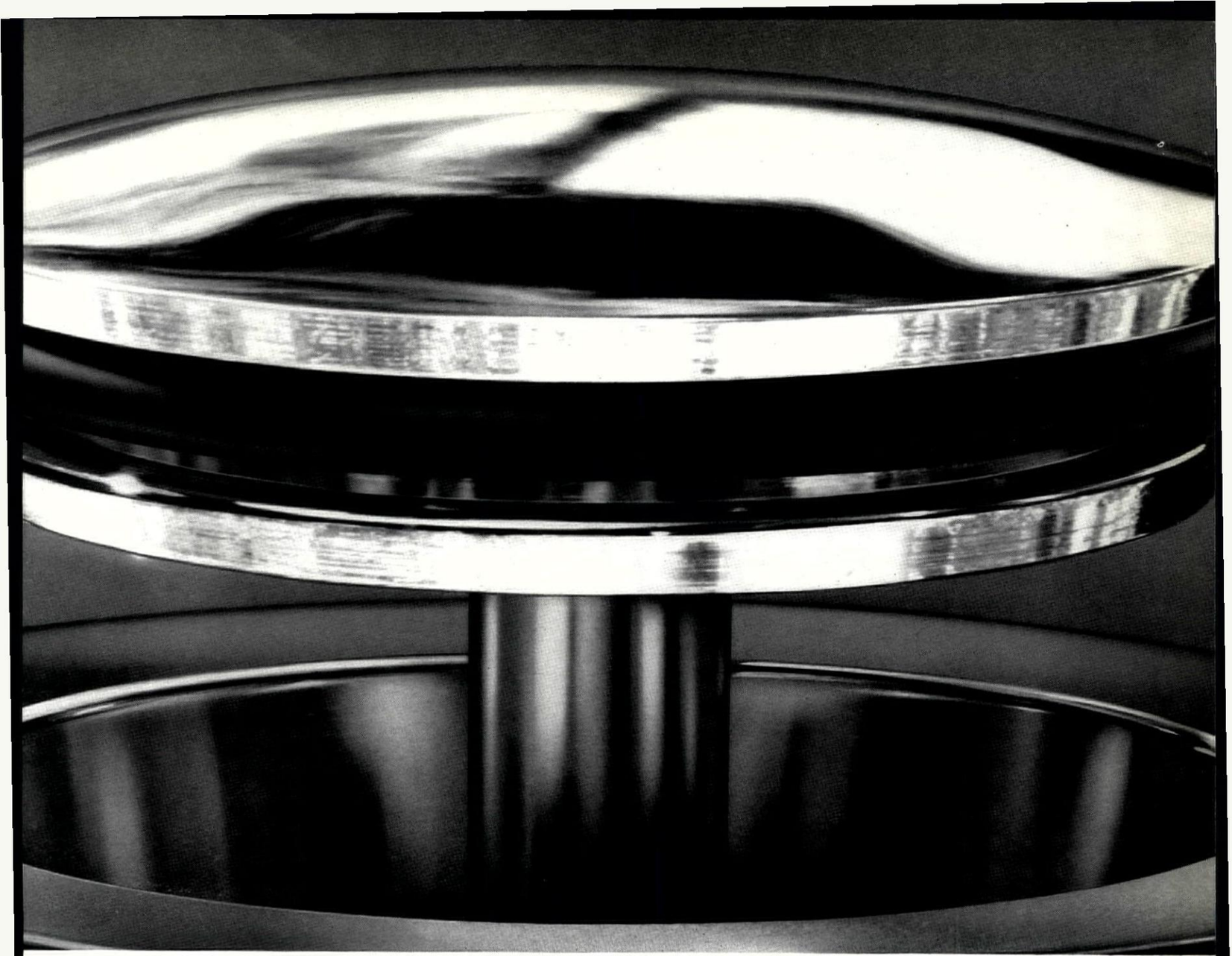

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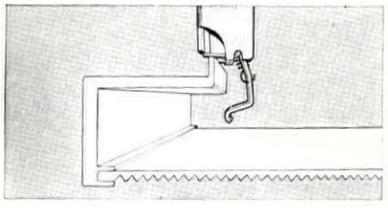

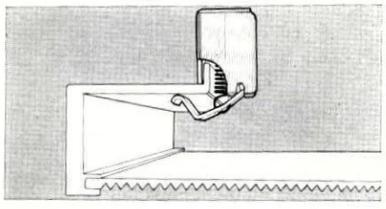

The photograph above gives an indication of the simplicity and size of the quick-release clips. The line sketches (left) show how effectively they grip. Simply press upwards to secure and pull down to release.

Patent Application No. 36773/65.

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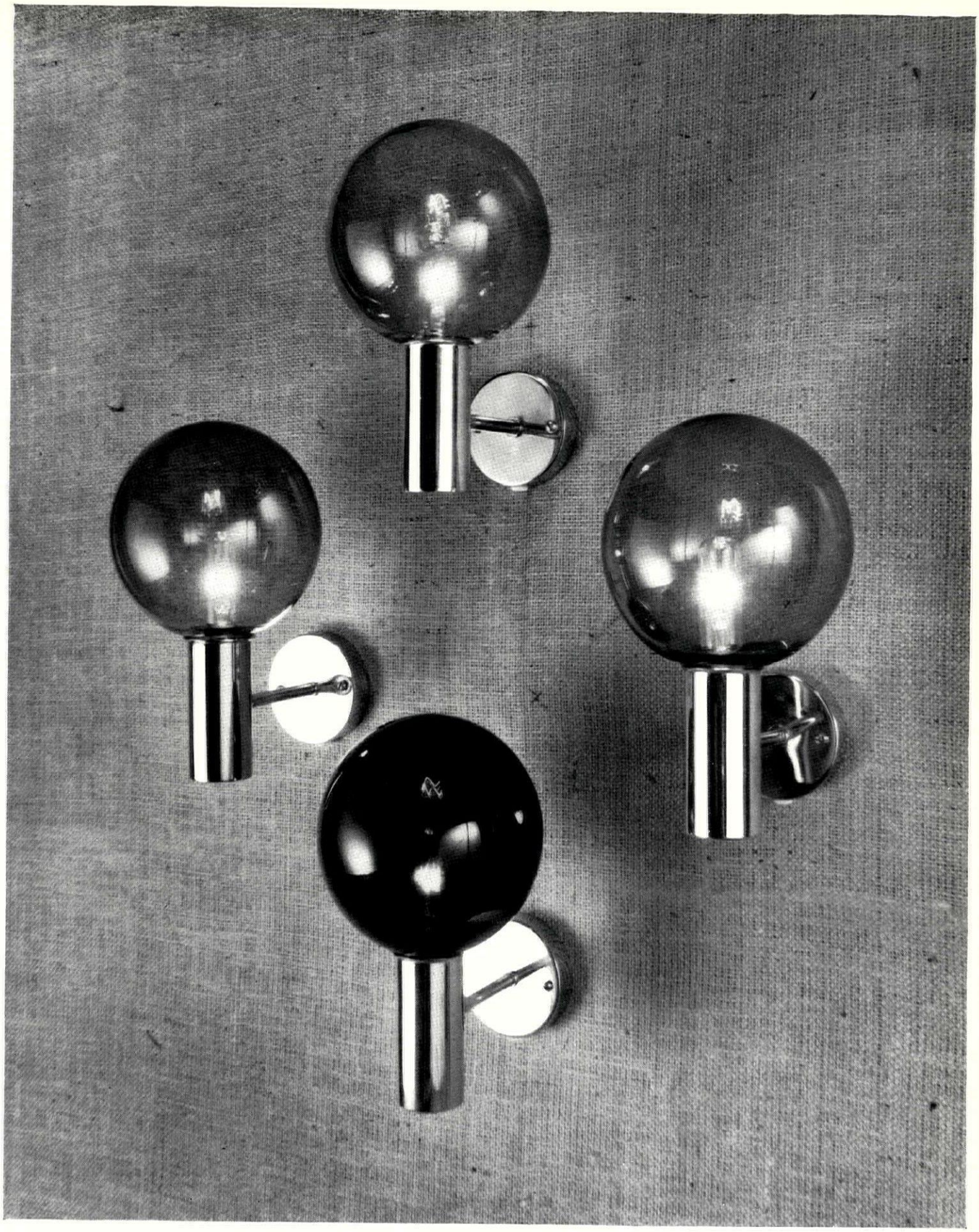

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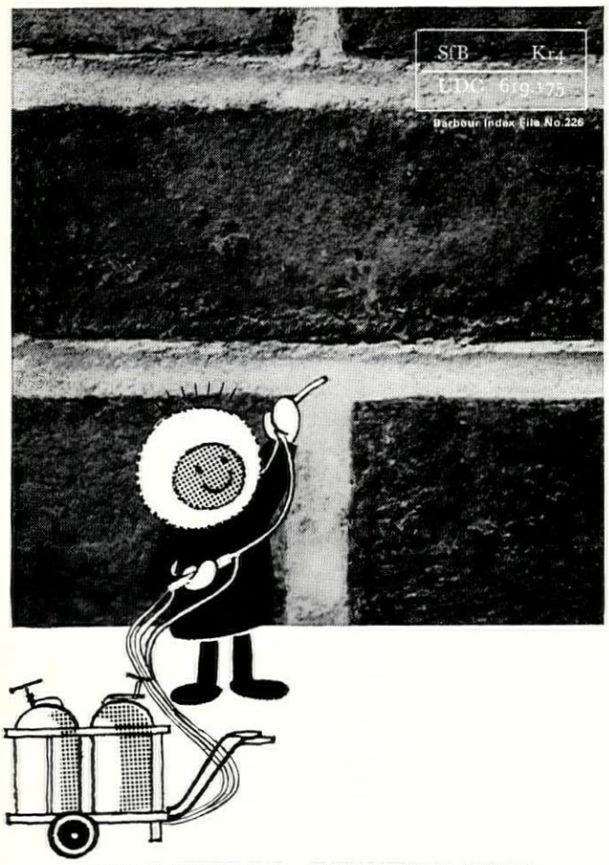

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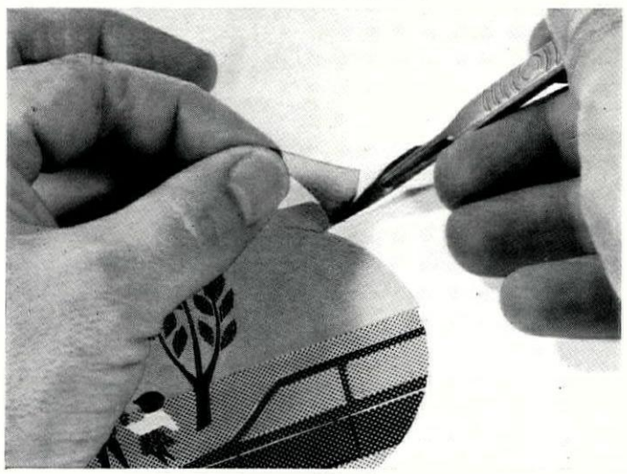

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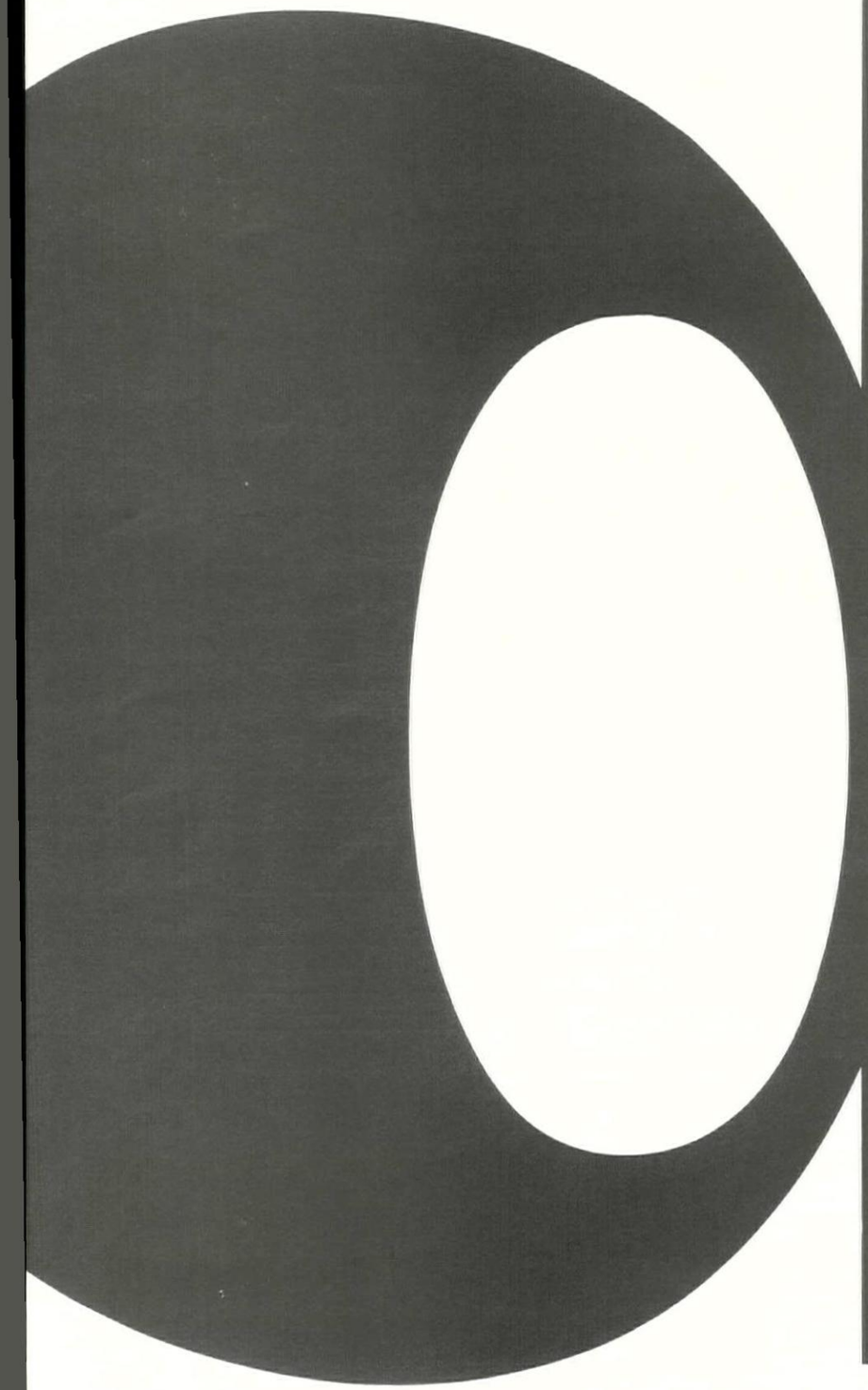

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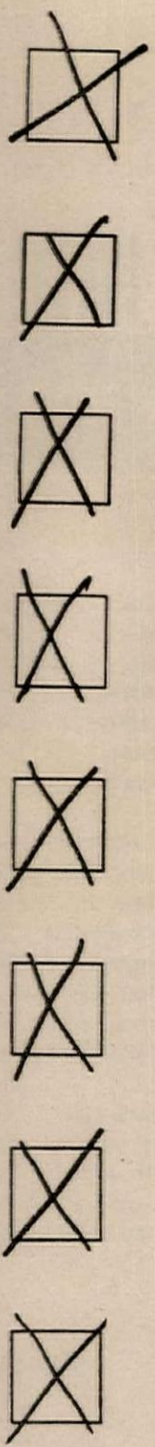
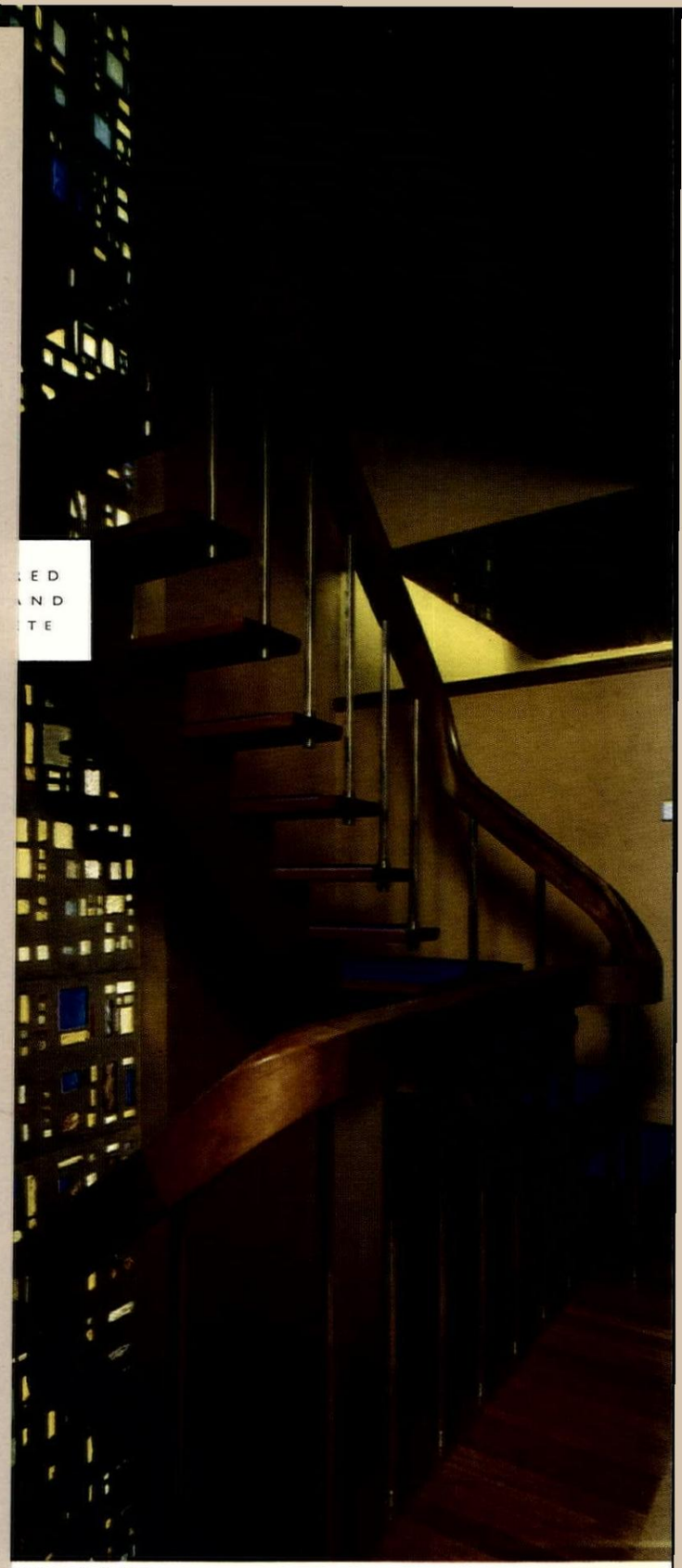


You just can't lose

See *page* 120



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TORONTO CITY HALL

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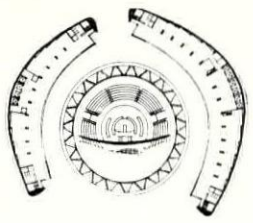
civic centre 'shuts out the city around it,' 2. The new square, 4, is strewn with flower pots and benches in an attempt to generate interest.

On the credit side, apart from the

10



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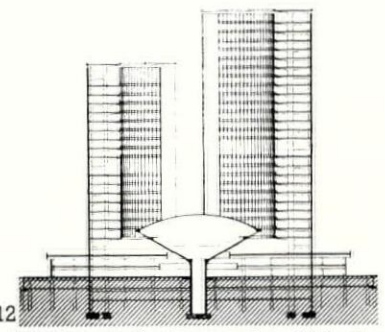

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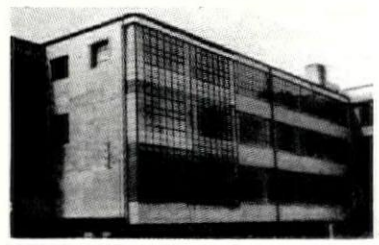
initial *coup*, is the way in which the old City Hall, 3, is brought into the group by the deceptively simple concrete arches spanning the pool. There is no doubt that the blank walls of the office blocks are superbly finished, 6, the precast panels being inset with strips of split-faced Botticino marble. Too much detail, however, is either stark or whimsical, 7. The ramp to the podium concourse, 8, has an impressive breadth of scale, and this is maintained in the Hall of Memory, 10, which surrounds the cup-shaped council chamber. The chamber itself, 9, is cool rather than noble, and it reads better in plan, 11, or section, 12.

The boomerang-shaped towers, 326 ft. and 260 ft., have a curious layout: the typists in open offices enjoy the exciting variety of views across the podium (except on the lowest two or three floors where the council chamber dome is in the way), whereas the prestige private offices are mainly placed against the windowless back walls. The City Council 'didn't think that the 10 per cent the architect asked for looking after the furnishing was justified,' so Knoll got the job (13 shows the Mayor's office).

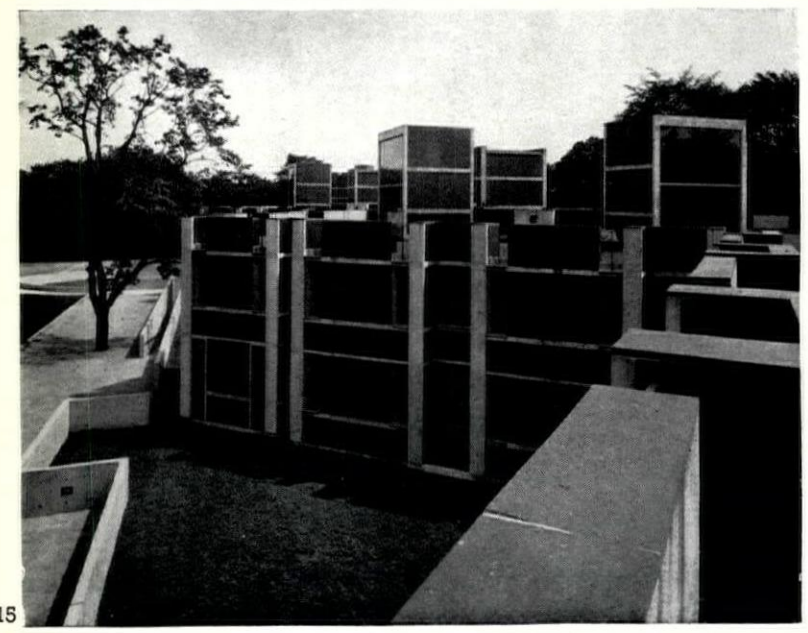
13

BAUHAUS REBORN



14

The battered remnant seen above, 14, is hardly recognizable as part of Gropius's Bauhaus. Damaged in the last war, neglected under Stalinism and patched up shabbily with brick in place of glass, the school is now at last to be rehabilitated. A grant of £90,000 (about a quarter of what may be needed) has been approved by the East German Ministry of Culture, which has declared the Bauhaus a national monument and has called on former students to ensure authenticity in colour and furnishings. The buildings will continue to be occupied by three trade schools and a nurses' training college, to which will be added archives, and a museum of artefacts.



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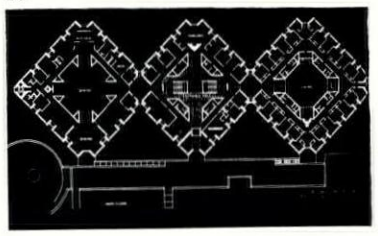
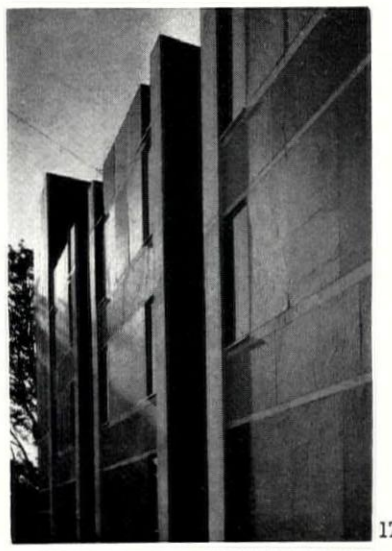
ACADEMIC RATRACE

In American university architecture an air-conditioned core surrounded by a 'racetrack' of corridors has become a major architectural form, with particular problems in expressing both the importance of the centre and the irregularity of peripheral spaces.

In his women's dormitory for Bryn Mawr College, 15, set in wooded parkland, Louis Kahn has, according to *Forum*, 'suggested more the refinement of a Renaissance chateau than the ruggedness of a Medieval fortress.' Kahn himself says, 'I took only one idea from the castle. It showed me that, living space at the core of the building can be made livable.' This core consists of three halls (living, dining and entrance), 16, round which two interlocking types of room are wrapped diamond-wise in a fretwork of projecting bays, crenellated parapets and turreted rooflights. In the cladding of

16





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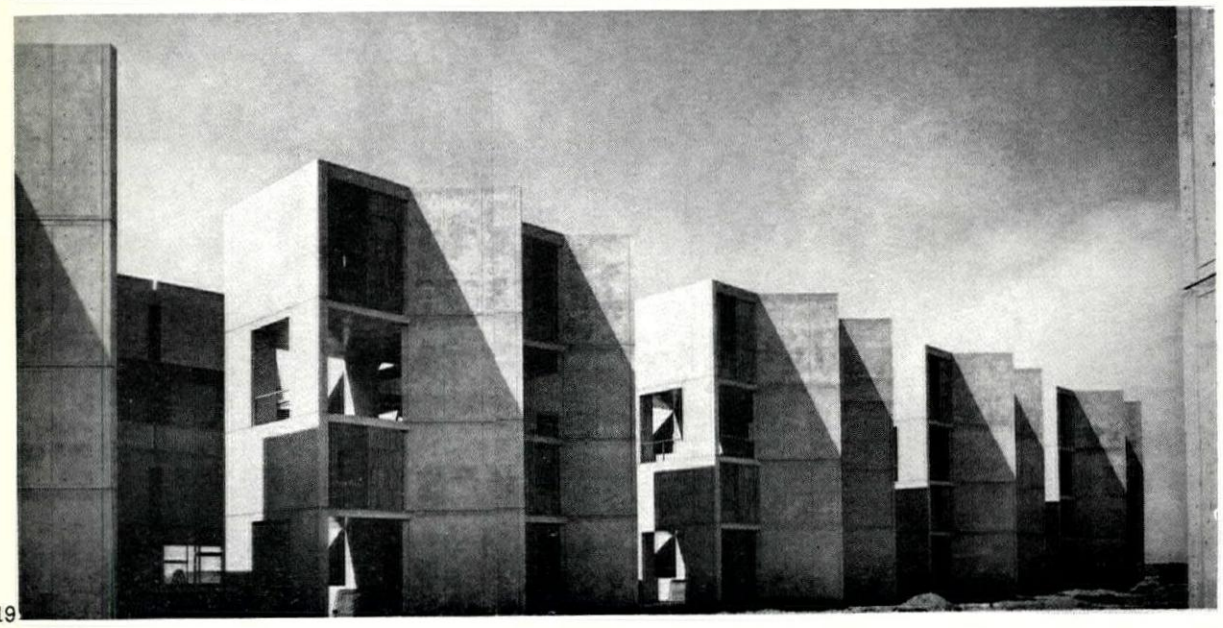

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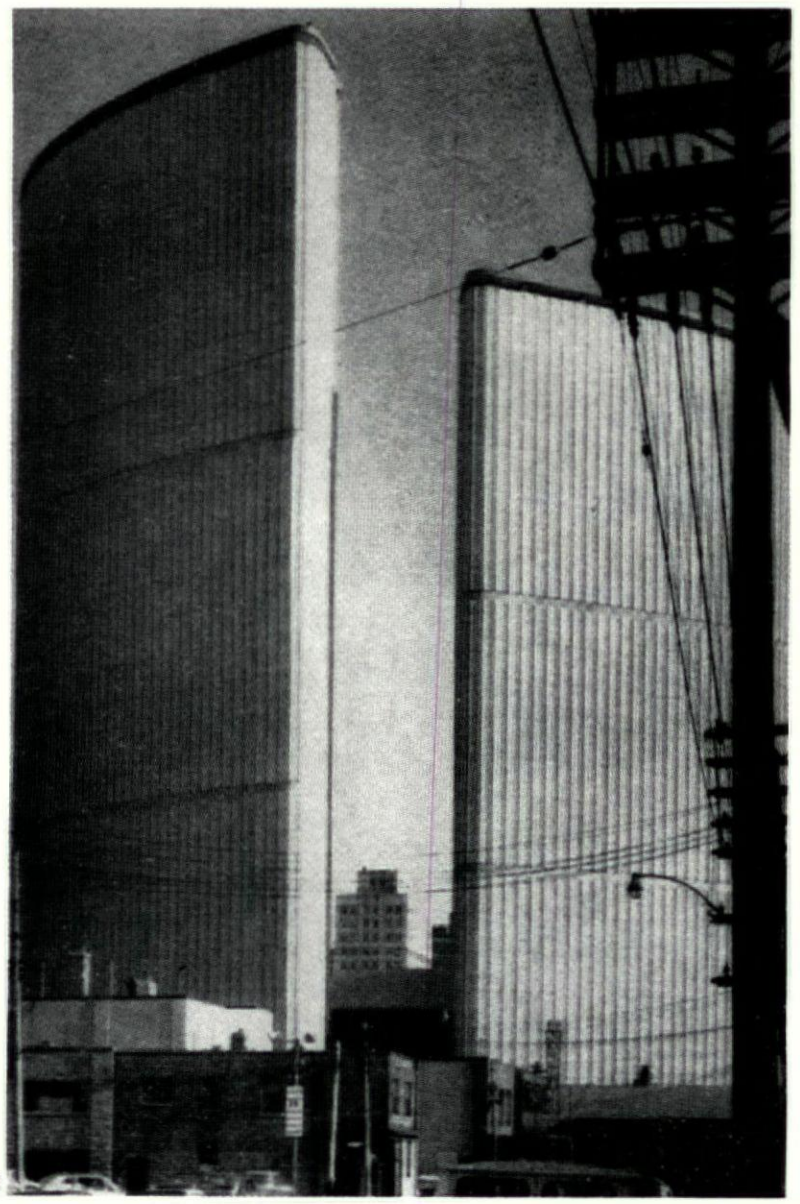

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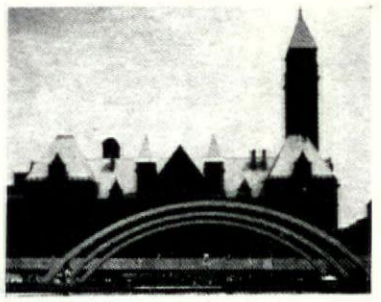
SIMPLE SYMBOL

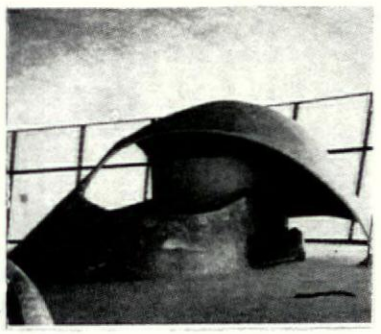


3

The two great competitions of the 'fifties were both held in the Commonwealth, both judged by Eero Saarinen and both won by Scandinavians. Both winning designs were supremely evocative as models, but whereas Utzon's Sydney (see frontispiece, page 174) has been heaved with medieval effort into architecture of almost medieval mystery, the late Viljo Revell's Toronto City Hall has remained a model, cut and dried, saying one thing only. This thing, 1, is the setting of the city council chamber, embraced by two giant curved office blocks and perched on a parking podium at one end of the new city square. Revell called it an 'eye,' with the chamber as pupil—but it only reads as such from the air, 5. The majority of the 1957 jury said that 'the overall composition clearly and dramatically expresses the major functions of civic government,' but the symbolism is crude (impersonation instead of real acting): a pearl of democracy enclosed in an oyster of bureaucracy. As Holford's minority report so accurately prophesied, this

4

5



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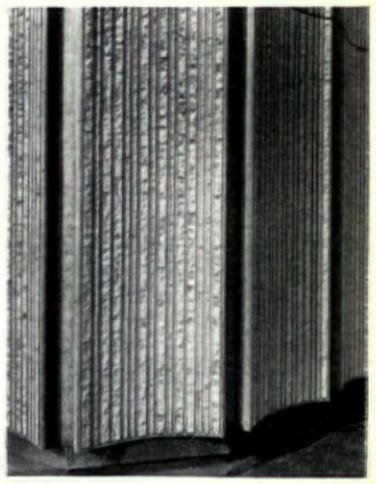

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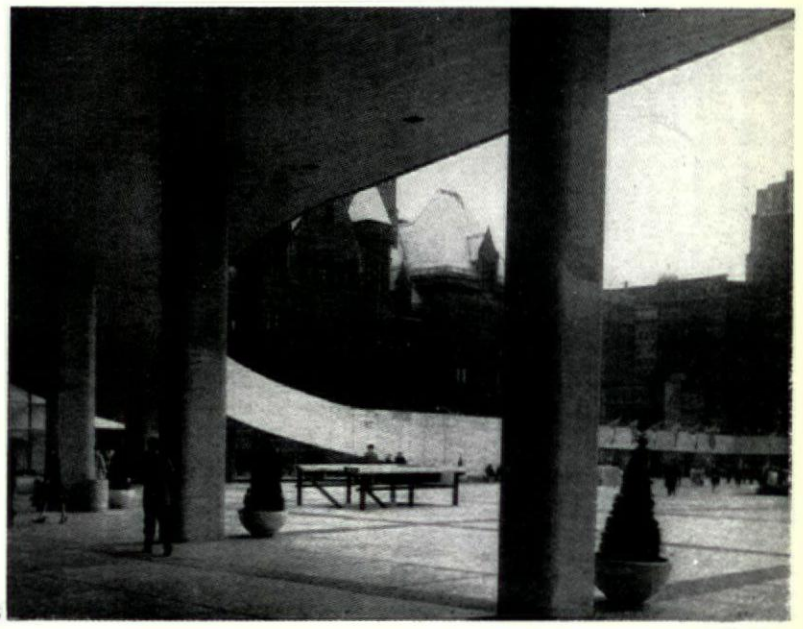

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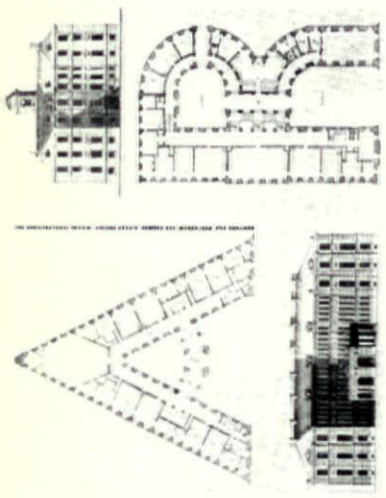
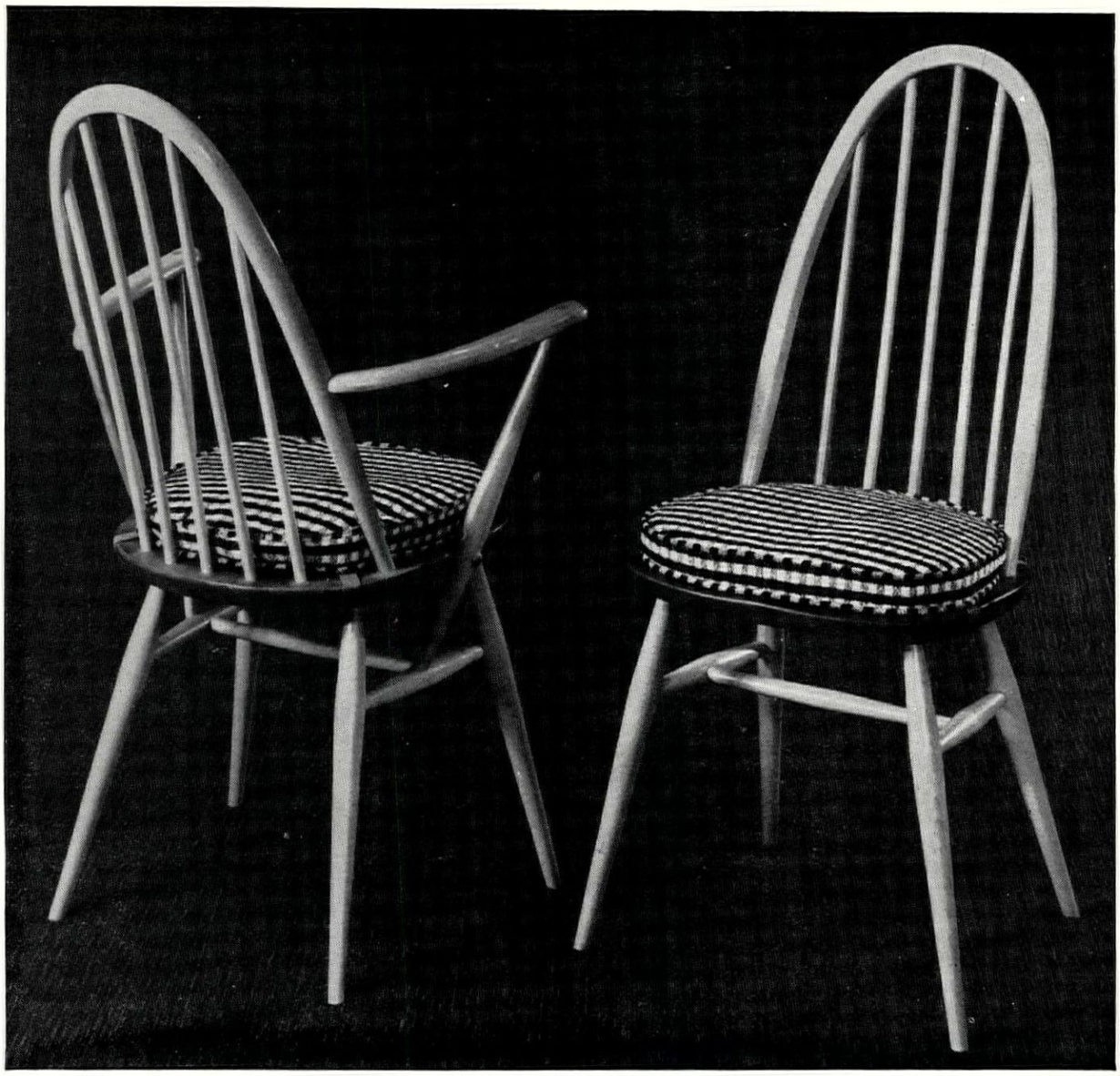
acknowledgments

WORLD, pages 167–170: 1, 6, 9, 10, 13, Panda Associates; 2, 3, 7, *Progressive Architecture;* 4, 5, 8, 11, 12, 15–24, *The Architectural Forum;* 25–30, *Architectural Record;* 31–33, *Bauen+Wohnen;* 40, 41, *Domus*. VIEWS AND REVIEWS, pages 171–173: 4, 5, S. Dryden; 6, Colin Westwood. FRONTISPIECE, page 174: Max Dupain. ORNITHOLOGICAL RESEARCH AND EXHIBITION BUILDING, SLIMBRIDGE, GLOUCESTERSHIRE, pages 178–181: Galwey Arphot. THE PAINTED CHURCHES OF MOLDAVIA, pages 182–192: 1, 3–23, Richards Arphot. BANQUE LAMBERT, BRUSSELS, pages 193–200: Ezra Stoller Associates. LONDON'S OWN CANAL, pages 203 and 204 (left): Eric de Maré; page 204 (top right): Jane Bown; page 204 (bottom right): Lewis Braithwaite. EXPLORING EYE, pages 207–209: 1–3, 6, John Donat; 4, 5, Elisabeth Beazley. FACULTY OF COMMERCE AND SOCIAL SCIENCE, BIRMINGHAM UNIVERSITY, pages 210–214: 1, 3–10, Eric de Maré. 2, Sidney W. Newbery. INTERIOR DESIGN, pages 217–220: 1–5, 7, 8, Henk Snoek; 6, Studio Jaanus. GALLERY, pages 223–226: 1, National Gallery; 2–7, National Portrait Gallery. DESIGN REVIEW, pages 227–228: Galwey Arphot. MISCELLANY, pages 229–236: Czech Cubism, 1, 3, 5–8, 11, 15, Taras Kuscynskyj; 2, Fr. Pekar; 10, K. Kotikova. Troglodyte Village, M. H. Goldfinger. Embassy Seats, MOPBW. THE INDUSTRY, pages 240–242: 2, Mann Brothers. STOP PRESS, pages 243–244: 2, 3, Nairn Arphot; 4, 5, MOPBW; 6–11, Civic Trust.



This month's cover *continues the* REVIEW'S *series of cover designs based on its own initials with the help of two of the plates from a volume of engravings entitled* Architectonisches Alphabeth *by Johann David Steingruber, published at Schwabach in* 1773. *(By courtesy of the Metropolitan Museum of Art, New York.)*



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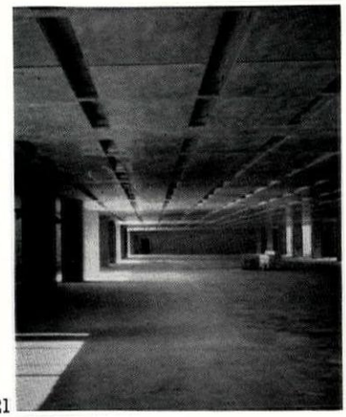

21

22

riven slate, 17, Kahn seems to be aiming, like Lutyens, at texture at the expense of architecture.

There is much simpler and more satisfying monumentality, with fascinating modulations of scale, at Kahn's Salk Institute of Biological Research, 18, whose two parallel laboratory buildings face the Pacific at La Jolla, California. They are flanked towards the central garden by scientists' studies, 19, with triangular bays canted forward to catch the ocean breezes, compensating for the controlled environment within the laboratories. In contrast to the grand but pointless cores of Bryn Mawr, 20, the laboratories of Salk, 21, form single working spaces of 245 ft. by 65 ft. Above the 11 ft. ceilings are service spaces no less than 9 ft. deep, allowing work benches to plug in almost anywhere. A whole storey is below ground, so the remainder must be one of the tallest two-storey buildings in existence. On the outer side is a giant procession of service towers, 24, superbly finished in boarded concrete with lead-filled bolt holes. Towards the sea, 22, the administrative offices, teak-faced like the studies, have an ugly joint with the nearest service tower. There is no such clash at the landward end, 23, where the mechanical plant continues the mighty scale.

While Kahn believes in articulating separate elements, most Americans subordinate the parts to a formal whole. The 'Palladian racetrack' appears most shamelessly at Minoru Yamasaki's Woodrow Wilson School of Public and International Affairs at

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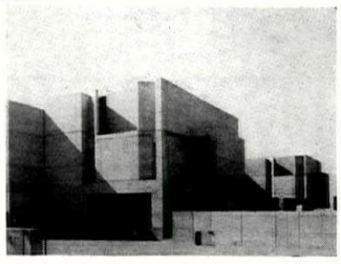

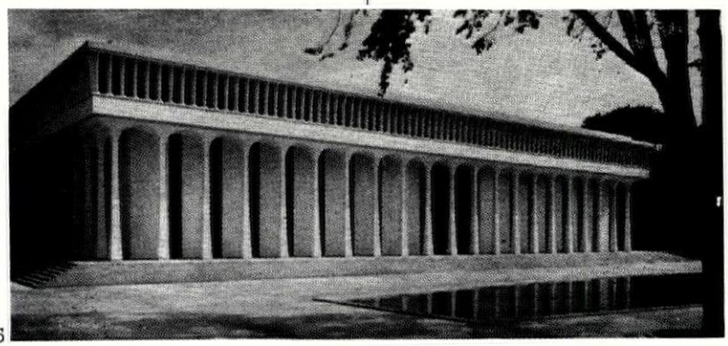

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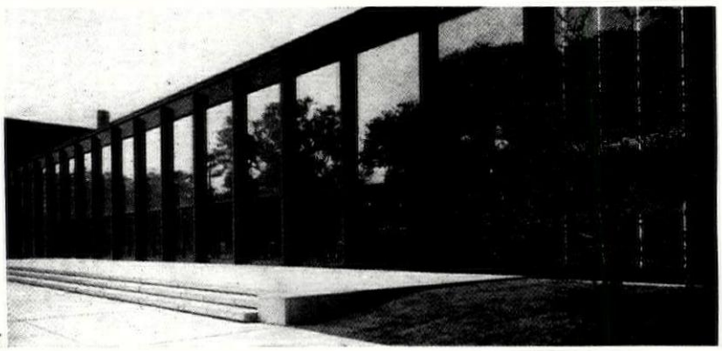

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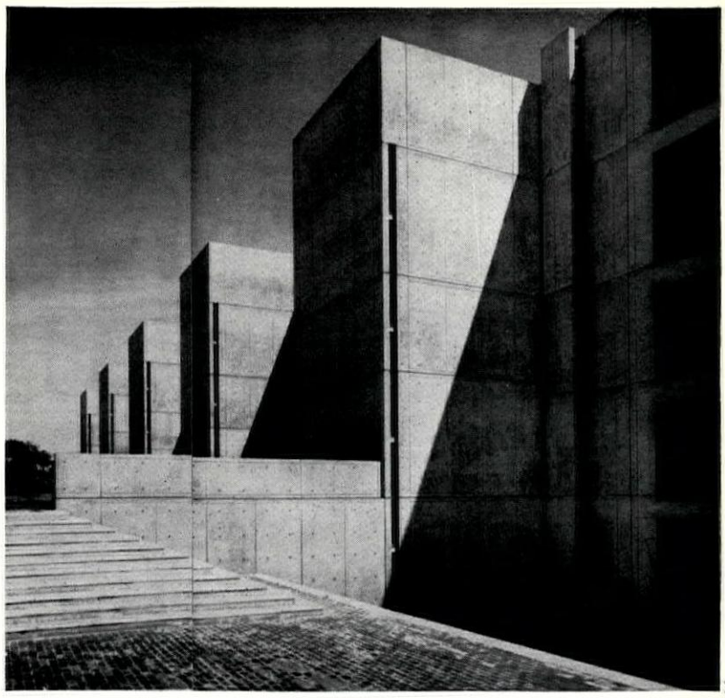

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Princeton, 25. The giant order of lecture hall and library supports an attic storey, 26, of offices round roof courts and lounges. At its purest the classical formula is used by Mies van der Rohe in the School of Social Service Administration on Midway Plaisance for Chicago University. Half sunk in the ground and flat in roofline (much quieter than Crown Hall), 27, the facade reflects the split-level arrangement within of halls below ground and offices on the first floor periphery, 28. Unfortunately, the periphery was not enough, so many of the sociologists work in the windowless core.

John M. Johansen's Goddard Library on the Clark University cam-

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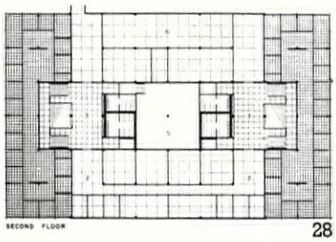

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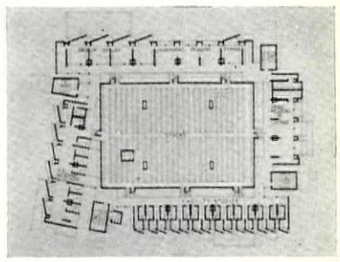
pus will be by contrast a romantic racetrack, 29; it will be a focal point on TAC's master plan, with existing Gothic buildings around it. The great rectangular reading space, 30, will be suppressed beneath frantically personalized offices and carrels.

Less monumental than any of these, almost a racetrack vernacular, is St. Joseph's College for 40 priests at

31

Aigen near Salzburg, Designed by Arbeitsgruppe 4 (Holzbauer, Kurrent and Spalt), it was illustrated in *Bauen + Wohnen's* recent Austrian number. The central rooflit chapel, 31, with an apsidal auditorium, forms a focus for the modular structure of red-painted steel, with its oversailing roof girders exposed, 32. The same architects show



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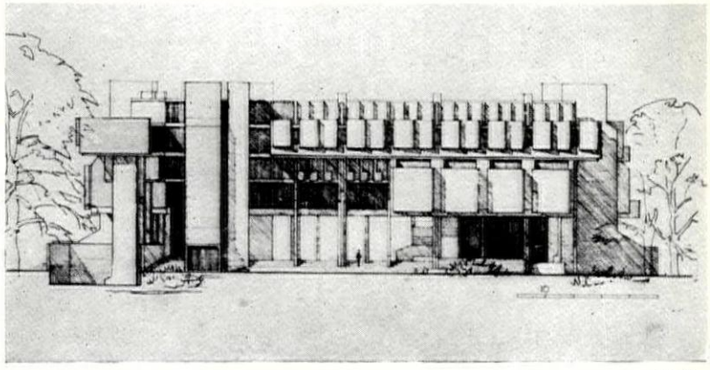
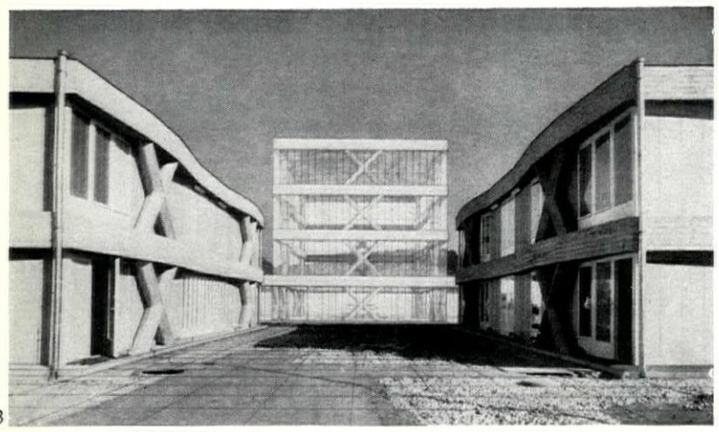


29

ARBEITSGRUPPE 4

32

another interesting use of structure, as expressive as the Latin examples elsewhere on this page, in their church centre for Steyr-Ennsleiten, 33. This is the exact opposite to the racetrack: four separate elements are placed apart on a paved surface, consisting of church hall (left), parsonage (right), church as yet unbuilt (centre) and kindergarten (behind the church). The tapering of the beams gives an odd optical wiggle to the wall surfaces.



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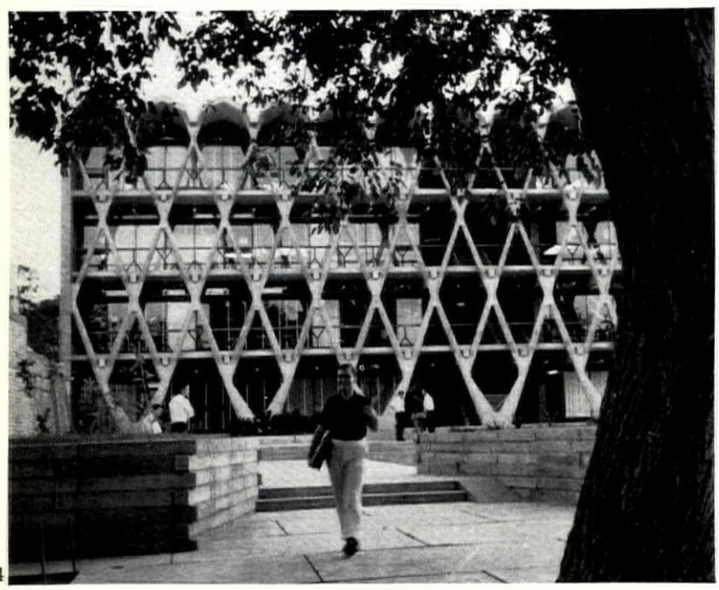

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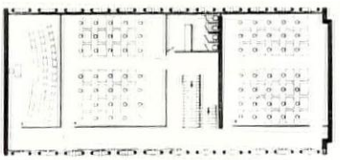

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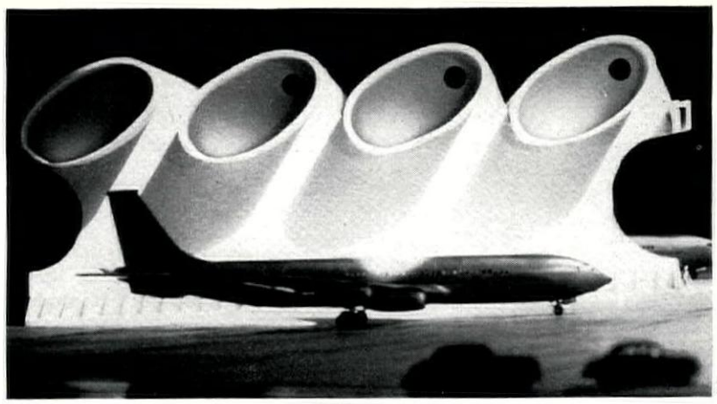
QUAKEPROOF

In areas affected by earthquakes, it is hard for the architect to move away from heavy columns and cross walls of narrow span. At Mendoza University in the Argentine, however, Enrico Tedeschi has achieved a distinctively personal kind of carpentry, 34, in the Faculty of Architecture. The prestressed columns, yellow-green in colour, were made at the local SCAC factory, and the reinforcing bars were electrically welded at each joint to make the network homogeneous, 35. Wide studio spaces and flexible partitioning, 36, were ensured by the bracing of three massive cross walls.



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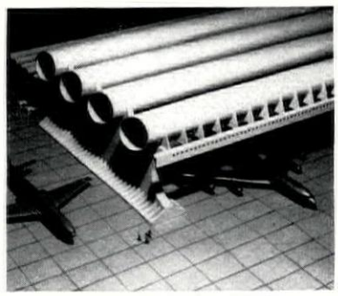
QUICKER BY TUBE

The dramatic scale of air travel has been associated since Saarinen with curving 'wings' of poured concrete, the natural flatness of formwork struggling to express the supposedly limitless agility of the material. Just as dramatic, and certainly quicker to build or extend, is the 'fuselage' solution of Julio Lafuente in his hangar at Athens, designed for the Onassis-owned Olympic Airways. Four vast elliptical tubes, 37, either of steel or of concrete, will be supported on reinforced concrete gable walls, 38, the total span of just over 500 ft. being sufficient to clear three Boeings or four Comets, 39.



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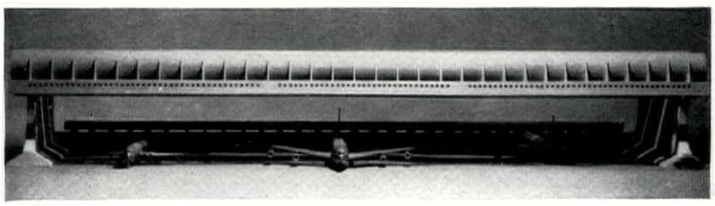

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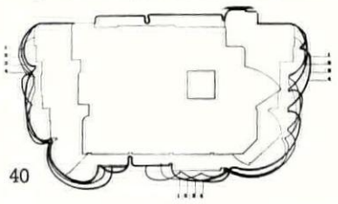
MINI BORROMINI

Luigi Moretti's *palazzina* on the Monte Mario at Rome, 41, relates the present sculptural tendencies in architecture directly, if not crudely, to the renewed interest of historians in the Roman Baroque. A rectilinear layout of flats bursts out in cantilevered balconies, whose arcs never overlap, 40. Moretti compares this to Borromini's San Ivo, where the internal spaces throw out 'an explosion held back in its final shape by the adverse forces of the world.' Sliding windows open on to the balconies, which are intended to trail with vegetation.



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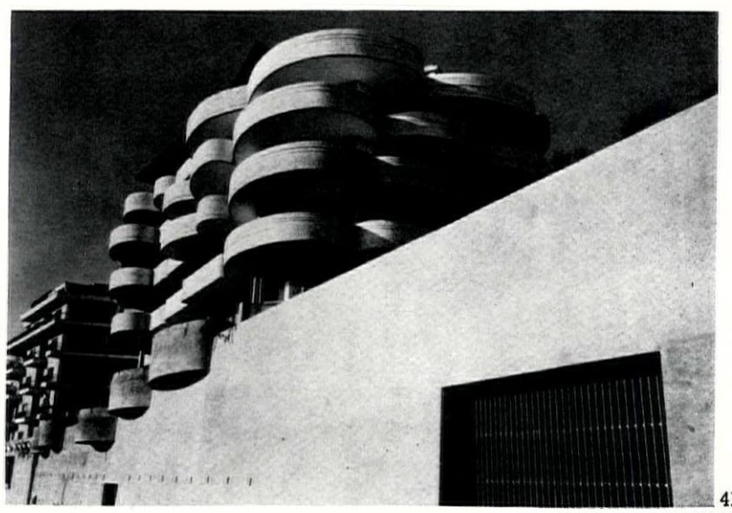

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VIEWS AND REVIEWS

marginalia

BARNSBURY TRIUMPH

The Minister of Housing's recent decision on the Barnsbury planning inquiry is a striking success for local initiative. As previously reported (AR, September, 1965), an apparently conventional inquiry into a Greater London Council proposal for piecemeal housing development on a three-acre site was turned into a public forum for full-scale alternative proposals, prepared by David Wager for the Barnsbury Association, which envisaged a comprehensive 'environmental area' on Buchanan lines for this attractive Early Victorian district. The Minister has cleverly satisfied both sides: he is giving the GLC the permission for which they asked, but 'in doing so he asks that the council will not start on redevelopment until they have let him see proposals for the whole district. The field of environmental management and standards is one in which further study is urgently necessary and it seems to the Minister that Barnsbury would be a suitable area for a pilot scheme. He proposes to invite the GLC and the Islington Borough Council to co-operate with his department in studying how best to create in Barnsbury an environmental area from which through traffic might largely be diverted. The Association will be consulted in the course of this study.'

It seems then that Mr. Crossman is prepared to carry through Buchanan's ideas into actual practice where his former colleague at Transport, Mr. Fraser, was not. It must be hoped that the new Transport Minister will keep herself closely in touch with the Barnsbury initiative, and that the results of the study will be made fully available to all local authorities.

PAXTON: WHOLE OR DIVIDED?

The Arts Council's centenary exhibition on Sir Joseph Paxton made appropriate halts at Birkenhead and Derby before coming to London for a month. Organized by Dr. G. F. Chadwick with the same meticulousness as his book on *The Works of Sir Joseph Paxton* (published by the Architectural Press in 1962), the exhibition inevitably had few further 'discoveries' to excite readers of the book or of Dr. Chadwick's earlier AR article (February, 1961). But by its wide conspectus it provided visually the fuel for some interesting controversy: was Paxton's importance, as Dr. Chadwick wrote in the well-produced catalogue, 'his ability to encompass a very broad field, and to do all within that field remarkably well,' or was he just a genius in glass who floundered in the conventional media of brick and stone?

Against Paxton as universal man stands the obviously gimcrack quality of many of the lodges and villas illustrated in the exhibition, which were turned out by his architectural assistants such as John Robertson and G. H. Stokes; in his favour as universal Victorian stands the appropriateness of these diverse buildings to their diverse functions, set within the all-embracing landscape which was his first pride. The controversy over eclecticism exercised many of Paxton's younger contemporaries, with their search for a synthetic 'Victorian style' —but perhaps Paxton's 'style for the job' can be appreciated more easily now than it was in the fervour of International Modern a generation ago, when only the Crystal Palace was thought appropriate to its age and ours.

CITY MILLS, PERTH

Destruction by neglect is a familiar method of getting rid of unwanted buildings which inconveniently happen to be 'listed.' Allow wind and weather to get in and eventually the building can be declared a dangerous structure and be demolished.

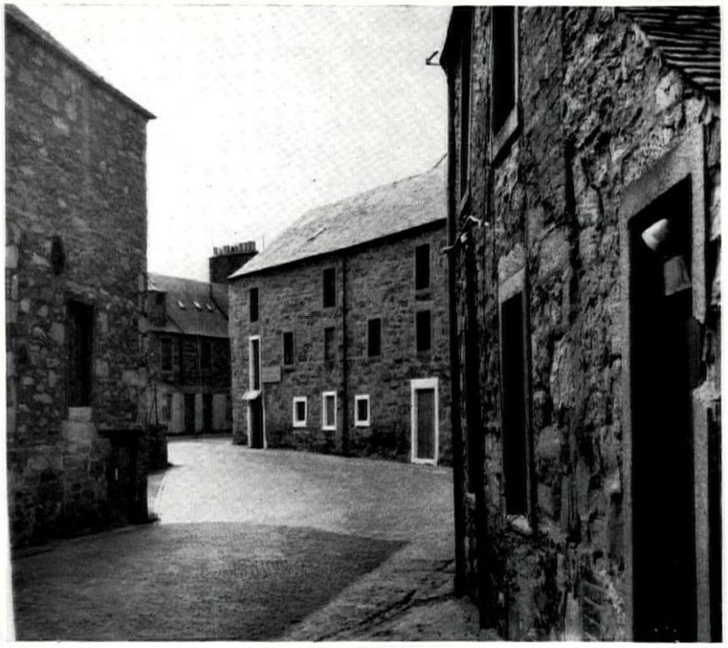
The City Mills at Perth, 1, owned by the council, seem to be in danger of just such a fate, even though this unique eighteenth-century group is listed under the provisions of the Town and Country Planning (Scotland) Act of 1947 in the highest classification of buildings of special historic and architectural interest. The slated roofs and stone walls are still in good order but lack of interior maintenance is causing deterioration of the timber columns and floors, a process speeded up by moisture penetration through several sashless windows.

Grouped in a cobbled court around the Town Lade the three-storey buildings, with machinery still intact, were in operation as mills until some seven or eight years ago. Now they are partly used as a grain store and part disused.

The Upper Mill, of three-storey rubble walling, is U-shaped in plan. The south part has a notable, possibly unique, king-post roof, 2, constructed with radial struts, and is reminiscent of shipwrights' construction methods. Two undershot water wheels with timber transmission columns supply power to all floors, and the gearboxes and millstones are intact. The west part dates from 1774, and the south and east parts were complete by 1792.

The Lower Mill, in which the machinery and 16 ft. diameter water wheel are in particularly good condition, dates in its present form, from 1805 to 1808, probably incorporating earlier parts.

On paper this unique group, which so neatly frames the spire of St. Paul's church, 3, is preserved through being listed. But local opinion seems to be that the council's present plans for redeveloping the surrounding area envisage their demolition; hence the neglect. This would be a pity, for with Perth priding itself on being the Gateway to the Highlands and attracting thousands of tourists each year, the Mills, which are conveniently situated in the central area, could well take on a new lease of life. For instance they would convert into a most attractive craft centre and industrial museum. But action is necessary now while they are still in reasonable repair. K.B.



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3

1, the City Mills at Perth, which are threatened by demolition. 2, king-post roof in the Upper Mill. 3, the Mills with St. Paul's church beyond.

PROPAGATING MORRIS

The William Morris Society, which celebrated ten years of work at a meeting on December 7 at the Central School of Arts and Crafts, has much to show for its existence, in two directions in particular: in making itself a central point of reference for inquiries about Morris (the indefatigable secretary, R. C. H. Briggs, being the far from faceless 'spokesman') and in publishing lectures, a journal and other pamphlets about Morris in forms of appropriately high quality. Members now have a sizable shelf full of such literature. For the future the society has much to undertake, besides conventional evangelism and recruitment: scholarly re-appraisal by visits and lectures of the frequently inaccessible work of the Morris Movement (not just Morris—he would have been the first to recommend others of the Movement); re-publication of the many important literary and political works now out of print (Longman's stock was destroyed in the blitz); and, last but not least, the reconsideration of Morris's relevance to the present day. His ideas, frequently misunderstood, have possibly suffered from too easy acceptance by the immediate post-war generation of architects and historians.

By appropriate coincidence, one of the handsomest of all visual evocations of Morris has recently been published, in the September issue of the Swiss magazine *Du Atlantis*. It includes articles by the editors, Martin Hürlimann and Willy Rotzler, and reprints from Sir Kenneth Clark and Barbara Morris. Its importance, however, lies in the superb full-page illustrations, exceptionally well chosen and including work by Mackintosh and Voysey as well as cartoons by Burne-Jones and Walter Crane. William Morris Society members can obtain it from the Secretary, 25 Lawn Crescent, Kew, Surrey; others can apply to Barmerlea Book Sales Ltd., 10 Bayley Street, London, WC1.

ARCHITECTURE EAST MIDLANDS

It is surely a healthy sign that a number of new regional architectural journals escape from parochial, village pump gossip and show an active dissatisfaction with the way things are going. The latest, *Architecture East Midlands*,* is frankly based on its lively forerunner *Northern Architect*. It is none the worse for that, and contents and presentation (typography by Trevor Burt) have so far maintained a very high standard indeed. The aim, according to the editor, Robert Cullen, is to avoid the usual 'pat on the back' type of magazine and to illustrate only

* Sponsored by the Nottingham, Derby and Lincoln and the Leicester and Rutland societies of architects.

good work; not to attempt to compete with the national magazines but to concentrate on regional problems.

Architecture East Midlands is seen as a propaganda instrument to stimulate the demand for better buildings and planning in its region. The region certainly needs it, for D. H. Lawrence's description of the Nottingham area as 'a great scabble of ugly pettiness over the face of the land' is still pretty near the mark. In the issues so far published punches have not been pulled. There seems to be a real searching for standards here and never mind whose vanity gets hurt.

The first issue contained an open letter to the town clerk of Nottingham, copies of which readers were invited to sign, demanding a proper plan for the city and a high quality staff to go with it. The present planning methods, which ring familiar, are summed up as follows. 'Planning by stealth is the declared policy of the city engineer; don't tell anybody you have a plan, work the proposals through the committees in bits and pieces and Bingo—in five or ten years time Nottingham will have a complete inner ring road.' Other subjects tackled include a revaluation of CLASP (on home ground here), the Smigielski plan for Leicester and town studies of Lincoln and Grantham. The latter show once again the dire results of a failure by architects and planners to appreciate the context in which they are building.

The latest issue, No. 5, deals exclusively with the village, first tracing diagrammatically the evolution of human settlements, then presenting portraits of various villages in the region. Their origins and characteristics are described and also the particular threats and problems they face today.

SCOTT'S OTHER ALBERT

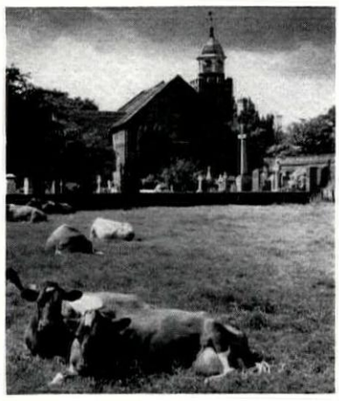
The accompanying photographs furnish an unexpected footnote to Peter Ferriday's centenary celebration of Sir Gilbert Scott's Albert Memorial (AR, June, 1964). Last year was the centenary of Scott's *other* Albert Memorial, 4—the little-known gravestone in Petersham churchyard, Surrey, to his own third son, Albert Henry, who died in 1865 aged 21 as an undergraduate of Exeter College, where his father had designed so splendid a chapel. The Scotts were then living in a Georgian house at Ham nearby. Perhaps if Albert Henry had survived, he would have become an architect like his two brothers, George Gilbert and John Oldrid.

The grave, 4, lies in a secluded corner, not far from the delightful Georgian church, 5 (which Scott cannot have liked), and next to the much-visited grave of Capt. George Vancouver. It is a hefty chunk of greenish granite, excellently lettered and with incised tendrils ornamented on the sides and on the top, where there is a foliated cross. There are globules of semi-precious stone at points of emphasis. N.T.

DO-IT-YOURSELF PLAYGROUND

The impromptu children's playground at Notting Hill Gate, illustrated in the July, 1965, AR under the above title, has now been given a permanent site. This is at the corner of Telford Road and Worthington Road, just off Portobello Road, Notting Hill, and contains, besides the adventure play area on the lines already illustrated (and shown on the left in 6), a pavilion (centre of picture), an 'under fives' area (right) and a ball-game area (background). The architects are Michell and Partners.

The pavilion is for use in winter and bad weather and during the evenings, and has a playroom, a quiet room and a kitchen. Its flat roof is part of the play area and has different levels and a turret. It is reached only by step-ladder. The material excavated in building the pavilion has been used to make an embankment along one side of the adventure play area.



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4, *gravestone designed by Sir Gilbert Scott for his son Albert Henry, situated in Petersham churchyard*, 5.

4

6, *the do-it-yourself playground on its permanent site in Notting Hill.*

LEICESTER SCIENCE PRECINCT

We are asked to point out that the reference in AR, January, 1966, Preview issue to the new building now going up in the science precinct at Leicester University as being the work of a firm of industrial package-dealers was incorrect. The architect of the building is Mr. W. F. Johnson, chief architect, Courtaulds Technical Services Ltd; the quantity surveyors, Monk and Dunstone.

correspondence

EKISTICS

To the Editors.

SIRS: Lord Llewelyn-Davies's article in your December issue indicates very clearly the scale of thought and action which is necessary in order to understand and tackle the problems now facing us. The need for multi-disciplinary groups thinking on so large a scale spotlights two vital deficiencies in our current way of doing things, one administrative and the other educational.

The administrative problem, which is largely generated by the current state of professional education, concerns our almost complete lack of ability or willingness to promote multi-disciplinary studies on an appropriate scale. Professional hierarchies have developed in such a way as to make collaboration well-nigh impossible. Large government bodies, which could find both the manpower and the money, are divided vertically under chief officers, and proposals for collaboration seem to raise insurmountable problems of status, secondment, finance, responsibility, accommodation, etc. It is impossble to know which of these problems is 'real.' It could be argued that large government bodies are not the place to do such work, but, because much of the money for it comes from government sources, these traditional concepts have the same effect when applications for support are being considered.

The question that must be asked is: How well fitted is the architect to play his part in multi-disciplinary collaboration? In many schools of architecture the direction of the course is still towards complete buildings and cities rather than complete minds. A kind of technical 'know-how' is taught which rapidly gets out of date, and no attempt is made to create a framework of knowledge into which the basis of technology fits along with the bases of many other subjects. Several schools are introducing subjects such as statistics or management, with lecture courses either grafted on to, or in place of, other lectures. These lectures run parallel with the production of intuitive designs in the studio, where students begin by applying what general knowledge they may have to small precise subjects and later apply a deeper knowledge, largely intuitively, to more general subjects. It is only rarely suggested that abstract forms of planning should be mastered (together with other disciplines) before an attempt is made to 'design.' Yet in other disciplines in which the idea of design is involved, such an order would be assumed. The purely visual emphasis given by the majority of architectural schools blinds the student to the fact that design, or form-determination, can be equally concerned with non-visual aspects, e.g. legislation, cost, supply, distribution.

Because of this highly subjective approach, the architectural student designs buildings without the ability to consider objectively all the non-visual and abstract questions of how the community affects his building and how the building affects the community. The student would do better by starting with the consideration of general problems generally, and later considering more precise problems more precisely, an overall knowledge of the likely interacting factors making for greater objectivity. Having said this, I am tempted to wonder whether architectural education is not back-to-front. It might well be better to teach 'planning' (for want of a better word) from which those wishing to practise its architectural aspects could proceed to do so at post-graduate level.

Yours, etc.,

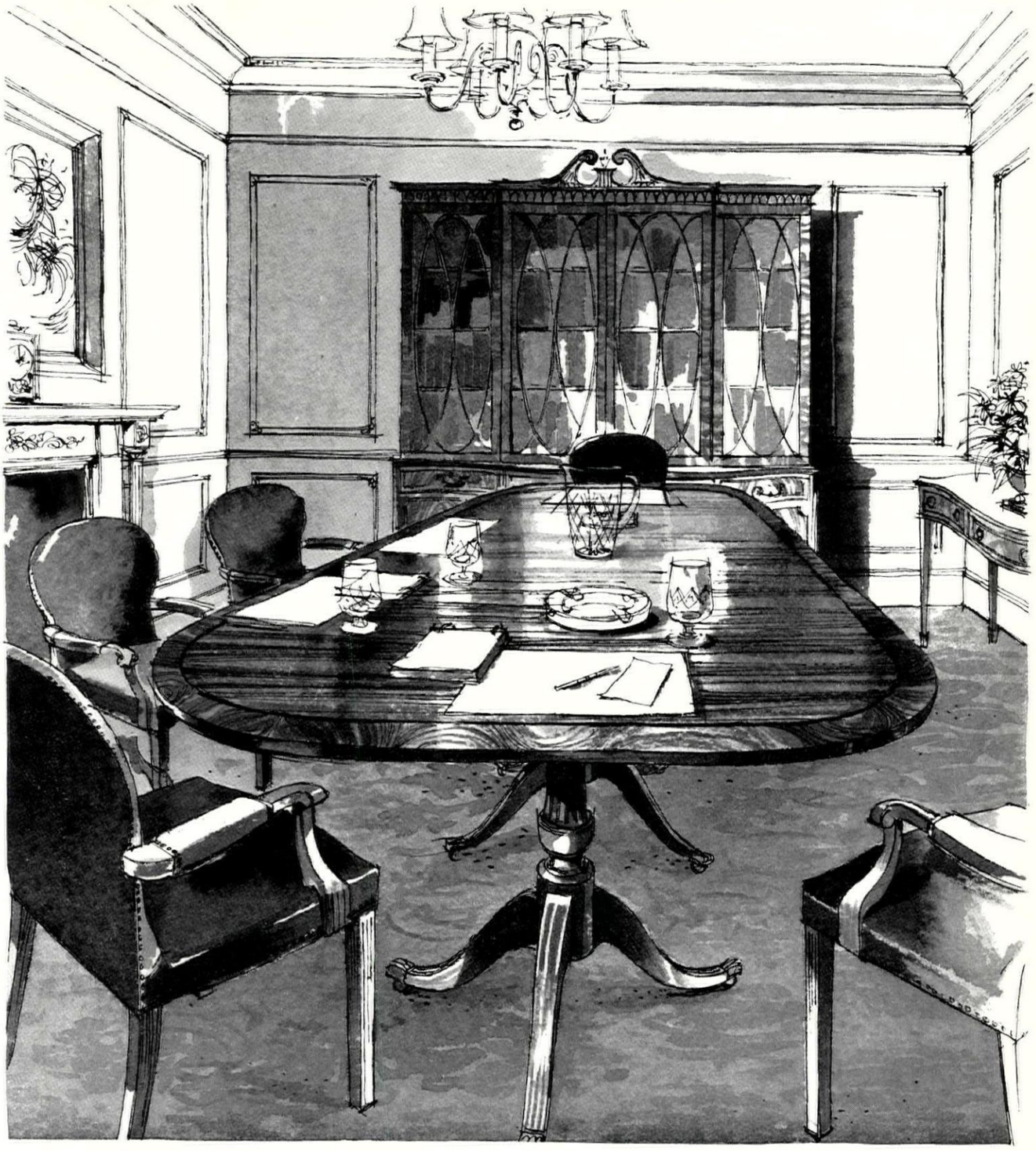
RAYMOND MOSS

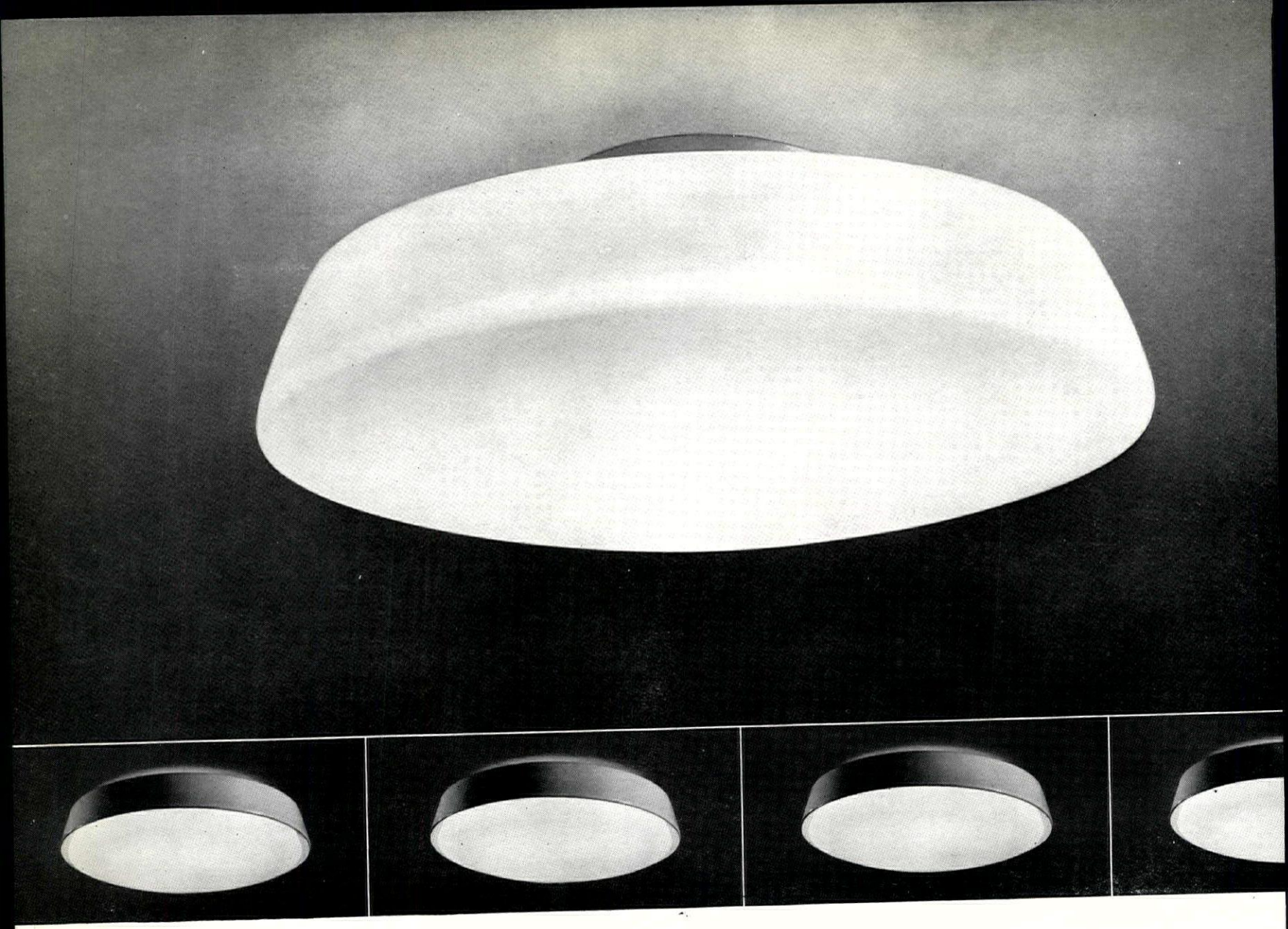
Southend-on-Sea.

GREEK NEWSLETTER

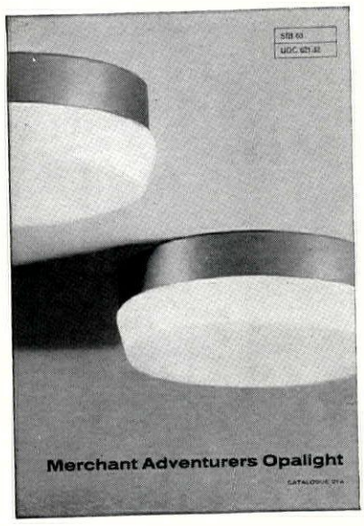
To the Editors.

SIRS: I cannot help feeling a little disappointed over Marina and Robert





Elegant 1550 series ceiling units from Opalight catalogue 21A



Opalight 21A

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Adams's article under the above title in your November issue. Although I agree with many of its points, I strongly object to the run-down of Greek architects in general by the rash and sweeping statement that, having always been affected by the country's rich architectural tradition, they are encouraged to simulate classical forms in modern buildings, such as the planetarium in Syngrou Avenue illustrated in the article. Of the many hundreds of buildings that have gone up in Greece during the past ten years, this is almost unique, a special exception.

Yours, etc.,

E. D. VASSILIADIS

Athens.

Mr. and Mrs. Adams write that they cannot agree since they have seen numerous such examples in Greece.

NO FUTURE IN THE TOWN HALL

To the Editors.

SIRS: May I make some belated comments about the article under the above title in your October, 1965, issue? By the time I had worked in two City Architects' Departments and for the National Coal Board, I was ready to leave Britain for some years. That was 1954. Much more recently, good friends from architecture-school days have finally left the town hall for the most precarious small practices, with audible sighs of relief. None of us is particularly vain or particularly lacking in social consciousness; rather the opposite, but to have one's own working hours, freedom from the institutionalized tea or coffee break and all the rest of the NALGO atmosphere, is worth a lot.

What you say about research, and continuity of knowledge and experience, is very true and raises an interesting question. Wouldn't it be well to recognize the ego-involvement and bohemian predilections of many bright designers and seek a system that would give maximum advantage to all types? Why couldn't there be, around a city hall, any number of small offices in lofts, attics, private apartments; two or three-man practices in the best Italian manner, working all night and sleeping all morning if they so desired? Others with steadier habits, or even these same prima-donnas for a few hours each week, could work in the City, or in a National subsidized bureau, at all that side of 'environmental design' that needs a selfless and 'objective' attitude—collecting data of various kinds, doing studies of 'court-housing' or homes for the elderly, or structural systems. The 'act of architecture,' the integration of all this information, with its necessary attitudes and agonizing, should take place in the setting most conducive to it, which is probably not among all the other municipal clerks.

That invaluable hero-figure Le Corbusier is a marvellous model for the rational separation of activities. Painter in the morning—how enviably unprofessional!—architect in the afternoon—where did he find such colleagues?—he acted out in one life the integration that our society needs. We were most hypocritical when we praised Corb so much and waited breathless for his next building without acknowledging the connection between it and his painting and his wood sculpture and his theoretical writings, and perhaps even his poetry. A Le Corbusier adjusted to the delicate personnel-relations of some City Architect's Department, even heading one, could not have existed.

Yours, etc.,

JOHN KENYON

City Planning Dept.,
Oakland, California.

REDEVELOPMENT IN KENSINGTON

To the Editors.

SIRS: In your January Preview issue, in which you illustrate the comprehensive redevelopment of Lancaster Road, Kensington, by Clifford Wearden and Associates, you criticize the layout, in your introduction, as being 'perhaps over-formal,' particularizing that 'the double herringbone terraces seen guaranteed to disrupt the consistent and harmonious curves of the Victorian housing towards Ladbroke Grove.'

This Victorian crescent layout is surely in itself highly formalized and, like all crescents, poses the problem of how to integrate the 'back' of the curve with other developments. The whole of the design was based upon a pattern imposed by the surroundings. In principle these surroundings form three separate elements: the LCC Latimer Road development to the north-west of the Metropolitan Railway viaduct; the strong axis formed by fairly recent buildings along Clarendon Road; and the crescents that you mention. The herringbone pattern was a logical development of the axes of these three elements, and as used does in its essential framework follow the lines of the crescents whilst at the same time terminating them and allowing them to develop into another spatial form, which is more compatible with the rest of the area both existing and proposed.

From the town planning point of view, it is perhaps a pity that the area between Blenheim Crescent and Cornwall Crescent was not included in the redevelopment area, since the principle of open space and gardens between houses, evident in the other crescents, has been here abandoned.

Yours, etc.,

PETER DEAKINS

London, SW5.

book reviews

MODERN MECCA

CHICAGO'S FAMOUS BUILDINGS. *Edited by Arthur Siegel. University of Chicago Press. $2.95 (hard cover).*

They are mending the roof of the Robie House, the city's official magazine (*Chicago*, quarterly) had virtually a special issue on architecture last summer, every picture-postcard you buy shows the twin towers of Marina City, a new edition of Harriet Monroe's *John Wellborn Root* is in course of preparation—Chicago is beginning to adjust, at last, to her role as the only *berühmte Architekturstadt* in North America. The adjustment is still uncertain, the architectural outlook less than one hundred per cent rosy—the Robie House Committee still need a vast amount more money; Ira Bach, the city-planning commissioner and front man of the Landmarks Commission, has been kicked upstairs to a position of apparent impotence, and if you ask any six intelligent citizens to direct you to the new Federal Center, five will direct you to the New Civic Center (and vice versa).

But the progress is real, and Arthur Siegel's pocket guide (also available in paper-back) is here to prove it, not only by listing some ninety odd buildings of architectural interest, but also by the backing it was able to muster: private munificence from the Graham Foundation, a municipal subvention on the recommendation of Mayor Richard E. Daley, and a battery of introductory essays from Ira Bach, Hugh Duncan and Carl Condit. After all that, it had to be a substantial piece of scholarship informed by a serious approach to its topic, and if one makes one or two sharpish criticisms of the result, it is for failing to live up to the last millimetre of this high promise (and to the high quality of the excellent photographs).

The guide's most infuriating fault derives, fairly directly, from its distinguished backers. The Chicago of the title is strictly and narrowly Mayor Daley's city, and this is not the whole of the architectural Chicago that visitors go to see. Oak Park and River Forest being *just* outside the city's administrative boundaries, the bulk of Wright's Prairie houses miss inclusion in the book by margins as small as seven blocks (the Fricke house) while a couple of dozen more —*and* Unity Temple—are within thirty blocks of city limits, but not in this book. What Siegel is really offering then, is a guide to Condit's commercial Chicago—the areas and the eras covered by *The Rise of the Skyscraper* and *The Chicago Shool of Architecture*, from the beloved old water-tower to Walter Netsch's new campus on Halsted Street. Here its only serious fault is the inclusion of demolished buildings, always a problem in a city whose face is apt to change in the time a book is with the printers. Yet if buildings demolished as long ago as 1961, before the book was begun, can be included on no better grounds than that they constitute 'a good example of the standard reached in the best average practice,' then surely there are grounds for including some reference to a building demolished in 1930 that set a better than average standard which Chicago architects still have to sweat hard to match—Richardson's Marshall Field Store. There are buildings in this book that, though interesting enough, have far less presence in the Chicago scene than Richardson's vanished masterpiece, and could well yield their pages to a brief notice of Marshall Field in later editions.

And later editions there should—*must*—be. Whatever criticisms have been made, the book is already required reading for the Chicago visitor. It steers him not only towards the named, known masterpieces, but also the heroic oddities like the First Infantry Armory, and the quiet, easily overlooked minor pieces like Keck's neat little apartment block at 5551 South University. While it falls into the common error of regarding the Heller House as good architecture simply because it is by Frank Lloyd Wright, it keeps the flag flying for such neglected fragments as Elmslie's Edison shop, and remembers to include the 'Bird-cage' car-park on Wacker Drive. Marginal reservations aside, its hard core is the kind of architectural handbook Chicago deserves.

REYNER BANHAM

ENGLAND ALONE

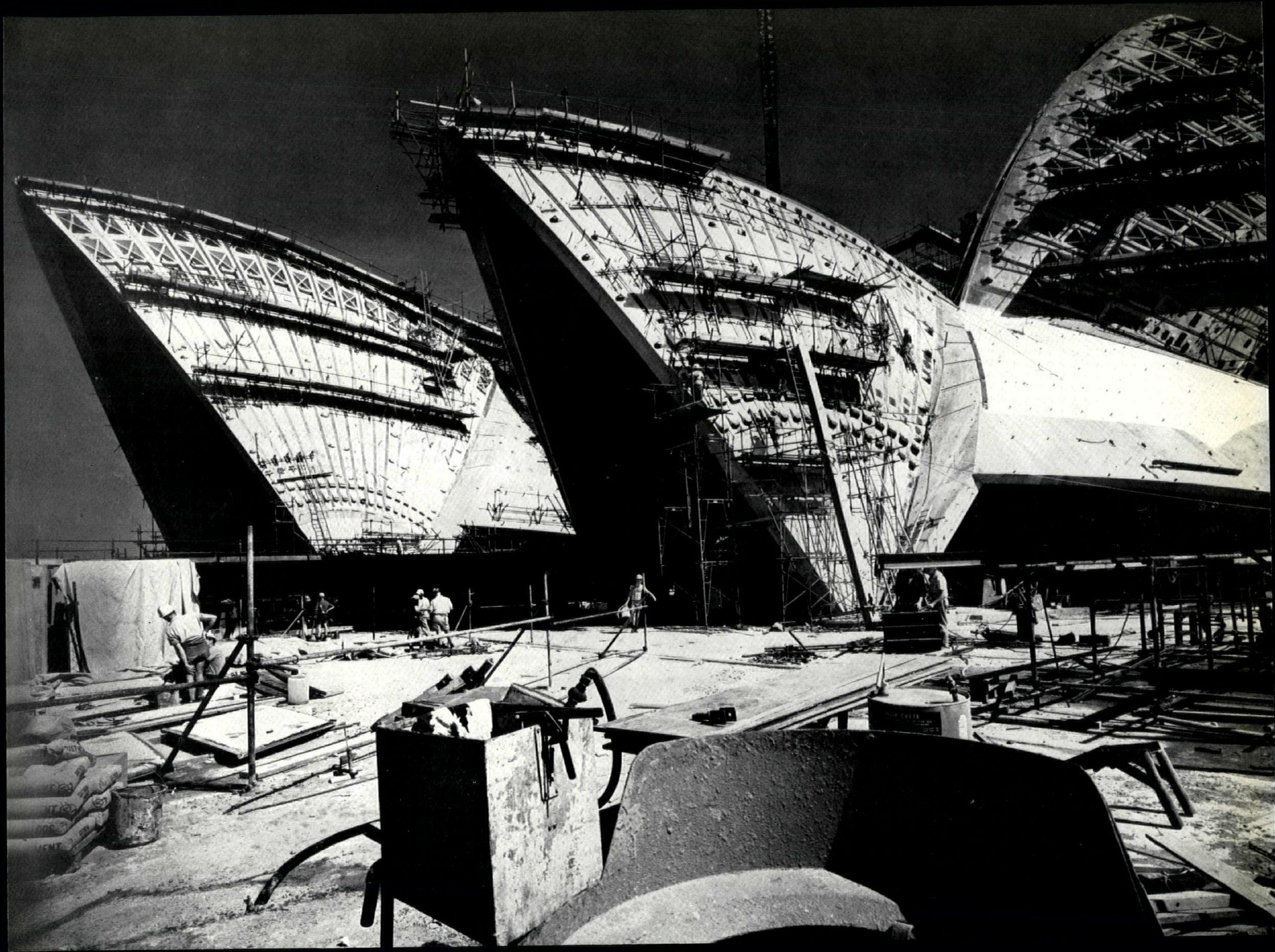
THE ENGLISH MEDIEVAL HOUSE. *By Margaret Wood. Phoenix House, 1965. 8 guineas.*

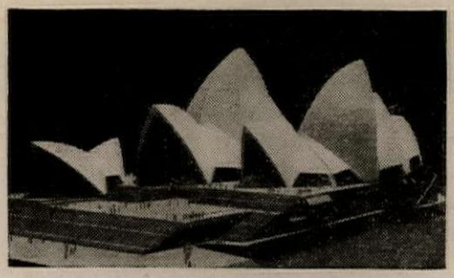
Dr. Margaret Wood (Mrs. Kaines-Thomas) produced her annotated catalogue of Norman domestic architecture in England in 1935. Since then she has worked exclusively on English medieval houses, and, as one might expect from the fruit of thirty years labours, her new book is comprehensive. One would even be ready to call it definitive, if it were not for one serious shortcoming: this is her disregard for the European setting. What Dr. Wood takes in of foreign houses is introduced frankly as second-hand. This is in contrast to, for example, Dr. Simpson at Aberdeen, who is as well versed in Continental castles as in Scottish or English. Yet how illuminating for halls would have been comparisons with Goslar or the archbishops' and bishops' halls in France.

Otherwise there can be nothing but praise for Dr. Wood's book. On over 400 pages and with nearly 450 illustrations she tells us everything about the medieval house: the plan, the individual rooms, screen, hearth, louvres, bathrooms and water supply, lavatories, and she gives a bibliographic reference to every one of the hundreds and hundreds of items mentioned. To convey an idea of the number of buildings involved Dr. Wood has *c.* 40 Norman and *c.* 100 thirteenth-century houses. She has evidently seen most of the buildings herself, although—like all of us—she has had to rely to a certain extent on what has been published. This explains, for instance, why she discusses several buildings in Westmorland, which has been covered by the Royal Commission, and only one in Cumberland, which is a county poor in literature. Thus the Deanery at Carlisle is missing.

Certain other buildings or features are, of course, also missing, but there are very few of them; for instance the Seats of Honour at Mayfield, Sussex, and the two consecutive halls at Pickering (twelfth and early fourteenth century). But who would wish yet more detail in a book so crammed full with detail already? '*Next in the scale comes the hall of* c. 1300 *at Broughton Castle which compares in size with Lytlington's Hall at Westminster* (c. 1375–6), *as Haddon Hall may be compared with that at Clevedon Court*, c. 1320. *The hall at Cumnor Place was similar to that at Sutton Courtenay Abbey*' and so on. This is a fair sample. A little more evocation would have helped the book. As it is, one will read it with respect and great profit and then keep it on the shelf for constant reference. It is—this should be remembered—the first serious replacement of Hudson Turner, and Hudson Turner came out in 1851.

N. PEVSNER





The long construction delays and continually increasing cost of the Sydney Opera House (competition won by Jorn Utzon in 1956) have made the architectural news from Australia for a number of years. The building is now at last, however, rapidly taking shape as the photograph opposite by Max Dupain, of two of the shells, shows. Above is the model of the whole building seen from the east, with the major hall on the left, the minor hall on the right and the restaurant shell in the left foreground. The engineer responsible for constructing the shells is Ove Arup.

WHOSE REDUNDANT CHURCHES?

It is an instructive paradox, worth pondering by Christians, that the man who by his theories and influence and by his foundation of the Society for the Protection of Ancient Buildings, did most to preserve the Church's heritage of ancient buildings, was a confirmed agnostic. William Morris's fervent belief that the stone and timber fabrics of parish churches expressed physically the whole life of ordinary people was only equalled by his hatred of the professionals who meddled with them. Churches, he implied, were far too serious a matter to be left to their clergy. Nowhere was this more true than in the treatment of those buildings which from the pastoral and liturgical points of view had become redundant.

Morris's disquiet is still relevant. The now fashionable iconoclasm of those church leaders who condemn church buildings as worldly trivialities has been matched by the loving cruelty of those (often the same people) who have bullied and battered them to fit their ephemeral fashions of outward performance (Peter Anson's *Fashions in Church Furnishings*, 1840–1940, gives a blow-by-blow account of this). The highly specialized concerns of theology, liturgy, history, aesthetics, surveying, finance and property development have usually been handled by the Churches (not just the Church of England) in a kind of portmanteau half-ignorance by officials such as Archdeacons and Diocesan Surveyors. Yet, at least on paper, the Church of England is at the present moment, in a little-known piece of legislation called the 'Pastoral Reorganization Measure,' making a fundamental attempt to remedy this. The Measure is the climax of many years of confusion and difficulty. In the Ancient Monuments Act of 1913, the first major piece of legislation which extended official care and protection to buildings as well as earthworks and which initiated the 'scheduling' of valuable examples by the then Ministry of Works, churches were excluded. Until an eloquent speech in the House of Lords, however, by the Archbishop of Canterbury, Dr. Randall Davidson, they had been included in the draft Bill because of a considerable public anxiety about the Church's stewardship of her buildings. There is just as great an anxiety fifty years later—although the reason is quite different. In 1913, the Church was still prosperous and relatively static in its pastoral organization, and the fears expressed were that the excessive zeal of Victorian 'restorations' might still be repeated. The Archbishop was able to point to the Church's own faculty system, of which the first recorded instance dates from 1236, as a means of giving or withholding permission for alterations to church fabrics, far older and more detailed than anything the State had yet provided. He promised the awakening conscience of 'Anti-Scrape' would be expressed within the Church, if left alone. So in 1914 a system of Diocesan Advisory Committees (DAC's), men and women appointed by each Bishop, was set up, the co-ordinating body, the Central Council for the Care of Churches, following in 1921. However, the Central Council's imposition of SPAB 'good taste' in the hangover from Victorianism had been adopted after the horse had bolted, after most of the major restorations. The council's particular expertise was in

the reclaiming of 'unrestored' redundant churches in the remote countryside.

But in fact throughout the 1920s and 1930s a much more serious problem was growing, in the fundamental transition away from the expansionist Victorian Church, which had resolutely built chapels-of-ease in the most remote rural hamlets and had peppered the Jewish areas of the East End with churches which were pastorally redundant almost from the moment that they were built. These East End churches had been a foretaste of future developments, being built from the proceeds of demolishing City churches by Wren. They in turn became redundant, as the working-class residential population itself moved out to the new suburban estates such as Becontree. But with a few notorious exceptions—the abortive scheme of 1920 for demolishing more City churches, the demolition of All Hallows, Lombard Street, and St. Paul's, Sheffield, in 1937—the Church of England remained hardly aware of the scale of social and demographic change.

The war changed everything. Redundant churches in city centres suffered very considerable damage, and from early in the war the more progressive administrators and pastoral experts realized that their opportunity had come. The old Union of Benefices Measure was replaced by the Reorganization Areas Measures (1944). Under this a reorganization committee was set up in each diocese to designate areas affected by bombing and to recommend to the Church Commissioners which churches in those areas should be closed, so that their sites could be sold to raise money for churches in new areas. Under the pressure of this work, the Diocesan Advisory Committee system in effect broke down. Its members were generally medievalists or Georgians, expert in dealing with the 8,800 medieval churches and the 520 Georgian churches. The churches affected by the bombing, however, were very largely to be found among 8,900 built since 1830. Apart from the occasional Betjeman or Piper or Hussey, the DAC's were devoid of expertise on Victorian churches. They were allowed to nominate only one member to represent them on each reorganization committee and, in spite of remonstrations from the Central Council, he turned out frequently to be an Archdeacon or some other diocesan dignitary who could hardly be expected to place aesthetic before administrative criteria.

In London matters were even worse: a special War Damage Repair Committee was set up entirely independent of the DAC. Pastorally, it was a great achievement. Architecturally, although the vast majority of the churches demolished were of little interest, there was much unnecessary carnage and a general failure to consider possible alternative uses; in the rush it was perhaps forgotten that medieval churches had frequently stood in ruins for centuries before changing fortunes overtook them (for example, Aldrington, Durrington and West Blatchington in the Brighton-Worthing area). Pearson's St. John's, Red Lion Square, with much of its vaulting intact, could have been a superb War Memorial ruin—a much more effective one than the uninteresting medieval church of Holy Cross, Southampton. Brooks's St. Saviour's, Hoxton, was not 'severely damaged' as the architectural histories say; a bit of roof had been burnt off at the east end and a good deal of rain had come through; it was demolished, apparently for 'party' reasons of Low versus High, in favour of the mean little church of St. Ann, which, unlike St. Saviour's, was badly placed pastorally, close to another (surviving) Brooks church. Equally bad were some of the emasculations performed by ecclesiastical architects with little sympathy for the ruins entrusted to them (perhaps the worst was not Anglican, but Roman Catholic—the treatment of Pugin's St. George's Cathedral, Southwark). South of the river George Gilbert Scott the Younger's St. Agnes, Kennington, was replaced by a brick tabernacle a third its size at just the time when the LCC's Brandon Estate began to rise behind it to give it a congregation. (Scott the Younger's other major London work, All Hallows, Southwark, was lost in a similar manner). However, Street's splendid adjoining church of St. John the Divine, Kennington, much worse damaged than St. Agnes, but beautifully restored by Goodhart-Rendel, stands as a witness of what could have been done elsewhere.

Such things continued in the 'fifties, with a series of well-publicized scandals: Holy Trinity, Leeds, of 1721, reprieved at the eleventh hour; Christ Church, Salford, a fine Greek Revival work of 1830 demolished; St. Mary, Sandwich, a fascinating relic of a great medieval church, saved by the first guerilla action of Ivor Bulmer-Thomas and his Friends of Friendless Churches. Under the Union of Benefices Measure, the Church Commissioners had to consult the Central Council on each case of demolition, but the council had no real authority. Yet the 1947 Town and Country Planning Act perpetuated the 1913 exemption from any planning control of 'buildings in ecclesiastical use.' Such things could not continue, particularly as the rising cost of restoring medieval churches was putting even the traditionally appreciated heritage in jeopardy—in spite of the foundation in 1952 of the Historic Churches Preservation Trust.

One of the few encouraging signs in the period since 1945 was the discovery of new uses for nearly a hundred redundant churches, ranging from George Pace's conversion of St. John's Ousebridge at York into the Institute for Advanced Architectural Studies, to the proposed Maritime Museum in St. George's, Great Yarmouth, to the conversion of St. Nicholas, Rochester, by David Nye and Partners into diocesan offices. Various of Wren's City churches were converted for specialized purposes. But these were a tiny minority. So the question has had to be faced: to whom are these churches redundant? The Church does not need them, and yet clearly the best of them are a national possession. Envious eyes have naturally been cast at the post-war renovation of churches by State monuments authorities in Italy and France. The Bishop of Norwich's Committee on Disused Churches recommended to the Church Assembly in 1949 that such buildings should be offered to the Ministry of Works for guardianship, if possible with a proviso that they could be reclaimed for worship later if necessary. The Ministry then made encouraging noises, but the Labour Government fell, and not until 1958 was action taken again with the appointment of the Bridges Commission.

As a result of three different reports the Pastoral Reorganization Measure is now painfully feeling its

way through the Church Assembly, who are likely to debate it decisively next summer. These reports, in reverse order, are: the Paul Report (1963) on the pay and deployment of the clergy, the architectural importance of which is simply that it recommends, by ending the parson's freehold, a radical redeployment of manpower, closing down many old churches and opening many new ones; the Ilford Report (1961) on pastoral reorganization legislation (the main report from the commission preparing the pastoral measure), which recommends the permanent adoption of the now disused war-time measures, setting up 'pastoral committees' who will take churches not singly but as part of reorganized areas; and, the most important architecturally, the Bridges Report (1960) on redundant churches. The actual procedure proposed in the Pastoral Measure is taken largely from Bridges.

The new system, when eventually it is passed (say, with luck, 1968), will have four clearly defined stages, with expert opinion properly consulted at each. First, the Diocesan Pastoral Committee will prepare its scheme for an area, consulting the DAC but concentrating primarily on pastoral needs. The Church Commissioners will then officially seal the scheme, before referring redundant churches to a new Redundant Churches Advisory Board, which will have the same prestige and calibre as the Minister of Housing's Advisory Committee on Historic Buildings. If the board says the church is worthless, demolition goes ahead. If the board says it has merit, then the third stage operates: a new Uses Committee, similar in calibre to the Ministry of Public Building and Works' bureau for historic houses, will have three years in which to consult all available organizations in order to find a possible new use for the building. This is a crucial step forward, even more important than the prestigious board, since it has been the Church's reluctance to see its buildings 'desecrated' (supposed to be a bad advertisement, though no Italian hill city bears this out) that has led to so many needless demolitions. If the Uses Committee fails to find a use, then the fourth stage is reached: in a few cases the building will be transferred direct to the guardianship of the Ministry of Public Building and Works, but usually it will be transferred to the third important new organization: the Redundant Churches Fund, which—another crucial advance in fixing responsibility—will be financed fifty-fifty by the Treasury and by the Church Commissioners (the latter largely from the sites of worthless redundant churches).

The doubts begin inevitably with the Treasury. The Bridges Commission, which gave a figure of 367 churches then redundant and 421 likely to become so within fifteen or twenty years, recommended a minimum of £500,000–£1,000,000 for the first five years' work. The Church asked the Treasury for half of £500,000, the Treasury agreed in 1963 to only £200,000—and that was just a provisional figure before the change of Government. The whole procedure also depends on the Church Commissioners resisting the temptation to sell highly profitable sites when the churches have good architecture. That this can at present happen even at DAC level is shown by the current unhappy case of All Saints, Dorchester. This is an admirable Early Victorian church by Benjamin Ferrey, and its spire is a vital part of the county town's central skyline, grouping with Ferrey's town hall spire and with the medieval tower of St. Peter's. The Dorset County Museum want to take over the church as an extra gallery, for which it would be very well suited; but the DAC, who already have outline planning permission for shops and offices and who want the money to supplement the public appeal for restoring St. Peter's, put up virtually impossible terms to the museum (high rent, short lease, full repairs). This is the kind of behaviour that the Uses Committee will be able to override. Another great Brooks church, St. Michael, Shoreditch, empty for two years, must be kept until the new system is working. Close liaison with the local authorities will be vital, over matters of townscape and group value as well as over new uses: Scott's spire of St. Nicholas, Colchester, was a tragic loss not long ago to one of southern England's few hill towns.

Two really serious problems will remain. The first is how actually to maintain empty disused churches of value, even when helped financially from the Redundant Churches Fund. The Central Council's sensible proposal is that there should be two categories of preservation: those first-class churches which would be kept meticulously like Ministry of Works monuments, and the second-class churches, many of them in remote rural areas, where a state of 'controlled decay' could be maintained. But the principal difficulty, in the countryside as well as in the towns, is supervision against the very rapidly increasing social disease of hooliganism—and insurance against it, judging by the recent candid statement from the Ecclesiastical Insurance Office on the increase in thefts (churches have lost much of their primitive taboo).

The second problem is that the churches of the Church of England are only part, although the most important part, of the total picture. There are the vicarages, which, according to a completely unexpected judgment by Lord Denning in 1963, come within the exemption from planning control of 'buildings in ecclesiastical use'—even though the building in that particular case was a Gower Street terrace house which had not been built as a vicarage. Does the same apply to church schools? Still more serious, there is the multitude of churches of the other denominations. The Roman Catholics, although centralized on Rome, are surprisingly diffuse within this Province, each Bishop and his Diocesan Development Commission (if he has one) being the sole law within his own area. Important Catholic churches badly need listing—and the Victorian Society has recently started on a pilot project in the Archdiocese of Westminster. As regards the Free Churches, the situation is, not surprisingly, one of complete freedom, only the Methodists having a highly organized central building agency (but this is not really concerned with preservation). There is a very strong case, as soon as the parliamentary timetable allows, for legislation to bring all churches and vicarages under planning control. The Central Council would like 'those under the faculty jurisdiction' (i.e. Anglican churches) to remain exempt, but even under the new system, there would be no harm to Anglicans in giving up being judge and jury in their own cases in exchange for the helpful Treasury grants.

ORNITHOLOGICAL RESEARCH BUILDING, SLIMBRIDGE

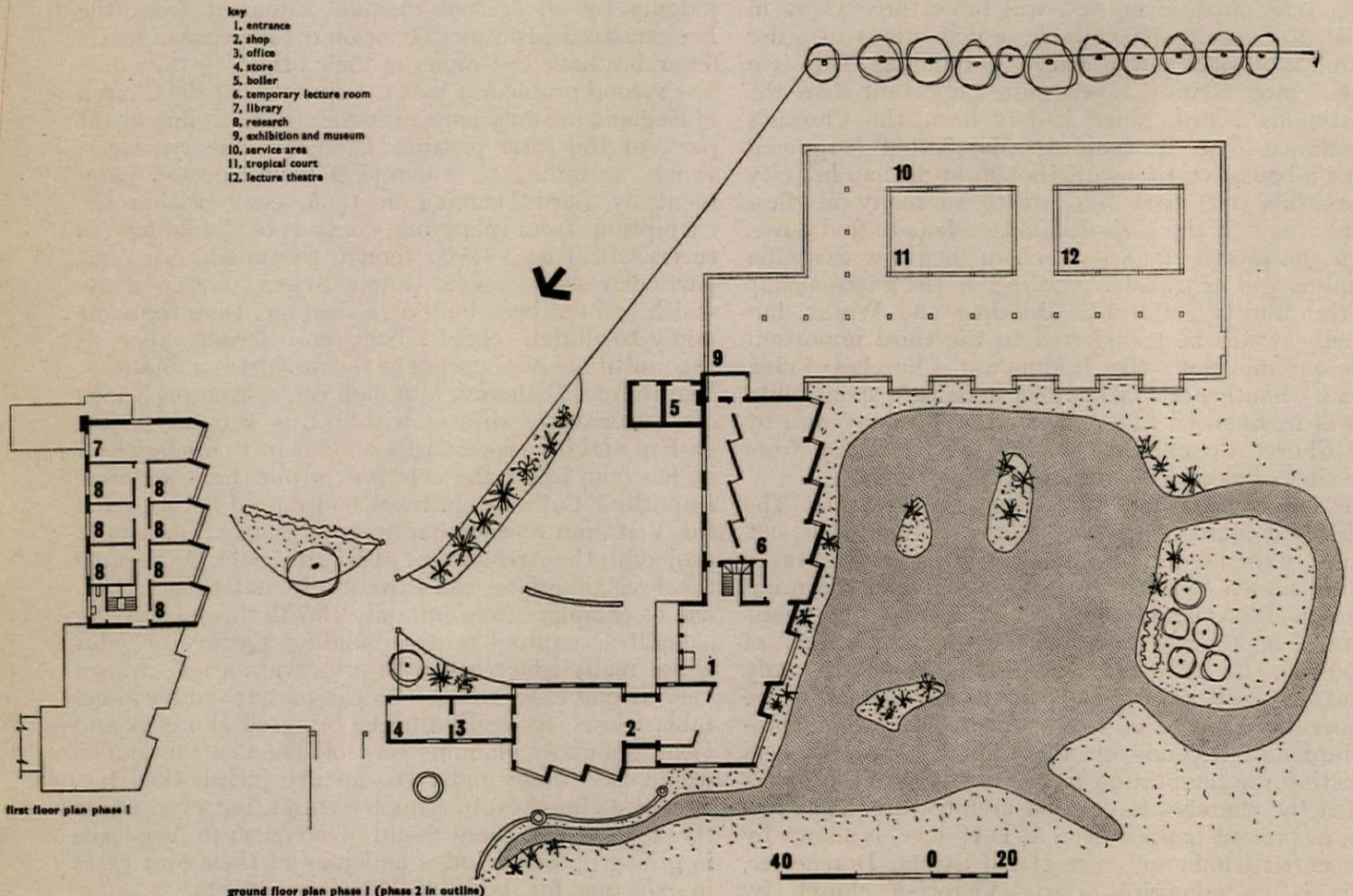
This building, which will be officially opened next month, forms the main entrance for all visitors to the grounds near Slimbridge of the Wildfowl Trust, a non-profit making organization founded in 1946 by Peter Scott in order to promote the scientific study of wildfowl in the wild state and in captivity, to propagate wildfowl in captivity—especially those species which are in danger of extinction—and to educate the public to a greater appreciation of wildfowl in particular and nature in general. The Trust's Slimbridge grounds reach down to the estuary of the Severn, which is the winter home of up to five thousand wild geese. At Slimbridge itself visitors can see the largest and most varied collection of ducks, geese and swans in the world, comprising over two thousand birds of more than 160 different kinds. The birds can come right up to the windows of this building.

The purpose of the building is to provide for the reception of visitors, facilities for resident and visiting scientists doing research work related to the collection of wildfowl, and museum, exhibition and lecture-room space. It has been sited so that approaching visitors are screened from any view of the grounds until they are inside the building, from the entrance hall of which there is a magnificent view through wide plate-glass windows of the ponds, the pens and the birds. These windows are angled to face the best of the view, the same angling being carried through the planning of the building.

Off one side of the entrance hall is a shop and off the other a hall (the Wolfson Hall) to be used temporarily for lectures and permanently for an exhibition, which deals with the work of the Trust and the arrangement and nature of the collection of wildfowl in the grounds. Visitors pass through the exhibition to reach the grounds; the exit is alongside the north wing, containing the shop, which has display windows facing this direction. On the first floor are seven individual research rooms and a small technical library. Beyond the exhibition hall and reaching across the south side of the ponds an extension (shown in the plan but at present only designed in sketch form) will be built at a later date to provide a permanent lecture theatre, further exhibition space, a museum and service space, with offices and further research rooms on the upper floor.

The building just completed is of load-bearing brick with London stock facings; these resemble in colour and texture the local bricks which were used for the Trust's earlier buildings but are no longer made. The cost of the building was considerably reduced by the generosity of the sub-contractors and suppliers (list on page 242) all of whom either gave materials or services, supplied them at reduced rates or contributed directly to the building fund.

Associate architect in charge, Francis Hookham. Consulting engineer, Peter Dann. Quantity surveyors, Davis, Belfield & Everest.



first floor plan phase 1

ground floor plan phase 1 (phase 2 in outline)

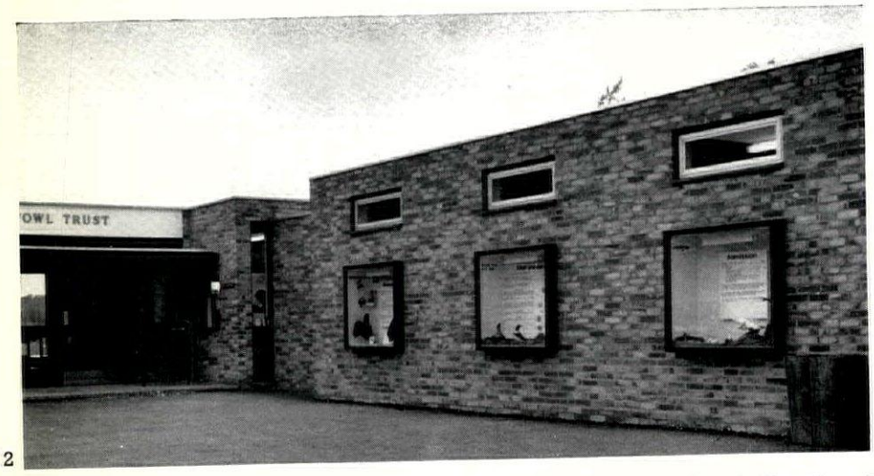
ORNITHOLOGICAL RESEARCH AND EXHIBITION BUILDING, SLIMBRIDGE, GLOUCESTERSHIRE

architect **PETER BICKNELL (OF HUGHES AND BICKNELL)**

photographs by H de Burgh Galwey

FOR THE WILDFOWL TRUST

1



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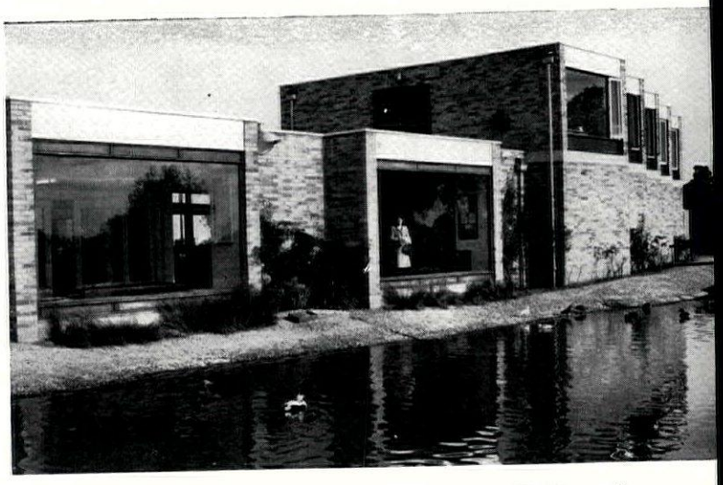
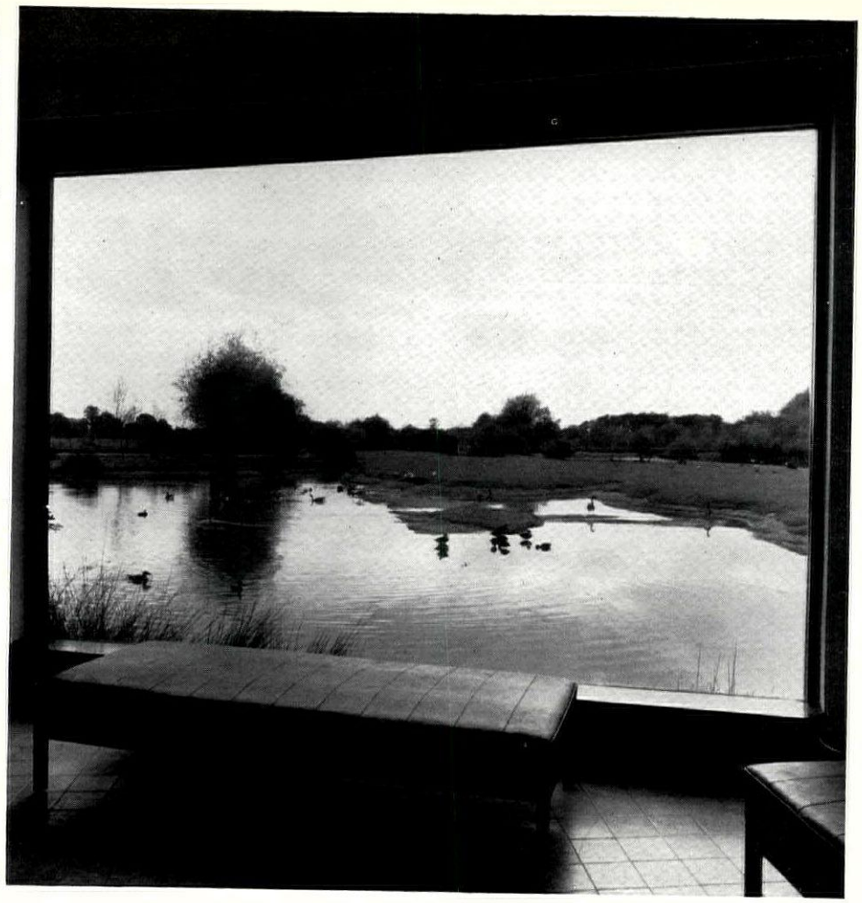


1 (page 179), the lecture room and research block seen from the site of the phase 2 building. 2, the back of the single-storey shop, with the exit from the grounds on the left. 3, from the north-west side of the lake with the entrance hall in the foreground. 4, the main block from the south.

4

ORNITHOLOGICAL RESEARCH BUILDING, SLIMBRIDGE



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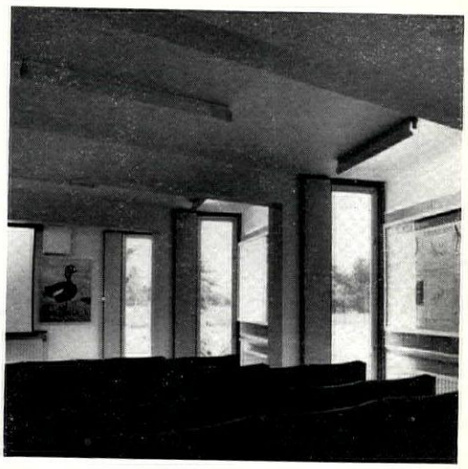

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5, the view of the lake from the entrance hall. 6, the staircase from the entrance hall to the first floor research rooms. 7, the ground floor temporary lecture room and exhibition area.

6

The monastery church at Moldovitsa, 1 *on the facing page, is one of the group of churches in northern Moldavia, described and illustrated in the accompanying article, which are unique in being completely covered externally with Byzantine-style paintings, executed for the most part early in the sixteenth century. The photograph shows the southern apse and buttresses. The paintings were done in* 1537.

J.M.Richards

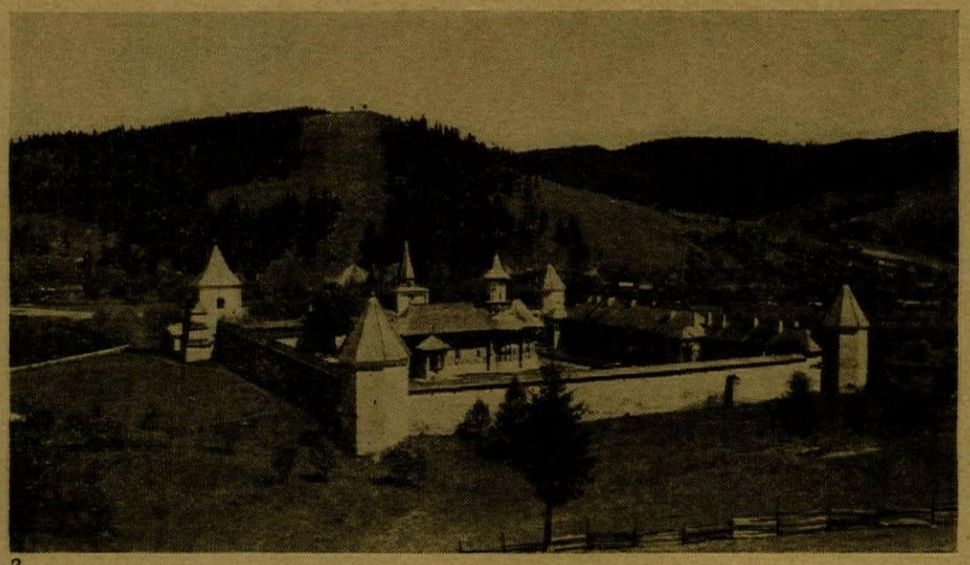
THE PAINTED CHURCHES OF MOLDAVIA

Hidden away in the Carpathian mountains, in that part of the Bukovina that still remains Roumanian—the northern part having been ceded to Russia during the second World War—are half-a-dozen remarkably well preserved medieval churches, unique in Europe on account of the paintings that cover their exterior walls from base to overhanging eaves and round the whole perimeter of each building.

The Bukovina was part of the Kingdom of Moldavia, a kingdom that resisted the invasion of the Turks until late in the sixteenth century, and these churches—some belonging to monasteries while others were simple village churches—were built and decorated only a short while before Turkish suzerainty was finally accepted. They date either from the reign of Stephen the Great (1431–1504), Moldavia's warrior-king, or from that of one of his immediate successors. The paintings are completely Byzantine in style and feeling, though carried out (mostly between 1535 and 1550) nearly a hundred years after the fall of Constantinople, so long did the disintegration of the Byzantine civilization, which followed the fall of Constantinople to the Turks in 1453, take to make itself felt in the remoter provinces.

This northern province of Roumania, now lying close along the Russian border, retains a sense of remoteness to this day. The country's present energetic programme of modernization is based on a policy of distributing new industries throughout the less developed areas, and this has turned Suceava, for example, the chief town of the region, into a thriving industrial city; yet in the mountain valleys the way of life, though not poverty-stricken, remains primitive and can have changed little in appearance since the Middle Ages. Much of the land is deep forest, still inhabited by wolves; the rest is open farmland folded among steep valleys, where ploughing is done by oxen (soon no doubt to be

THE PAINTED CHURCHES OF MOLDAVIA



2

superseded by tractors, omitting the intermediate or horse-drawn stage of development), where women work in the fields and where they and the men, clad in embroidered sheepskin jackets, populate a scene like a painting by Pieter Bruegel.

The churches are approached along rough unmade roads, sometimes impassable in winter when the snow lies thick on the ground. Those which were built simply as parish churches are naturally in inhabited valleys, but several belonged to remotely sited monasteries. The latter were fortified, with the church isolated in the centre of a square of stone buildings, facing inwards and entered by a single protected gateway. They are usually sited at the junction of three valleys, and the surrounding landscape of forested hills is strikingly beautiful. The enclosed squares are grassed, and in this predominantly green and white setting—the green contributed by the level grass and a back-cloth of trees and the white by stone walls and perhaps patches of new fallen snow—the coloured churches stand up strangely, like rich, exotic objects of furniture.

The churches, like all the Byzantine churches of the region, are high and narrow with apsidal ends. They have shingle-covered roofs, in most cases crowned by a cupola, with broad overhanging eaves. Inside they are divided—again like all Byzantine (that is, Greek Orthodox) churches—into three compartments: the sanctuary, the naos separated from it by a screen, and the pronaos, walled off except, usually, for a narrow door. The services in the naos are attended by men only, women not being allowed further in than the pronaos.

At two of the monasteries, Sucevitsa and Moldovitsa, the whole group of buildings is fairly intact, though only because of the extensive restorations that have been carried out in the last few years. This has been done, by the Government department in Bucharest responsible for conserving historic buildings, with restraint as well as expert scholarship. It is particularly to be welcomed that in the case of the churches themselves the only restoration undertaken is structural repair and maintenance; no attempt is made to retouch the paintings even where they have become blurred and faded on the side exposed to the weather.

There were originally many monasteries in the region, most of which survived under the Turks, but when the Bukovina became part of the Austrian Empire in 1775, Joseph II closed all but seven of them. Some were reopened after the territory was restored to Roumania in 1918, and the two mentioned above that possess well preserved exterior paintings, Sucevitsa and Moldovitsa, are still in use as convents, with fifteen or twenty nuns in residence in the vast rambling buildings. They will not however remain so for long, since no young nuns are being admitted and the religious population will gradually die off. At Gura Humorului there are only the ruins of the surrounding monastic buildings, and here and elsewhere the church functions as a parish church, under the care of a priest. This, and the churches that began simply as parish churches, are in active use and near one of them, that at Voronets, a new village church of timber is being built nearby so that the old one need no longer be used for services and candle-smoke blacken the interior paintings. These, though darkened by centuries of smoke from candles and braziers, are reasonably well preserved. What is astonishing is the state of preservation of the exterior wall-paintings after four hundred years' exposure. Their colours are strong and clear and the detail of the paintings beautifully sharp. They are to a great degree protected from the wet by the wide overhang of the timber-lined eaves, and only on the weather side, facing the prevailing wind, and on the walls of projecting porches, are there areas where the colours have faded and in some places the paintings almost wholly worn away.

The paintings continue round window openings and over buttresses and apses, ignoring, and playing strange perspective tricks with, the geometrical form of the building. Where they curve away into the angles they create the effect of an enormous open illuminated book. For the most part they divide the wall surface into small rectangular compartments, each group of compartments containing a related series of scenes or figures. The arrangement and the themes depicted vary from church to church, but in every case the eastern apse (there are sometimes also apses on the north and south) has its own subject treated in a broader and more monumental way—a Last Judgment, perhaps, or a representation of the Ladder of Paradise or of the damned tumbling into Hell. Throughout there is a strange array of pagan motifs and personalities woven in among the religious: signs of the zodiac, portraits of the Greek philosophers (at both Sucevitsa and Moldovitsa) and so on. At Moldovitsa also there is a vigorous representation on the south wall of Constantinople besieged by the Persians.

The remarkable preservation of the paintings can be attributed in part to the careful technique employed.* The paintings were done on a plaster base, made with the addition of flax or hemp. The pigments were vegetable or mineral (earth-colours), using ox-gall as a binder, laid on to a preparation of powdered charcoal —made from limewood—which prevented too great a reaction between paint and plaster. The actual medium was egg-yolk. A limited range of colours was used, mostly the same colours that were used locally for dyeing woollen cloth: red from the madder plant, blue from indigo and so on. There were also the ochres and other

(*continued on page* 191

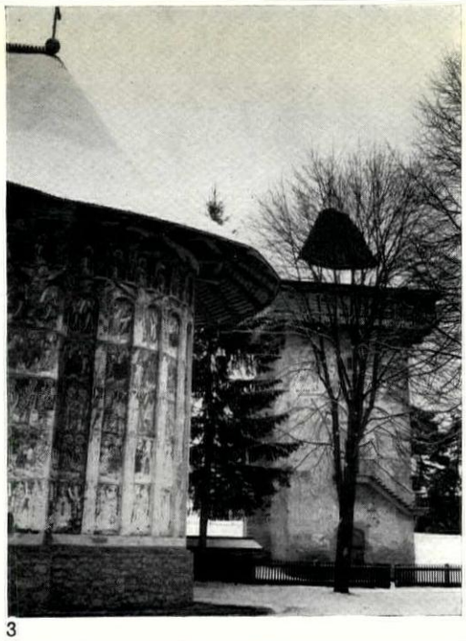
* This information about technique is given by Georges Oprescu in his introduction to the Unesco publication, *Rumania: Painted Churches of Moldavia.* (New York and Paris, 1963.)

Sucevitsa

2 (*facing page*), *the church in its typical position in the centre of the square courtyard formed by the defensive walls of the monastery and its buildings.*

Gura Humorului

3, *the apsidal east end of the church on the left; the free-standing bell tower beyond.* 4, *looking through the narthex, showing the typical widely projecting eaves and the way the wall paintings are carried round and within the arcade and over its vaulted ceiling.* 5, *part of the south wall with the open narthex at the west end. The paintings were done in* 1535.



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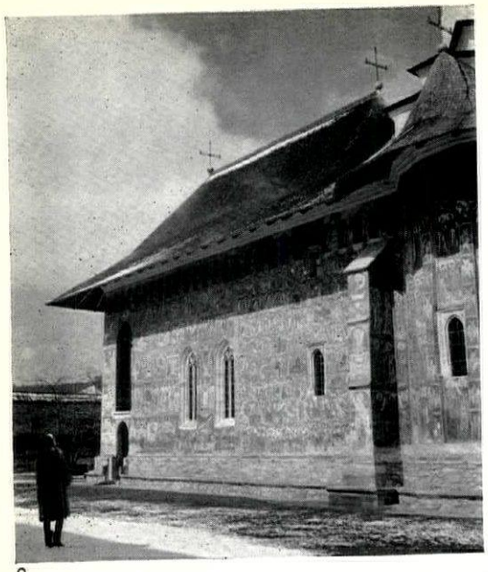

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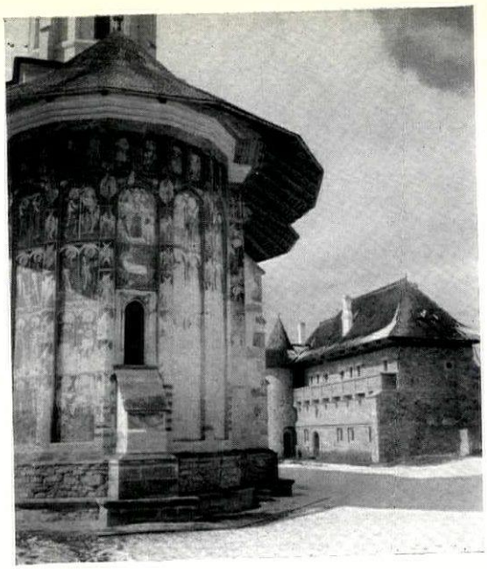

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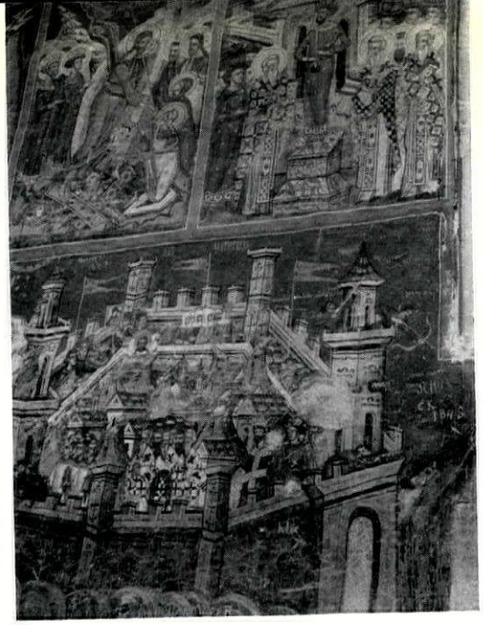


8

9

Moldovitsa

6, *from the south (the paintings were done in* 1537). 7, *the east end of the church with some of the restored monastery buildings in the background.* 8, *detail of part of the south wall, alongside the narthex, with a painting representing the siege of Constantinople by the Persians in the seventh century. It can be dated by the weapons and costumes. Portrayed among the besieged are the Emperor, the Empress and the Patriarch.* 9, *the west end of the church with its double arcaded narthex.* 10, *looking into the entrance, which is through the narthex, with one of the nuns who still occupy the monastic buildings.* 11, *detail of the south-western corner of the narthex. Another view of Moldovitsa is on page* 182.

Arbore

The church was under repair (see 23, *page* 191) *when these photographs were taken.* 12 *is a close-up of paintings on the south wall of the church done in* 1541. *The condition of the window-surround indicates the need for the structural repairs being carried out.*

10

11

12

13

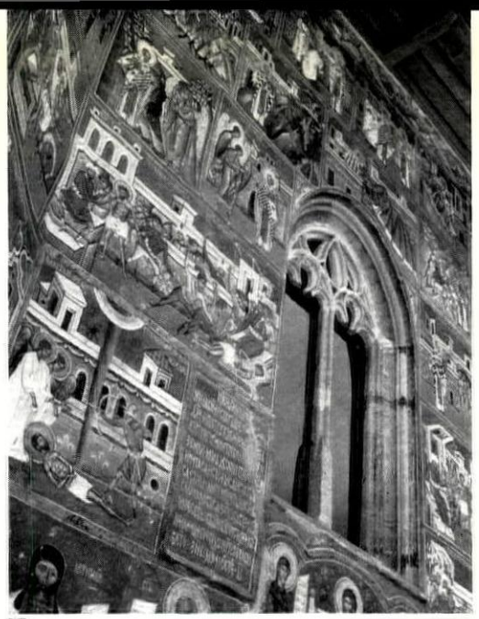
14

Voronets

13, *a Tree of Jesse occupies the major part of the south wall—on the left in this picture.* 14, *the windowless west end, occupied by one vast painting on the subject of the Last Judgement. This picture also shows the detached bell-tower.* 15, *close-up of part of the Last Judgement on the west wall and flanking buttresses.*

15

16

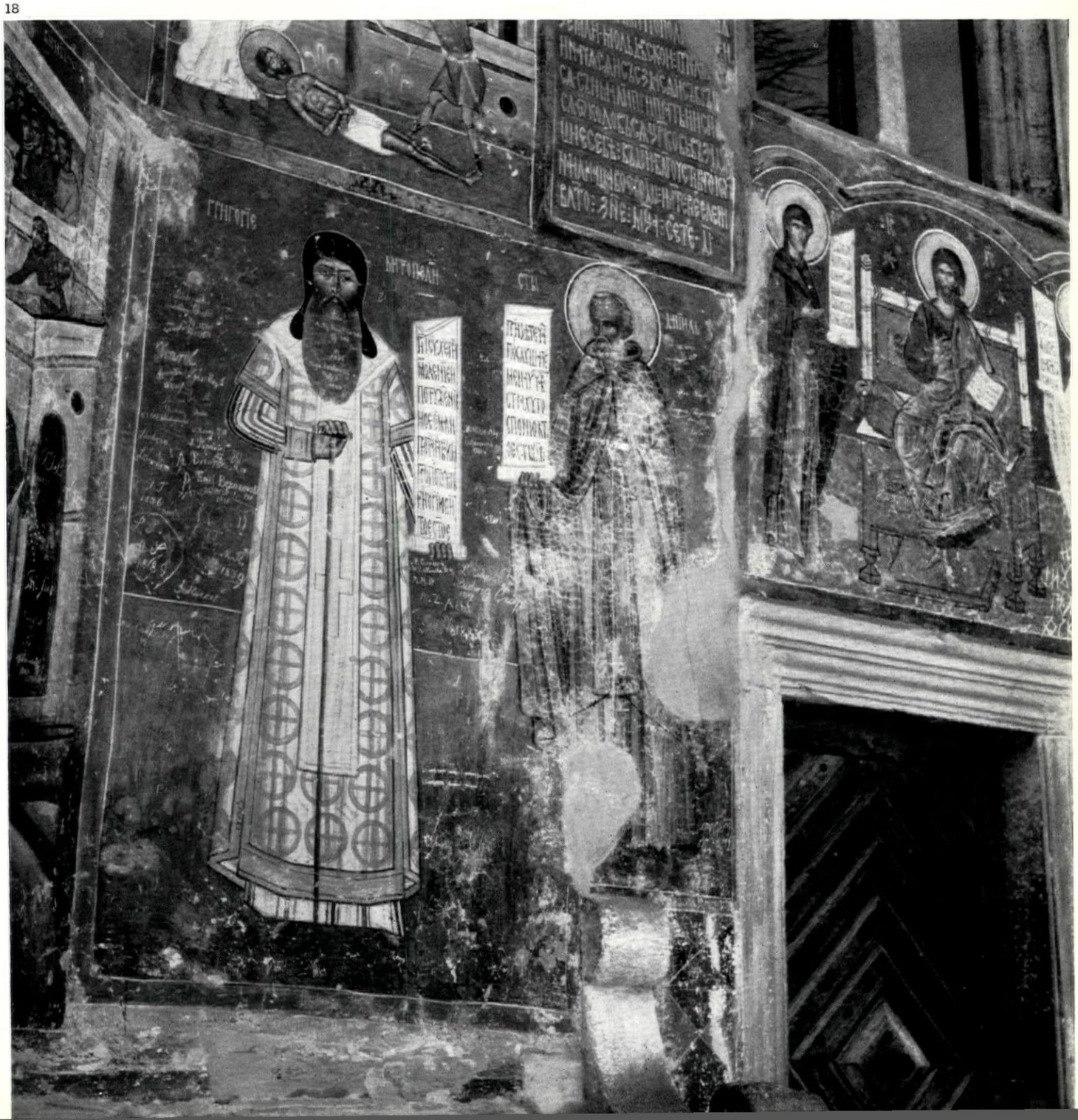


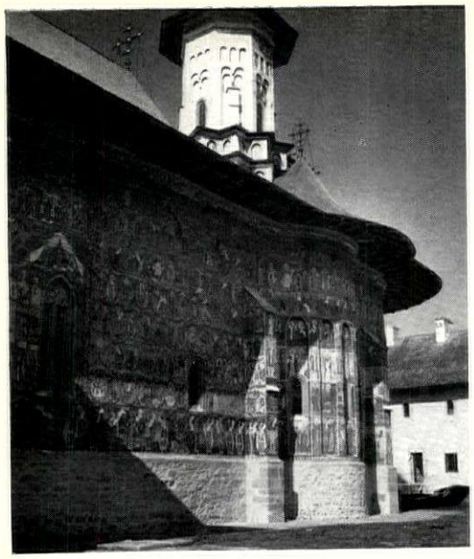
17

Voronets

16, *the south side of the church, with the small door leading direct into the pronaos. On the right of it, the Tree of Jesse (see also* 13*); on the left the paintings shown in close-up in* 17 *and* 18. 17, *detail of part of the south wall. The scene to the left of the window depicts the Tartars flaying St. John of Suceava—an event that is supposed to have occurred in the thirteenth century in the Crimea. The square panels above show two scenes from the life of St. Nicholas.* 18, *portrait beside the south door of the Metropolitan Gregore Rosca, by whose order the paintings were done in* 1547.

18





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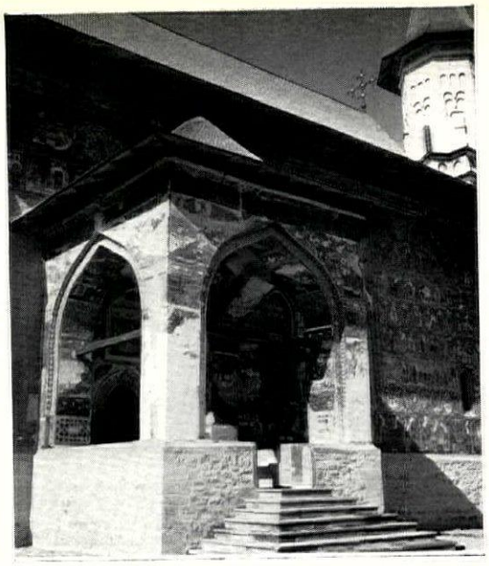

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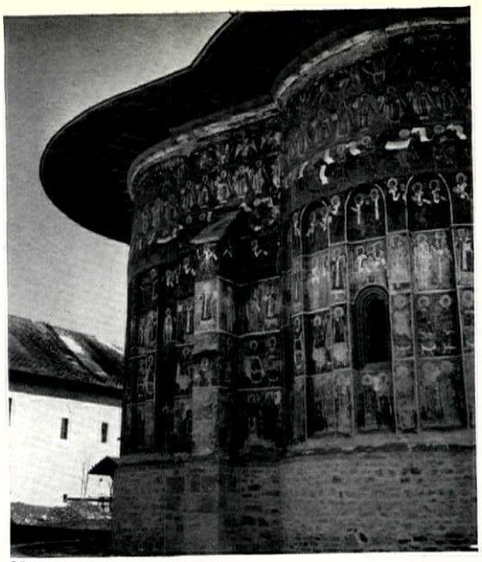


21

22

Sucevitsa
Another church in the centre of a fortified monastery, some of whose buildings can be seen in the background of 19 (*see also* 2 *on page* 184). *The exterior paintings were done as late as* 1602–1604. 20, *the south proch.* 21, *the apsidal east end.* 22, *close-up of the paintings seen in* 21, *covering apses, window recesses and buttresses, showing the subdivision into ikon-like panels.*

Arbore
23, *a parish, not a monastic, church, under repair. On the left is a free-standing bell-tower.*

23

THE PAINTED CHURCHES OF MOLDAVIA

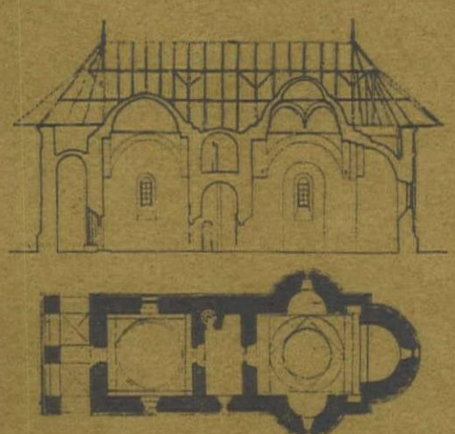
(*continued from page* 184)

earth colours and green from chromium oxide, and although gold was sometimes used, more often it was replaced, no doubt because of the expense, by a greenish-yellow pigment extracted from unripe wheat grains. Before painting began, the subject was roughed out on the plaster with a brush or a brick-red line.

The number of churches must at one time have been very great. There are said to have been as many as forty parish churches alone,* painted in this way, and it is an indication, if the figure is correct, of the relatively undisturbed state of the country under Stephen the Great, that in spite of the pressure of the Turkish invasion not far away, the work could go forward in so many places without the protection of monastery walls.

Fourteen churches exist today with some remnant of exterior wall paintings, of which nine have the paintings as remarkably well preserved as the photographs accompanying this article show. Five of the best preserved are illustrated here, though one of them (Arbore) only partially because it was under repair and covered with scaffolding when the author visited and photographed it. A brief account of the five churches, in the order in which they were painted externally, follows.

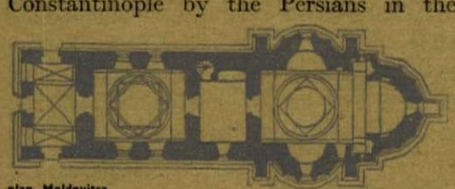
Gura Humorului: This was one of the monastery churches, but only ruins are left of the surrounding monastic buildings. It was built about 1530 by a *boyar*, Tudor Bubuiog, who was Great Logothete (or chancellor of the kingdom) during the reign of Petru Rares, an illegitimate son of Stephen the Great and the country's last powerful king. He reigned from 1527–46 and after him the Moldavian princes became gradually subservient to the Turkish sultan. His portrait is one of the figures in the exterior paintings. These were done in 1435. In this church alone the paintings inside were done in the same year—possibly, therefore, by the same artists; generally the interior paintings are earlier. The church has the usual



section and plan, Gura Humorului

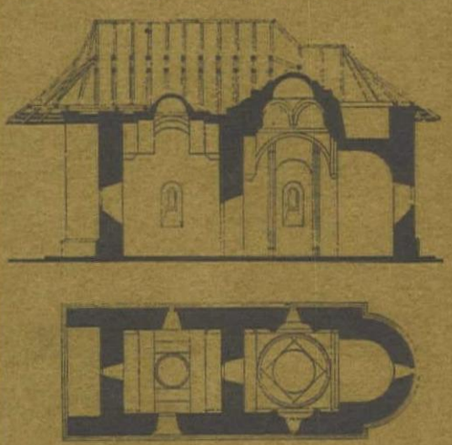
triple apse and an open narthex at the west end. North-east of the church is a free-standing bell-tower.

Moldovitsa: This again was a monastery, but here the range of monastic buildings is largely complete, though fairly thoroughly restored. It was built in 1532 on the orders of Petru Rares, and the exterior painting was done in 1537. The plan of the church is similar to that of Humorului; here too there is an open narthex but it has a two-storey arcade. The two side apses are flanked by buttresses, and the small central window of the eastern apse has a buttress below it. The paintings include, on the south side, a Tree of Jesse, on the same side further west a portrayal of the siege of Constantinople by the Persians in the seventh century and on the west front a Last Judgment.



plan, Moldovitsa

Arbore: This was a village church and was built in 1502 by Luca Arbore, Governor of Suceava and at the time commander-in-chief of the Moldavian army. The exterior paintings were done in 1541 and only in this case is the name of the painter chiefly responsible known—Dragos. The church stands in a green close, which is entered through the archway of a bell-tower at the north-west corner. Its outline is very simple, with no projecting buttresses and a plain semi-circular apse to the sanctuary. There is no porch, the pronaos being entered direct from north and south. There is no cupola either. This is the church that was under restoration when visited; the exterior paintings are in less good condition than in the other four churches shown here, except for those on the west wall, depicting the lives of various saints, which have been protected from the weather by the depth of the recess.



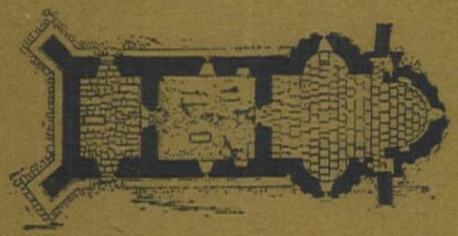
section and plan, Arbore

Voronets: This is one of the best of the churches, in a superb situation near the top of a broad wooded valley. It was built in 1488 by Stephen the Great, but the paintings were not done until 1547,

* According to Donald Craik and Ruth Churchill: 'Byzantine Frescoes in the Bucowina.' AR, June, 1939.

THE PAINTED CHURCHES OF MOLDAVIA

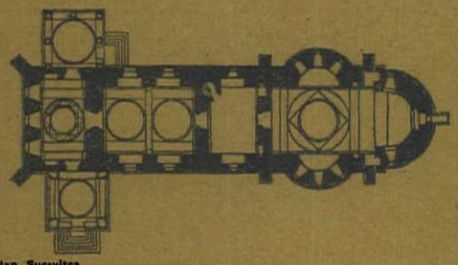
by order of the Metropolitan Grigore Rosca, who also added a narthex. His portrait is among the paintings to the left of the south door. The church has a stone seat along the outer wall, formed as part of the stone base. The pronaos is again entered from north and south direct from the outside. The apse has one small central window and the naos is square and is flanked by shallower apses with their own small windows—see plan. The



plan, Voronets

exterior paintings include, occupying the whole south side of the naos wall, an elaborate Tree of Jesse. The whole of the broad western end, which is without windows—together with the two corner buttresses—is occupied by a magnificent Last Judgment.

Sucevitsa: This is the latest in date of the churches with painted walls. It was built in 1584 by Bishop George Movilescu, a member of one of Moldavia's ruling families, and painted between 1602 and



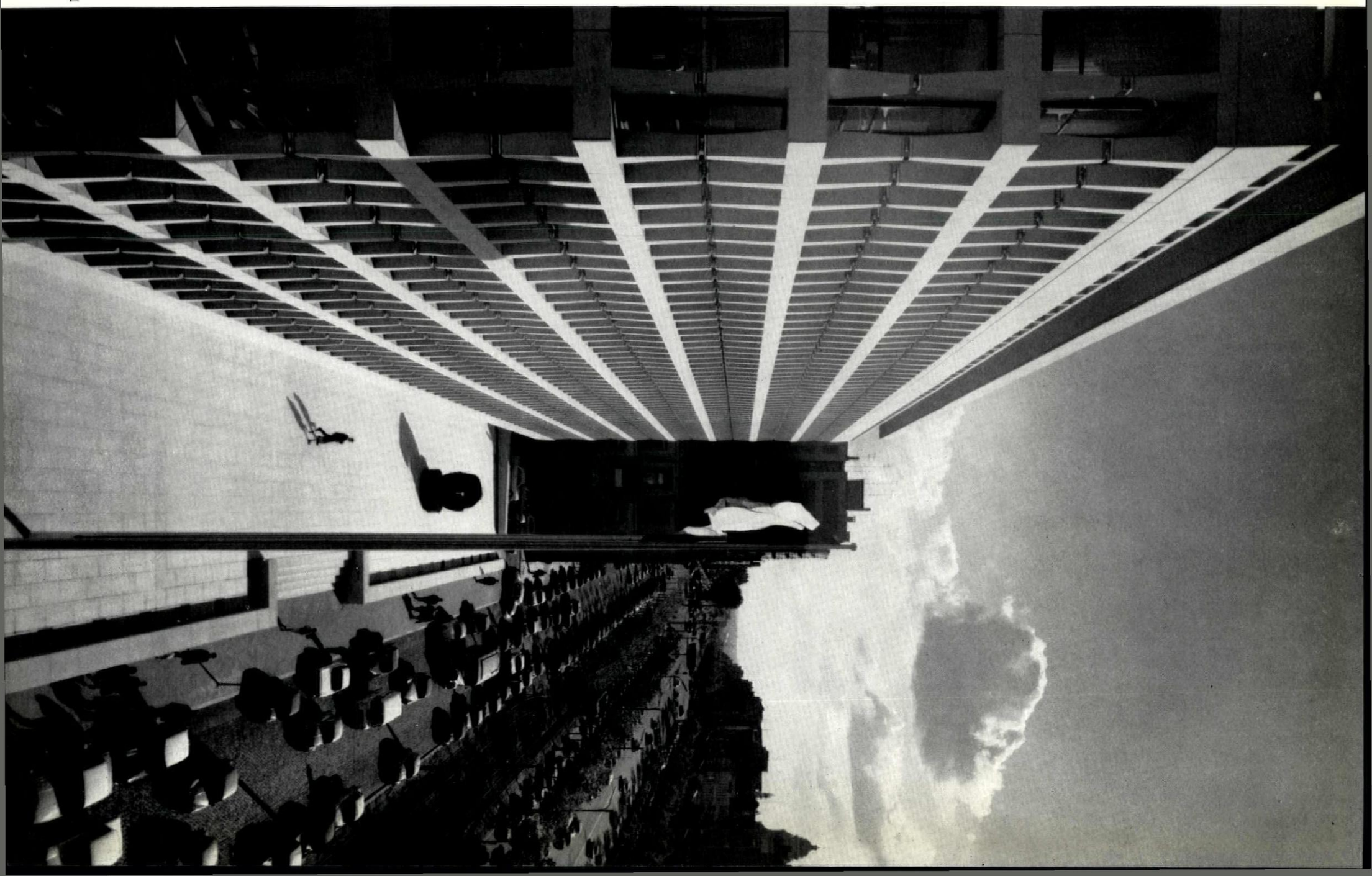
plan, Sucevitsa

1604. It has a fairly elaborate plan with a triple apse, a small rectangular naos, a large pronaos of two compartments and, at the west end, a narthex entered through porches from the north and south. It was a monastery church and is one of those with its monastic buildings remaining and in occupation, although restored. The whole of the north wall is covered by one painted composition on the subject of the Ladder of Paradise, an invention of the sixth-century theologian, St. John Climacus, consisting of a ladder of thirty rungs, each representing a different sin, up which the souls of Christians are seen climbing on their way to Paradise and, if they are guilty of sin, being hurled off the ladder by one of the black-skinned demons who wait on every rung. At the top of the wall is a choir of angels welcoming those who climb the ladder without mishap. The apsidal end of the church has seven rows of religious scenes and figures, each in its own aedicule, with something therefore of the appearance of a collection of ikons.

The origin of this wholly localized practice of painting the exterior walls of a church is a matter for speculation. Since Byzantine churches were normally painted (or decorated with mosaics) inside, one suggestion, made by André Grabar*, is that a source of the idea may have been the paintings in the porches and open galleries in some medieval Byzantine churches, in Greece, Serbia and Bulgaria. Such paintings were visible from the outside and to spread them over the whole outside of the building may be regarded as a logical next step. Whether their origin was something like this or whether it was a spontaneous local development, the results represent a unique and startling, as well as a beautiful, late chapter in Byzantine art history; and since the Moldavian churches were built as well as painted many years after the fall of Constantinople they can best be defined as posthumous offspring of the Byzantine civilization.

* In his preface to *Rumania: The Painted Churches of Moldavia*, Unesco (op. cit.).

BANQUE LAMBERT, BRUSSELS | *architects* **SKIDMORE, OWINGS AND MERRILL** | *photographs by Ezra Stoller Associates*

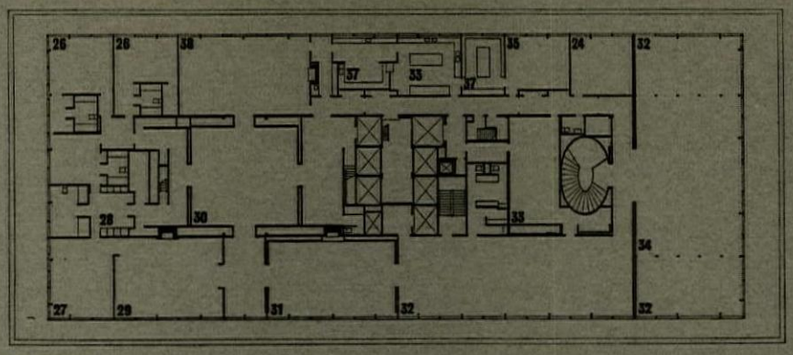


2

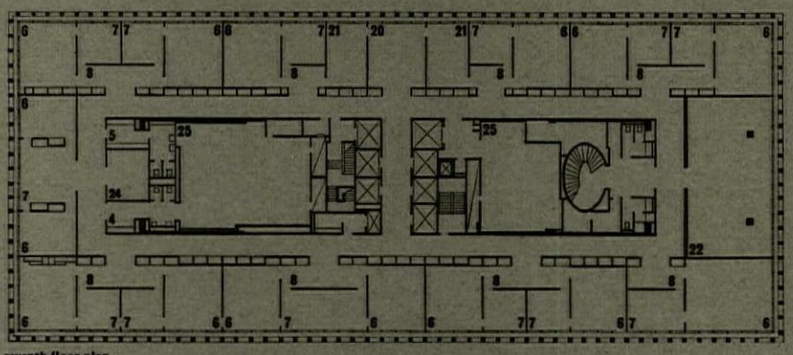
1 (preceding page), looking along the facade of the building; Avenue Marnix is on the right. 2, rear (east) elevation. 3, main elevation from the boulevard.

BANQUE LAMBERT, BRUSSELS

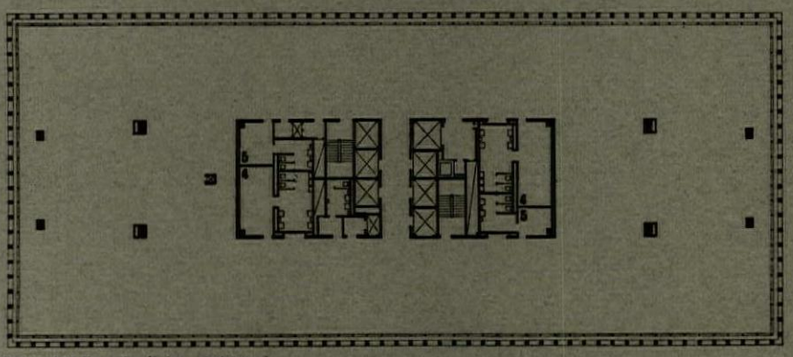
3



penthouse plan



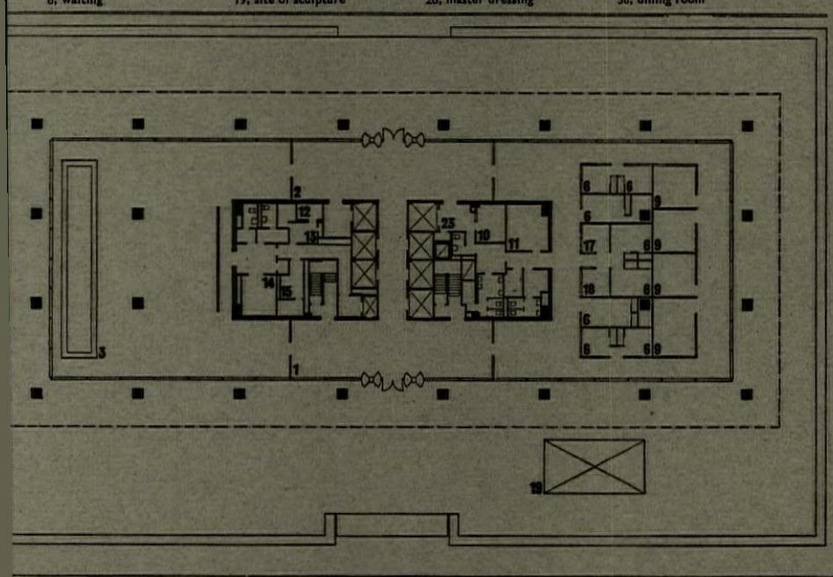
seventh floor plan



first to sixth floor plan (before subdivisions)

key

1. west lobby
2. east lobby
3. banking hall
4. men's lockers
5. women's lockers
6. office
7. secretary
8. waiting
9. director
10. watch guard
11. archives and storage
12. vertical conveyor room
13. mail room
14. conference room
15. janitor's closet
17. 18. parlour
19. site of sculpture
20. reception
21. conference
22. board room
23. porter
24. storage
25. fan room
26. guest bedroom
27. master bedroom
28. master dressing
29. library
30. entrance hall
31. drawing room
32. directors' dining
33. kitchen
34. ballroom
35. servants' living
37. pantry
38. dining room



ground floor plan

0 10 20 40 80

The building occupies a whole block fronting on to the Avenue Marnix, which is part of the inner ring of boulevards surrounding the centre of Brussels.

The requirements were for flexibly planned office space for the headquarters of the bank and its associated companies, together with staff cafeteria, etc., a main banking hall, vaults and safe-deposits, parking space and residential accommodation for the Baron Lambert.

The whole of the glass-enclosed ground floor is allocated to entrance foyers and banking halls. Above this are seven identical office floors, each with two parallel corridors on either side of a central service core and lift-hall, with the office space between corridors and window walls laid out on a 5 ft. module in each direction. This module determines the spacing of structural units and window mullions; also of the lighting units, which include fluorescent lights recessed into an acoustic tile ceiling. Movable partitions can subdivide the space as needed.

Private offices and secretarial space occupy the two long sides of the building and open-type general offices the spaces at either end.

On the top floor is the penthouse flat of the Baron Lambert, designed to accommodate also his important collection of modern paintings and sculpture. Below ground are two basements containing the vaults and safe-deposits, staff cafeteria, lounge and kitchens and a parking garage for 120 cars. The entrance to the garage, and for vans serving the building, is through a single-storey structure to the east of the main block, reached from a side street. Nearby is a private car entrance for the penthouse and banking hall and, screened by a wall, parking space for 25-30 cars. The building stands on a slightly raised paved platform extended in front to form a forecourt containing a large bronze sculpture by Henry Moore.

The reinforced concrete structure consists of interior columns along the line of the walls of the central core and precast storey-height units forming the facades, spaced at the modular interval of 5ft., outside the glass wall. These facade units are cross shaped, with the horizontal member acting as a spandrel beam to receive the floor slab (for which they acted as formwork during construction) and the vertical member transmitting the perimeter floor-loads directly downwards. Where the units join half-way between floors the load is transmitted through a polished steel ball-and-socket hinge joint, which is cast into the unit. These facade units have an exposed aggregrate of marble chips, polished after casting. They begin at first floor level, where there is a deep cantilevered concrete slab which transmits the perimeter loads to columns placed 15ft. back from the facade. The penthouse roof structure is cantilevered from the interior columns.

The ground-floor banking halls, occupied basements and penthouse flat are fully air-conditioned. Heating of the office floors is by fin-type radiators along the window wall below a 2ft. cill, supplemented by warmed air in the perimeter office space supplied from a duct in the corridor ceilings. Hopper-type windows open in every module of the window wall, with fresh air induced by an exhaust plenum in the same corridor duct.

Partner in charge of design, Gordon Bunshaft. Project manager, Frederick C. Gans. Design assistant, Whitson M. Overcash. Structural engineer, Paul Weidlinger. Mechanical engineers, Syska and Hennessy.

criticism

This is a highly significant building because is was the first of a series, similar in style and structure, that has changed the image evoked by the letters SOM from one of meticulously detailed Miesian glass curtain-walling to one of sculpturally modelled reinforced concrete units with neoclassical overtones. Though only completed last year, the Banque Lambert was designed in 1958 and was followed by the Rare Book Library at Yale University and the Heinz building at Hayes (England)—both further developments of the same idea; an idea which has been pursued simultaneously in other English buildings. Examples are Philip Dowson's buildings for Somerville College, Oxford and Corpus, Cambridge (AR, February 1965).

The origin of SOM's abrupt adoption of this new style can suitably be given in the architects' own (1959) words: 'While structural steel is used almost universally in the United States for office buildings, it was felt that, due to the relatively high cost of such a structure in Belgium, a reinforced concrete frame would be more appropriate. The architects also felt that the precision of a metal and glass facade is appropriate for expressing a steel framed building but inappropriate as an expression of a concrete structure. In addition a metal and glass facade would seem out of place in Brussels among the stone and brick-faced buildings which give the city a rather unified appearance. With this in mind, and recalling also the scale of the existing buildings along the boulevard, the architects, with Paul Weidlinger as consulting engineer, developed a precast reinforced concrete structural unit to be placed at modular intervals . . . around the periphery of each typical floor.'

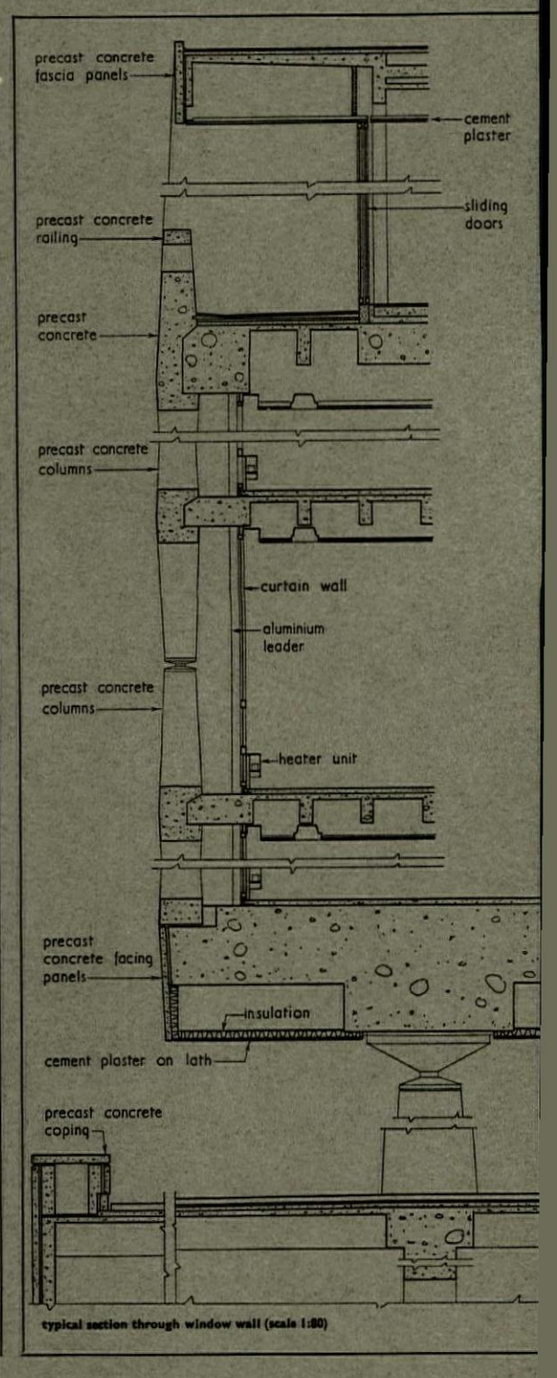
The architects' explanation continues with a technical description of the structural unit, but that much quotation is enough both to confirm the high degree of rational thinking that lies behind—as it always has done—SOM's design decisions and to draw attention, by its very reticence, to the questions it leaves unanswered. Whether they meant to or not, SOM in this building not only set a fashion for themselves but conformed to a trend which has been internationally evident for some years, but especially in the United States. There is no need to repeat here the excellent summary of this trend made in the AR as long ago as 1960 by Professor William Jordy (AR, March 1960: 'The Formal Image: USA'). Professor Jordy was concerned with the deliberate management of facades, the contrived symmetry and the harking back to neoclassical principles discernible in some of Philip Johnson's work and in that of Yamasaki and others. SOM are not, like some of these, guilty of backsliding from rationalism into formalism for its own sake; their role has been to endow this new trend with a viable, adaptable vocabulary, just as earlier, in Lever House and subsequent buildings, they endowed the Miesian conception of architecture with a vocabulary adaptable to general commercial use. It is therefore worth using the occasion of their first experiment with this concrete vocabulary to examine the architectural opportunities it offers and the limitations it imposes.

First of all its positive achievements: the Banque Lambert does, as the architects claim, preserve by its use of an exposed concrete wall-frame the scale and continuity of the built-up frontage to the Brussels boulevard; it does not blow a hole in it, as a transparent curtain-walled building might have done. It likewise furnishes the building with a rhythm not unrelated to that of the load-bearing brick and stone architecture surrounding it. But here the first question arises. The architects imply that it expresses concrete structure. It is certainly expressive in the sense that the structural frame, in the form of precast cruciform units, is frankly exposed and gives its aesthetic character to the building. But the character it gives stops at the facade. The three-dimensional spatial flexibility, the penetration of space between outside and in, that are characteristic of frame construction, whether the frame is of concrete or steel, are not expressed. In terms of townscape, the creation of such an opaque, even-rhythmed facade out of the needs and economics of concrete construction is a useful achievement; but it limits the range of expression of which concrete structures are capable, rather than enlarging it.

There is also the question of scale. The somewhat inflated scale created by the storey-height facade units gives the Banque Lambert the monumental presence that its position on the outside curve of the boulevard requires, but when used elsewhere the great size of the units can result in a blind and even cumbersome rejection of the human scale, which sensitive profiling of the units cannot wholly put right.

A problem in this form of construction is how to terminate the tiers of wall units at top and bottom. In some buildings where they are thus employed the units have been allowed to make the whole facade; for example in the Heinz building, where the base is simply a half-unit apparently sunk in the ground and is visually not very satisfactory. At the Banque Lambert, however, the top of the building is neatly finished off by the recessed penthouse storey, and at the bottom the problem has been boldly solved by stopping the units at the first floor slab, which rests on large square columns recessed within the building. Surprisingly, this does not result in a weak and insufficiently substantial base because the horizontal line at first floor level is strong enough to give the superstructure the character of a facade screen supported on it, rather than that of a wall with openings, which would have looked awkward with nothing but glass to stand on. This is an example of the difficulty of handling this, in many ways admirable, form of concrete construction; its virtue lies in its looking what it is; yet its limitations are most effectively overcome by means that make it look what it is not.

It will nevertheless be clear from the above that most of one's reservations about the aesthetic acceptability of this form of structure, which SOM have helped to put into common currency, apply less to their Banque Lambert than to other buildings, and in their handling of the base there is only one defect: the insensitive design of the ground floor columns themselves. These have a profile presumably designed to be in keeping with the moulded profile of the cruciform frame units, but the result is a clumsy, outward-spreading entasis far removed from SOM's usual delicacy of detailing. Elsewhere this is impeccable. The precision of detail and quality of craftsmanship throughout the building is such as SOM are almost alone in regularly achieving. J.M.R.



typical section through window wall (scale 1:80)

BANQUE LAMBERT, BRUSSELS

4

4, the paved forecourt with bronze sculpture by Henry Moore. 5, part corner of the building, showing profiling of the exposed concrete structural frame.

5

7

6 (facing page), corner of the building from the forecourt between it and the Avenue Marnix. On the left is part of the Henry Moore sculpture seen also in 4. 7, directors' lounge on the top floor. The mural on the right is by Fernand Leger.

8

9

8, basement foyer to the customers' safe-deposit. 9, typical open-planned general office. 10, public banking hall on the ground floor: entrance from forecourt beyond the screen on left; cashiers' counter on right; waiting space in foreground.

10

BANQUE LAMBERT, BRUSSELS

11

12

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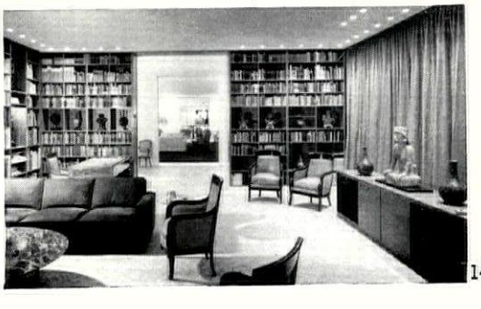


14

Inside Baron Lambert's penthouse flat: 11, marble lined entrance hall with illuminated ceiling, displaying part of the Baron's collection of sculpture—three Giacometti figures on the right; 12, the dining room, showing the view over the roof-tops of Brussels; 13, the drawing room; 14, the library.

TOWNSCAPE *Lewis Braithwaite/drawings by Richard Reid*

LONDON'S OWN CANAL

The scale and complexity of London's problems and the formation of the Greater London Council have led to much discussion of land use. Yet little has been said about one belt of land which could provide a much needed link in the development of the twilight areas through which it runs—the banks of the Grand Union and Regent's Canal in its loop path from Brentford to Limehouse.

The London Canal was built at the end of the canal age. The Grand Junction Canal—Brentford to the Midlands with an arm from Bullsbridge (Southall) to the Paddington Basin—was authorized in 1793 and finished in 1805; the Regent's Canal, linking Paddington with the Docks and the Lea Valley, was authorized in 1812 and finished in 1820. In 1929 these were amalgamated into the Grand Union Canal, and in 1948, as part of British Waterways, they came under the control of the newly formed British Transport Commission. The Grand Junction Canal was profitable for a time; but the Regent's Canal, largely financed and carried through by John Nash, never recovered from a shaky start, with inaccurate estimates and the embezzlement of many of the original subscriptions by its promoter Thomas Homer.

With the coming of the Railway Age the London Canal settled into a steady decline but survived many other canals by providing a valuable link in the waterway system, and supplying materials for building first the railways and later the extensive Victorian suburbs, through which it now runs. The property developers, however, did not agree with Nash that a canal carrying barges was an attractive urban feature and excluded it from their schemes, so that it is often difficult to find, and many north Londoners are not even aware of its existence.

THE CANAL AREA TODAY

Today the canal is neglected and forgotten. There is little traffic (about five barges a week on the central stretch, more in the west and in the East End—to serve timber yards—and more from Brentford via Bullsbridge to the Midlands. There is also some seasonal and weekend activity from pleasure boats); and the whole strip of land is in an amazingly decrepit and run-down state.

In the west there is an unpleasant belt of scrubland, neither town nor country, full of thistles, motor-car tyres and garbage. As in much of Greater London the only trees, meadows or fields are in parks or golf-courses. When it does become built up, the towpath is barred to the public, and on the banks are shabby, crumbling buildings—relics of long-dead industries—railway bridges and sidings, and occasional modern factories that have no connection with the canal. In no way does the canal contribute or even relate to the area through which it passes.

The one notable exception is Nash's scheme at Little Venice which uses the canal as an architectural focus for the area, but at the Paddington Basin, where the canal is at its closest to the West End, it is completely hidden—a melancholy contrast to its early days when it used to be fashionable to stroll along its banks or take the packet boat to Uxbridge (fare 2s. 6d.; breakfast served on board). Beyond Marylebone the canal forms part of the countryside of Regent's Park, but through Camden Town and across St. Pancras there is incredible wastage of what must be some of the most valuable land in London—in a procession of black, derelict buildings that seems to come straight from a communist film version of 'Oliver Twist.' One has to reach Victoria Park and the East End before the canal and its banks are used at all comprehensively.

In spite of this neglect, the canal has a certain nostalgic charm, which is best appreciated from a boat. The general public can go from Little Venice to Camden Town by Jason or Zoo Waterbus, or, occasionally in summer, westwards with Jason to Greenford (over the North Circular on an aqueduct); but there are no boats for hire and for any other stretch, or for the marathon trip round London (including the Thames from Limehouse to Brentford)—46 miles, 15 hours, 26 locks—one must have a boat of ones own.

The most interesting trip is from the Zoo to Duncan Terrace across St. Pancras. Setting off under the busy Regent's Park Road one plunges immediately into the empty private world of the canal. Cut off from crowds, diesel fumes and noise, the only other inhabitants a few fishermen, one passes into a living museum of early industrial England. There are lock-keepers' cottages with vegetable gardens, a muddy towpath with occasional ramps (for pulling out the horses that used to fall into the canal) and the simple and appropriate cast-iron bridges, timber lock-gates, bollards and precise brickwork—in a general setting of squalor and decay. In the confined linear space of the canal the various landmarks seem to come quickly; the three Hampstead Road locks, past bridges and sidings to unexpected vistas across the St. Pancras yacht basin, another lock, the bulk of the King's Cross gasometers, and round a corner the black entrance of the Islington tunnel. For half a mile one gropes through this immense brick pipe towards the egg-like reflection of the far end, until one emerges with relief into the light and trees of Duncan Terrace.

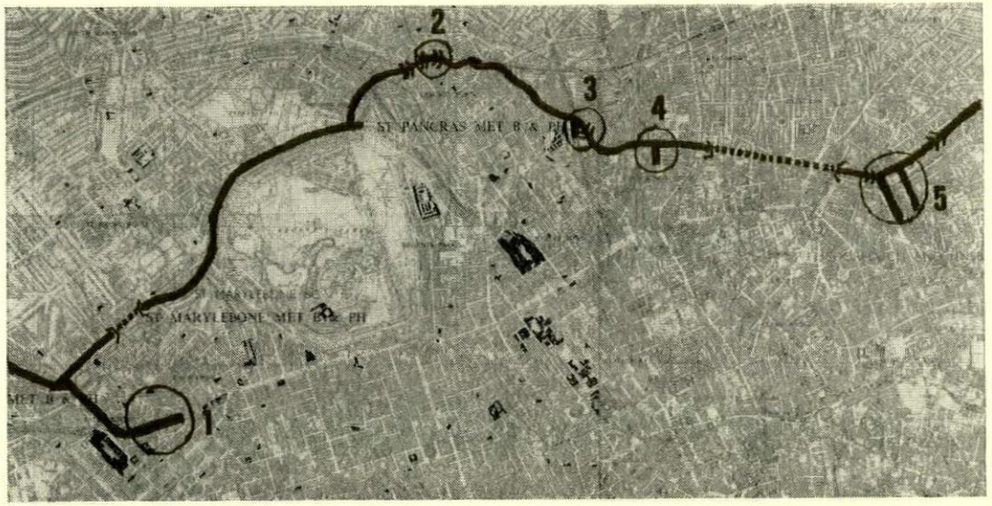
It is extraordinary that the canal banks should be so run-down and the canal closed to the public when London is desperately short of housing land and amenities. A particularly glaring example is the deserted City Road lock and basins, in the middle of Islington, London's most overcrowded borough. British Waterways are so concerned with reducing their annual deficit of £1½m that they do not seem to have tackled the problem of their urban canals, which could be made to justify their existence as an asset to the community rather than as part of a national transport system. But there is no reason why the various London boroughs should not repair and maintain the canal as an amenity if British Waterways would make over the canal to them. British Waterways would save money and probably gain some boat licences, the boroughs would gain the opportunity of developing the land as an integral part of the surrounding area; they would have to purchase much of the land on the banks—little of which is owned by British Waterways—but by using the open space of the canal itself, a well conceived scheme, including both commercial and residential development, could be at high density and give a good return for the capital outlay.

PRINCIPLES OF DEVELOPMENT

It is very difficult to make specific suggestions as to how a comprehensive plan should be drawn up; this would be a detailed and highly technical task for a team of planners, architects and engineers. But the plan should at least embody the following points:

A. It should consider the canal and the land on its banks as a whole and establish general principles of planning and development. The canal is owned by British Waterways, but much of the land on its banks is owned by British Rail, and it

Map showing the course of the London Canal from Brentford to Limehouse.



Map showing the route taken by the Regent's Canal through central London. Areas of particular opportunity are shown ringed and numbered and the drawings which follow show Richard Reid's interpretation of the way in which these opportunities might be realized. (This map and the one on page 201 are reproduced from the Ordnance Survey Map with the sanction of the Controller of HM Stationery Office. Crown Copyright reserved.)

passes through the new boroughs of Hounslow, Ealing, Brent, Hammersmith, Kensington and Chelsea, City of Westminster, Camden, Islington, Hackney and Tower Hamlets, all of which have their own planning departments; this will therefore be a major difficulty.

B. It should preserve the canal as a usable waterway system and encourage further commercial and private traffic. There is a boom in boat ownership in this country, and if marinas were established and people realized that there was a waterway within a short distance of their homes, the canal should become very popular. In addition the most interesting and attractive parts of the canal are associated with it being a waterway; the Hanwell flight of locks, the Southall three-way intersection, the Maida Vale and Islington tunnels, the bridges—cast-iron and brick—and the barges and timber-yards. The locks should be painted, the bridges and tunnels properly maintained and the whole area cleaned up, but the canal should on no account be prettified or become a museum.

C. The canal should **NOT** therefore be filled in, covered over or used thoughtlessly for immediate transport purposes—such as a hovercraft link to London Airport or a road from Canonbury to the Docks.

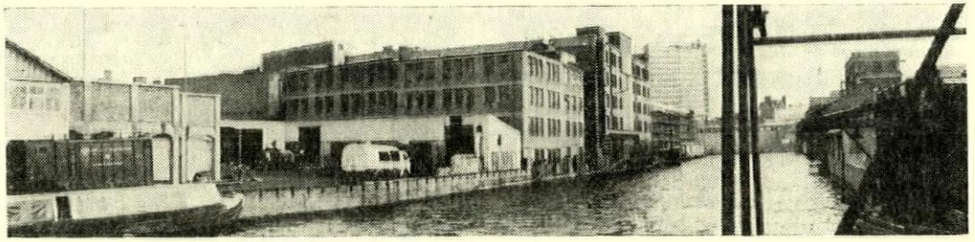
D. It should preserve the towpath as a unique London amenity. One can walk right across London—leaving the canal only at the tunnels—crossing no roads or railways, completely segregated from all traffic.*

* In Central London, access is barred and a permit, costing 2s. 6d. a year, is required from British Waterways. In Regent's Park there is a recent disturbing feature; a short stretch of the towpath has been completely sealed off by the Zoo, whose property it skirts.

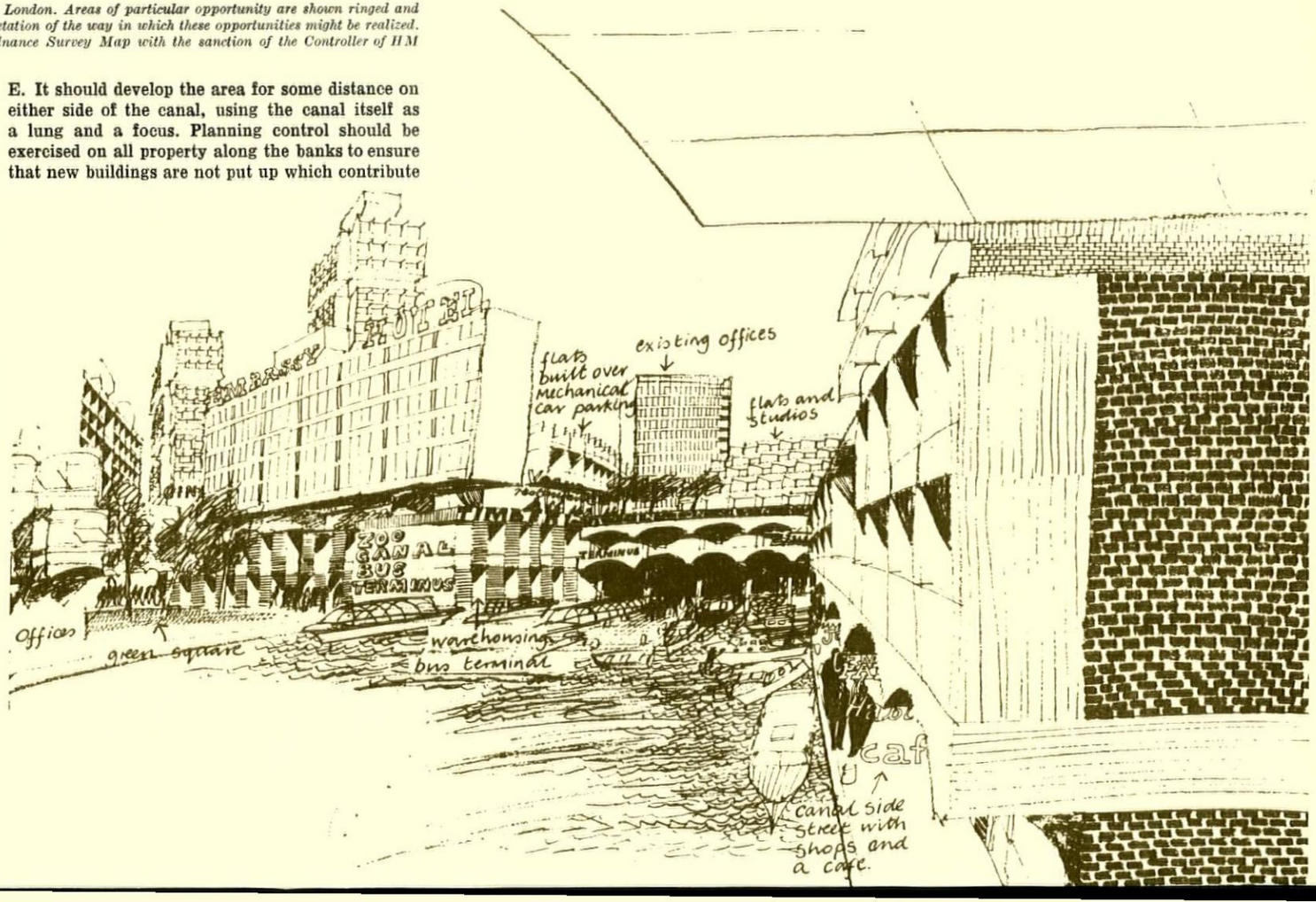
E. It should develop the area for some distance on either side of the canal, using the canal itself as a lung and a focus. Planning control should be exercised on all property along the banks to ensure that new buildings are not put up which contribute nothing to the canal as an area. The stretch of water should be used architecturally and pubs and restaurants built by the edge or over the water (see page 205). Residential tower blocks could be sited to open out the space visually, and with imagination and skill a canal only 50 feet wide could serve a considerable area.

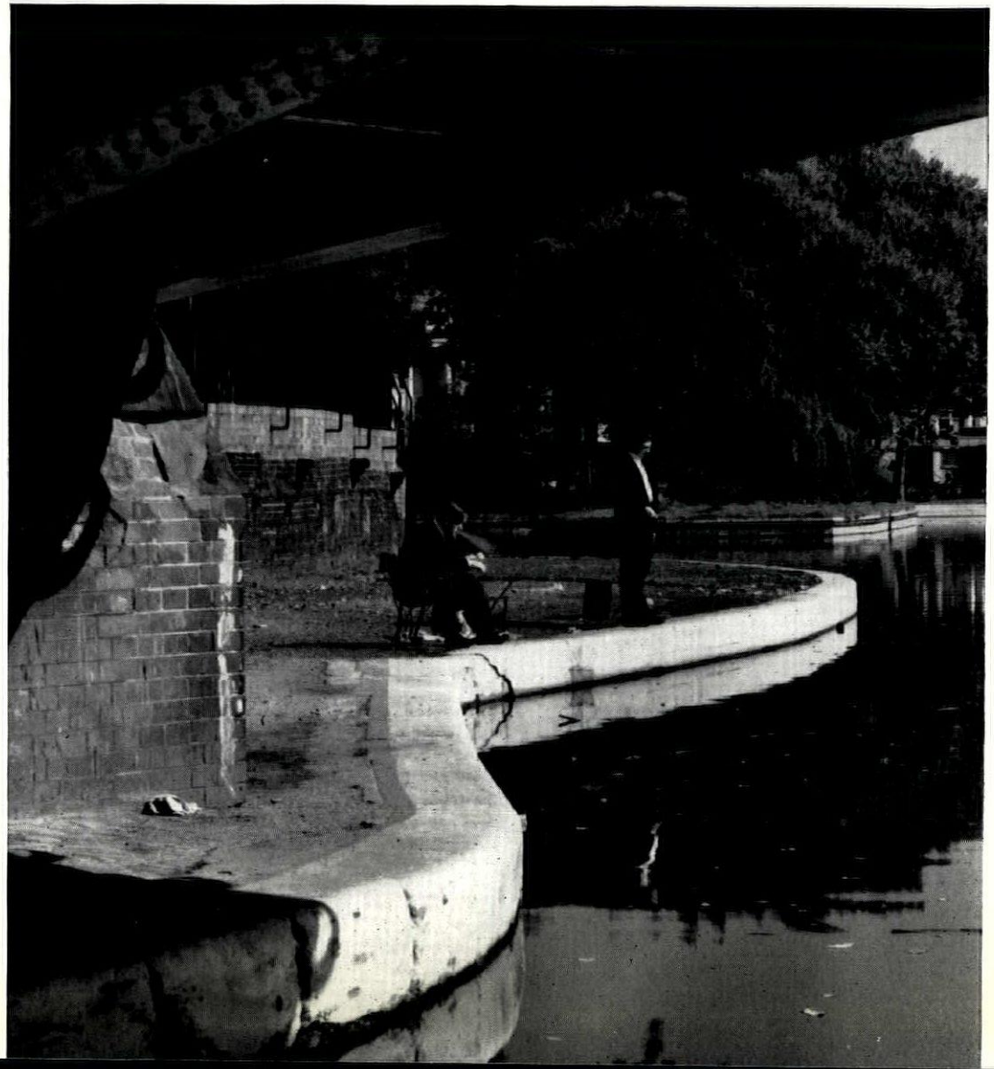
The London Canal has been treated in isolation from the national waterway system as a whole. But when considering whether to site factories by the canal or encourage pleasure boating, the national waterway policy does, of course, become relevant. British Waterways in a recent report* says that the existing system can never be econo-

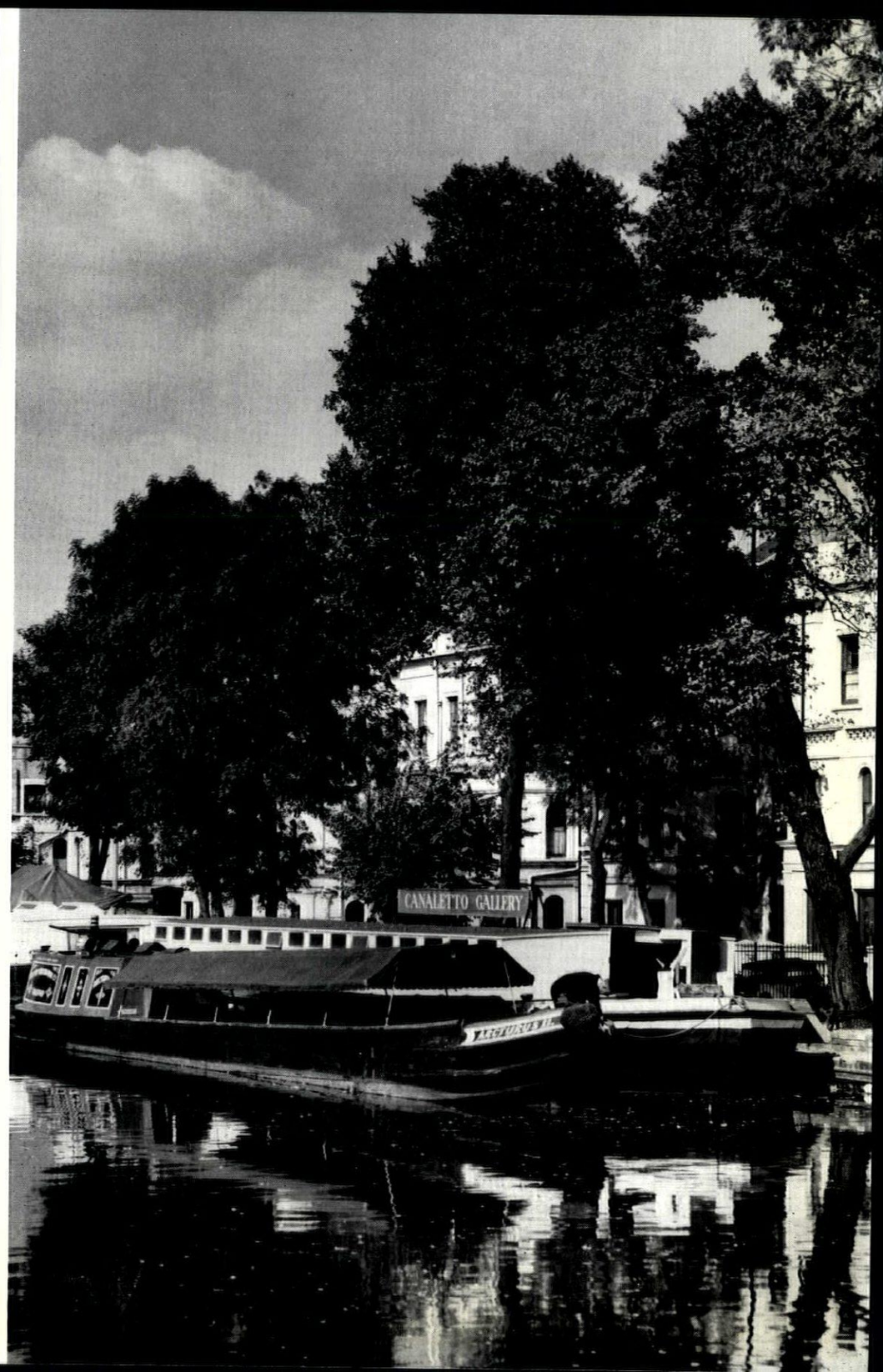
* *The Facts about the Waterways.* A Report by the British Waterways Board. December, 1965, HMSO. 15s.



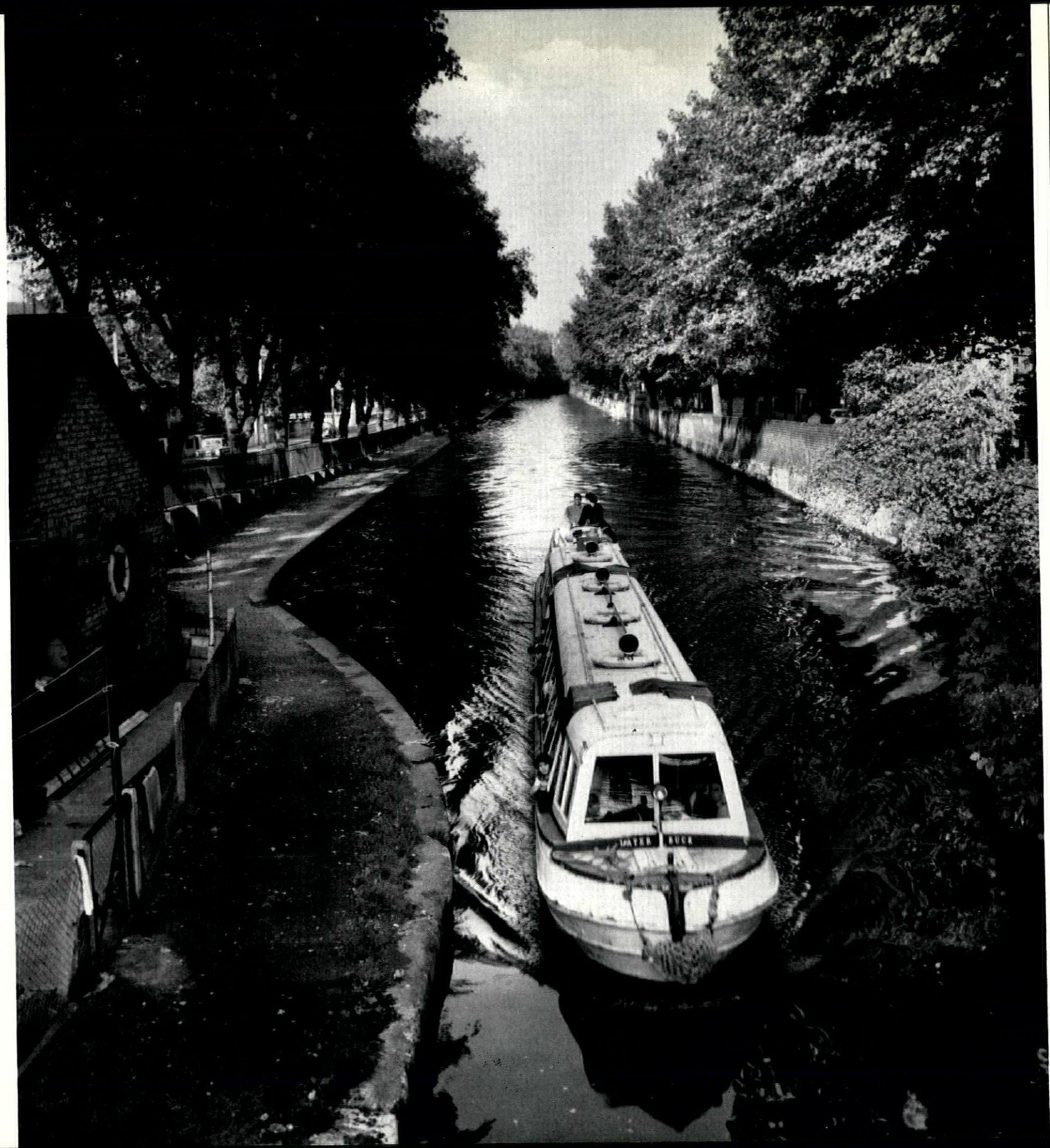
1 Paddington Basin *The closest part of the canal to the West End (above), and between the busy stations of Paddington and Edgware Road, this is the obvious place for high density development and good quality shops, as suggested below. With no locks west for 20 miles or east before Camden Town, it is also the best point for a water-bus terminal.*

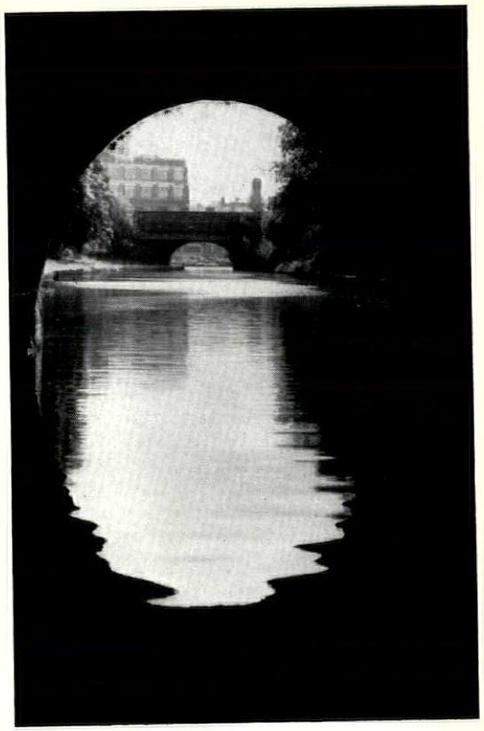






The scenic value of the canal realized. Above, Macclesfield Bridge, Regent's Park. Below, Little Venice. Right, Blomfield Road.





Left, straight tree-lined avenue running north-east from Little Venice. Above, exit from the Islington Tunnel at Duncan Terrace. Below, the other side of the coin; for much of its length the canal passes through a bleak industrial landscape.

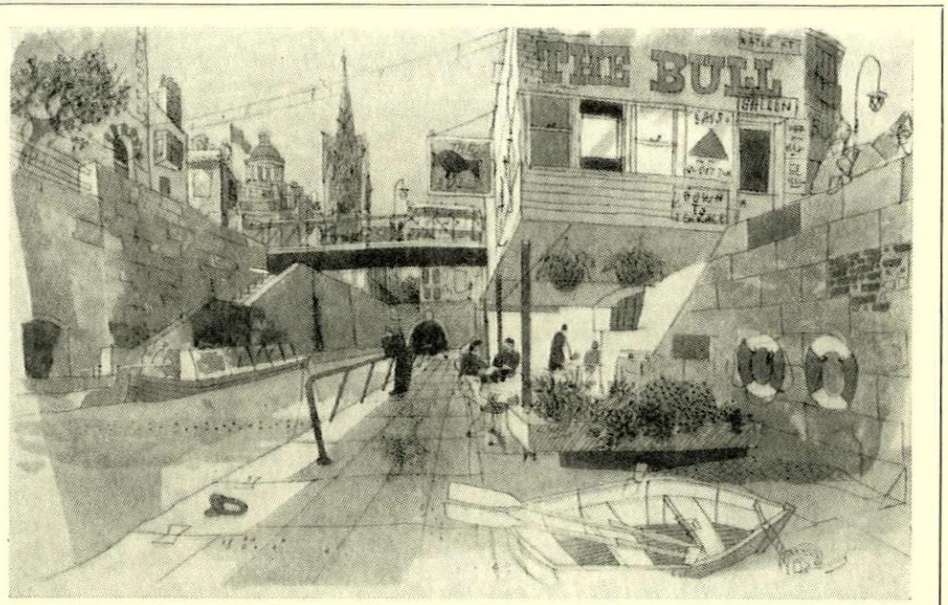
mically viable and the minimum cost solution is for large sections to be closed as waterways but kept open as watercourses, to supply industrial water and provide drainage. The independent Inland Waterways Association on the other hand advocates† considerable expenditure on an expanded and modernized system—with canals 100 feet wide running on the 310 feet contour with lifts at the ends but no locks; this would serve as a bulk carrier of commodities, a tourist amenity and a national water grid. A reasonable practical assumption for the London canal would be its maintenance as it is as a waterway, with access to the river Lea, and the Thames at Limehouse and Brentford, but no connection up the Grand Union to the Midlands. The detailed architectural treatment would follow from the straightforward functionalism of the bridges and locks—probably a basic simplicity of form and materials avoiding any suggestion of the fussy or twee. One feature of the canal poses an interesting design problem; that of opening up the canal without destroying the attractive feeling of being in a world apart, defined by the bare brick walls of buildings which turn their backs on the canal. A compromise which would offer in addition a practical approach (and which Richard Reid has adopted in his drawings) would be to select for development first the high spots like the basins where there is the greatest opportunity, but for the moment—apart from planting a few trees and the general cleaning up already suggested—leave the linear stretches in between much as they are.

The principles outlined above have broad implications which would affect the overall planning strategy. Keeping the tow-path leads to a general treatment of the whole canal area as a pedestrian precinct; here is a chance to re-establish a traditional London village centre free from traffic—with shops, flats, pubs and markets. Encouraging boating and establishing marinas leads to the setting up of a whole range of associated do-it-yourself and hobby activities; shops for fishing gear, woodwork and paint, a machine shop and workshop space which could be rented. And when people have this sort of absorbing spare-time activity—as can be noticed near allotments or sailing clubs—there is usually an unhurried timescale and a relaxed friendly atmosphere. This could form the starting point of the various pubs or coffee bars and give them some life and character.

These suggestions for the development of the canal have been put forward not out of nostalgia for the past but because the canal area could form the basis for a worthwhile pattern of urban living. At present many Londoners crowd on to the roads and railways to find their leisure in the country. But if people could fish, keep a boat, do odd jobs at a work bench, stroll around shopping, buy vegetables or generally relax in a pleasant environment near their homes, there would be no need for much of this travel, less pressure on the roads and railways—and fewer ulcers.

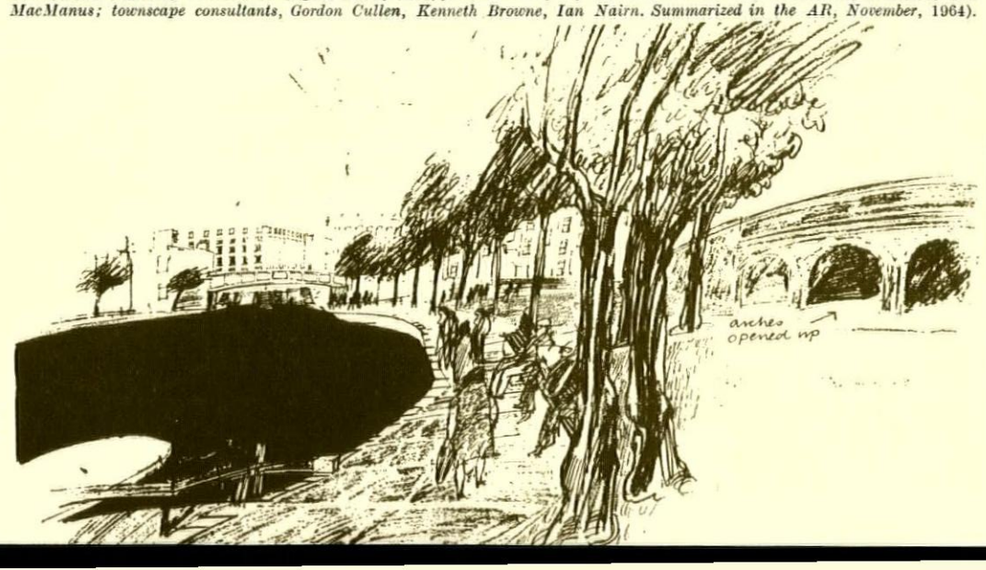
To incorporate this thread in the fabric of London

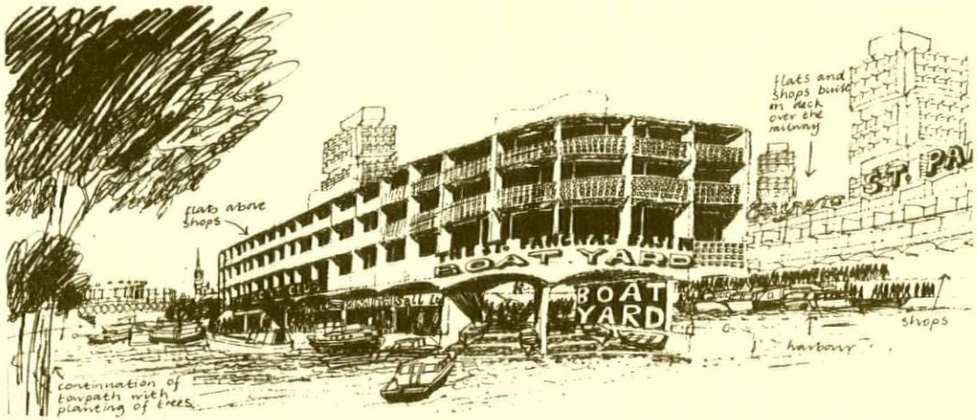
† *New Waterways*, August, 1965. Published by, and obtainable from, The Inland Waterways Association, 114 Regent's Park Road, London, NW1. (3s. post free.)



A suggestion by Gordon Cullen for the treatment of an urban canal showing a pub entered on one side from the street but with a quiet waterside terrace on the other. (Reproduced from The Canals of England *by Eric de Maré. The Architectural Press Ltd.)*

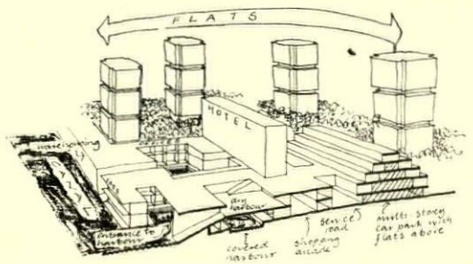
2 Hampstead Road Locks, Camden Town *A typical linear stretch (above). In the proposal below no new buildings have been added but the whole area (now a mess of builders' equipment) has been cleaned up, with trees and grass planted. The railway arches are opened up to connect with the adjoining open space and housing (as suggested in* West Kentish Town, *Town Planning Consultants' Report No.* 3, 1964, *for the Borough of St. Pancras. Planning consultants, Armstrong and MacManus; townscape consultants, Gordon Cullen, Kenneth Browne, Ian Nairn. Summarized in the AR, November,* 1964).

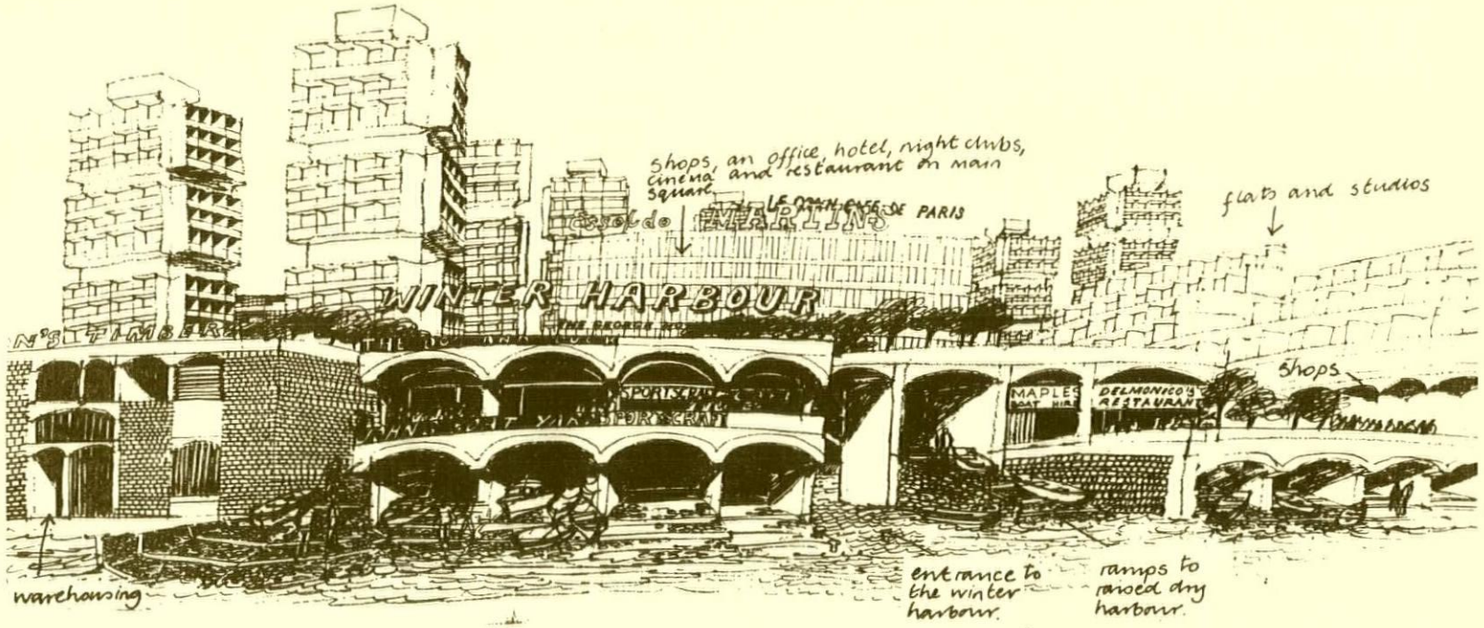




3 St. Pancras Basin *Seen above as an open-air summer boat basin. At present (below) a bleak, windswept no-man's land, it is however already used as a marina. It needs protection by trees and, perhaps, buildings wrapped round the existing harbour and built up over the railway lines. (Surrounded by goods yards, any development here would have to be in close collaboration with British Rail.)*

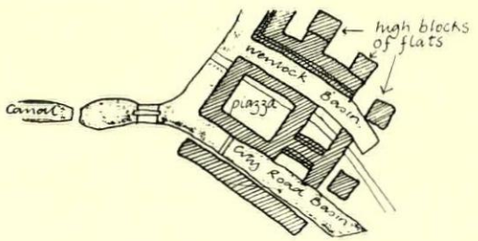
into a comprehensive scheme is an exciting and challenging task for a designer which this article has only just touched upon. There are few precedents for a linear urban renewal of this scale and none tackling the particular character of the British canals.

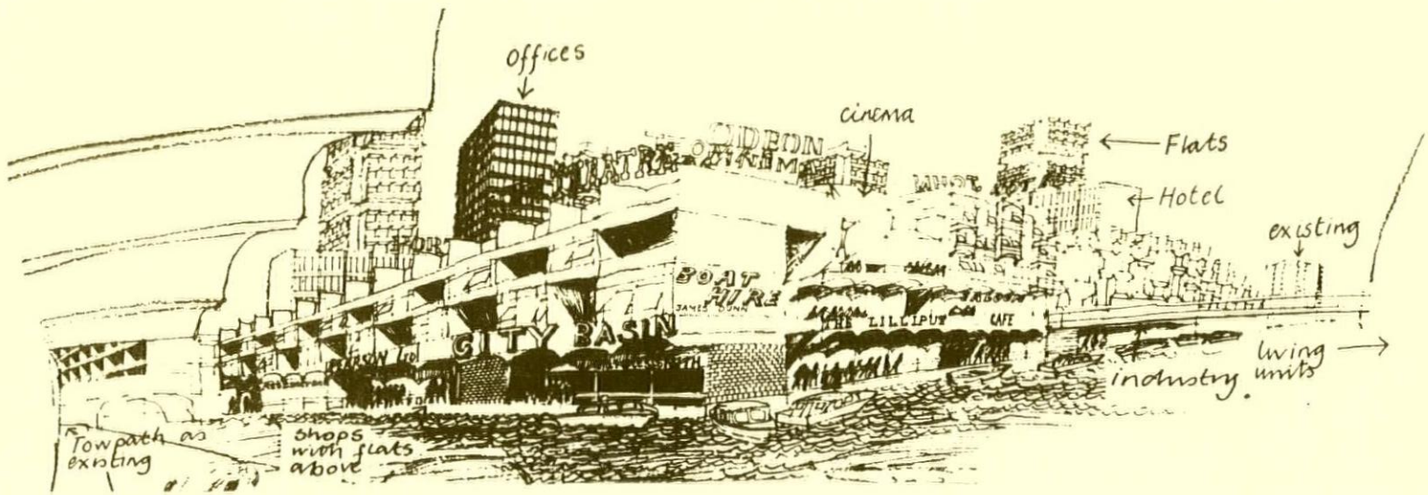


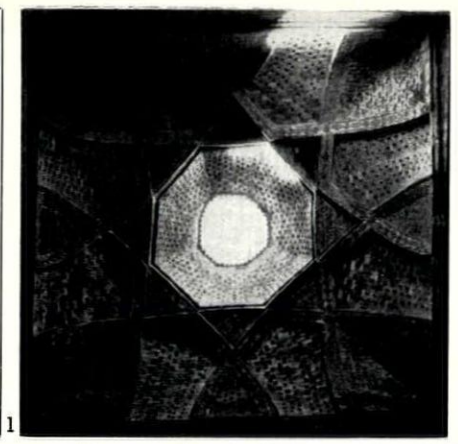


4 King's Cross Basin *This is shown (right) as an enclosed winter boat basin. At present (below) the basin is unused and there have been proposals to fill it in, which would be a pity. King's Cross is one of London's busiest traffic centres and needs redeveloping. It could become an inner ring shopping centre (see section above), a North London equivalent of the Elephant and Castle. The scheme here shows facilities, rarely provided in this country, for working on boats and doing odd jobs under cover.*

5 City Road Basins *At present (above right) a jungle of warehousing, shut off from the public, this could provide the most exciting architectural opportunity (right) since the central block is bounded on three sides by water. The development might be mainly housing around a central piazza (see plan below). The closest point of the canal to the City, this is an opportunity to link up through Golden Lane and Barbican.*



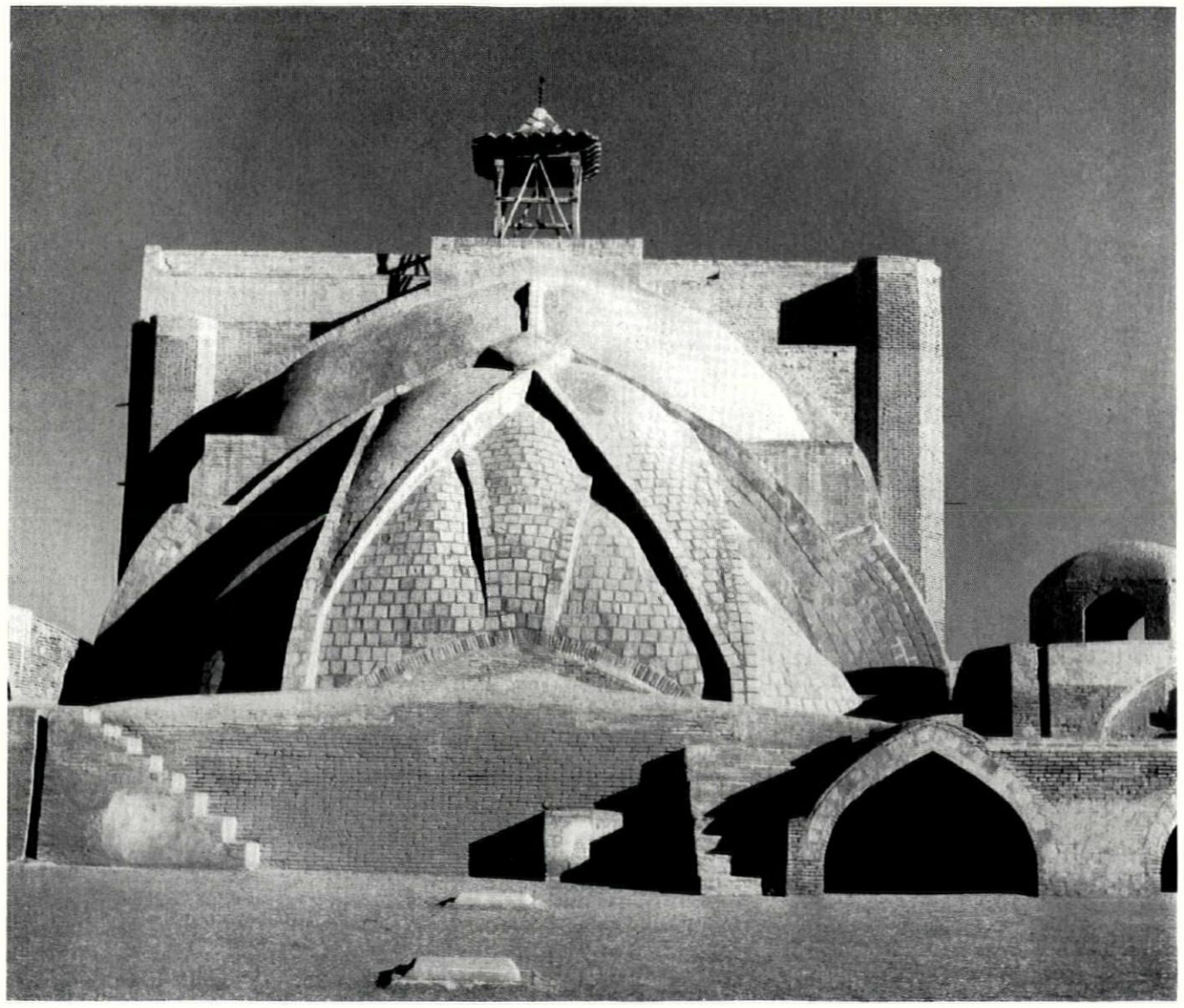




So overwhelming is the impact of the great Masjid-e-Jume, or Friday, Mosque at Isfahan that the European visitor forgets that there must be another side to the splendid geometry and extraordinary variety of pattern of the domes and vaults unfolding above him. To the Persian, the equally astonishing roofscape which exists above this mathematical complexity of brick and tile is taken for granted. The humblest plateau village can provide examples of solid geometry which amaze the foreigner, and this mosque, like others less complex, simply provides a yet bolder example of the marvellous possibilities of mud. Here on the roof there is no pattern whatever: mud plaster (with occasional unrendered brickwork of the same dun colour) covers every surface, reducing the complexities below to the simplest geometric forms. Their visual weight is such that the vaults and domes which emerge from the general level of the roof seem to be hewn out of the ground, rather than raised, in defiance of gravity, through what is in fact a deck. They have the fantasy and scale of an extraordinary range of dunes which has been ordered by some giant sculptor instead of by the wind. Except for the timber-framed guldasta, seen in 2, from which the faithful are called to prayer—this, exceptionally, is intended to be seen from the courtyard—there are no trimmings; and whether it be the drainpipe ventilators in the small saucer domes or the precision with which a small flight of steps is cut short unexpectedly, just where the design requires, but where no byelaw could ever allow, the detail is as admirable as it is enviable.

ELISABETH BEAZLEY

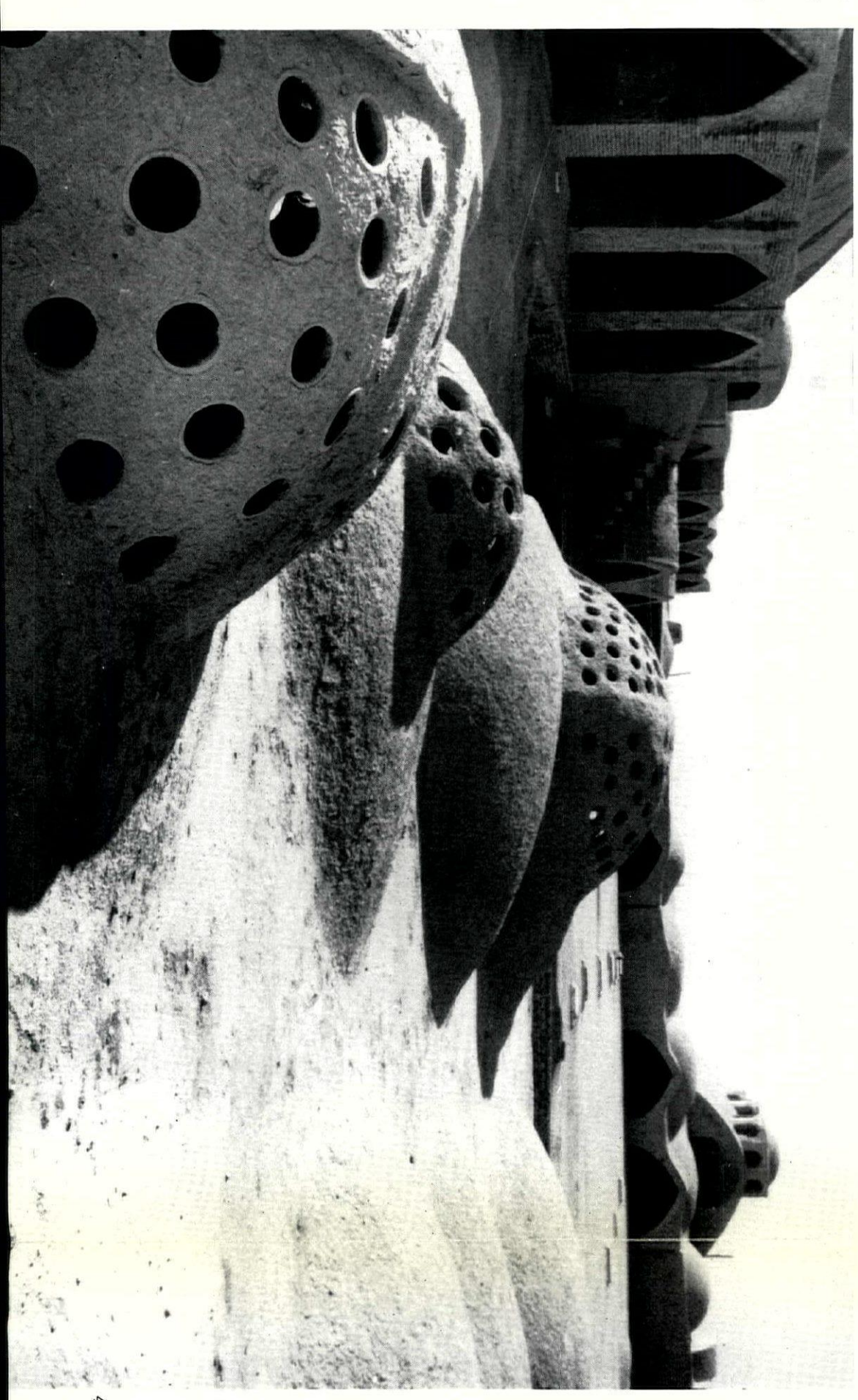
1, *looking up into the dome of the Masjid-e-Jume.* 2, *the strange external geometry of the north-west ivan.*



2

FACULTY OF COMMERCE AND SOCIAL SCIENCE, BIRMINGHAM UNIVERSITY

1, the faculty building from the south-west showing the balconied senior common room on top of the study bloc



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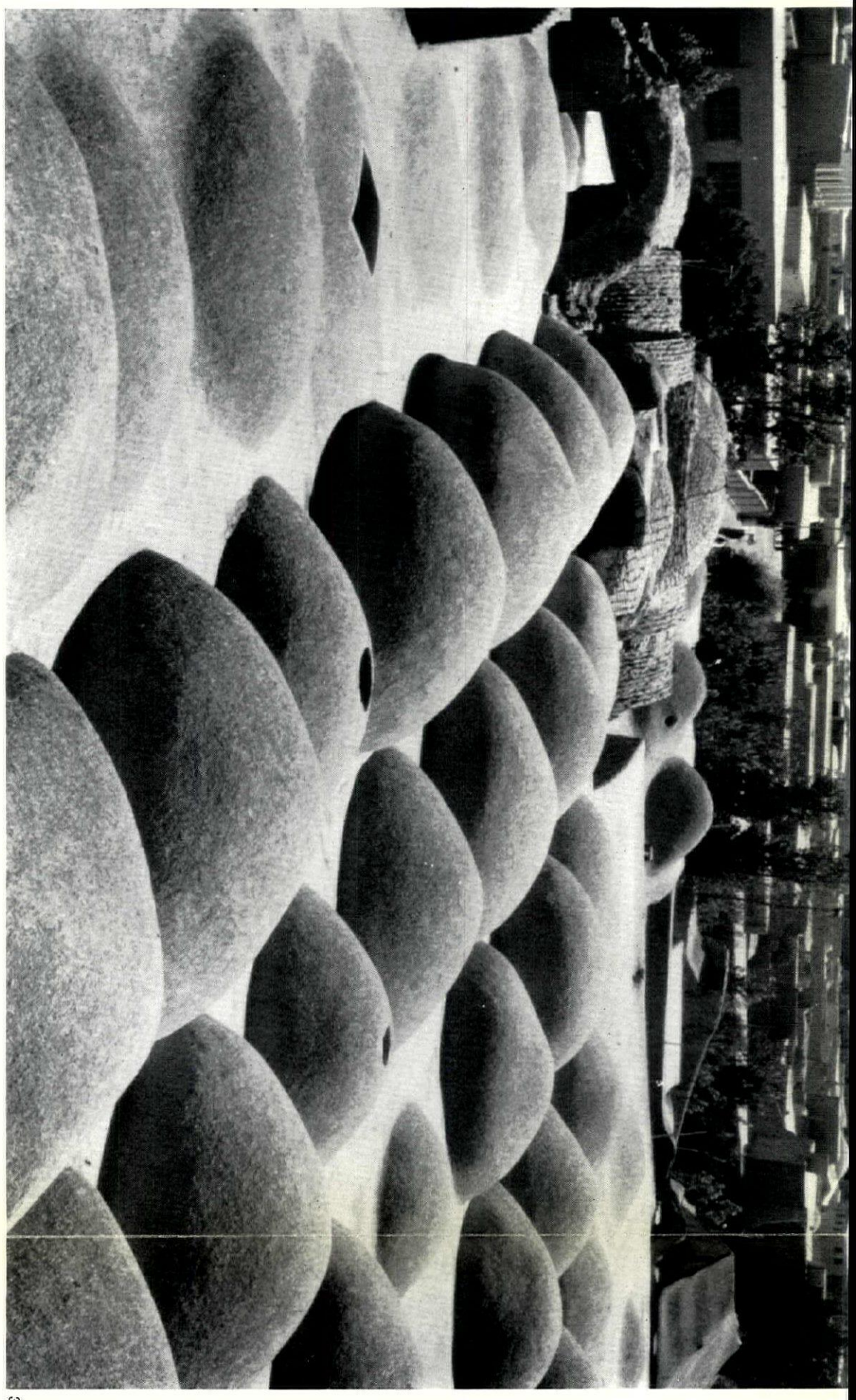

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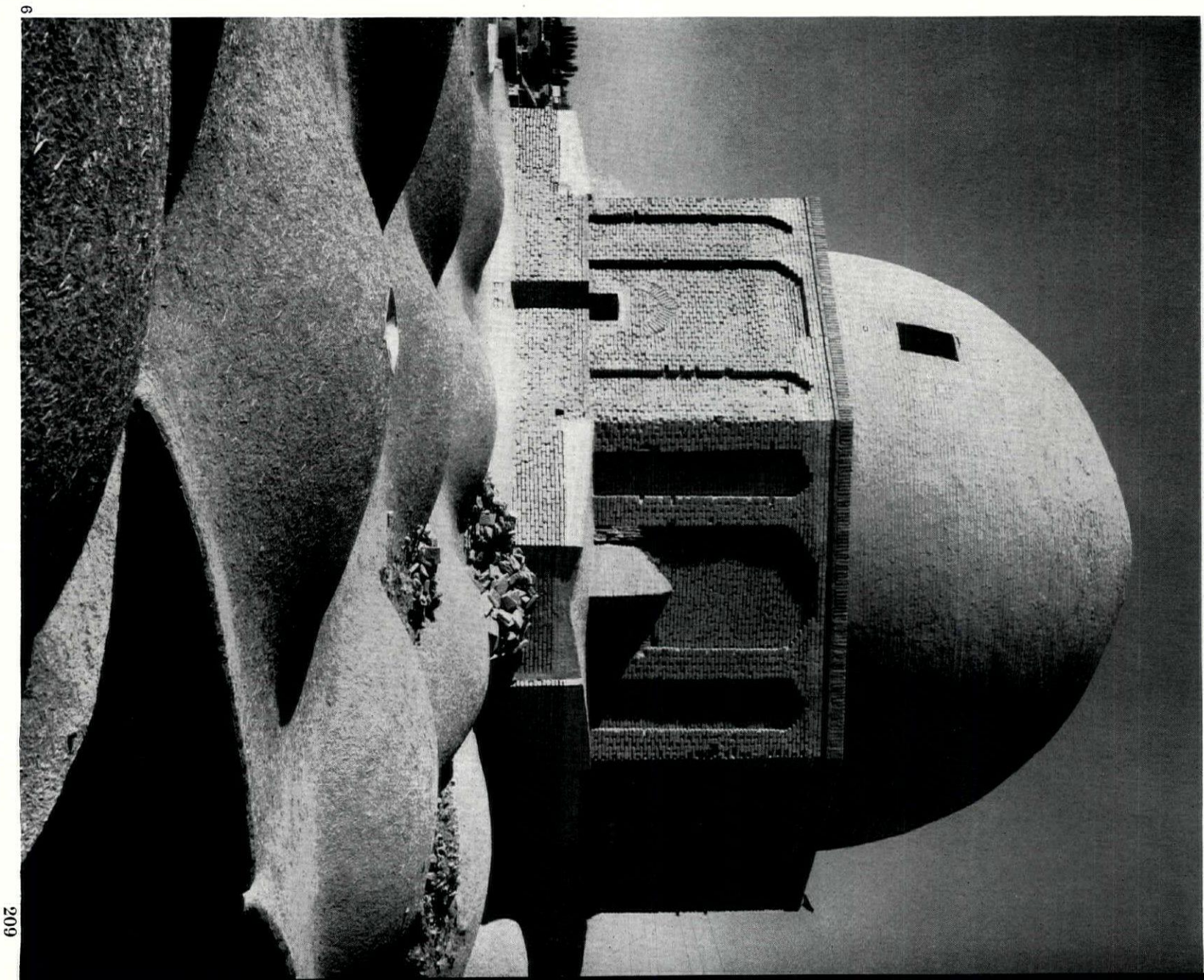

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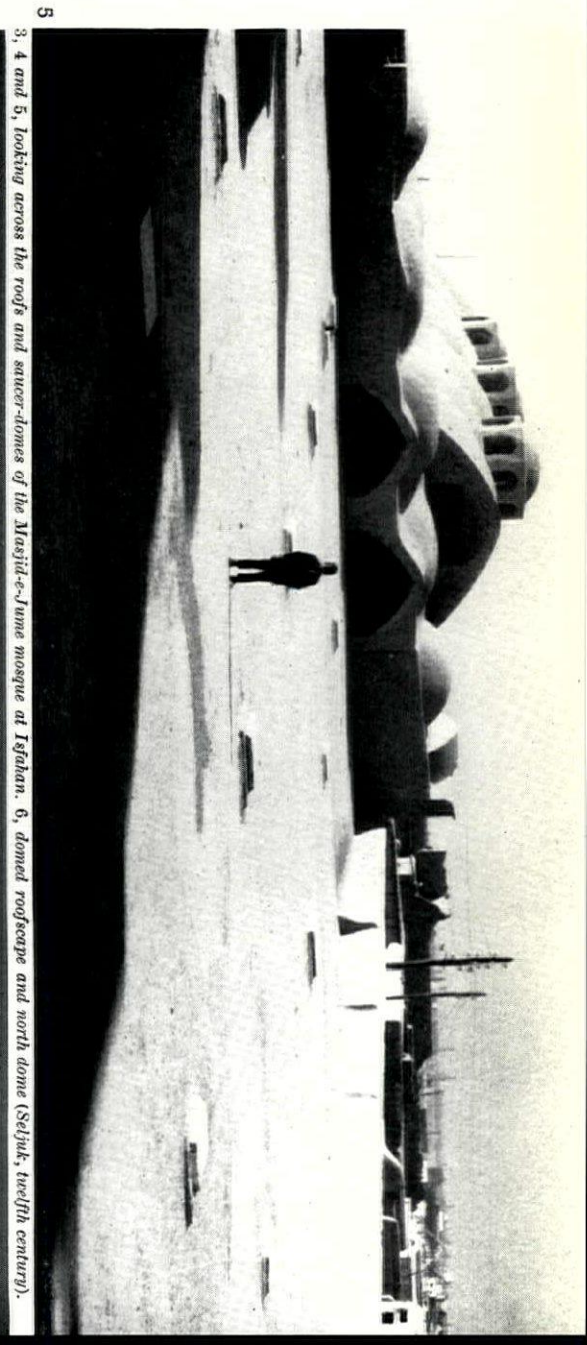

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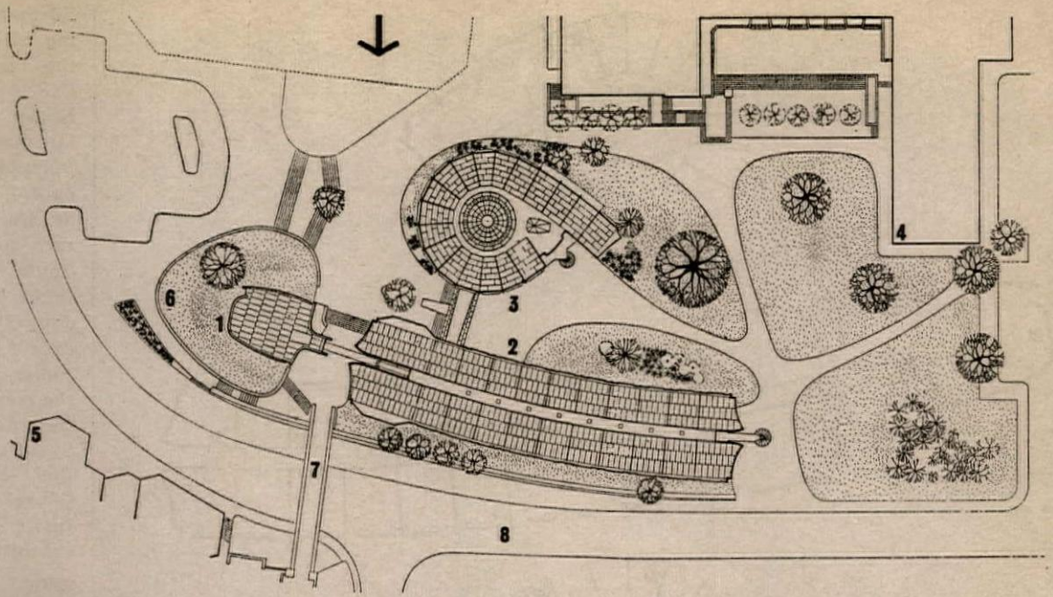
3, 4 and 5, looking across the roofs and saucer-domes of the Masjid-e-Jume mosque at Isfahan. 6, domed roofscape and north dome (Seljuk, twelfth century).

site plan
key
1, main lecture hall
2, lecture block
3, study block
4, arts faculty
5, dept. of education
6, bicycle park under
7, footbridge
8, university ring road



architects **HOWELL, KILLICK, PARTRIDGE AND AMIS**

photographs by Eric de Mare

The building is part of the rapid expansion of the university from its original Edwardian nucleus (by Sir Aston Webb), under Sir Hugh Casson's 1957 plan. It is situated on the north-eastern bend of the university's ring road. Sir Hugh imposed no restrictions on layout, except for a general requirement that the buildings should visually round off this corner of the campus, or on materials, except for the blue engineering brick 'plinth' towards the ring road, also intended to define the university's inner circle.

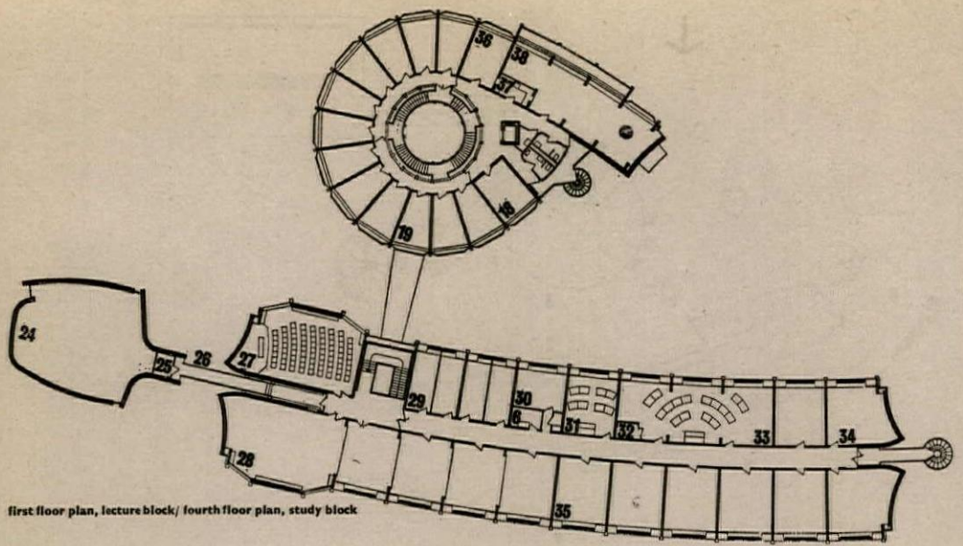
Accommodation is divided between two blocks, one containing lecture, seminar, research and common rooms for students and staff, which generate heavy traffic, and the other containing 69 studies for professors (190 sq. ft. each) and lecturers (150 sq. ft.), which require maximum repose. It was decided to separate the buildings, apart from an open connecting canopy, because the steps from the ring road lay-by will be a major approach route to the university for pedestrians unconnected with the faculty.

The five-storey study block has its standard UGC allowance of corridor space wrapped into roughly the shape of a snail, the tail being a relatively short unwinding from the circular centre. The structure consists of in situ concrete floor and roof slabs on 9 in. brick-on-edge cross-walls, the radiating pattern giving rooms for lecturers around the centre splayed at 20 degrees and almost rectangular rooms, splayed at 3 degrees, for professors in the tail (and also at the inner end of the spiral). Each aluminium window is contained in a single precast concrete unit, splayed inwards for better natural lighting. Externally each unit is separated by narrow curved concrete strips, bolted on and covering the cross walls, by stub cantilevers sticking out from the cross walls, and by thin clerestory strip windows below the main concrete floor slabs. The cross walls give a sound insulation value of 50 dB. The splayed shape minimises wasted space near the entrance. The custom-built desk has its two stacks of drawers splayed at 20 degrees inwards from the main writing top, so that it can easily be placed in the popularly preferred position across a corner of the room. On the side walls of painted frogless bricks, bookcases and pinboards can be fitted to the inset picture rail. All timber is British Columbian pine, with doors painted bronze green.

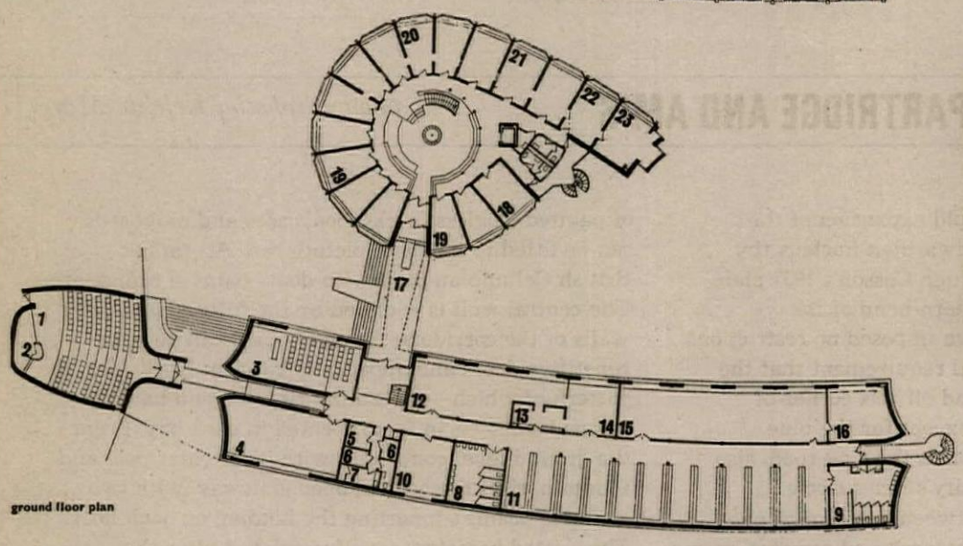
The central well is enclosed by the fully glazed inner walls of the corridors, through which can be seen repetitive doors and apparently random brickwork, the pattern of which—of certain bricks on end having frogged sides—is in fact repeated in each bay. From the ground level concourse, with its circular pool and fountain. rises the central open stairway, with two concrete beams supporting the landing on each floor. The slatted banisters are of varnished pine, the handrail of tubular steel painted black. The dome consists of eighteen timber half-trusses connecting an outer concrete ring to an inner steel ring. It is lit from clerestory windows at the side (there is no horizontal glass apart from the central eye, because the clients wished to avoid excessive maintenance).

The two-storey lecture and seminar room block follows a slow curve, each bay being turned ¾ degree. This is enough for the central corridor, which is lined throughout with frogged bricks on end, to pass out of sight from one end to the other. The curve is continued three-dimensionally in the Chinese shape of the roof, brought about by changing the angle of the reinforced woodwool slabs between the purlins. Above the cycle park, which is built into the hillside beneath, there is a concrete-framed ground floor and a cross-walled upper floor of seminar rooms. External facings are of split concrete blocks, grey in colour. The lecture theatre, semi-detached at the eastern end, has its shape dictated by the simple envelope of an audience, narrowing abruptly to the entrance.

The total cost was £290,000, including £18,500 for the parking substructure and £25,000 for external works. Partner-in-charge, W. G. Howell. Chief assistants, S. A. Osgood and A. S. Morgan. Assistants, R. J. Lattimore, R. W. Selwood and L. Bingle. Quantity surveyor, Davis, Belfield and Everest. Structural engineer, Harris and Sutherland. Mechanical and electrical engineers, Steensen, Varming, Mulcahy and Partners. Lift consultant, E. Bampton, Superintendent of Works and Chief Engineer to the University.



first floor plan, lecture block/ fourth floor plan, study block

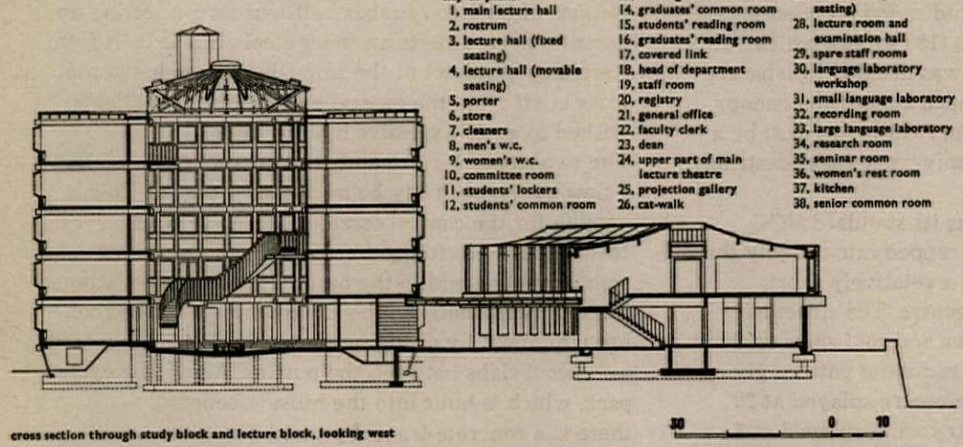


ground floor plan

30 0 10

key to plans

1, main lecture hall
2, rostrum
3, lecture hall (fixed seating)
4, lecture hall (movable seating)
5, porter
6, store
7, cleaners
8, men's w.c.
9, women's w.c.
10, committee room
11, students' lockers
12, students' common room
13, vending machines
14, graduates' common room
15, students' reading room
16, graduates' reading room
17, covered link
18, head of department
19, staff room
20, registry
21, general office
22, faculty clerk
23, dean
24, upper part of main lecture theatre
25, projection gallery
26, cat-walk
27, lecture hall (fixed seating)
28, lecture room and examination hall
29, spare staff rooms
30, language laboratory workshop
31, small language laboratory
32, recording room
33, large language laboratory
34, research room
35, seminar room
36, women's rest room
37, kitchen
38, senior common room



cross section through study block and lecture block, looking west

30 0 10

criticism

The individual faculties in the older 'red bricks,' in contrast to the interdisciplinary courses of the new universities, tend to inspire buildings which consciously try to be different, but are increasingly reduced to the corridor layout of the average office block. The essence of university life is the cross-fertilisation of ideas, but this is unlikely to happen if the communal space is 200 ft. long and 5 ft. 6in. broad. The great merit of this Birmingham building is that, by wrapping its corridors around a central well, it turns them into a place and not merely a route.

The plan of the study block is exceedingly well thought out. Separated from the heavy traffic of lecture and common rooms, and turned inwards from the broad stepped approach to the campus, it draws together the small individual departments of a somewhat diffuse faculty. The bigger rooms in the tail enable professors to be placed next to their departmental colleagues on each floor. The cheese-shaped rooms are excellently lit, furnished and insulated. The use throughout of bricks on edge not only gives, in Howell's words, a 'less aggressive, blander because bigger' surface to the study walls, but also offers sectional measurements (3 in., 6 in., 9 in., 12 in.) which are more flexible and economical than those of bricks laid conventionally flat (4½ in., 9 in., 13½ in.).

Further economies were made by eliminating plastering—hence the cubic vastness of the central rotunda was possible on the UGC's two-dimensional space restrictions. Howell's imagination was fired historically by the late London Coal Exchange and functionally by his own schoolboy experience of Blore's arcaded B House quadrangle at Marlborough College. Unfortunately no such space, not even Asplund's Gothenburg Town Hall or Johansen's Dublin Embassy, could have been pushed past the present-day British fire officer and his byelaws, except with continuous external escape balconies, which the UGC could not afford. So the corridors were glazed in, and in spite of the effort to cancel reflections on the glass by means of concealed fluorescent lighting, the space is compromised severely. (Absurdly there would have been no such fuss if it had been a department store or an exhibition hall, in spite of their inflammable contents.) From this point, alas, a profusion of materials takes command, from heavy wooden slats on the meandering central stairway to the knobbly pattern of frogged bricks which exacerbates the sense of vertigo in the corridors. Howell says that otherwise there would not have been enough going on in the corridors—but he seems to have confused the cosmetic application of 'goings on' with the creation of spaces where people can genuinely do things. The floor of the well has not been made into a real meeting place. Nothing noisy would have been suitable, but a carpet and a few easy chairs would have been infinitely preferable to the mini-fountain (which from the upper landings resembles an outsize spittoon).

2, the ground floor of the rotunda.

Contrasts in quality between planning and detail continue outside. The corner site is cleverly exploited and the central flight of steps is impressive. Howell's characteristic precast windows enhance the initial feeling of brittle and angular elegance (hardly a line is actually curved). But why should the brick crosswall structure be hidden by tacked-on cover strips, the illusion of a reinforced concrete frame being maintained by the jutting bits of concrete cantilever? Restless mannerism is continued on the fashionable solid-over-void fenestration of the lower block. It was no doubt daring to use split concrete blocks 'salvaged' from their usual role on municipal roundabouts, but they seem tawdry on top of the massive blue brick plinth insisted upon by the university's planner, Sir Hugh Casson. The inability to leave well alone seems to suggest a lack of confidence in the ability of the present architectural vocabulary to speak for itself—an ability Howell himself amply demonstrates in creating a community of scholars and not just an office block. **N.T.**

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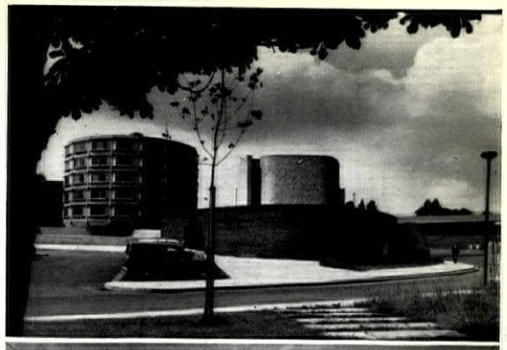

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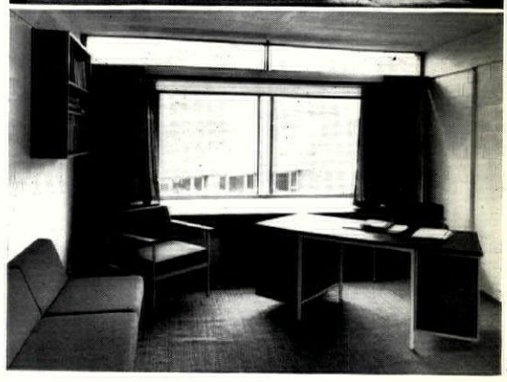

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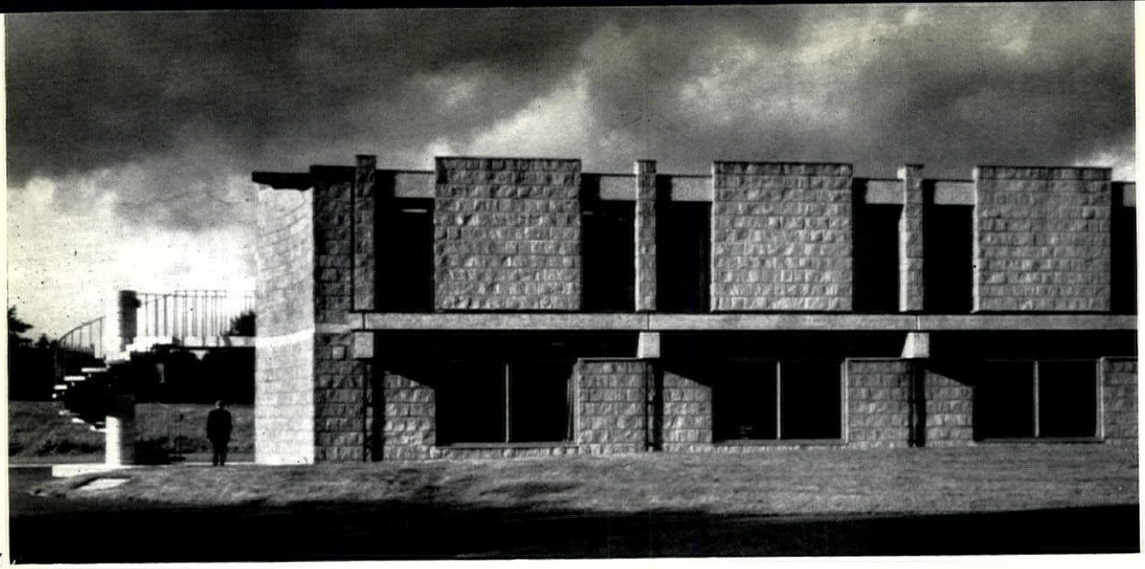
3, the roof of the rotunda. 4, the approach from the university ring road, with lecture hall over the cycle park, right. 5, a typical lecturer's study in the higher block, showing bookcase fitment and angled desk. 6, view from central stairway halfway up the rotunda, showing glazed corridors and exposed bricks on edge.

6

FACULTY OF COMMERCE AND SOCIAL SCIENCE, BIRMINGHAM UNIVERSITY



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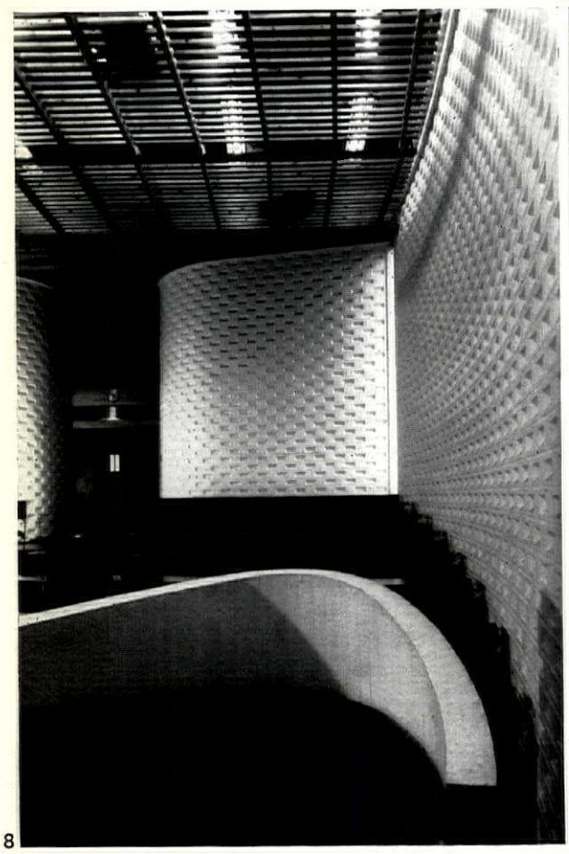

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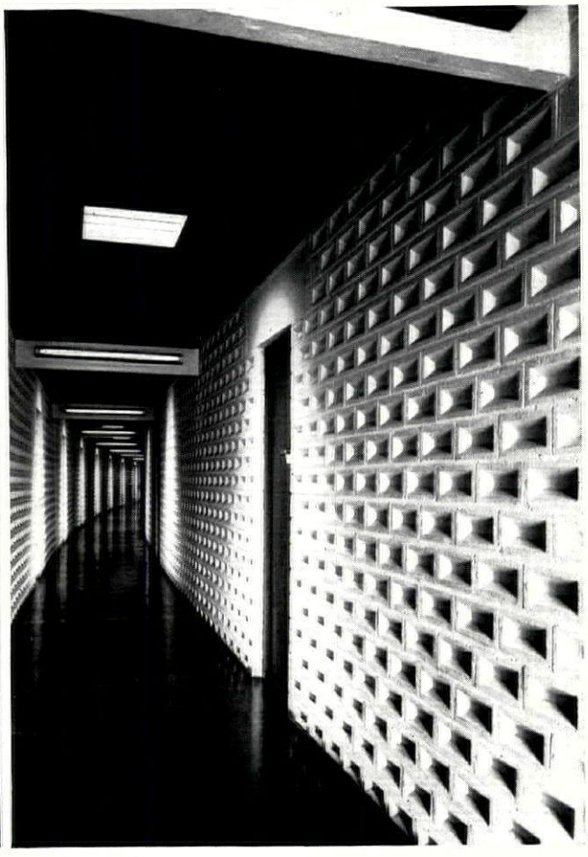

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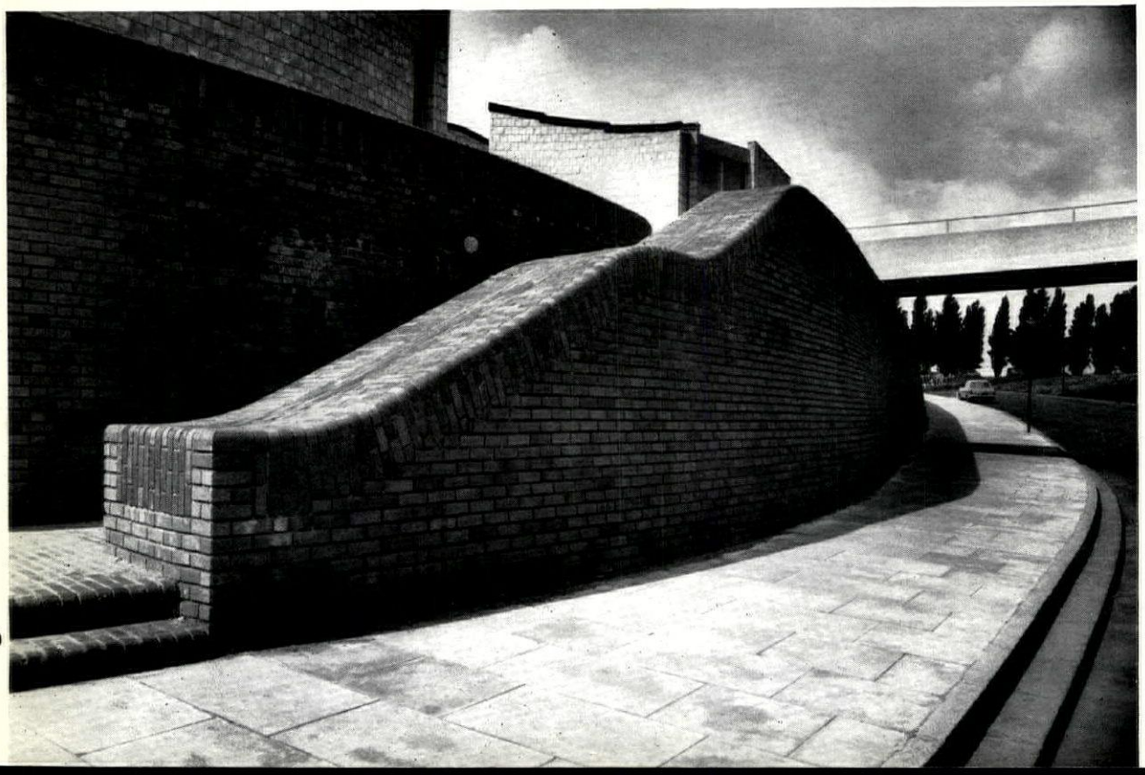

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7, part elevation of lower block from south, with split concrete block facings and external escape stair. 8, interior of lecture hall looking back towards entrance. 9, curving corridor of lower block. 10, detail of engineering brick plinth to ring road, enclosing cycle park.

JOHN HAVILAND

and the Picturesque Taste in America

Matthew Baigell

1, *the John Cridland Villa, at Roxborough (now part of Philadelphia)*; 1818.

For the years between the publications of the books of Richard Payne Knight and Sir Uvedale Price in England and their popularizations in America by Andrew Jackson Downing—between, say, 1800 and 1840—very little is known about the development of Picturesque taste in America. It appears certain, however, that John Haviland played a role in its evolution and perhaps even its birth.

Born near Taunton in 1792 and trained by the London architect, critic and scholar, James Elmes, between 1811 and 1815, Haviland came to America in 1816. He became one of his adopted country's most knowledgeable architects and soon gave evidence of his talents with the publication of *The Builder's Assistant*, a book that, while reflecting no more information than any recently trained English architect might possess, can nevertheless be considered a landmark volume among American architectural handbooks[1].

Known as the first book to be published in that country containing illustrations of the Greek orders, it helped popularize the Greek Revival that swept across America during the 1820's and 1830's. Less well-known, however, are the passages Haviland devoted to an analysis and discussion of the Picturesque[2]. These marked, very probably, the first serious and extended discussion of the subject to appear in an American handbook and may have helped provoke the subsequent attention given to the Picturesque point of view during the 1840's and 1850's.

[1] John Haviland, *The Builder's Assistant* (3 vols.; Philadelphia: 1818, 1819, 1821).

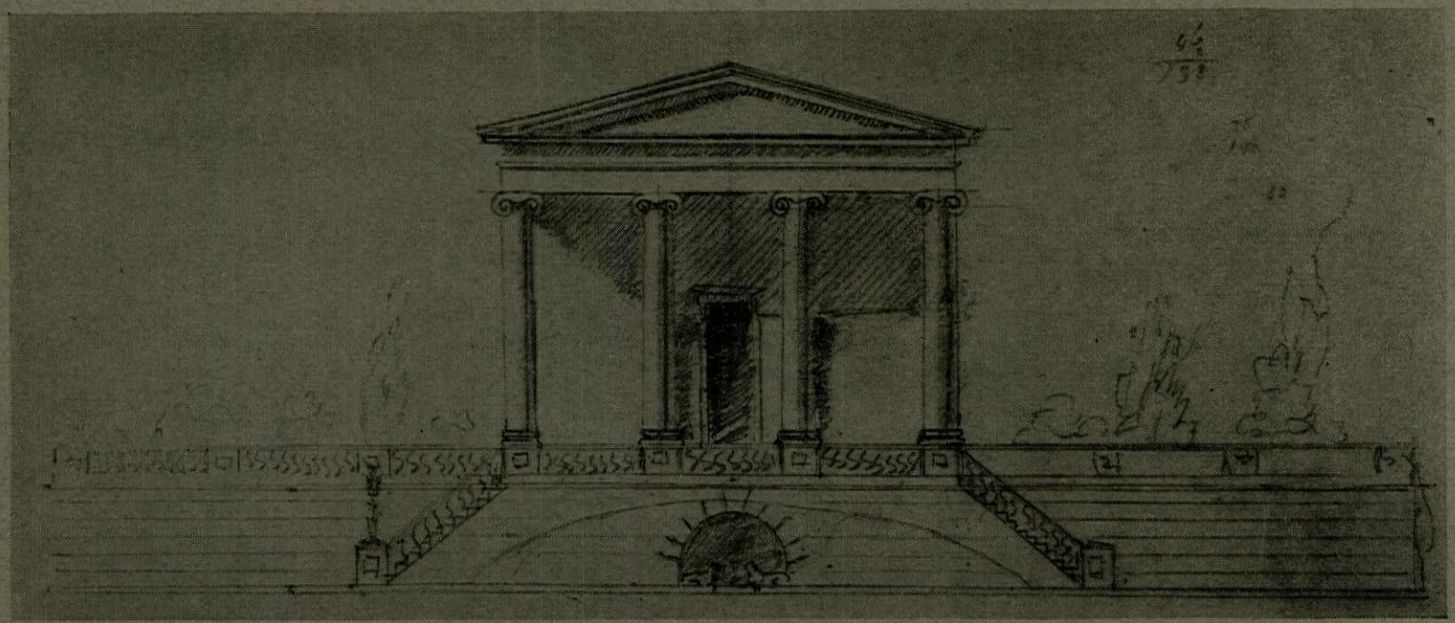
[2] *Ibid.* III, pp. 36–39. All quotes are taken from these pages.

2, *the Moses Moody Villa, Haverhill, Mass.*; 1819-20.

In his book Haviland devoted a number of pages to the relationship between a house and its site, a major aspect of Picturesque taste. Acknowledging the works of Price and Knight as his sources of information, he wrote that a breakfast room of a country house should front on a morning scene, while the drawing room should look out to the setting sun. 'In short,' he said, 'to every view, some object, it is supposed, should appear sufficiently striking to characterize it.' Haviland went on to note that the appearance and style of an exterior should be predicated upon the topography of the site, i.e., the forms and shapes of the trees, the colours of the rocks and soil.

'On rocky exposed spots, where trees grow low and irregular, low irregular edifices in the castle style may be raised. In valleys, where they grow high and elegant, houses in the tower style which implies much height, should commonly be had recourse to. In rich extended planes, buildings of the Grecian order, or such as are in a more massy and regular style than the others, should be formed.'

In order to achieve the goal of placing a house properly in a landscape setting, Haviland, following current English notions, believed that the style and position should be determined only after care-



3, *undated and unlabelled drawing from John Haviland's daybook.*

ful inspection of the site; certainly not '. . . in the closet of the designer.'

Although it is impossible to determine how profoundly these passages impressed Haviland's contemporaries, the book, re-issued around 1830 as *The Practical Builder's Assistant*, must have reached a fairly wide audience, and no doubt provided some with their initial introduction to the Picturesque.[3] The book's readers saw, as well, reproductions of two of Haviland's first American buildings, the John Cridland Villa, 1, at Roxborough (now part of Philadelphia), 1818, and the Moses Moody Villa, 2, at Haverhill, Mass., 1819–20.[4] While these houses fall within the rubric of what we now call Romantic Classicism because of their abstract space-containing forms, they contain certain Picturesque features which perhaps caught the attentive contemporary eye.

In both dwellings, Haviland softened the transition between exteriors and interiors, between house and garden, by means of porches and attached greenhouses, two Picturesque elements common to English country houses of the period.[5] The addition of porches, which provided the façades with a note of variety, Haviland helped justify (in typical early-nineteenth-century fashion) on the basis of utility. In explanation of his design of the Cridland Villa, he wrote the following:

'The monotonous effect of a straight front is broken by the projecting centre, which affords considerable convenience both in the balcony and porch, and agreeable recesses for placing garden chairs, flowers, etc., but it is chiefly introduced for the purpose of giving interest and character to the front in conformity with the roof, which overhangs the wall with a broad projecting shadow, that produces, it is presumed, a bold and striking effect.'

Unfortunately, most of Haviland's domestic architecture is beyond recovery and, so far as is known, he never wrote about the Picturesque again. But it would appear that he was ever mindful of incorporating Picturesque features into his residences despite their geometrically oriented forms. There is one design, an undated and unlabelled drawing in his daybooks, 3, that gives some indication of his subsequent train of thought, and, because of its rarity, is nothing short of tantalizing.[6] In what may be regarded as almost a text-book example of early nineteenth-century styles and attitudes, John Haviland combined ancient Greek and modern French motifs with contemporary English Picturesque taste by joining a temple portico to a long podium which masked a private garden. The portico is derived from the Athenian temple on the Illysus, while the podium, with its staircase and statuary, bears a striking resemblance to Claude-Nicholas Ledoux's *Petit Château*, 4, at Eaubonne, 1776. Visually, this marriage between such divergent models is consecrated [at the balustrade, the plinths of which Haviland cleverly allows to serve as bases for the columns, thus locking the house firmly together with its pedestal. But the most noteworthy feature of the design is the manner in which the house and its garden are combined within a single architectural envelope. Although the interior is intimately linked with the immediate surroundings, a feeling of privacy is nevertheless engendered by the podium, which tends to isolate the building in space.

4, *Claude-Nicholas Ledoux's* Petit Château, *Eaubonne*; 1776.

As a result, the dwelling contains Romantic Classical and Picturesque qualities at the same time, a combination noticeable in the earlier dwellings as well.

Together with his book, this combination of forms, articulated within the rigid framework of Romantic Classicism rather than the more intimate manner of American mid-century architects, lets us view Haviland as a significant early figure in the story of the importation and domestication of the Picturesque in America.

[3] No publication date appears on the title page.

[4] The latter building is still standing.

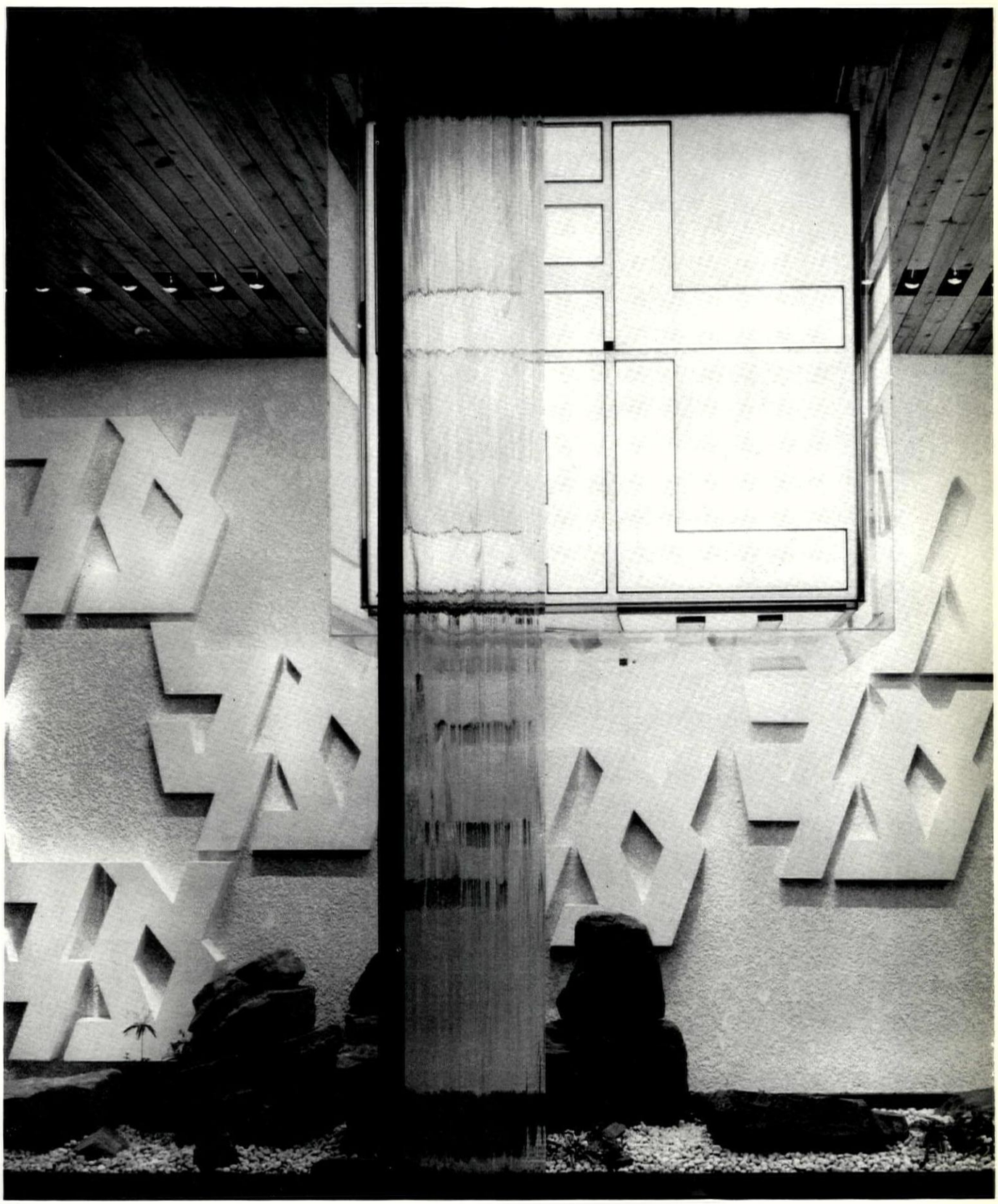
[5] See Donald Pilcher, *The Regency Style*, 1800 *to* 1830 (London: 1948), pp. 40–42.

[6] The drawing may be a study either for the J. M. White house or for the I. L. Joseph house, both of which were erected in 1836–37 in New Brighton Village on Staten Island, New York City. References appear in the Haviland Papers, MS, Vol. 5, at the University of Pennsylvania, Philadelphia, Pa.

Airline Offices, Regent Street, London

architects: Frishman Spyer Associates; design consultant: George Him

photographs by Henk Snoek and Studio Jaanus



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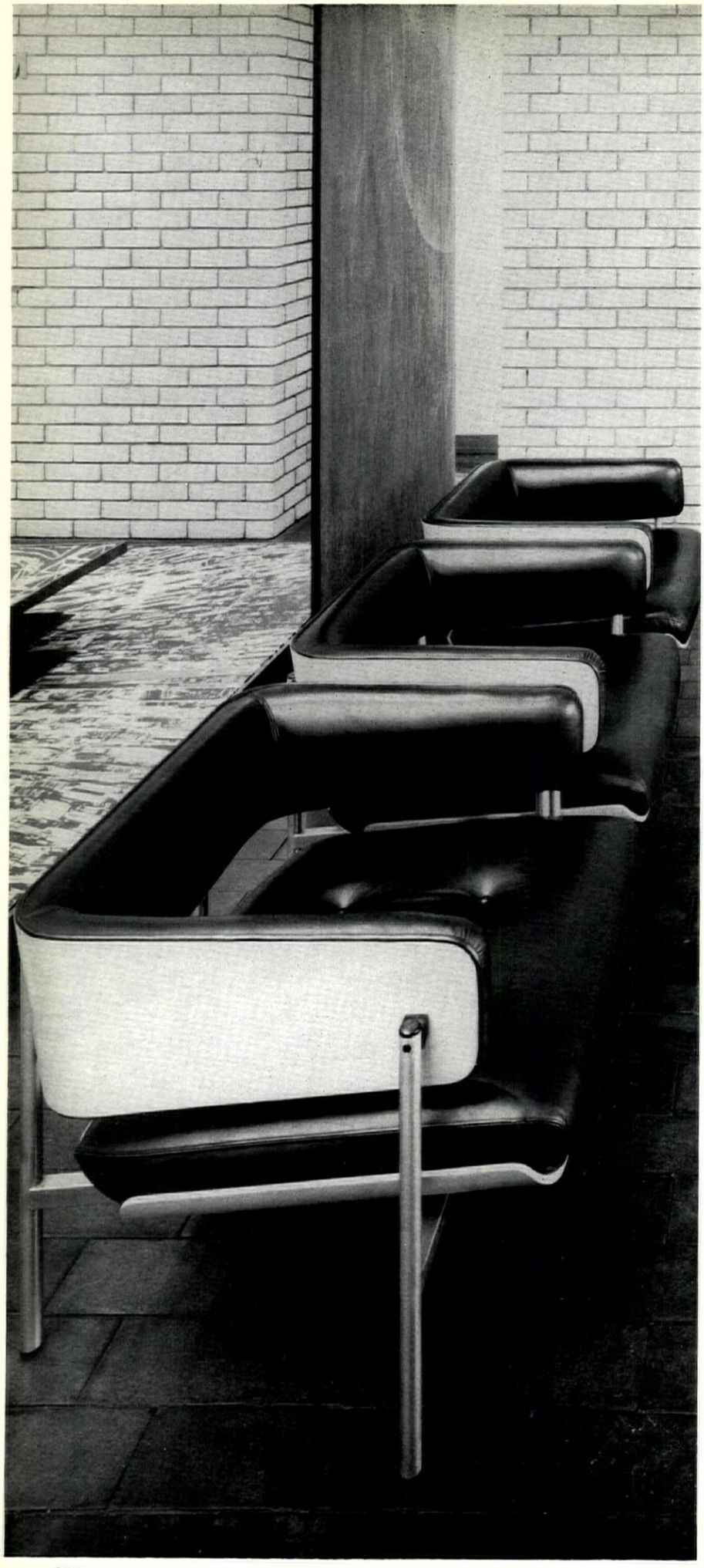
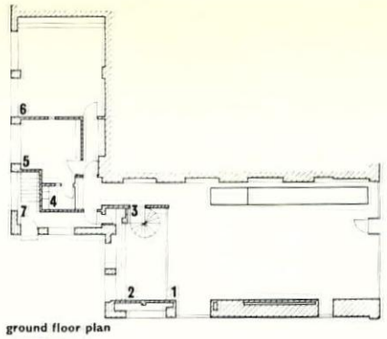
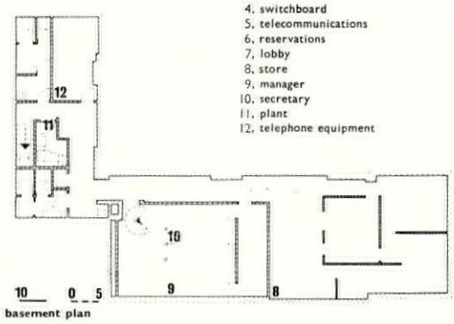




ground floor plan

key
1. booking hall
2. well
3. staircase to basement
4. switchboard
5. telecommunications
6. reservations
7. lobby
8. store
9. manager
10. secretary
11. plant
12. telephone equipment



basement plan

1 (previous page), detail of right-hand wall showing the Hebrew lettering, planting strip, main logotype sign and one of the yellow glass panels. 2, easy chairs designed by the architects. The bricks of the wall beyond are pale grey.

In designing this showroom and booking offices for El Al (Israel) Airlines the architects have followed what now seems to be usual design practice for projecting an airline image. They have exploited the interior space, which is visible from the street through a large window, by keeping subdivisions to a minimum, and placing within the space bold decorative features and carefully designed furniture. The choice of materials, colours and objects expresses the national character of the airline; the simplicity and clean lines, its function.

Walls are of flint lime brick or rough cast plaster, the wooden ceiling is pine and the floor quarry tiles. Three yellow cast glass panels, running from floor to ceiling, act as divisions, while the Israeli character is strengthened by the use of high relief Hebrew lettering and a landscaped planting strip that runs the length of one wall.

Booking desks, easy chairs and tables were designed by the architects, the remaining furniture being part of a standard range. The rear wall displays polished aluminium darts on a screen made up of acrylic tubing backed by a perspex diffuser. The main logotype sign which hangs from the ceiling is also of perspex. A spiral staircase at the end of the showroom leads down to the basement offices which are again furnished from standard ranges.

Airline Offices, London

2

3

4

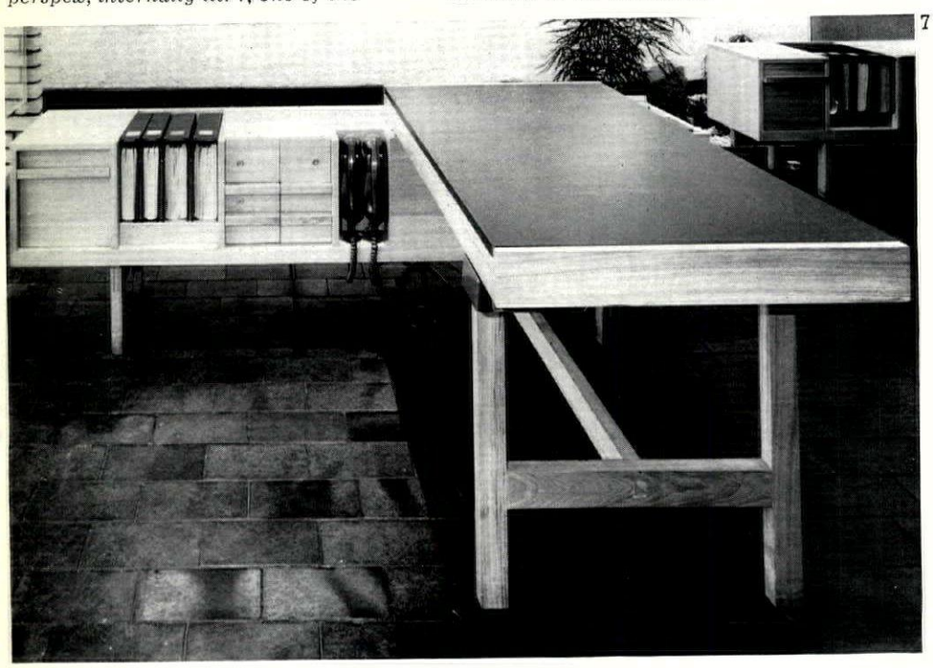
3, view down the length of the showroom. In the background is the rear-lit perspex display wall. 4, the showroom from Regent Street. 5, detail of spiral staircase at the end of the showroom.

5

6

8

6, *the main logotype sign built up of layers of clear, stippled and neutral grey perspex, internally lit.* 7, *one of the booking desks designed by the architects.* 8, *small planting area at the foot of the staircase in the basement.*

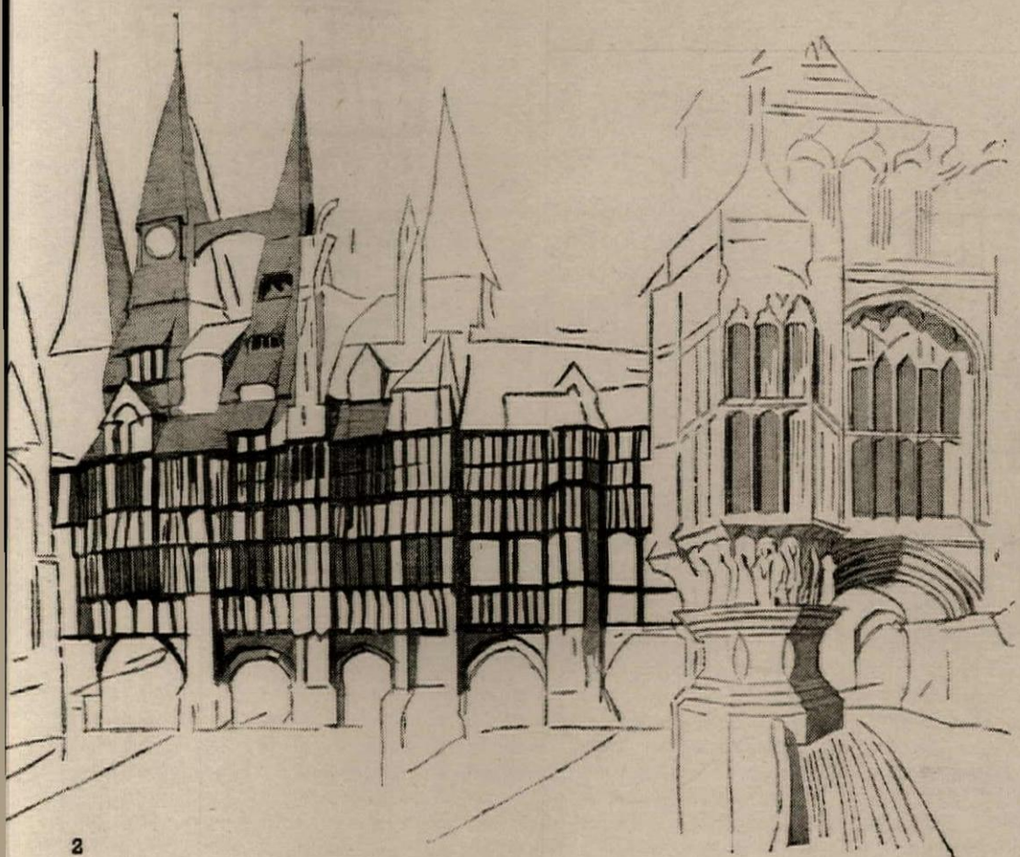


7

Airline Offices, London

1

1, *backs of terrace houses.* 2, *bridge and merchant's house.*



2

contemporary draughtsmen:

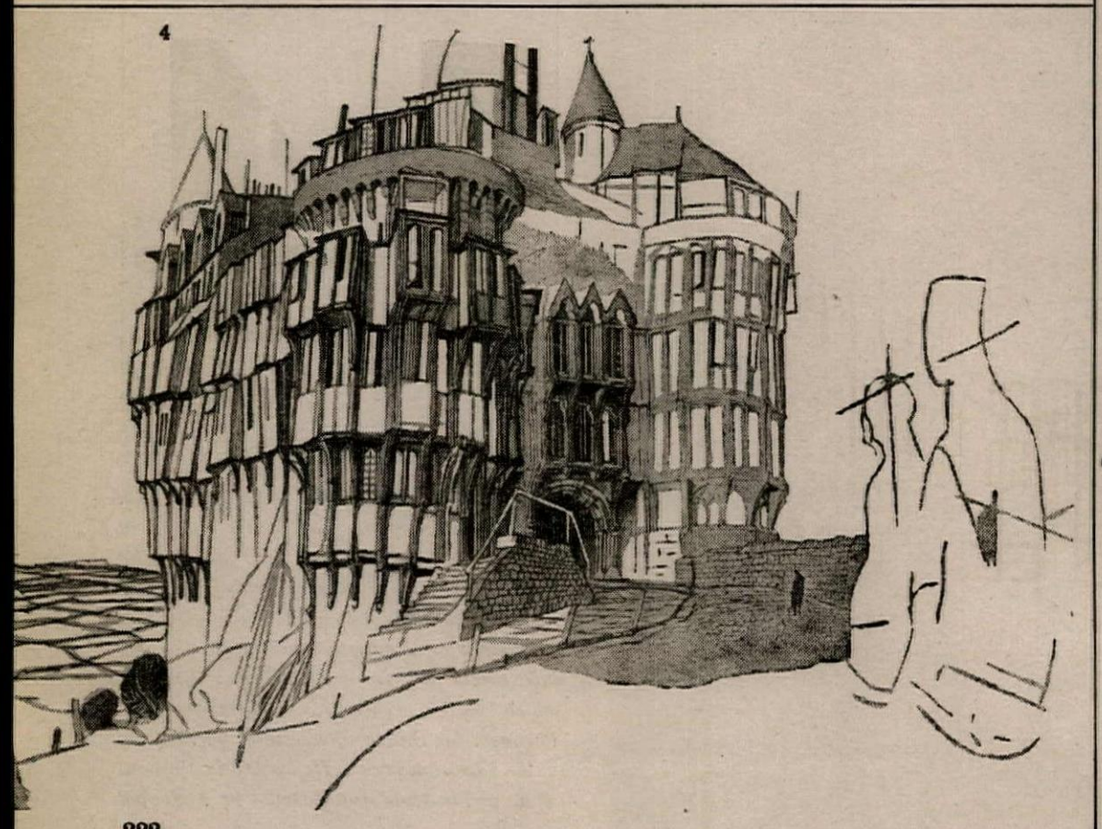
14

Rodney Hubbuck

***Rodney Hubbuck**, born in 1940, comes from the Hampshire-Sussex border. He studied at Portsmouth School of Art, Bath Academy of Art and Brighton College of Art before taking up his appointment in January as assistant art master at Bradford Grammar School. He has specialized in drawings and linocuts, which mainly reflect his longstanding enthusiasm for church architecture, particularly of the Victorian period. He worked in 1961–62 as an architectural draughtsman for Seely and*

Paget; his own taste has gradually moved from Sir Ninian Comper to James Stirling. He has written a pamphlet on the churches of Portsmouth and an unpublished volume on Sussex churches. He selected the illustrations and wrote many of the captions for Basil Clarke's and John Betjeman's British Churches (1964). *The fantasy sketches reproduced here, reminiscent of H. W. Brewer's or F. L. Griggs's work of* c. 1900, *follow a recent tour of the sources of Gothic in the Ile de France and Normandy.*

3



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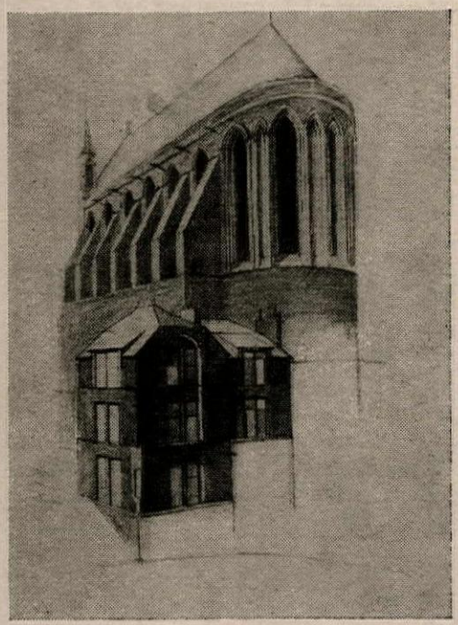

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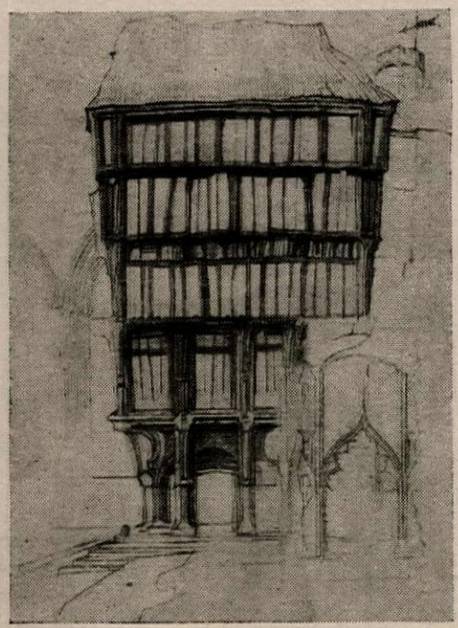

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3, *fortified abbey.* 4, *nobleman's tenement.* 5, *High Victorian church and clergy house (based on Edmund Scott's St. Bartholomew's, Brighton—see AR, April,* 1965). 6, *merchant's house.*

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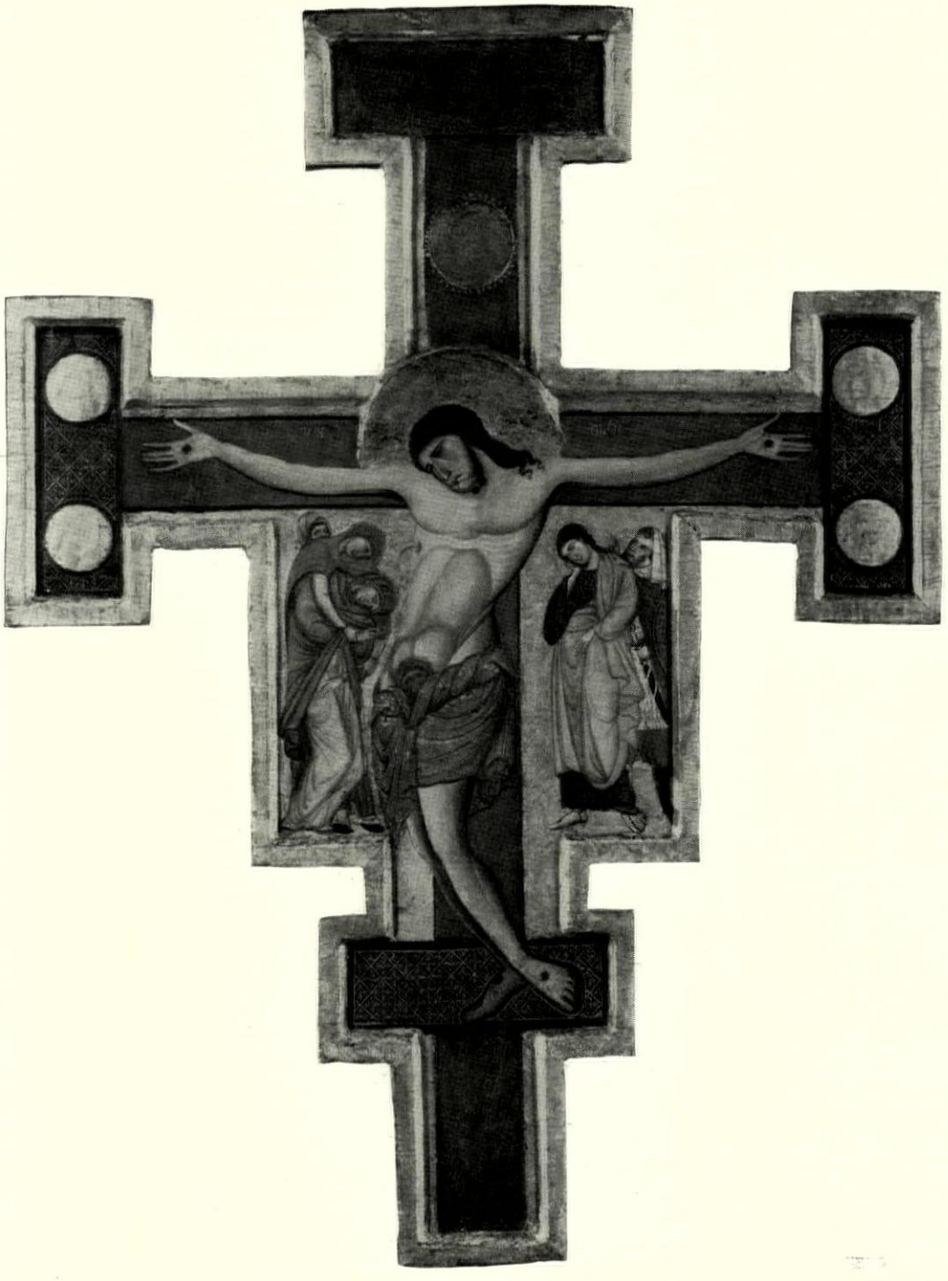
S.49

THE COOL WAY

Robert Melville

The cool abstracts of some of our younger painters and sculptors are the emblems of an inherited iconoclasm. In the twentieth century, the human image has been exorcized by countless acts of disfiguration and obliteration, and the young men now solve their design problems as if the human image never was. The outcome in pure decoration reflects a society which, spiritually, has written itself off and grown tired of its self-disgust. But this cool and uninvolved art is not entirely negative. Like our best architects, the painters and sculptors want to provide the rat-race with a decent environment. On the principle that an air-conditioned nightmare is nicer than a nightmare that isn't, they may even be said to have a qualified idealism.



1, *Master of San Francesco: 'Crucifix,' Thirteenth Century.*

In these circumstances, I would have thought that we were peculiarly well-placed to appreciate the marvellous coolness of a small thirteenth-century Crucifix, 1, recently acquired by the National Gallery, and that it might even warrant a discussion at the ICA. But it has aroused little interest. About a year ago, the National Gallery acquired Cézanne's 'Les Grandes Baigneuses,' a painting of a totally different order, in which we can see the beginning of twentieth-century iconoclasm. The bathers are the remnants of old figure studies, so worn-out by over-use that they are like a mouthful of decayed teeth. Nevertheless, the painting is a monumental expression of anxiety and lends weight to a much-quoted saying of Picasso's: 'What forces our interest is Cézanne's anxiety, that's Cézanne's lesson.' I don't think it is true of Cézanne's finest paintings, but in 'Les Grandes Baigneuses,' crucified by anxiety, it's rammed down our throats. Lessons in anxiety are becoming as boring as a flower-piece by Fantin-Latour.

The thirteenth-century Crucifix, which hangs in Room I, round to the left, off the main staircase, is attributed to the nameless painter of a St. Francis in a church near Assisi, and art historians call him the Master of San Francesco. In the same room there is a larger Crucifix of similar design described as 'in the style of Segna di Bonaventura,' but it's an old name-plate, and the picture may by now have a different attribution. It is a somewhat later work and the Christ and subsidiary figures are in a more realistic convention: the body of the Christ droops a little in slight acknowledgment of the law of gravity.

By contrast, the Christ by the Master of San Francesco has what balletomanes call elevation, and the figure describes the most elegant of curves. The highly conventionalized anatomy is picked out in green lines, softened with an edge of lighter green which provides a faint sense of modelling. The sharp facets of eyes, nose and mouth are gently enclosed by the shadowed outline of the beard. The halo, a gilded wooden projection, is scooped out and forms a little shelter for the head. The blood trickles charmingly: double red lines from each foot meander down the blue of the cross to form neat little triangles at the golden border; a tiny leap of blood from the breast leaves no

further trace. The linear interweave of the waist-cloth is incredibly beautiful and has the curious effect of lending infinite value to the hidden genitalia.

The first figure in the group of three Marys on the left of Christ is clothed in light blue and is the Holy Virgin. The figure supporting her is in red and must be the Magdalene. The chief figure on the right is certainly St. John, and the exotic figure behind him is no doubt a Roman soldier. All these subsidiary figures are rather tightly packed into the space available, which has the effect of emphasizing the light, airy sacredness of the Christ. Whatever its appeal in the thirteenth century, it is for us, with only aestheticism as a guide, an image of Grace Abounding.

I suppose this Crucifix is an example of Italian Gothic, but it seems to preserve much of the spirit of the Byzantine in its linear precision, in the clarity of its contrasting but harmonious colours and in the arithmetic which projects its charm. Gervase Mathew, in his book on Byzantine aesthetics, says that the serenity of Byzantine art was 'based on recognition of the dominance of Idea and of the rule of cool and temperate mind . . . on belief in the existence of an invisible world of which the material is the shadow—so that an image presupposes the Imaged, just as a shadow presupposes the body that casts it, and is as closely linked to it.' He maintains that 'the sacred icon was never considered to be identical with its prototype,' but 'could be a channel to it and from it and as a reflection signify its presence.' Perhaps our figurative problem is that we can only open channels to our Freudian selves.

The avowed reason for the destruction of sacred images by the Iconoclasts of seventh-century Byzantium was that corporeal images in places of worship led to idolatry, but Mathew suggests that this was only a cover for the struggle for political power, and that the Iconoclast Emperors had no fear of graven images and were in fact 'munificent patrons of art.' They simply wanted to direct Christian allegiance on to themselves.

Only a time-traveller could tell us about the quantity and quality of the sacred images destroyed in England in the mid-sixteenth century by the Tudor Iconoclasts. All we know is that it turned England into an artistic desert for a very long time. Henry VIII was another 'munificent patron of the arts' and was fortunate in having Holbein in his service to raise secular portraiture to great heights, but after Holbein's death the quality of portraiture went rapidly down-hill. After Henry's death, as Roy Strong points out in his excellent preface to the Hans Eworth exhibition recently held at the National Portrait Gallery, 'no major artistic projects were undertaken by the Crown for the rest of the century.' He then goes on to say: 'One cannot emphasize enough the significance of this recession in royal patronage which led to a fossilization of style to be shattered only by the arrival of Van Dyck.'

The Tudor portraits signed 'H.E.' and now thought to be the work of Hans Eworth, a Dutchman active in England from about 1545 to 1570, are among the best things done in this period of recession, but they are interesting mainly for what is known about the sitters. The rather splendid portrait of an unknown lady of the Fitzwilliam family, 2, is not signed 'H.E.' and is considered to be the work of one of Holbein's 'most distinguished unidentified followers.' It is probably finer than anything from the hand of Eworth.

Even the 'Family of Henry VIII,' 3, interesting as a naïve attempt at royal glorification, is not

2, *School of Holbein: 'Unknown Lady.'*

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3

thought to be his work. Henry VIII, enthroned, hands his sword of justice to Edward VI; opposite, Mary accompanied by Philip of Spain is followed by Mars, God of War, and Elizabeth stands in the foreground, stamping on the weapons of discord and pointing to her attendants, Peace and Plenty. No prizes can be given for guessing who commissioned it.

3, *Unknown Artist: 'Family of Henry VIII.' The inscription round the frame reads: 'A face of much nobillitye loe in a little roome. Fowr states with theyr conditions heare shadowed in a showe. A father more than valyant. A rare and virtuous soon. A zealus daughter in her kynd what els the world doth knowe. And last of all a vygin queen to Englands joy we see successyvely to hold the right and vertues of the three.'* 4, *Hans Eworth: Mary I.* 5, *Unknown artist: Henry Stewart, Lord Darnley.*

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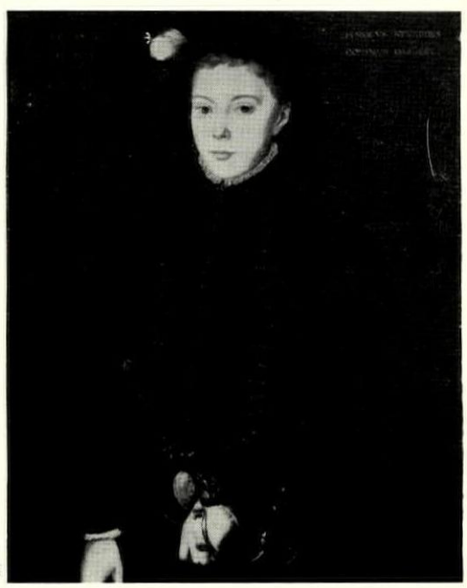

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The portrait of Mary I, 4, is attributed to Eworth and, as in several other portraits of her by various hands, the face is based on the likeness in the three-quarter length portrait which belongs to the Society of Antiquaries and is also attributed to Eworth. The face in this small version is even more grim than in the original portrait, and it raises questions which presumably will never be answered. Who was it painted for and was it done while she was still the reigning monarch?

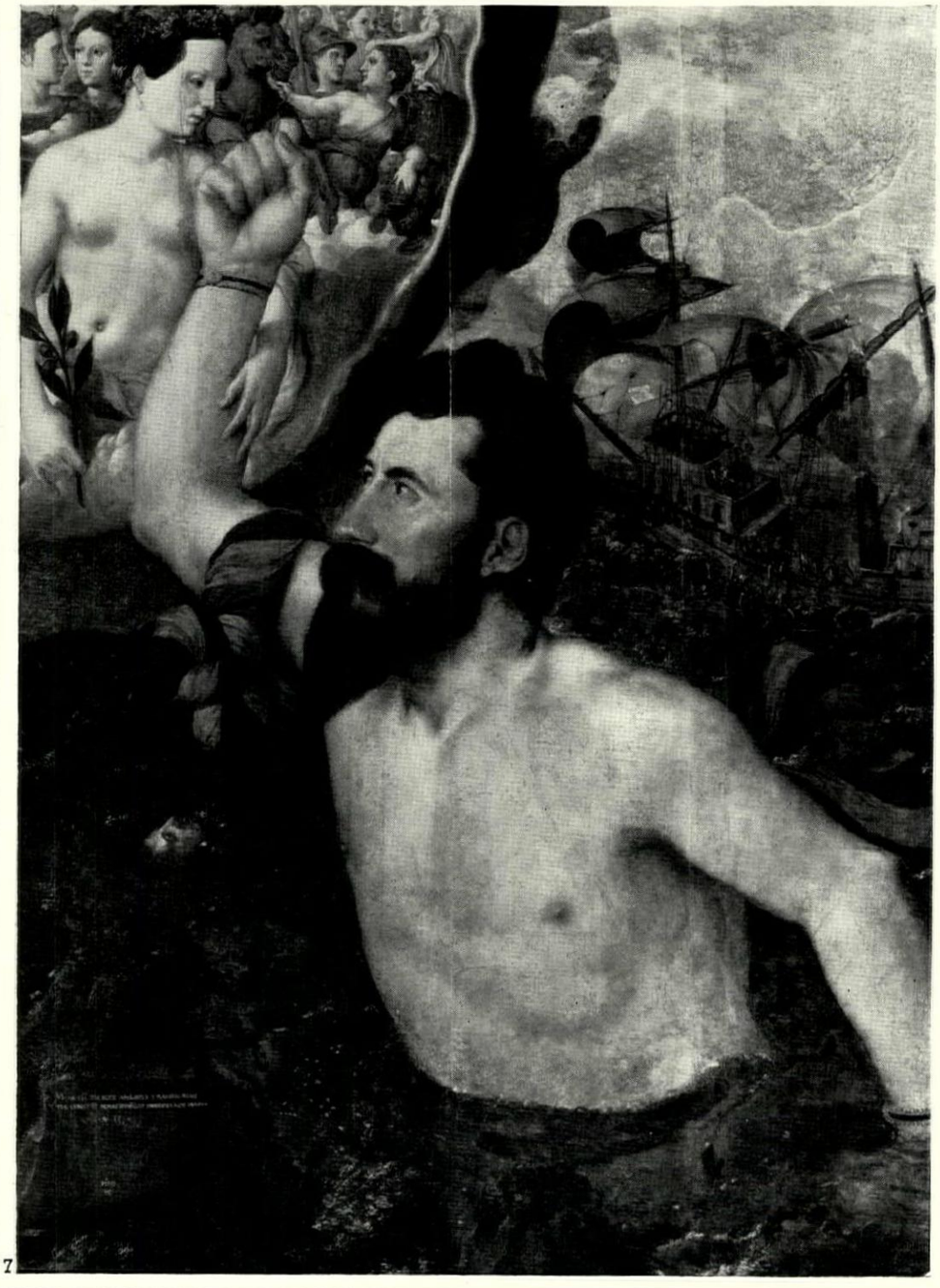
An inscription notes that the 'Henry Stewart, Lord Darnley,' 5, is a portrait of him 'when he was young, to the waste.' Mary Queen of Scots described Darnley as 'the properest and best proportioned long man' she had ever seen. As everyone knows, he was murdered at the age of 22, two years after his marriage to her.

6

The portrait of Lady Dacre, 6, shows in its rather vulgar way the influence of Holbein, but puts one in mind of some of Gertler's portraits of coster women. The small portrait in the background is of the woman's first husband, who was hanged in 1541 for murdering his park-keeper.

The most interesting of Eworth's portraits is the 'Sir John Luttrell,' 7, an essay in allegorical portraiture of which a careful copy was made by someone else in 1591. The inscriptions on Sir John's bracelets are only in their original form on the copy: one reads 'money did not deter him,' and the other, 'nor danger wreck.' The allegorical scene in the top left-hand corner is in the style of the School of Fontainebleau, and is almost certainly the work of a French painter. In its heavy-handed fashion the picture is a foretaste of the emblematical art of Nicholas Hilliard, the greatest of our miniaturists and, with the exception of John White, the only creative English artist of the sixteenth century.

The fossilization of style referred to by Roy Strong is most evident in the numerous court portraits of Queen Elizabeth with a mask-like face, in which the attributes of majesty are conveyed by the detailed brilliance of the jewels and lace of her gowns. They were tokens of allegiance and are like caricatures of Byzantine sacred portraiture. They are more reactionary than the work of Eworth, who seems to have stopped painting before they were produced, but it is a sign of our changing attitude that in recent years their total impersonality, their decorativeness and their hint of the Byzantine make them more interesting to us than Eworth's run-of-the-mill Mannerism. In Hilliard's miniatures—which were tokens of a more intimate allegiance, since they were usually worn at the breast and must often have been exchanged by lovers—this fossilized style became the purest magic.



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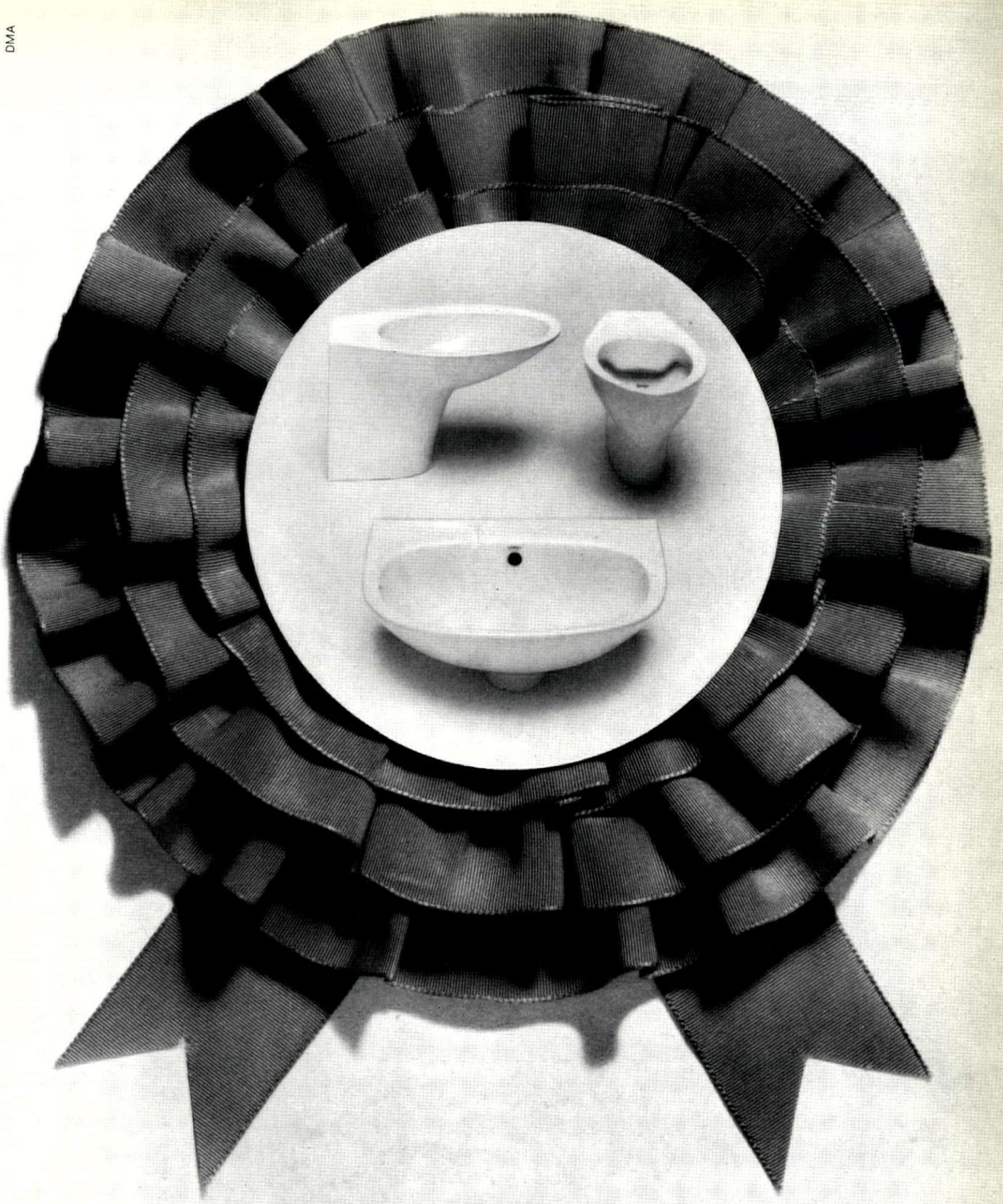
6, *Unknown Artist:* '*Lady Dacre.*' 7, *Hans Eworth:* '*Sir John Luttrell.*'

DMA



Award for 'Meridian One'–by **adamsez** who are proud to announce that their new sanitary suite designed by Knud Holscher MAA and Alan Tye Dip. Arch ARIBA (in association with Alan H. Adams) is one of the 16 Design Centre Awards for 1965. Designed for use with a duct – or similar concealed services space – the backs of the fittings align with a 6″ tile module and all unsightly connections are concealed. For an A4 data folder on the 'Meridian One' range, ask Adamsez Limited, 75 Victoria Street, London SW1 (Tel: Abbey 5846) or Fireclay Works, Scotswood-on-Tyne.

Design Review

New products chosen and annotated by Ronald Cuddon.

DR

Sanitary ware; tiles

The architects Knud Holscher and Alan Tye met and worked in the office of Arne Jacobsen. Both came to England, Holscher to work on and supervise the building of St. Catherine's College, Oxford, and to become with Tye a prizewinner in an international sanitary ware competition. Their designs were taken up by Adamsez and a close collaboration between designers and manufacturers resulted in the 'Meridian One' sanitary suite. 1,

1

sculpturally excellent but also a well considered essay in the relationship of equipment to the building fabric. There would appear to be three ways of attaching sanitary equipment to walls and floors. First, by abutting units to the finished wall surfaces, producing the filthy, obscene, vertical cracks which are aggravated by the rounded corners and untrue surfaces of ceramics especially prevalent after glazing and firing. Secondly, by building-in and bringing the wall finishes down and up to the earthenware, replacing the vertical cracks with face joints less vulnerable to wet conditions and eliminating the rounded arrises where they are not required. This approach, however, demands more skill than is easily obtainable, since tiles have to be carefully cut and other materials accurately scribed round the earthenware at junction with the wall. The third method, that of isolating and cantilevering equipment from the vertical surfaces, breaks down when service pipes and waste connections are taken back through the wall and multiply the visual contacts with the wall surface; and there is the additional snag of increasing the probabilty of puddling on the floor. The 'Meridian One' suite is a reminder of the conflict between the expression of exposed services and their suppression by means of enveloping outer skins. The boxing-in of all services can be repugnant, but unless the services are skilfully organized and seen as an aesthetic contribution by the specialists and trades concerned in their installation, the result is confusion and crudity. This new suite largely overcomes these problems by ducting the services and enveloping the traps with a smooth and easily cleaned outer skin, integrating equipment with walls and floor. It is therefore a welcome and valuable development where space for a ducted cistern is available. Adamsez have opted

2

for abutting equipment to walls on the prototype panels I have seen, but the whole suite is made to a 6in. module to fit British tile sizes and was designed to be built-in. Consideration is being given to the idea of adapting the suite to meet the 4in. module of industrialized building. The pedestal closet, 2, has the Adamsez 'Lotus' rimless flush bowl and the height of 14in., which is 2in. lower than traditional closets and therefore accords with current medical opinion. The seat and lid are of white perspex superbly tailored to the bowl, though it could be argued that the seat-ring is perhaps too narrow for maximum comfort. The basin of more orthodox pattern, 4, has a combined outlet and overflow, is supported by two screw-to-wall brackets and conceals all the plumbing except the waste trap beneath the basin. Although primarily designed for wall-mounted taps or mixer fittings, the basin can also be supplied with tap holes, in which case tap connections can only be reached from within the duct

DR

space. The tail of the waste fitting and its often unsightly connection are concealed by the skirting of the basin.
The prototype panels exhibiting the Meridian One suite also show the Adamsez 'Admix' basin mixer valve, 3, designed by George Kassabov and Max Sheardown for the *Economist* building in London (architects Alison and Peter Smithson). The valve can be used over a wide range of differential pressures and provides 100 per cent hot or cold water at the extremities. It is chromium plated with anti-splash insert in the nozzle, with 6in. long tails and wall flanges to cover the junction of wall finish to fitting. The side control is an innovation

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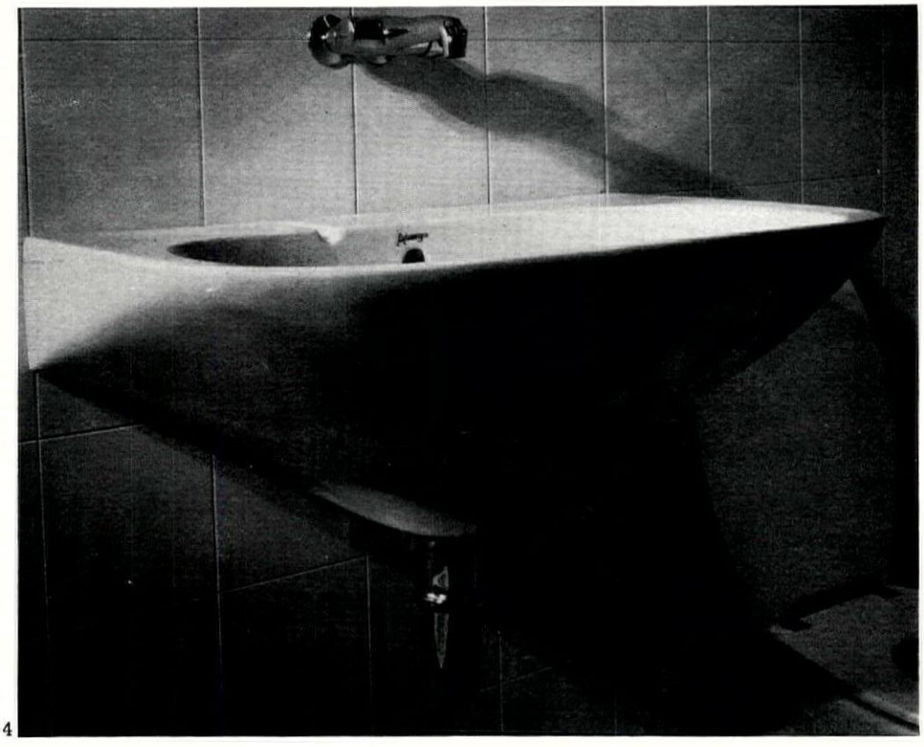

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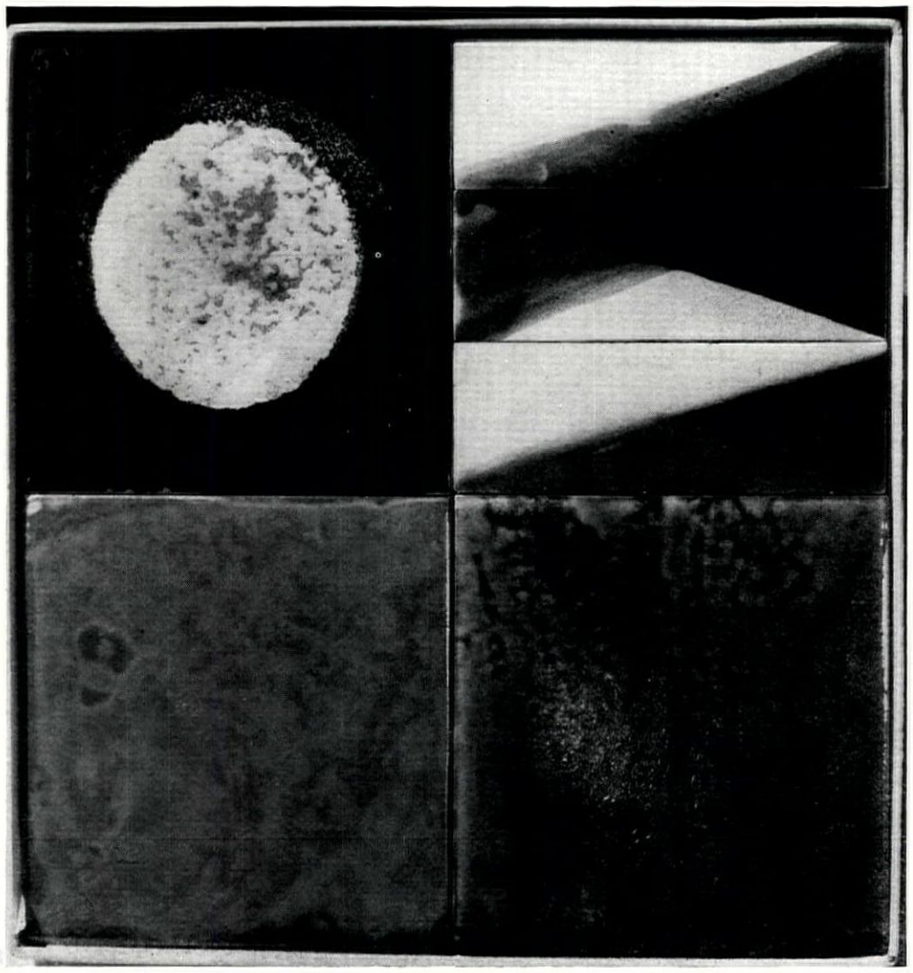
for this kind of valve, and though easily handled by most people a left-handed person may find this to be irritating and inconvenient when it is placed high on the wall. Although the nozzle and body are well formed, the back nuts and flanges appear heavy and slightly incongruous and may prove awkward to clean.
This valve, however, is pleasantly small in scale and is complementary to the basin and bidet, if used with the Meridian range.
The tiles, 5, by Alan Thornhill are interesting for their texture and colours. They are either red quarry tiles in sizes ranging from 6in. by 6in. by §in. down to 6in. by 1in. by §in. or Carter's white biscuit tiles in the same variety of sizes. The quarries are dipped or partially dipped in black or white or black and white glazes and refired to a temperature at which the body of the tile and glaze mature together and vitalize each other. On the biscuit tiles glazes and colours are applied in various ways such as dipping, trailing, printing, etc. The tiles are intended for internal and external use, for walls primarily but also for floors where traffic is not heavy. They can be used as repeat patterns or built up into murals.

Products: Sanitary ware and fitting; ceramic tiles.
Manufacturers: Adamsez, Alan Thornhill.



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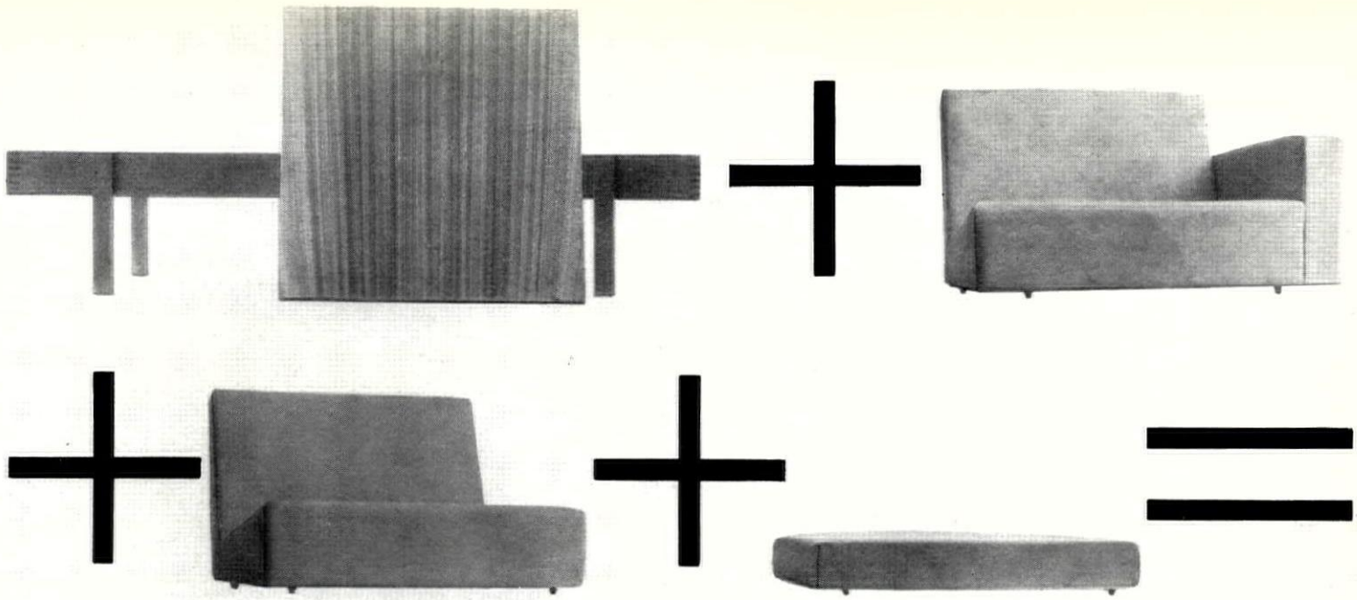

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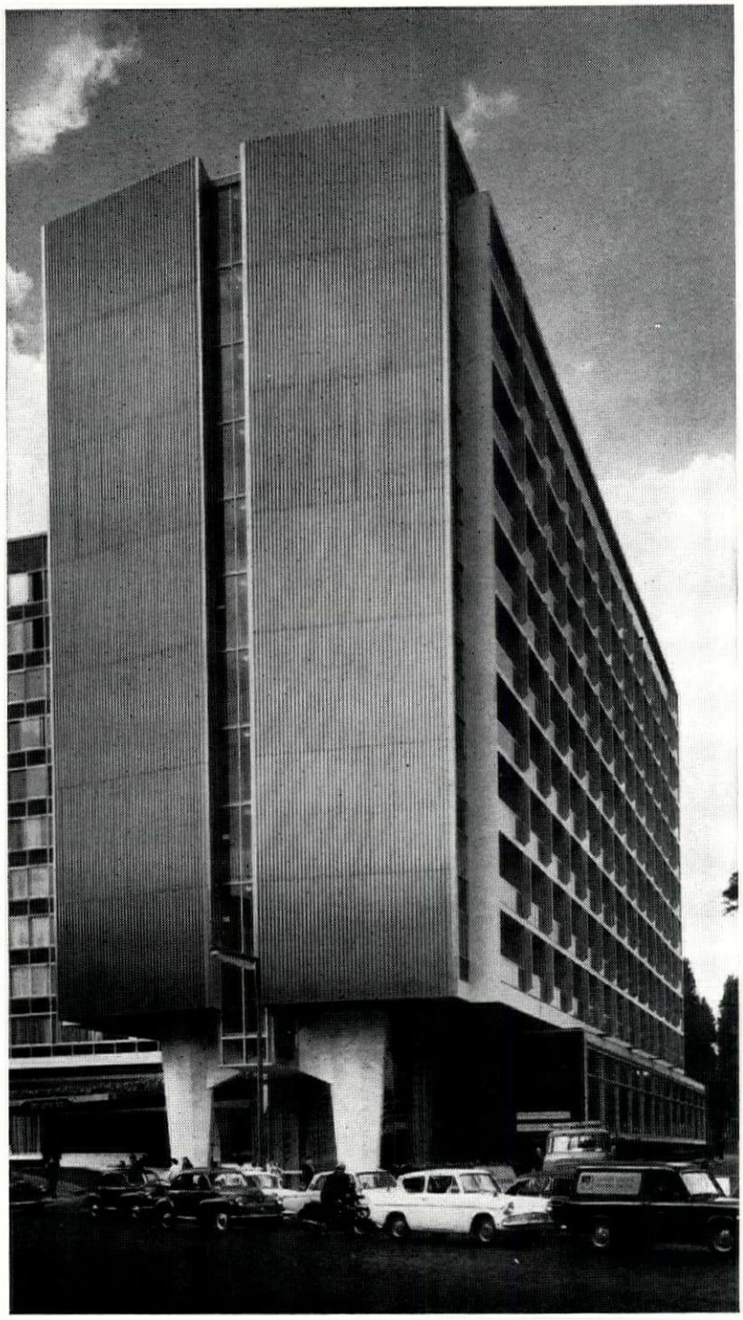
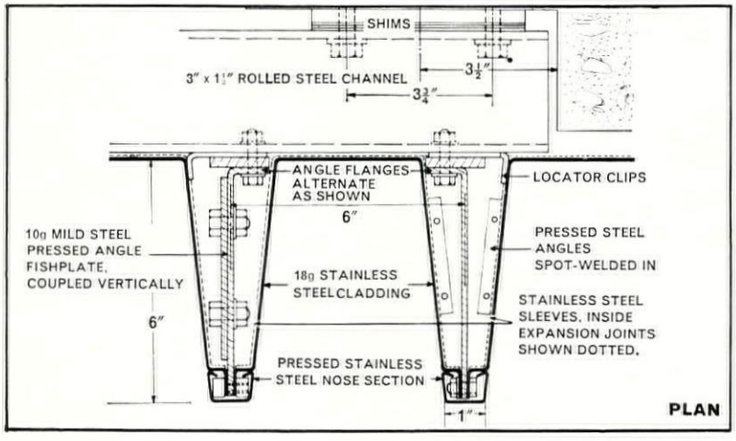


The Royal Garden Hotel, Kensington Architects: R Seifert & Partners. Contractors: Messrs Tersons Ltd. Stainless Steel fabrication: Culford Art Metal Ltd



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history

CZECH CUBISM

There is in Bohemia a group of buildings which, dating as they do from the early years of the twentieth century, present a marked contrast to the architectural styles current at the time. Their façades, 1, are broken up into a series of projecting and receding angular surfaces, and the windows have the same angles. The furniture designed by the architects of these buildings is still more extreme.

The architectural situation in Bohemia—still at this time part of the Austro-Hungarian Empire—was much the same as in the rest of Europe. Art Nouveau flourished and, as well as the normal architecture of the day, there was a strong group of architects working in traditional styles. Jan Kotera (1871–1923), who played a major part in the revival of Czech artistic life at the end of the nineteenth century, was himself a pupil and follower of Otto Wagner in Vienna, and stirred enthusiasm in young Czech architects. By 1911 several of these—particularly those who tended towards the Wagnerian theory—left the Modern Artists' Association, *Manes*, and together with painters and sculptors formed the independent Artists' Group. From 1911 to 1914 they published their own magazine, *The Artistic Monthly* (*Umelecky mesicnik*), which was completely devoted to articles attempting to explain Cubism not only in terms of painting and sculpture—but also of architecture. The Cubist painter Emil Filla, writing in 1911 in the first number of the magazine, said: 'The body in its final appearance is tranquil, but its spatial value is a token of movement, although of movement in our mind only.'

The theorist of the Artists' Group was the architect Pavel Janak (1882–1956). Born in Prague, he studied architecture at the College of Technology, where at first he was taught by architects interested in historical styles. He was a pupil of Otto Wagner in Vienna from 1906 to 1907 and then spent some time in Italy. In 1908–09 he worked with Jan Kotera in Prague. Even before the foundation of the new Group, Janak began to question the Wagnerian theory of 'Zweck, Konstruktion und Poesie.' In 1910 he wrote an article 'From modern architecture to Architecture,' in which he called for discipline and unity in architectural design. 'We need a new theory. There has been enough poetry in modern architecture, but too little architectural beauty. Poetry im-

1, *block of flats in Neklanova Street, Prague*, 1912, *by Josef Chochol.*

2

3

Sources of Czech cubism: 2, vault of Franciscan church at Bechyne, c. 1895, and 3, porch in Old Town Square, Prague, c. 1510, by Benedikt Ried.

proves architecture only by adding details, but architectural beauty must be constructed; and we reach it through the structure of the material. Architectural beauty is a dramatized balance of materials. Olbrich and Hofmann used ornament, where we feel there should have been a plastic form. The creative mind and abstraction will take the place of the previous predominance of purpose (decorated by poetic details), and architecture will continue in its efforts for plastic form.'

Czech architecture has always shown a preoccupation with plastic form; the Baroque developed in Bohemia to a superb level and its forms dominate the country and particularly Prague. The Late Gothic with its cellular vaults, 2, was already exploring the possibilities of construction resulting in spatial complexity, and even in the unsettled times at the end of the fifteenth and the beginning of the sixteenth century Benedikt Ried developed his famous vaults with double-curved ribs; the columns of his porch, 3, in the Old Town Square are strikingly similar to those of four hundred years later. The powerful Baroque Gothic of Santini after 1700 (AR, February, 1957) is the climax of these efforts. Interest in historical architecture was, at the beginning of the twentieth century, strengthened by the growing nationalism of the Czechs and their dislike of the domination of Vienna. There was an active movement for the care of monuments, for which the Cubist architects were enthusiastic.

The basis of the theory which resulted from these influences was expressed by Pavel Janak in two articles: 'Prism and Pyramid' (1911) and 'Revival of the Façade' (1913). In 'Prism and Pyramid' he called for a reappraisal of the Baroque. He did not mean the rich decoration, but referred to the approach to form and space, in which the material has no importance and the architect aims at optical effects. In 'Revival of the Façade' Janak was more concise; he defined two approaches to architectural design. In the first, the spectator is supplied immediately with an objective knowledge of the form and space, tangibly accurate—for example, in the space of a central plan. The second approach, which demands the active participation of the spectator, is exemplified by the relation between a longitudinal plan and its façade. Here the façade supplies only some knowledge of the space but gives important hints. Thus, for example, the blank arcades on the façade of San Michele at Lucca define the dimensions of the church, and by using our visual perception create an impression of the space behind—as if we were looking at a bas-relief. Baroque took this idea a step further; the façade elements which had been mere additions to the internal space combined with it into a unity, some thereby becoming more important, some being reduced to a secondary role.

Before the third dimension was actually exploited, the Baroque used tricks of perspective. Even the central plan was

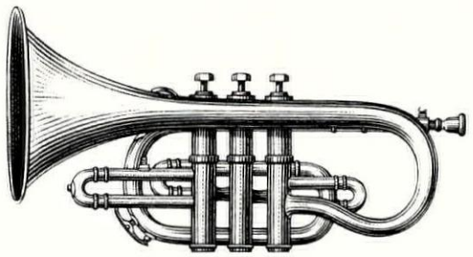
4

5

Contrasting scale in designs by the chief Cubist theorist, Pavel Janak: 4, lock and barrage at Predmerice, 1914, and 5, table and chair, 1913. 6, house at Prague-Vysehrad, 1912-13 by Josef Chochol.

6

WR9



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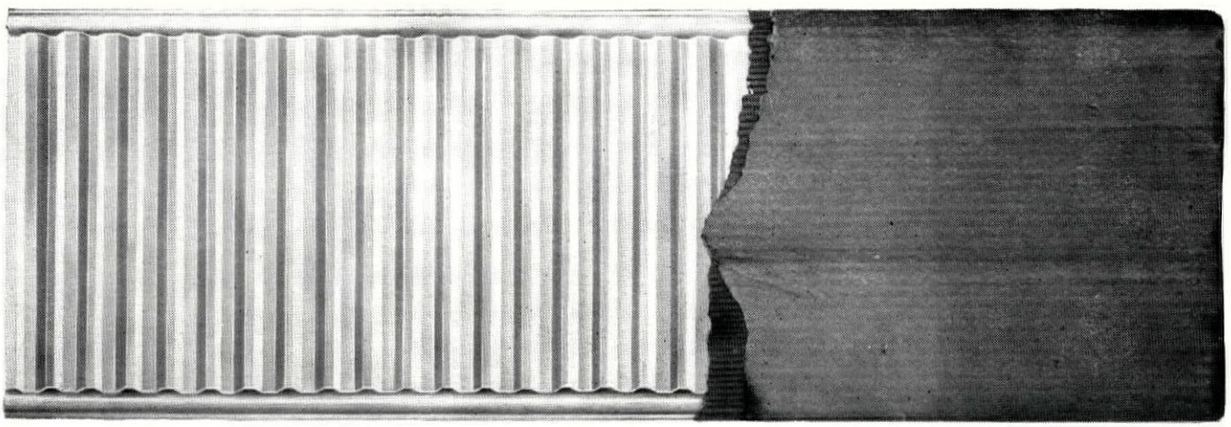

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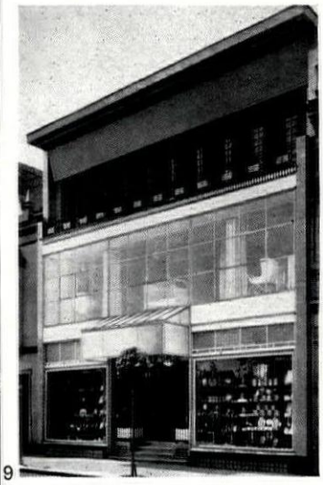
7

8

7 and 8, block of flats in Neklanova Street, Prague, 1912, by Josef Chochol. 9, Wenke store, Jaromer, 1909; 10, building in Celetna Street, Prague, 1912; and 11, sanatorium at Bohdanec Spa, 1912, all by Josef Gocar.

expressed through a façade, as in the church of St. Charles Borromeo in Vienna, or in Kilian Dientzenhofer's church of St. Nicholas in the Old Town at Prague. Janak concluded this analysis by defining the purpose of Cubist architecture: 'Space is always three-dimensional, but it is necessary to add to it; space must be created by the plastic shaping of its limiting surfaces.' It was according to these principles that the Group worked.

Janak himself designed some small Cubist houses, and the remarkable locks and barrages at Obristvi (1911) and Predmerice (1914), 4, but he was more of a theorist than an architect. His major importance lies in furniture design (his table and chair of 1913 are a good example, 5) and in the organization of the Artists' Group. The most important architect of the Group



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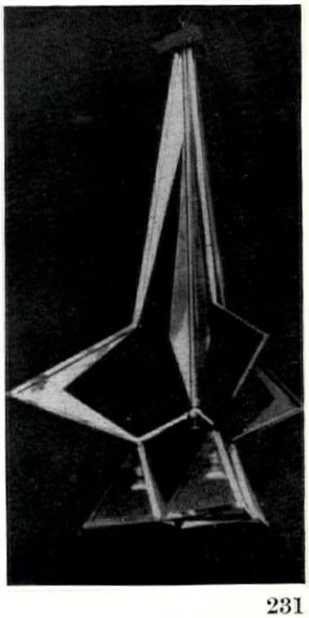


14

Furniture design by Josef Gocar: 12, sideboard in red oak, 1912; 13, table and chairs, 1911; and 14, chandelier, 1913.

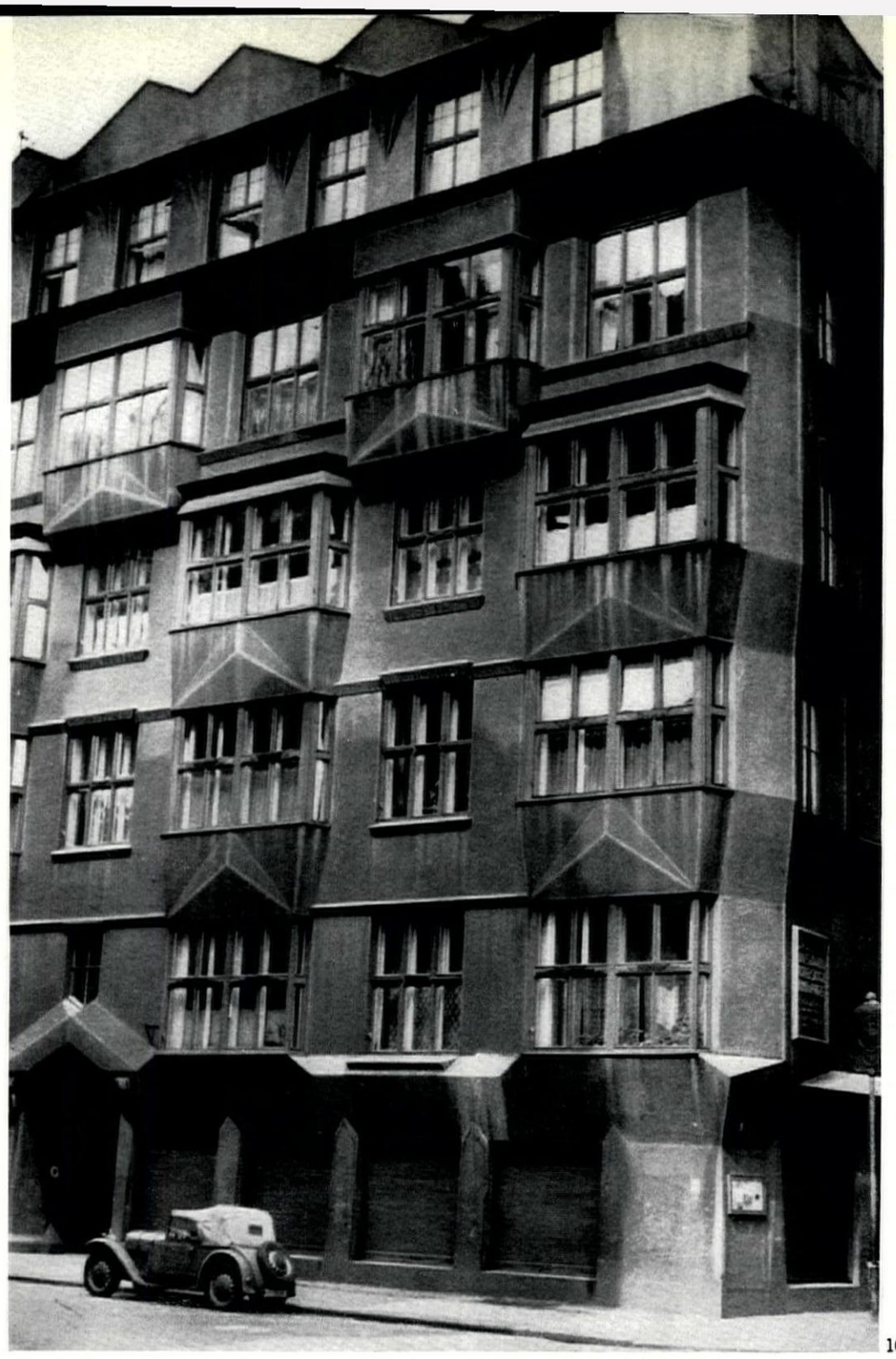
was Josef Chochol. Born in 1880, he also studied at the College of Technology in Prague, and then in Vienna under Otto Wagner. His house in Prague-Vysehrad, designed in 1912 and built a year later, 6, and especially the block of flats nearby in Neklanova Street, also of 1912, 1, 7 and 8, are the most outstanding realizations of Cubism.

Josef Gocar, also born in 1880, was a disciple of Jan Kotera at the Academy of Arts in Prague, and, after finishing his studies, he worked until 1908 in Kotera's studio. Before joining the Group he produced, in the years 1910–11, many designs in the Wagnerian style and became established as a successful modern architect. His Wenke store of 1909 at Jaromer, 9, was a bold foretaste of the curtain wall. In fact, Cubism as a movement seems to have been only an episode in his work. He exploited the Cubist principles for his own artistic purposes, but very skilfully. Two Cubist buildings were built after his designs, both of 1912: a building for medical care at Bohdanec Spa near Pardubice, 11, and the building in Celetna Street in the Old Town of Prague, 10, which was called *U cerne matky Bozi*—'By the Black Mother of God.' He also designed a great deal of furniture such as a sideboard in red oak in 1912, 12, table and chairs in 1911, 13, and a chandelier in 1913, 14. Blending admirably with an old thoroughfare full of Baroque buildings, Gocar's building in Celetna Street proves the close harmony in practice between Czech Cubism and Czech Baroque. A. Pfeiffer's cubist framing of a Baroque statue in the same year makes the same point in sculpture, 15.

Beside these major cubist architects, there were other less important figures. Vlastislav Hofman (1884–1964) studied architecture at the College of Technology in Prague, designed some furniture, and made some designs for buildings, never executed (AR World, May, 1965). Otakar Novotny designed one house in Prague, at Bilkova Street in the Old Town, inspired by Cubist ideas, 16, but he never returned to the style again.

15, *canopy to Baroque statue in Prague*, 1912, *by A. Pfeiffer.*
16, *house in Bilkova Street, Prague, by Otakar Novotny.*

15



16

In furniture design more was actually achieved. There were more opportunities, especially in the workshops founded and led by two members of the Group, Janak and Gocar. The materials on this small scale allowed more freedom to an architect—as far as the manufacturer allowed it. The early Cubist furniture was designed without any consideration for its surroundings; each object was an independent piece of architecture, 4, 12, 13 and 14. It was shown to Europe at the exhibition of the Deutscher Werkbund in Cologne in 1914, just before the outbreak of war.

Although these Czech works were quite exceptional for their time, it must be remembered that behind them was not just the eccentricity of one mind. There was a more general movement in reaction against the decorative richness of Art Nouveau, the objectivity of Wagner's architecture, and the dullness of conventional work—and the movement was not merely negative. The aim was to achieve an architectural synthesis along the lines of Janak's ideas. Although these ideas were developed only as far as the façade was concerned, it was an important beginning. The whole activity of the Group lasted little more than three years. They were not given the opportunity for larger commissions and it was very difficult to find a contractor for such extravagant buildings. The materials available were another severe limitation. At the time of most promise, the war stopped it all.

The influence of the Cubists continued, however, although in another direction. 'We have got rid of detail,' Josef Chochol

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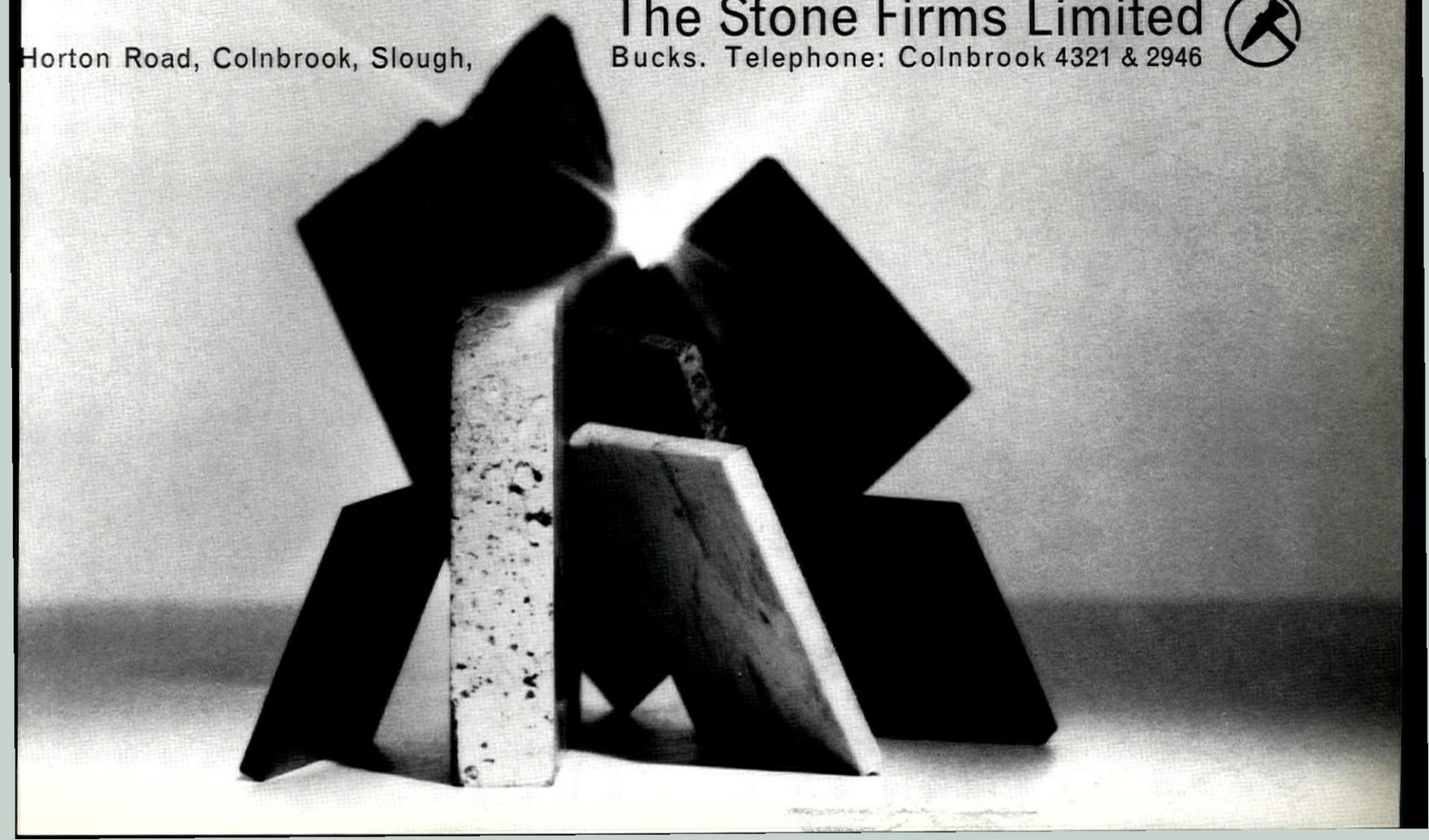

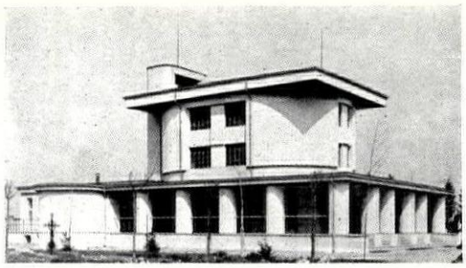

17, *crematorium at Nymburk*, 1922, *by Bedrich Feuerstein.*

wrote, 'and we have begun to work with larger surfaces.' The analytical way of developing a façade was continued by the first Czech functional architects, such as Oldrich Tyl and especially Bedrich Feuerstein at the Nymburk crematorium, 17, in 1922. The Czech functional architecture continued the Cubists' efforts for modern architecture far more convincingly than the so-called 'national' form of Cubism, which appeared soon after 1918 as a by-product of the strong nationalistic feeling in the works of the two former Cubist leaders Janak and Gocar.

These two themselves eventually came to functional architecture, each of them by his own way, though Gocar as late as the thirties designed an addition to a Baroque building in Prague using the plastic elements of Cubism. Josef Chochol, the most important of the Group, stayed relatively silent. Vlastislav Hofman became an outstanding stage designer in the Expressionist style, where his dramatic talent was well applied. Otakar Novotny was all his life a follower of Jan Kotera. All these architects are now dead, Hofman being the last survivor.

Although only an enthusiastic episode, architectural Cubism may still have its relevance in present-day Czechoslovakia, now that modern materials and technology allow more freedom in plastic forms. One of the designs in the recent Old Town Square competition at Prague (AR World, December, 1965) suggested that the younger Czech architects are becoming aware of these possibilities.

JAROSLAV VOKOUN

topography

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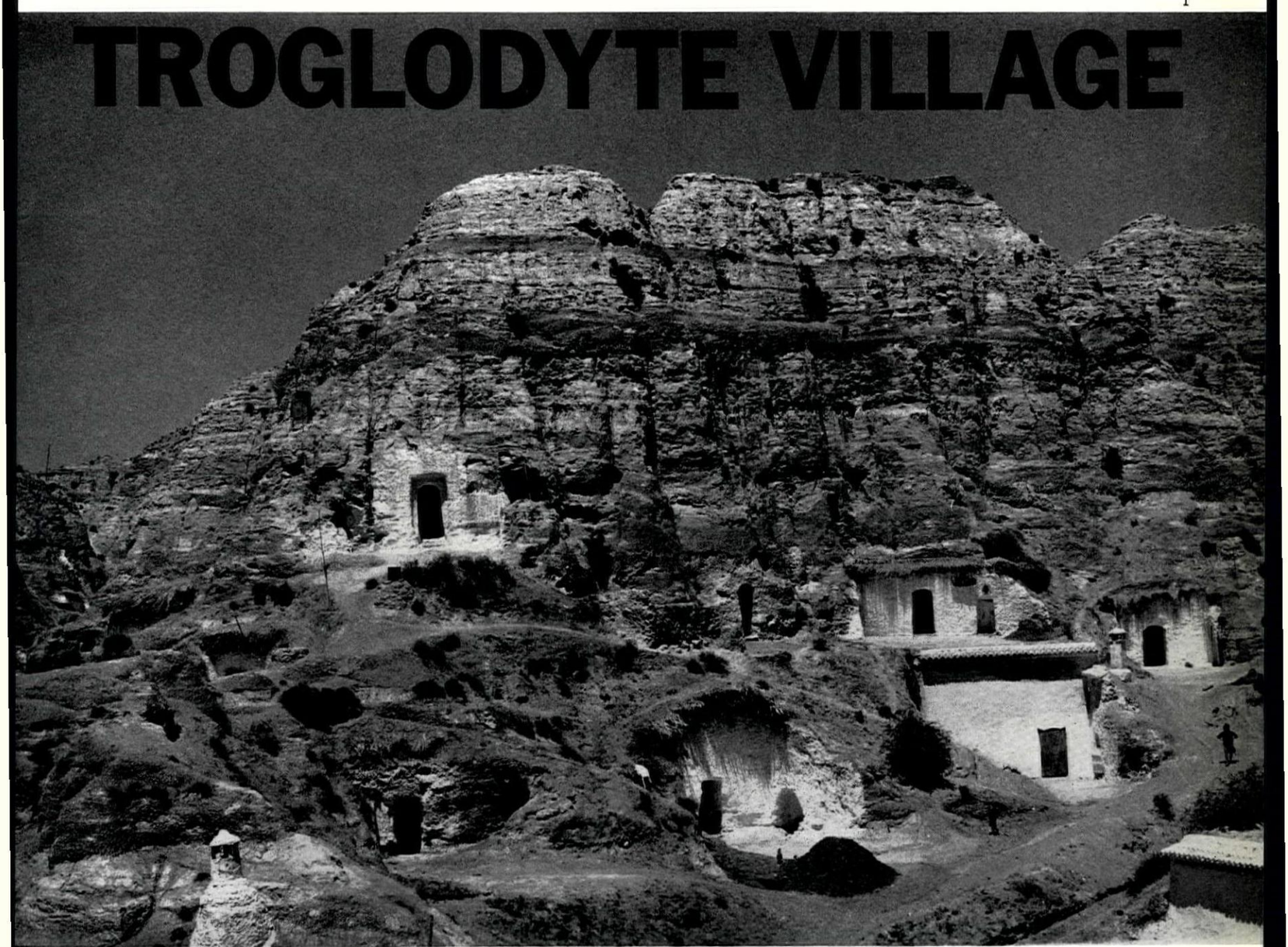
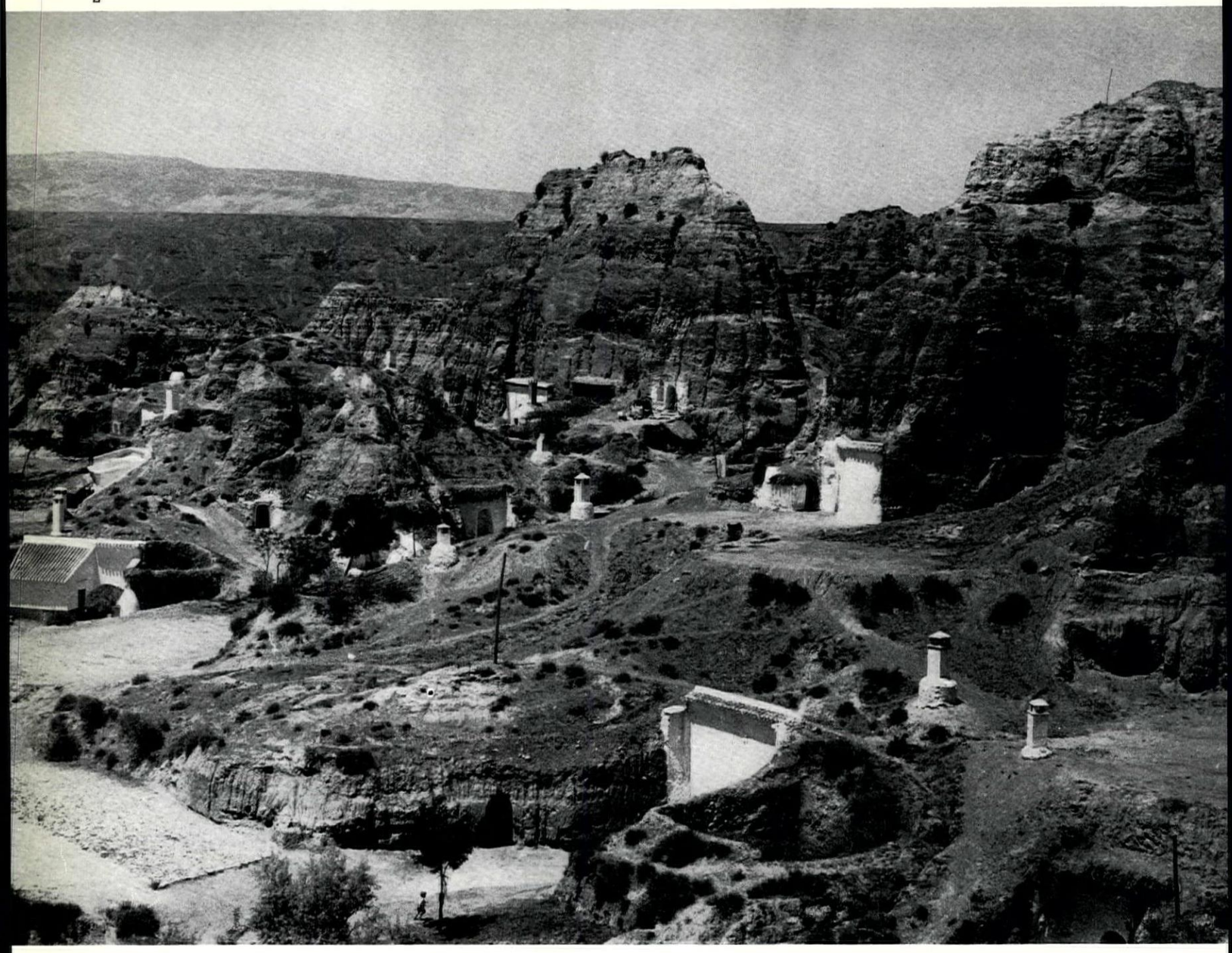
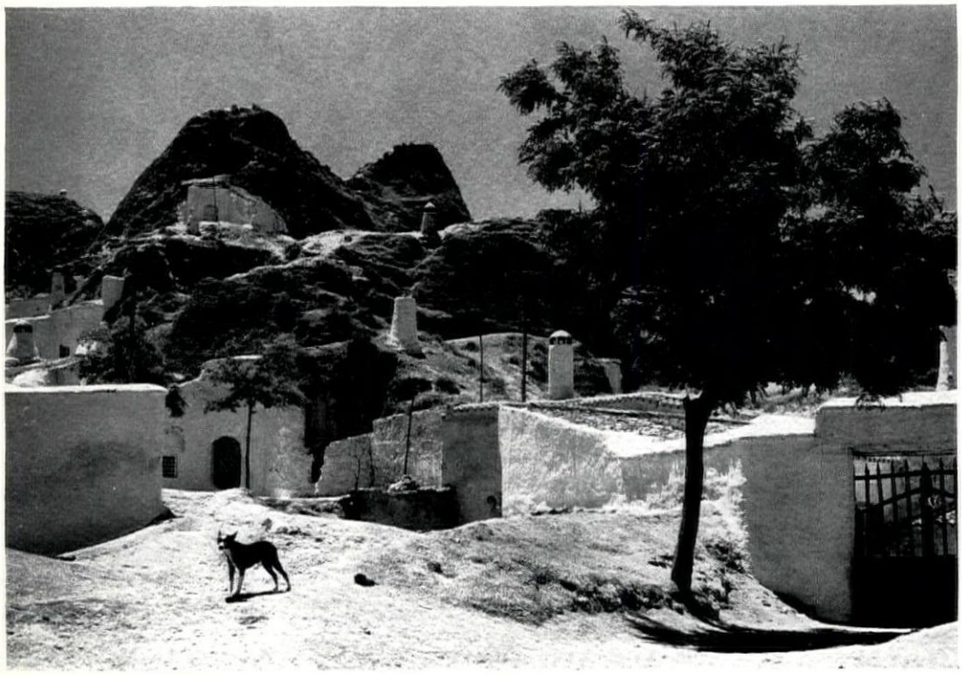
TROGLODYTE VILLAGE



Gaudix is a subterranean Spanish village, located forty miles east of Granada in Andalusia. It is only vaguely identified at a distance by the exposed entrances and chimneys of the dwellings, accentuated by whitewash, 1 and 2. The rugged terrain remains unspoiled and natural. The streets have a flowing sculptural quality, brought about by the relationship of the man-made

2

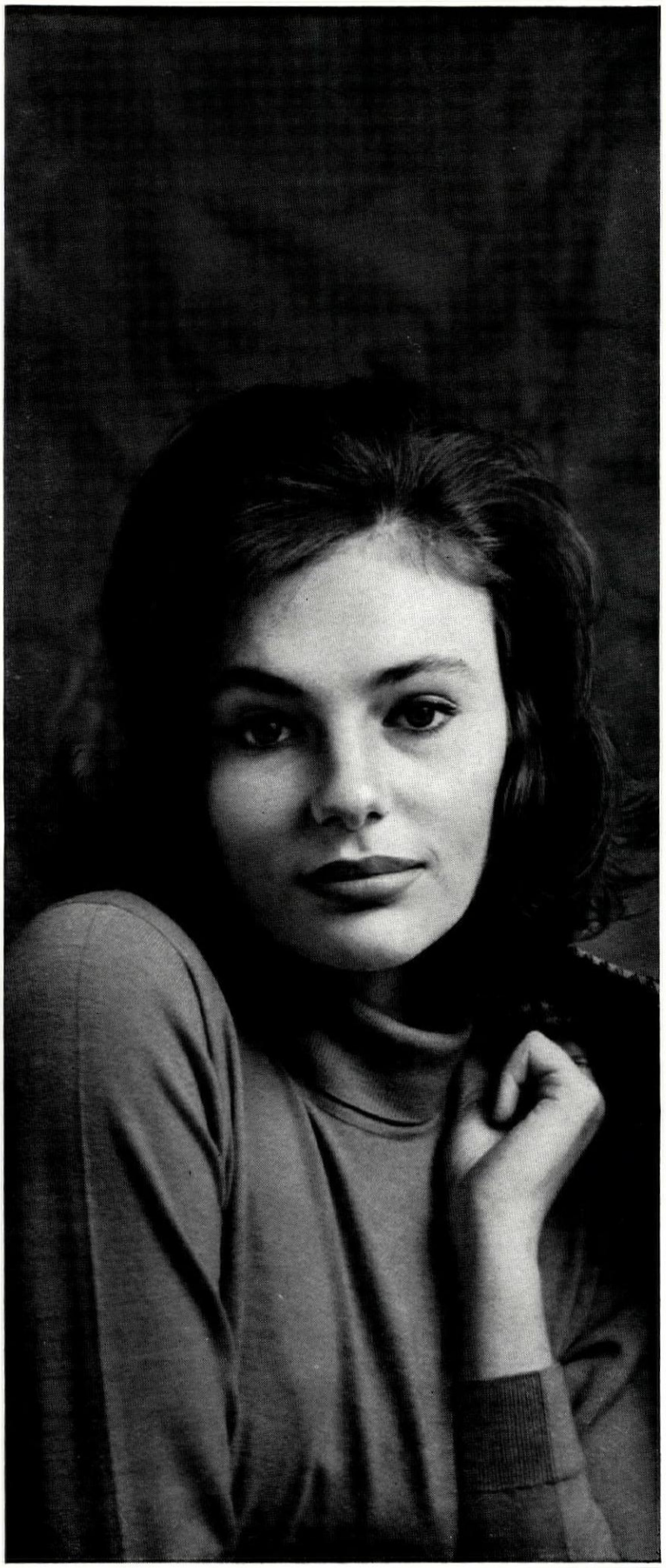




3

forms and the natural rock formations, creating a variety of spatial contrasts, 3. Most of the dwellings are simple connected cells, but occasionally the habitations have been enlarged by the building of an exposed addition of red tile roof and white stucco wall on to the basic unit, 4. The

4



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4 WAYS TO A MAN'S HEART—IF HE'S AN ARCHITECT

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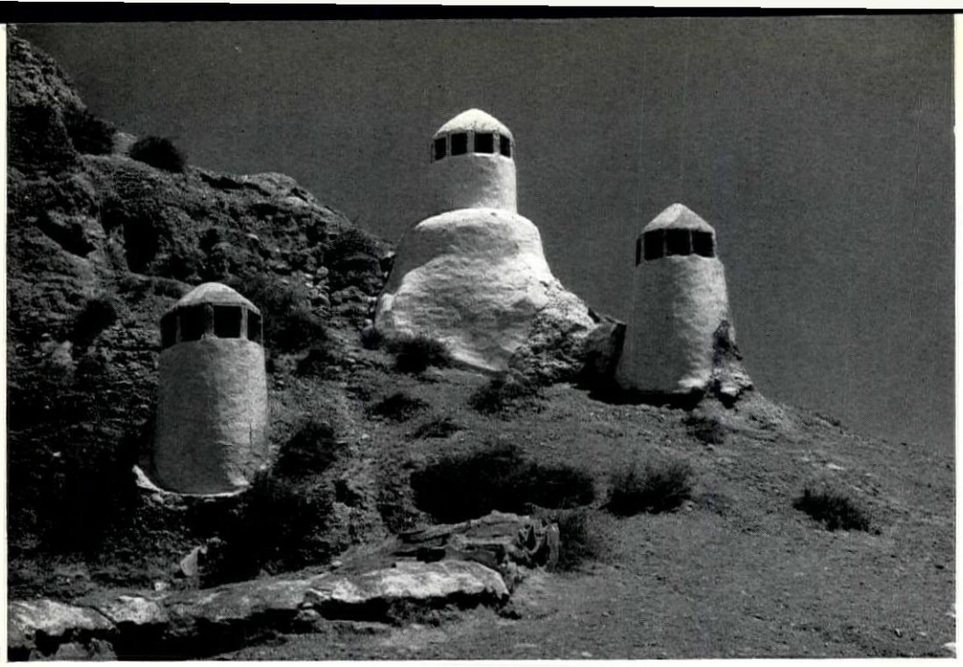


5

chimneys shoot up singly or in groups, setting up a repetitive visual order, 5.
The typical troglodytic town is generally more a part of nature than architecture. Gaudix, on the other hand, expresses a good balance between art and nature, and presents man as an earth sculptor.

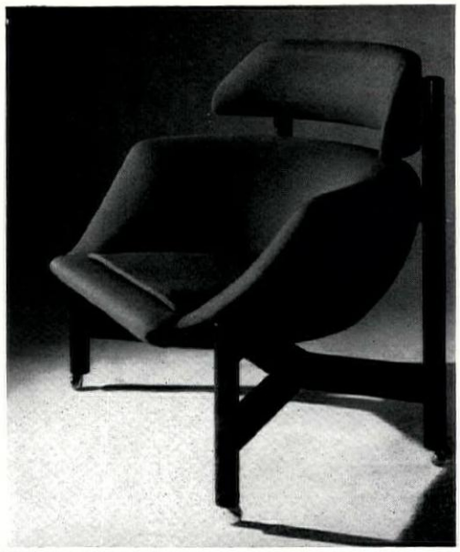
MYRON GOLDFINGER

furniture

EMBASSY SEATS

'Some of the furniture is adequate, none excellent.' This was the AR's comment in January, 1953, in a feature, 'The Crown Furnishes,' which dealt with furniture designed by the Supplies Division of the then Ministry of Works. Thirteen years later those same words apply equally well to the latest designs by A. C. Zoeftig, of the MOPBW, for the new British Embassy in Mexico, illustrated here.
A chair is usually the representative piece in any family of furniture and so it is with these, but what is one to make of 1, an easy chair which 'floats on rosewood leg frames'? Admittedly in its over-designed way, it asserts itself (the same could hardly be said of its 1953 counterpart) but it really is too much a summary of that bastard style, Mid-Century Modern by Ilford Broadway out of South Bank.
Perhaps all the criticism levelled at the Ministry's design policy over the years has pushed it over the edge and dreams and delusions of Design Centre Awards have resulted in the application of 'that extra touch' which so often occurs when a designer has to think up yet another chair. The rest of the furniture is adequate, and although 2 and 3 look a little low in the back and 4 long in the seat, the desks, tables and cabinets are straightforward enough to be unobtrusive. But look at the Charles Eames chair behind the desk in the mock-up of the Ambassador's study, 5, and think what could have been.

G. J. NASON



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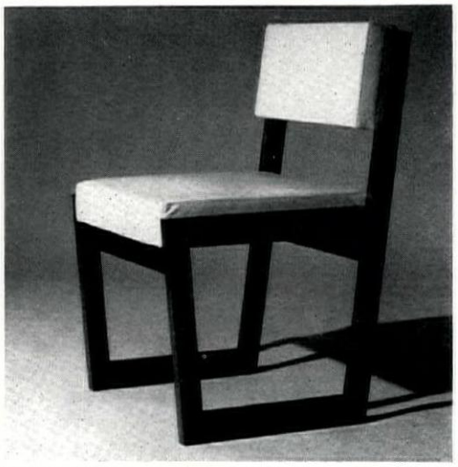

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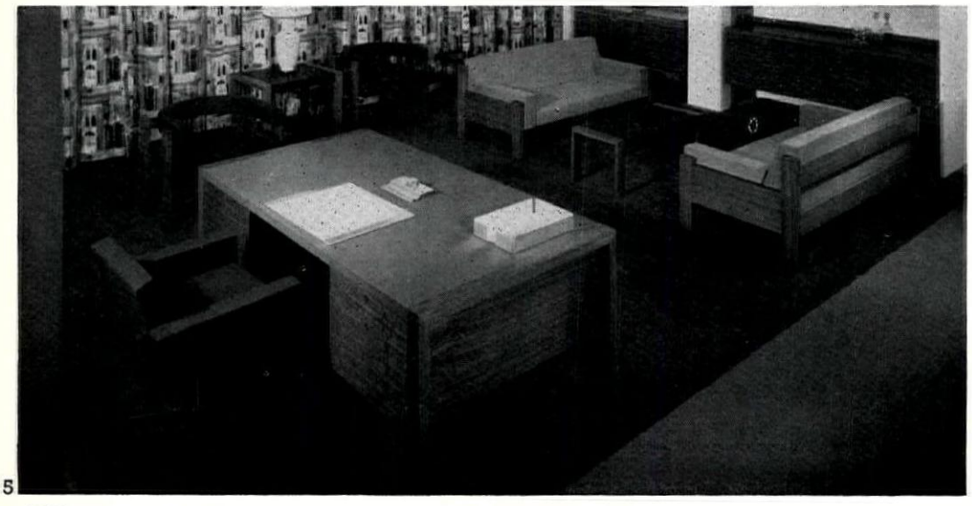

5

Integration and Industrialization

Industrialized building is a term which has been seriously overworked in recent years. It has now been joined by another word—Integration. In this article Iain Stewart attempts to analyse what these two words really mean when used together and to point a way to the future relationships of the diverse members of the building team.

A first essential in any discussion of this subject is to clear away the woolly associations given to these words and define precisely what is meant. Both words have become political catch-phrases whose meanings have become obscured by emotional overtones.

Take first industrialization. This can be defined as the rationalization of the building process to achieve greater efficiency in the use of both materials and labour. The question of productivity of labour is of course a vital one. Site labour is notoriously inefficient and the obvious immediate answer is to transfer a large proportion of this inefficient and badly controlled force into a controlled environment where rationalization can be effected—in other words into factory production.

Open or closed

This of course is only the first stage in defining what is meant by industrialization applied to building. First efforts merely read these signs and jumped to immediate integrated commercial control. At face value this was a justifiable step, but it overlooked a vital point. The building industry is too great an industry to lend itself to centralized commercial control in the same way as the motor or textile industries. Buildings influence everyone's life far more than cars. Although centralized control through system building is theoretically advantageous, in reality this is only so within very restricted limits, largely of a commercial nature. To restrict the choice of homes to the badge-engineering of BMC or Rootes is unthinkable, and homes, though they form a large proportion of the demand for buildings, are only a part of the overall demand.

The limitations of 'system building' have been seen and thought given to alternative solutions to the overall problem of industrialization. The result is the 'open' approach, or what may be called catalogue building.

Open system factors

It is in the 'open' approach that integration of design and production really raises itself as a problem. The 'closed' system almost demands as a prerequisite to functioning, that design and production must be fully integrated and in the majority of cases design is subordinated to production control. In catalogue building on the other hand the relationship between the two sides of the industry is much nearer the traditional. The units envisaged by the open system approach are, after all, merely an extension of the principles already used in building. They are larger and more completely functional units in themselves.

For any open approach to operate in practice, however, certain rules must be established which both designer and manufacturer find acceptable. The units provided must find acceptance in advance of production by the users; i.e. architects and contractors. In the same way any building designed by architects must be capable of construction, employing the units listed in the manufacturer's catalogue.

These rules fall naturally into two categories, governing size and quality.

Dimensional rules

The dimensional side of the problem, although it has caused the greatest discussion over the years, is, perhaps, because of this, probably nearer solution than most people realize. A convention for dimensional co-ordination is really largely a matter of arbitrary consent. Certain criteria must be fulfilled and so long as these are met co-ordination exists. Disagreement which still exists on this point is no longer a dispute between reactionary traditionalists and modular prophets but rather an argument on the semantics of applications.

Functional rules

Qualitative acceptability for open system units is a much more thorny problem. Arbitrary decisions are much less acceptable. Factors having influence are less closely defined than was the case with dimensions. Only recently have any attempts been made to identify the physiological, psychological, sociological and economic influences governing the acceptability of the building as a whole, but these influences are now being identified. These are user requirements but not *user* in the sense of *designer* or *builder* but *user* in the sense of *occupant*. This is the individual who should count. He is the one for whom the rules are made. Neither designer nor constructor nor manufacturer has prior claim to his rights.

When this approach is accepted, the production of performance specifications covering all aspects of use for manufactured catalogue units will become feasible. This of course is not the end. The performance specification must provide acceptability tests, or testing facilities must be available which will provide acceptable unbiased opinions on how the specification criteria have been met.

British Standards and Codes of Practice are not yet up to this level. They are adequate in most cases on technical grounds but have little to offer the ultimate building occupant/user.

In traditional working in the building industry, a large part of the quality testing and control is carried out under professional supervision at site level. This control of course is lost as site work is transferred to the factory. This transfer brings about the second problem of testing. The units, by tending to depart from traditional concepts, will require testing in unorthodox ways. This of course is part of the *Agrement* system adopted in France and in other European countries. The application of *Agrement* in this country, although not yet effective, seems to be more limited in intention.

The need for co-ordination

It is obvious that the production of components for catalogue building must be under effective specification control, but it is equally obvious that this control can no longer be the individual control of any particular project. Central specifications must be applied, but these specifications must be different in character to those with which we are traditionally familiar.

The formulation of such specifications cannot be a one-sided matter. There must be a two-way traffic of information. The professional must acquaint the manufacturer with desired performance criteria, while the manufacturer must pass back limiting criteria on the production and economic levels.

Such procedures will naturally pro-

[continued on page 240

THE TALLEST STRUCTURE IN EUROPE IS MADE FROM APPLEBY-FRODINGHAM HIGH TENSILE STEEL PLATES

The 1,265 foot T.V. mast at Emley Moor, Yorkshire, consists mainly of a steel column 9 feet in diameter, housing equipment and a power-operated lift permitting maintenance work to be carried out in all weathers.
The column is built from 375 fabricated segments in Appleby-Frodingham high tensile steel and weighs 210 tons.
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Masts commissioned by I.T.A. and to be shared by B.B.C. Design, supply and erection by British Insulated Callender's Construction Co. Ltd. for E.M.I. Electronics Ltd. Fabrication and hot dip galvanizing of steelwork by Painter Bros. Ltd., Hereford.

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continued from page 238]

duce reaction from traditionally minded individuals. The architect will claim that this destroys his freedom of design, the builder, his freedom of operation, the manufacturer his freedom of production. All are probably in the right, within their own terms of reference, but the difference between freedom and licence lies often only in the viewpoint.

Integration

The answer being suggested by many individuals is that of integration, but it would seem really that this answer is too extreme. It is based on a false analogy with other industries. In these, normally, the product is designed and produced by the manufacturer alone. Therefore, it is said, if building is to industrialize, it must do the same, but this integration can only mean that one of the participants—be it architect, manufacturer or contractor, will absorb the others. This mere copying of the pattern of other industries is not the answer in building. Instead a much more fundamental look into the mechanics of industrialization is necessary.

Industrialization can be considered in three degrees or stages. These are first, rationalization, second, mechanization and finally automation. In building, rationalization has been taking place, perhaps slowly, for centuries. The pace has, in recent years, speeded up enormously and already the second stage is being embarked upon. The third stage is still in the future. Before it can be achieved, much more detailed and quantifiable knowledge of the end product must be produced.

Catalogue building is a step forward in the mechanization stage, but integration in the form of absorption is not the answer. The form of integration needed is rather one of co-ordination. In fact this word is less likely to provoke emotional barriers than the 'take-over' qualities of integration.

The prime need in the industry is to build better and cheaper. To achieve this, first the client must define closely and rationally, what he wants to build and why. To do this, there must be collaboration between client and architect, but clearly there is no 'integration.' This brief or programme must then be translated into a design which itself must define in complete detail all that is needed for the production of the building. This design, however, must contain everything, plans and details and, also, descriptions of everything which cannot be communicated on the drawings: i.e. the complete execution plan in space (site organization) and time (operational plan). Not only must this design be complete but it must be the best possible for the conditions and money available.

Obviously in order to achieve this comprehensiveness collaboration between architect and contractor must take place. Subservience of either interest to the other, however necessary for integration, is a questionable answer. Again co-ordination is the only solution.

Co-ordination

It would seem therefore that industrialization of building can best be achieved by co-ordination. To achieve this it is likely that a new figure must emerge. This co-ordination must be controlled. Who is to effect this control?

No member of the building team fills the role automatically from his position in traditional building organization. This new controller must have the design ability of the architect, the economic ability of the quantity surveyor and the organizational ability of the contractor. From the traditional standpoint probably the architect most closely approaches the needs of this new man. In fact this role was the one he filled in the older craft-based industry. Events have overtaken him however. The solution suggested here is that the architectural profession will split into designers and co-ordinators. The co-ordinators will be the architects of the future, co-ordinating the client's needs with design, components, production and economics. These individuals are already developing within the industry and very soon formalization of their training must develop.

This really is sounding a note of warning. If the architect as he now exists tries to retain his place without widening his basic position, he will find himself supplanted. If, as is suggested here, a new controller develops, he will be replaced. If, on the other hand, through indifference, other sides of the industry enforce integration in the full sense, through commercial interest, he will find himself relegated to the position of the designer in other integrated industries; the stylist influencing only the decorative features.

Without the independent professional co-ordinator, building cannot serve its clients efficiently, either economically or aesthetically, and if the client suffers, we all do, for we are primarily not architects or contractors or manufacturers but human beings and of such are our clients made.

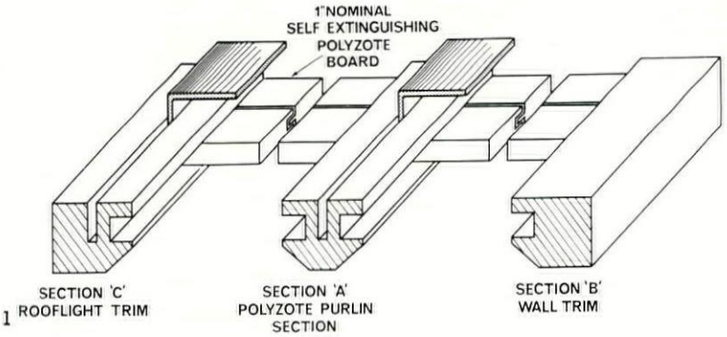
The Industry

Roof insulation

A new system of under-purlin insulation for industrial roofs has been introduced by Expanded Rubber & Plastics Ltd. Using expanded polystyrene, it is known as the 'Polyzote Nuliner System', 1, and can be used for both new and existing buildings. The system provides a suspended roof lining of one inch thick self-extinguishing 'Polyzote' expanded polystyrene and metal fixings are completely eliminated. Specially cut and shaped sections 4 ft. long and slotted on the top edge are glued on to the vertical leg of the purlin using a rubber based adhesive. Machined grooves 1 in. by 1 in. are provided in the sides of these sections and into the grooves 1 in. thick boards of expanded polystyrene are slotted.

The boards themselves are tongued and grooved on their butting edges to obviate gaps with consequent heat loss and are 2 ft. long overall, the width being cut to suit the purlin centres of individual installations. Special section pieces are supplied for gable ends and for the abutment to rooflights, fixing again being by adhesive. To assist the insulation properties and to prevent the entry of birds into the cavity, the eaves, ridge and rooflight abutments are closed with backings of mineral or glass fibre.

The well-known insulating properties of expanded polystyrene provide an efficient insulation against heat loss reducing the U-value for an asbestos



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sheet roof from about 1.4 to 0.16. Weight is approximately 1 lb./sq. yd. *Expanded Rubber & Plastics Ltd., Mitcham Road, Croydon, Surrey.*

Stationery trays

A new range of stationery trays by Intercraft is claimed to be one of the most versatile made. The basic design is a single open tray of knock-proof plastic with interlocking lips and slides moulded into top and bottom respectively. When slotted together they can be locked with the backs flush or staggered so that the sloping front edges form a flush line. Made in ranges for A4 or British quarto sizes, dividers are available for smaller paper sizes and envelopes. To complete the final tray in any composite assembly a front plate is available together with three different metal back supports for suspension. The illustration, 2, shows examples of six tray arrangements for a variety of purposes. Available from trade sources, the suggested retail price is 7s. 6d. per tray.

Intercraft Designs, Berkeley Square House, Berkeley Square, W1.

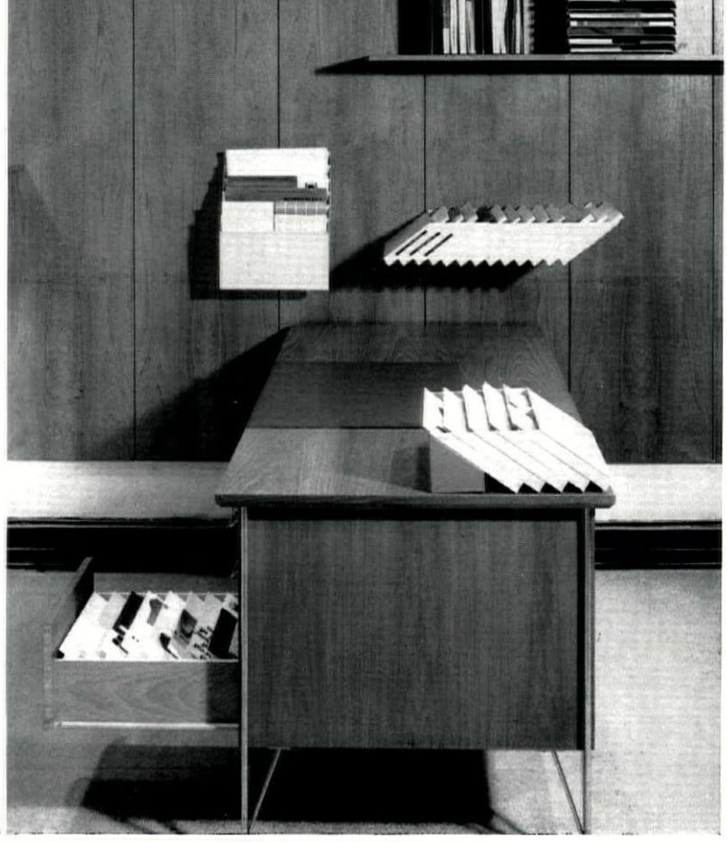
Bulkhead fitting

A new fluorescent bulkhead fitting designed to operate efficiently for long periods without maintenance has been produced by Osram (GEC) Ltd. Features of the fitting, 3, include the use of two fluorescent tubes which have a longer life than the tungsten lamps used in most 'bulkheads,' and therefore need changing less frequently.

These 12 in. 8W tubes operate on separate circuits so that if one tube fails, the fitting still remains operational until re-lamping can be carried out. Weatherproof, dustproof and corrosion resistant, special thief-proof cover screws can only be removed with a key which is supplied with each fitting. The fitting can be mounted on a wall, ceiling, or in the angle of a wall and ceiling. It may also be semi-recessed.

It will be of particular interest to local authorities in the lighting of the access ways of multi-storey flats because it gives about the same amount of light as a 60W tungsten

[continued on page 242


2

Another Hoval Boiler on the rooftop!

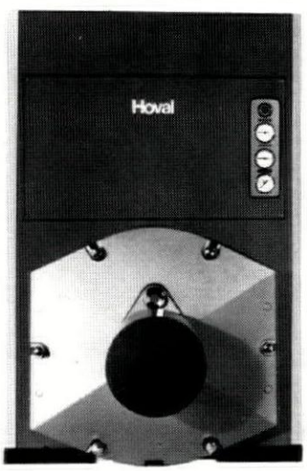
There are many reasons why rooftop boilerhouses are chosen so frequently in today's building designs. For instance, there is a saving of costly floor space on the ground level, and the expensive chimney construction throughout the whole building can be omitted.

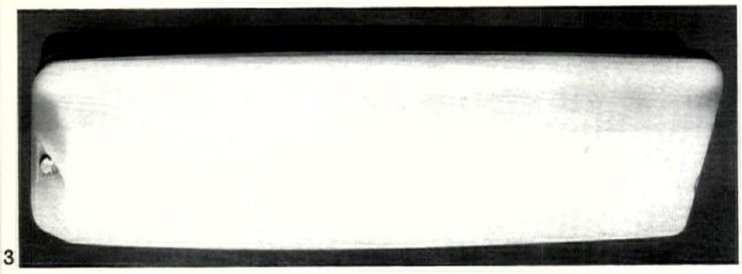
The Hoval TKD boiler lends itself exceptionally well for rooftop boilerhouses, because it is a true combination boiler for central heating and domestic hot water services. It needs no chimney, saves space and cuts the running costs down.

The Hoval TKD boiler is of advanced Swiss design matched with British boilermaking tradition. It can use oil or gas as fuel. It is available in ratings from 400 000 to 4 000 000 Btu/hr.

Please ask for further information:
Hoval Boilers (U.K.) Ltd.
Northway House
High Road, Whetstone
London, N. 20
Tel. HILside 0454

Hoval Boilers





3

continued from page 240]

lamp, while consuming little more than one third of the electrical energy. Designed to comply with the latest British Standards for lighting fittings, it has a 'Diakon' opal injection moulded cover giving high light transmission and excellent diffusion. The lamp caps are positively earthed and new spring mounted lampholders give positive contact and easy lamp removal.
Length is 14 5/16 in. by 3 5/16 in. wide and 3 7/8 in. high and the price is £5 15s.
Osram (GEC) Ltd., East Lane, Wembley, Middlesex.

Doors

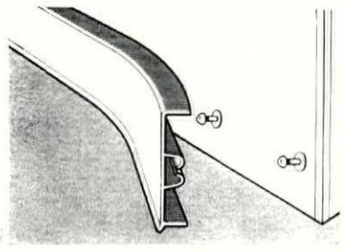
Thames Plywood of Barking at last November's Building Exhibition, introduced two ranges of products. The first of these was the 'Thames-Slimfold' folding cupboard doors, 4. These are prefabricated sets of two or four doors with hinges and pivots pre-fixed ready to assemble in an opening with or without frame based on the Henderson 'Bi-fold' track and gear. This gear links two door units by butt-hinges, pivoting at one side of the opening with the leading edge of the outer leaf, running in the top track. Thus two leaves fully open only project the length of half the opening.

4

Sets are provided in two leaves or four leaves according to the width of opening, 2 ft. and 3 ft. having two leaves and 4 ft. and 6 ft. having four. Two different heights are also provided namely 6 ft. 6 in. and 7 ft. 6 in. The full range of heights and widths, however, are only provided finished in hardboard for *in situ* painting. Other finishes are available limited to the 6 ft. 6 in. height. These are veneered both faces and long edges in Sapele or Afrormosia for site finishing or alternatively in a louvred design in solid Philippine Mahogany prefinished in cellulose laquer. These last are also limited to the 2 ft. and 4 ft. widths. Prices vary from £5 6s. 9d. for 6 ft. 6 in. by 2 ft. in hardboard to £13 13s. for the same sized in louvred mahogany and to £12 19s. for 7 ft. 6 in. by 6 ft. wide in hardboard.
The second product introduced was the 'Thames-Melaflush' internal door range. This is a range of flush doors in eight standard sizes of 1 3/8 in. finished thickness with melamine laminate facings on both sides on 5 mm. plywood. Hardwood lipping is provided on both long edges with lipping at top and bottom as an optional extra. Also optional is a matching melamine strip for lipping the lock edge of the door. The laminate facings are provided in a range of five plain colours and six wood grains.
Prices vary from £10 19s. for a 6 ft. by 2 ft. door in plain colour to £13 14s. for a 7 ft. by 3 ft. door in wood grain.
Thames Plywood Manufacturers Ltd., Harts Lane, Barking, Essex.

Plastic skirting

A new patented method of providing quick, economical skirting to finished walls and capable of carrying electric and telephone wiring is being marketed by the GC Flooring Company. An advantage of this new skirting is that it can be installed, without adhesive, after all decoration has been completed. Under the name 'Forshaga' vinyl skirting, the product consists of a vinyl extrusion 6 cm. high by 1.25 cm. deep or 2 1/4 in. by 1/2 in. approximately. The space behind the skirting face is divided by two curved wings which clip on to round headed nails fixed into the base of the wall, 5.
Available in black, white, green, terra-cotta and two shades of grey, it is supplied in 4.5 m. lengths and it is claimed that the complete cost including installation can be as little as 3s. a foot. As an aid to fixing, a nailing dispenser can be supplied at a cost of £4 10s. which automatically inserts the nails into the wall at the correct height at 25 cm. (10 in.) centres.
The GC Flooring Co., 53-57, London Road, Twickenham, Middx.



5

P.v.c. pipe joints

A rubber ring push-fit joint for p.v.c. pipes, is introduced to the United Kingdom by Yorkshire Imperial Plastics. The joint, 6, which will be known in this country as the 'Anger' joint, is being made by Yorkshire Imperial Plastics under licence from Kunststoffwerk Gebruder Anger GmBH & Co., and will ultimately be available with 'Polyorc B' unplasticized p.v.c. pipes to BS3505 and BS3506 in all sizes up to and including 12 in. The joint is available for immediate delivery in BS3505 sizes 2 in., 3 in., 4 in. and 6 in. in all classes, and the extension to the range of sizes should be completed by early summer.
The 'Anger' joint is an integral part of one end of each length of pipe, specially thickened during the extrusion process. The socket and the rubber ring groove are expanded and formed by a patented collapsible core which ensures absolute dimensional accuracy. The joint also incorporates a unique triple-ribbed synthetic rubber sealing ring designed to remain securely in its groove and to provide a perfect seal. Even after the thickened end of pipe has been expanded into a socket its wall thickness remains greater than that of the rest of the pipe, so that the designed mechanical strength of the joint is maintained throughout.
'Anger' joints may be used for all water mains, pumped sewage mains, effluent lines and industrial pipework systems where push-fit jointing is preferred. The ribbed synthetic rubber sealing ring is unaffected by all materials which can be safely conveyed in 'Polyorc B' pipes and provides a useful cushioning effect against water hammer or other pressure surges.
A comprehensive range of standard fittings has been designed for use with 'Anger' jointed pipe, including bends, adaptors to cast iron and asbestos cement, slip joints, reducers and double-ended couplers.
Yorkshire Imperial Plastics Ltd., PO Box 166, Leeds, Yorks.

6

Contractors etc

Ornithological Research and Exhibition Building, Slimbridge, Gloucestershire. *Architect:* Peter Bicknell (of Hughes and Bicknell). *General contractor:* Ford & Weston Ltd. *Sub-contractors: Paptrim edge to roof:* Pitchmastic Asphalt Paving Co. *Acoustic tiles:* Armstrong Cork Co. *Concrete:* Ready Mixed Concrete (UK) Ltd. *Doors:* Venesta Ltd. *Eternit fascias:* G. R. Speaker & Co. *Insulation:* Fibreglass Ltd. *Glass:* Pilkington Bros. *Floor tiles:* Richards Tiles Ltd., The Marley Tile Co. *Pin-up board:* C. Leary & Co. *Heating engineers:* A. W. Kurton Ltd. *Ironmongery:* Randalls Ltd. *Paints:* Goodlass Wall & Co. *Plaster, plasterboard, woodwool slabs:* British Plaster & Boards Ltd. *Vapour barrier:* Imperial Chemical Industries. *Sanitary fittings:* Shanks & Co. *Aluminium windows:* The Crittall Manufacturing Co. *Boiler:* Thomas Potterton Ltd. *Reinforcement:* GKN Reinforcements Ltd. *Oil tank:* Welded Tanks Co.

Faculty of Commerce and Social Science, Birmingham University. *Architects:* Howell, Killick, Partridge & Amis. *General contractor:* J. Parnell & Sons. *Sub-contractors: Mechanical services:* Ashwell & Nesbitt Ltd. *Electrical services:* Lee Beasley & Co. *Lift:* Otis Elevator Co. *Aluminium windows:* Alumin Building Components Ltd. *Window control gear:* Teleflex Products Ltd. *Nuralite roofing:* Plumbing and Building Services. *Balustrades:* Bigwood Bros. (B'ham) Ltd. *Floor coverings:* R. M. Douglas Asphalt & Paving Ltd., Marley Tile Co. *Lecture theatre seating:* Rank Precision Industries. *Blackboard screen units:* Pathe Equipment Ltd. *Blinds:* J. Avery & Co. *External rendering:* Jaconello Ltd. *Precast concrete cladding units:* Wettern Bros. (Wolverhampton) Ltd., The Trent & Havering Concrete Companies. *Precast concrete building blocks:* Baggeridge Brick Co. *Ironmongery:* A. G. Roberts (Exports) Ltd. *Steel roof girders:* Tubewrights Ltd. *Steel ring beam:* W. E. Broadbent Ltd. *Columns to covered way:* Allfarm Metalwork. *Curtain track:* James Wood (Merchants) Ltd. *Picture rail:* Imperial Aluminium Co. (Wales) Ltd. *Fibre glass domelights:* Lenscrete Ltd. *Common bricks:* Marston Valley Brick Co.

Ian Nairn

STOP PRESS

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

OUTRAGE

GUILDFORD, SURREY
Intrusion by bone-headed flats, 1, into the marvellous view out from the High Street which was—formerly—largely green.

2

HALESWORTH, SUFFOLK
The Co-op in an unco-operative mood, 2.

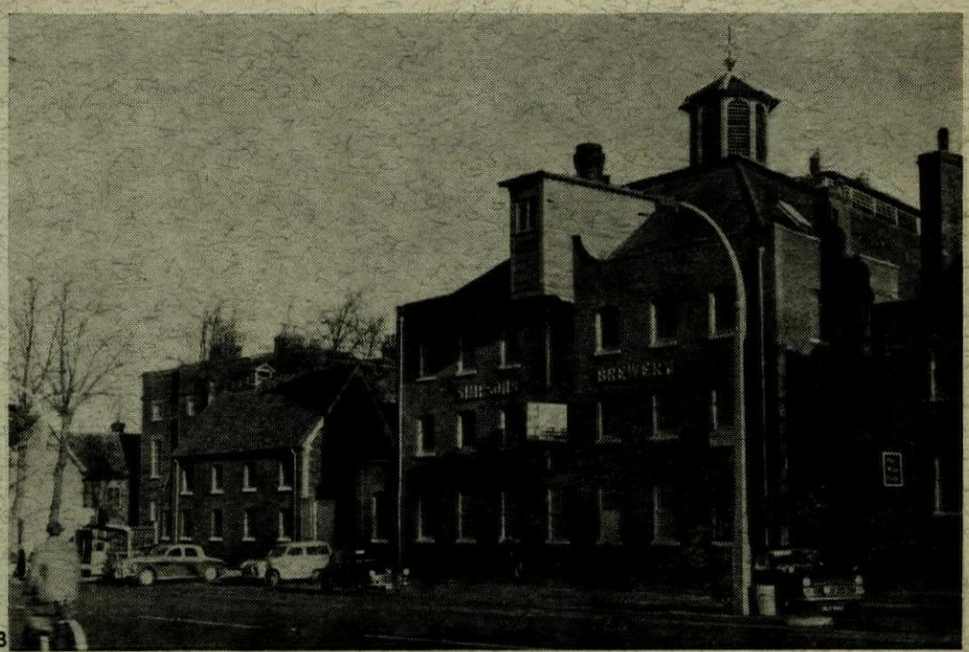
SOS

BALDOCK, HERTFORDSHIRE
The former Simpson's Brewery, 3, now up for sale on a site which faces the Great North Road but which will become much more tranquil next year when a by-pass is built. For £100,000 a purchaser can get the brewery building (illustrated in *The Functional Tradition*, page 144) two cottages to left and right and two huge Georgian houses. There is enough back land to be able to keep all of these as a memento of the time when brewers really lived with their work—probably the best and prettiest in the country.

CAUTION

CIVIC TRUST AWARDS
Most of this year's crop are well deserved, but one whole category seems to have gone wildly astray. The restorations selected for awards seem to show an attitude which was just what the SPAB was founded to combat—ninety years ago. The most striking case (all illustrated with the Trust's trustingly taken befores and afters) is that of Bewdley Post Office, 4 and 5, where the culprit is the Ministry of Works. Thirteen years after the AR expressed the hope that this splendid town would not squander its heritage for a 'mess of knottage'; now here is the knottage, exposed with everyone's approval. A close look shows that few of the details correspond, a whole Georgian window has disappeared (on the right); the

1



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4

5

relaxed country-town feeling has gone. Some citizens of Bewdley have said that the whole building ought to have been demolished anyway and I agree; a decent modern Post Office would have been far better than this charade.
At Lavenham, 6 and 7, the buildings have been rescued from dereliction. But rescued into what? None of the windows and doors correspond. There may have been 'evidence' underneath (shades of Gilbert Scott) but that is no cause to strip off a building's personality.
This has been been done even more insidiously at Guiting Power, Gloucestershire, 8/9, 10/11. There the stone structure is inflexible; but the details have been fussed around with, creeper has been stripped off, some hoodmolds

7

go and others appear (11). What has certainly disappeared is charm and personality—the only reason for keeping minor buildings in the first place.

8

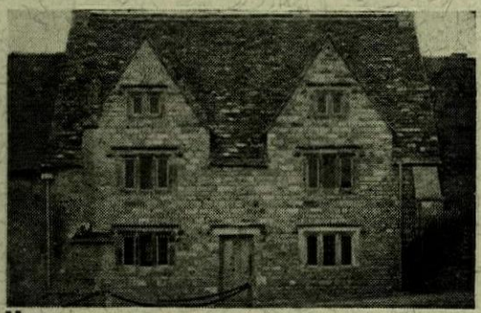
9

CREDIT

GUILDFORD, SURREY
A new multi-storey car park, seen up an alleyway beside Holy Trinity church, 12. The building itself, close to, is rough, but its effect on the townscape isn't. Such buildings, freed from bye laws on daylight and ceiling height, could be one of the most useful elements in changing town centres if properly used.

6

10



11

12

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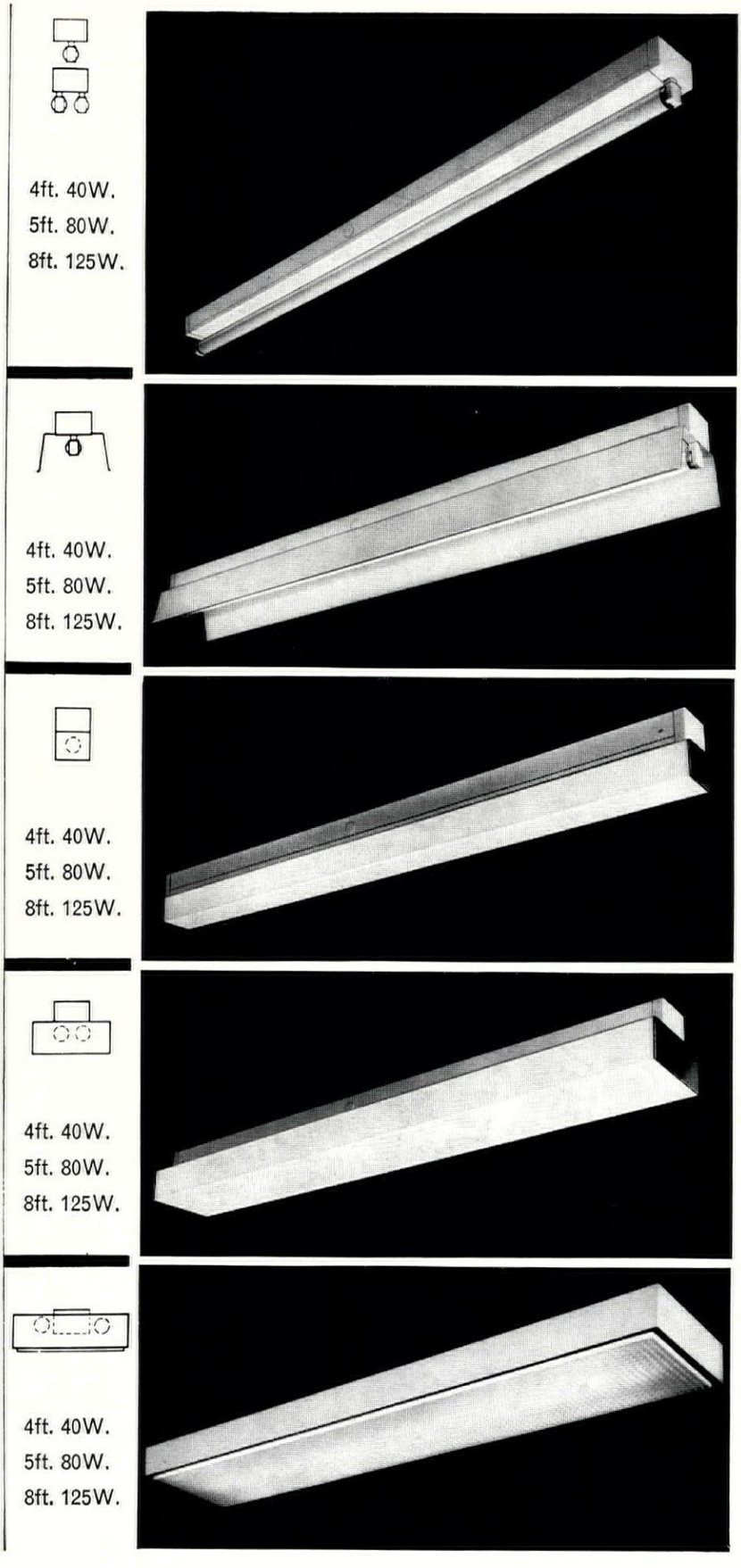
For full details of the complete range write for information sheet No. 202.



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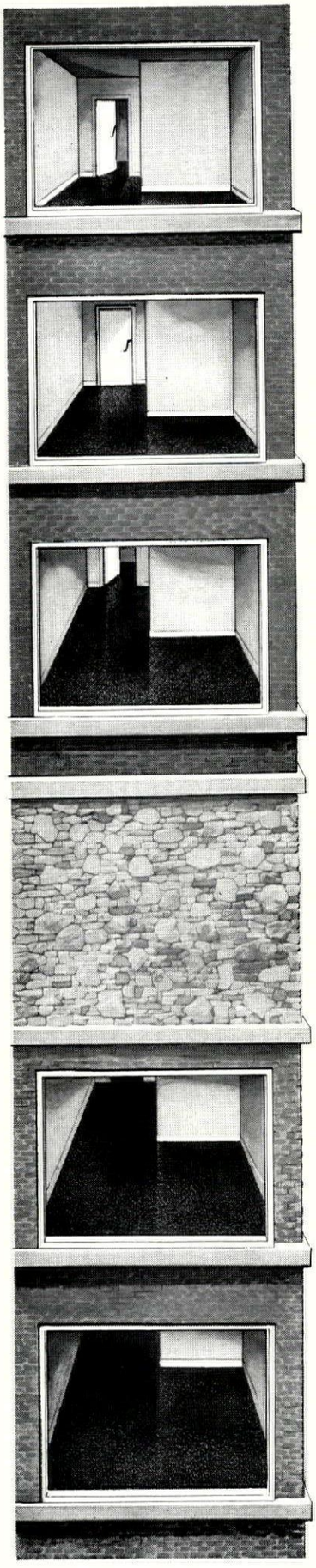

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Rossella is made in a varied range of modern good looking designs and colours. These designs are permanently sealed in a pure clear vinyl topskin, (no fillers or extenders).

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Photograph reproduced by courtesy Troughton & Young (Lighting) Ltd.

Plan with Elcoplan

Elcoplan was used recently by Troughton & Young (Lighting) Ltd. for the luminous ceilings in the new Economist Building in St. James. The system was ingeniously adapted to meet the specification laid down by architects Peter and Alison Smithson.

Elcoplan was selected because it represented a high quality, low cost luminous ceiling offering the right degree of control and required amount of light. There was one problem: as first floor ceilings were visible from ground level an unusually high degree of cut-off was required. To provide this a system was devised using opal sheets laid on top of the louvre and held firm by magnets built into the louvre panels.

The result was a lighting system eminently suited to the task—simple to install, economically priced, providing controlled light and a pleasing appearance.

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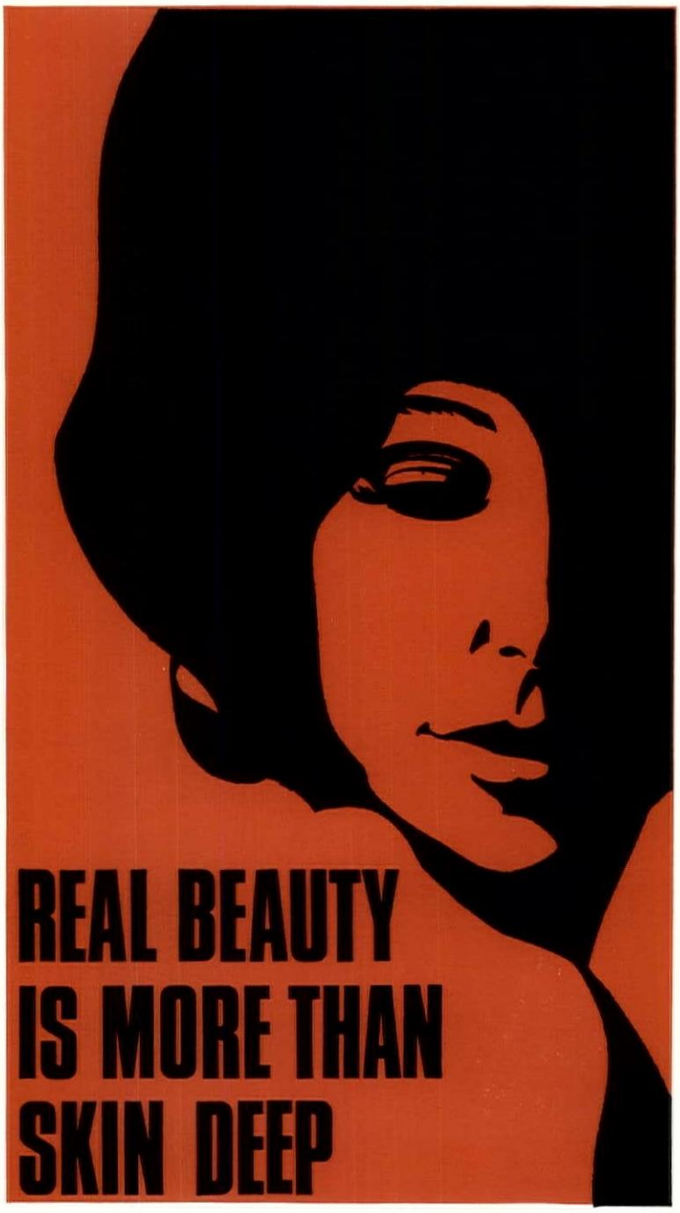

So it is with doors. Even if you use the best paints in the world, they will not give satisfactory results on an inferior base. Therefore, always be sure that you use the best foundation available—a Gliksten "Silkstone" Door. It has a perfect surface to bring out the full beauty of paint, and the edges are completely knot-free. The "Silkstone's" flush, unbroken surface ensures a perfect finish. The "Silkstone" is supplied in a special off-white primer which prevents the absorption of moisture on the site, and provides excellent adhesion for final painting. The "Silkstone" only requires the usual two finishing coats.

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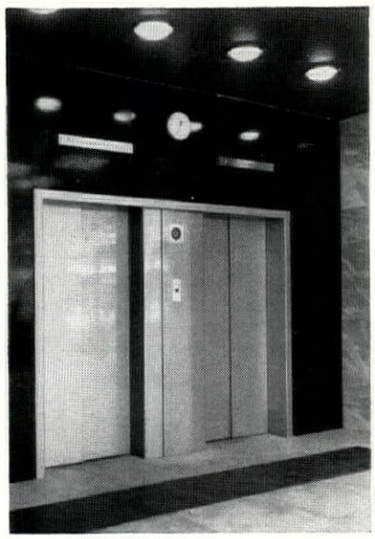

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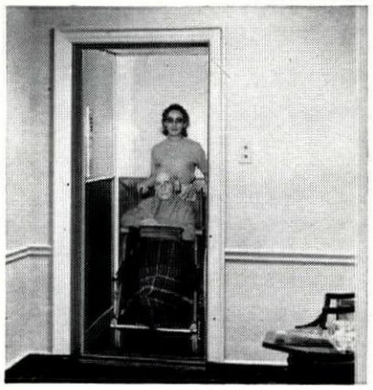

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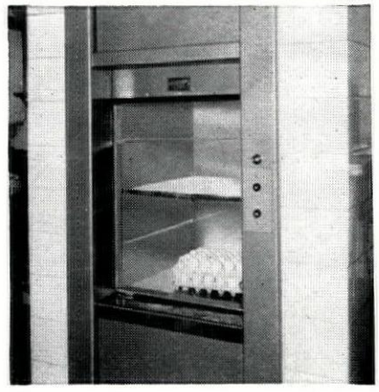

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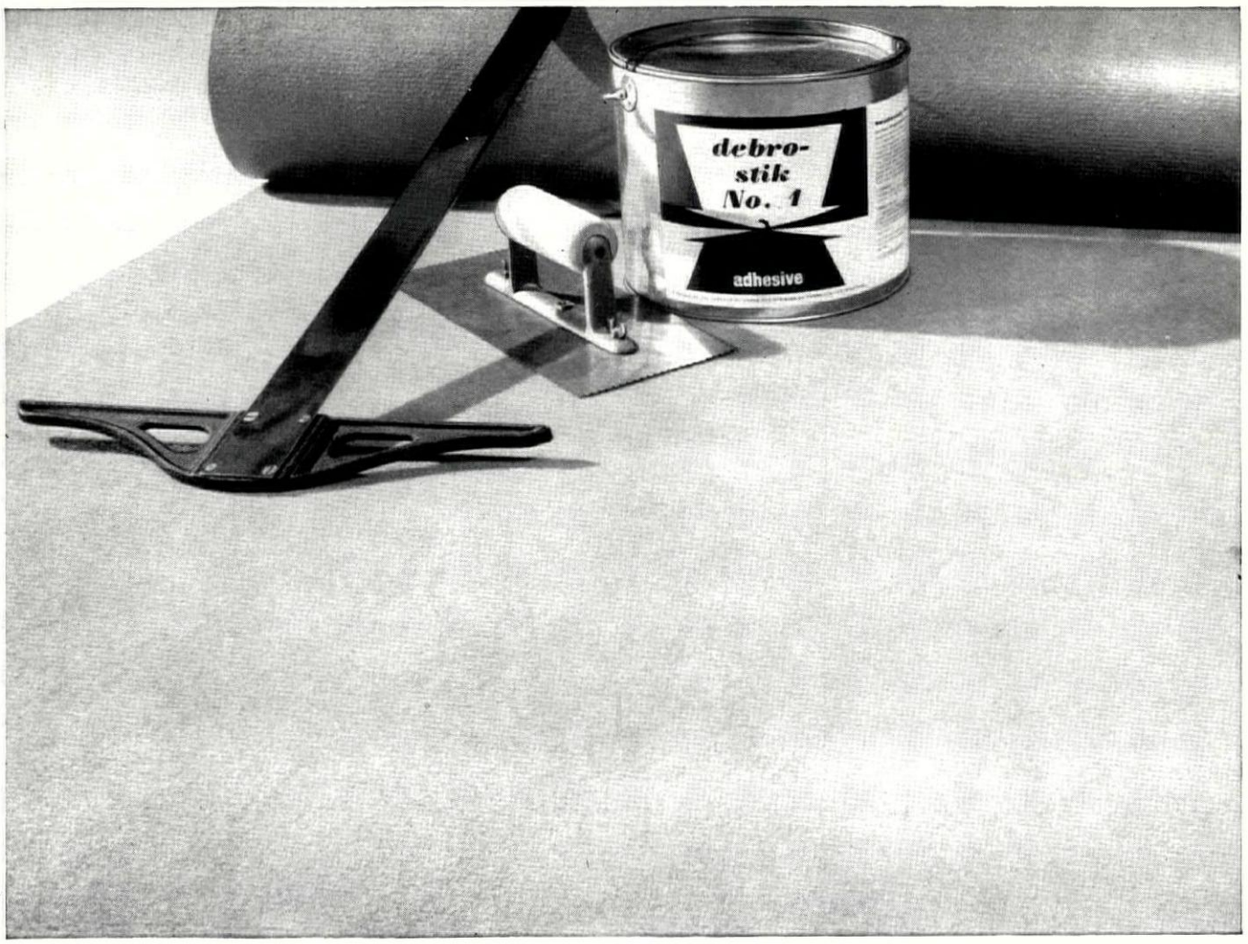

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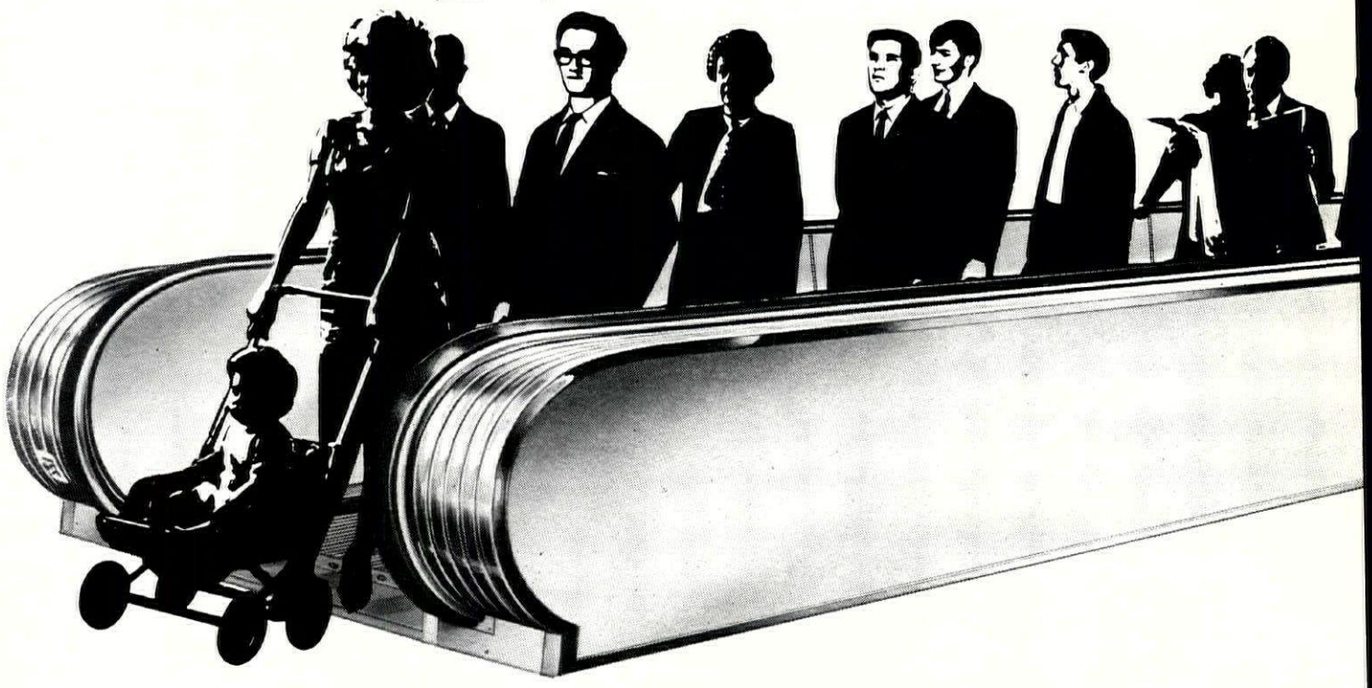

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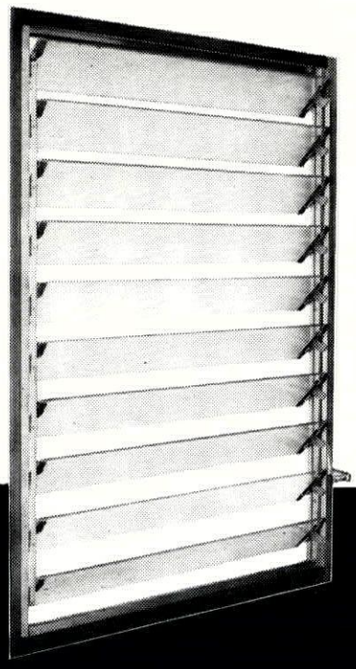

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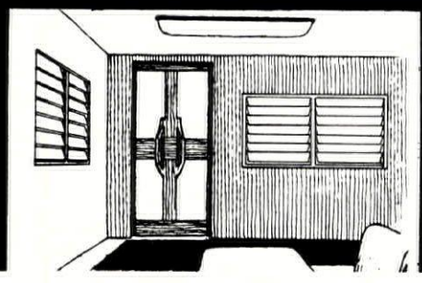

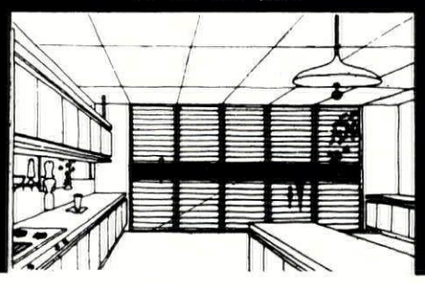

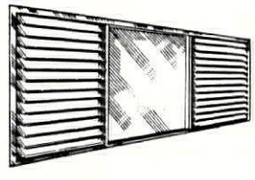

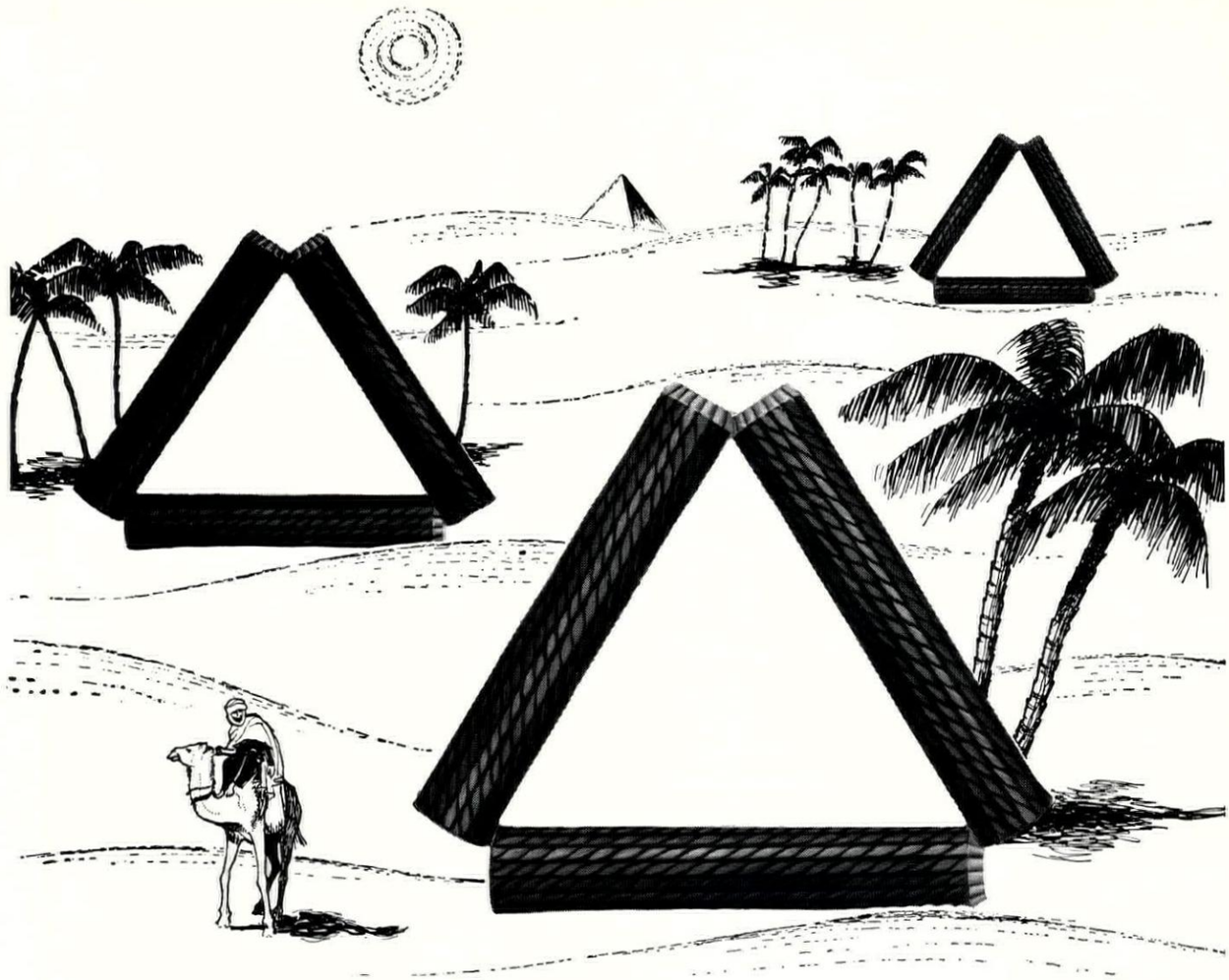

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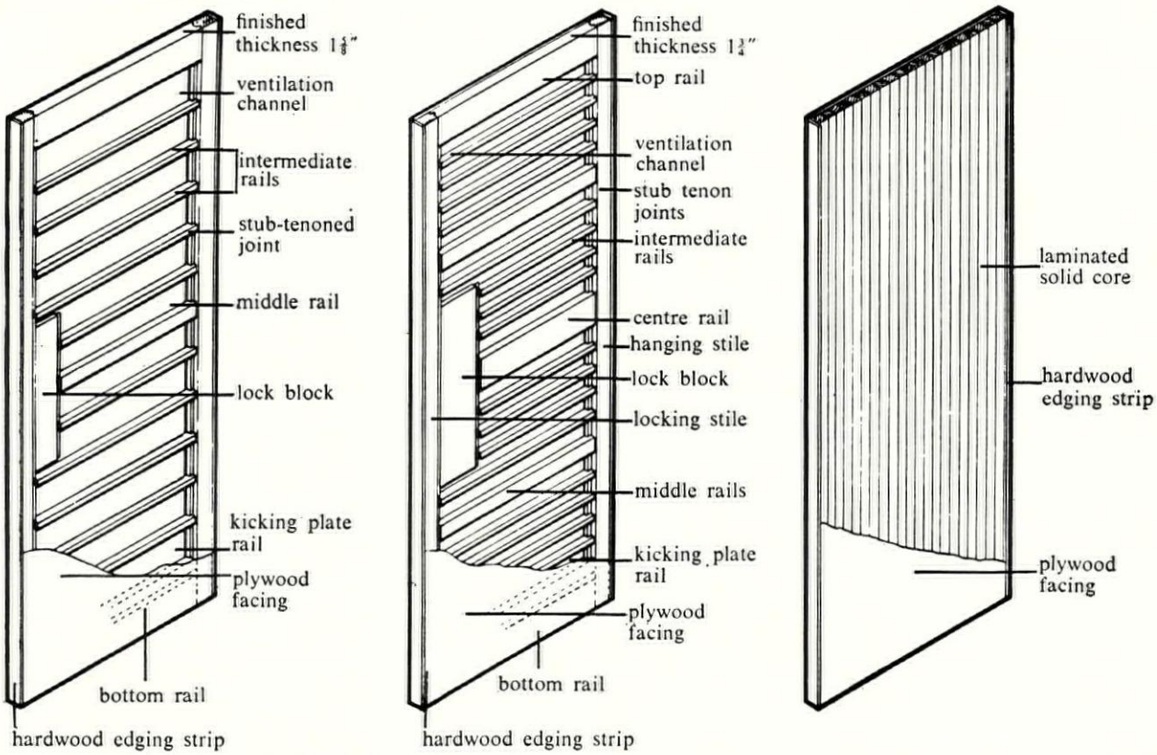
The Leaderflush range includes all the main types of flush doors; solid, semi-solid, timber-cored and asbestos lined fire check doors.



MATERIALS Canadian Western Red Cedar is used exclusively for all cores. Its low coefficient of expansion virtually eliminates the risk of distortion even when subjected to changing temperature and humidity. Facings are beech for interiors and West African mahoganies for exterior work. Veneers may be specially selected, book matched and laid to order, or can be supplied from stock laid at the time of manufacture of the plywood. All timber is subjected to electronic checking for correct moisture content before it is permitted to be incorporated in a Leaderflush door.

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Although the four types of door illustrated above form the basis of the Leaderflush range, a substantial part of our business is in purpose-made doors to individual requirements. For complete details, write or telephone

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AUTHORS AND CONTRIBUTORS

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