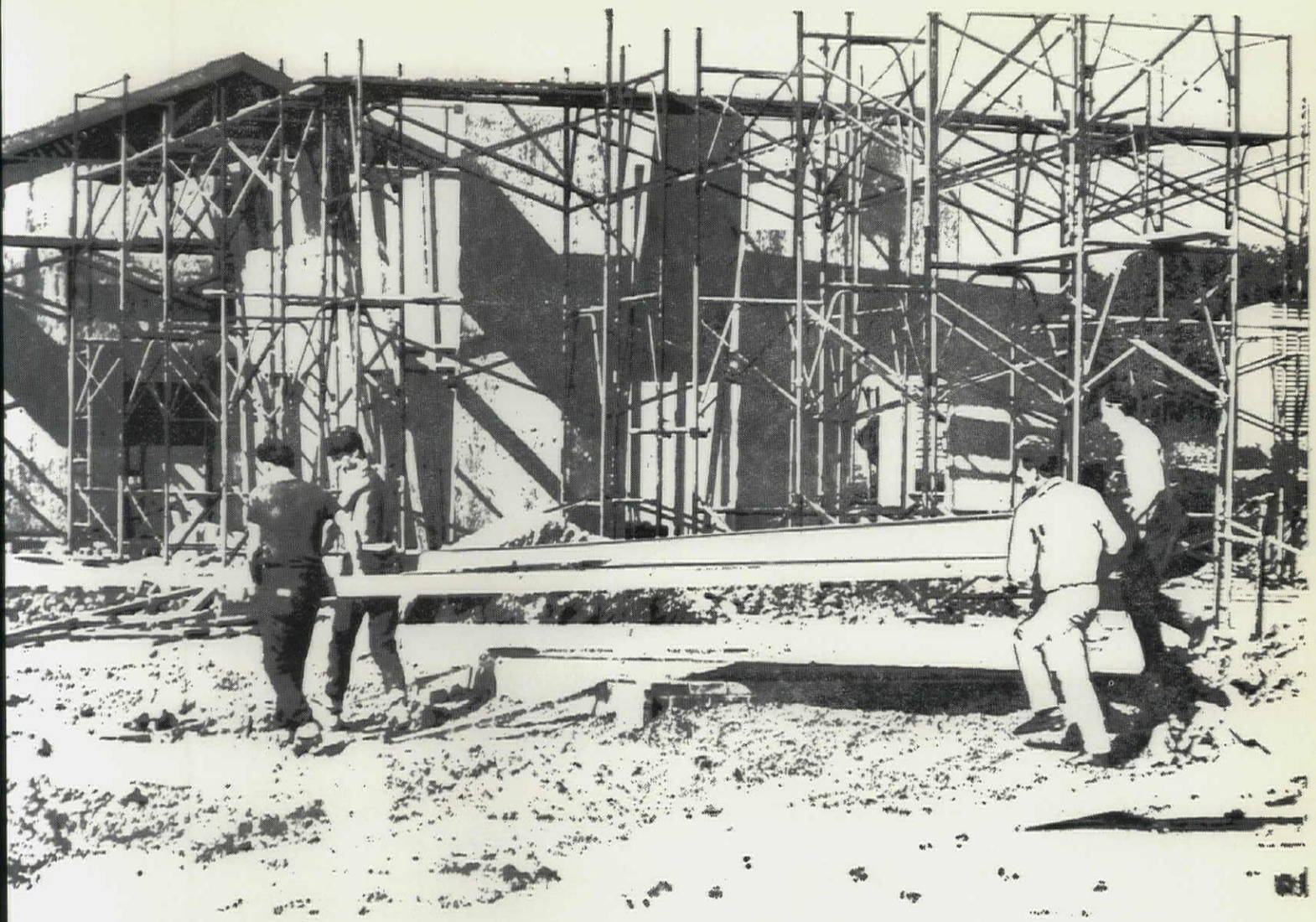
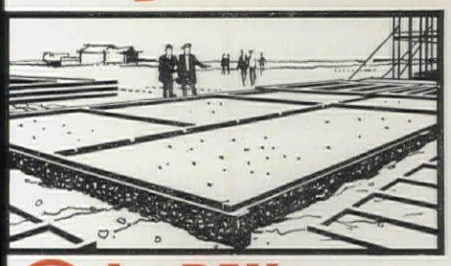
THE ARCHITECTURAL REVIEW VOLUME CXLII NUMBER 850 DECEMBER 1967 FIVE SHILLINGS



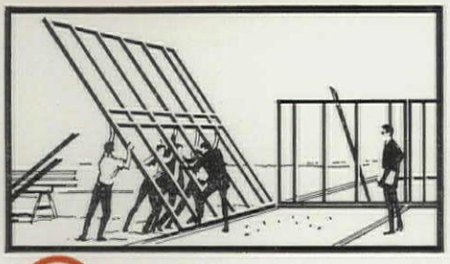
Diary of a Timber-frame house

This sequence illustrates a few of the stages in the construction of a typical timber-frame house. Much higher speeds are provided with fully industrialised methods.



1st DAY

8 am Frames ready for erection
on prepared foundations.



8.15 am Erecting frames for all external walls.

3 pm Walls erected. First floor joists laid.
5 pm Carcass completed.

2nd DAY

5 pm Roofed, clad and weatherproofed.
Inside work commences.

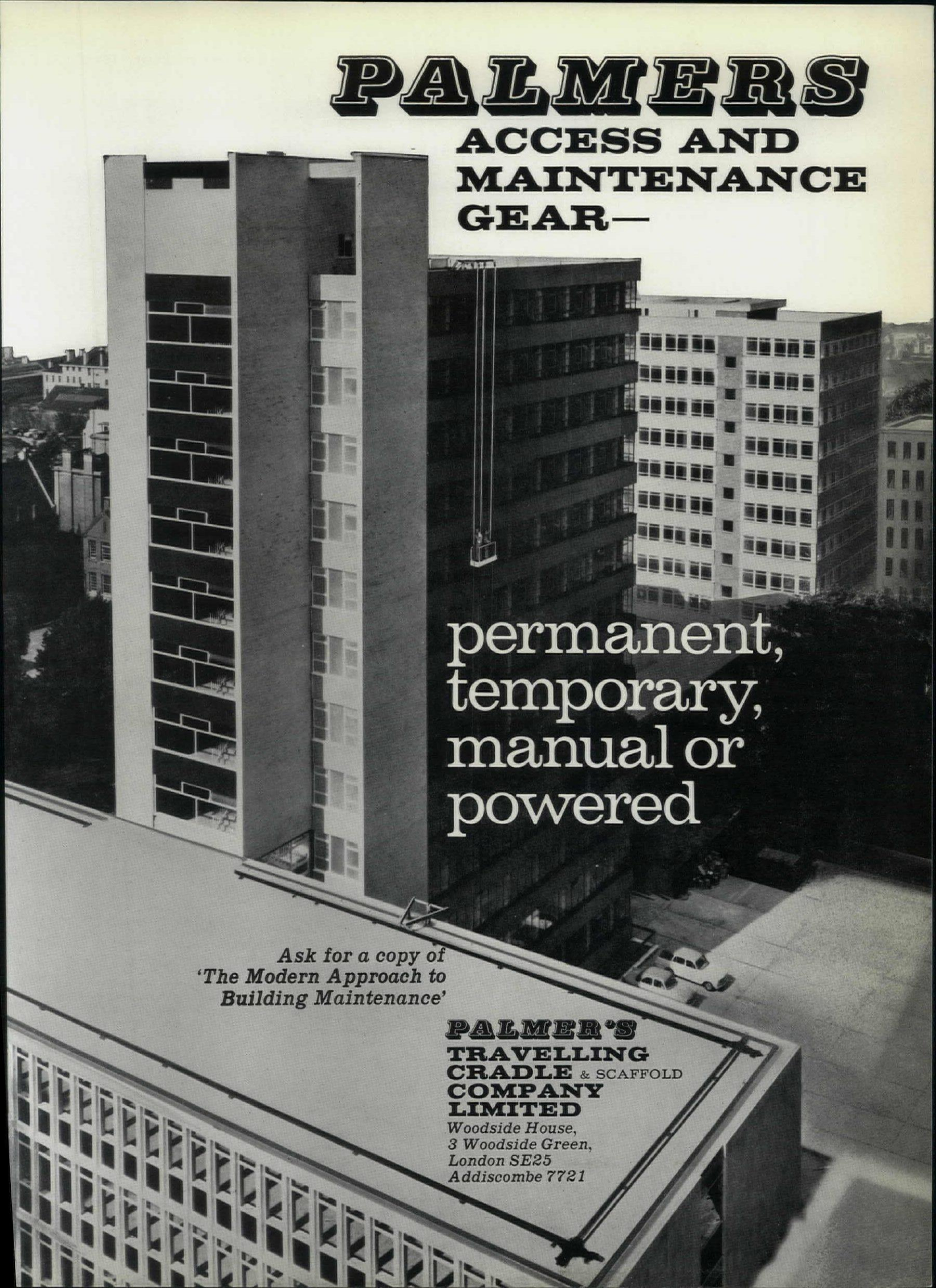
6th DAY

External work finished.
Internal fitting and decoration.

25th DAY

OCCUPIERS MOVE IN

TT17A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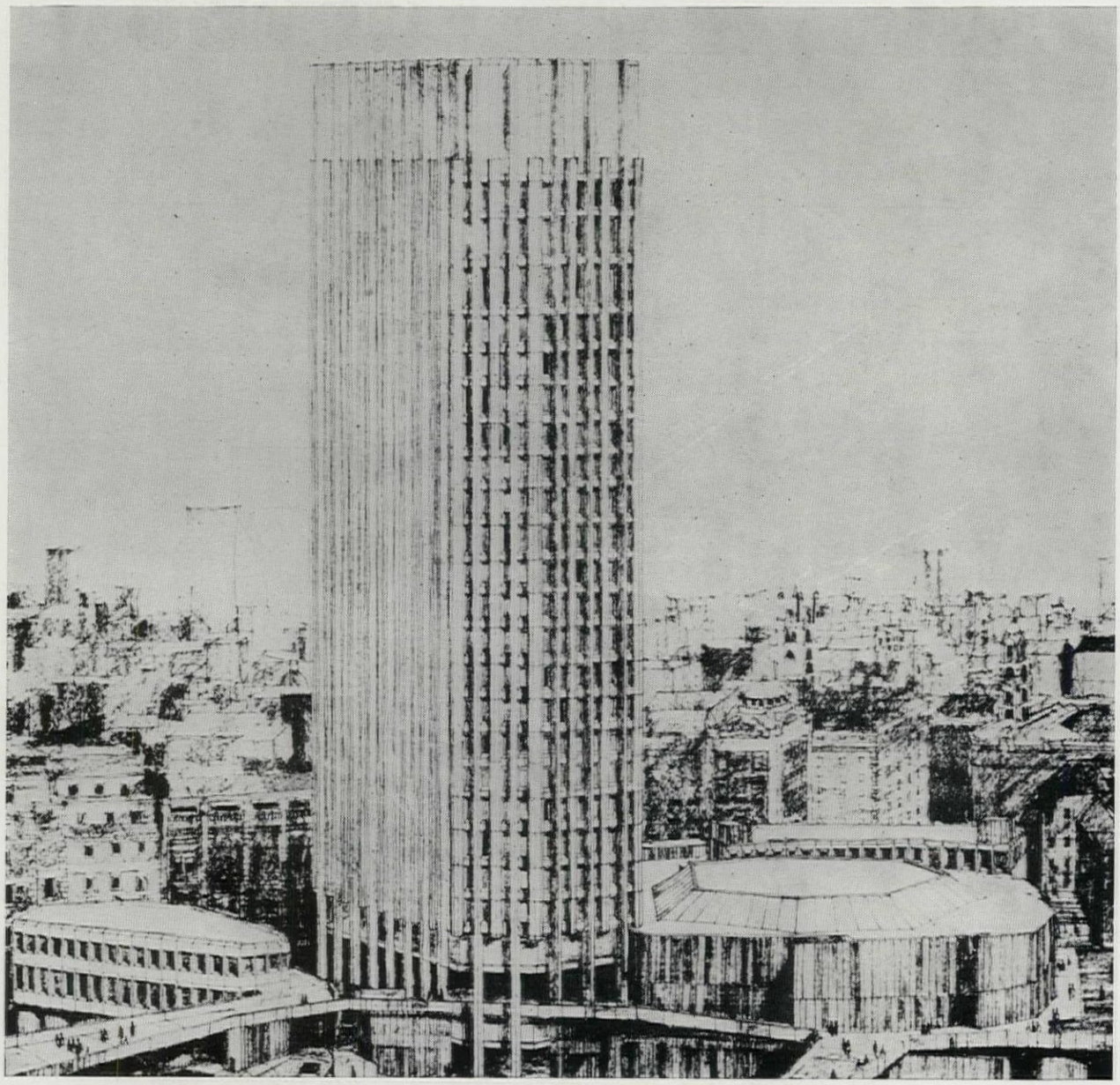


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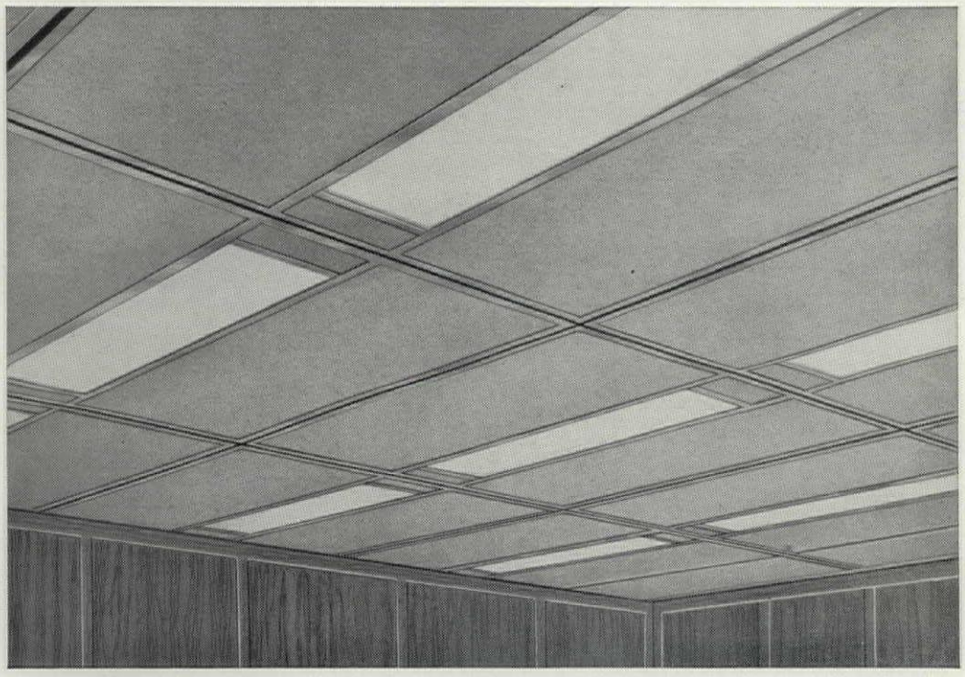

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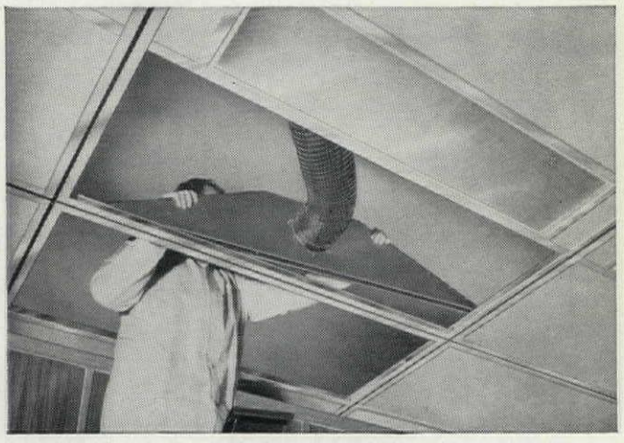

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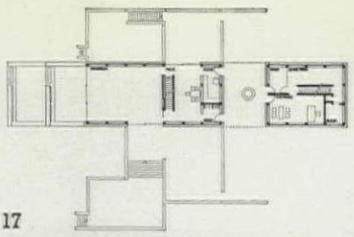
HAT-TRICK

whitewashed, 16. The house is long and thin, and steps down the hill in three large balconies which serve the principal rooms on each floor, 17. Any privacy, however, is lost by wide openings which enable a person standing on one terrace to look down



17

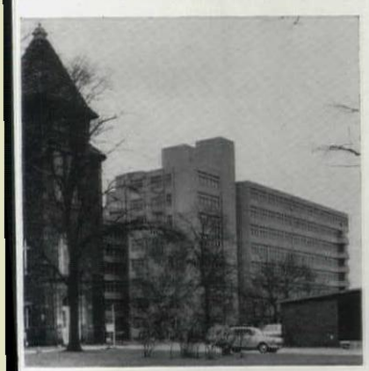
16

on the one below, 18. There are terraces and steps to take in the changes in level on the two long sides, and the lower ground floor stretches back the full length of the house to become a basement. At the top end the building is really a small office block, separated from the house by a common entrance area (seen in 16) through which passes the free-standing form of the boiler chimney. London boroughs might do well to consider such a sensible combination of residential and business use and to question more often the validity of their stuffy zoning regulations.

18

SON OF POELZIG

It is appropriate that Peter Poelzig's new clinic, 19, should be in Charlottenburg where his father Hans built the Broadcasting Centre (1930) and taught at the Technical College. The building is exclusively for ENT, eyes and neurology, and is the latest addition to Westend hospital. Due to a sharp fall in the ground, the main entrance (right in 20) is on the second floor. The plan, 21, consists of two overlapping blocks, 9- and 10-storeys high, linked by the main vertical circulation. This nodal point is clearly expressed by deep recesses on plan and a strong vertical emphasis in the fenestration and lift towers. The long block contains the wards and X-ray departments. Entrance, administration and operating theatres are in the square block. The contrast of vertical with horizontal window strips is reminiscent of the 1920s, but the articulation of the different parts into



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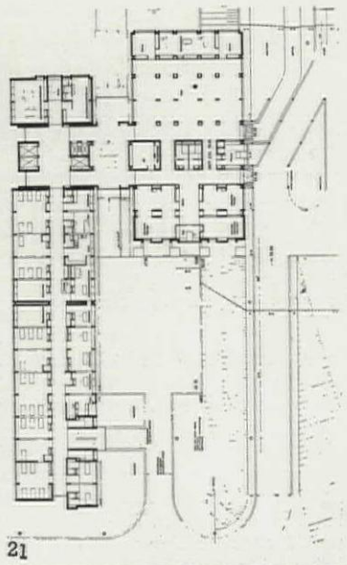

21

blocks and the precast concrete cladding give the building the look of a constructed object so characteristic of today, 22.

WUPPERTAL BATHS

The problem of infill weakening the expression of structure, so brilliantly solved by Saarinen at Dulles airport, is well illustrated by comparing the end elevation of the new public swimming baths at Wuppertal (architect: Friederich Hetzelt) before and after glazing, 23 and 24. Another classic problem, seen on the entrance side, 25, of relating smaller ancillary accommodation to the massive form of a single long-span structure, remains unresolved despite the consistent symmetry of the plan, 26. Also the large scale of catenary structures makes integration into existing built-up areas extremely difficult and at

23

24

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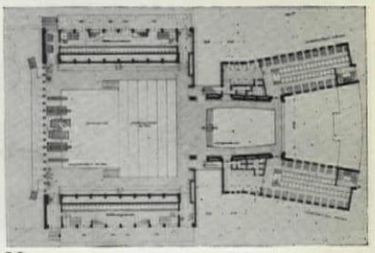

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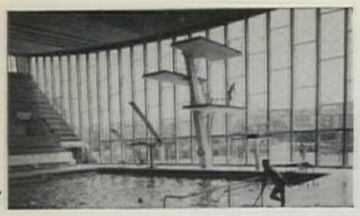


27

WUPPERTAL

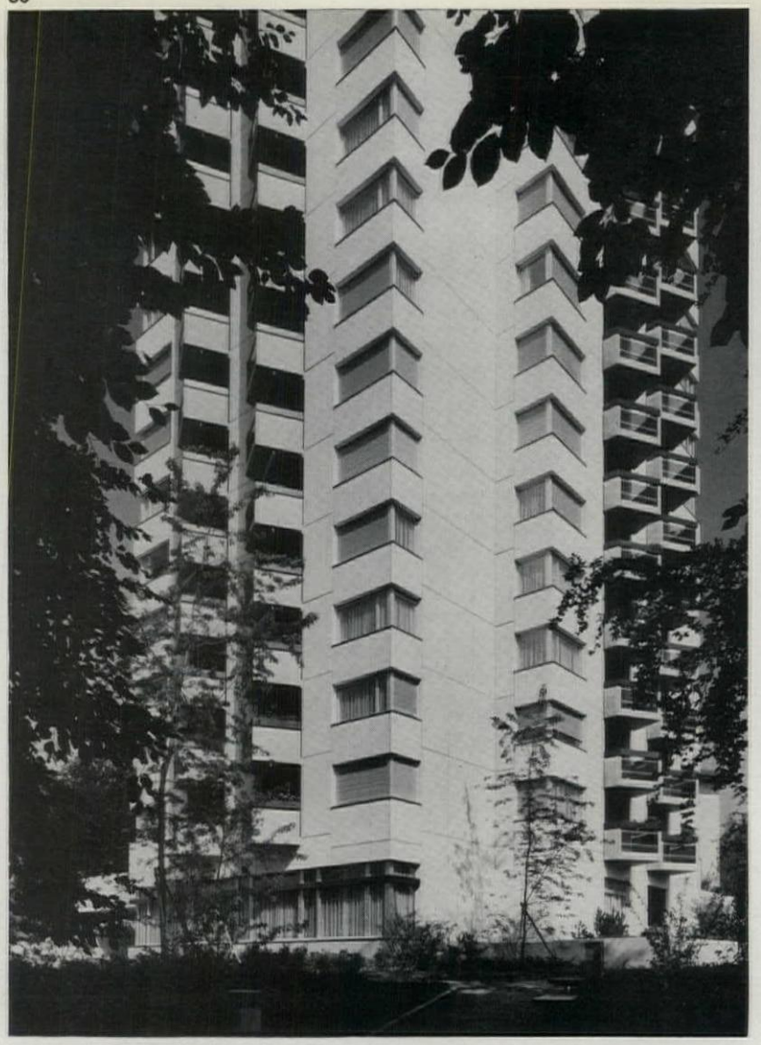
Wuppertal there is plenty of traditional 3- and 4-storey housing around to underline this point.

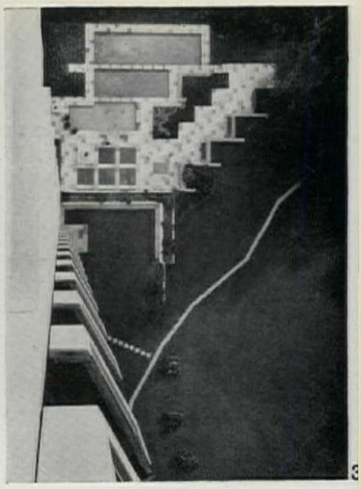
The plan fulfils the standard requirements for public swimming baths (see AR May 1967) and has an efficient circulation between the swimmers' entrance and the pools. Spectators enter from the sides underneath the raked seating. The noisy teaching pool has been placed quite sensibly in a separate space open only on one side to the larger pools. Some doubts arise about the wisdom of having an unscreened window wall facing due south, 27, though looking out on to a hill must reduce glare considerably.

HIGH-RISE FOR THE OLD

In a small Lucerne park Erwin Burgi has recently completed a 16-storey tower block for old people, 28. High-rise housing is mercifully rare in Switzerland, but can be justified in the case of old people living in a city who have no desire to have a garden. Lift access and a compact plan, 29, reducing horizontal circulation to a minimum makes the journey home as effortless as possible. The planning everywhere reflects the meticulous care

30

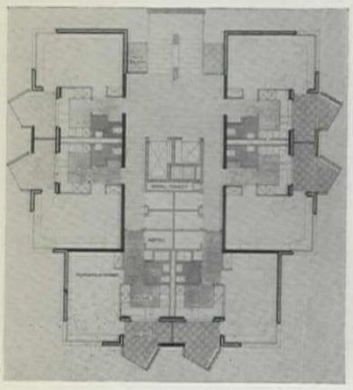




3

which one associates with the best Swiss architecture. The bed-sitting rooms and large balconies have complete privacy, their orientation is ideal and each room is furnished with an exceptional understanding of old people's needs. Construction is of *in situ* floor slabs and precast concrete load-bearing walls with an external facing of white aggregate panels. The whole building is skilfully detailed and brought to an high standard of finish. Both the angled balconies and the corner windows help to lead the eye round the building making it into a truly three-dimensional form of considerable strength, 30. Anywhere but in Switzerland or Scandinavia an existing park would have been an excuse for economizing on landscaping. Here, on the contrary, the tower spreads out at ground level with extensive pools and terraces, 31.

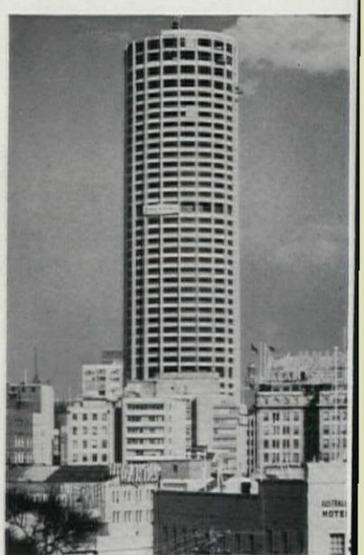
28



29

CITY OF SUPERLATIVES

After the world's longest single-span concrete bridge and the world's most controversial building (a book called *The Sydney Opera House Affair* has just been published), now comes the world's tallest building in lightweight concrete, the 600-ft. high cylindrical Seidler-Nervi tower in Australia Square, 32 (World, AR March 1962 and November 1964). The use of lightweight concrete above the 8th floor lightened construction loads and made it possible to reduce the size of columns and load-bearing walls. It is claimed that the savings which followed amounted to over £100,000 and that the increase in lettable area will provide £130,000 gain in rents over the first ten years. Besides 37 floors of office space, the building also contains an exhibition hall, a floor of shops, a lecture theatre with conference rooms and a revolving restaurant with observation deck. Nervi's tapering vertical structure gives the silhouette a gentle entasis but fails to provide the strength and verticality promised in the design and so amply demonstrated in his other Commonwealth collaboration, the Place Victoria building at Montreal. The Sydney skyline, 33, gives rise for some concern with its two bulky slabs facing the harbour. In the gap between an exciting outline of high and low buildings can still be enjoyed, but will good sense be able to resist commercial pressure or will AR's epitaph in a year or two show the gap built up solid?



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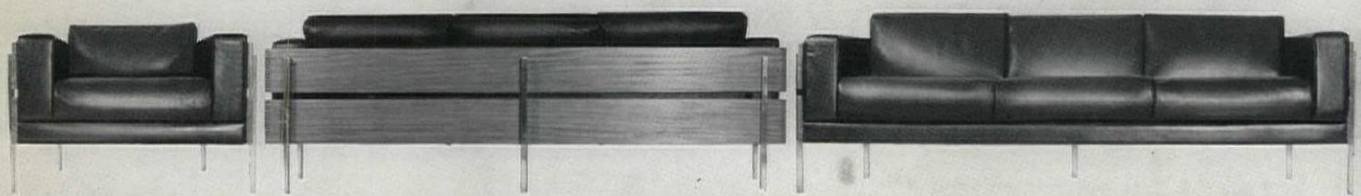


hille

VIEWS AND REVIEWS

marginalia

TENTERDEN OBSERVED

At a time when there is much talk of historic towns and the need to preserve them, any report which sheds light on the problems of conservation is particularly valuable. Tenterden, Kent, a small historic town of considerable character and as yet unspoilt, is the subject of just such a report recently published by the Kent County Council. Entitled *Tenterden Explored*, it is a model of how to do it and everyone concerned with similar problems should get a copy from the county planning officer, County Hall, Maidstone. Attractively produced, it contains an unusually thorough and sensitive appraisal of architectural and townscape qualities by Frederick ManManus and Gordon Cullen and is illustrated with brilliant drawings by the latter. Commissioned jointly by the county and borough councils, and issued in conjunction with a draft town-centre map by the county, it anticipates the requirements under the Civic Amenities Act to chart the areas of particular townscape value. It is proposed to examine the report and map in more detail in a future issue of the REVIEW.

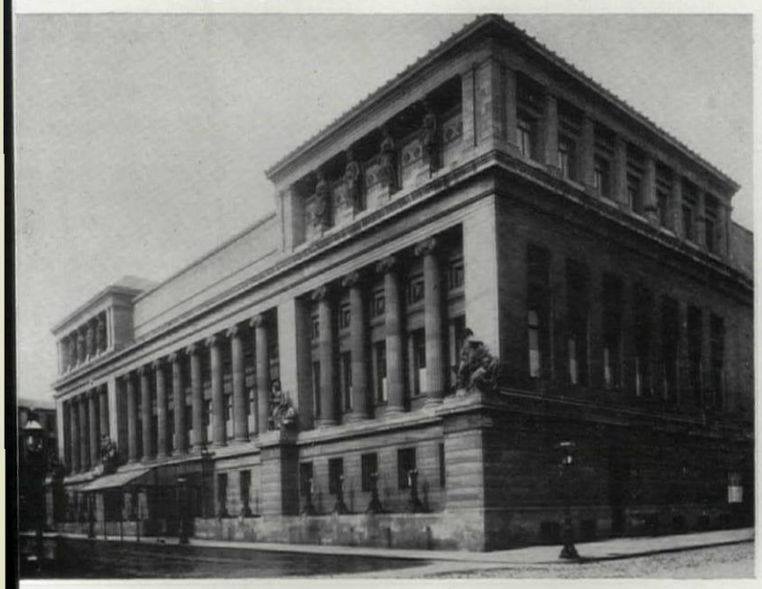
ST. ANDREW'S HALLS

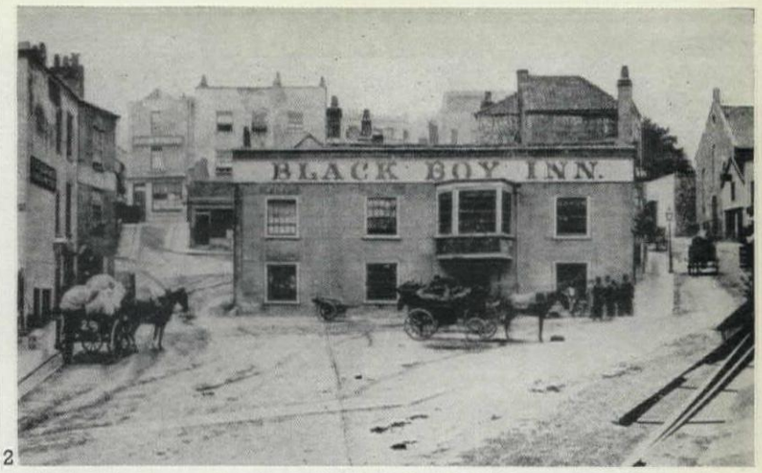
Much of Glasgow's architecture of the nineteenth century is dominated by the work of 'Greek' Thomson. His geometric rationalism and anachronistic style were continued by James Sellars, most notably in the massive bulk of St. Andrew's Halls, 1. It was probably from Thomson's practice that there came the device of placing the columned front above a stylobate whose lineal treatment, although a Thomson mannerism, derives in nineteenth-century architecture from Schinkel, as does the reticulation of certain groupings of windows and other details. There remains, however, much of Sellars's detailing which is in the Thomson idiom. Nevertheless, Sellars (1843–88) obviously failed to fully realize or comprehend the reasoning behind Thomson's very individual approach to romantic classicism. The result is that, while Sellars's works are interesting, they frequently lack the intellectual force that is Thomson's true quality, so that the former's buildings are neither so satisfying architecturally nor visually so emotive. Still, Sellars's concert hall, set deep in the heart of Glasgow's west end, was grand enough for all that. As the last great monument of neo-graeco art it is wholly in keeping with the imperial age of the late eighteen-seventies, even although stylistically it is very, very late. After all, St. George's Hall, the only other comparable structure in size or scale, is thirty years earlier.

It would appear that the design owes a lot to Schinkel, particularly in the frontal use of a gigantic order of columns held firmly at the sides by spurs of the side walls. Avoiding the visual weakness of Wilkins's ten columns at University College, London, or the monotony of Smirke's British Museum peristyles, Sellars divided his impressive range of sixteen ranked columns into three sections. He further punctuated each division with allegorical statuary of colossal size. Along a broad horizontal axis they created a clear separation of parts which never became disruptive since the column dividers also acted as conductors unifying the vertical lines from attic to basement. Thus Sellars's break-up of the columned line provided an opportunity for making an impressive addition to the strength and utility of the main elevation. This was needed if the design was not to suffer the centrifugal force set up by the heavy masses of plain masonry forming so much of the side walls. With its simple numeric ratios, the main front is a vivid essay in the beliefs and ideals of that European neo-classical school which had flourished in the early eighteen hundreds. Indeed it is astonishing that such purity of conception and execution should still exist when elsewhere it had long before vanished in the decline of the Piranesian vision of architecture. To discover it in Glasgow of the late eighteen-seventies, with the works of Sir J. J. Burnet and Mackintosh appearing in the next twenty years, is almost unbelievable.

Unfortunately, after a boxing match in October, 1962, St. Andrew's Halls were gutted by fire. However, the Corporation has declared its intention of restoring and retaining the shell of the old concert hall. The interior will then house a major extension to the Mitchell Library which backs against the hall. As well as allowing for a huge increase in the storage space for books, there will be a lecture theatre, seating 300–400 persons, suitable for adaptation to theatrical performances by amateur groups. For the students working in the main reference room a cafe will be provided, while private study rooms will also be incorporated in the scheme. Provided these facilities can be incorporated within the existing shell, then not only will the very interesting facades be retained, but there will still remain the long low proportions of a building sited magnificently among sandstone tenements and all to scale. JAMES MACAULAY

1, *St. Andrew's Halls, Glasgow, by James Sellars.*





2, *the Black Boy Inn, reproduced from* Bristol As It Was 1874-1866.

VICTORIAN BRISTOL

Reece Winstone, that idiosyncratic and indefatigable Bristol photographer, has produced yet another of his admirable records of the city as it was and the events that took place there, based on what must be a unique collection of local photographs.

This is the ninth volume of the series, which began with *Bristol Today* and has been working systematically backwards, getting more interesting each time. The present volume is called *Bristol As It Was* 1874–1866. Among the subjects it depicts are the construction of the first dock at Avonmouth, the newly opened Clifton suspension bridge, Rownham ferry (removed 1873), the Black Boy Inn, 2 (demolished 1874), the hemp and flax mills at St. Philips (parts of which lingered on until 1957) and St. Mary, Redcliffe before the spire was restored in 1872. There is also an interesting note on the Bristol pioneer photographer William Friese-Greene.

The book has been written, designed and published by Mr. Reece Winstone, from whom it can be obtained (23 Hyland Grove, Bristol 9) for 13s. 6d. postage paid.

ID IN AR

1968 will see a new development of the Interior Design section of the AR, introduced at this time by the Editors because architects increasingly find themselves in need of news and guidance about the various components that go to make up an interior—furniture, light-fittings, carpets, fabrics and the like. This is partly due to the growth of contract furnishing which gives architects the role of selectors as well as designers, and partly to the number of ready-made designs of a high standard now on the market about which architects need to be fully informed. Interior design is in any case a branch of architecture that needs better and more discriminating coverage than it often gets.

From the February issue onwards therefore (the January issue being the AR's usual annual Preview), the ID section will be considerably expanded, illustrating in rather more depth than previously new interiors, both British and foreign, and including short technical articles on problems affecting the design of the interior and news of new designs, whether special to one job or in regular production. This last feature will replace Ronald Cuddon's Design Review series which appears for the last time this month.

OF AND BY

A new Studio Vista paperback called *Urban Structuring: studies of Alison and Peter Smithson* is a collection, made and described by the Smithsons themselves, of their own thoughts and projects about town design. Its aim is to 'examine various patterns of association and identity in urbanism,' and it is an expanded version of an earlier collection, entitled *Uppercase* 3, which was published in a limited edition in 1960, edited and designed by Theo Crosby. Crosby has also written an introduction to the present collection.

For those interested in following the sequence of ideas that the Smithsons have introduced into their various projects, this is a useful summary, though not cheap at 12s. 6d. and rather dear in the hardback edition at 25s. It is

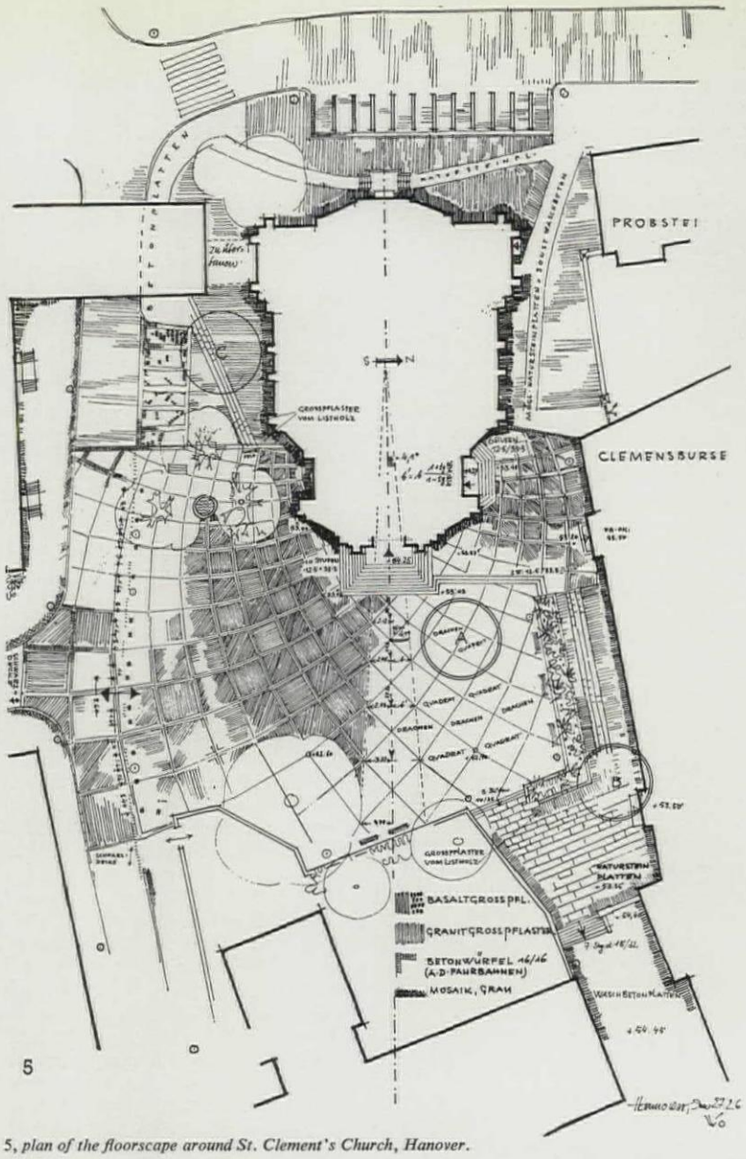
to be hoped that the ugly word 'structuring' will not be widely adopted. Some of the collection has real significance because the evolution of several of the ideas discussed—the 'street deek,' for example, or the conception of cluster—mark essential stages in the development of post-CIAM planning theory. Other parts are not so original; for example the pages explaining how in 1964 the Smithsons were asked to advise on the use of a site in the High Street at Street, Somerset: 'Our intention being to try to renew in Street that feeling of living in a small country town. We have gradually come to the understanding that this feeling is largely generated by the presence of farming and other open land within the town. . . . The feeling is also due to the town's actual size—in a town very much bigger than Street the sense of country (smell, bird life, etc.) would sharply diminish.'

TILES: INSIDE AND OUT

There is increasing interest in the architectural uses of decorated ceramic tiles, and these two pictures show the current work of two tile designers. 3 shows part of a range of coloured tiles designed and made by J. W. Morris who has recently set up his own studio workshop at Newark, where he has been lecturing on ceramics at the technical college. Six of these standard patterns have been chosen for the Design Centre. 4 shows a diagrammatic model made by Mrs. Jan Williamson to illustrate her ideas for the use of patterned tiles on the exteriors of buildings. Mrs.Williamson was previously a textile designer but has recently turned her attention to tiles. The tiles shown here are in grey, green or brown on a white ground.

FLOORSCAPE—OFFICIAL

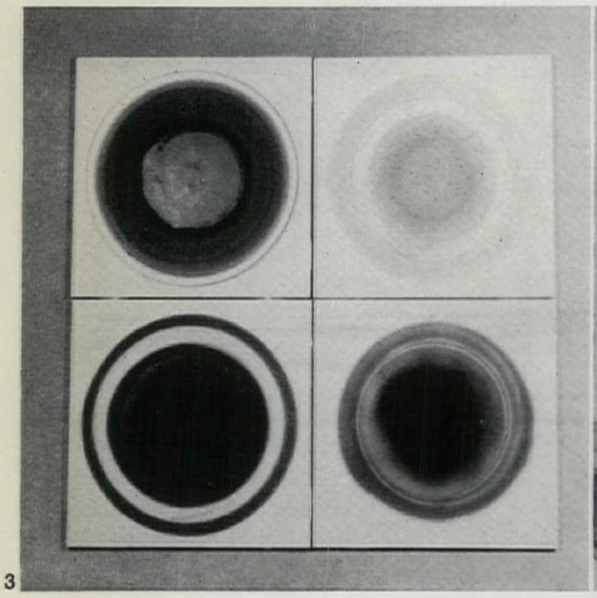
It is gratifying to THE ARCHITECTURAL REVIEW to see floorscape taken seriously and tackled very intelligently in another country. The journal *Deutsche Kunst Und Denkmalpflege* (1966), the official publication for matters of preservation in Germany, has published an article by Heinz Wolff recommending the re-use of pavement stones of all kinds and sizes where paving has to be done in conjunction with buildings of architectural value. Illustrations of the most appetizing floorscapes are added. They come from Würzburg (in fact from the Residenz), Monte Erice in Sicily and, in much more detail with an admirable plan, 5, from the area in front of the eighteenth-century church of St. Clement at Hanover.



5

5, plan of the floorscape around St. Clement's Church, Hanover.

3, coloured tiles by J. W. Morris. 4, model by Mrs. Jan Williamson showing how patterned tiles could be used on the exterior of a building.



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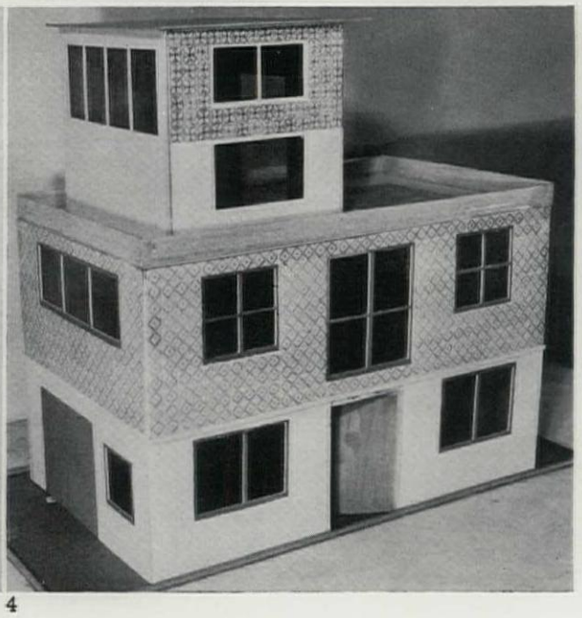


4

KEATS'S HOUSE IN ROME

The Keats-Shelley Memorial Association is appealing for funds to maintain the house at 26 Piazza di Spagna in Rome, where Keats spent the last few months of his life. They say that, owing to rising costs and the high taxation in Italy, the future of the house is now threatened unless more money can be made available.

The house was bought by the Association in 1907. It exhibits a collection of manuscripts, paintings and relics and has a library of 10,000 books. In recent years it has also become an important outpost of British cultural activities in Rome.

The Association is responsible in addition for the upkeep of the graves of Keats, Shelley, Severn and Trelawny in the Protestant cemetery. Donations to the Keats-Shelley Memorial House appeal should be sent to the Association in the care of Barclay's Bank (West End Foreign Branch), 1 Pall Mall East, London SW1.

ROOSEVELT MEMORIAL

Mr. William F. Pederson of New York writes to correct the paragraph in the September AR in which the first design for the Franklin Delano Roosevelt memorial at Washington, the result of a competition, was attributed to Hoberman and Wasserman. The latter were, he states, employees in his office, and the design was based on early sketches by himself. It should therefore be referred to as a Pedersen and Tilney design.

DESIGN OF CITIES

Edmund M. Bacon's book of the above title, reviewed in the November AR, is published in this country by Thames & Hudson, price 84s.

correspondence

CHALLENGE OF POP

To the Editors.

SIRS: Surely Sir Paul Reilly's 'conviction' as a criterion for judging pop may lead him astray: the naïve, immature, or even mentally handicapped can show (and generate) no less conviction in their work than those at the heights of human achievement.

Why not function, not *tout simple* as in the Good Old Days, but function that takes into account human feelings and attitudes as much as mechanism? To provide experience and enjoyment of rich colour, texture, complication, ambiguity or just plain novelty is becoming often more important than for a product merely to work—which latter, thanks to the good deeds of Sir Paul and others, is beginning to get sometimes rather a bore. This has always been the case with clothes; and we can learn from them, particularly that judgment of worth is much less simple than is often thought.

Yours, etc.,

CHRISTOPHER BRADSHAW

London EC4.

To the Editors.

SIRS: Sir Paul Reilly's article in the October AR understandably makes depressing reading because it confirms once more the confused state of our thinking about design. It seems to me that this malaise reveals itself in the

lack of a common language of description and analysis amongst designers: just what, for example, do terms such as function, style, quality, really mean in the context of Sir Paul's article?

This vagueness seems to me to be due to an almost complete absence in this country of any kind of rigorous study of the fundamentals of design. If professional historians, administrators and critics on the one hand, and the designers on the other, who adopt the terms and methodology they employ, are so vague, how can we have an informed public and how can designers really appreciate what they are doing or be precise and discriminating in any analysis of their task?

The study of design and the decorative arts, their history, theory and aesthetics is hardly more advanced than that of the fine arts two centuries ago. The result of more than a hundred years research, speculation and publication in the fine arts has led to a profound and widely disseminated comprehension of the values and purposes embodied in them. We desperately need a similar understanding of design and the decorative arts: we need to know just what the criteria really are by which to distinguish and evaluate them. This must start at a high level to be effective: I imagine what is required is the establishment of a university chair in Design Theory and Aesthetics.

Yours, etc.,

LIONEL A. BURMAN.

Salford.

book reviews

CITY REFORMERS

THE SEARCH FOR ENVIRONMENT. *The Garden City: Before and After. by Walter L. Creese. Yale University Press.* 105*s.*

The rather lengthy title clearly indicates the contents of this book. Mr. Creese is concerned with the Garden City movement as one important and influential response to the problem of securing a tolerable environment in an age of industry and swelling cities. Unlike most other writers, he is more concerned with antecedents and later extensions of influence than with the direct creations of the movement. Though there is a chapter on Letchworth, there is little about Welwyn—much less than there is, for example, about Bedford Park or Wythenshawe. The emphasis is also mainly, though not entirely, on the visual, and Mr. Creese is preoccupied with the work of architects rather than with other thinkers and administrators who had a major share in some of the work which he discusses. Unwin and Parker are the individuals who receive the greatest share of his attention, and Howard seems no more than a leading member of the supporting cast. It should be noted, however, that Mr. Creese does full justice (which various others, including the present reviewer, have failed to do) to the great range of Unwin's questing mind in his effort to maximize the improvement that building and planning can have on the quality of life of the members of a community.

The author's method is to give a chapter each, in chronological order, to some of the planned communities and the individuals associated with the Garden City movement. The accounts of such foreign derivations and impact as the movement had, and of the new towns built since World War II, are somewhat sketchy. But the other chapters display a wealth of detailed knowledge, carried lightly, and illuminated by the critical comments of a lively and perceptive mind. It is not a demerit that many of the comments will stimulate disagreement, as also will the choice of topics for inclusion or omission. Early nineteenth-century Leeds is described as an example of what the reformers had to revolt against, and the model villages near Halifax and Bradford are the first reforms discussed in detail. Mr. Creese calls these 'the first model villages at the advent of the industrial revolution,' ignoring all that was done by Owen, Oldknow, the Strutts, the Gregs, the Ashworths, and others. Though it goes against the grain for a Yorkshireman to say so, his local emphasis at this point seems seriously exaggerated. Saltaire was a remarkable instance of a self-contained community, well balanced between residence and work. But Akroyd's Copley, with its Gothicized back-to-back houses against the railway, was really rather a mess, misreading both social and architectural tradition; and the later Akroydon was only a modest improvement. These were not major influences. On the other hand it seems too restrictive to treat Bedford Park, which had so many more imitators, as disqualified from serious consideration as a garden suburb.

In the twentieth century the most questionable omissions are the housing estates and privately developed suburbs of the interwar years. Unwin and Parker could never have perpetrated them, but both in layout and house design it is not hard to trace an illegitimate ancestry from the pioneer architects of the beginning of the century. There are bad as well as good effects from the imperfect execution of noble ideals. The 'twenties and 'thirties were not a good time for those who believed in creating and maintaining the town as a self-contained whole; and the debasement of architectural ideas to inferior purposes was not wholly independent of limitations in the earlier architects. Unwin and Parker did little to lessen the semantic confusion attaching to 'garden city,' 'garden suburb,' 'satellite town'; and there was something debilitating in the harking back to an idealized version of the medieval town as a standard of reference, and in Parker's pre-1914 dictum: 'every advance made by machinery must mean a corresponding retreat on the part of art.'

Mr. Creese is indulgent towards such weakness, perhaps because, swimming against the tide, he inclines to judge not only architecture but town planning as an art. One might prefer an approach which treated technology as integral to the creative process rather than as an external influence, and economics as something to be lived and worked with rather than passively deplored. Nevertheless one should be grateful for an individual work so well-informed, fair-minded and stimulating.

WILLIAM ASHWORTH

Next to Waterhouse's Hall at Balliol, Oxford, stands this new pavilion for the Senior Common Room, 6, designed by the Oxford Architects' Partnership (six of whose seven partners were trained at the local school of architecture). It provides a new drawing room and an enlarged dining room with six teaching rooms on the upper floors reached by a separate stairway. Facings are in Clipsham stone and concrete with a light grey limestone aggregate.

EPHEMERA ABOVE

THE PAINTED CEILINGS OF SCOTLAND. *By M. R. Apted. HMSO.* 50*s.*

Scottish painted ceilings are, as they say nowadays, a growth industry. Every now and then an old house is demolished or repaired and another painting is found hidden under the plaster. Many more doubtless await discovery and it is not yet the time for a definitive book. This one is more in the nature of an introduction, handsomely produced with 105 plates of which six are in colour. The chapters are short, clearly written and not exhaustive; and except for Thea McDonald's ceiling surveys the paintings are not dimensioned.

The Scottish painted ceiling is of a type found elsewhere in Europe (a few parallels would not have come amiss) and appear to be the result of ecclesiastical artists reorientating themselves to the Reformation redistribution of wealth. Usually in distemper on wood or plaster, and frankly decorative with occasional excursions into illusionism, they were intended to be ephemeral, just a little more permanent than wallpaper; subjects ranged from heraldry, beasts and flowers to scenes illustrating the Bible, classics or proverbs. Some of the subjects are shown to have been taken from contemporary imported books, but much more work on this is clearly required. More study might also be given to the clients: it is surprising to read nothing of the fertility cult which the Prestongrange ceiling illustrates (1581, the earliest known secular example and the most Italian in style) and to see the most interesting sections discreetly avoided except in the small scale of a ceiling survey—but then this is a Stationery Office publication.

D.M.W

ST. PETER'S STORY

SAINT PETER'S. *By James Lees-Milne. Hamish Hamilton.* 84*s.*

No book about St. Peter's can just be about architecture; nor is this admirable, comprehensive and beautifully illustrated work. From the first chapter, entitled Peter Saint and Man, to the last, Mr. Lees-Milne deals not only with the building and its monuments but with its setting, its history and that of its predecessors from Constantine's basilica onwards, with all the unexecuted designs and projects, with Popes and Cardinals, architects and sculptors, and by implication with the history of Christianity itself.

His scholarly but still readable text is fully illuminated by sketch-maps, prints and photographs of all kinds (including an excellent series in colour). The great merit of his writing is that it is cool and judicious; even his account of Mussolini's disastrous driving of the Via della Conciliazione through the Baroque tangle of the Borgo is fairer than those of most writers, though all the more damning by being so.

BY BAYER

HERBERT BAYER. *By Himself. Studio Vista.* 105*s.*

The great number of departments of design in which Herbert Bayer was an innovator is revealed in this collection of his work, introduced and explained by himself, in the fields of visual communication, architecture and painting. Page after page, in the section devoted to his graphic work especially, show designs that anticipate styles and fashions that became popular in later years: a prefabricated bus-shelter and news-stand (1924); a calendar incorporating *trompe l'oeil* Victorian decorations (1935); and surrealist posters and illustrations from 1928; also montages containing pop-art elements which, if they did not anticipate this development, are early examples of it.

Bayer's biggest contribution, however, is in his wonderfully inventive use of lettering. His book-covers of 1923 for publications by the Bauhaus (where he was a student from 1921 and a teacher from 1925) are astonishingly ahead of their time. Printed type he is less happy with; he insists in this book on perpetrating the unfunctional fashion of doing without capital letters and, like all designers trained at this period, only likes sans-serif type. His architectural designs, of which there is an impressive quantity, are also inventive but follow contemporary trends rather than setting them.

The recently completed State Office Block at Sydney, opposite, besides showing how much better buildings of this kind appear when enriched by contrasts of scale and period, illustrates the good standard of design achieved in the office of the Government Architect of New South Wales—a standard described and further illustrated by Mr. T. Heath in an article on page 472.

Edward Lucie-Smith

THE ARTIST AS PERFORMER

The sociology of the arts is a comparatively new subject—and a very fascinating one. One of its most interesting aspects is the question of the relationship between the painter and sculptor, and the society in which they exist. Two books which give us a glimpse of this relationship in the past are Francis Haskell's *Patrons and Painters*, and *Canvases and Careers* by Harrison C. White and Cynthia A. White. Haskell makes a study of the relationship between patrons and painters in seventeenth-century Italy. The Whites look at the condition of the arts in nineteenth-century France, and especially at the slow breakdown of the system of official patronage, and its replacement by the dealer-critic network as we know it today.

On the whole, Haskell shows us a more stable situation than the Whites do, and one would expect the twentieth-century equivalent to be less stable still. Yet this expectation is only half fulfilled. Our own age is, on the whole, kinder to its artists—even the experimental ones—than nineteenth-century France was to the Impressionists. This isn't necessarily a sign of greater tolerance or virtue. What it suggests, from the sociological point of view, is the idea that artists are again discovering for themselves an accepted place and role.

It's worth searching the pages of the two authorities I've just mentioned for clues as to what that role might be. For example, one's eye lingers with a certain fascination on Haskell's account of the career of Salvator Rosa, the odd man out among the painters of his time. We find that Rosa failed 'to appeal to a select clientele of fastidious tastes' and was 'forced to look beyond even the outer circles of contemporary patronage'—a situation which galled him greatly. Rosa, an intellectual fascinated by Stoic philosophy, was constantly confused with the *bamboccianti*, the popular painters of genre. These were most of them northerners, who had migrated southwards, and who had set up a whole new way of life for themselves in Rome. Their mode of existence was one which invited the use of the word 'Bohemian' in just the sense that we now employ it; and Rosa had this much at least in common with them—he was a man who deliberately 'composed' a personality for himself. Where men like Pieter van Laer were content to create a sense of difference between themselves and their patrons, Rosa paraded his accomplishments before his dazzled friends. It was 'his talents for conversation, music, poetry and mime' that were admired, at least as much as his painting. In fact in Rosa we see the first beginnings of a claim that the artist is a man of a different species from the rest, and that this difference lies in something inborn, and not merely in a code of behaviour which fails to conform to conventional ideas.

But before pursuing this theme any further, let me turn to the Whites. One thing which particularly concerns them is the effort which artists were making during the nineteenth century to assimilate themselves to the bourgeoisie. The painter was no longer content with the free, Bohemian status which the *bamboccianti* had created for themselves. Still less was he content with the much older image of the painter as an artisan, a man who worked with his hands. But the artist was not to dominate the situation so easily. The Whites point out that the real reason why so many of the Impressionists got into financial difficulties was the fact that they were trying to live the bourgeois life

without a sound financial basis for it. With the next generation, with Gauguin for instance, this effort was abandoned. Like the northerners in seventeenth-century Rome, he was content to live in the lower class without being of it—the contrast in Gauguin's case being far more marked, because he had at one time, in his stockbroking days, been comparatively well-off. The Whites consider that Gauguin's career 'represents the extreme denial of values that often was needed, in that era, to wrench a painter out of his middle-class role.'

There is, of course, one very important difference between Gauguin's time and our own. Since the seventies and eighties of the last century, the Western world has seen an exceedingly rapid collapse of social hierarchies. It's often said that we are in the process of replacing a vertical structure—that of class—with a horizontal one, where the age-groups are rigidly separated from one another. And at the same time we've seen an increasing interest in the idea of man as an individual, without bonds, free to unleash an imperious will, to mould the world to his own image, and not the other way round. This has meant, among other things, a posthumous canonization for Gauguin, an eager recognition that he was indeed as different, as special, as he sometimes claimed to be. The legend of Gauguin, as retold for instance in Somerset Maugham's novel *The Moon and Sixpence*, has had a profound effect on the popular attitude towards artists—and the growth of the mass-communications industry has meant that in fact such attitudes are 'popular' in the full sense of the word, that the legend has reached every class and every generation, in a way that Rosa's didn't.

When we consider, for example, the numerous biographies and intimate accounts of Picasso which have been published in recent years—Françoise Gilot's is perhaps the most striking—we see that what we have before us is an enormously successful and wealthy individual, but one totally unassimilated to anything resembling bourgeois values. If we look at the case of Rubens, who enjoyed a fame in his own lifetime which was almost as universal, we quickly see the difference. Rubens did fit himself to the framework which offered itself—he was the courtier, the diplomat, the wise counsellor of the Regents of the Netherlands. Picasso, on the other hand, can only be himself—he is condemned to acting out the role of genius on a very public stage. Sometimes this is done wittingly. One remembers Clouzot's film, *Le Mystère Picasso*, which was made in 1956. The title gives the clue. What Clouzot concentrates on is the attempt to catch the very moment of creation. Picasso draws, using special inks and semi-transparent paper, and the audience is able to watch the image altering before its very eyes. Though we see this changing image, and not the artist, the result, oddly enough, is to devalue what is being made in favour of the man who makes it. The works of art which Picasso creates for the camera have no permanence, and we are aware of this. The one constant is the artist himself, and the specatator is asked to ponder, not on the meaning of Picasso's pictures, but on 'being an artist.'

Picasso is not the only artist to turn the business of painting a picture into a public spectacle. There were, for instance, the performances given by Georges Mathieu at the height of his glory in the mid-fifties. One recalls, too, the late Yves Klein, draggging a nude, paint-smeared girl across a canvas. The end-product was surely less significant, even to the artist, than the way in which it was produced, not forgetting the fact that it was produced in public.

But the place where the histrionic nature of post-war activity in the visual arts has shown itself most clearly is New York. Abstract Expressionism notoriously tended to use the bare canvas as a kind of arena, where a bullfight must be fought, or some desperate psychic drama acted out. The 'happening'—a kind of activity that began in New York—occupies the territory between the visual arts and the theatre itself. A 'happening' is a picture painted with people, actions and objects; another definition would be that it is a theatrical performance that rejects theatrical standards and accepts in their place those of painting, a kind of collage in time as well as space.

From the 'happening' it is only a short step to the notion of the 'life style.' There have been a good many recent instances (the American Pop artist Andy Warhol comes to mind) where the artist has seemed to be determined that everything around him should take on the quality of a performance, where the individual has devoted all his efforts, not so much to making works of art as to making the environment correspond to some quality which he feels within himself. The way in which Warhol lives, the constant publicity that surrounds his activities, the underground films, the night-club act and so forth—all of these point towards a single centre, the artist himself. The artist's personality, rather than any of his products, has become the work of art which is produced by him.

How far can this theory be extended to include architects? Accounts of life at Taliesin and Taliesin West leave little doubt that the business of 'being an architect' played some part in the life of Frank Lloyd Wright. I am, of course, using the phrase in a somewhat special sense. 'Being an architect' is something distinct from the business of designing and creating buildings and whole environments. Wright, however, might be thought of as the great maverick of modern architecture. What about more conventional figures such as Mies van der Rohe or Eero Saarinen?

With these, and other less celebrated masters of modern architecture, one sees, I think, a much closer integration with society than occurs with painters or sculptors. But the integration is of a strange kind. What did Seagram's buy, when they commissioned Mies van der Rohe to design the Seagram Building? What did TWA purchase, when Saarinen was asked to create the TWA terminal at Kennedy International? Not only architecture, but publicity. The buildings I've just mentioned are two of the most effective pieces of outdoor advertising in existence, more effective than acres of hoarding down in Times Square. But the bargain the client made with the architect always seems to me a slightly dishonest one. Seagram's bought the 'style' associated with Mies; the one which, by and large, he applies to everything. It was more than a little like getting a duchess to sponsor Pond's Cold Cream. Certainly, the deliberate projec-

tion of the architect's personality in the cause of commerce came into it somewhere. Incidentally, I don't know if I'm alone in finding the Miesian 'false functionalism' disturbing—I mean by this the tendency to disguise the expensively hand-made as the product of logical design for the machine, as with the Barcelona chair. One might almost describe functionalism as simply an element in the Miesian role.

The TWA Terminal is more openly and honestly an advertisement—the butterfly-like building is a 'conceit' in the way that the house in the form of a broken column in the *Désert de Retz* is a conceit. But in the modern world conceits have to sing for their supper. Over and above this, however, we are again aware of the stress being laid on the architect's personality by both parties to the transaction. But the examples I've been giving don't seem to me to be by any means the best and clearest examples of the cult of personality in modern architecture. This honour must probably go to a number of uncompleted projects. The thing about these projects, which turn up in every big architectural competition, is the fact that they aren't meant to be built. They are polemics, not architecture. They are also certificates that those who put them forward are architects.

It may seem perverse after saying this to say that the artist as actor or the architect as actor do not seem to me always and necessarily to be a bad thing. If the focus has changed, it's for a good reason. We concentrate less on the building or the work of art and more on the architect or artist because the arts themselves are going through a process of disembodiment. Let me give some examples. A 'happening,' with its ever-altering components and its limited duration in time, is one example. A piece of kinetic art, which is only 'art' when it is moving, is another. Assemblages, like those made by Robert Rauschenberg, have what is surely a very limited life-expectancy in the physical sense. Architecture, I suspect, is moving more and more in the direction of the temporary structure, or even towards the idea of a building which isn't a 'structure' at all. Imagine, for example, a building which consists of a roof supported on four columns of air, with curtains of warm air for the walls. These things, these not quite impossible imaginings, very naturally tend to transfer our attention from the thing made to the maker. There is also the fact that modern technology, by filling our environment with objects which we know to be easily replaceable, makes us less respectful of objects of whatever kind. Materialism is coming full circle.

But we are still materialistic enough for most purposes. One characteristic of the social organization we see around us is the fact that the transcendental has been winnowed out of it. Religion no longer plays a predominant part in our lives. The liberty of the citizen—the conventional, bourgeois citizen—is continually being diminished. Men are certainly less free, in many important respects, than they were before the industrial era began. Obviously these losses must be compensated for by some kind of substitution. It seems to me that this is the task which artists, in the broad sense, have been selected to perform.

Naturally enough, there are bound to be excesses, stupidities, follies of all kinds. But the artist also runs certain risks. There may be occasions when Picasso seems like a clown, even though a clown of genius. There are certainly others when he seems more like King Pentheus in the *Bacchae* of Euripides, the man torn limb from limb in a ritual drama. The artist as performer puts more at risk, very often, than his grandfather, the artist as bourgeois. And in any case we, either as artists or as spectators, can do little to change the situation.

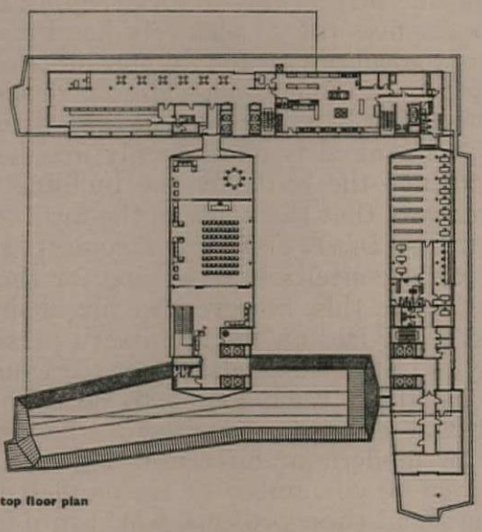
TELEVISION OFFICES, ROME | *architect* FRANCESCO BERARDUCCI

The site of this curtain-wall office building for RAI (the Italian radio and television corporation) facing the Vialle Mazzini lies in the middle of an area scheduled as residential in an old development plan of 1931-4 which, until the plan was modified and other types of building permitted, had no focal point or cultural centre. Although the site available was small, it was decided to locate the television headquarters here largely for economic reasons; other important departments of the corporation, including the production studios, were already established in the neighbourhood. The new building stands in sharp contrast to its surroundings, but its external colouring echoes the reds, browns and the typically Roman ochres of the older buildings around, and the scale and rhythm of the curtain-wall are also related to those of the neighbouring classical facades.

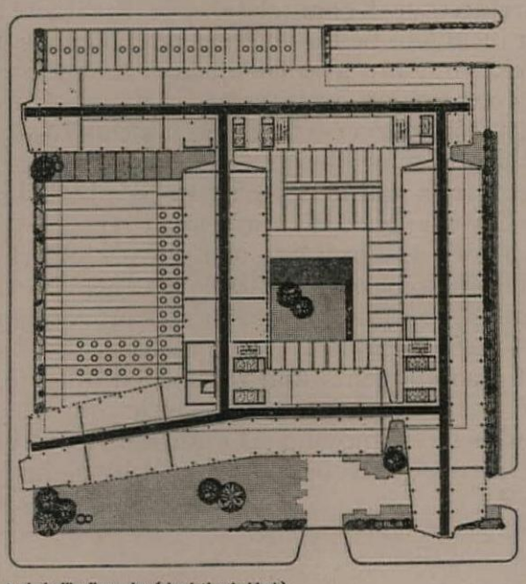
The original brief demanded a plan of great flexibility which would enable the construction to proceed in phases. But the flexibility which could be achieved on the available site proved insufficient, and the whole building was put up in one operation. The effect of the original brief can however still be seen in the massing, which consists of a number of functionally independent blocks linked only by short glazed connections. The requirement was for an office building accommodating 1,000 people. Local planning regulations, however, did not allow a high building, so the plan had to spread horizontally. The office space can be used either as large open areas or subdivided into individual offices with demountable partitions. The only fixed elements are vertical service and circulation cores built of reinforced concrete and providing supports for the steel structure.

The rectangular ground floor forms an independent horizontal base, contrasting with the freer shapes of the building above. The base sits on a reinforced concrete basement structure which provides the rigid foundation for the steel superstructure. On the ground floor are the entrances, a reception area and waiting-room for the general public, large rooms for private receptions and entertaining, the library and other large spaces for central services such as the drawing office and accounts department. In the middle, entirely glazed along its four sides, is a garden which serves as a focal point for all the spaces surrounding it. The basement consists of a single service floor, since a water-bearing subsoil made it uneconomical to go deeper. This has created parking problems.

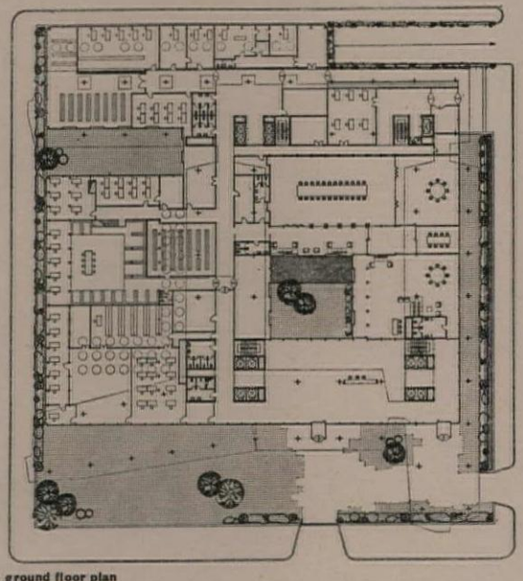
At ground floor level the structural grid is widely spaced to accommodate the large uninterrupted areas required. The specially designed cruciform columns here are tapered, but on the upper floors they are reduced in size and formed of standard sections. On the top floor, where there is a large conference room and a restaurant, the middle row of columns is omitted by adopting a freely shaped roof made out of light lattice girders. The curtain wall consists of two panel sizes, one and two modules wide, and all windows open on either horizontal or vertical pivots. This is to allow the possibility of a break in the air-conditioning during the spring and autumn seasons and above all to avoid psychological problems brought about by claustrophobia.



top floor plan



typical office floor plan (circulation in black)



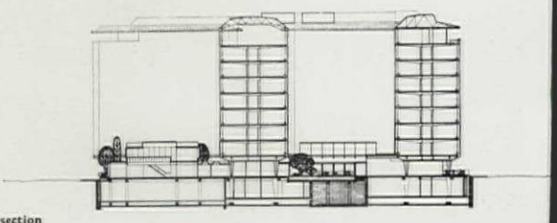
ground floor plan

The opening windows also break the regular rhythm of fixed curtain walling and make an endless and unpredictable variety of facade patterns possible.

TELEVISION OFFICES, ROME

2

3

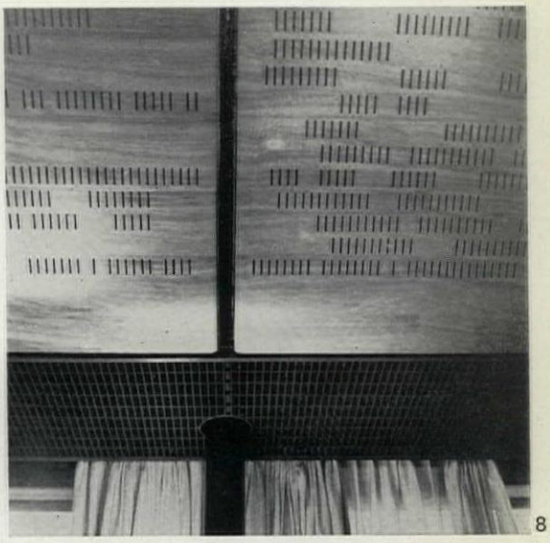


section

2, projecting wing alongside the entrance in the Via Mazzini. 3, sculptured horse by Messina in the entran forecourt. The ceiling above the entrance is by Gi Marotta. 4, general view of the building from the corn of the Viale Mazzini and the Via Pasubio.

5

6



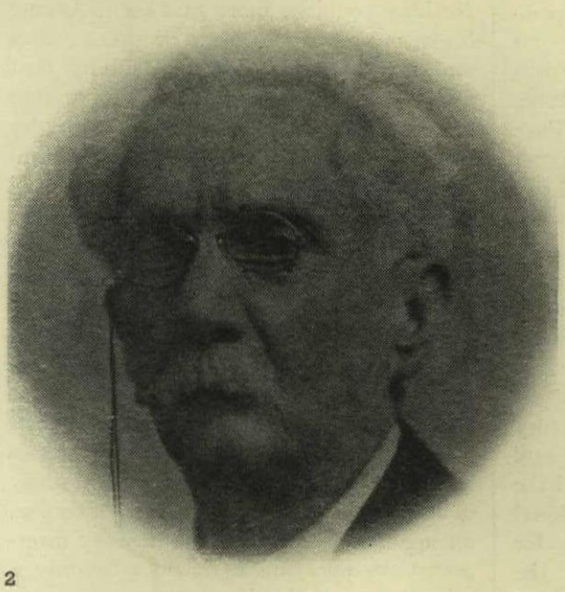
8

5, cafeteria and lounge on the top floor: terrace on left; lighting incorporated in the timber ceiling. 6, waiting-room on the ground floor, looking towards the garden courtyard beyond which is the library. 7, from the library, looking back across the court-yard. 8, ceiling of the top-floor conference room, with air-conditioning grille at junction with wall. The ceiling panelling is light walnut.

7

1

A characteristic piece of detailing in a multiplicity of materials by Luis Domènech, a contemporary of Gaudí, whose work is the subject of the article beginning opposite. The detail, 1, *is from the main entrance hall of one of Domènech's two major buildings: the Hospital of Sant Pau at Barcelona* (1902-1912).



2

Much that has been written about Antonio Gaudí has taken him out of his Catalan context and has therefore ignored the work of Luis Domènech, the other dominant figure of the Catalan movement of which Gaudí's work was essentially a part.
This article discusses Domènech's work and his place in history—a far more significant one that has hitherto been acknowledged outside Spain. It follows the article by David Mackay on Francesc Berenguer (AR December 1964) another important figure in the same movement who was also Gaudí's link with it.

ORIOL BOHIGAS

LUIS DOMENECH Y MONTANER 1850-1923

In spite of the studies of Ràfols, Cirici and Collins,* the Catalan cultural movement known as *Modernisme* remains very little known outside its own territory, except in the case of Antoni Gaudí, its most important, though not most representative, figure. The world-wide publicity so enthusiastically accorded to Gaudí as a genius unique in Spain at the turn of the century has contributed to the neglect of that extensive, though exclusively Catalan, movement from which Gaudí himself sprang—and without which, indeed, his work would be inconceivable.
The Modernist phenomenon has all too often been included under the heading of *Art Nouveau*, without being granted its own special characteristics. This view, while apparently justified, at least in part, is based on a fundamental error. Modernism is clearly a movement parallel to those which in other countries were known as Liberty, *Art Nouveau*, Modern Style, and *Sezession*. Not only does it share with those other local movements a strong personal touch, but it is distinguished from them by two very pronounced characteristics: first, by its uniquely widespread popularity, which sprang from its remarkable identification with the social and political realities of its country—thus enabling it to embrace, within one coherent approach, everything from poetry to economics—and, secondly, by a stylistic complexity which allowed the co-existence and reinterpretation of the so-called 'revivals,' of the social and ethical reforming impulses of *Arts and Crafts*, of floralizing carried to the point of delirium, of rationalist machine-worship, and of the most advanced and revolutionary expressionism.
All this is largely to be explained by the historical circumstances of Catalonia, circumstances without parallel in any other part of the world. After a prolonged decadence stemming from the unification of Spain and the discovery of America, a colonial enterprise it took but small part in, Catalonia had lost its political personality, its traditions and—almost—its language. But through a series of events which cannot be described here, it was the only part of the Iberian Peninsula prepared, in the eighteenth and nineteenth centuries, to take part in the great revitalizing drive of the industrial revolution, while the rest of Spain, in the death-throes of its wrecked empire, grew further and further away from Europe. In this way, from the opening years of the nineteenth century, Catalonia achieved a comparatively European standard of industrial development, set its economy moving on a large scale, savoured both the joys and sorrows of an industrial society, and gradually massed its forces towards a collective re-birth (*la Renaixença*) which affected all spheres—economy, culture, politics—and bore fruit, in the last quarter of the century, in a nationalist programme opposed to the domination of Castile. (Therein still lies, even today, the unfinished drama of Catalonia).
The *Renaixença* represented a truly titanic effort, in which the whole country took part and from which came great cultural achievements. Catalonia had to improvise in fifty years what the other European nations had achieved in the course of five centuries; namely, the standardization and modernization of the language, the setting-

* J. F. Rafols: *Modernismo y Modernistas*. Barcelona, 1949. A. Cirici Pellicer: *El Arte Modernista Catalán*. Barcelona, 1951. George R. Collins; *Antonio Gaudí*. New York, 1960.

up of a university, academies, scientific research, museums and art-galleries, an aristocracy and a new proletariat, political parties, and a form of government. Also—naturally—its own artistic expression, an indigenous expression based on its own traditions but yet in keeping with the progressive outlook of an industrialized society—and, thus, opening the door to modern European culture. *El Modernisme* was, then, the artistic expression of the whole Catalan recovery; it became, for the first openly nationalist generation, *their* style; and that is why it became so popular; that is why it sank its roots so deep in local realities, and that, too, is why it plunged so deeply and in so many directions into the recesses of an art at once new and very much its own.

The first of these two characteristic features is overwhelmingly important: none of the countries now considered fundamental to the architectural history of the period in question can boast of so rich an ensemble of works as Catalonia—not even the England of William Morris, the Scotland of Mackintosh, the Belgium of Victor Horta nor the Austria of Otto Wagner can be said to possess such *fin-de-siècle* 'density.' And nowhere did the style go so thoroughly into the very details of daily life as in Catalonia. Modernist architects and artisans were still working in the Vallés up to a comparatively recent date, ranging in a variety of styles from the constructive severity of Moncunill to the ornamentalism of Raspall. Gerona began with bursts of flowery linealism, and then followed up with secessionism and Masó's valiant versions of Mackintoshism. Valencia filled its *Exeimple* (its modern centre) with the same kind of baroque Modernism so marked in the *Exeimple* of Barcelona. Mallorca not only welcomed the personal contributions of Gaudí and Domènech, but also the several variations on them by local architects. There are still more than two hundred Modernist shops in Barcelona, some of them very original and some very mannered, but all attesting to the quite fabulous influence of the Modernist style. By the same token, it is impossible to find examples of Modernism anywhere else in the Peninsula, if we leave aside works by Gaudí and Domènech at León and Santander (the result of the chance presence of a Catalan bishop and the patronage of the Marqués de Comillas), a couple of unique works in Madrid, whose Catalan provenance would need checking, and some strange 'colonial' variants in the Canaries—doubtless the first fruits of some architect who had studied in Barcelona during the peak years of the irresistible Modernist euphoria. The movement can safely be described, then, as a phenomenon integrally and exclusively Catalan.

The second characteristic feature is mainly important in situating Modernism precisely within the general picture of the European culture of its time. As Cirici says,* the transition from *revivals* to a new style was marked, between the years 1880 and 1885, by the following five works: the Casa Vicens by Gaudí (1880), the Balaguer Museum by Fontseré (1882), the Academy of Sciences by Domènech Estapá (1883), the Francisco Vidal Art-Industries building by Vilaseca (1884), and the Montaner y Simón Publishing House, by Domènech y Montaner (1885). From that time onward, Modernism was tirelessly trying out new possibilities, searching for a new style, absorbing the mutually contradictory influences of local art, local history and literature, new movements abroad and the isolated inspirations of certain exceptional creative geniuses. The enthusiasm for things medieval, caused both by the reigning aesthetic of the moment and by the nationalist claims based by Catalans on the brilliant history of their own Middle Ages; the machine-mindedness and structuralism deriving from the ideas of Viollet-le-Duc and then developed by the nascent Catalan metallurgical industry; flowery ornamentalism and the *coup de fouet* of *Art Nouveau*, which arrived here early on; deliquescent or wraith-like sculpture; the revindication of brick architecture—vault and balancing arch; the simplification, if not suppression, of mouldings in an architecture that was gentle, smooth and restrained; a taste for plain surfaces and pure volume; the appearance of expressionism; the return to the intimately domestic, as also to the cult of landscape; morbid decadence; the forms evolved by Mackintosh, Wagner, Hoffmann or Olbrich—all these factors co-existed and interacted at boiling-point in the immense cauldron of Modernism. We can no more speak of a 'pure' movement than we can hope to disentangle with complete clarity the various tendencies involved. What we are dealing with is a collective cultural situation, the restless quest for a new architecture.

Gaudí and Domenech

Within the Modernist school, Gaudí and Domènech represent what came to be, in a sense, the two fundamental and even warring trends at the origins of the movement. These two main tendencies led respectively, by the inescapable course of events, to expressionism and rationalism (and even today they can spark off a polemic, though a polemic much less vital and useful than three generations ago).

Much has been made of the constructive element in the work of Gaudí, and frequent efforts have presented him as the protogenius of a certain kind of rationalism. Nothing could be more mistaken. Among his near-contemporaries, a group of critics and architects kept on proclaiming that Gaudí's ideas represented a decisive step in the history of architecture, meaning by this in an exclusively technical-cum-rationalist direction; mankind, they would have it, was about to experience a new and definitive style, now that those tentative gropings, Romanesque and Gothic, had come to grief. After the Romanesque vault, supported by the thickness of the walls; after Gothic, which concentrated its thrusts diagonally on the piers, came Gaudí with his system of balancing vaults and counterthrust—eliminating buttresses—and all this within an unexampled unity of space and structure. This was, of course, an ingenuous and very fragmentary interpretation, applying as it does to only a minute part of Gaudí's work.

The truth of the matter is that his anxiety to improve on the stone-structure systems of the various traditional styles was Gaudí's major defect. His indifference to new materials, in particular to the possibilities of iron, makes of him, in the field of technology, not so much a great precursor as the last genius of the past. On the other hand all his masterpieces, those basic works such as the Palau Güell, the Pedrera, the Casa Batlló, the Güell Park, the chapel of Santa Coloma, the school by the Sagrada Familia, mark the dawn of expressionism, for dramatic forms, for pictorial and sculptural values—and mark it at times with a majestically brilliant contempt for structure which reveals him as the predecessor, not of Gropius or De Stijl, but of the more extreme Mendelsohn,

Domenech: Biographical Dates

1850:	Born.
1873:	Qualified as architect.
1874:	Prizewinner in the competition for the Instituciones Provinciales de Instrucción Pública (collaborator, Vilaseca).
1875:	Professor at the Escola de Barcelona.
1881–85:	The Montaner y Simón publishing house, carrer Aragón, 255, Barcelona.
1887–88:	Café-Restaurant for the Barcelona Exhibition (now the Zoological Museum).
1888:	Hotel Internacional, Barcelona (no longer extant).
1892:	President of the Unió Catalanista: with the autonomist 'Bases' laid down at its Assembly in Manresa.
1893:	Palau Montaner, carrer Mallorca, 273, Barcelona.
1897–99:	Institut Pere Mata, Reus.
1899:	Casa Thomas, carrer Mallorca, 291, Barcelona.
1900:	Head of the Escola de Barcelona.
1901:	Deputy at the Cortes.
1901:	Casa Navás, Plaça Espanya, 7, Reus.
1902:	Casa Lamadrid, carrer Girona, 113, Barcelona.
1902–04:	Decoration of the Fonda España, carrer Sant Pau, 9, Barcelona.
1902–12:	Hospital of Sant Pau, Barcelona.
1905:	Casa Lleó Morera, Passeig de Gràcia, 35, Barcelona.
1905–08:	Palau de la Música Catalana, Plaça Amadeu Vives, 1, Barcelona.
1902–12:	Gran Hotel, Plaça Weyler, 7, Mallorca.
1908–11:	Casa Fuster, Passeig de Gràcia, 128, Barcelona.
1913–14:	Reforms to the Casa Solà, Firal, Olot.
1923:	Died, Barcelona.

For further details of Domènech's life see the *Cuadernos de Arquitectura*, 2nd and 3rd quarter 1963 (Barcelona).

* A. Cirici Pellicer: *El edificio de la Editorial Montanery y Simón*. Cuadernos de Arquitectura, Barcelona. 2nd and 3rd quarters, 1963.

of Steiner, de Klerk, Poelzig, and even perhaps of Le Corbusier's latest phase—that is, they make him the most important expressionist figure.

Domènech, on the other hand, was, almost from the outset, very differently received. The generation after his (the *noucentistes*, as they were dubbed) were often unable to see anything more in his work than unbridled decoration, a purely epidermic style totally lacking in basic architectonic concepts. This view was mistaken: first, because this Domènechian 'epidermis,' which so shocked that generation of 'good taste' and neo-classical 'discretion,' now seems to us rather a symptom of positive cultural development, a total absorption of the most advanced European trends, from Morris and the Pre-Raphaelites to the decorative products of *Art Nouveau*. If, moreover, we make a mental effort to eliminate the anecdotal aspect of the ornamentation, we find in Domènech two main elements: on the one hand his concept of space and treatment of planes and, on the other, his highly intelligent use of the new technology, which placed him far ahead of the rationalist revolution.

These facts granted, we can see that the Café and Restaurant for the Barcelona exhibition of 1888 presupposes a complete re-assessment of planes, of pure volume, and also, that the *Palau de la Música* was the most important seed of an architectonic concept which was to give rise, some years later, to much controversy: rectangular metal structure, open plan and enclosing walls without loads—in fact a curtain of continuous glass. And that is why Domènech, contrary to usual opinions, represents the true evolution of Catalan architecture by way of structuralism, rationalism and even, one is tempted to add, of purism. If Gaudí, or his disciples, were fated to end, in their final stage, with a vociferous expressionism whose social and technological significance had already vanished, Domènech on the contrary was destined to set the pattern of an evolution which bore fruit all over Europe, right up to the *Fagus Werk* of Gropius, which at last opened the gates to the new style in its fullest development. The Domènech line,* though interrupted in Catalonia by *noucentisme*, continued, thin but coherent, through Rafael Masó and Josep M. Pericás, with their secessionist forms and memories of Mackintosh; through those who, like Ramón Puig Gairalt, echoed Loos; through independent freebooters like the early Francesc Folguera; and culminated in the brilliant orthodox rationalism of GATCPAC.

From 1873 to 1888

Domènech qualified in 1873. In 1878 he published an article entitled *En busca de una arquitectura nacional* (In Search of a National Architecture), in which he defined his architectural thought and explained his experimenting, heavily marked as it still was by eclecticism. Between 1874 and 1880 he collaborated with Josep Vilaseca (1848–1910) on the plans for the Instituciones Provinciales de Instrucción Publica, the competition for which they had jointly won. These plans, representing a true membership of Europe, made a great impact on Catalan architectural circles. In this connection, Puig i Cadafalch wrote, in an article in 1902, that, when he was a young architect, his Catalan colleagues followed three main tendencies: first the archaeological, represented by Elías Rogent (1821–1897) and the reconstruction of the Romanesque monastery at Ripoll, coupled with the continuation of the neo-Romanesque University of Barcelona (from 1859 onward); second, what might be termed the eclectic tendency, as championed by Joan Martorell (1833–1906), designer of the church of the Salesas (Barcelona, 1885); and, thirdly, an authentic effort at renewal, linked to the general European movement—and especially to the Germanic; this last being ushered in and presided over by Domènech and Vilaseca's plan for the Instituciones Culturales.†

Not, indeed, that this design could be described as Modernist—but it does represent a break with past styles and the determination to express the new technology in architectural terms. It is worth emphasizing the direct use of elements whose significance and application up to then had been confined to engineering—as for instance the great chimney on the compositional axis of a façade, the desire to demonstrate everything rationally and, above all, the urge to escape from all taint of stylistic formulae, seeking instead a radically true form of expression. There can be no doubt that this design—which was never carried out—was for both of these architects the starting-point for their first mature works: Vilaseca's Industrias de Arte de Francisco Vidal and Domènech's Montaner y Simón publishing house.

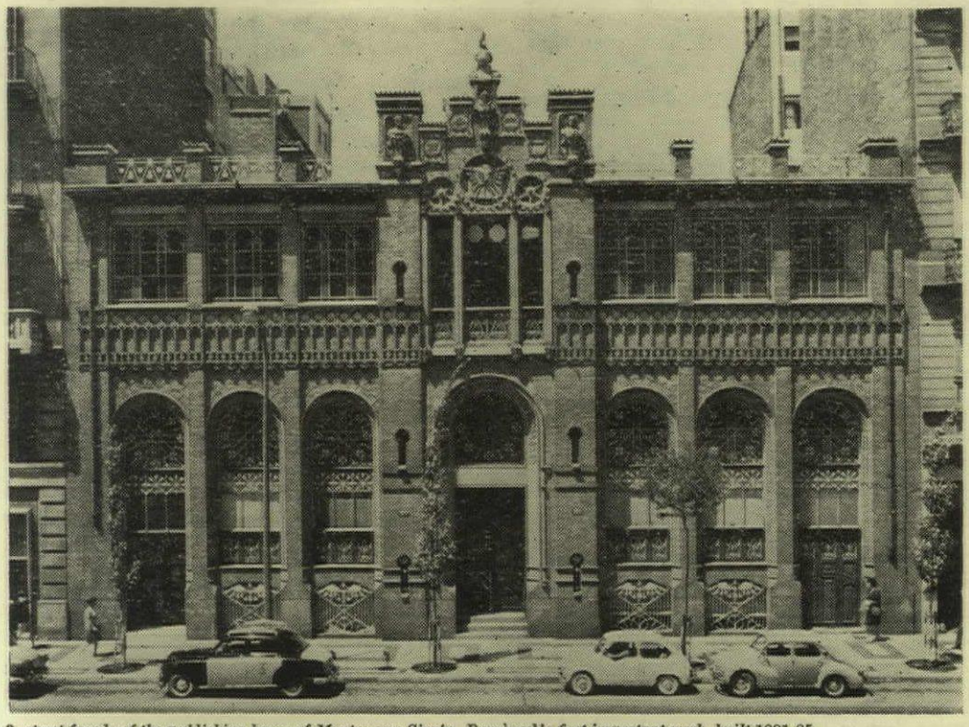
The publishing premises, carried out between 1881 and 1885, are therefore, along with Antoni Gaudí's Vicens house in the calle Carolinas in Barcelona (1878–1880), an important historical landmark. The Gaudí building contains the germ of all the later expressionist developments, while Domènech's, with its completely 'architectonic' use of iron and its great continuous glass surfaces, triggers off those of rationalism. They are the first two works to use fair-faced brick on a large scale, but in Domènech this material takes on a constructional logic and an ornamental severity which may be seen as a hint of what was to come in the Café and Restaurant for the 1888 Exhibition.

The 1888 Exhibition

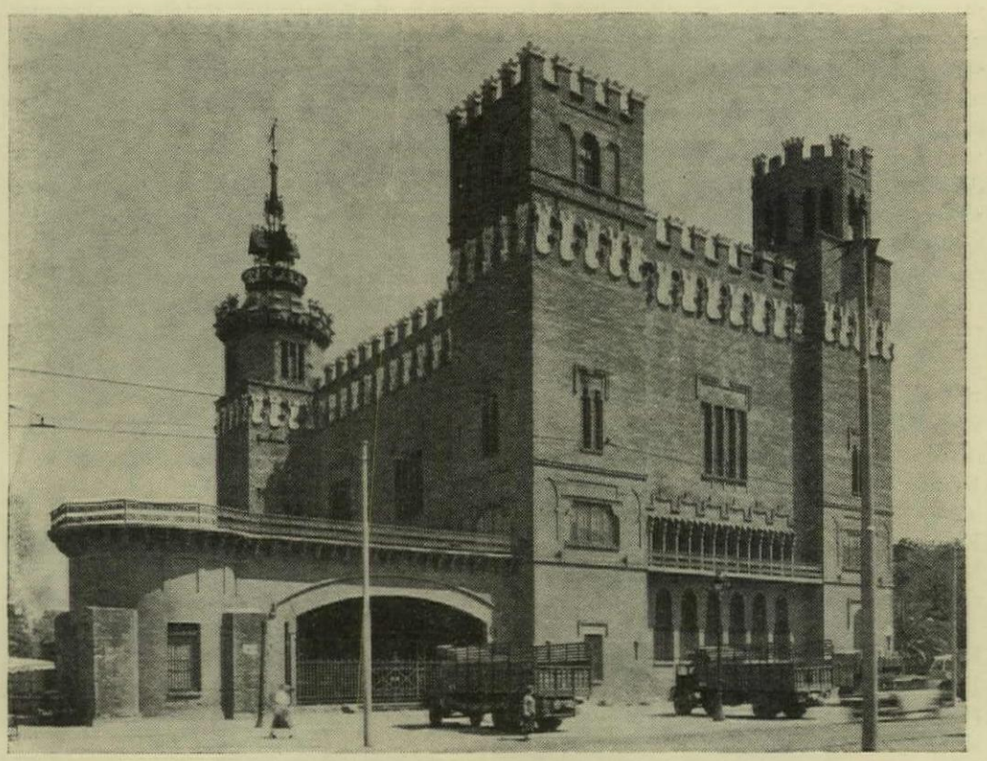
In 1888 a great international Exhibition was held in Barcelona. It offered a splendid opportunity for the revelation *en masse* of a whole new generation of architects. The directing architect of the exhibition was Elías Rogent, with whom collaborated a most efficient and distinguished team—the

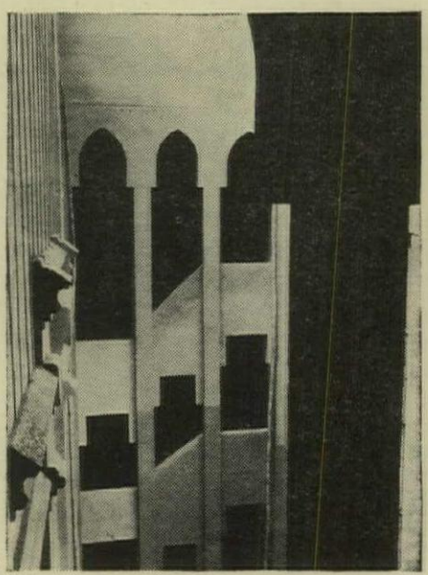
* Domènech has been virtually ignored by international critics. H. Russell Hitchcock, for example, in his *Architecture of the Nineteenth and Twentieth Centuries*, pigeon-holes him as a mere extravagant disciple of Gaudí.

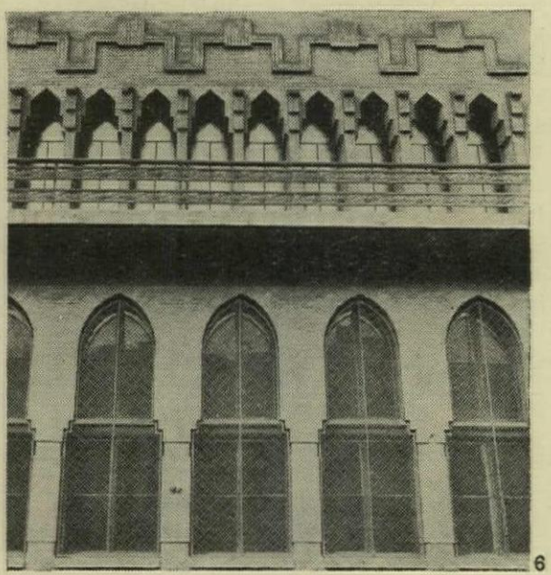
† *Hispania*, December 1902. Puig i Cadafalch (1869–1956) was yet another Modernist architect, archaeologist, expert on Romanesque art and Catalanist politician; he rose to be president of the *Mancomunitat de Catalunya*.



3, *street facade of the publishing house of Montaner y Simón, Domènech's first important work, built* 1881-85.







The café and restaurant building at the Barcelona fair of 1888: 4, *the exterior;* 5, *the main staircase;* 6, *detail of south elevation. The building is now a museum of zoology.*

active participation of Domènech, Fontseré, Font y Carreras, Gallissà, Vilaseca and (though somewhat less committed) of Gaudí made it possible for the Parc de la Ciutadella to show a fairly unified collection of buildings which might serve as a definition of that flourishing moment in Catalan architecture.

Domènech was responsible for two important buildings: the Hotel Internacional in the Passeig de Gràcia, now no more, and the Café and Restaurant which today, after many vicissitudes, lingers on in the guise of a Zoological Museum.

The Hotel Internacional was certainly one of the most important constructional adventures of the *fin-de-siècle*. A five-storey building, with a façade of about 500 feet, it was built in sixty-three days. This incredible record was made possible not only by Domènech's extraordinary capacity as an organizer, but also by the intelligent way he had envisaged the whole design from the start and made use of industrial methods of prefabrication. Confronted with the need for speed and the poor quality of the ground on which he had to build, he evolved an ingenious system of foundations with a grille of railway-tracks, later recoverable; on these he stretched a series of chambered countervaults which transmitted to the ground uniform loads of 0.20 Kg./cm2. The whole project took ordinary brick as its staple element, so that all the walls could be built without fragmentation. To have brought the carpentry, the roof-structures, and even the ornamentation all into line together, as he did, meant a gigantic effort, given the under-developed state of the building industry in Catalonia at that time. The hotel was completely dismantled after the exhibition closed.

If the Café and Restaurant has today an even greater effect than the hotel, the reason is that it was never entirely finished and therefore spared the ornamentation that might well have spoilt it. What remains is the fact that the volumetric and spatial skeleton of the building, the quality of its material and construction, make it, historically speaking, one of the most important works of its time in Europe. The use of exposed iron, not only in the roof arches but even in the façade lintels, is particularly remarkable.

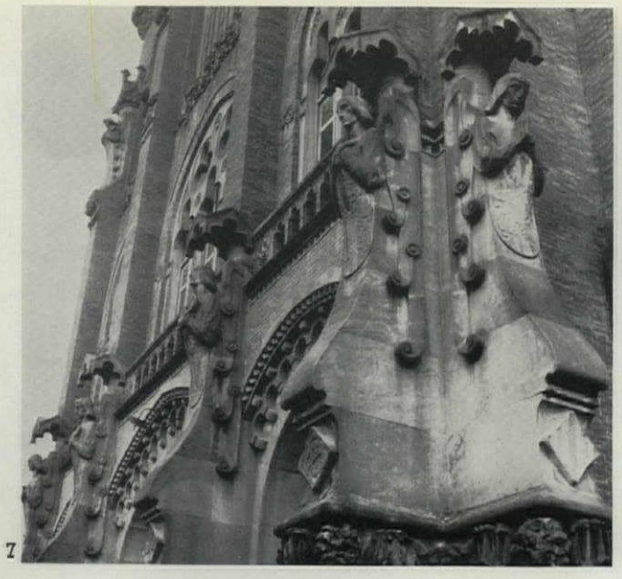
The whole composition has a strange quality, a feeling of respect both for structural rigidity and flexibility of design. The facades are consistently treated as a volumetric whole, based on two parallel walls, and this lends the interior of the building a rather fantastic atmosphere. But perhaps the most striking thing is the new treatment of planes. The Café and Restaurant is without doubt the first work in which the plane is regarded as a fundamental element in architecture. In both the sculptural and structural sense the plane is shown to be autonomous. The sparse ornamentation is subdued to this criterion, and at the wall-surface the mouldings are suddenly cut as if guillotined by the unifying continuity of the plane.

The fact that Domènech must have taken his bearings from Catalan Gothic, and may therefore be to some extent open to the charge of archaeologizing, is of the merest anecdotal interest, because he quite consciously made any such influence secondary to his urge to give the plane its proper architectural value. It took ten or twelve years before Berlage hit on the same values in his Amsterdam Exchange, which gave *De Stijl* the basis of its true three-dimensional style. The resemblance between the Barcelona Café and Restaurant and the Amsterdam Exchange is surprising, and has already been remarked on more than once. For Catalonia, Domènech here ushered in the rationalism that was shortly to produce its most remarkable example in the *Palau de la Música Catalana*. This latter sparked off a whole series of works in brick and iron by various architects, and led to the purism of the 'twenties and 'thirties.

Political Prestige

Between the 1888 Exhibition and the 1914 War, Domènech became one of the leading figures of Catalan cultural and political life. It was no accident that the Modernist architects were closely involved in the social, cultural and political movements in Catalonia; for they were all caught up in the collective enthusiasm for the claims made by the nationalists. Gaudí, for

[*continued on page* 435



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Hospital of Sant Pau at Barcelona (1902-12): 7, *sculptural detail at the end of the administration block;* 8, *the main entrance hall—foot of staircase* (*see also* 1 *on page* 426); 9, *the library in the administration block.*

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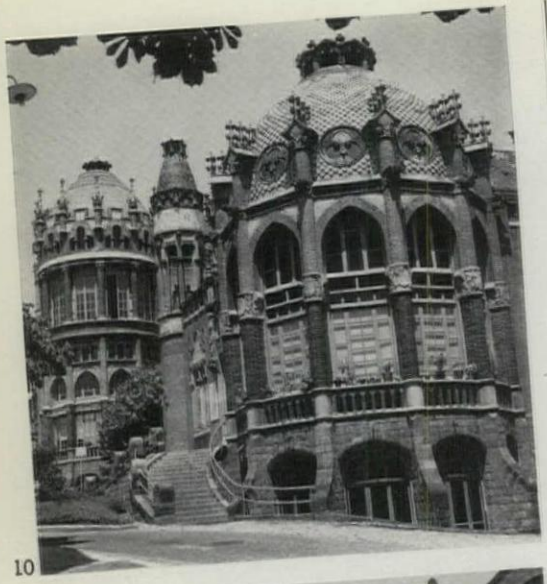

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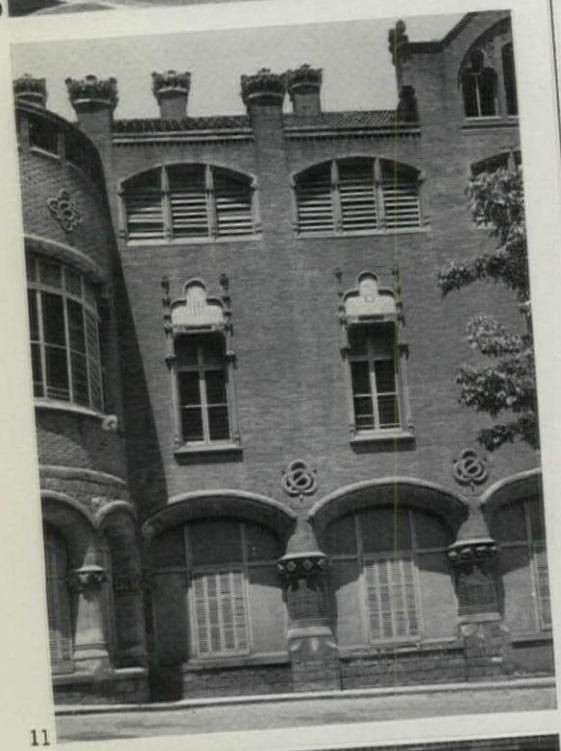

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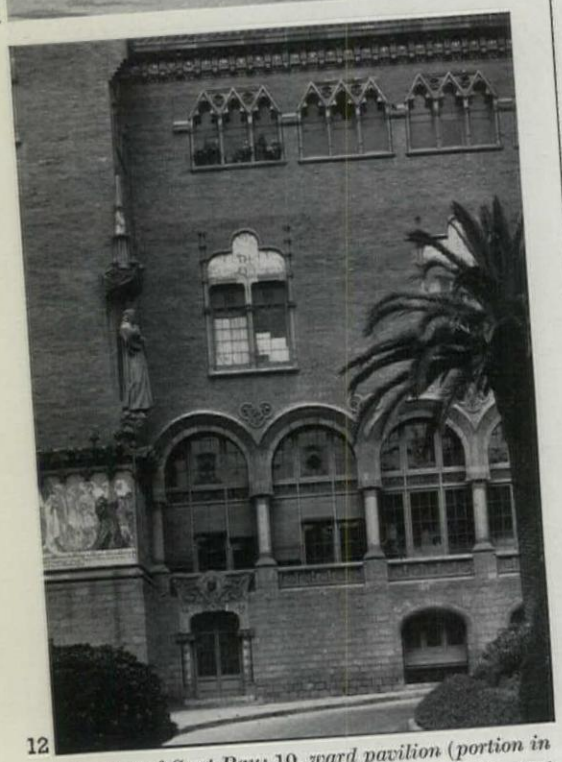

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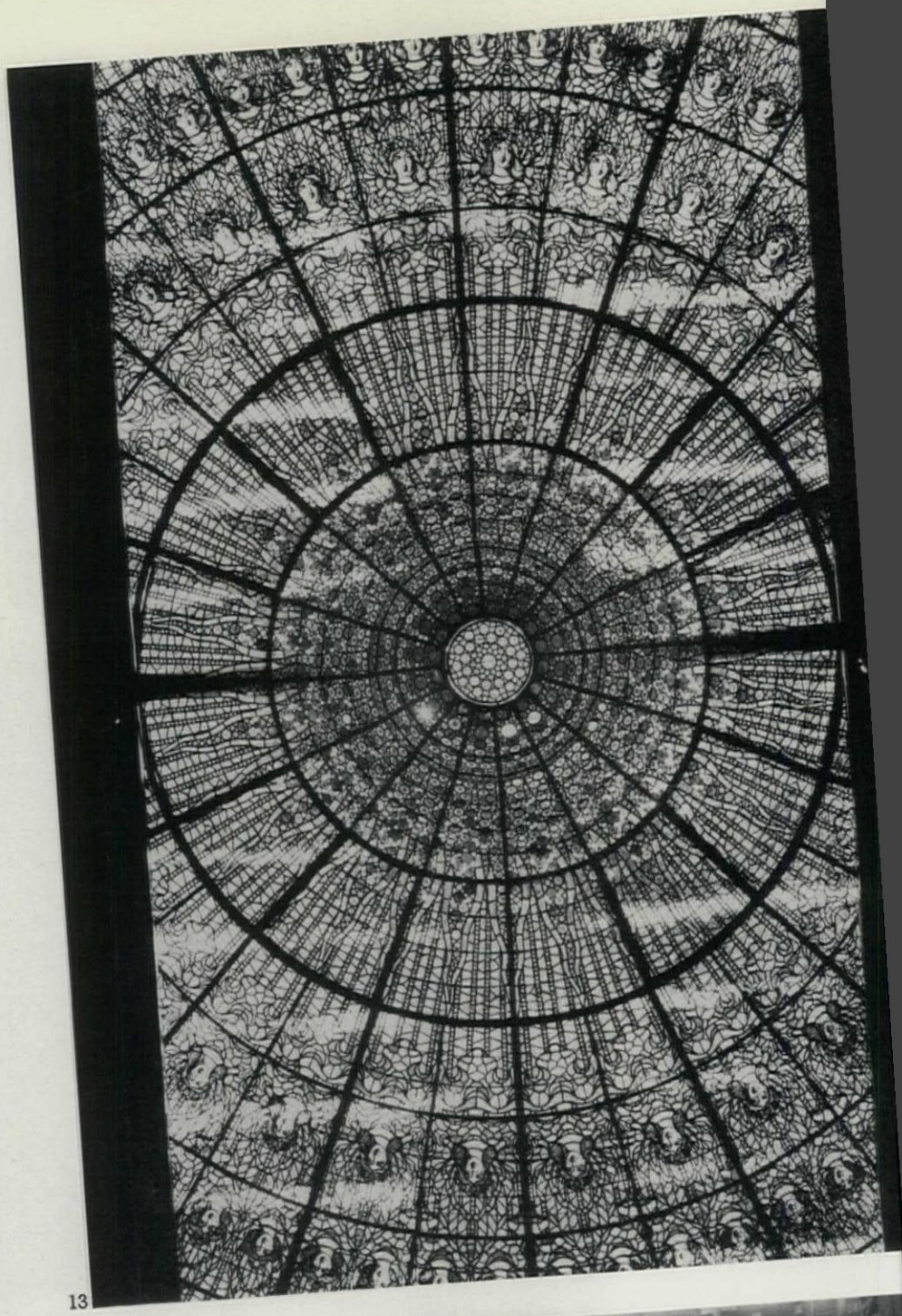
Hospital of Sant Pau: 10, *ward pavilion (portion in background completed by Domènech's son);* 11, *part of ward pavilion with consulting rooms on ground floor;* 12, *wing of administration block.*



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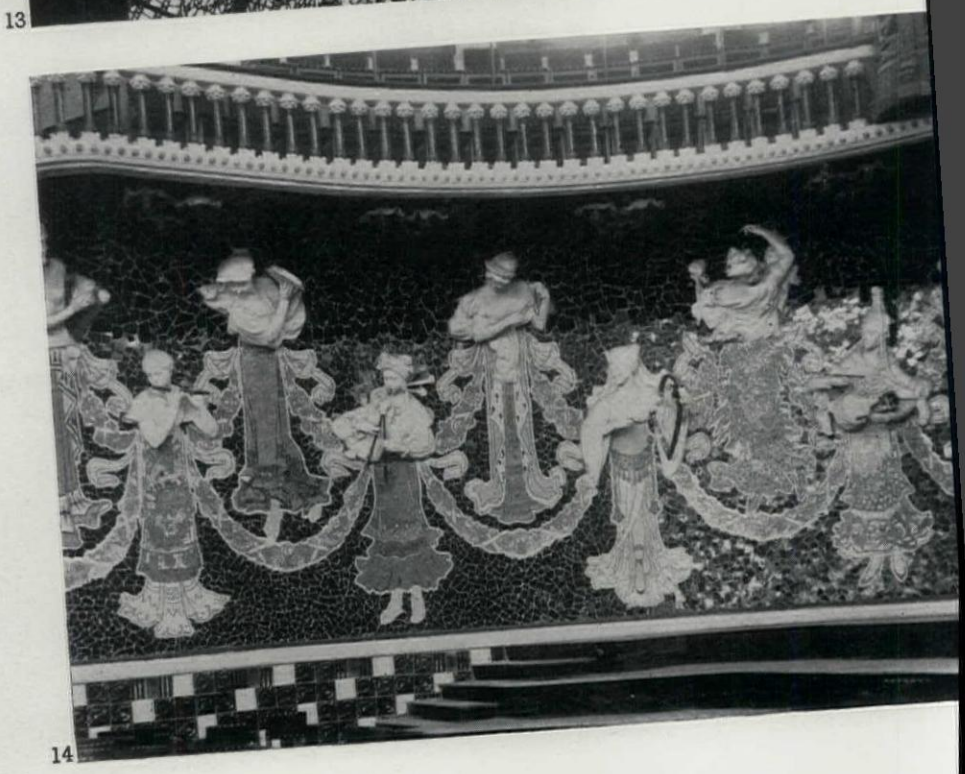

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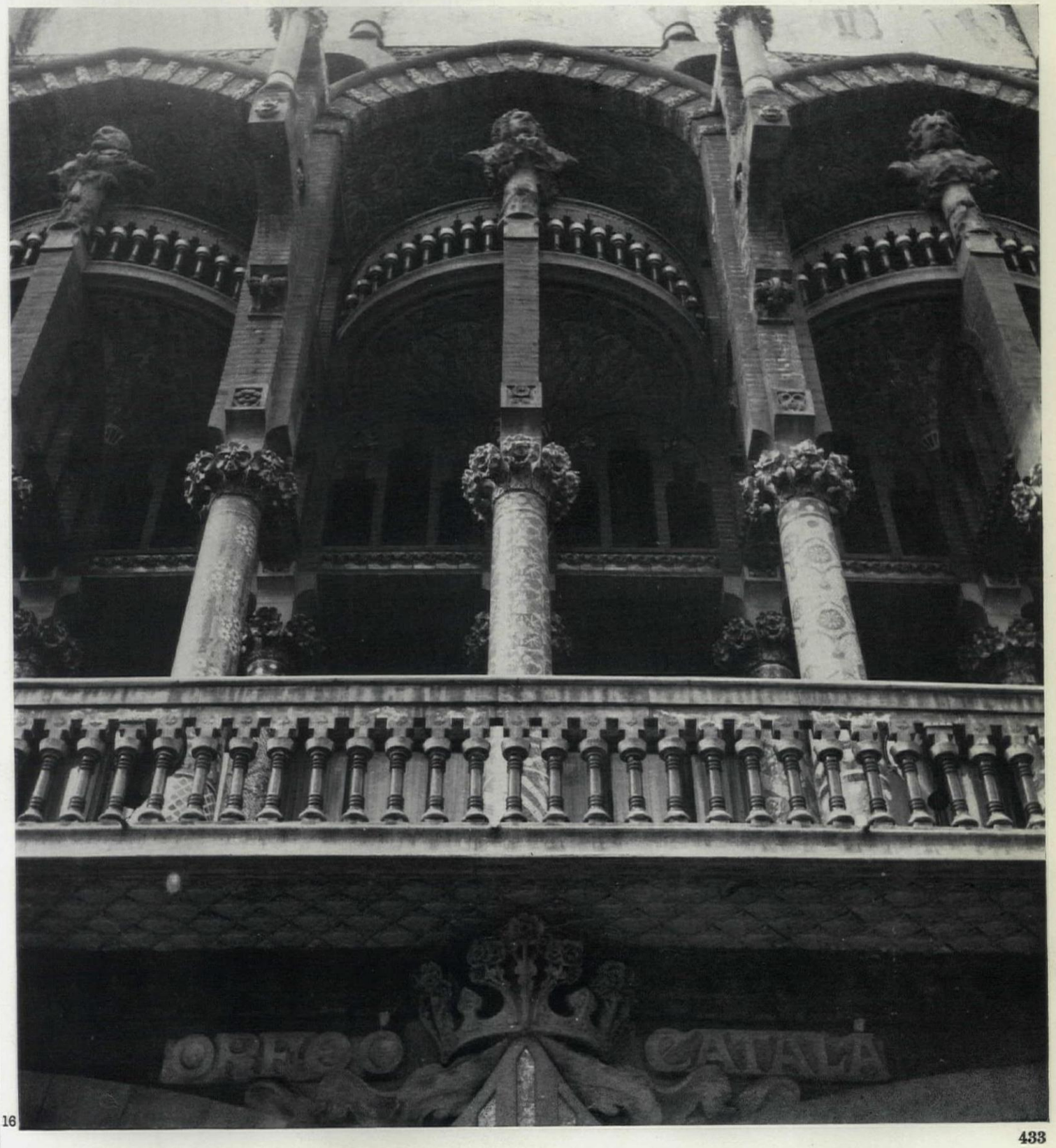
The Palau de la Música Catalana in Barcelona (1905-1908), *the culminating work of Domènech's career:* 13, (*facing page*), *central rooflight in the hall;* 14, (*facing page*), *background of stage.* 15, *interior of auditorium looking down from the gallery;* 16, *the main front, looking upwards to the first-floor gallery.*



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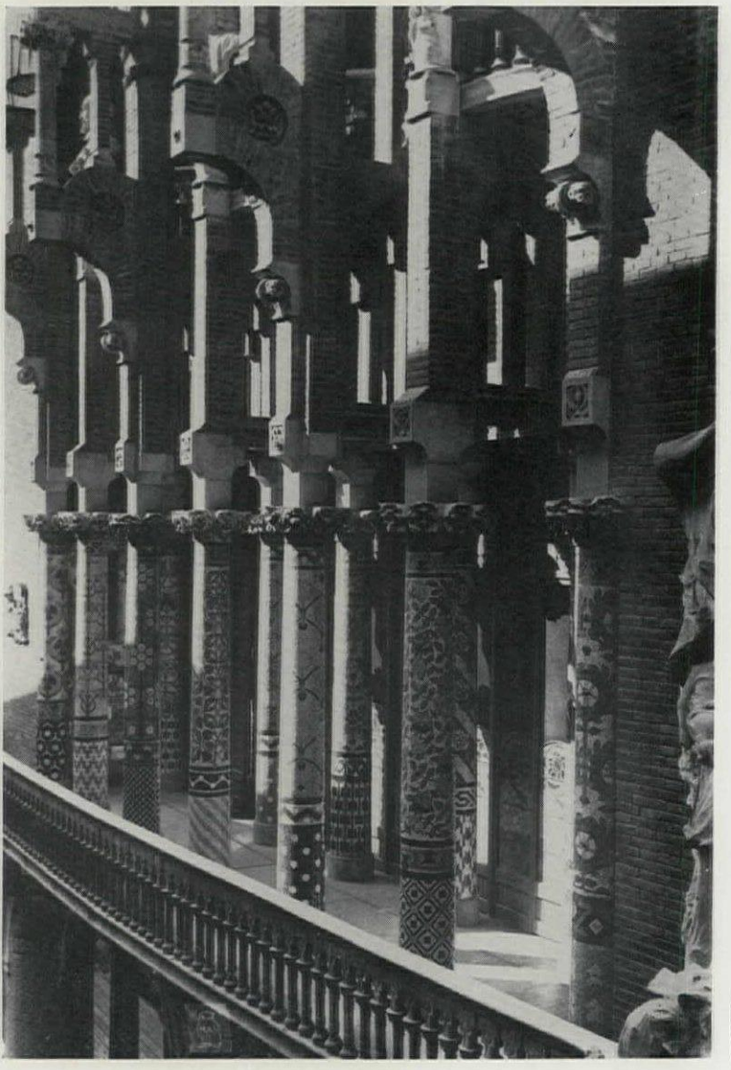
17, *the interval room at the Palau de la Música Catalana showing the fully glazed walls.* 18, *detail of a pilaster base in the entrance vestibule.* 19, *external gallery in front of the interval room at first-floor level.*

18



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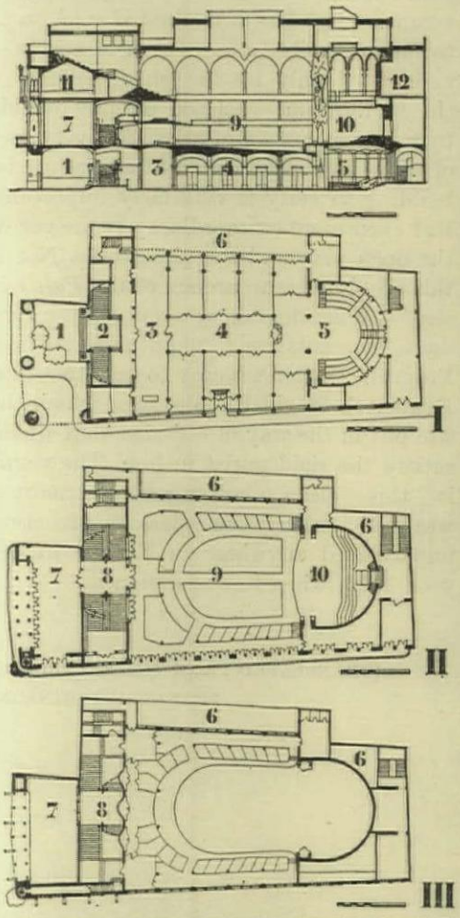
example, from being a simple architect turned himself into a sublime beggar in the cause of an impossible *Catedral dels Pobres* (Cathedral of the Poor), thus anticipating a whole religious and patriotic movement. Puig y Cadafalch was President of the *Mancomunitat*, the first united Government of Catalonia, and his position in the *Institut d'Estudis* gave him great cultural influence. Domènech y Montaner was for a time the living embodiment of his country's spirit, the chief of the combined forces. It is essential to take all this into account if one desires to understand Catalan Modernism; if, that is, one is to realize that, far from being a mere depersonalized echo of foreign movements, it was the result of a social and political situation and represented a united cultural front with a whole people behind it.



Section and plan at three levels of Domènech's Palau de la Música Catalana. 1, vestibule; 2, main staircase; 3, café; 4, offices; 5, recital room; 6, patio; 7, interval room; 8, staircase landing; 9, auditorium; 10, stage; 11, upper interval room (or promenade); 12, organ.

In 1892 Domènech was named president of the *Unió Catalana*, and in that capacity took the chair at the momentous Assembly of Manresa, where the 'bases' were drawn up that gave Catalan autonomy its first programme and guided all Catalanist policy for many years. In 1901 he was elected Deputy to the Cortes, as one of those famous candidates, 'the four presidents,' whose political triumph was the first for the Catalanist movement, and marked the beginning of a new era in the political struggle of Catalan nationalism, which was to culminate, after the collapse of the Dictatorship of Primo de Rivera, in the autonomy of 1931—so soon and so dramatically cut short by the Civil War.

The Industrial Arts

Concern for the problems of industrial art showed itself very early on in Catalonia, in keeping with the progressive outlook of Catalan industry. There is room for research into the writings and achievements, in this field, of Catalan aesthetic theorists, economists and sociologists of the last century. Worthy of note, for example, if only as a precedent, is the first Exhibition of Industrial Products, which was organized by the Board of Trade in 1852. Another such exhibition was held in 1854 by a group of industrialists; and in 1851 by the Industrial Institute of Catalonia. In 1860, the 'Art and Industry Exhibition of the Principality of Catalonia' placed its main emphasis on furniture. In 1869 a new building was erected in the Gran Vía with the express purpose of housing an Exhibition of Industrial Art. Practical proof of Catalan concern with industrial art was given when in 1871 the Diputación (provincial council) sent the critic Sanpere y Miquel on a tour of England, France and Germany to study the institutions set up there to deal with relations between art and industry. The same year another critic, Miquel y Badía, published several articles on the same question in the *Diario de Barcelona*, and in 1873 and 1875 the Ateneo held competitions. In 1881 Sanpere y Miquel brought out a very important small book on the same subject. Then exhibition followed fast on exhibition—1881, 1882, 1884—and from then on at regular intervals. The Art and Industry Exhibition of 1892 even included a series of lectures aimed especially at workers and delivered by various architects and designers.

The objects shown in these exhibitions are interesting when studied with an eye to what was on offer at similar shows in London and Paris, where the influence of Ruskin and Morris and the theories of Laborde could be plainly seen. Between Barcelona and the other centres there was a close relation, because in Barcelona as elsewhere forces were propelled by a keen awareness of what was happening in England. In Catalonia the cult of naturalism and the harking-back to craftmanship, as a reaction against the new industrial civilization, reached its zenith with the Exhibition of 1888, and was, practically speaking, presided over by Domènech y Montaner. Here, as with Morris, the plea for a return to craft was based not only on aesthetic but on moral and social grounds. Each is, however, special to Catalonia in that here there existed in addition the political urge to evoke medieval history, i.e. Catalonia's lost sovereignty. So the return to craftsmanship, to the medieval guild idea, was part of a general determination to get back into the continuity of a broken history.

This revitalization of the industrial arts had its focus in Domènech's Café and Restaurant. After the exhibition it was occupied for a while by Domènech, who used it as a workshop for objects of craftsmanship with which to embellish other buildings he was then engaged on. There, with the constant collaboration of the architect Antoni Gallissà, he concentrated on the forging of iron, the casting of bronze, on terracotta, glazed ceramics with lustre effects, Dutch tiles, majolica, glassware and so on. To this workshop came old craftsmen from all over Spain to give their decaying crafts a new industrial meaning.

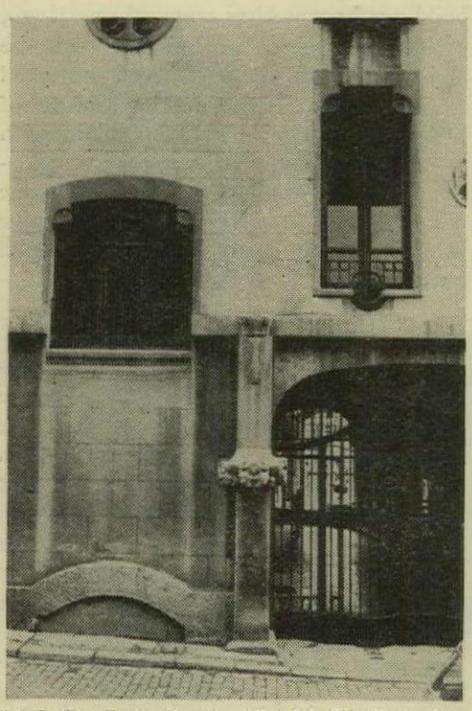
From Ornamentation to Rationalism

The climax of Domènech's production was from 1895 to 1905. During this period he planned, built or finished the Institut Pere Mata, at Reus, the Casa Thomas, the Casa Navás, also at Reus, the Hospital of Sant Pau, the Casa Lleó Morera, and the Palau de la Música Catalana. These masterpieces taken together establish the characteristics of his style. In each and all of them is to be found—under the clamour of floral ornamentation—a strict constructional rationalism and a highly advanced way of posing architectural problems.

To study the development of floralism in Domènech, one would have to make a detailed examination of his famous capitals in chronological order. In all of them we can see a development from Corinthian forms, through Gothic stylization, towards an absolute naked purity, coupled with a gradual intervention of structural rationalism. The function of the first capitals is still sculptural: that of passing from the stem to the springer of an arch in a clear and radical manner (as in the porch of the Casa Navás at Reus). The floral ornamentation, here, is an almost independent collar, but behind it persists the moulding of the capital. In the Casa Lleó Morera, on the other hand, the architectonic structure of the capital has almost disappeared and been replaced by a series of great round flowers in a strictly geometrical arrangement. Though the arabesque of these flowers may be reminiscent of the Corinthian, one can yet claim that here the typical Domènech capital has been born. It may seem paradoxical, but this capital is the result of firmly rationalist thinking. The process begins by the refusal to admit that the capital is a necessary element, from the point of view of resistance. But as the polemic in favour of rationalism had

not yet come to a head, Domènech, faced with the weight and prestige of tradition, hestitated, finally deciding to replace architectural mouldings by an element of ornament which might act as a mere reminiscence of them, clearly and specifically non-constructive and even gently ironic.

The most significant moment in this development is to be found in the capitals of the Hospital of Sant Pau and the *Palau de la Música*, both designed during



20, the Casa Fuster, Barcelona (1908-11). *The interior has been remodelled; the building itself was saved from demolition by a students' protest in* 1963.

Domènech's peak period. The majority of these capitals, typically, are chains of round or square flowers entirely detached from their background, so that behind them the column passes on, insensibly, with no gaps, toward the arch-springer. But the final step in this simplifying drive was taken with the columns of the façade at the back of the Casa Fuster, in the carrer Jesús in the Barcelona district of Gràcia. Here the capital has practically disappeared, and all that remains are light and fleeting incisions between geometrical and vegetable forms. This extraordinarily smooth façade, of an extreme lineal perfection, was almost Domènech's last work and, culturally speaking, may be taken as his utmost point.

Domènech's two most important works are, without any doubt, the Hospital of Sant Pau and the *Palau de la Música Catalana*. Their importance resides not only in the fullness of the architectural ambition behind them but also in their being landmarks on the road to structural rationalism, and especially to the bold use of hitherto unused materials.

The Hospital is important in two ways: in the architectural and city-planning ideas behind it, and in its constructional requirements. As to the first, it must be remembered that Domènech and his contemporaries found themselves at a crossroads—of doubt between the Hospital conceived as a centralized unit and as a collection of scattered pavilions. Domènech tried to overcome the technical difficulties of communication by means of an impressive underground system, preserving in each apparently independent annex the proper degree of human contact. As to the structural interest of the Hospital, it may be true that it could be called not only traditional but even archaeologistic, but what must not be forgotten is that Domènech was striving passionately for the revitalization of the crafts and techniques of his country, not only for aesthetic but mainly for ethical reasons.

A similar meaning could be drawn from the Institut Pere Mata, at Reus, done to almost exactly the same plan as the Hospital. Here there is admittedly a hint of a certain archaic, Mannerist quality and more than a hint of carelessness in detail and finishing-off; all of which conspire to render it distinctly inferior to the Hospital. Nevertheless, the requirements of construction would seem to have been envisaged with care.

These constructional requirements were studied to further effect in the *Palau*, where various new elements were brought into play at will. The *Palau* surprises by its floral ornamentation, its polychromy, the unity of its spaces and the impressive way they follow one upon the other, but above all by its courageous structural planning. The structure is rectangular, with beams and girders of laminated steel, so as to make possible a succession of spaces—penetrated only by the great volume of the auditorium—enclosed on the outside by a simple curtain of glass. The very fact of using iron structure in a non-industrial building so early is extremely important. But even more extraordinary is the use of the open plan and the glass walls. Nor is this absolute transparency of the *Palau* in any way accidental, or even a mere product of exclusively sculptural criteria. From the sketch it is easy to ascertain that Domènech fought the obstacles which the site put in the way of a design that would satisfy the rigid purist in him. The result is this clean, rectangular structure, wrapped entirely in glass, a structure unparalleled anywhere in Europe in the year 1905, when it was designed.

(TRANSLATED FROM THE SPANISH BY PEARSE HUTCHINSON)

Interior Design

Art Gallery, London W1

architects: James Crabtree and Hans Haenlein

photographs by Barbara Lüthy and Geoffrey Gale

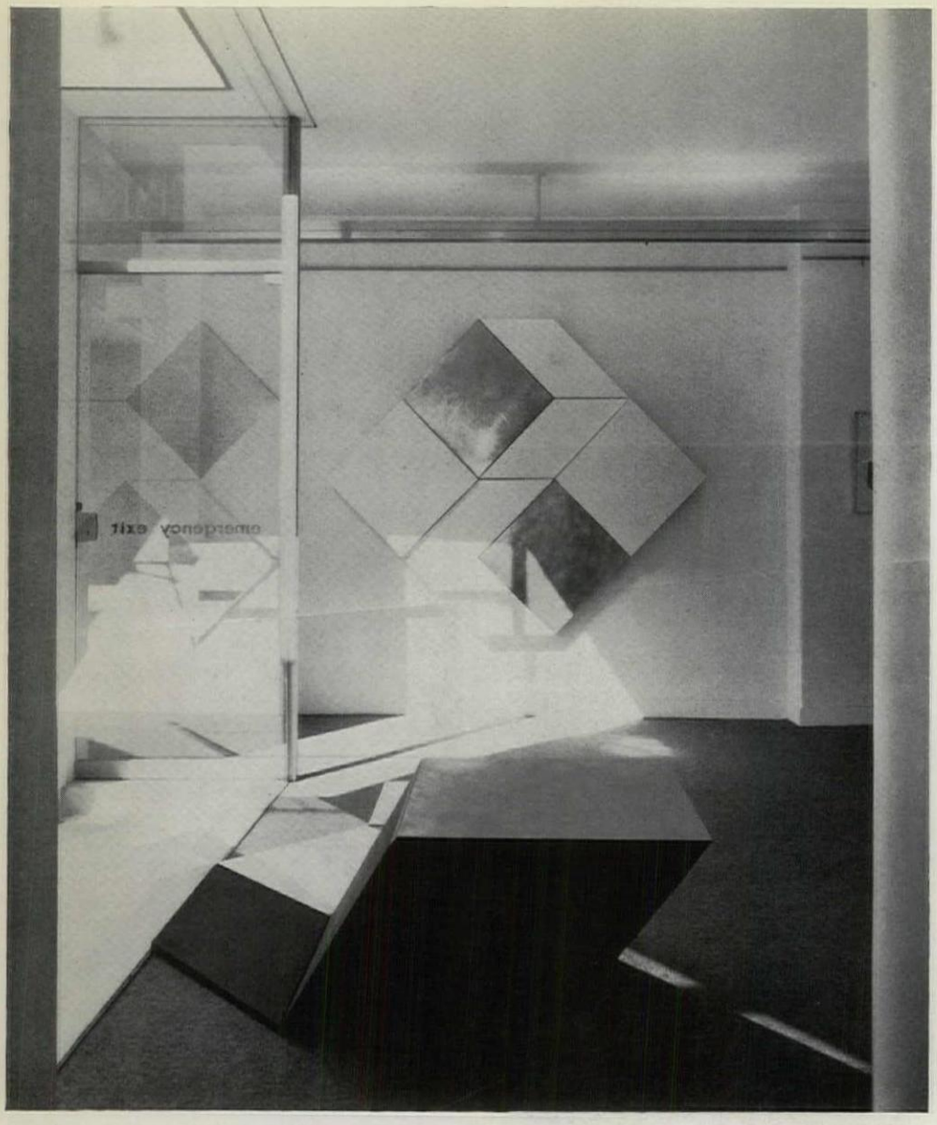
The gallery (the Axiom Gallery, Duke Street) is on two floors, ground floor and basement, both floors being provided with natural daylight; the ground floor by a shop window set back 4ft. from the building line continuing down to basement level. The basement is lighted additionally by two side windows. The ground floor is gallery space in front and is separated from the office by a stair to the basement, which is also used as continuation of the gallery space. The office contains some hanging space and also storage racks for paintings and trays for drawings and graphic works. Separated from the office at the rear is an air-conditioning plant, gas-fired. As the office forms the main storage space, there was an insurance requirement to make this space secure, this being achieved by a sliding door from floor to ceiling, which can be locked.
The lower gallery runs from the back of the stair line around the sculpture court, which is an extension of the old light well, i.e. widened by 4ft., and continues under the pavement to within approximately 18in. of the carriageway. The area below pavement level is sealed internally and contains an extension of

1

2

1, looking into the gallery at night, showing the two levels of exhibition space. 2, the lower gallery looking out to the widened basement area—which becomes a sculpture court.

Art Gallery, London W1



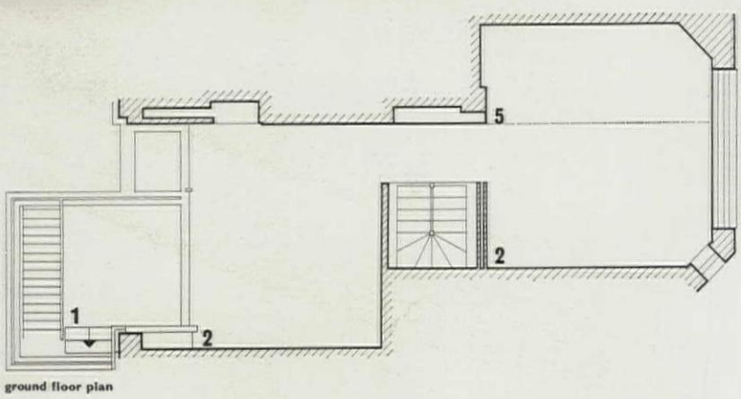
3

3, the upper (street-level) gallery, with the aluminium-framed entrance door on left. 4, the sculpture court which partially lights the lower gallery. On left, escape stairs to pavement which also serve as goods access leading to floor-to-ceiling plate-glass door on right.

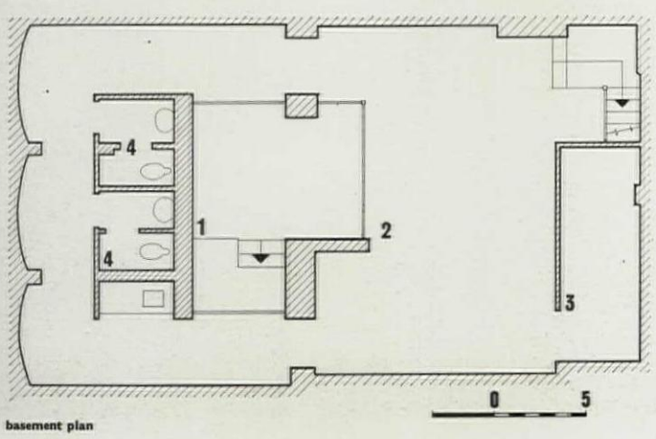
the exhibition space and also two lavatories and a wash-up. Separate mechanical ventilation is provided to the latter. The secondary means of escape runs from the sculpture court to the pavement, and also provides the main goods access to the lower gallery through a plateglass door which is a continuation of the lower glazing. Both the ground floor and lower access doors can accommodate large paintings and sculpture.

The gallery walls and ceiling are finished in emulsion painted plaster or plaster board and the floors in uncut PVC-backed goat-hair carpet. The shop front is plateglass in aluminium framing. The sculpture court and lower steps are of white marble terrazzo in white cement. The area below the pavement is finished in emulsion paint over waterproof cement rendering. The guard rail and escape stair are of painted wrought iron.

4



ground floor plan

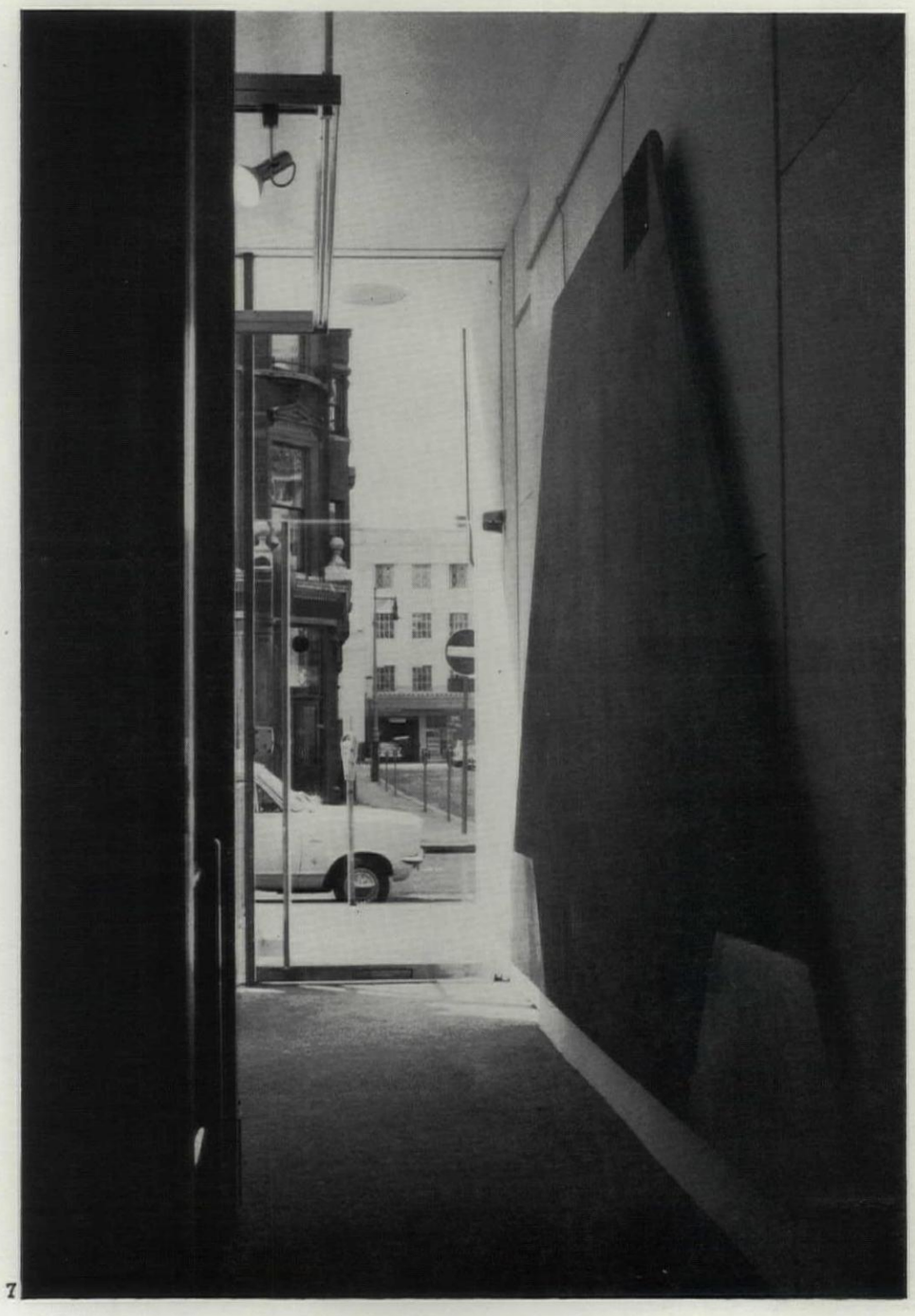


basement plan

key
1, sculpture court
2, gallery
3, store
4, w.c.
5, plant

5

6



7

5, looking from the main (street-level) entrance, with gallery on right and office beyond. 6, the lower gallery; sculpture court on right and stairs to ground floor beyond. 7, looking out towards the street from the ground-floor gallery.

1, (*facing page*), *from the pedestrian ways 'the centre is heaped above in tiers of concrete: one of the most impressive sights in town planning today.'*

criticism

Patrick Nuttgens

Cumbernauld Town Centre

Chief architect-planner: Dudley Leaker (who succeeded L Hugh Wilson in 1962)

Criticism of Cumbernauld has matched its growth. Its initial plan, persuasively expounded by Hugh Wilson, was greeted with enthusiasm. It was a breakaway from a discredited theory of neighbourhood planning indulged in by the first-generation new towns; it was planned compactly, at medium-high densities of about 80 people to the acre, as a single unified urban structure; it was based on the principle of separating vehicles and pedestrians; its traffic plan was one of the first to be fully studied in the light of emergent statistics of the post-war private car explosion; and the plan had the clarity, tightness and simplicity that attracts the architectural mind.

Ironically, Cumbernauld is now criticized heavily at a stage of growth similar to that of the first-generation new towns when Hugh Wilson criticized them. In both cases it was and is manifestly unfair. The most difficult phase in any creative exercise comes when the first simple flush of ideas has passed and the final totality cannot yet be seen. That is where Cumbernauld is at the moment, with a population of about 20,000 out of a target of at least 70,000. It is like that stage of writing when the preliminary synopsis that looked so promising has been put aside and the bulk of half-organized material still awaits a painful synthesis that may or may not resemble the original proposal. You read or hear that the tightly packed housing of Kildrum is cramped and dreary, the houses on the slopes of Seafar are whimsical and confusing, the landscaping is pretty but irrelevant to our time, the road system is absurdly large in scale, the pedestrian network fails as a social link.

The extraordinary thing is that, although criticism of all the new towns has been wide and free, there appears to have been no systematic study which would have enabled their planners to learn from the huge volume of results that must be available. Condemnations of Cumbernauld are premature, reflecting the hectic neurosis of top-speed planning amidst the swings of the pendulum of taste. At less than the halfway stage, with its seams unpressed, Cumbernauld still represents a search for higher standards than the greater part of the country shows. The housing is more varied and ingenious, the landscaping is delightful, the roadworks can challenge any other town where roads have without exception proved inadequate, the separation of pedestrians is still a valid objective and no one has produced a better answer, there is evidence of a dramatic reduction in the accident rate compared with the national average for a town of comparable size, the pedestrian network though incomplete is actually used. For Scotland its single-mindedness is astonishing; you have only to go to Glasgow to see areas of housing bigger than the New Town without any ameliorating facilities whatsoever.

Above all, the place is optimistic. The team in the Development Corporation are now the people who have the hard job of making a plan real. They seem job-orientated rather than status-conscious, which is a standard measure of good management and human relations. Under Dudley Leaker as Chief Architect and Planning Officer, they are informal, caustic ('Remind me to kick that man in the teeth when I next see him') and positive. They need to be; and nowhere more than in the vicinity of the highly idiosyncratic fragment of the town centre that has now been built.

The town centre—the fifth of it that exists—rears up on legs like a huge vertebrate monster on the ridge of the hill. With vacant ground in front of it and at its ends it seems from close-up an isolated extravaganza; from the hills to the south-east, across the valley with its industrial area and railway, it beds firmly into the surrounding sloping town and dominates it like a medieval cathedral. The long view is important; because the town centre only makes sense in the context of the town as a whole.

Because there are no neighbourhood shopping centres but only corner shops in the residential areas (one for every 300 houses, sometimes ingeniously fitted into old existing buildings), the new centre is, to quote a press release, the 'vital pivot of the Cumbernauld plan.' Approached from the north and south by pedestrian paths, it sits along the major spine road and thus links them at one stroke with the vehicles. When completed it will contain, to quote again, 'almost everything the town needs—shops, banks, cinema and other entertainments, a community hall, a sports centre, police and fire stations, main post office, health centre, technical college, hotels and restaurants, civic and commercial offices.' It is literally in the centre, and is designed as a linear structure with multi-level section, for contact between and full segregation of pedestrians and vehicles, with residential accommodation over the top. The first phase is occupied; a much larger second phase is on the drawing board and so is the technical college, by Gillespie, Kidd and Coia. Earth moving has been completed near it, planting of trees has been established in the vacant area that allows for future expansion. It looks what it is—a first stage only.

This stage contains nearly 117,000 sq. ft. of shopping and over 40,000 sq. ft. of offices; it also has banks, a health centre, a library, a hotel, a public house and function suite, a public hall, the main post office, 35 maisonettes and car-parking for about 400 cars. That it is a fraction only is indicated by the fact that the whole centre will include 10 acres of shopping floor-space and space for 5,000 cars. But already the basic pattern has been set; and although the next phase is simpler and better, the essential organization of levels, spaces, functions and communications must influence the future total form. How is that organization made up? It is necessary here to study the diagrammatic plans and sections, because it is difficult to understand. It is even more difficult on

the site, and I found myself hurrying to and fro, up and down, sectional drawing in hand, trying to discover where I was in the architect's scheme; it is fundamentally three-dimensional in concept and feels like the product of an exceptionally lucid if not eccentric mind. The non-architect user is probably less worried and does not, after all, need to acquire an insight into the total concept. In the end it is simpler than it looks; for the confusion of the scene is created more by the architecture than the planning.

To simplify one aspect, it should be explained that references to orientation in this article are 45 degrees from the truth. It is assumed that the spine-road runs east to west, with the buildings straddling it and joining the housing to north and south. In fact it runs south-west to north-east. On the basis of the assumed orientation, the east-west route is level and the ground slopes from north to south. The main road (or 'central carriageways') is at ground level. At that level the road is lined with loading docks on each side leading straight into a storage level a few feet above it. Below it to the south as the land falls are two floors of car parking; car parking to the north is on the road level. On the first floor, on each side of the road above the loading docks, is the main shopping level, wholly pedestrian and linked across the road. Above that is an office level with a few specialized shops, a library and meeting hall. Above that again, on the south side, are penthouse maisonettes and a big restaurant, ballroom and skittle alley.

This is basically straightforward. The rest is extensions to the main concept. To the south, the centre reaches away from the road and, because of the fall on the site, it steps downwards, so that a huge supermarket continues on the storage level and, further down, some more offices and a health centre continue the parking level. To the north it is the main shopping level that eventually connects to the ground, and the connecting areas are used for banks and other offices. To the west the centre is terminated with a Crown office on one side and an hotel on the other. To the east it is indeterminate because here it connects to Phase Two. In other words, it seems more complicated than it is. Part of that complication arises from the fact that in the southern block there is a kink in the main shopping level of a few feet, caused by the crossfall of the site, but also by the need to get extra height for the loading docks at ground level, and just to the south of them extra height for that main shopping street on the floor above. This makes a step in the section (in fact a ramp where pedestrian routes cross) and seems a mistake in terms both of ease of shopping and of architectural clarity.

The next clue is the circulation, which links together the access system—vehicle

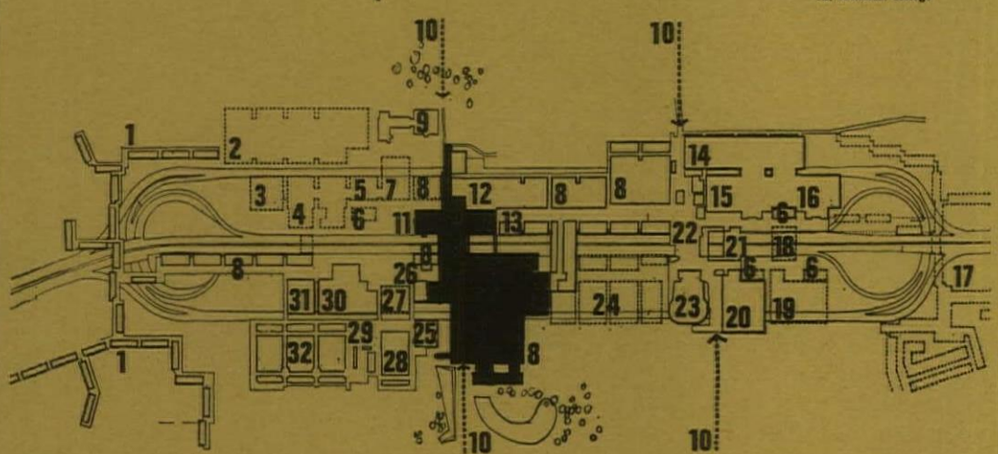
2, *'the town centre—the fifth of it that exists—rears up on legs like a huge vertebrate monster.'*

left: town centre in relation to the town as a whole. Industry is placed at the northern and southern extremities, housing is surrounded by open space and the town centre, shown cross hatched, is at the heart of the town functionally and topographically.

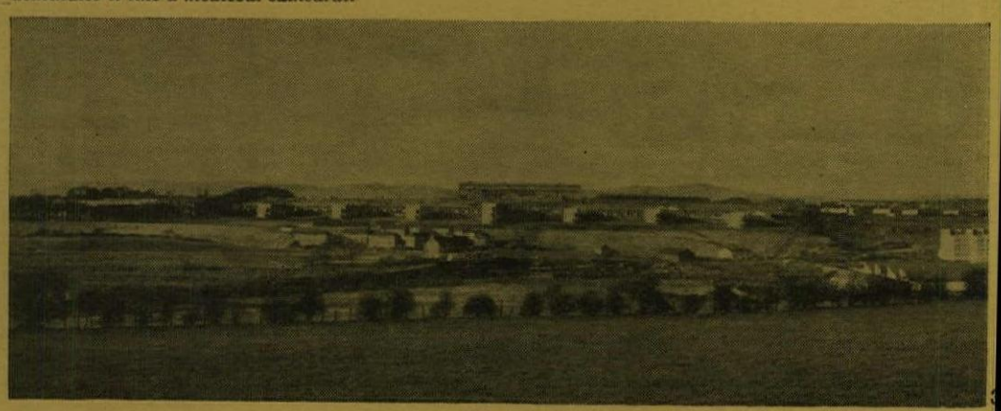
below: plan of town centre (completed first stage solid)

key

1. housing
2. training college
3. local authority
4. office tower
5. museum
6. offices
7. hall
8. retail shops
9. St Mungo's Church
10. pedestrian ways
11. hotel
12. retail market
13. shopping mall
14. floodlit training area
15. sports centre
16. swimming pool
17. housing
18. pub and restaurant
19. ice rink
20. dance hall
21. buses
22. plaza
23. cinema
24. retail
25. central government
26. GPO
27. Sherriff's court
28. hall
29. courtyard
30. police station and court
31. fire station
32. technical college



3, *'from the hills to the south-east, across the valley. . . it beds firmly into the surrounding sloping town and dominates it like a medieval cathedral.'*



routes from east and west at ground level; pedestrian routes from the north at first floor level and from the south at the lowest level. There is a nodal point in the heart of the structure where everything connects vertically. At this point lifts go up from bottom to top, and an escalator brings people from the car parks to the main shopping street. Here are located a creche, lavatories, and a police box overlooking the junction. From here, wide ramps go up and down. In one direction a ramp goes upwards to the offices, and thence, across the floor at ninety degrees, up again to the penthouse flats and restaurant. In the southward direction the ramp slopes downwards to the supermarket, changes sense again and goes on down to shoot finally out to the ground towards the housing on the southern slopes. Again this is basically straightforward. It is elaborated by the addition of secondary ramps, stairs and an escalator to provide other linkages between floors where necessary; an example is the area in front and to one side of the supermarket.

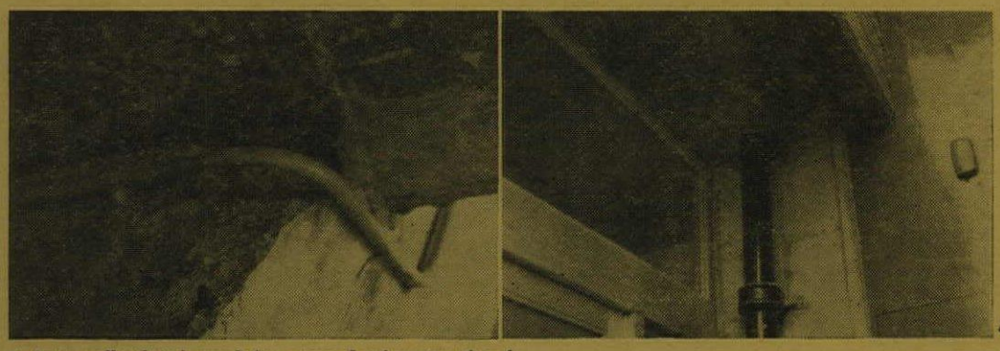
The materials are strong and unified—board-marked concrete throughout the structure, with grey calcium silicate bricks for panel walls and grey concrete tiles on the piazzas formed by the stepped section. Apart from that, walls to some of the internal units have metal plastic-coated cladding, and there is considerable variation in the fronts of shops and banks. An unsuccessful variation is the supplanting of the grey bricks by red ones for the exterior of the Crown office, an expression of different function that seems out of key with the overall concept of an integrated structure.

The structure itself is concrete, with columns and a system of 'waffle' slabs evolved by the structural engineer and contractor, which gives an effect of coffering to the ceilings. But there are in fact two separate structures which interpenetrate. The first is the main one, standard for all the principal functions of shopping, offices, banks, etc.; it is reasonably open and flexible, allowing for infilling with units. The second structure is the one which provides the drama. It consists of six huge vertical piloti, evenly spaced, which cut right up through the main floors and are linked over the top by enormous concrete beams cantilevered on each side. These carry the penthouses, seven houses to each beam, so that the residential top level is like a vast flat arch over the whole of Phase One. It is impressive; but it must be one of the most expensive ways of providing foundations for two-storey housing ever devised.

That brief explanation of the functions, the planning concept, the circulation and the structure may help to relate the diverse experiences you have as you use the town centre or visit it. If, after all, you have a multi-purpose structure, you would expect to have a multifold series of reactions. There are times when the place seems cool and slick; other times when you park in the cavernous concrete lower bays and ascend by escalator through cut-back concrete rectilinear forms and then up ramps past clashing concrete posts and slabs and solids and voids, when the place makes Piranesi's fantastic visions seem like a polite tea-party in comparison. It may be best to start at the north, approaching on foot from the richly landscaped housing of Seafar.

The wide pedestrian mall slides past St. Mungo's parish church (well planned inside but slightly irritating externally with its spindly lantern on top), over the road to a piazza by the hotel. As hotels go, the Golden Eagle is good—just short of vulgar in internal decoration, high class and welcoming, its exterior heavily patterned but fitting into the general scheme of materials. Intelligently grouped near it are small shops and banks, which notoriously reduce the attraction of a principal shopping street and are therefore here placed at a convenient circulation point; the nearby fancy goods shops or specialized firms and offices are appropriate. The banks are happily varied. For example, the Royal Bank of Scotland, marble and aluminium outside, is internally tall, lush, comfortable and imposing, with patterned paper and hardwood, rather dated to an architect but serious and attractive to its clients. In contrast, the Clydesdale at the next internal corner is simpler and more contemporary; its low ceiling is acoustically treated, its lighting soft, the dark glass partitions between counter bays give privacy without isolation, the fittings are ingeniously reticent, and a so-called security system in the form of a television screen outside displaying the door of the safe for everyone to see is the best advertisement in the town. Outside in the public spaces there are frequent examples of hurried designing; awkward junctions, scruffy electric conduits, exposed rainwater pipes. But these may be less obtrusive as the scene becomes more complete.

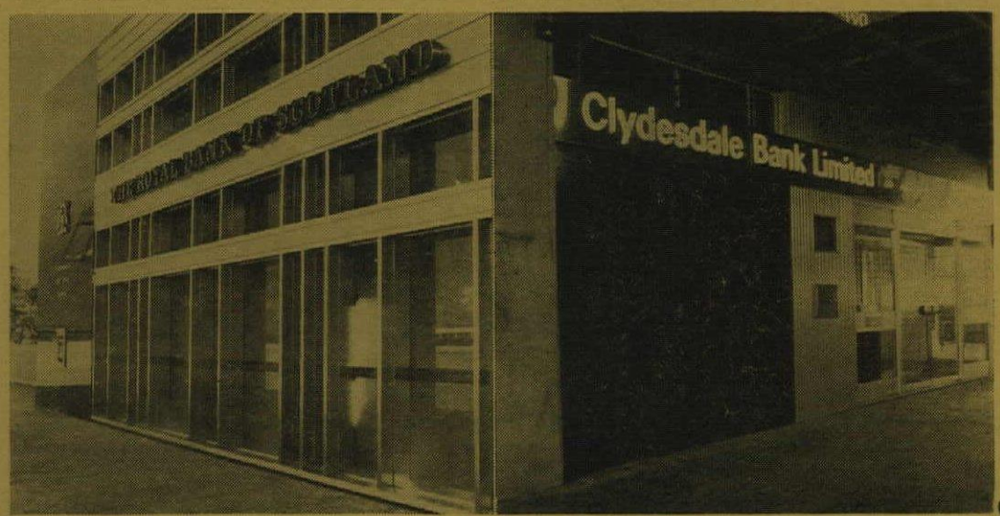
The main shopping mall is rightly round the corner by the nodal circulation point; it has the Crown office, clean and decent, at one end, and large stores and a pub at the other. Here the height is greatest and the coffered ceiling reads clearly; there are exciting views down angles of stairs, more sober impressions of the prevailing surfaces. Some shop walling is poor (such as the timber-framed glazed walls of the chemist), some excellent. The least satisfactory element is the waste space over the low-ceilinged shops, partly occupied by a box for advertising; and there are other meaningless spaces which seem to be merely architectural voids. There is some criticism of the structural grid as not being ideal for shop layouts; but in fact tenancies have been rapidly taken up and at the time of writing only a few units await final agreement. The strength of the scene



4, 5

4, 5, 'scruffy electric conduits, exposed rainwater pipes.'

6, 'the Royal Bank of Scotland, marble and aluminium outside . . . rather dated to an architect but serious and attractive to its clients.' 7, 'the Clydesdale . . . simpler and more contemporary.'



6, 7

gives the possiblity of idiosyncratic detailed design, and display, signs and lighting should make it a vital urban thoroughfare.

The office level above has other small uses, such as a hairdresser, travel agency and restaurant, and at one side an admirable lending library and community hall. It is also where the drama begins to build up and inconvenience shows. Voids and concrete upstands break the floor, fragmented areas of sky intrude. So does the weather. For practical reasons, screens of steel and plastic cover openings to the west and over the top. Here the characteristics of the detail are most vivid. Consistent with the structure, elements are separated and articulated. On the ramp that goes up again each part—upstand, concrete nibs, slabs and wall—are all expressed and announce their functions, all very hard-edged and reminiscent of student designs.

The top level is effectively not a floor but a composition of entirely separate units, structurally as well as functionally. The long gallery-restaurant, skittle alley and function suite is a masterly touch; it looks north across to the hills and can hardly fail to bring people to the top of the town; it is not surprising that entrepreneurs have appreciated its possibilities. Galleries link to the penthouses on the south, which are maisonettes with a linking corridor at half-level. The view along that corridor, lit with tall portholes on one side, broken by the repetitive lobbies to the maisonettes on the other, is powerful; but it is eclipsed by the one on the top. On the roofs, Scottish regulations have required a series of water-tanks, one for each house, and the walkway past them—if you can stand the height—is like the battlements of a huge Scottish tower house. Looking downwards to the south, the occupants of the maisonettes have a view of distant hills, of intermediate serrated roofs and flat walls with wide white window margins, the housing of Carbrain; more directly down, the stepped roof piazzas of the lower shopping precinct and the supermarket.

Down at that supermarket, the largest in Scotland, the centre is most alive. The ramps reach down and up, a water tower on a thin support punctuates a corner of the generous piazza-roofs, women and prams are in movement, and the whole front of the supermarket against the glazed wall under a canopy is a pram-park. It is very successful. Minor ramps and steps give access to the roof-top of the market, an escalator links to the mezzanine car park below. And the wide ramp, with splayed sides of granite setts, reaches outwards past strongly modelled offices and a sweeping curved bank of earth at their foot—an inventive geometry of hard and soft forms. Boys on bicycles (strictly forbidden) enjoy themselves, and a woman actually runs up the slope with her pram. From the tail of the ramp, the centre is heaped above in tiers of concrete: one of the most impressive sights in town planning today.

To the final question: is it a success?, the answer must be a careful yes. Given the scale of the project and its speed of building, it is inevitable that faults of detail should have occurred. They can be discounted provided they are corrected (e.g. an odd step over which everyone trips); general complaints often turn out to be caused by such details. It is quite extraordinary that such a town centre building should have got on to the ground at all, and a tribute to the officials of the Corporation that they have secured the co-operation of tenants.

Furthermore, any blanket denunciations (and there are plenty about) must be treated with reserve. As a town centre, it has to meet conflicting demands, and architectural merits are not always the same as commercial ones. In the latter field there are vested interests which would view its success with apprehension; for if, with its changes of level and emphatic use of space, it proves profitable (which will take time to assess), the developers, who commonly get away with any kind of inadequate architecture in the name of commercial viability and their own profit, might have to review their standards. In that sense Cumbernauld town centre could be a landmark in reasserting the importance of social planning as something more than just satisfying the immediate market. The greatest attack on its commercial success is in fact the climate. Rainfall is common and the wind is fierce; by bad luck, the winds this year have been the worst in living memory; there is a walking posture known colloquially as the Cumbernauld lean. This was a fault in the initial planning when the town centre was located in an exposed position; and the original architect for the building perversely accentuated the problem by providing architectural voids all over the place to bring the weather in. This has been corrected where possible, and the next phase is properly enclosed; these difficulties will decrease as more is built. The use of different levels, commonly regarded as disastrous for shopping, was again inherent in the initial plan. But it seems to work, and in any case people will get accustomed to such novelties increasingly. Those who have done so already are enthusiastic; one perceptive housewife at least had appreciated the fact that although you have to walk uphill to get to the centre you do so when your shopping bag is empty; when it is full, you are always walking downhill. And that makes for a positive lightening of the heart.

It is the architecture itself that is therefore most open to criticism. Vastly imaginative, it is sometimes coarse and verging on the megalomaniac; here and there it ignores simple needs in favour of some private aesthetic. And yet with ironic justice it is the occasional pieces of pure architecture that in the end are the most irritating aesthetically, communicating a lively sense of the unnecessary. The personnel have changed and the next phase will reduce the significance of the faults in the first as the whole centre takes on a shape and structure in which the planning and architecture are more at peace.

The next phase, too, must inevitably correct what appear at a superficial glance to be major faults. For some years the land surrounding the centre will remain empty while waiting for future expansion. The planting of trees will reduce this effect, although it may be a fault in the initial planning. Ultimately the centre will integrate functionally with its surroundings; the later phases will also be more in character with the architecture of the town as a whole. But there will still be a contrast, both in character and scale; and this seems both proper and stimulating in the context of a huge experiment. There is an air of grandeur at the heart of things which is rare in modern planning.

And that relates to the final point. It is often said that the town centre is far too ambitious and monumental in scale for a town of Cumbernauld's size. But it is essential to see Cumbernauld, not as it was first envisaged, but as it has become. When it was designated in 1956 it was an overspill from Glasgow; it followed East Kilbride as a part-solution to the problems revealed in the Clyde Valley regional plan. Now it has become a regional centre, at the overlap of existing market areas. Midway between the Firth of Forth and the Firth of Clyde in the narrow waist of industrial Scotland, 15 miles from Glasgow, Stirling and Grangemouth, 32 miles from Edinburgh, within easy reach of three airports, and close to the crossing of the east-west road between Edinburgh and Glasgow and the south-north road between Carlisle and Stirling and the north, it could hardly enjoy a more promising regional position. The town centre is the magnet for that region. Its dominating scale has the capacity for its developing function. The former status has quietly changed, and it is a measure of the growing self-consciousness of the town and the awareness of its economic strength and potential that the impression it gives now is of a confident regional growth-point, secure upon its windswept hill.

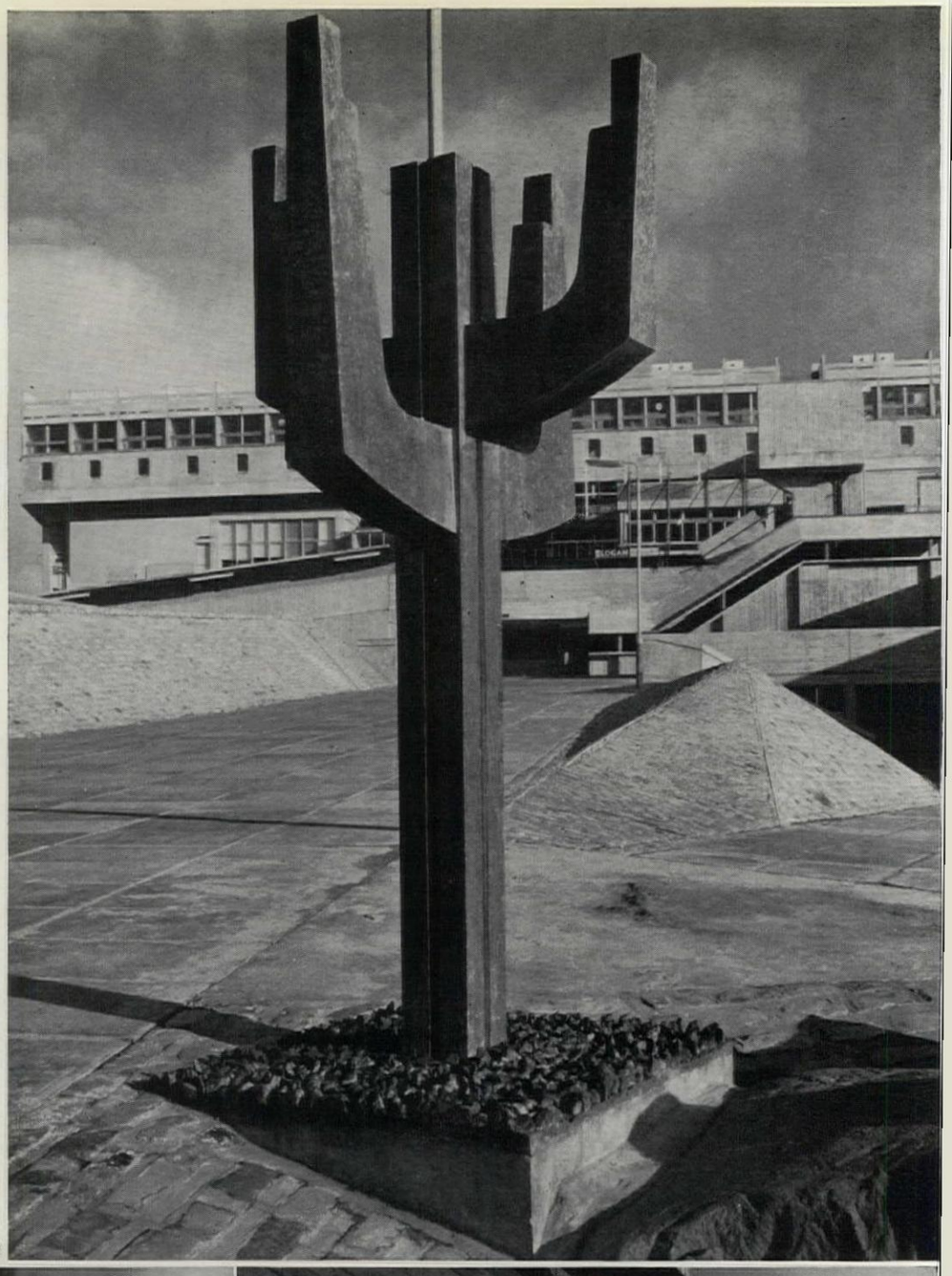
In preparing this review, I took the precaution of walking round the centre on one occasion for two days with two small children, aged 10 and 8, who might reasonably be expected to grow heartily sick of the whole enterprise. I conclude with their comments on leaving:

'Outside it's horrid, but inside it's fab'; and 'When they tidy that all up, anybody'd go there.'

1

TOWN CENTRE, CUMBERNAULD NEW TOWN | *chief architect-planner* **DUDLEY LEAKER**

1 (page 445), south-east corner showing the penthouse flats over the two-storey post office. Projecting from the concrete frame is the strong-room.
2, sculpture by Robert McIntyre alongside the pedestrian mall leading to the supermarket.
3, 4, at the supermarket, ramps reach up and down and a water tower on a thin support punctuates a corner of the piazza-roofs.



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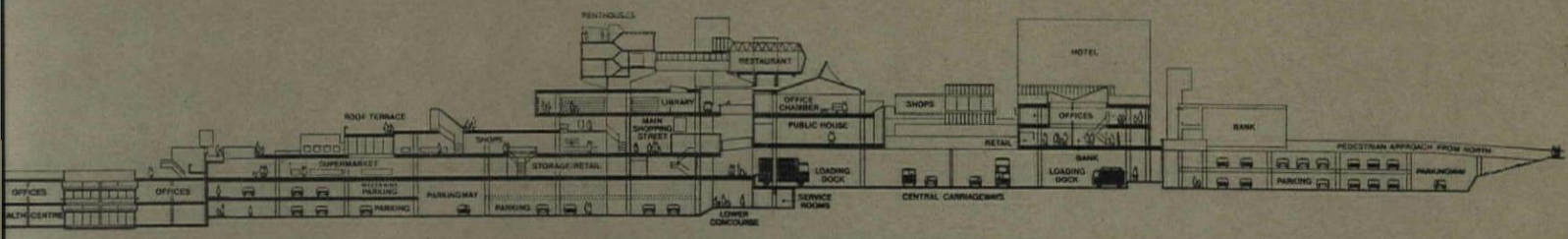
3,4



north-south section through first stage

TOWN CENTRE, CUMBERNAULD NEW TOWN

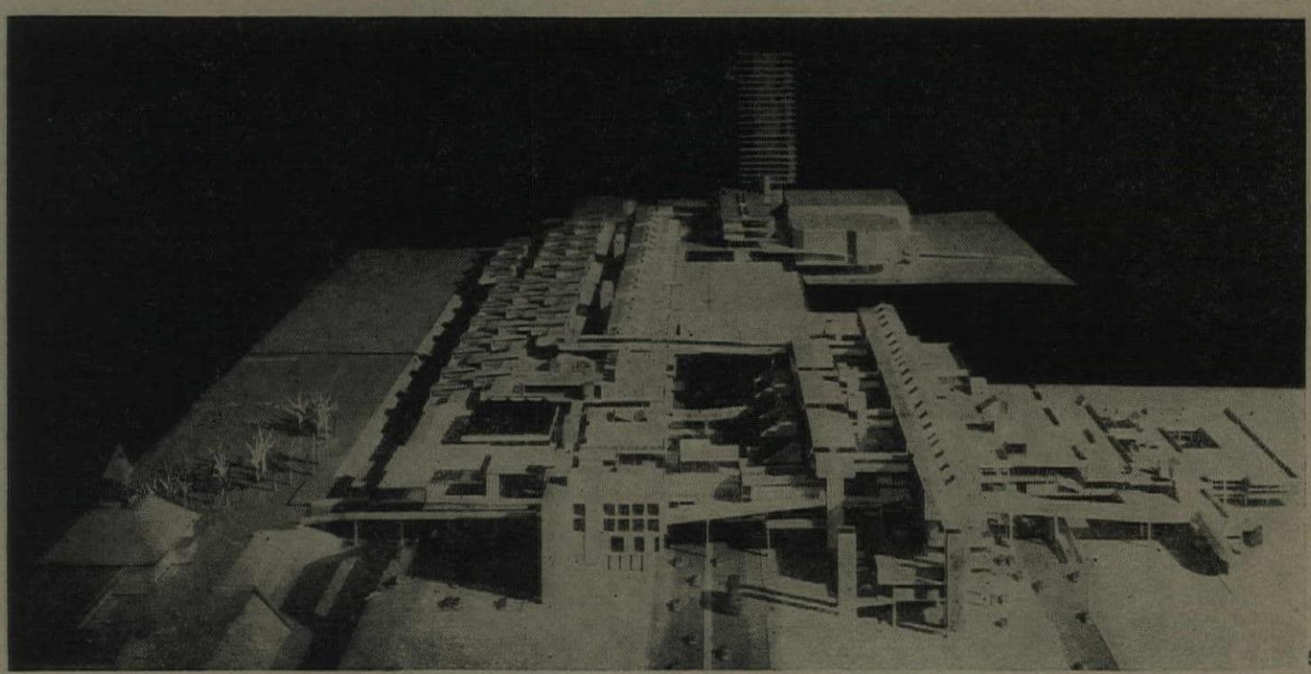
Cumbernauld, designated as a new town in 1956, has been planned for an ultimate population of 70,000. The present population is somewhat over 24,000. Unlike the earlier new towns, which were divided into self-contained neighbourhoods each with its own centre, Cumbernauld, on its hill-top site, has only one centre round which the housing is fairly closely grouped, the furthest being 20 minutes' walk away. The first fifth of the centre has now been completed and is illustrated here.

It is principally a shopping and communications centre, but also contains offices and public buildings, all incorporated in one multi-level structure designed for the complete separation of vehicles and pedestrians. The main pedestrian shopping level is two floors above the ground and is reached by ramps, stairs, escalators and lifts. Below are storage floors for the shops and a supermarket, vehicle access, loading docks, etc., and parking (ultimately) for 5,000 cars. The main spine road of the new town passes through, and is bridged by, the centre, the pedestrian levels of which are therefore reached quickly and vertically from bus stops and parking areas. On the floors above the main shopping level are a library, offices and more shops and, at the topmost levels, a restaurant and 35 pent-houses.

At either end of the centre there will later be open squares reached by footpaths converging from the housing areas. The square at the west end will provide pedestrian access to civic buildings, the town church, the hotel and various commercial buildings, and that at the east end to the entertainment and cultural centres. All the upper levels are linked by stairs, ramps and bridges and are provided with public spaces in the shape of squares and terraces, some open and some enclosed. Excavations and roadworks in connection with the remaining phases of the centre have started, and it is hoped to have the second phase of the shopping area completed, and to make a start on the civic and entertainment areas, in 1969-70, by which time the population of the new town is expected to have reached between 43,000 and 45,000.

First chief architect-planner, L. Hugh Wilson. Group architect for central area, Neil Dadge. Job architect, John Ogg. Other members of the architectural team, past and present: G. Copcutt (first group architect), P. Aitken (group architect from 1963), David Beaver, Colin Stewart, Robert Maxwell, Malcolm McIlraith, James Halliday, John Byron. Consulting engineers, Oscar Faber & Partners. Quantity surveyor, Douglas Macgowan. For contractors, see page 486.

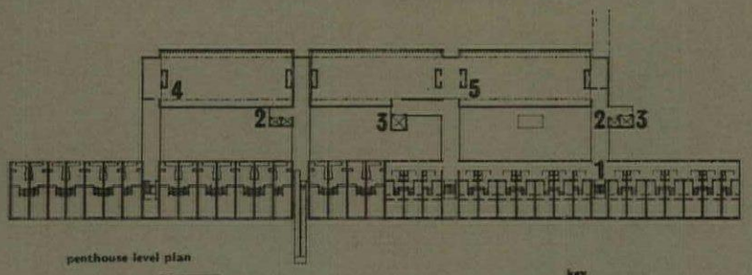
5. model from the west showing the completed first stage and, beyond, the proposed second stage.



5

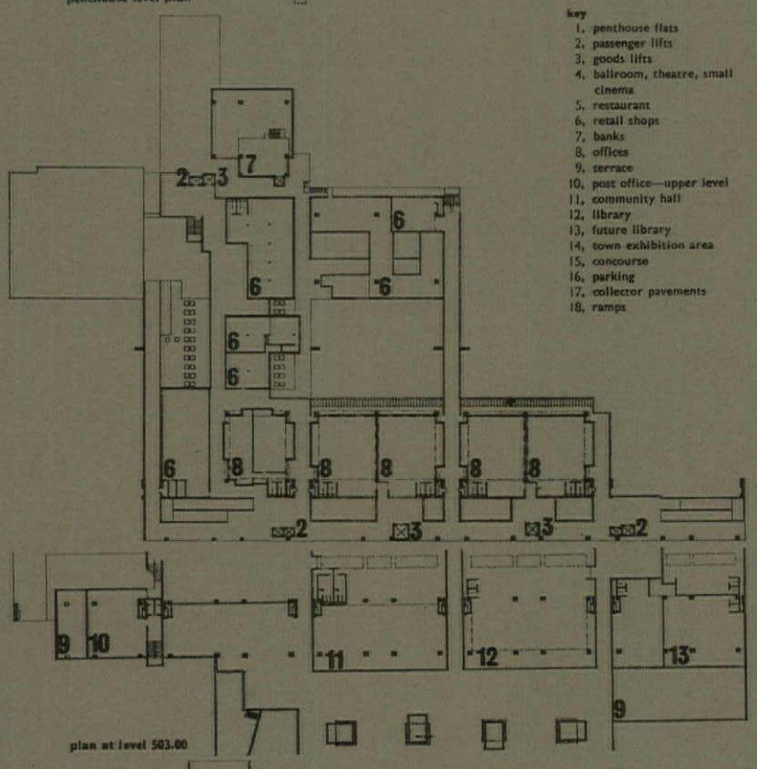
TOWN CENTRE, CUMBERNAULD NEW TOWN

Facing page : 6, the main shopping mall. 7, the parking beneath.

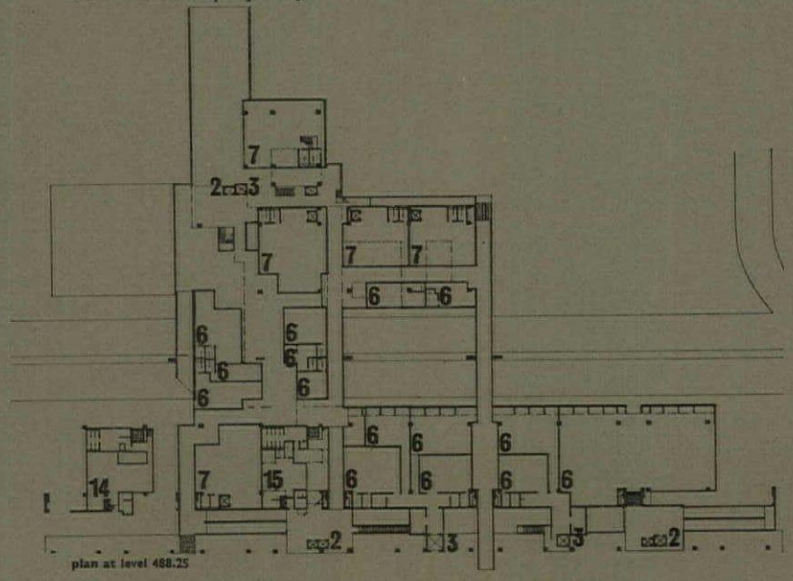


penthouse level plan

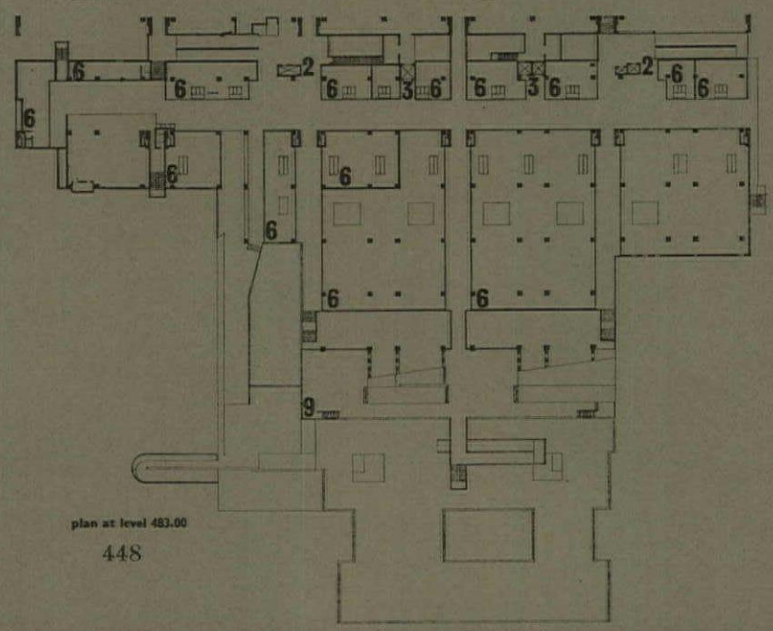
key
1. penthouse flats
2. passenger lifts
3. goods lifts
4. ballroom, theatre, small cinema
5. restaurant
6. retail shops
7. banks
8. offices
9. terrace
10. post office—upper level
11. community hall
12. library
13. future library
14. town exhibition area
15. concourse
16. parking
17. collector pavements
18. ramps



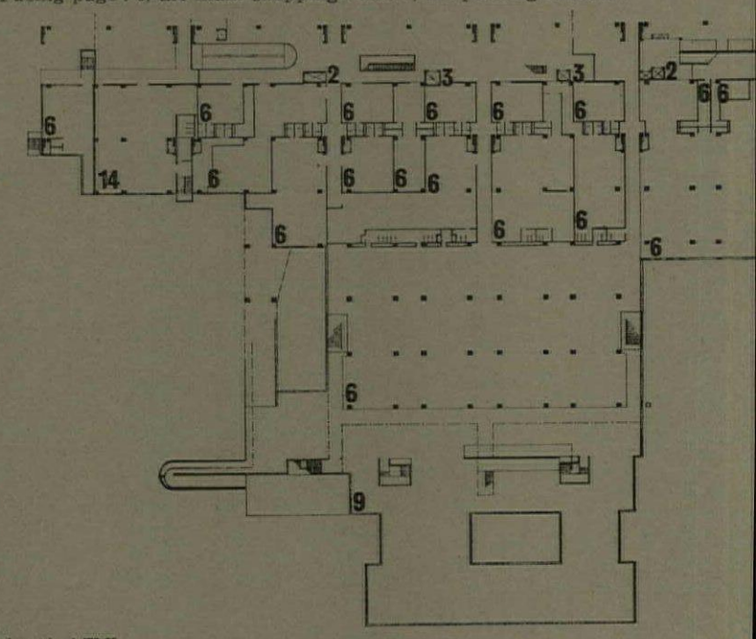
plan at level 503.00



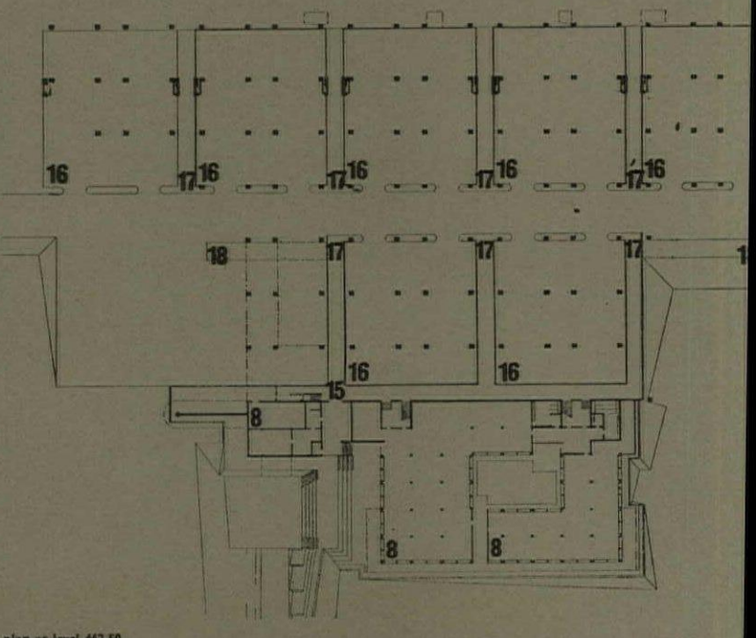
plan at level 488.25



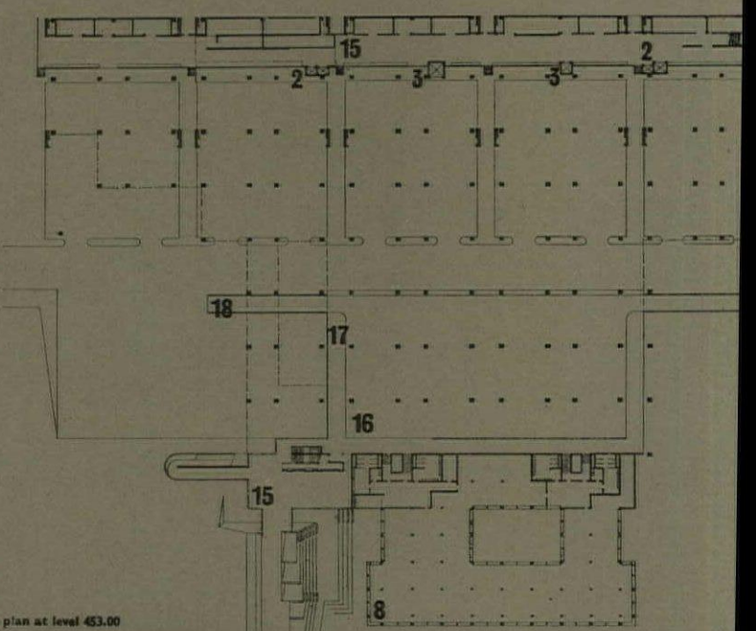
plan at level 483.00



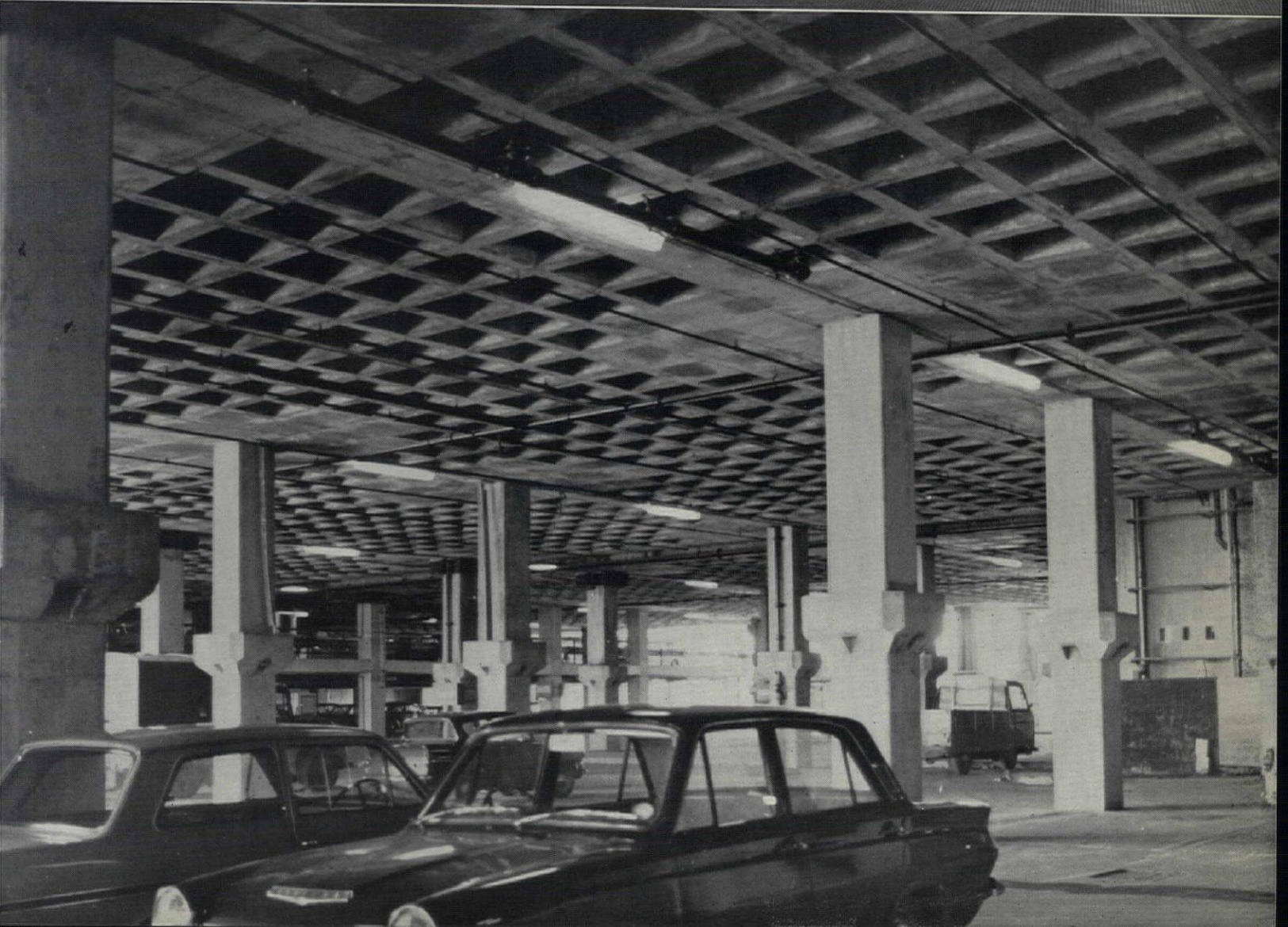
plan at level 472.00



plan at level 462.50



plan at level 453.00



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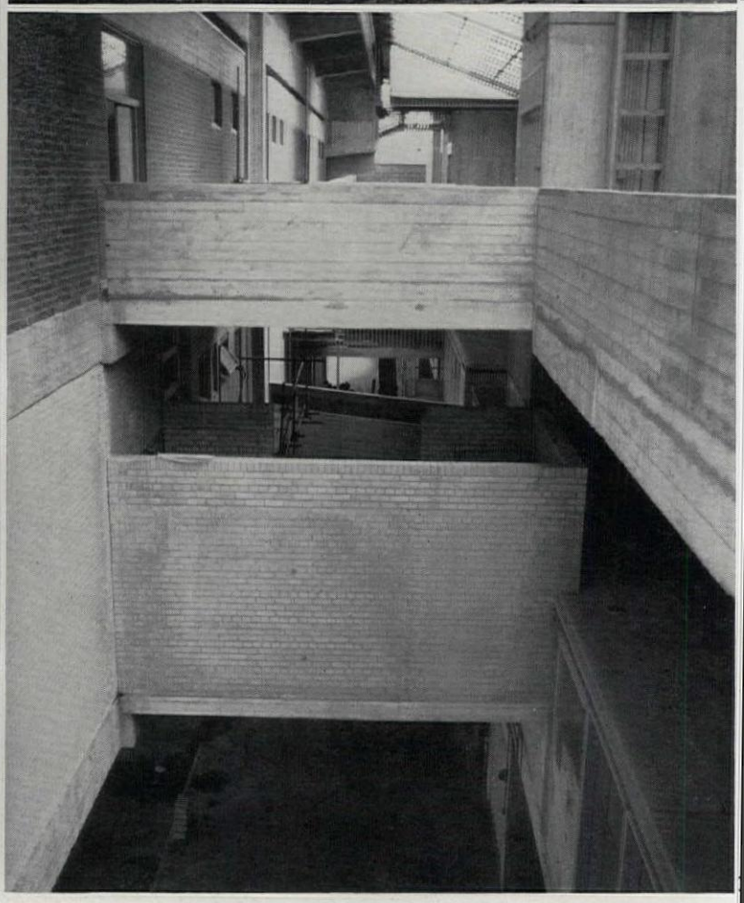
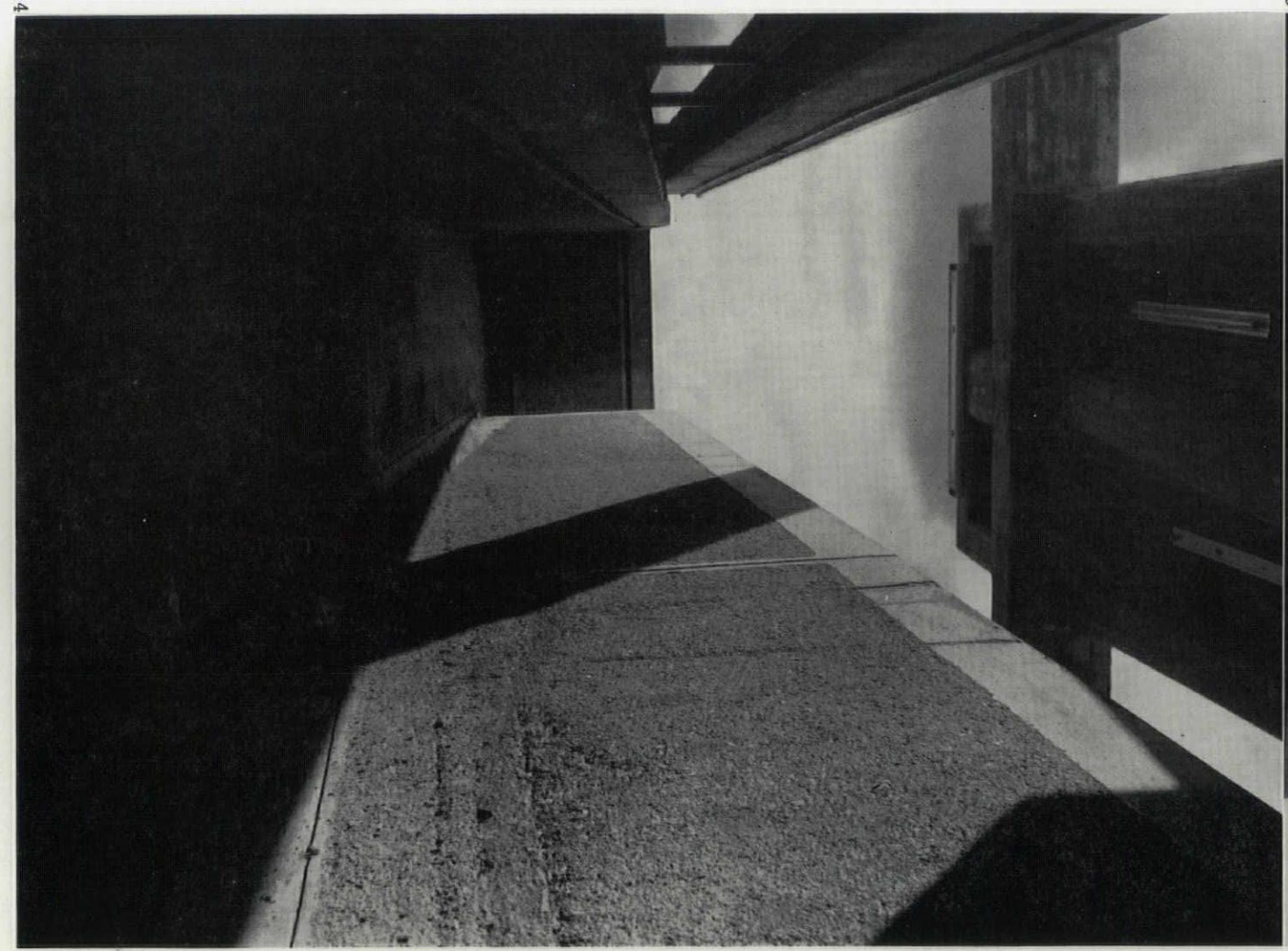
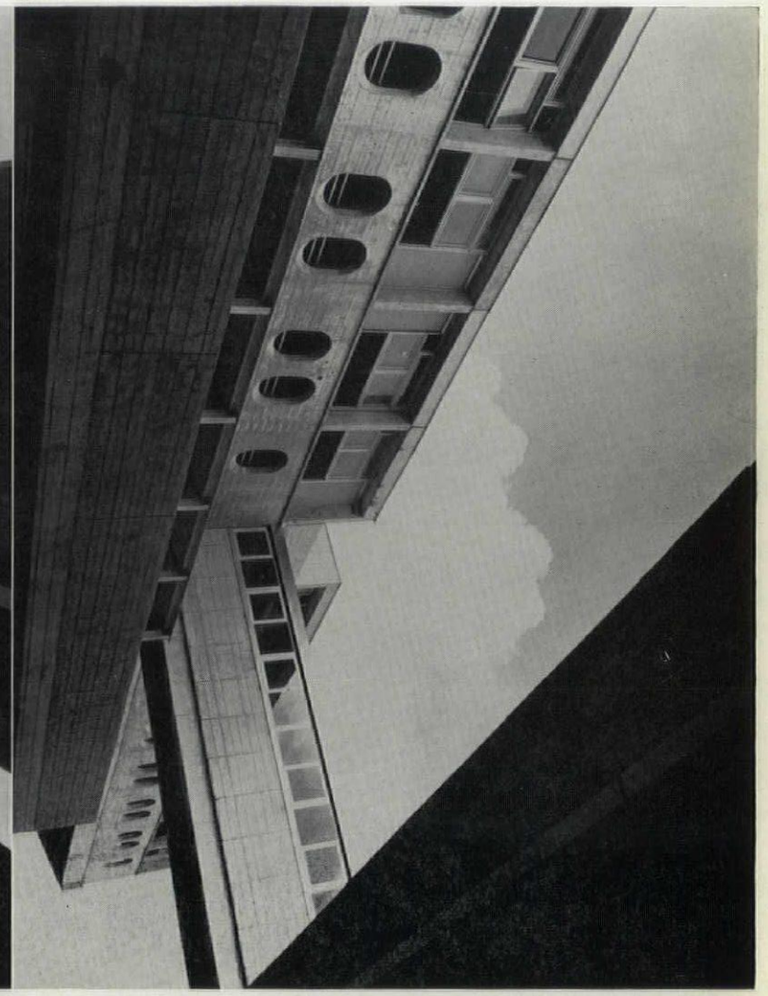
8, south-west corner of the strongly modelled two-storey offices.
9, the supermarket showing the canopy under which prams are daily parked.
10, the eastern end of the penthouse spine.
11, from the east towards the office block.
12, internal balcony access.
Facing page: 13, high level bridge from the penthouse to the ballroom.
14, partially covered pedestrian ramp.

10

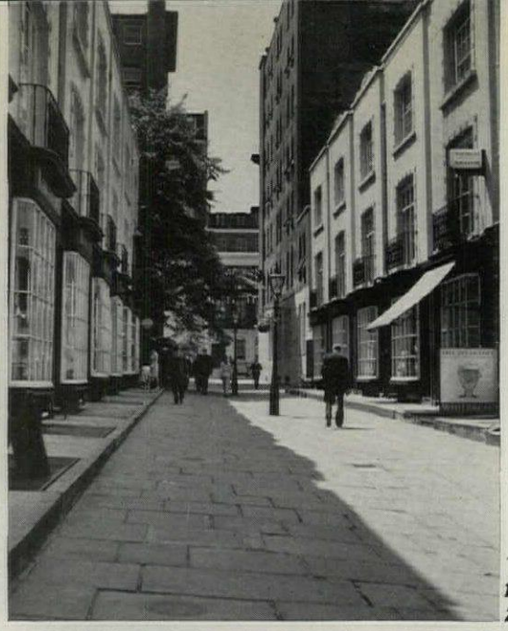
11







photographs by H de Burgh Galwey | **TOWN CENTRE, CUMBERNAULD NEW TOWN**



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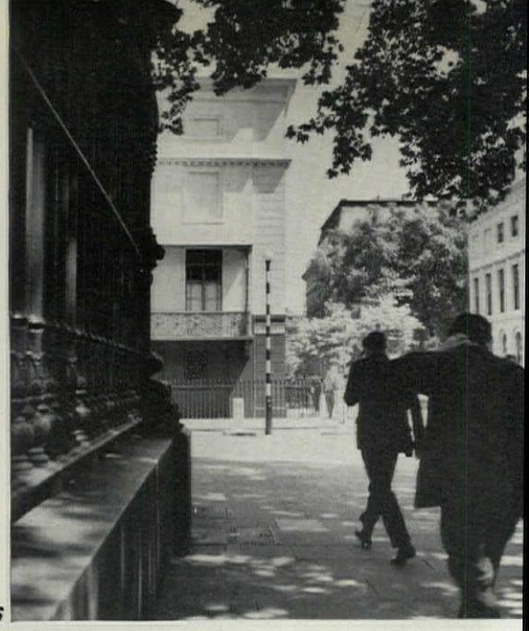

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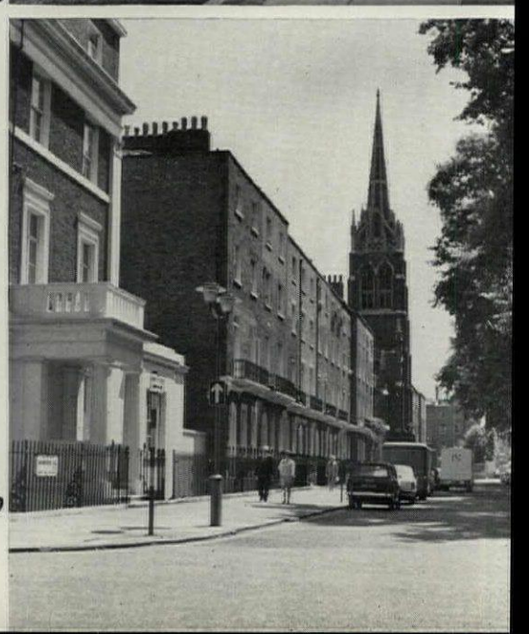

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Opposite: the dignified structure of Bloomsbury: ***1,*** *Cartwright Gardens.* ***2,*** *Woburn Walk.* ***3,*** *Bedford Square.* ***4, 5,*** *Gray's Inn.* ***6,*** *Great Russell Street.* ***7,*** *Bedford Place.* ***8,*** *Great James Street.* ***9,*** *Woburn Square.*

WEST END 8

TOWNSCAPE

BLOOMSBURY

Kenneth Browne

The story of Bloomsbury is a sad one. Despite the fact that it is perhaps London's finest example of a planned and civilized environment, it is nevertheless in grave danger of obliteration.

To make things worse, the principal threat comes, not from the speculator, which would be bad enough, but from two of our leading cultural institutions, London University and the British Museum (see page 455).

CHARACTER

Since the squares, terraces, small shopping streets and alleyways of Bloomsbury (see facing page) form a hierarchy of spaces, the balance between them is vitally important. Human in scale and essentially English, Bloomsbury displays no grand gestures, but an easy relationship between things and a gentle development from one real place to another.

PATTERN

Though the area is built to a grid, it demonstrates that, given ingenuity, much variety can still be achieved. Though long vistas such as Gower Street and Southampton Row become a bore, between them is considerable variety. Also the east-west streets never seem to run straight through.

Following the prototype squares, Covent Garden (1630) and Lincoln's Inn Fields (1658) Bloomsbury Square (1660) was the first open space to be so called. Laid out by the Earl of Southampton to face his mansion, it was a fortunate start for the subsequent development of Bloomsbury. To quote John Summerson, the Earl 'realized that a square was not enough by itself. It had to be the centre of a number of smaller, less expensive streets, and perhaps a church. In fact the whole thing had to have a life of its own.' Bloomsbury was organic from the start.

After Bedford Square (1776) the pattern was developed north and east, principally by James Burton and Thomas Cubitt in a splendid series of squares: Russell, Torrington, Woburn, Gordon and Tavistock. Throughout, the principle of Georgian town planning, the creation of urban units catering for all classes, was reflected in the variety of scale and yet the homogeneity of the whole. The buildings by Thomas Cubitt for the Bedford Estate between Russell and Euston Squares, notably Gordon Square and Tavistock Square, were particularly well designed and soundly built. So much so that, to quote Summerson again, 'their execution (is) so admirable that today there is hardly a wall out of straight or a sagging lintel.'

In contrast to the squares, Cubitt also built a small shopping centre (now Woburn Walk, ***2***) of small stuccoed houses with shops on the ground floor. Exceptionally refined in detail and human in scale they are a model today and must be safeguarded.

SQUARES

The squares of Bloomsbury are quite unlike the Continental baroque squares, which were only elements in a grand composition. Here are no axes or grand vistas, but instead each square forms a little world of its own, casually linked by undemonstrative terraces to other such worlds. The squares differ widely in size and shape, but always contain a central garden of large forest trees, left unpruned as though in a rural landscape. The regimented facades of the houses contrast happily with the informal and luxuriant foliage. Built to be quiet and calm, away from the traffic of the main streets, the enclosure afforded by the surrounding buildings of equal height gives much the same effect as being in a room. Non-directional, it suggests contemplation rather than movement.

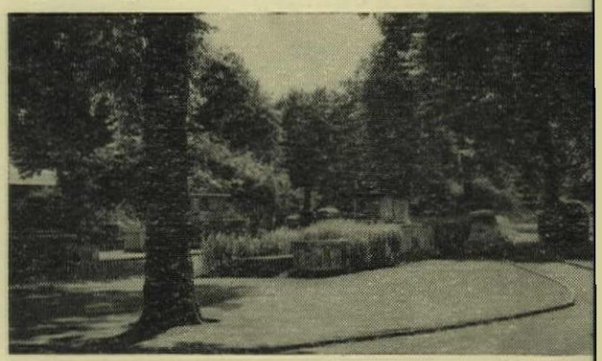
A band of simple iron railings always enclosed the central garden, effecting a neat junction between its informality and the formality of the architecture, but only in Bedford Square have these survived the wartime drive for metal scrap. Elsewhere they have been replaced by scruffy concrete posts and pig-wire. It is essential for the appearance of the squares that either railings similar to the original should be replaced, or, in some cases, that there should be no vertical barrier at all.

WANTED: A SURVEY

Here of all places it is the spaces and connections between them which count, and the preservation of single buildings is not enough. The importance as urban landscape is such that a detailed townscape survey is needed now to determine what must be kept at all cost and what action is needed to pull back areas which have slipped. This survey would cover not only the famous places, such as the splendid green oasis of *Gray's Inn,* ***4, 5,*** which is an object lesson to planners, a world of quite courtyards and tree-shaded lawns yet within a few yards of the traffic, or *Bedford Square,* ***3,*** the last square to remain intact, where only protection is needed.

But the survey would also cover the lesser known places like *Regent Square* ***13,*** rundown and war-damaged, where imaginative action is desperately urgent, and draw attention to the value of strange places like St. George's Gardens, ***10,*** just north of

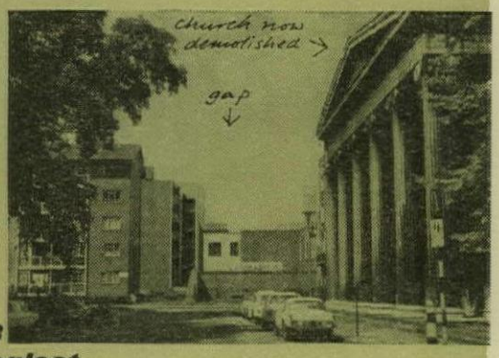
10, *St. George's Gardens.*



Map of Bloomsbury *Key:* ***A,*** *Bloomsbury Square.* ***B,*** *Bedford Square.* ***C,*** *Russell Square.* ***D,*** *Woburn Square.* ***E,*** *Gordon Square.* ***F,*** *Tavistock Square.* ***G,*** *Byng Place.* ***H,*** *Cartwright Gardens.* ***I,*** *Argyle Square.* ***J,*** *Regent Square.* ***K,*** *St. George's Gardens.* ***L,*** *Brunswick Square (with adjacent area to be redeveloped shown cross hatched).* ***M,*** *Coram's Fields.* ***N,*** *Mecklenburgh Square.* ***O,*** *Queen Square.* ***P,*** *Red Lion Square.* ***Q,*** *Gray's Inn.* ***R,*** *British Museum (area of proposed extension shown hatched in colour).*

11
traffic

12
unsuitable building



13
neglect

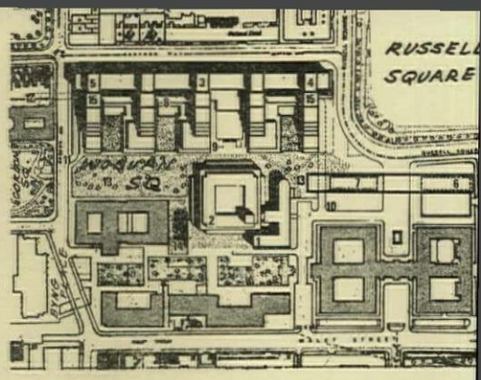
Above: ***11,*** *Bedford Square.* ***12,*** *Tavistock Place.* ***13,*** *Regent Square.*
Below: ***14, 16, 17,*** *the present setting of St. George's, Bloomsbury.* ***15,*** *Museum Street*

Regent Square, a secret garden hidden from the racket of the streets and immensely valuable in human terms. And south again the three adjacent spaces — *Brunswick Square* — *Coram's Fields* — *Mecklenburgh Square*, a symmetrical composition which, since the removal of the Foundling Hospital which stood in the middle, makes no kind of townscape sense, with Coram's Fields itself an untidy dustbowl. Here again ideas are needed. In particular attention needs to be drawn to the area south and east of *Queen Square* as far as Gray's Inn Road. Threatened with redevelopment, it contains a number of fine streets, notably Great James Street, ***8***, Rugby Street, Great Ormond Street (south side); and in Doughty Street—John Street—Bedford Row a complete Georgian street scene. These must not be broken down by piecemeal redevelopment. *Queen Square* itself is a sad mess, badly in need of improvement, the forbidding hospital buildings which occupy the whole east side literally putting the hand of death on the whole place. The south side is still attractive.

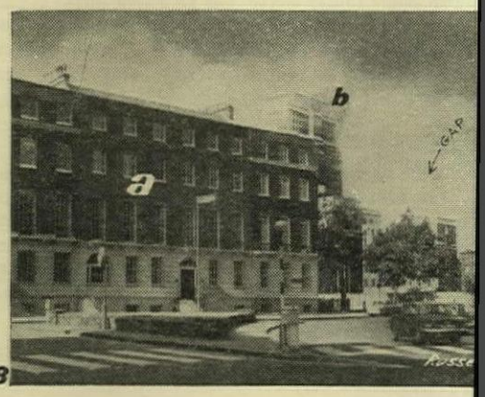
THREATS

Traffic: Stationary cars packed into every available space detract visually from the squares, ***11***, but any suggestion to put car parks under them must be discounted. Without doubt it would kill the trees which account for at least half of Bloomsbury's attraction. More serious still, since noise and exhaust fumes are added to visual disruption, is the introduction of one-way traffic systems which have brought fast-moving traffic where it has no right to be. Gower Street for instance has become a race-track, sending vehicles tearing across the east end of Bedford Square. This must be stopped and Bloomsbury recognized as an environmental area with no through traffic.

Unsuitable building: In addition to the deadly boredom of most of the London University buildings, the council flats, ***12***, in the north-east corner of the area, behind St. Pancras Town Hall, are a prime example of how not to build in Bloomsbury. A depressing failure in environmental terms they lose all sense of urbanity by spilling out anonymous chunks of open space on to the pavement in grisly



Above: Plan showing the proposed rebuilding of Woburn Square by London University which will completely wipe out its present character.
Below: ***18—21,*** *the present approach from Russell Square to Woburn Square showing,* ***18,*** *the gap which exists on the west side of the former.*



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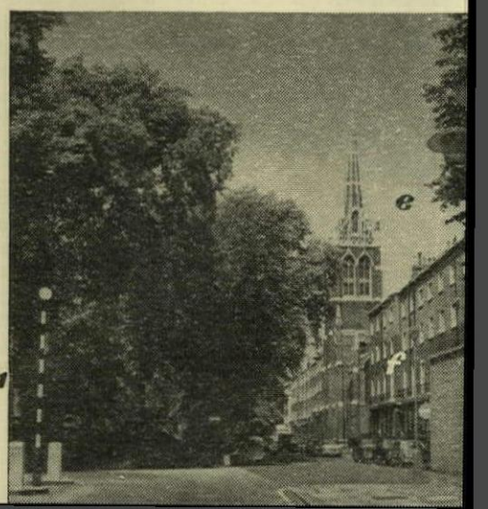

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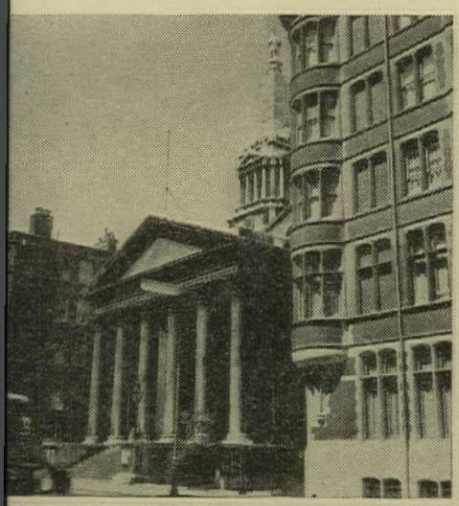

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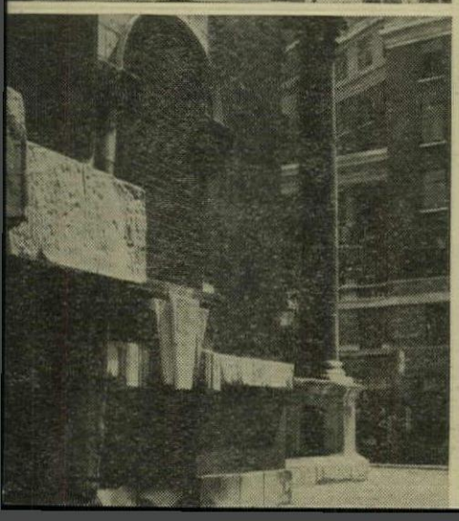

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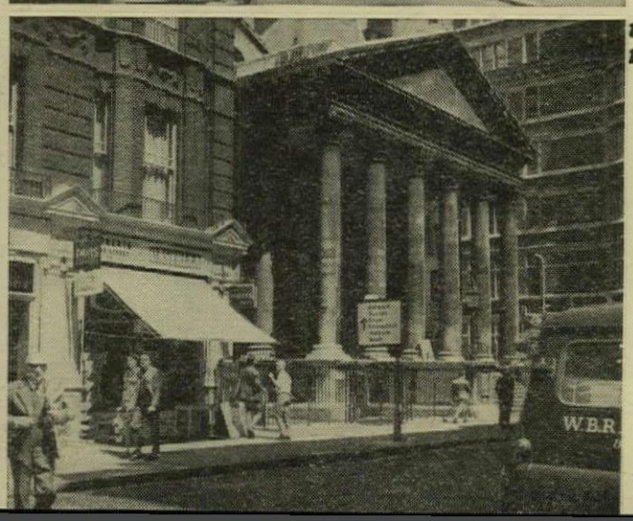

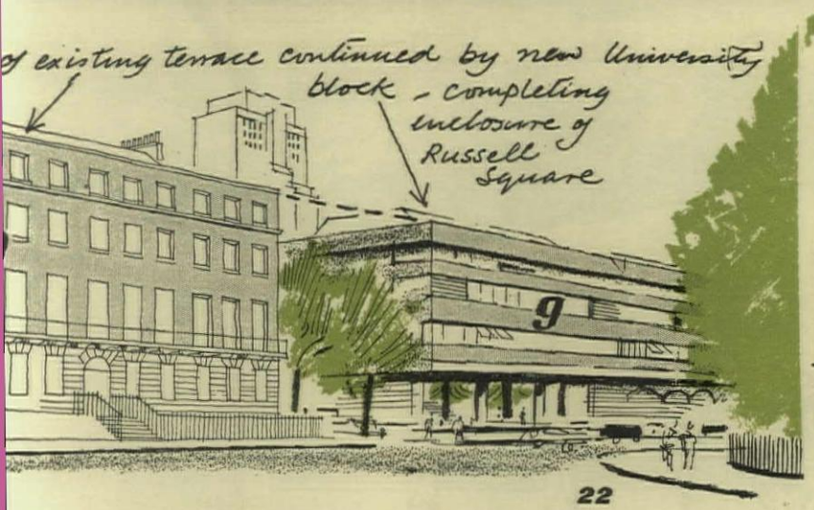

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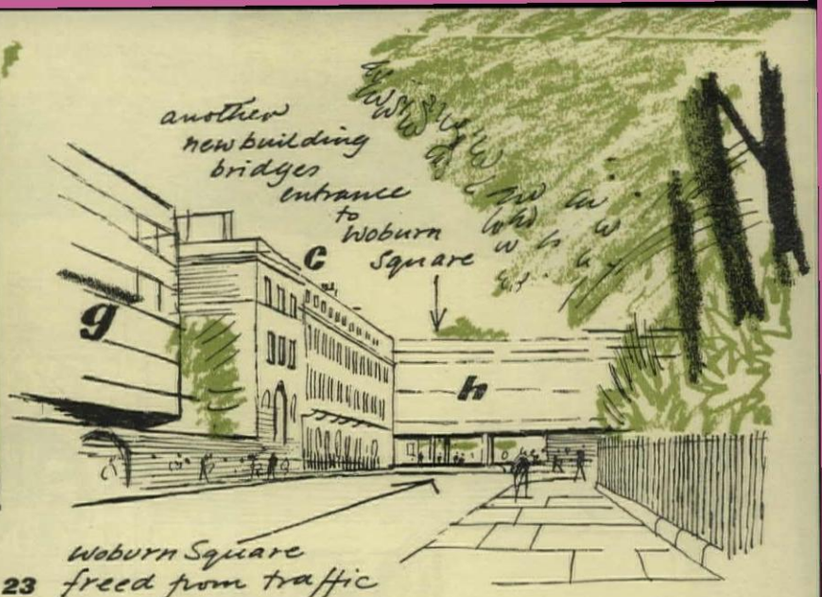


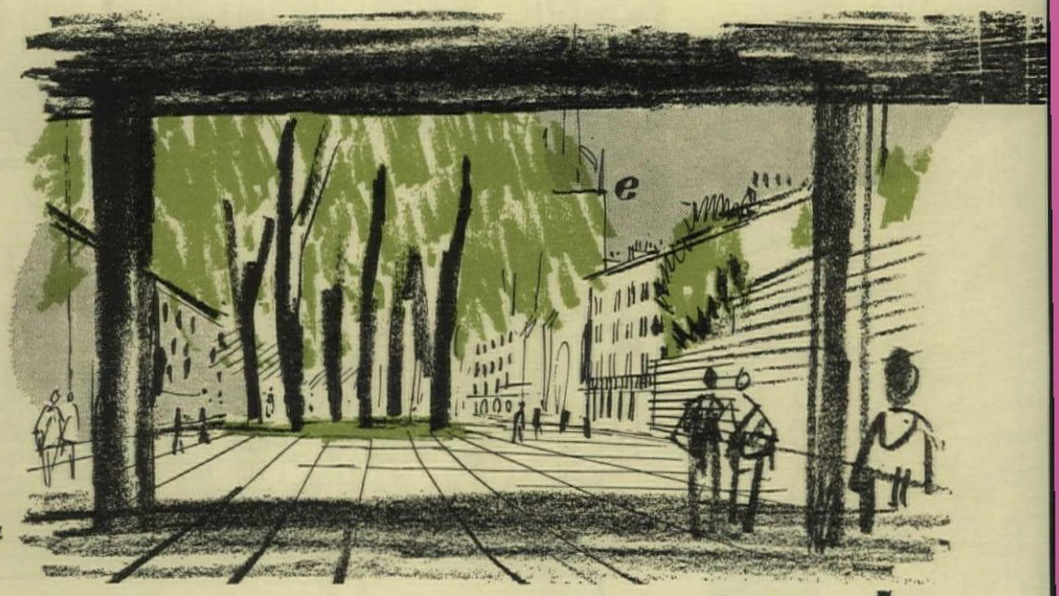
23 Woburn Square freed from traffic and entered . . .

contrast to the earlier Bloomsbury and its respect for space and enclosure. If this is the twentieth century pattern, it is not good enough.

Commercial pressures: The monstrous office blocks of Theobolds Road and Holborn threaten to spread into Bloomsbury itself. This must be arrested, for they would smash the scale to pieces.

Neglect: Regent Square, ***13***, is a prime example of this. A tree-planted square with a Georgian church at one end, complete with portico and steeple (St. Peter's by William Inwood, 1824). Something worth keeping, you would think, despite the fact that the body of the church was blitzed. Yet, instead of carefully rehabilitating the place, we find that not only do the council flats which now occupy the north side leave gaping holes at the corners of the square, but the church itself has, in the last couple of months, been demolished. Apparently the Church Commissioners regarded it as an embarrassment and its scenic importance was not recognized by the Camden Council.

Expansion: This is the greatest threat of all. For a long time the British Museum has wanted more space, and planned to develop a 7-acre site* immediately south of the existing building. This necessitated demolishing the whole west side of Bloomsbury Square and erasing Great Russell Street, ***6***, and all the small streets between it and Bloomsbury Way. Fortunately objections by the borough of Camden have now been upheld by the Government and the scheme has been dropped. In addition to supplying the required museum accommodation, including a National Library, this scheme† also provided a raised pedestrian piazza as large as Bloomsbury Square between the church and the Museum. But unless this piazza had been brilliantly handled, it would have been just another draughty desert nobody wanted, while London would have lost yet another well-loved area of considerable character. Though few of the buildings involved are outstanding in a pedantic sense, the spaces they enclose and the atmosphere they create are valuable, ***15***. What is more, the Museum itself is unlikely to gain visually from being further exposed, especially as seen from a raised deck. The present powerful railings, reinforced by the avenue of trees in Great Russell Street, help the rather dull design. Again Hawksmoor's St. George's Church gains by its present siting embedded in the street line in the same way as many Italian churches. This is not to defend the existing buildings to either side but the way they make you see the church—first the portico casually encountered in the line of shops along Bloomsbury Way, ***17***; then the tower, surprising enough anyway and doubly so by the way you are made to see it. Another experience here is the way you have to squeeze round the base of the church to get to the church hall and Little Russell Street, forced to be literally in touch with the material and detail of the building, ***16***. Such subtleties are important as townscape yet all the time they are being whittled away.

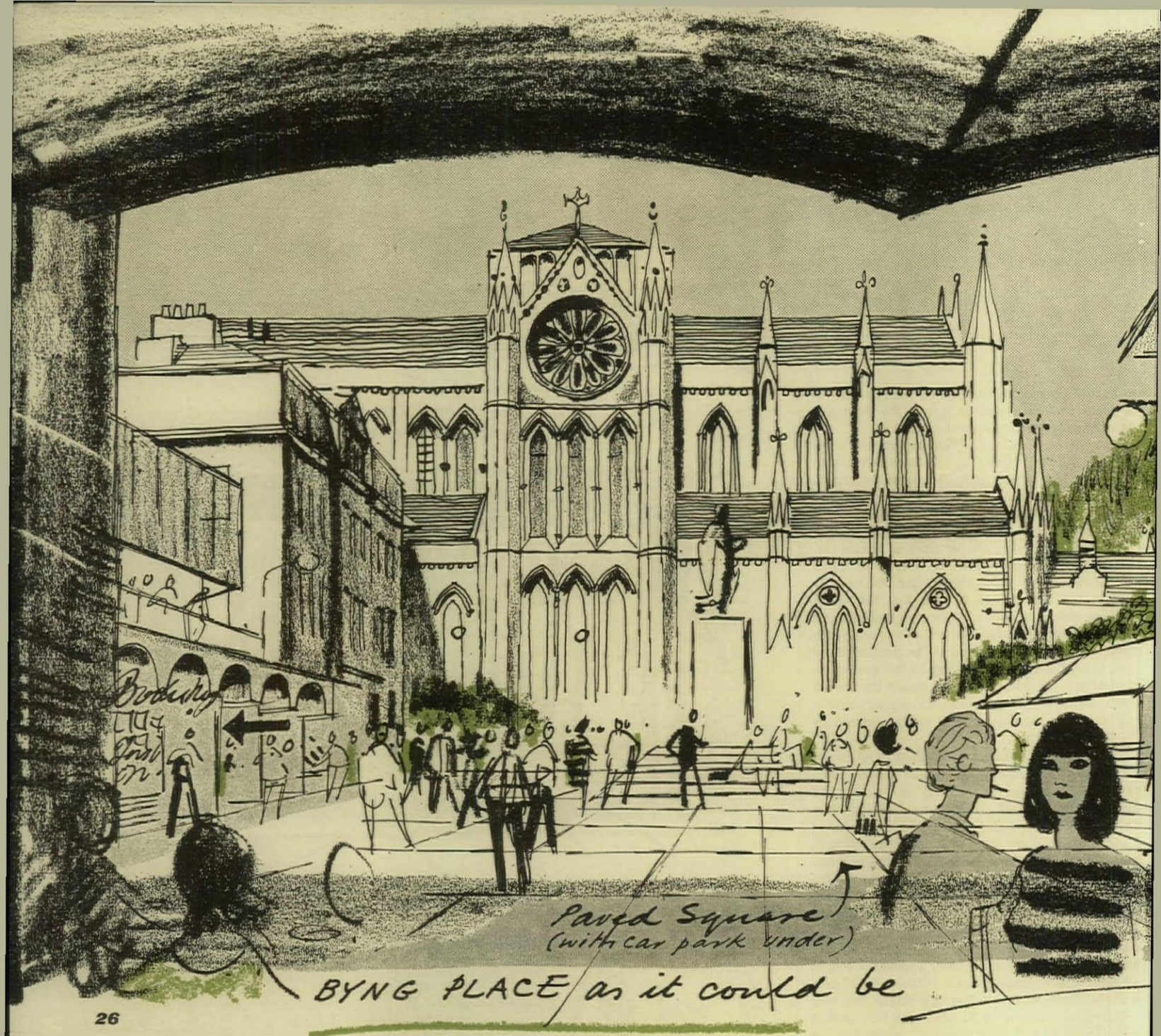


24 . . through a colonnade under the new building **h**

25

* Bounded by Great Russell Street, Bloomsbury Street, Bloomsbury Way and Bloomsbury Square.
† By Sir Leslie Martin and Colin St. John Wilson.

NOW . . . Approach to Woburn Square . . AS IT COULD BE



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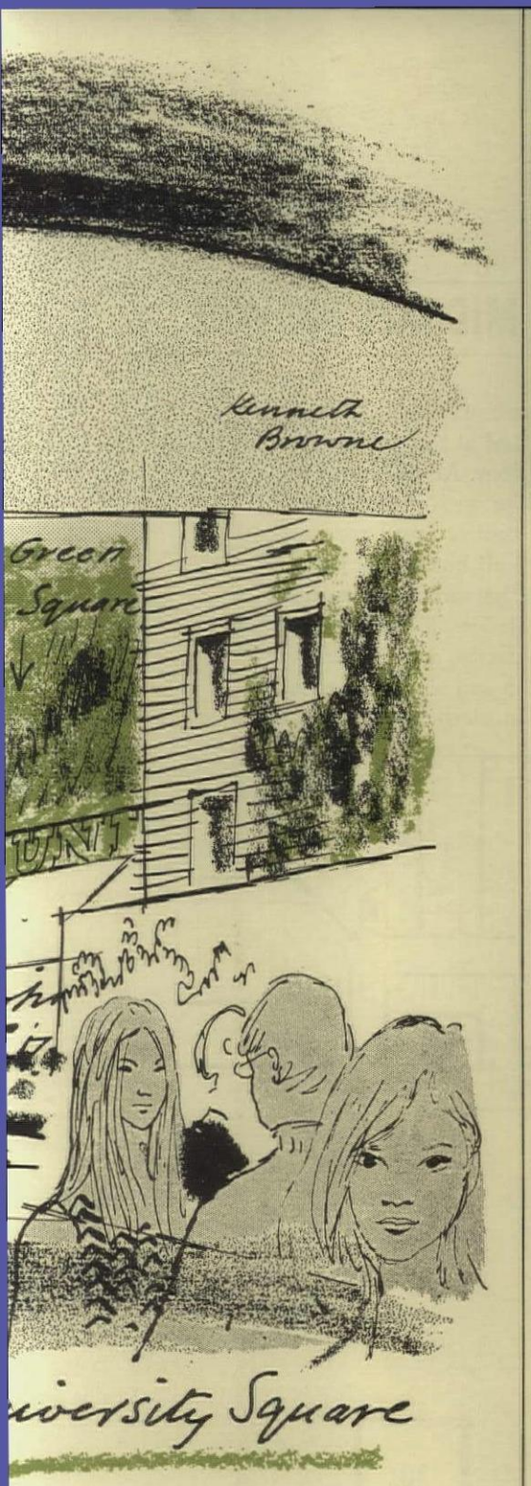
27

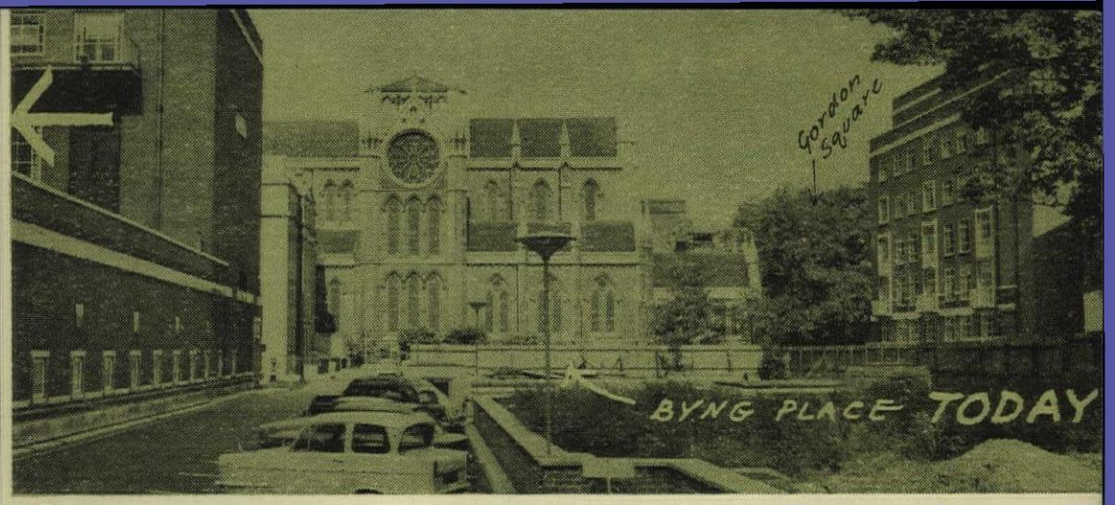
Byng Place, which today is utterly shapeless, ***27.*** ***26,*** *above, as it could be.*

However the real tragedy of Bloomsbury is the presence of London University. Grown out of all recognition since its arrival as University College in Gower Street in 1825, it has in the last thirty years acted like some monstrous cuckoo. Ever greedy for more space, it now threatens the very existence of this area which on the face of it appears to provide such a suitable and historic background. Squares have been smothered and much valuable environment has already gone to make way for student hostels and halls. In its place have risen bulky, dull buildings, overpowering in scale, which contribute nothing. Outstandingly bad is the hideous Faculty of Engineering block facing Malet Street. Surely it is time to call a halt before it is too late and insist that further growth must take place outside Bloomsbury.

A plan published in 1959* demonstrated how the considerable further expansion envisaged by the University might fit into the existing pattern of Bloomsbury. It showed a series of enclosed and tree-filled spaces, bounded by long horizontal terraces and with a tower block in Endsleigh Street. Terraces would complete the enclosure of Russell Square, a much needed step, and also bridge over the present entrance to Woburn Square which would become pedestrian. This plan had the merit of being comprehensive and unifying in intent; it proposed buildings whose layout would contain open spaces which people could enjoy, something the previous buildings, save for the original building in Gower Street, had signally failed to do. Unhappily the plan appeared also to involve considerable demolition of existing and precious things—for instance the Cubitt terrace on the east side of Gordon Square, and the whole of Woburn Square as it now stands including the church, ***9***. The square would even lose its present form entirely with a long block running slap across the middle. This threat to Woburn Square, which few people probably realized, became more imminent with the concrete proposals for the area north of the existing university senate house in 1967†. This scheme, unaccountably passed by the Royal Fine Art Commission, creates a pedestrian precinct between Russell Square and Gordon Square which is good, but then not only demolishes the terrace and church seen ***9*** in ***21*** and (replacing them by stepped back wings to a terrace in Bedford Way), but breaks up the present plan of the square (see plan on page 454). This cannot be justified, for no matter how good the new architecture may be, it destroys a valuable piece of the original Bloomsbury pattern. Also, in detail, the visual effect of a stepped back block (replacing an even-height terrace) seen in profile on the north side of Russell Square, will surely be disruptive.

* By Sir Leslie Martin and Trevor Dannett.
† By Denys Lasdun and Partners.





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neath and dominated by the existing University church of Christ the King. It could connect to the green spaces of Gordon and Woburn Squares through entrances restricted by rows of bookshops, cafes, etc., and with a series of smaller quadrangles running south from it. Today all this is either harrassed by traffic or scattered with parked cars.

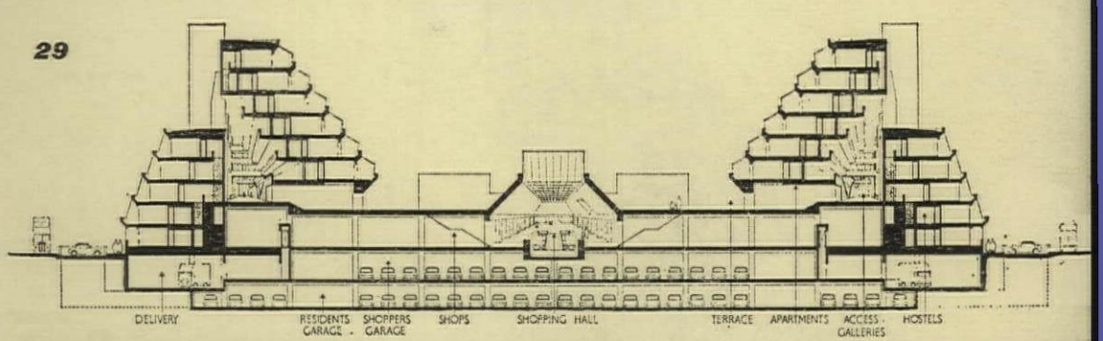
INTERNAL STREET

An imaginative scheme* which, unlike those for London University, does not threaten outstanding environment, is that for part of the Foundling Estate, the area bounded by Bernard Street, Marchmont Street, Tavistock Place and Hunter Street (see shaded area on map). A combined operation between a developer and the council, it promises a remarkable structure consisting of a large sandwich of shops at ground level with two levels of car parking underneath. The shops will be reached from a broad internal and traffic-free street, ***29***, open for much of its length save for covered sidewalks and a large central glazed shopping hall. The flat roof of the shops will form a continuous plateau, four acres in extent, enlivened, it is hoped, with pubs, cafés, trees, etc. and bounded on either side by long raked-back terraces of housing for Camden Council, ***29***, ***30***. The success of the scheme will depend on the handling of the big central space. Can it become a real place in the way the old squares are or will it be just another great draughty open deck? Protected on both sides by the terraces, it promises to avoid the wind-swept aridity of Route 11. This redevelopment will provide a new west side to Brunswick Square and the opportunity to improve it as townscape. As ***30*** shows, the intention is to omit the housing directly opposite the square so that the central space of the new scheme and the square itself can be directly related. A pedestrian bridge between the two will link them further. Today, as we have seen, the adjoining spaces of Brunswick Square—Coram Fields—Mecklenburgh Square make little visual sense. Here is the chance to unify and improve them and also to link them with their surroundings.

* By Patrick Hodgkinson (consulting architect for Estate, Sir Leslie Martin.)

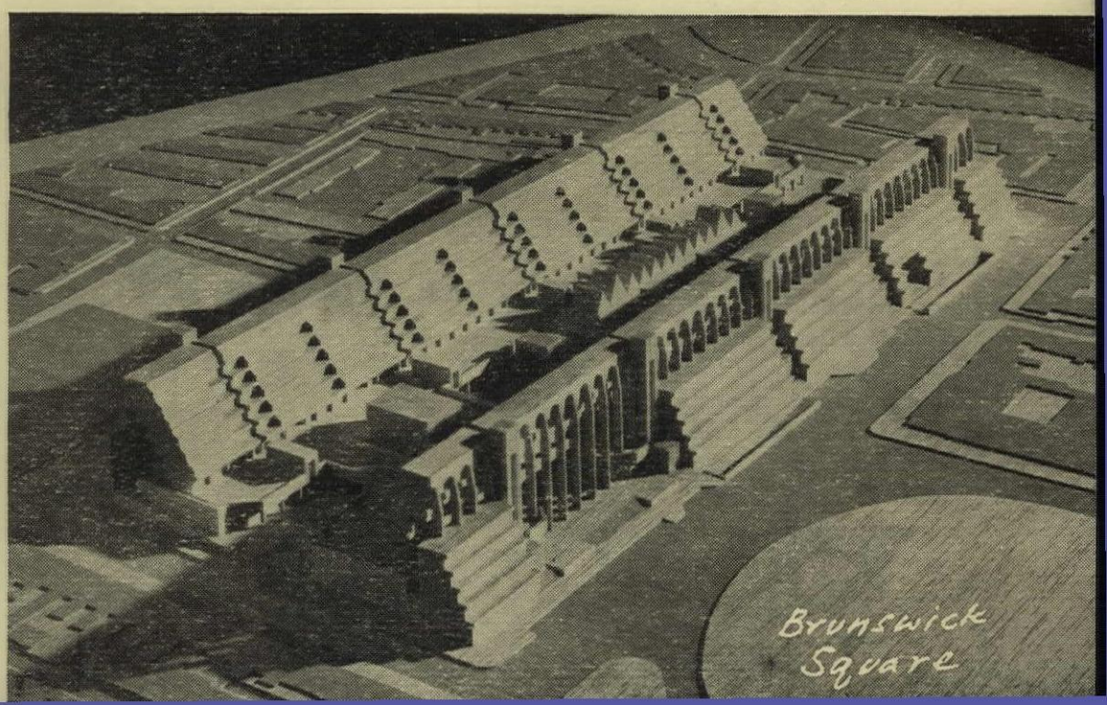
Section and model of proposed redevelopment adjacent to Brunswick Square.

29



INTERLOCKING OLD AND NEW

Woburn Square today is a long rectangle with the church built flush with the east side terrace, ***9***, ***21***. Down the centre of the square a mass of huge trees masks the damage already done by the university to the west side with the insertion of the Warburg Institute. The square's value in spatial terms is that it forms an excellent link between the king-sized Russell Square and the smaller Gordon Square to the north. With traffic removed it would be even better. Surely then it would be possible to keep the existing form of the square, yet still put a new university terrace along the gap-toothed west side of Bedford Way as proposed; much in the same way as the British Museum does not destroy one side of Bedford Square but lies behind an existing terrace. If this were done the transition from Russell Square could be as shown in ***22*** to ***25***, with the enclosure of Russell Square completed, Woburn Square cleared of traffic and, at the north end, leading into a remodelled Byng Place (***G*** on map). This with traffic rerouted might become a central paved university square, ***26***, with car park under-

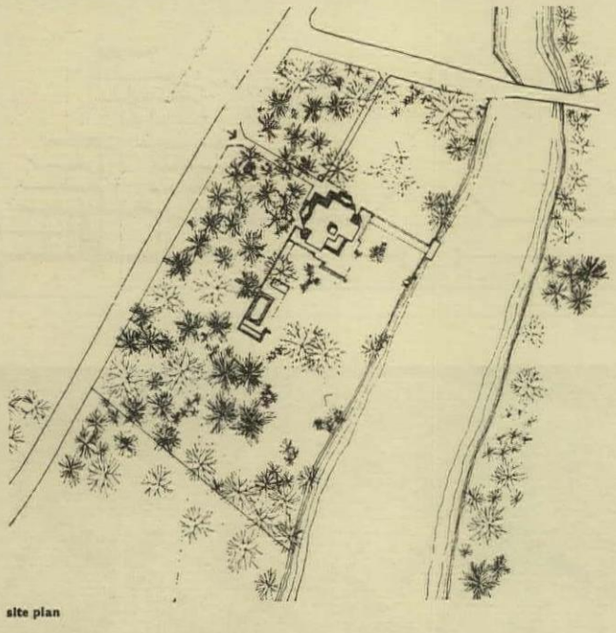


HOUSE AT FISHER'S POND, NEAR WINCHESTER | *architect* MICHAEL BRAWNE

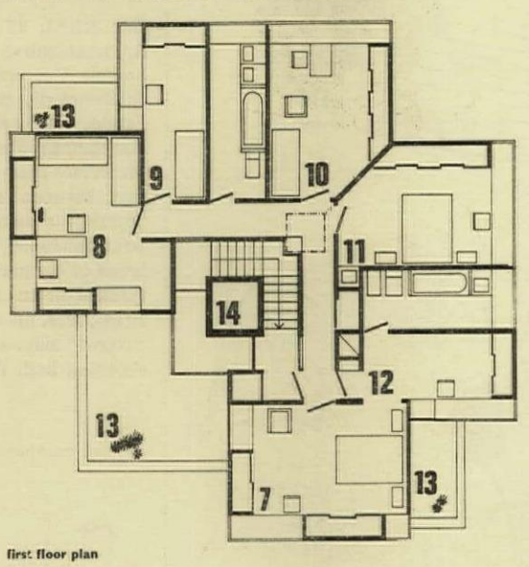
The house stands a few feet above a long narrow pond running north-south. A belt of larch trees shields it from the road beyond. The house looks south down the pond, south-east across to a clump of pines beyond it and south-west into its own garden. It is more or less symmetrical about its north-south diagonal, with cooking and a children's area to one side of the central double-height dining space and an adult's sitting area to the other. The dining room is given prominence and thought of as the most communal room in the house. To the rear of this L-shaped space is a service zone—two steps up—which includes entry, cloakroom and laundry. A central drum containing ducts for hot air heating and tanks, with a staircase on its outside, stands between the two zones. Beyond the service zone are two car-ports, which are accepted as the normal space through which one enters.

The bedrooms and bathrooms on the upper floor are reached from a top-lit corridor giving views of a terrace across the void above the dining area through glass partitions at each of its ends. The outline of the upper floor does not follow that of the ground floor; the bedrooms both retreat and project. Where they move back, three terraces are created; where they come forward, they become the roofs of the car-ports. The upper floor is tied together by a reinforced concrete ring beam which also acts as a balustrade to the terraces and forms an upstand in each room. Windows and cupboards project beyond this, so that within each bedroom there is a deep window-ledge between cupboards, forming a kind of bay window. The 7ft. 6in. ceiling slopes down above the windows so as to reduce their height, cutting out the sky and drawing attention downwards towards the water and trees.

The lower part of the house is block-work construction left fairfaced and painted. The piers are filled with concrete and the block-work tied at the top by a ring beam which carries a timber floor. Above this level the entire construction is timber with plasterboard on studs. Windows and external timber areas are western red cedar. On the outside wall all horizontal junctions also imply a change of plane, the wall stepping back each time to avoid horizontal ledges. This requires some changes from normal practice, as in the case of glass which is inside-glazed top and sides, but outside-glazed at the bottom with a ⅛in. strip of aluminium.

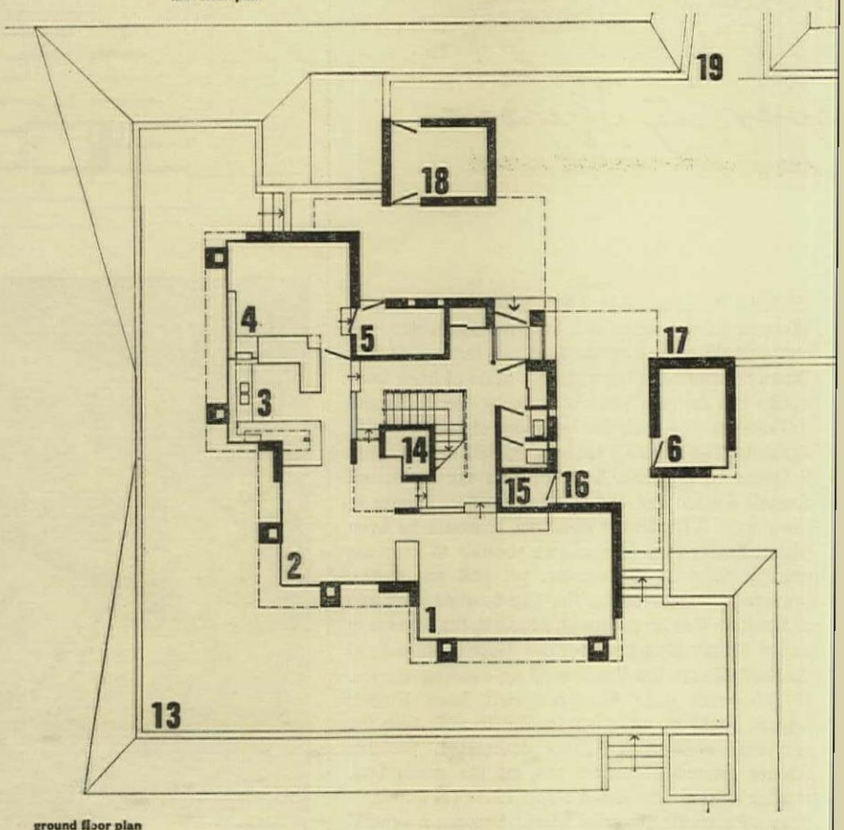


site plan



key
1. living
2. dining
3. kitchen
4. playroom
5. laundry
6. workshop
7. parents' bedroom
8. boys' bedroom
9, 10. girls' bedroom
11. guest's bedroom
12. study
13. terrace
14. duct
15. boiler
16. car port
17. parking
18. storage and dust
19. drive

first floor plan



ground floor plan

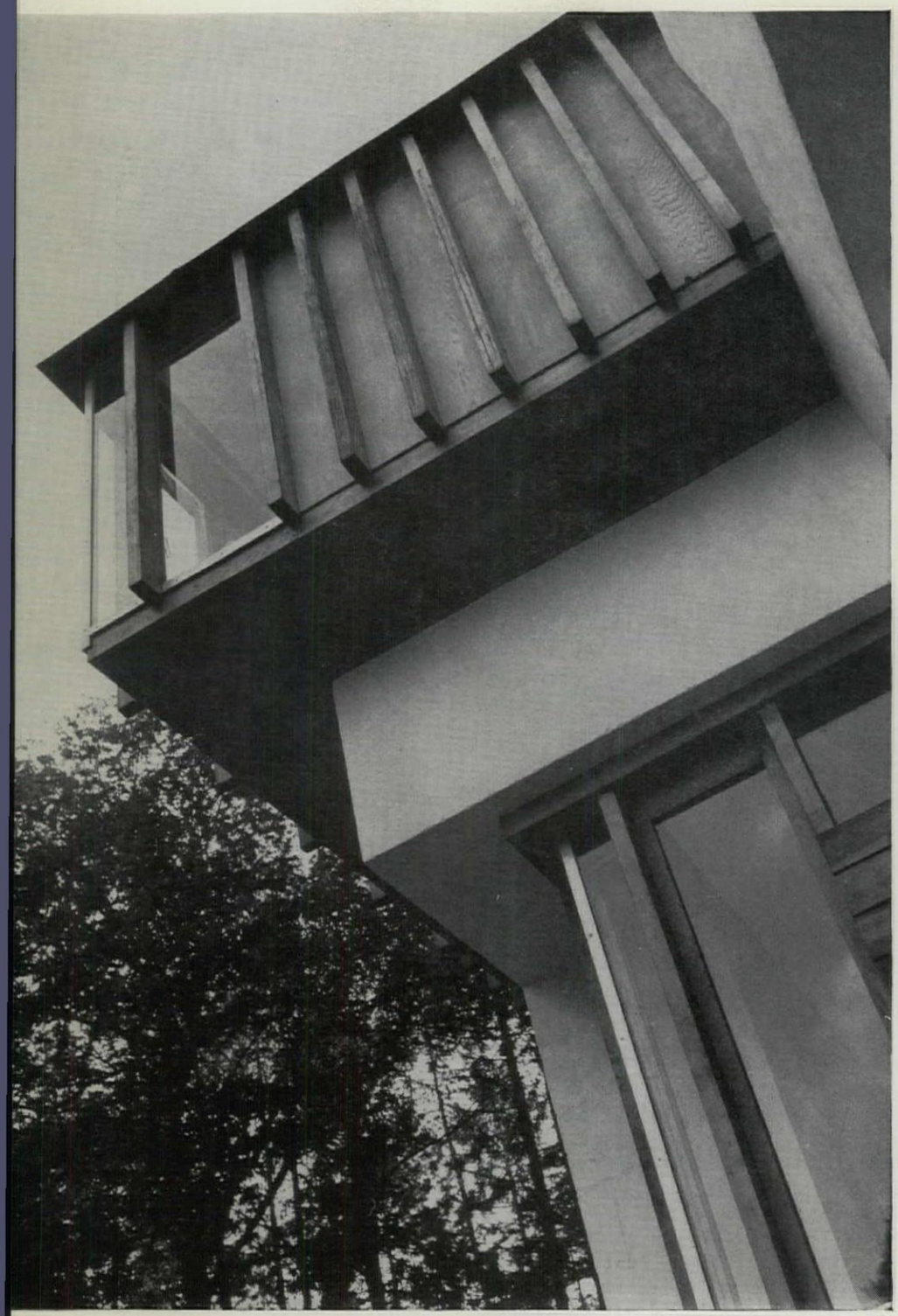
1 (above), the house from the south-west, showing how the upper rooms project beyond, and the lower rooms are recessed behind, the line of the roof terraces. 2 (below), the south-west corner from the edge of the pond. 3, from across the pond. 4, the north-west corner.

1

2

3

4



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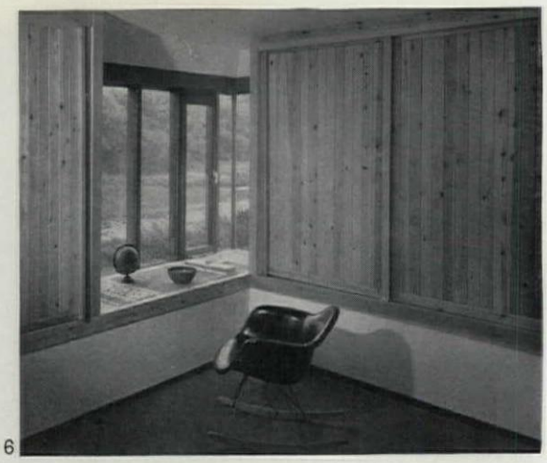

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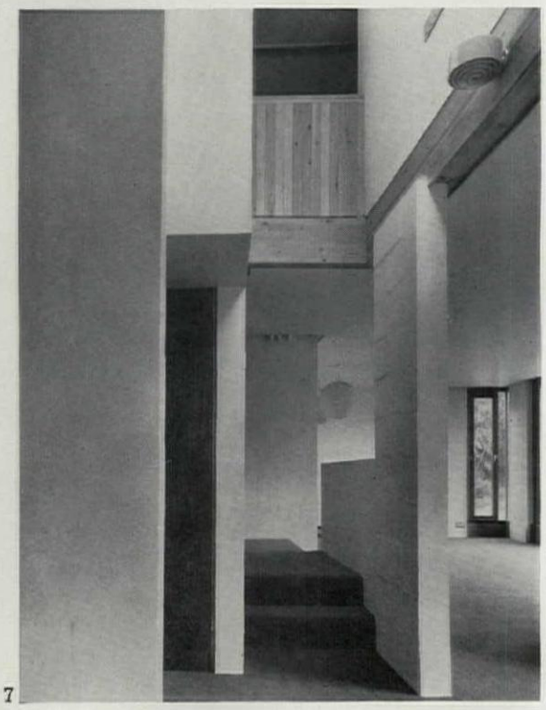

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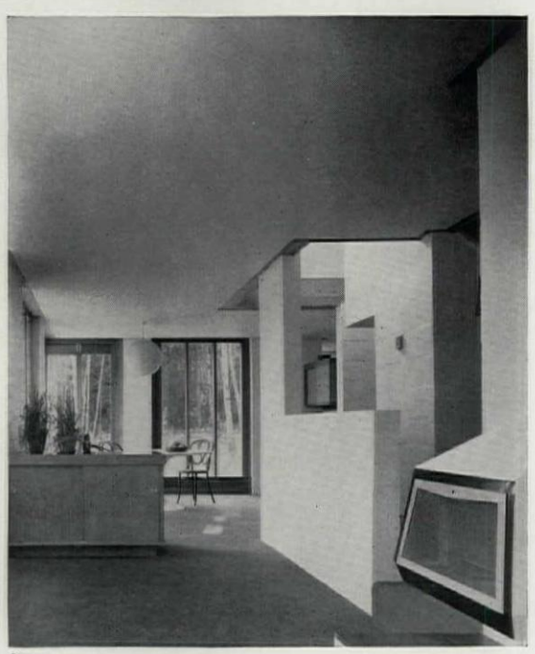

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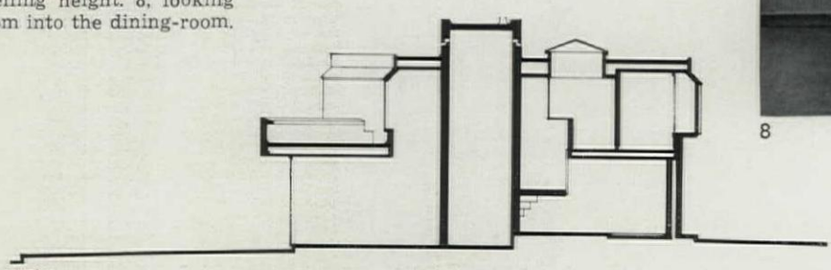
HOUSE AT FISHER'S POND, NEAR WINCHESTER

5, detail of south-west corner, showing successive projection of fascia and first-floor bedroom. 6, corner of the same bedroom from inside. 7, the central core, showing double ceiling height. 8, looking from the living-room into the dining-room.



section

HOUSE AND KENNELS AT PIRBRIGHT, SURREY

architects **BERYL HOPE ASSOCIATES** | *photographs by H de Burgh Galwey*

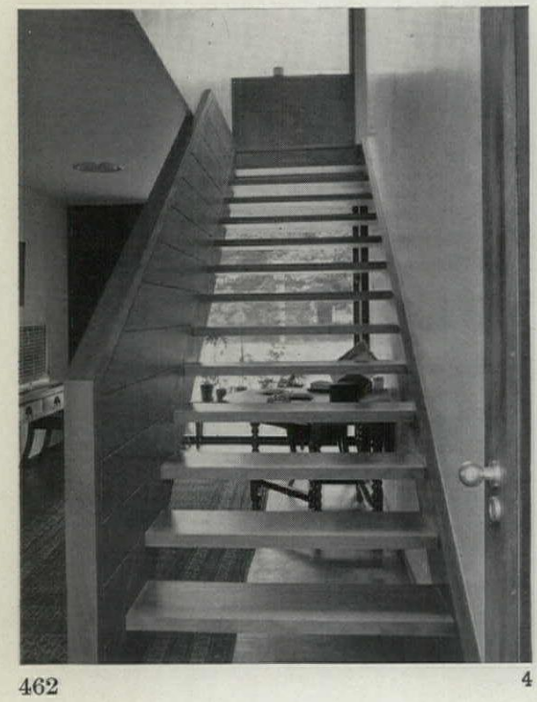
1

1, eastern end of the new house with garage below and main bedroom above; original cottage and farm buildings on right. 2, kennel entrance between old and new buildings.

2

3

3, the new house and kennels from the south, with the older farm buildings beyond. The private entrance is in the centre of this side, with the private living area occupying the first floor. 4, the staircase. 5, looking from the living-room into the dining-room. 6, looking from the dining-room into the kitchen.



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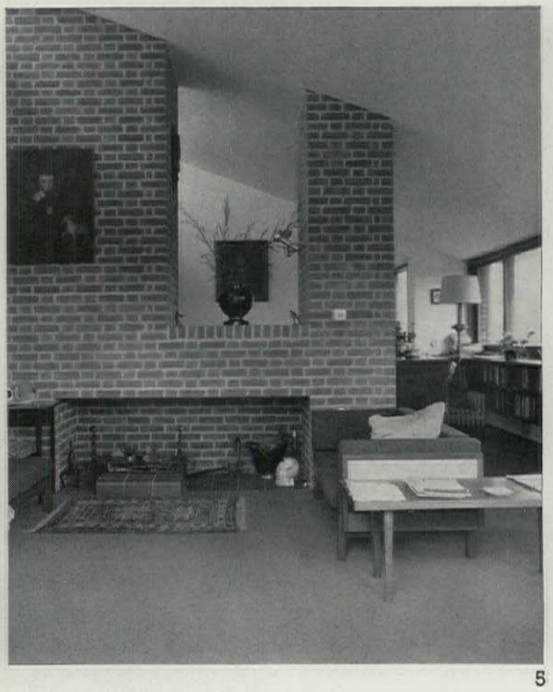

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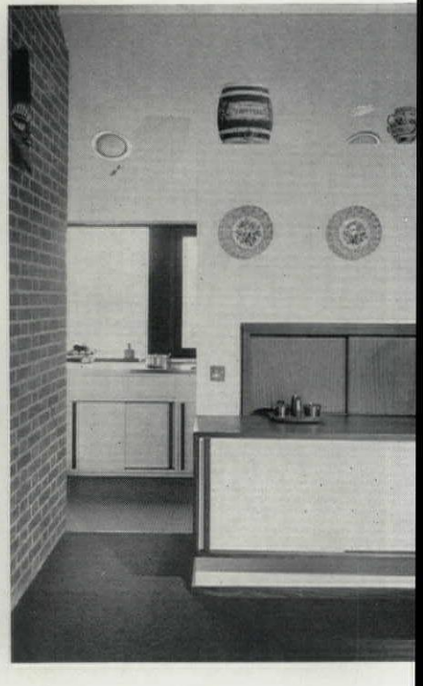
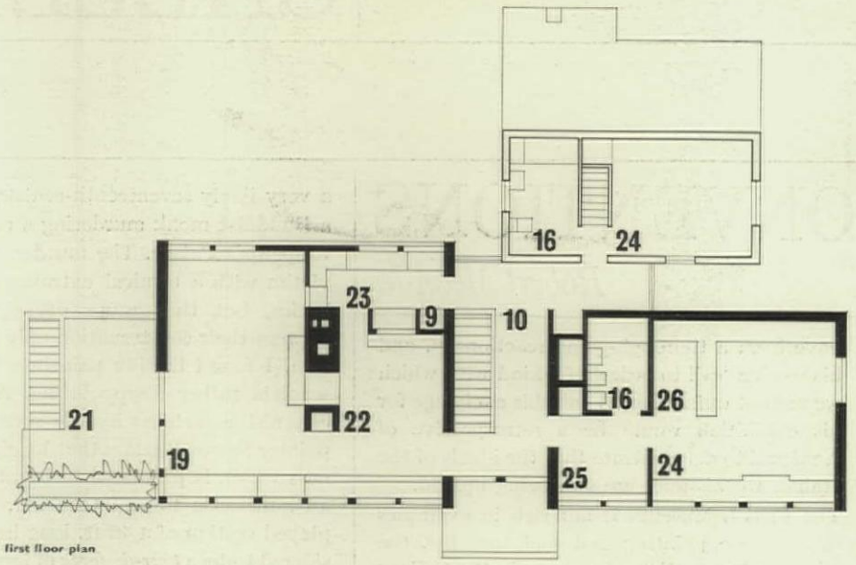


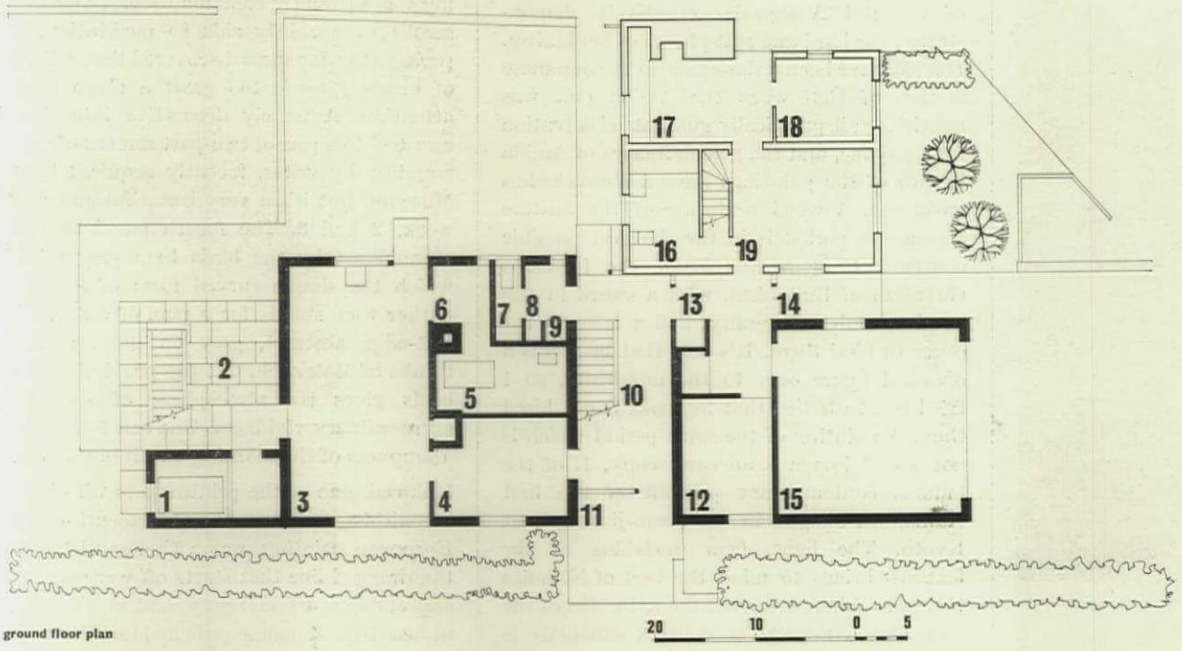
HOUSE AND KENNELS AT PIRBRIGHT, SURREY



first floor plan

key

1. oil store
2. covered terrace
3. chihuahua kennels
4. office
5. boiler
6. store
7. w.c.
8. cloakroom
9. hoist
10. hall
11. private entrance
12. kennel maid
13. reception
14. kennel entrance
15. garage
16. bathroom
17. kennel kitchen
18. kennel maid
19. sitting room
21. terrace
22. dining
23. kitchen
24. bedroom
25. study
26. dressing room



ground floor plan

This is a private residence with special dog-breeding facilities built as an extension to an eighteenth-century cottage on a boarding kennel farm. A previous application for a separate building on an adjoining part of the site was refused planning permission as the farm lies within the Green Belt.

The basic requirement was for open-planned living accommodation as far removed from the kennels as practicable while still maintaining reasonable contact. A small Victorian addition to the cottage was demolished, and the new building sited to the south on a narrow strip of land bordered by the existing driveway which is located on rented property. Living areas are at first floor level and the breeding kennels, offices and staff accommodation at ground floor level. The cottage itself has been converted to provide guest rooms and a kennel kitchen.

Double-glazed sliding wood windows at the upper level, sheltered from the direct sunlight on the south side by deep overhanging eaves, provide uninterrupted views, above the kennel buildings, of the surrounding countryside. The roof-shape of the existing cottage influenced the choice of pitched roofs at varying degrees for the new building. These varying pitches, and the changing shapes and volumes of the units, are reflected internally.

Care was taken to obtain hand-made bricks similar to the old ones, and a copper roof was selected as a suitable match for the existing weathered clay tiles. The copper is dressed down over the fascias and forms panels over the windows on the east and west elevations. Clear sealed afrormosia timber is used for all joinery and veneers. The cavity walls and internal block walls to the living areas are plastered and painted white, in sharp contrast to the wood linings for door openings and window surrounds. Block walls in the kennel areas are left fairfaced and painted white.

The first floor consists of an *in situ* concrete slab to minimize noise transference from the kennels below, finished with a fitted carpet. Red brown paviours are used at ground level on the porch steps and kennel entrance. The breeding area and adjoining office have asphalt paving. Oil-fired central heating feeds radiators and under-cill convectors at first floor level located behind fitted cupboards and seat and shelf units.

Partner in charge, Irving Brauer. Quantity surveyors, du Bosky & Partners.

CULTS AND CONVENTIONS

Robert Melville

Three recent exhibitions of Japanese art defeated my eclecticism and left me in a state of diminished responsibility, with no stomach for lofty spiritual values, a venomous eye for fat-faced Buddhas, scholars contemplating waterfalls and dexterously dragged brush-strokes, and a shamelessly indulgent smile for

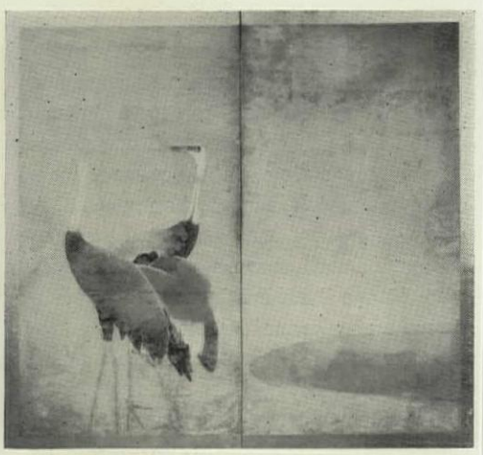
1

anything which reminded me, however faintly, of European masters. The claims made for Tomioka Tessai (1836–1924) were quite mystifying. An exhibition of his work which came to the Arts Council Gallery is circulating in Europe under the sponsorship of Japan's Ministry of Foreign Affairs and the catalogue praises him for resisting all modern trends and recapturing the purity and nobility of the 'traditional concept' of Japanese art. But if his paintings measure up to anything in the exhibition at the British Museum called 'The Classic Art of Japan' it must be for reasons which we would find irrelevant to the art of painting. It's possible, for instance, that his dull, fussily painted, unimaginative view of Mount Fuji is considered pure and noble because it was painted with water which he brought back from the summit, and that his undistinguished conversation-piece of three gnarled representatives of Confucianism, Taoism and Buddhism is valued for its ecumenical significance. Tessai seems to me to have been a thorough-going reactionary, and his work a 'call to order' of a kind with which we are not unfamiliar. A suitable exchange for his exhibition would be a retrospective of Annigoni to demonstrate that the ideals of the Italian Renaissance are still being upheld.

The British Museum is not rich in examples of Japanese painting and sculpture but the selection it recently put on view in the Gallery of Oriental Antiquities effectively demonstrated the hard and soft phases of Buddhism. It must have been a slack time in the Japanese section of Hell when the Amida cult was flourishing; it practically guaranteed salvation for everyone, and the golden images of Amida in two of the paintings have a characterless sweetness. A wood sculpture of the austere Kamakura period is in the sharpest possible contrast. It represents Fudo, the ferocious Guardian of Buddhism, with a sword in one hand to smite the guilty, and a lasso in the other to bind them. It's said that he seems a dreadful figure only to the unfaithful, so I tried not to notice that he looks like a hired thug. A painting of the same period which is not a cult image is an early copy, 1, of the famous contemporary portrait of the first Kamakura Shogun in the Jingo-ji temple at Kyoto. The light, firm modelling of the features brings to mind the best of Nicholas Hilliard's miniatures, and the reduction of the complicated raiment to a black silhouette is echoed in Henri Rousseau's treatment of his own Sunday-best black suit in the splendid Self Portrait which appeared unheralded at the Tate in the 'Cubist Art from Czechoslovakia' exhibition.

The secular pictures of later centuries included a very lively seventeenth-century painting of a Buddhist monk murdering a courtier in the Emperor's Palace. The murderer leaps at his victim with a comical extravagance of acrobatics, but the groups of seated courtiers express their consternation only by raising an arm. I found the ink paintings by Zen landscapists rather disappointing. A set of eight convulsive sketches by the sixteenth-century painter Sesson disclose that heightened awareness which is presumed to be attributable to an adherence to Zen teaching, but the displayed section of a 40 ft. long handscroll considered to be a *tour-de-force* of landscape painting was distinctly commonplace. These handscrolls were chiefly aids to meditation, and perhaps the Japanese discovered that a display of mastery made too great a claim on the attention. A merely decorative intention is ascribed to a pair of two-part screens of cranes standing by water, recently acquired by the Museum, but it's a very beautiful and poetic work, 2 and 3. The fourth panel has been surrendered by the birds to a grey mist in which the simple curved form of a slightly darker tone stands for a pool of water. It's a soft-edge abstract, grey on grey, and one thinks of Malevitch, but the proximity of the birds gives the atmosphere of silence an extraordinary vividness. One can feel the cool dampness of the morning air on one's skin.

Hokusai, one of the printmakers who had so astonishing an influence on nineteenth-century European painting, was a tireless virtuoso of the dragged line that starts off wet and black and ends up dry and grey, and in the studies of beautiful Japanese girls included in a sheaf of his drawings at the Anthony d'Offay Gallery in Vigo Street they were obtrusive enough to seem tiresomely facile. This is due perhaps to the vacuity of the Japanese ideal of feminine beauty; his line had nothing to bite on, and one is quickly bored by these heaps of cur-



2
3

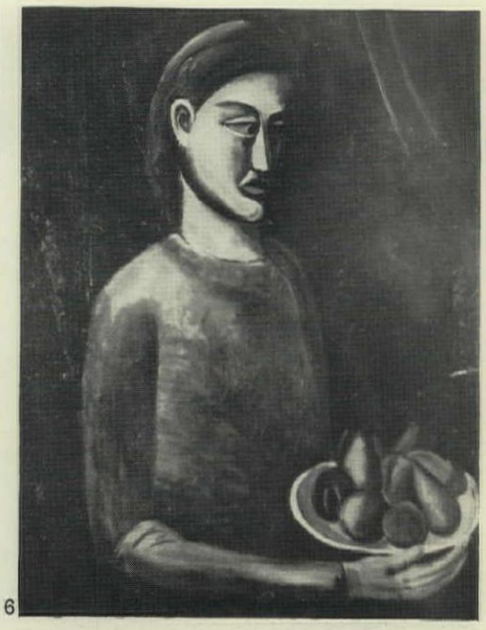
1, *portrait of the Shogun Yoritomo; Tosa School;* 14*th century.* 2 *and* 3, *pair of folding screens; Sotatsu School;* 17*th century.*

4

4, *drawing by Hokusai.* 5, *The Dragon of the Storm by Hokusai.*

vilinear folds surmounted by innocuous faces, 4. But there were other things that testified to his mastery of line, and a study, as if from the life, of a demon clutching its head in nameless fear, justifies the frequent mention of Rembrandt when Westerners discuss Hokusai's drawings. The largest drawing in the exhibition, 'The Dragon of the Storm,' 5, is far from being one of his most inventive essays in the grotesque; it treats a conventional Oriental theme in a familiar enough way, but it has a certain grandeur which is missing from his much more original and nightmarish drawing of an octopus wearing an actor's mask, seated on a large artichoke which is turning with awful inevitability into a creature. In Chinese art the dragon personifies natural forces, and it is this aspect of the theme which saves Hokusai's dragon from becoming too X-certificate; but whereas a Chinese dragon has a majestic, lion-like ferocity, Hokusai has transformed its activity into a slow reptilian swishing. Its destructive power is psychological rather than physical (it's typical of Hokusai to have given it a scholar's steel spectacles) and it could well be turning a gleeful eye on the Garden of Eden. I think Odilon Redon would have greatly admired it.

The Derain exhibition, organized by the Arts Council and shown at the Edinburgh Festival and the Royal Academy, was to some extent a victim of the growing reluctance of collectors to let their pictures undergo the hazards of transportation. (Frightful things can happen to paintings when, for instance, subject to radical changes of temperature during high-altitude flight: Liverpool's Walker Art Gallery has just re-hung its famous Victorian painting 'Dante and Beatrice' after two years in the restoration studio, following a trip to Rome when the canvas shrank and the paint came off in showers). At all events, the organizer of the Derain retrospective apologized for the absence of a number of key works, and although Derain had an enormous output he was represented only by about a hundred paintings, including many minor examples. A larger exhibition would not be likely to modify the impression that his work suffered a sharp decline in the early 'thirties, but it's possible that the paintings of his so-called Cubist period would have made a stronger impact if more of them had been present. A last-minute addition to the showing at the Royal Academy of a portrait of a young girl in a shawl, lent by Picasso, was one of the best things in the exhibition. The mask-like face, however, bore a remarkable resemblance to the treatment of the face in Picasso's 'Portrait of Gertrude Stein' painted when Derain was still a Fauvist. Derain was one of the best of the Fauve painters, and this aspect of his work was fairly well represented in the exhibition, but in the



6

7

6, *André Derain: L'Offande* (1913). 7, *André Derain: L'Italienne* (1921).

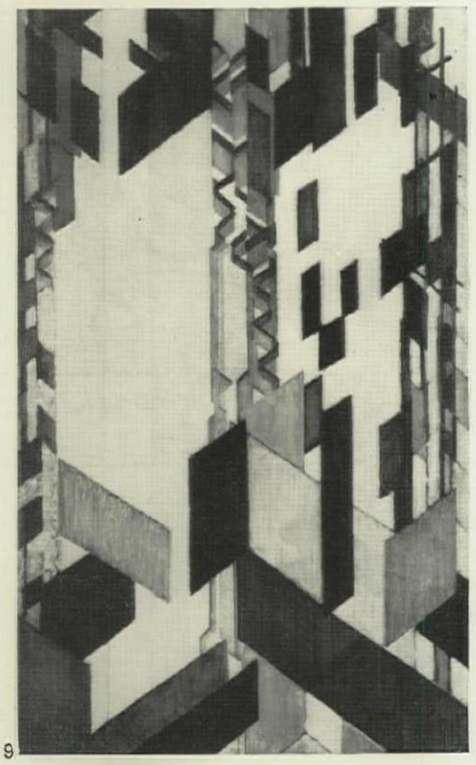
period which followed he became a sort of darkly brooding conservative, hovering on the edge of Cubism and never taking the plunge. His best things seem to me to owe an immense debt to Picasso's pre-Cubist negro period. His 'L'Offande,' for instance, 6, painted in 1913, is an attempt to put the influence of negro sculpture into a tidy, romantic relationship with the 'European tradition,' and he was still trailing after Picasso in 1921, producing things like 'L'Italienne,' 7, which is a soft version of Picasso's neo-Classicism.

The exhibition entitled 'Cubist Art from Czechoslovakia,' which the Arts Council

8, *Picasso: Female Torso* (1908), *from the Kramár collection.*

brought to the Tate Gallery, was a very equitable exchange for an exhibition of sculpture by Henry Moore which the British Council sent to Prague. It included some of the very finest twentieth-century pictures in the collection of the National Gallery of Czechoslovakia, and although the Cubist theme was not, fortunately, strictly adhered to, since we were allowed the pleasure of seeing Rousseau's 'Self Portrait,' the group of Picassos painted between 1906 and 1922 included several Cubist masterpieces. They were collected by Dr. Vincenc Kramár, who bought them soon after they were painted. He also published one of the earliest books on Cubism and became the director of the gallery which was the nucleus of the present National collection. If only we had had a man of his stature at the Tate!

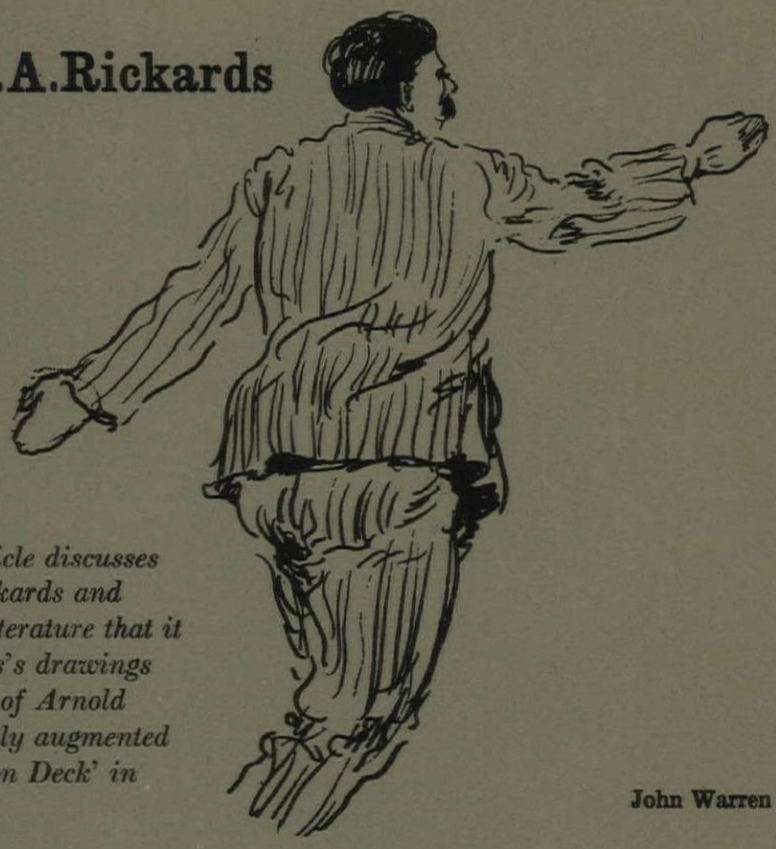
'Female Torso' 8, is one of several marvellous examples of the negro period collected by Dr. Kramár, and the clear, bell-like resonance of its forms makes a sharp contrast to Derain's romantic approach. There were also fine examples of Braque in the exhibition, but the larger part of it was devoted to Czechoslovak painters who were influenced by the revolutionary movements in Paris in the years before and just after the first world war. The most famous of them is Kupka; his work is not Cubist, but he was a lively experimenter in the geometrical field. His 'Vertical and Horizontal Planes,' 9, painted in 1913, is one of his most original conceptions, and has a fascinating dream-like atmosphere which somehow brings to mind Kafka's vision of America. The best of the Cubists proper is the aptly named Kubista. I don't know on what pretext Kremlicka's charming nudes got into the show, unless it was the presence of one of Picasso's greatest neo-Classical giantesses. Certainly the girl in 'Before the Mirror,' 10, can be counted as one of her numerous progeny.



9, *Kupka: Vertical and Horizontal Planes* (1913).
10, *Kremlicka: Before the Mirror* (1920).

Arnold Bennett and E.A.Rickards

That prolific novelist and literary impresario Arnold Bennett, the centenary of whose birth occurs this year, would hardly be thought of as a typical Architectural Press author; yet it was he who contributed the introductory obituary to The Art of E. A. Rickards, *a book published in* 1920 *by Technical Journals (the Architectural Press's earlier name), which celebrated the Baroque brilliance of his closest friend. This article discusses the friendship between Bennett and Rickards and the relations between architecture and literature that it fostered. On the right is one of Rickards's drawings (the property of the author) — a sketch of Arnold Bennett on his yacht. It was later slightly augmented and reproduced as 'Swedish Exercises on Deck' in Bennett's book* The Log of the Velsa.



John Warren

Some twenty years ago the late H. S. Goodhart Rendel said of E. A. Rickards:[1]

'He was a great friend of Arnold Bennett, a brilliant draughtsman who could only work with exciting amatory experiences. He had an extraordinary talent for all-outness, and died young.'

In a curiously staccato way this generalization gets close to the impression given by the voluble, volatile, egocentric little Londoner who was the great moving spirit of that outwardly rumbustuous and flamboyant style—the Edwardian Baroque.

The style that ended so sadly in the emasculated pediments of bankers' Georgian really began with the final bold phase of Norman Shaw's career and was carried to its peak by Rickards in the halcyon days of Imperial prosperity and the *Entente Cordiale*. Writing of Rickards's youthful competition success, Charles Reilly enthused:[2] 'It seemed at the time like a new revelation . . . seemed to open the way to a new world . . . every student was full of it.' The year was 1897 and the building the civic centre in Cathays Park, Cardiff. Rickards was then in his mid-twenties, self-tutored, hypersensitive, questing and querulous. For some years he had been a close friend of a young journalist who had gravitated from the Potteries to London in pursuit of his career, and who sometimes wished that he himself had 'gone in' for architecture. Later in life, when both had achieved professional eminence, the journalist-turned-novelist, Arnold Bennett, wrote: 'Rickards, the man, influenced my view of life more than any other person I have ever met'; and elsewhere he accorded him, with H. G. Wells, the distinction of being 'one of the two most interesting, stimulating and provocative men' he had ever met. More picturesquely, in a speech[3] at a dinner in celebration of Rickards's success in winning the competition for the building now known as Westminster Central Hall, he said: 'Rickards is a sea, an ocean and I have always felt myself to be a child wandering by its shore.'

Throughout their friendship Bennett's Journals record the impact of Rickards's character, and often it is possible to see the two personalities impingeing upon each other:[4]

'Rickards dined with me. . . . He talked about himself the whole time. . . . Of course this exasperatign egotism was painful as a disease to witness, but his talk was exceedingly good and original.'

'Rickards' conversation remains what it was, the most human and genuinely poetic in texture of any I have ever enjoyed.'

'He is now getting hold of me again as a great artist. . . .'

'. . . did water colours with Rickards.'

'. . . Rickards talked incessantly.'

'. . . Rickards arrived. We had a tremendous deal to say to each other.'

'. . . Rickards is wonderfully addicted to talking in the early hours of the morning.'

Of the friendship, Frank Swinnerton wrote,[5] 'They argued the whole time. They never quarrelled. They contrasted each other with complete firmness.' The friends shared from their youth the fashionable Francophilia. They made a joint first visit to Paris in 1897—'Zola's Paris,' for which Bennett had hungered so long. Rickards was lost in admiration for the Beaux Arts scholarship of the French 'free classic.' Both were irresistibly drawn by the romance of the capital:

'As we went home past the Moulin Rouge and met crowds of carriages going towards it each told the other he had no desire to go there, and each lied.'

In architectural terms Arnold Bennett is significant only in that he mirrored in his writings the events and personalities of his day. Through his works it is possible to see the architects and their work at first hand. With eye-witness precision and intensity he describes them and comments on their problems; historical perspective vanishes and, almost by accident it seems, the efforts and frustrations of his architect friends well up through his pages with the immediacy of journalism. His characters were drawn from life, and inevitably Rickards is prominent among them.

Of Bennett's sensitivity towards building matters there stands Frederick Marriott's[6] record of a joint visit to the unfinished shell of Westminster cathedral, in which they were accompanied by Rickards.

'As we walked, Rickards who was in one of his pessimistic moods, treated us to one of his passionate outbursts against things in general and the architectural position in particular. However, as soon as we entered the cathedral all his pessimism immediately melted, and for the moment he forgot the pet theme he had been so force-

fully elaborating, and he broke into an enthusiastic appreciation of the genius of Bentley, the architect of the building.'

'I have never seen Bennett more intensely affected than he was by that great imposing architectural skeleton, unfurnished by surface decoration, and he questioned whether it would ever look finer than it did then, in its crude rugged grandeur.'

The spectacle drew both Bennett and Rickards back many times, and the descriptions of one particular visit afford a poignant insight into the life of the architect of the building as well as a clear example of the literary technique that makes Bennett's work so valuable as descriptive material.

This technique was largely dependent upon his accurate transcription and projection of events about

Self-portrait by E. A. Rickards.

him—scrupulously observed and noted—into his creative work. How closely the observed event and the final description were sometimes made to tally can be judged from an entry in his Journal, of May 22nd, 1901, describing in detail how they had watched Bentley, the architect, wandering alone in the gaunt and cavernous interior. Sixteen years later it formed the basis of a scene described in his wartime novel, *The Roll Call:*[7]

'On the highest floor, at the other extremity of the cathedral, in front of the apse, a figure had appeared in frock-coat and a silk hat. The figure stood solitary, gazing around in the dying light. "By Jove! It's Bentley! It's the architect!" George literally trembled. He literally gave a sob. The vision of Bentley within his masterpiece, of Bentley whom Enwright himself worshipped, was too much for him. Renewed ambition rushed through him in electric currents. All was not wrong with the world of architecture. Bentley had succeeded. Bentley, beginning life as an artisan, had succeeded supremely. And here he stood on the throne of his triumph. Genius would not be denied. Beauty would conquer despite everything. What completed the unbearable grandeur of the scene was that Bentley had cancer of the tongue, and was sentenced to death. Bentley's friends knew it: the world of architecture knew it: Bentley knew it. . . .'

George Cannon, the hero of *The Roll Call* is, on Bennett's admission, a character based on Rickards whom he had then known for something like twenty-five years. The portrayal of Rickards in the novel shows him a highly sensitive man, delighting in artistic creation, and particularly in the esoteric pleasures of his calling; extremely conscious of the world around him, yet self-consciously apart from it, observing it half-quizzically, half sympathetically . . . self-centred and consumed with ambition.

'In the very centre of his mind and occupying nearly the whole of it was the vast thought, the obsession, of his own potential power and its fulfillment. George's egotism was terrific, and as right as any other natural phenomenon. He had to get on . . . he had to be a great architect, and—equally important—he had to be publicly recognised as a great architect. . . .'

'. . . on matters upon which his instinct had not suggested a course of action, George was ready enough to be taught: indeed his respect for the expert was truly deferential. But when his instinct had begun to operate he would consult nobody and consider nobody.'

Passages of pure reportage describe Rickards at work and demonstrate that his designs were not the result of cold calculation, or tentative empiricism. They were the creations of a surge of feeling, of emotion. They were conceived in an instant, not slowly devised, evolving façade from plan. He worked in bursts of enthusiasm.

'. . . the sum of work seemed tremendous; it made the mind dizzy: it made George smile with terrible satisfaction at his own industry. . . .'

'. . . the perspective drawing did not quite satisfy—and there was still time. The point of view of the perspective drawing was too high up, and the result was a certain marring of the nobility of the lines, and certainly a diminishment of the effect of the tower. . . .'

'. . . in one second he had decided to finish the original perspective drawing, and in his very finest style. He would complete it sometime during the night. . . .'

'. . . in a few minutes George was at work, excited, having forgotten all fatigue. . . .'

In all these extracts Rickards is clearly recognizable.

Similar verve and intensity characterized his brilliant caricatures, his sketching and water-colour work. In a book produced as a tribute to Rickards,[8] Bennett wrote of his painting:

'He was extremely excitable and while at work would produce in his companions and himself the illusion that nothing on earth matters but water-colour.'

There are several records of painting trips shared both in England and abroad. These were no doubt in Bennett's mind when he wrote: 'Rickards always had a zest for life

Sketch made by Rickards on Bennett's yacht, The Velsa, probably during a cruise through Holland.

. . . such as I have seldom seen equalled and never seen surpassed.'

and in the same book[8]—

'. . . he was vastly more bitten by caricature than by any other art except architecture . . . Caricature was second nature to him. He caricatured all the time.'

The years of Bennett's success brought him the pleasures of a country house, a yacht and substantial wealth and prestige. Though he had by now married, his friendship with Rickards increased rather than diminished. They shared sailing holidays, and a fluent record of the voyages that Rickards made on Bennett's yacht remains in his drawings for *The Log of the Velsa.*[9]

The Great War first clouded and then obliterated this sunlit landscape, and Rickards died, in 1920, of tuberculosis accelerated by service as a volunteer with the army in France. He had lived in an age when the natural movement in architectural taste coincided with his inclinations, and as that movement lost impetus under new and disturbing forces, his own career had ended. In any evaluation of this short but vivid phase of our architectural history an essential element is the *spumanti* spirit of Edwin Alfred Rickards; to any understanding of Rickards the work of E. Arnold Bennett is essential source material.

---

[1] In conversation with Nikolaus Pevsner: account printed in THE ARCHITECTURAL REVIEW, October 1965. 'Goodhart-Rendell's Roll Call.'

[2] *Scaffolding in the Sky.* By C. H. Reilly.

[3] Read on Bennett's behalf by William Kennerly: Bennett at this time was living in Paris.

[4] Extracts from the selection of *Arnold Bennett's Journals*, published by Penguin Books and edited by Frank Swinnerton.

[5] From a letter to the author. 1956.

[6] From *My Association with Arnold Bennett.* By Frederick Marriott, published by Keele University Library. 1967.

[7] *The Roll Call.* By E. Arnold Bennett. Published by Hutchinson. 1918.

[8] *The Art of E. A. Rickards.* Technical Journals Ltd. 1920.

[9] From *The Log of the Velsa.* By E. Arnold Bennett, published by Chatto and Windus 1920.

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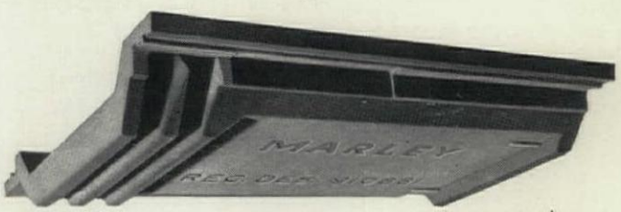

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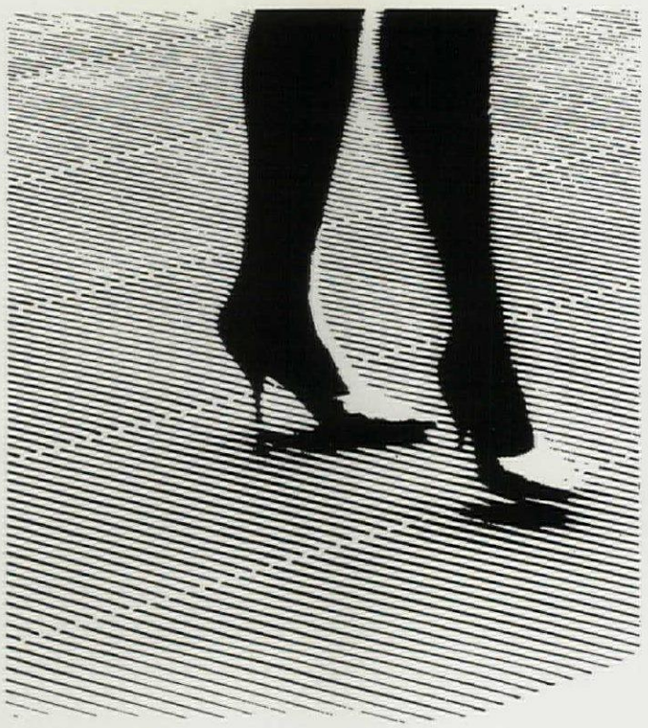

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Design Review

New products chosen and annotated by Ronald Cuddon

DR

Jewellery

The objects I have chosen to illustrate this month may seem remote from architecture, but since this is the last of my present series of Design Review contributions I have allowed myself a certain licence. In any case, since design is indivisible, visual judgment must not be suspended when, having put aside some massive architectural deliberation, one is moved to acquire some tiny adornment or a ring for a significant finger.

The silver necklace, 1, was bought in Copenhagen and made by Warmind, an artist-craftsman working I believe in Jutland. It has a unique beauty and was discovered only after much searching in the jewellery and objet d'art establishments that abound in the Frederiksbergg and Ostergade. In spite of the high reputation of modern Danish silver, I found great difficulty in locating a personal ornament that did not look contrived and where the emphasis was on form rather than applied decoration. In this case, however, the elegant yet strangely primitive forms are clear cut, and by virtue of their pendulous shape, accented by the black enamel inlay, fall naturally and gracefully in a subtle arc. Regrettably, modern jewellery usually lacks these formal qualities; it appears to be an expression of art in isolation, moribund and nebulous, unrelated to the contours of the body, extracting neither inspiration from its physical characteristics and movement nor tactile satisfaction from the materials used. Jewellery could benefit from a study and application of ergonomic theories, and it is therefore refreshing to see the work of a designer whose creative impulse is triggered by an acute and fundamental observation and evaluation of natural phenomena, generated by an understanding of mechanical movement and by an awareness of the beauty of geometric configuration.

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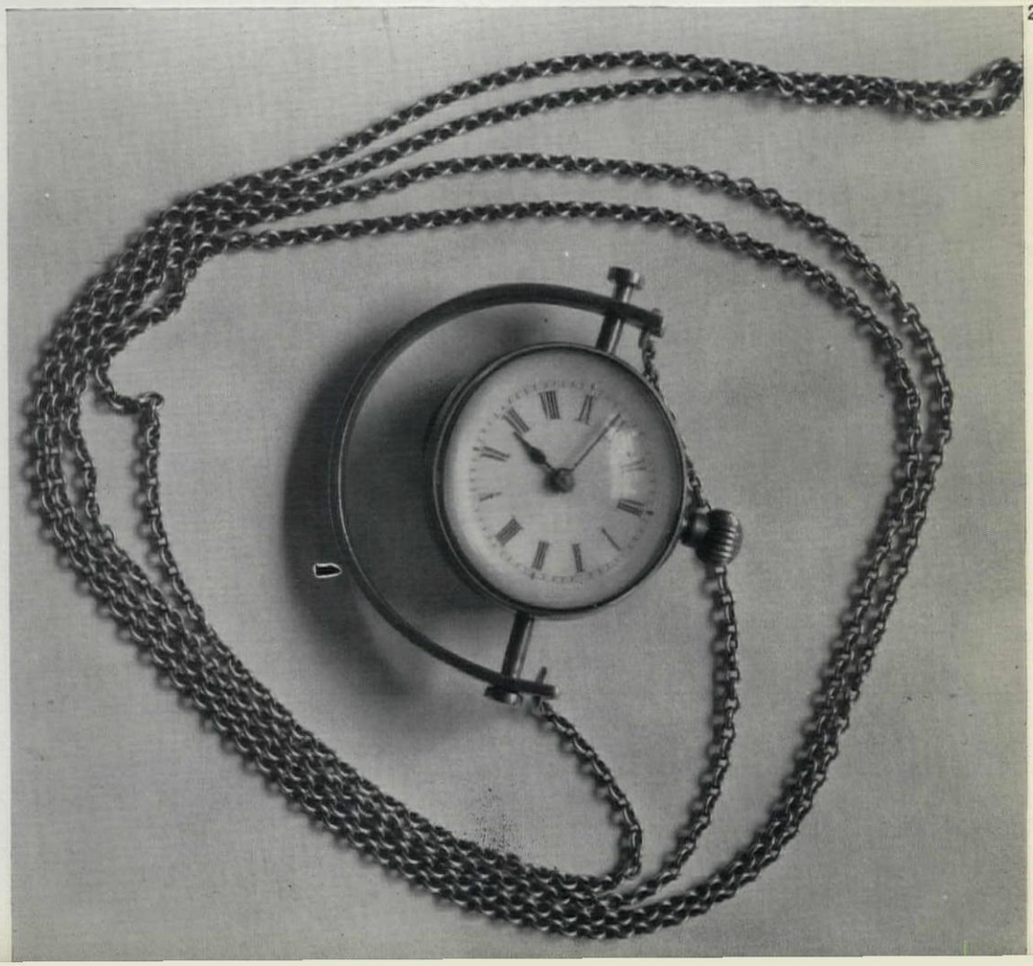
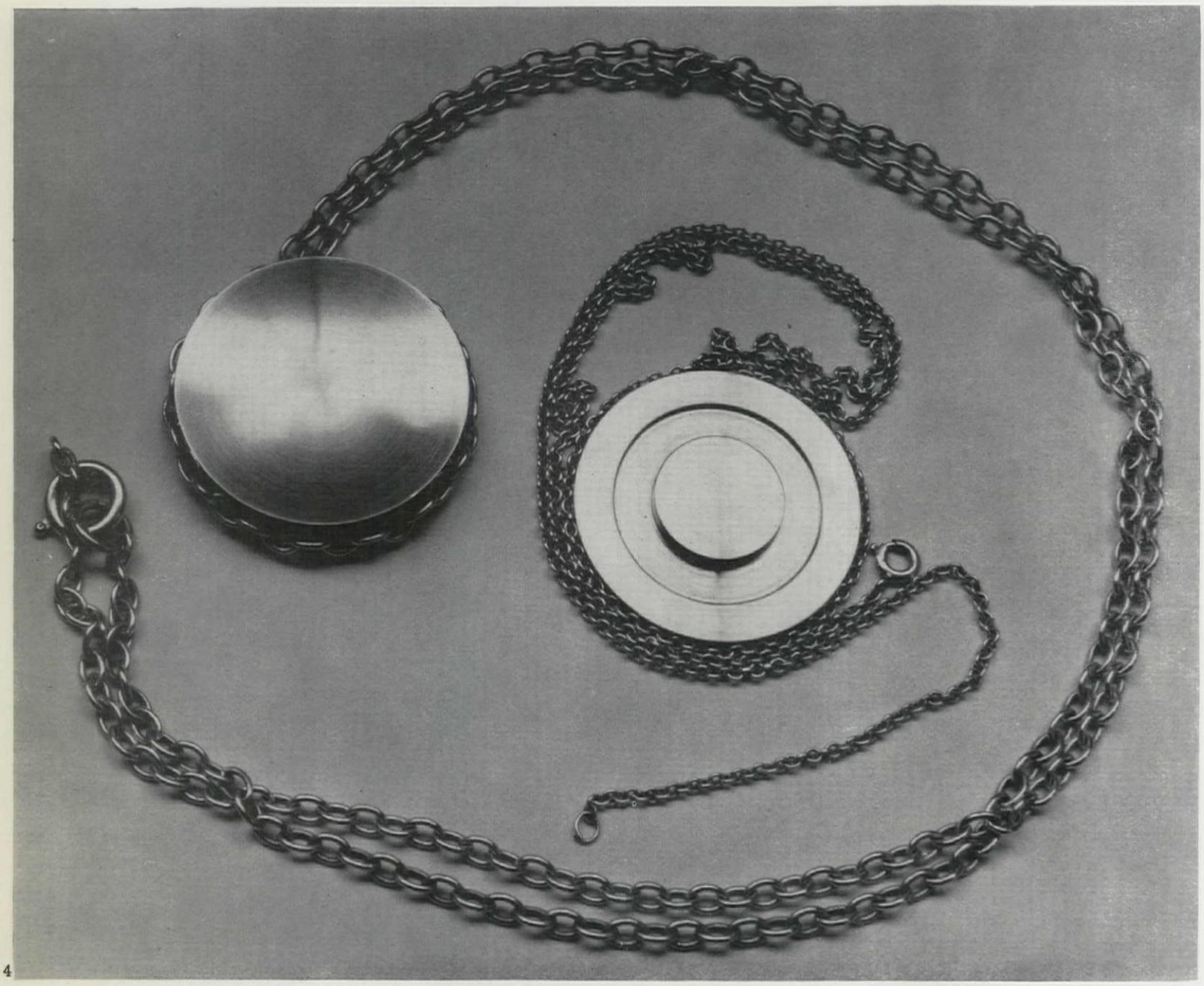


2

These values are illustrated to a greater or lesser degree in Carol Russell's work in stainless steel, precious and semi-precious metals, 2-10. Some of these examples are more successful than others but all have their roots in a sound design philosophy. 2 and 3 show the front and back of an antique watch which has been skilfully fitted gimbal-fashion



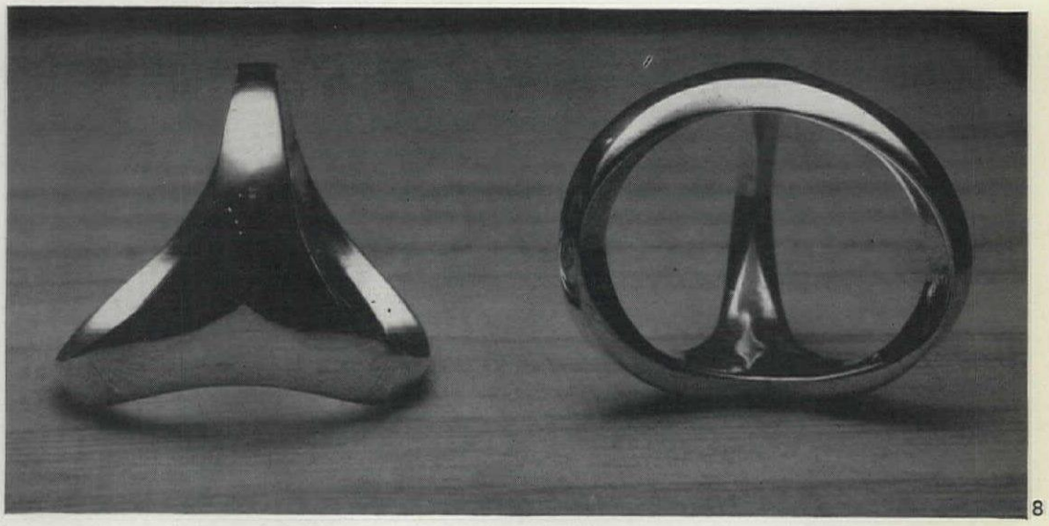
4

to a silver chain designed to hang as a pendant from the neck, to be revolved by fingers abstracted by conversation or toyed with by those fascinated by the rocking action of the suspended watch about its pivot. 4 shows two medallion-like pieces to be hung loosely by chain from the neck. Unwanted protruberances are avoided by securing the chain in a groove formed in the edge of the circular stainless steel disc, rather as a pulley section holds a belt or chain drive, thus preserving the geometric purity of the form. The delicately dished surfaces of the larger medallion have a pleasant tactile quality, and the coarse and fine machining of the different faces is innately decorative, stressing the simplicity of the shape. Engineering techniques have also been adopted on the other disc for incising the surface of the metal.

5,6

5, 6 and 7 (preceding page) are chokers of silver. The lower one in 5 is shown worn in 6 and reveals how the slotted arcs are linked and secured by tiny turn-buckles, whereas the other example takes advantage of the spring in the metal for its fastening. 7, a detail of the hinged links in another choker. The wide silver band hugs the neck, contrasting superbly with the dark skin and the contours of head and shoulders. Formally, and as an idea, the knuckle-ring, 8, is fascinating, but it is probably less comfortable to wear than the simpler turned cylindrical rings shown with cuff-links in 9. The long chain necklace, 10, is constructed from cast silver links but its weight is daunting and the clever concept of shortening length by overlapping every other link, which is then held in position by the broken staggered waist of the intervening link, is not entirely satisfactory and is too laborious a task to more than contemplate.
The last photograph, 11, shows an inexpensive French bangle which doubles up as a watch-strap. It is interesting in the way machine-stamping techniques have been used to produce decorative effects, the perforations visually lightening the broad metal band and revealing glimpses of the wrist. Ingenious clips enable a watch to be fitted to the bangle, but the additional weight of the watch distributed to one side on so loose a strap could prove uncomfortable, the edge of the combination falling unevenly and perhaps cutting the hand when it is in a down position.

Product: Jewellery.
Manufacturers: Warmind (Danish); Carol Russell.



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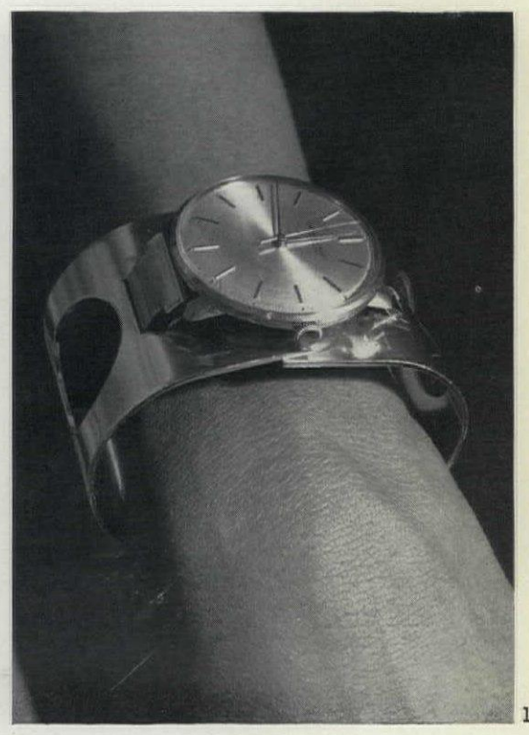


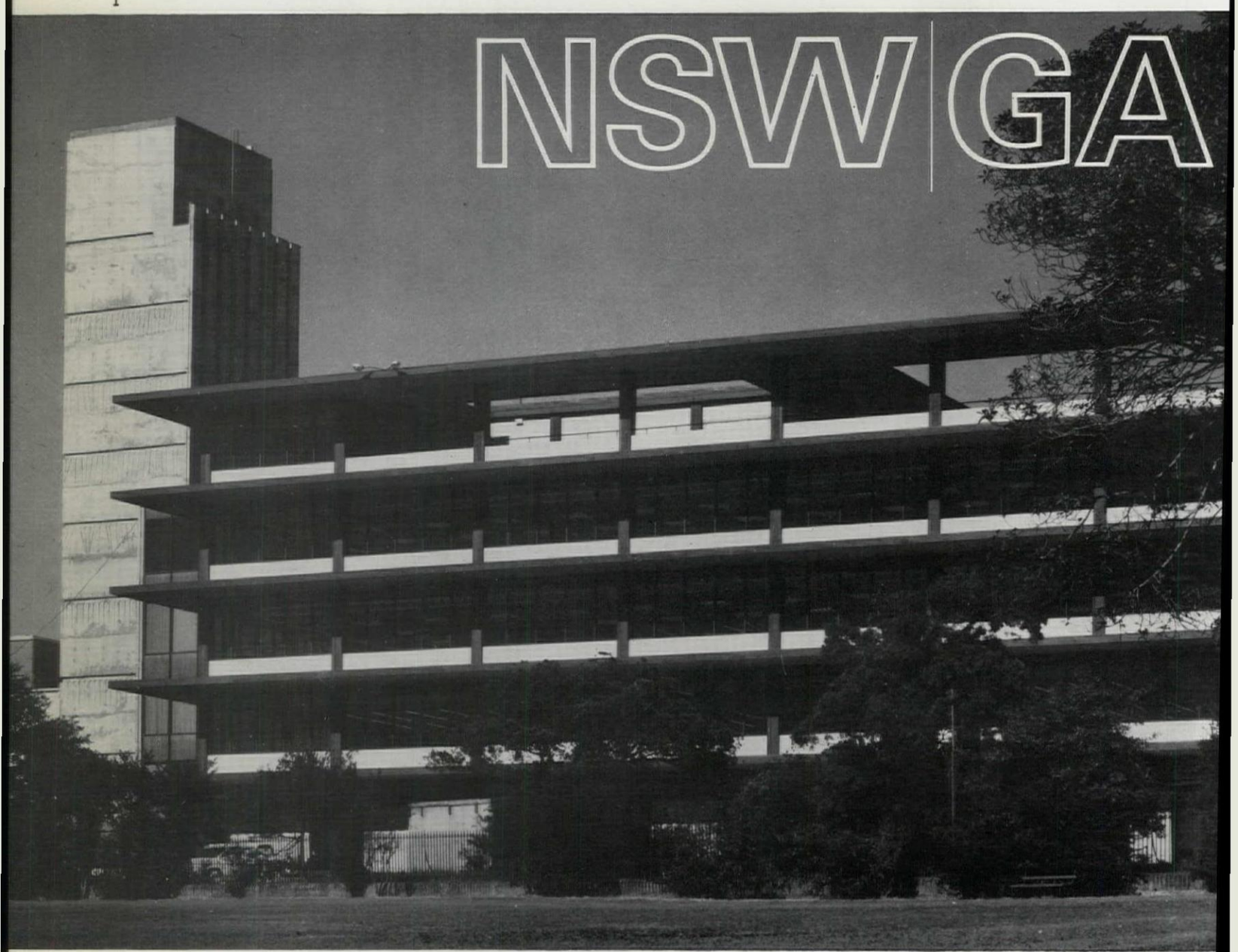
10,11

THE WORK OF THE NEW SOUTH WALES GOVERNMENT ARCHITECT

In theory, the office of the Government Architect of New South Wales is responsible for all public building in the State; there are numerous exceptions, but it still adds up to a lot of building. The annual turnover is currently $A60m, more than any private office and probably exceeded only by the Commonwealth Department of Works among the public offices. Not all of it has the elegance and distinction of the newly completed State Office Block, shown in the frontispiece of this issue; nevertheless this office, alone among the public offices, can be relied on to produce good architecture as well as good building, not only as a response to some outstanding opportunity but almost as a matter of routine. Twice in the last five years the Sulman Prize, awarded annually by the NSW Chapter of the Royal Australian Institute of Architects, has gone to the GA (the popular acronym); once for the Fisher Library at the University of Sydney in association with T. E. O'Mahoney (architect in charge, Ken Woolley), 1, and once for the Goldstein Hall at the University of New South Wales (architect in charge, Peter Hall), 2 and 3. In 1964 the Taree Technical College, 4 (Michael Dysart), won the Blacket Award for work in the Country and Newcastle Divisions. These awards were obtained at a time when the quantity and quality of architecture being produced by the profession generally were greater than they had been for decades.

Already in the nineteenth century the office

1



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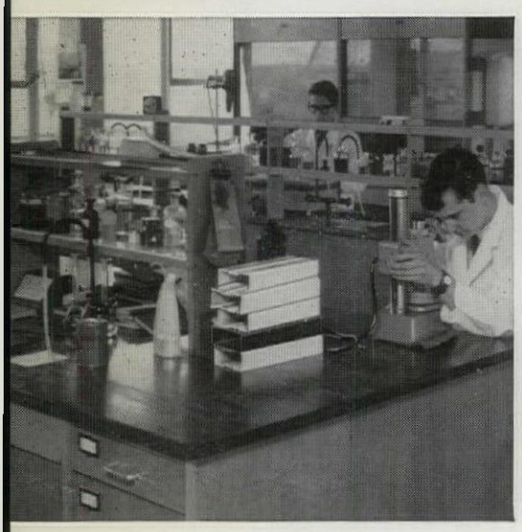

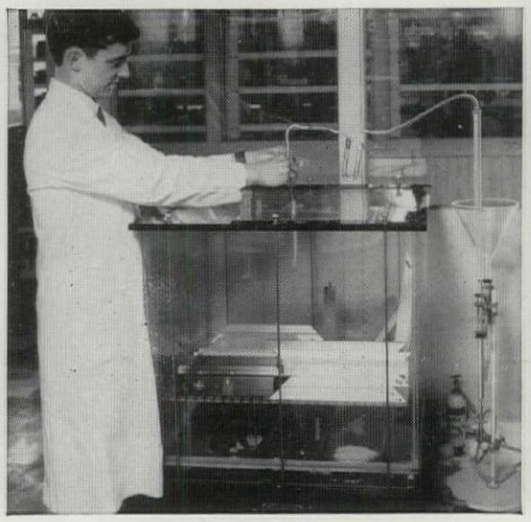

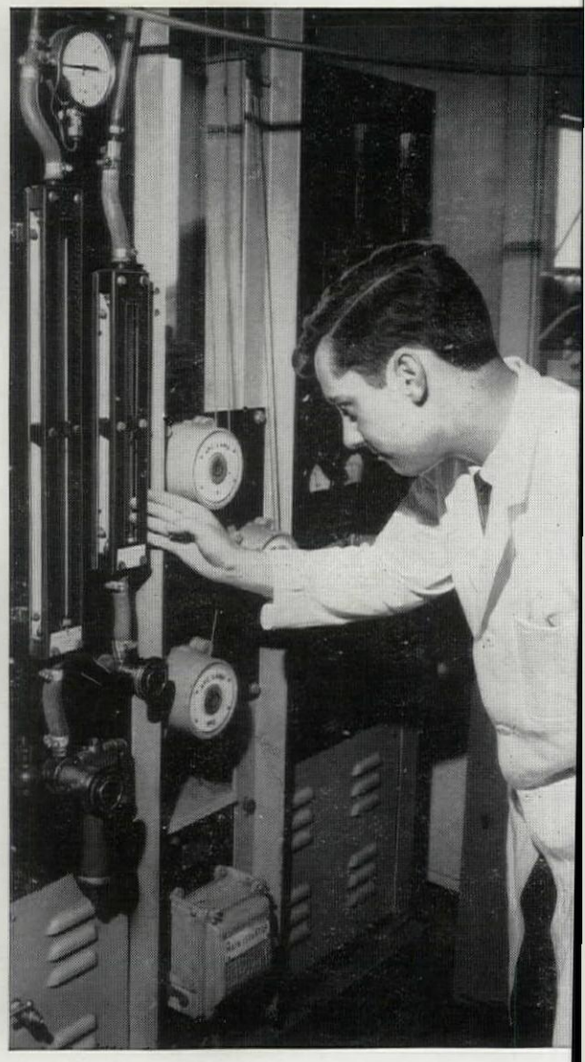

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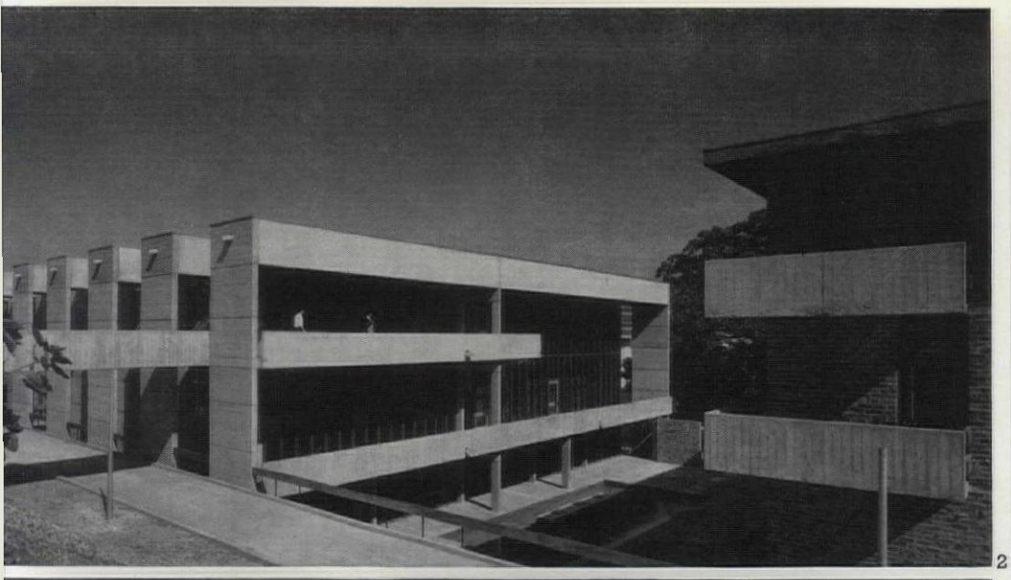

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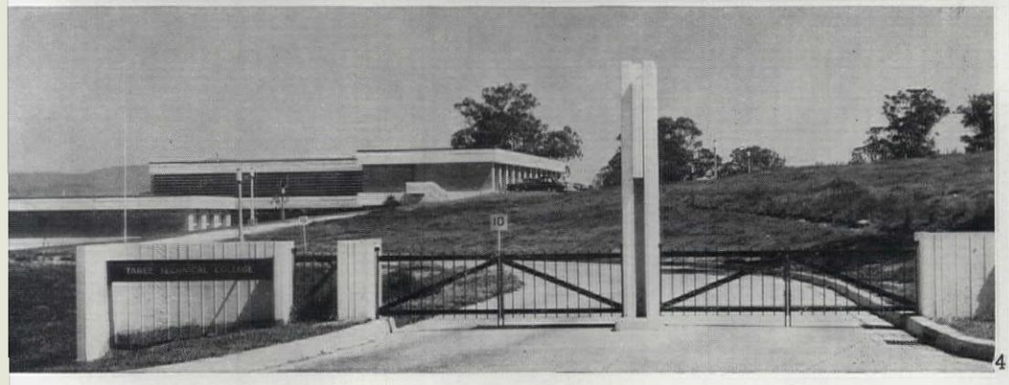

4

of Colonial Architect had established a tradition of quality, of which Greenway's St. James's Church, Sydney, 6, and Barnet's General Post Office, 5, are examples. But by the end of the nineteen-forties, in the aftermath of depression and war, the Government Architect's office had a staff which was actually smaller than it had been in the 'nineties. It must nevertheless have been apparent that a period of expansion was coming, even though the actual scale of the expansion may not have been envisaged. At least the government architect of the day, Cobden Parkes, and the senior designing architect, the late Harry Rembert, backed by an unusually far-sighted Public Service Board, began the policies which are now bearing fruit. Their main problem was staff. In recruiting staff any public body (in Australia at least) had to contend with the bureaucratic image: rigidity, conformity, lack of opportunity. Like many social sub-systems this tends to result in the staff actually hired preserving the image—an image particularly unattractive to young architects.

A nexus of this kind can only be broken by force. The force applied in this case was the introduction of a bonding system; the university fees and living expenses of outstanding students were paid in return for their entering into a bond to work for the Government during vacations and for five years after graduation. The first bonded student graduated in 1954. But bonding by itself was not enough; other public offices have adopted bonding without the same success; the bonded graduates have to be induced not to pay off their bonds or to leave after completing them. This depends on providing opportunities and rewards at least equal to those available outside the public service; and this the GA's office recognized. Young graduates have been allowed to rise through the rigid public service pay structure somewhat faster than usual; they have been allowed to travel or study overseas and complete their bonds after their return (overseas travel was and remains almost mandatory for the newly graduated Australian architect). The compartmentalization of design, the preparation of working documents and supervision has been increasingly broken down and, last but not least, as the demand for public buildings increased, young architects were given opportunities to design major buildings which would still be rare in the 'sixties and were unheard of in the 'fifties.

The first building which was clearly the fruit of these policies was the new Chemistry School at Sydney University, designed in 1953–54 and constructed during 1956–57. It was not an unqualified success. An ingenious structural-service system was encased in a poorly scaled and thermally disastrous pink and blue glass curtain wall. In retrospect, however, this building did two good things; it was at the time a consciously fresh statement, and it put the Government Architect's office in the van of the retreat from the metal-

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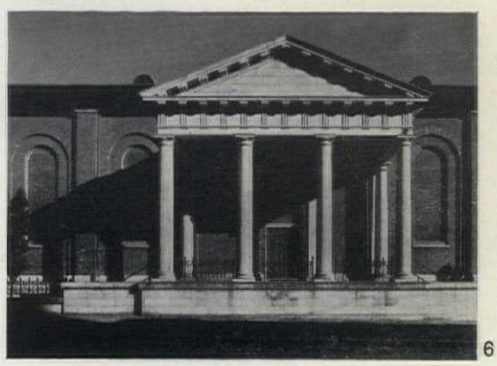
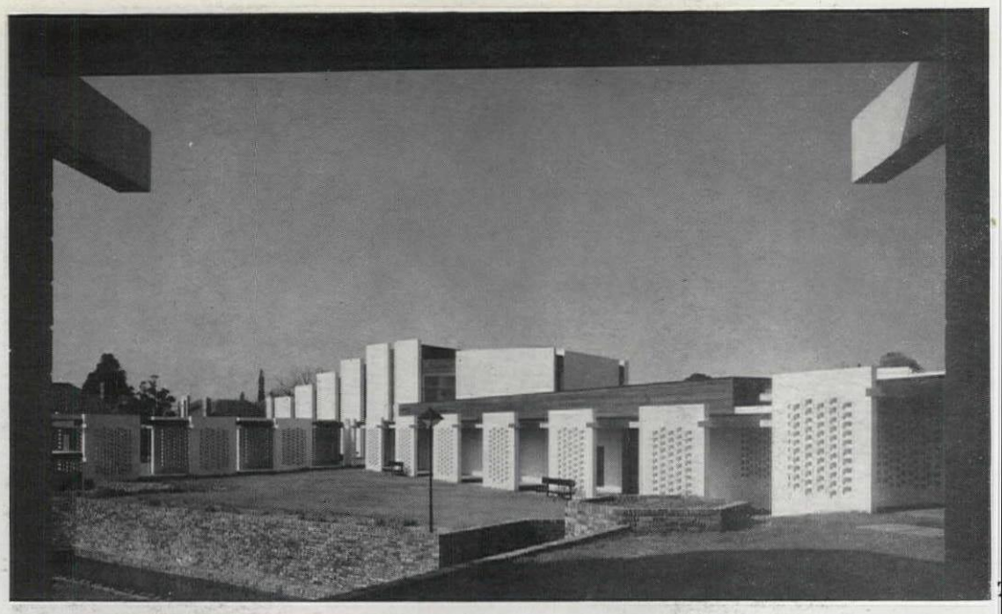
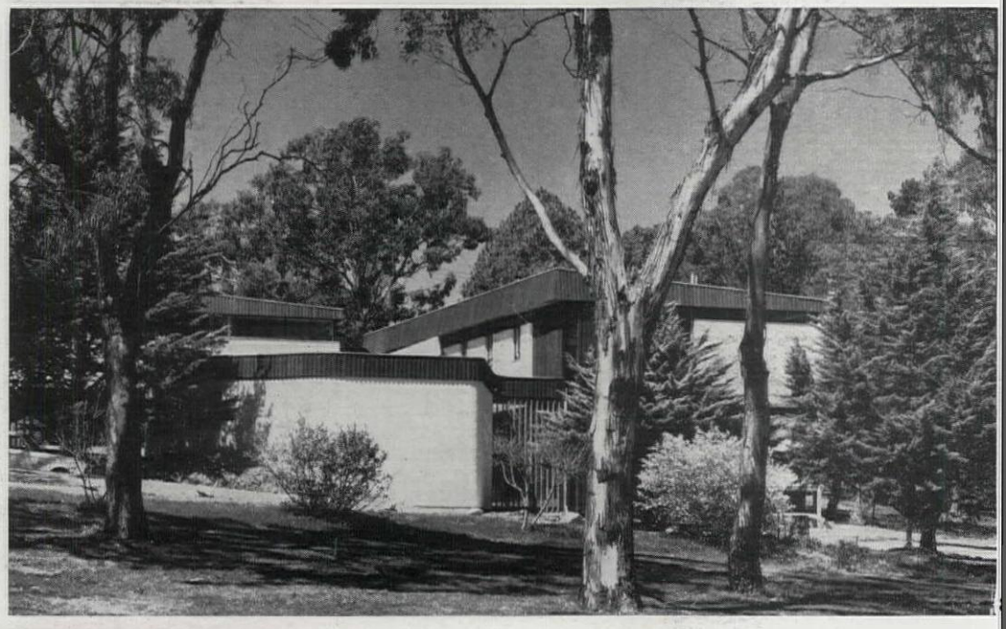
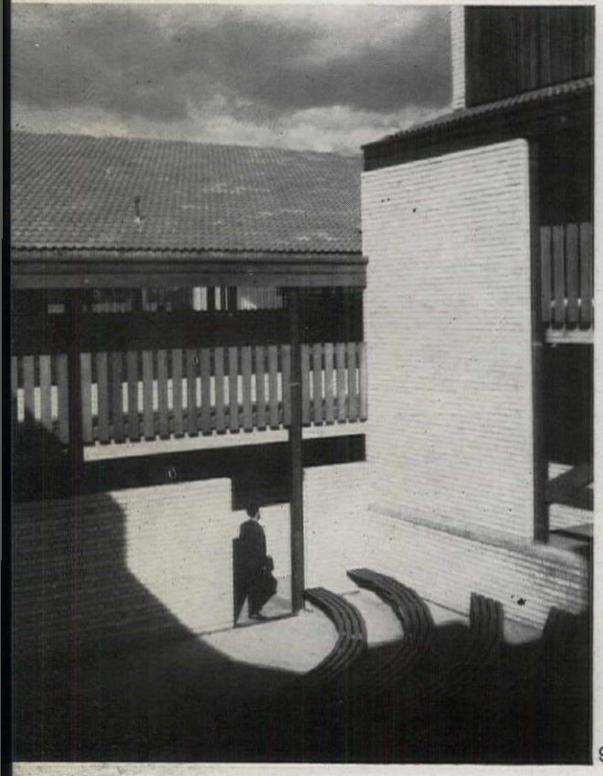


6

glass curtain wall. The development of the office from that point is not independent of the general currents of ideas amongst the young architects of the period, which have produced, if not a regional style, at least something resembling a Sydney School, and it linked the work of architects who would not give one another the time of day, as well as that of the usual cliques and cabals. This broader picture cannot be developed; but some of the formative influences on the four or five architects responsible for the work illustrated can be mentioned. One of these was the AR itself, in its *persona* as champion of the picturesque, rather than as a forum of theory; the picturesque quality of the Broughton Hall (Psychiatric Hospital) Day Clinic (Michael Dysart), 7, of the Psychology Building at the University of New England (Peter Webber), 8, and of Ryde High School (Michael Dysart), 9 and 10, is obvious. The Fisher Library may appear more classical until it is realized that the concrete tower to the left is only the core of a concrete book-stack, now under construction, and is rather larger in bulk than the reading-room section shown. Another influence was the work of Alvar Aalto, which was sympathetic for a number of reasons: he was working, in the middle and late 'fifties, largely in brick and timber, the characteristic materials of Australian construction; the moderate scale and lack of formality of his buildings of this period suited Australian attitudes, and their siting, often in wooded country, was related to that of many projects in New South Wales. Three at least of the designers whose work is shown here visited Finland in the late 'fifties and confirmed their admiration for Aalto. One can see something of his influence in the Lidcombe Hospital Chapel and Hall (Ken Woolley), 11 and 12, in the curved wall and the handling of the roof of the Psychology







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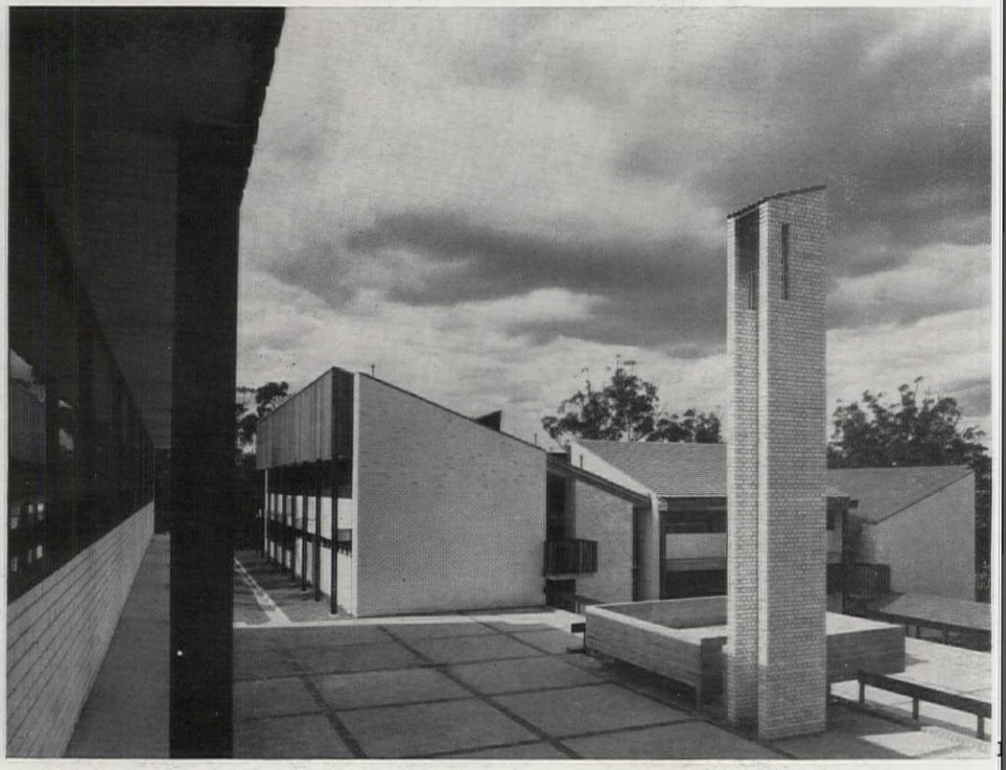
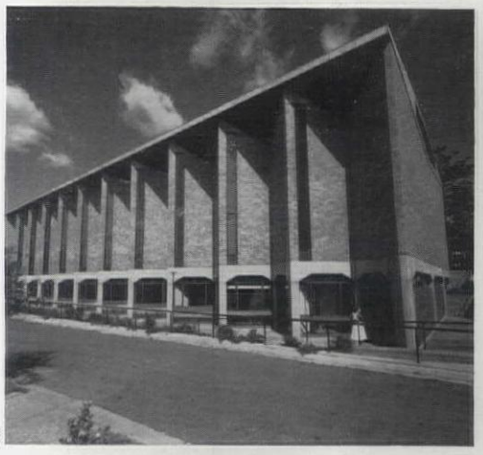


Building at New England, and in the courtyard of the Agricultural Economics Building (Peter Hall), 13. Sophisticated handling of concrete can be seen at Phillip Baxter College in the University of New South Wales, 14.

Finally, and perhaps most important of all, there was the influence of Harry Rembert, who retired as Assistant Government Architect two years ago, shortly before his death. Rembert was himself a designer whose gifts had exceeded his opportunities as a young man, and who sacrificed his further development to create opportunities for the younger men under him. The two or three major buildings designed by him in the late 'thirties and 'forties stand out amongst the work of the time in their clarity of conception and consistent use of materials. In 1935 he designed a small timber house for himself which was left to weather to the natural silver grey. This unassuming building reflects an attitude to materials and construction which was already influencing his assistants before the first Brutalist manifestos appeared. 'Well made' or 'well put together' are phrases which they are still inclined to use, almost unconsciously, to describe buildings which please them, covering in these descriptions not only construction but planning and spatial qualities.

E. H. Farmer succeeded Cobden Parkes as Government Architect in 1960, and has capably and sympathetically steered the office through a period of enormous expansion; Peter Webber succeeded Rembert in 1965. A new generation of architects is now coming forward in the office, who have been exposed to a different range of influences and whose work as it is beginning to appear is different and perhaps less unified in character.

T. HEATH



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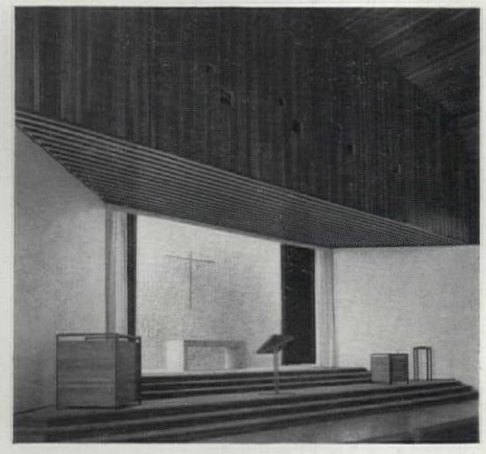

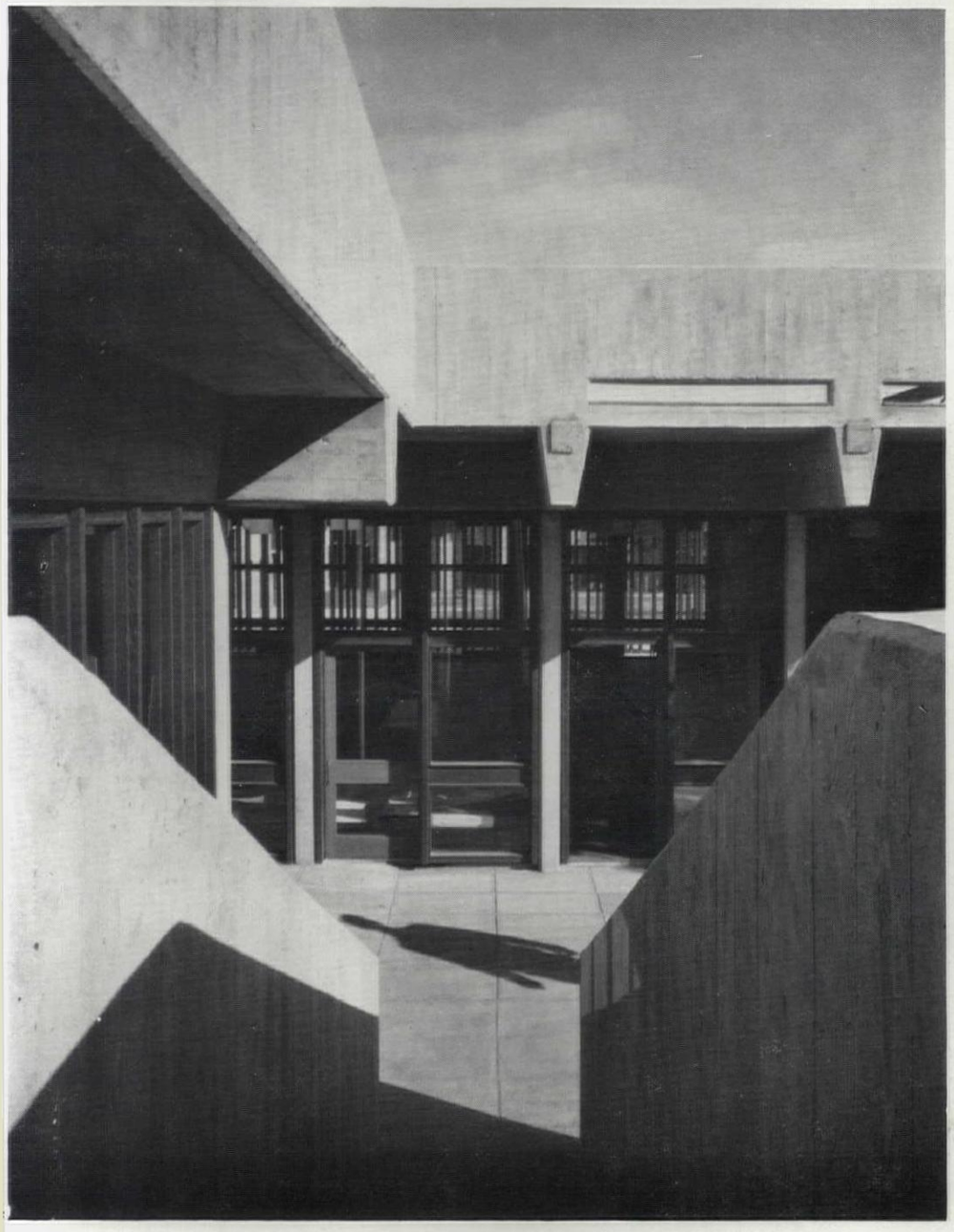

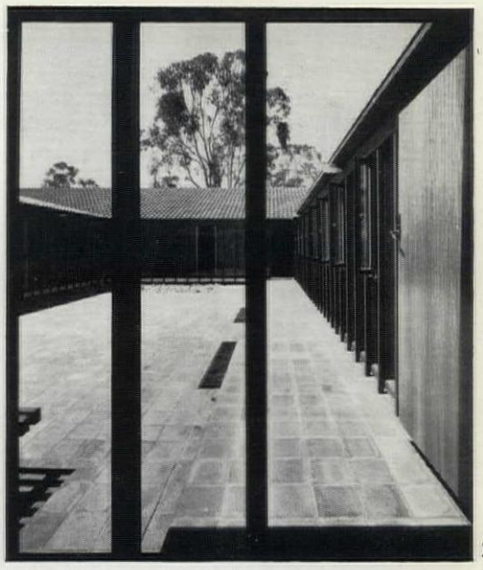

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FINCH IN FINLAND

This month Finland celebrates her fiftieth anniversary as an independent nation and can look back on an era of architectural achievement which has placed her among the most advanced in the world. One of the early pioneers of this development was an English potter, Alfred William Finch, whose writings and teaching did much to inspire Finnish architects. His contribution is little known,

and can appropriately be recalled on the occasion of this anniversary.

To trace the story of Finch it is necessary to go back to the end of the last century; to that time of ferment in architecture and the allied arts in Europe when new philosophies were

1

1, self-portrait by A. W. Finch, 1918.

battling with the old in an effort to come to terms with the machine and its products. The philosophy of Ruskin and Morris calling for a return to a craft culture, and the conscious breaking away from the earlier imitative styles in architecture in the work of men like Voysey, Mackintosh and Philip Webb, were heralding the new thinking in terms of simplification of building form and the rationalization of spatial relationships.

A. W. Finch, having been born in Brussels in 1854, had spent his life working in that city. By the time the new ideas were spreading from England into Europe he was at the height of his powers as a ceramic artist. He became a leading exponent of the new philosophy in Belgium and maintained the closest contact with architects and artists at this time, particularly with Henri Van de Velde.

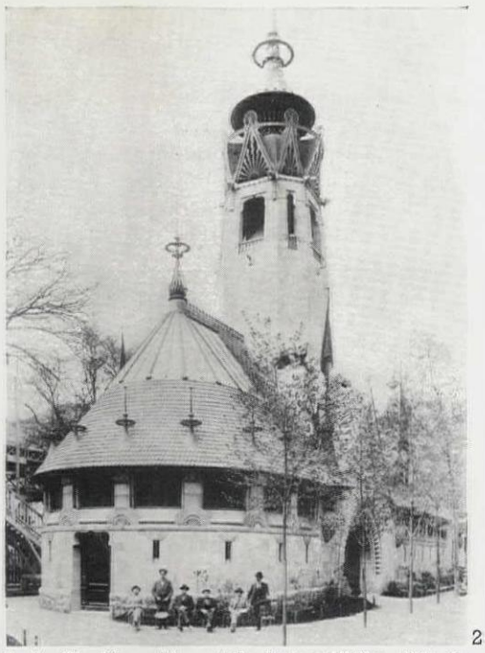
This was also the age of the great exhibitions in Europe, which acted as international forums for the architects and industrial artists, composers and writers from the countries concerned. Such exhibitions were significant for Finland, whose national identity had been submerged first by Swedish and then, after 1809, by Russian domination. All through the nineteenth century Finnish nationalism had been growing, and this was strongly reflected in the arts. Elias Lönnrot had collated the national epic *Kalevala*, and the poems of Aleksis Kivi and J. L. Runeberg had expressed the yearning for nationhood in literature. By the turn of the century the mighty figure of Sibelius was emerging and giving powerful and masterly expression to the national emotion. This was further expressed by architects Gesellius, Lindgren, and Eliel Saarinen in their design for the Finnish Pavilion at the Paris exhibition of 1900. It demonstrated the breakaway from the imposed classicism of Imperial Russia to forms of building based on peasant tradition.

It was at such an exhibition that a widely-travelled Swedish aristocrat, Count Louis Sparre, who was also a painter and interior designer, met Finnish design representatives. Sparre had stayed in England in the 1890s, had become a convert to the Ruskin-Morris philosophy, and had got to know both Finch and Van de Velde in Brussels. The result of these meetings was that Sparre set up the Iris furniture factory at Porvoo on the coast east of Helsinki in 1901 and persuaded Finch to join him as head of the ceramics department. Shortly afterwards Finch was elected Professor of Ceramics at the Helsinki College of Industrial Art, a post he retained until his eath in 1930.p

It may be thought that this would have given Finch little architectural influence, but it should be remembered that Finland was remote from the rest of Europe. Her young architects had gleaned most of their knowledge of the new English ideas from the pages of the *Studio*. Now an English artist had come to live and work in Finland, a man who was completely dedicated to the new movement and clearly understood the architectural implications as well as those of the allied arts. His energy in propounding and explaining the philosophy was considerable, for already in 1901 he had published an article in the Finnish magazine *Ateneum* underlining the difference between the ethic thinking in England and the commercial trends on the Continent, and how the Arts and Crafts movement meant a total change in life and thought in England. He commented on the literary content in the English Movement. . . . 'Should we regret the influence of this literature? I don't think so, because the more numerous are the intelligent elements in the Arts, the higher must be the standing of the Arts.'

He gave concrete advice on the way to furnish a home, starting with a description of the psychological qualities of form and colour, and recommending simplicity, both mental and formal. In this he demonstrated his closeness to the English concept expressed in the architecture and interiors of Voysey and Mackintosh rather than the Continental *Art Nouveau*, which was a decorative rather than an architectural development, in spite of the early work of Henri Van de Velde.

Simplicity, both mental and formal: this was the basis of Finch's teaching, and it was he who arranged for the architect Sigurd Frosterus to go to Weimar to work with Van de Velde where the masters of the new 'functionalism' were gathering into what was soon to become the Bauhaus. The most significant building which Frosterus designed as a result was the Stockmann department store in Helsinki, notable for its simple structural expression in contrast to the national romanticism of Lindgren and Saarinen. Perhaps most significant of all, Frosterus had a young pupil working for him named Alvar Aalto. By the time Aalto had emerged and rejected the stark functionalism of the Bauhaus in favour of a more human treatment in the design and use



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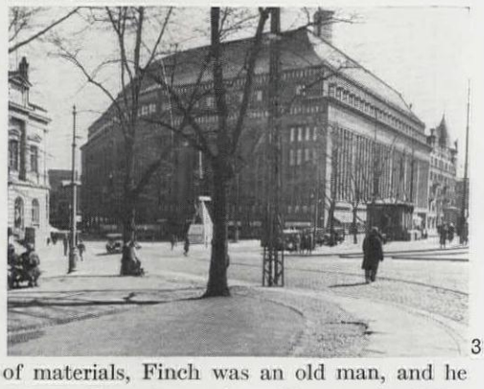

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2, the Finnish pavilion at the Paris exhibition, 1900, by Gesellius, Lindgren, and Saarinen. 3, the Stockmann store in Helsinki, by Frosterus.

of materials, Finch was an old man, and he did not live to see the achievements of the succeeding generations.

Although Finch was a great craftsman in his own right—the simple, sensitive combination of ceramic form and beauty of glaze of his work is proof of this—perhaps his greater contribution to Finnish culture was the single-minded dedication revealed in the *Ateneum* article. If he could see today how Finland has used her fifty years of freedom, he would be well satisfied.

DONALD J. C. COOK

4, ceramics by A. W. Finch.

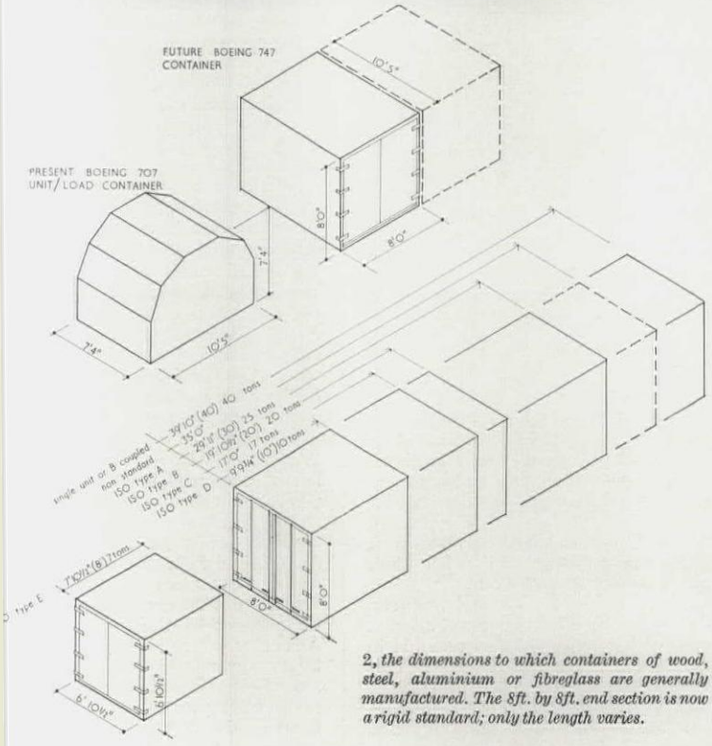
4

skill

The Container Revolution

In this article Peter Falconer points out the trouble and expense we are letting ourselves in for if we do not see at once that the container implies a unified approach to transport. Discussing in turn the current use of containers in road, rail, sea and air transport, he puts forward a project for 'inland ports' at which containers could pass from one system to another with least delay and effort.

1, containers being loaded on to a ship at Felixstowe docks.



2, the dimensions to which containers of wood, steel, aluminium or fibreglass are generally manufactured. The 8ft. by 8ft. end section is now a rigid standard; only the length varies.

The use of containers for the transport of goods by road, rail, sea and air is growing so fast that it may be the accepted method of freight transport within the next 10 years. The advantages of containers are many. They eliminate intermediate, piecemeal handling of goods and make loading and off-loading so much faster, that new time standards can be set for turning round ships, trains, lorries and aircraft. They greatly reduce damage, loss and pilferage risks by the protection and built-in security they provide and by the relative ease with which their movements can be controlled and tracked. Lower insurance premiums and reduced packaging charges, particularly for export goods, are other obvious benefits. Simplified paperwork and checking of consignments make it possible to quote a single through movement charge from door to door, anywhere in the world.

At the same time, containers bring new problems in the co-ordination of container sizes, handling methods, palletization, marshalling transport and storage. An imaginative overall plan is required immediately, so that an effective network of depots can be built up in the British Isles, to take full advantage of the tremendous opportunities now within our grasp.

The much-discussed 'container revolution,' like any other revolution, will succeed or fail according to the planning and co-ordination that go into it. That containers will be used increasingly is beyond question, but this is no more than an extension of a logical series of developments which can be traced back twenty years or more. The container itself is no more than a medium for the integration of road, rail, sea and air transport on a world scale, and if this integration is not fully achieved, the heart is taken out of what could prove a true revolution in freight transport.

To quote the foreword to BS 3951: 1965 (*Specification for Freight Containers*): 'It is emphasized that the purpose of this standard is to establish a series of freight containers suitable for conveyance by road, rail and sea, including interchange between these forms of transport in order to permit merchandise to be moved safely and securely from manufacturer to consumer on a national basis and to facilitate the transporation and handling of freight containers on a world-wide basis.' Against a background summed up in this declaration of intent, one finds railway workers demanding to keep the movement of goods by liner (container) trains within the railway organization—even to the road delivery vehicles employed. One finds rival ports building container handling installations within existing port areas where, with three exceptions, the space available is already (or will soon prove) inadequate. At London Airport, two new cargo depots are being built which take little account of opportunities opened up by the use of containers, the requirements of giant container-carrying Jumbo jets in the 1970's or the rapid loading of modern road transport.

Road transport has the least difficulty in adjusting to container traffic; it has flat-deck vehicles and a number of depots with adequate yard-spaces. However, there is a limit to which road transport of containers can be pushed and, in any case, as the volume of container traffic increases, so does the need for proper container transit-sheds in which goods can be packed, passed through customs, marshalled, and incoming goods unpacked, checked and passed on to the consignee.

Nature of the container

BS 3951:1965, which reflects the results of five years' study and discussion by the International Organization for Standardization (ISO), recognizes the following container sizes and ratings:

Designation	*Height ft. in.*	*Width ft. in.*	*Length ft. in.*	*Rating tons*
A	8 0	8 0	29 11	25
B	8 0	8 0	19 10½	20
C	8 0	8 0	17 0	17
D	8 0	8 0	9 9¾	10
E	6 10½	6 10½	7 10½	7

Operating requirements, apart from the obvious one of containers being weatherproof, include stackability (when filled) at least four-high in the case of container types A to D and three-high for container type E. A proportion of containers may never need to be stacked, but quite apart from uniformity, the drafting committee came to the conclusion that the increased cost of manufacturing to meet these requirements would be

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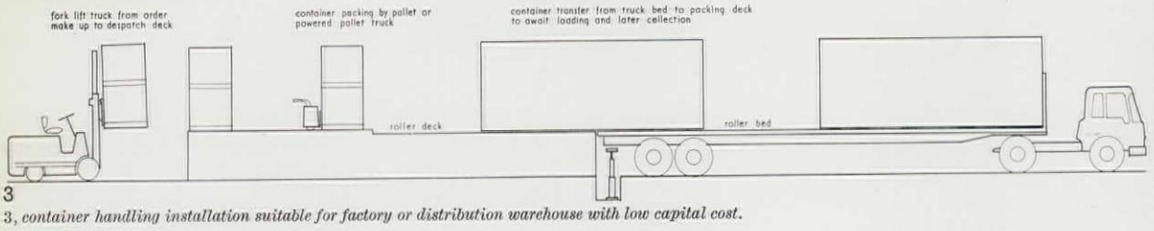

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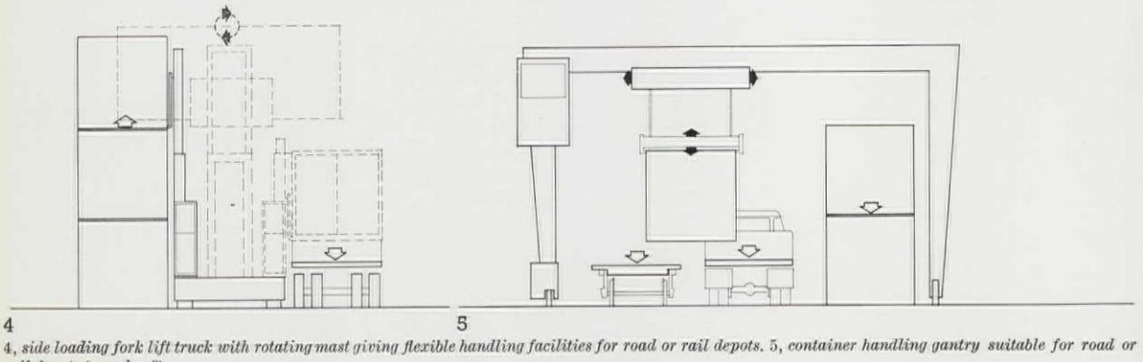
3, *container handling installation suitable for factory or distribution warehouse with low capital cost.*



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4, *side loading fork lift truck with rotating mast giving flexible handling facilities for road or rail depots.* 5, *container handling gantry suitable for road or rail depots* (*see also 9*).

offset by lower maintenance cost and a longer life.

Minimum provision for lifting is from the top corners and bottom corners in the case of container types A to D and from the top in the case of type E, which should also be capable of being raised by means of a forklift truck. The nature of corner fittings dictates not only the type of spreaders and other lifting attachments to be used in handling the containers, but also whether or not interlocked stacking of filled containers will be possible, compatibility of top and bottom corner fittings being necessary.

Materials for constructing containers are not specified in BS 3951, because this could inhibit design and the introduction of newer materials. Broadly, selection is based on strength, lightest possible tare, greatest possible cubic capacity and ease of cleaning, which is particularly important in food handling. Wood, lightweight alloy and steel as construction materials have been joined by reinforced plastics. Containers are either built up from panels on a steel frame or one-piece moulded in reinforced plastic, which is lightweight, resistant to corrosion without the need for protective painting and easy to repair.

Filling the container

A container may be 'filled' (the word 'loaded' is avoided, as it could be confused with subsequent handling of the container) at any of these three points:

1. The manufacturer's premises, where it may be sealed by customs. In some cases, containers are delivered to the supplier, filled, transported to the dock and presented to the ship all in the same day.
2. An inland port or depot, which will also serve as a general goods clearance point. Here, smaller items from one source can join others bound for the same destination, making up complete container loads under what is termed a groupage system.
3. A port at which containers are to be loaded on to a ship—either a pure container ship or a mixed cargo vessel carrying a proportion of containerized freight.

Goods or materials transported in containers may be:

1. Bulk solids or (in special containers) liquids.
2. Discrete items such as a large number of individual packages.
3. Units loads, being a number of items assembled either:

(*a*) on a standard pallet;

(*b*) on a throw-away pallet which has runners or feet which enable it to be handled by forklift truck, yet is of cheap enough materials for it to be disposed of at at the end of the journey;

(*c*) as a self-palletized load, being a number of items packed and bound in such a way as to provide for handling by forklift truck or crane, without the need for a pallet as a base.

Filling of containers with a number of unit loads rather than with a very much greater number of individual items is obviously faster, but there are circumstances where this is impracticable; articles of widely different size, unsuited to palletization, may have to be despatched together to a single destination. As multiples of standard pallet sizes seldom match the internal dimensions of containers, special pallets are generally needed for use in containers if all the space is to be filled by mechanical means.

Most items small enough to fit in a container — excluding established bulk materials such as sugar and wheat—will ultimately travel in one, at least on sea routes. There are, however, many types of goods which, for transport by road to rail and for simpler, more flexible handling in factories and depots, are better in some unit load form.

Unit loads of less than container size need not be put in containers for carriage on lorries; this fits in well with the roll-on, roll-off concept, under which ferry-type vessels on short sea routes such as to the Continent and Ireland are loaded without the use of a crane. A ramp enables goods to be driven on, towed on or carried on by forklift truck. Turn round time saved on a short voyage—time at sea must not greatly exceed the very short offloading/loading time—outweighs the poor use of cube on board, due to the space occupied by vehicle wheels.

This means that a container depot must provide not only for receipt, storage, despatch, filling and emptying of containers, but also for the handling of unit loads—those received from smaller manufacturers who send export goods to a depot in unit form for transfer to a container, and those destined for onward movement by roll-on, roll-off ferry or some other form of transport favouring the uuit load as much or more than the container.

A second conclusion to be drawn from the above paragraphs is that Customs procedures will have to be revised so that officials are available when required at both individual factories and inland depots—as well as at the docks, as at present—to seal filled containers.

A third point of interest is that whereas it may be possible for a container supplied by a transport operator to a manufacturer for filling at factory level to be turned round in a matter of hours, in other circumstances a container may serve more as a sorting bin cum miniature warehouse; at a depot, a container could be earmarked for despatch in, say, three weeks' time to Fremantle, all the goods for that destination being assembled in that container in the meantime. This is very much better than the traditional system of laying out assorted bundles on the floor of a transit shed, for subsequent movement to the dock and on board in a loose, pilferage-prone form.

Containers by sea

Britain's export trade depends on ships, which make strikes, costly movement of goods, pilferage and breakage, a national scandal. The advent of unit loads and containers offering the first true advance in methods of loading and discharging cargo since steam ships first appeared, has not been welcomed by the port authorities, encumbered with their old-fashioned installations.

Because of the labour and financial difficulties they have a vested interest in carrying on as long as possible in the present haphazard way. This country is 10 years late in starting to tackle the fundamental problems that cut across orthodox thinking and show up the unsatisfactory do labour position. The idea of specia designed container ships and t minals to accommodate them w first aired in America about 1955 b was viewed with trepidation here. On short sea routes, such as to Irela and the Continent, the roll-on, ro off transport system mention earlier enables ferries to be turn round in one or two hours. The l use of cube is acceptable on sh regular journeys.

Talk of a 1,000 ft. berth being al to handle ten times as much car as at present and of one ship doi the job of five on the UK—Austra run, gives an indication of what co tainers and large container ships c mean. But the assembly of contain for shipping and the rapid dischar of cargo in containerized form prese major problems for facilities a organization.

There are indications that contair ships will in general carry up something like 700 containers. (New York's Port Elizabeth sea/roa rail terminal, ships carrying mo than 600 35 ft. long, 20 ton capac containers are being joined by oth of twice this size.) As it will possible to load or unload at a ra of about one container every t minutes, computer control will necessary to ensure that contain are presented for loading at the rig time and in the correct sequence. the same token, either a high organized rail system must provided to carry away the contain as they are unloaded, or there mu be a very large area at the quaysi for containers to be stacked. In fa since the stacked containers still ha to be dealt with, it seems that t sooner containers can be on their w to container depots or throu Customs and on to their destinati the better for customers and de operators alike.

Movement of containers on land c be by forklift truck, sideloader, straddle carrier, mobile crane, gant crane, 5, or conveyor. The first fo mentioned have the advantage th they can travel anywhere on le surfaces under their own power, b they can be used for direct loading vessels only where a relatively le drive-in can be provided. Selecti factors, apart from flexibility movement, include load lifting a travel speeds, the range of contai sizes that can be handled, stacki ability, the accuracy with which co tainers can be placed where they a required, the necessary gangw widths and the degree of selectivi that can be attained among contain stacked in a given area.

For actual loading of container shi at present it appears that use of container crane as at the Churcl docks, Antwerp, provides the b answer. However, cranes must be f with containers during loading, wh in the course of unloading contain must be carried away from the po where they are 'dropped.'

With the coming of containers a large container ships, it becon possible to take an entirely fresh lo at everything from port locati upwards: a port need really be onl deep berth with facilities for tra ferring containers from ship vehicle or vice versa, very much the pattern of the new oil have Assembly of loads, checking of co tainers through customs and marsh ling of containers in the correct or for presentation to the ship could be carried out at inland depots.

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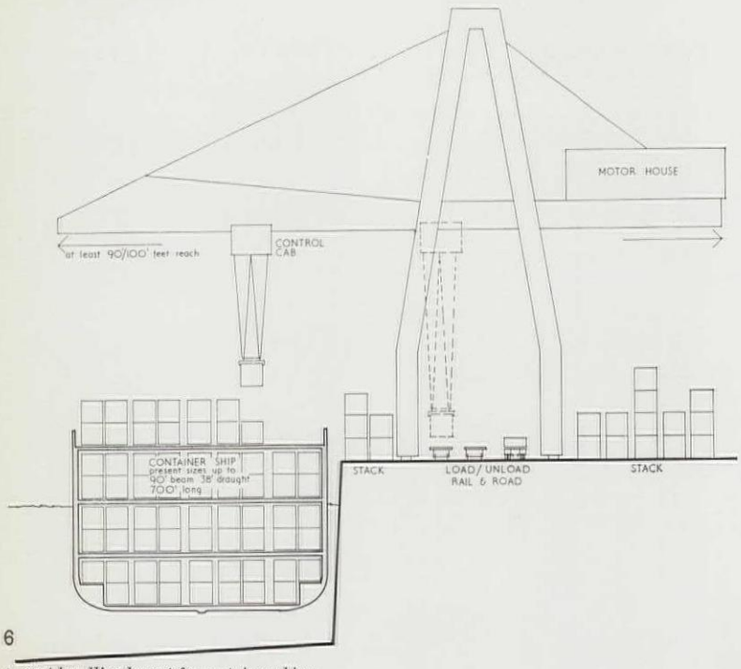

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6, *port handling layout for container ships.*

continued from page 478]

transit sheds and depots are to be built out in the harbour areas, it is possible that even the largest ships would be brought within covered areas for loading and unloading. It is becoming increasingly difficult in this climate to obtain labour willing to work against the elements and a blizzard can stop work outside.

Ideally, it should be possible for a manufacturer to fill a container at his factory for an excise officer when required, and check and seal the container so that it can be despatched to arrive alongside the ship for loading precisely when required. There is no reason why this should not be achieved in a computer controlled transport system. By contrast, it is not unusual for goods to be presented three or four times under the present system before they are finally loaded on board. Unless the customs service is changed completely within the next five years, unnecessary capital expenditure and high transport and storage costs will be inevitable.

Containers by rail

Transport of containers by rail on regular high speed liner trains is an economical and satisfactory method of moving goods between two main centres—where traffic is regular and both starting and delivery points are themselves close to the depots where loading to and from the rail wagons takes place. Ideally, the distance run on the railway must be over 100 miles and should be at least twice the total distance run by the road vehicles carrying the containers at either end. Only on long journeys can the total time taken be less than if a lorry runs the whole distance, while transport to and from the railheads will have double the waiting time and will be less likely to back-load (carry a load on its return journeys) than a long-distance lorry will be.

Where a manufacturer can use the railways to transport containers on a regular basis direct from his works to another plant or to a depot, rail holds definite advantages. It is this type of business on which the railways are likely to concentrate.

Location of railway container-handling depots presents a most difficult problem. In the London conurbation land at present occupied by rail sidings tends to be in areas of acute congestion from a road traffic viewpoint, and industry is tending to move away into development areas. London's new rail one-and-a-half million pound international freight terminal at Stratford, 7, 8, occupies an old railway shed area of 35 acres, but the total area available, including the new freight liner loading area, amounts to 100 acres. The new te minal had to be constructed ve quickly because of the disastrous fi at Bishopsgate which destroyed t goods depot there, but the origin concept has been altered during t course of construction. It has no been developed by British Rail collaboration with nine freight fo warding agents, each of who operates in their own shed, in whi they receive goods, pack containe or railway trucks, and have their ow customs arrangements. It now seen that these agents will deal more a more with containers only, both f internal and export purposes.

The depots, which have a clear ro span of 175 ft. and headroom of on 12 ft., have raised floors in order load rail wagons by fork trucks ru ning into them, which is done insi the buildings, which are not heated insulated. Surprisingly, road vehicl are handled outside the building a because of the loading banks most the lorry loading and unloading is l hand and not by fork truck, as done at the sea-land Rotterda depot and in many other depo throughout the world. The decisi to erect a depot village, rather th a single depot subdivided for t various forwarding agents, aro because of commercial considerati but may lead to difficulties in t future because of unequal expansi of the various freight forwardi agents.

The freight liner terminal lies alo the north-west side of the site and t first of the projected three install tions is already in use. It consists three rail sidings and one roadw spanned by a Morris gantry cra which can lift 24 ft. long containe off the railway trucks directly on the lorry beds, 9. The depot lies so hundreds of yards from the forwa

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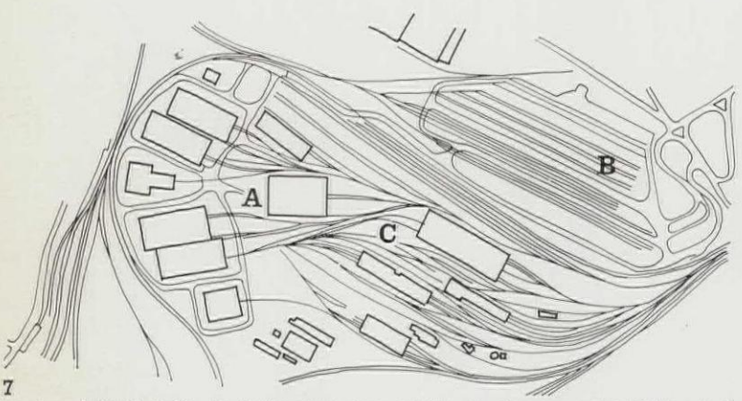

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7, *plan of British Rail's Stratford rail terminal, London.* (A, international freight terminal; B, Stratford terminal—three sets of gantries above three sets of track and roadway; C, motive power depot). 8, *the sheds at Stratford.* 9, *Morris crane in operation at Stratford.*

8

9

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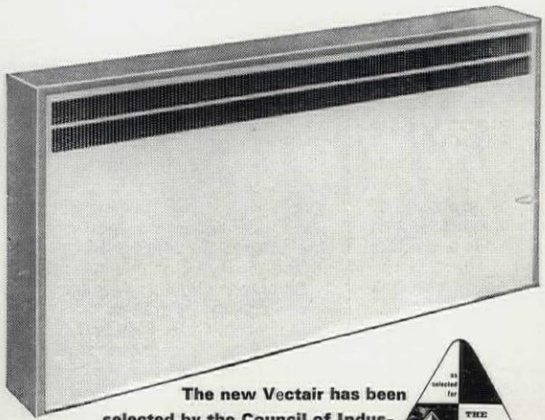

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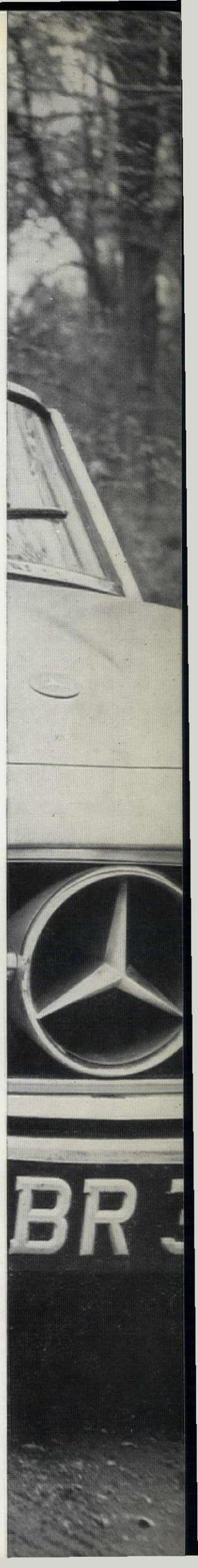


skill

continued from page 480]
ing agents' depots so that when containers come into general use, there will be a considerable amount of double handling between the agents and the terminal. It would appear that future depots of this kind will have to consist of a huge one-level depot, subdivided as required, dealing with the railway at one end and road at the other, operated by fork trucks to give full flexibility.

Where inland ports are being established, railways must be one of the prime movers, linking harbour areas with the inland depots as well as providing trunk services. As the inland ports will probably be equipped with very heavy duty forklift trucks, movement of containers on and off the rail wagons will present no difficulties. This presupposes that there will be a network of railheads with frequent liner train services covering most of the main distribution and manufacturing areas of the country. The first stage of British Rail's National Freight Grid, scheduled for completion by the end of this year, includes a network linking sixteen freightliner terminals, including London (York Way, King's Cross, Stratford and Willesden), Glasgow, Manchester, Liverpool, Aberdeen, Birmingham, Cardiff, Edinburgh, Hull and Leeds.

Weekly totals show well over 1,000 containers in use, each averaging 1,000 miles a week, compared with the traditional four-wheel van's average of 2,500 miles a year. Two men moving 20 tons in 2½ minutes indicates the handling speeds that can be achieved with containerized loads. The time is soon coming when a manufacturer receiving orders in his office one morning will telex his factory at noon, containers will be filled in the afternoon and will reach their destination the following morning—a 24-hour delivery in say Glasgow from a London factory.

Containers by air

The amount of cargo carried by air has been doubling every four years and this rapid growth rate seems likely to continue. Speed is the attraction, but as cargo on average spends no more than 20 per cent of its transit time actually in the aircraft, smooth-running ground services are as essential as high air speeds.

More than 50 per cent of all air freight travels in the holds of passenger aircraft. Here, the problems of loading are similar to those found in rail transport, where goods travelling by passenger train pass through the passenger station instead of through the goods yards to freight trains.

For economic reasons, passenger aircraft are likely to continue to take cargo well into the foreseeable future. The problems of running an economically viable, regular freight service are the same as those faced by other goods carriers: under-utilization of capacity, difficulty in balancing traffic in both directions and the cost of handling goods on the ground.

However, there is undoubtedly a trend towards pure freighter aircraft. Some go so far as to say that freighters will be carrying close to two-thirds of all air freight by 1970. Certainly it has been established that, using pallets and containers, it is possible to unload and load even the largest freighters, carrying 40 tons or more, in less than an hour. Pallets, measuring 88 in. × 108 in. or 88 in. × 125 in., are loaded in the cargo sheds, transported to the aircraft by some form of powered industrial truck or truck-and-trailer combination, raised to the level of the aircraft sill by fork-lift truck or mobile elevating platform, and rolled aboard.

The unit size and weight of goods sent by air tend to be small, the average weight being something under 100 lb. There is therefore a strong case for the use of containers, which are ideal for carrying a number of small assorted items. One study has shown that an air carrier's terminal costs per ton mile were reduced by more than 75 per cent when one single-piece 2,000 lb. consignment was handled instead of five individual pieces of equivalent total weight.

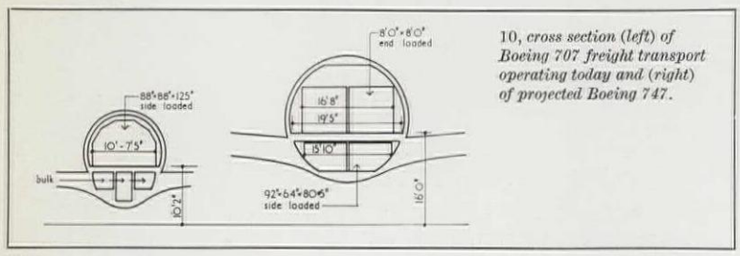
Containers tailor-made in glass fibre to conform to the shape of a particular aircraft's fuselage have recently been appearing. Examples are those developed by BOAC to fit into its Argosy aircraft, measuring approximately 8 ft. × 8 ft. × 6 ft. high and having zipped canvas fronts, and those introduced by Air France for use with its Breuguet Universels. However, freight containers in use on road, rail and sea must ultimately be the ones to travel by air. Otherwise, the cost of repacking three times on a journey will represent the most expensive operation in the transport of goods between consignor and customer.

Two possible stumbling blocks in the path of air/road/rail/sea container interchangeability are (*a*) the question of whether the weight of conventional freight containers can be justified in air transport, and (*b*) limitations imposed by the shape of most existing aircraft—and, indeed, of some of the aircraft scheduled to be introduced in the coming years. However, these points are too often exaggerated.

The introduction of aircraft designed to take containers will greatly simplify loading. If all air cargo could be carried in containers there would be no need for the very expensive mechanized and automated cargo terminals at every airport (of which the project for Schippol is the most recent example), which attract heavy vehicular traffic carrying small packages in penny numbers.

The new 100 ton Boeing 747, which should come into commercial service in 1970, will be capable of carrying full size containers of 8 ft. by 8 ft. cross section, 10. Aircraft manufacturers are worried that the £14,000,000 facilities now under construction at London Airport are not designed to handle containers of this size and will prove quickly obsolete. At the smaller airports, however, there should be no difficulty in handling large containers, as handling facilities will have remained very much more flexible and all that is needed is a high capacity fork lift truck.

On balance, there is an overwhelming case for aircraft to carry the same containers as are in use on road and sea. When this stage is reached and inland ports have been established to handle the containers, handling equipment only will be required at airports—backed up by some warehouse space for the containers themselves. Sizing, weighing, sorting, documentation, storing and recalling of individual items need no longer tie up capital, space and manpower at the airports.



10, *cross section (left) of Boeing 707 freight transport operating today and (right) of projected Boeing 747.*

Location of inland ports

When planning the location of inland ports, to serve as transit depots for palletized and containerized goods transported by land, sea and air, the reasons why these depots are required must clearly be understood.

The objects are:

1. To relieve vehicular congestion in the port and airport areas so that container lorries or trains can travel into these areas on a tight time schedule and be turned round immediately, goods flowing on board the ship or aircraft at the appointed time and in the required sequence, and goods flowing off the ship or aircraft to be transported to the inland port on the return journey.
2. To provide a despatch/receiving depot where goods can be consigned in small lots; where the shipper can pass goods through customs and pack them in sealed containers to await the appropriate ship or aircraft; and where the procedure can also operate in reverse to accommodate incoming goods.
3. To provide a marshalling area for containers, where shiploads or planeloads can be assembled in the correct order for loading. The containers could be checked and sealed at the inland port by customs officials or, where a manufacturer is despatching one or more full container loads, an official would have checked out the load as the containers were being filled at the manufacturer's premises.
4. To act as an economical clearing house for all goods which are not travelling direct by road or rail over the entire transport distance. It follows that inland ports must:

(*a*) adjoining existing or future motorways, because 75 per cent of the goods handled will travel by road vehicle for part of the journey;

(*b*) be within 20 miles of the local ports or new container embarkation berths, to ensure that goods arrive alongside the ship, by road to a strict timetable;

(*c*) have direct rail and motorway connections between them, to provide for economical inland/port transport;

(*d*) be planned on a very large scale and capable of accommodating much larger containers, pallets, vehicles, fork trucks and other handling equipment than are at present in use. Otherwise, the new inland ports would quickly become inadequate;

(*e*) be built on land with good weight-bearing qualities so as to keep down the overall cost of buildings and yards.

The map, 11, shows where the inland ports would cover the country for an integrated container service.

Conclusions

The present picture is of random building of poorly designed depots to be operated independently by road, rail, sea and air interests, which c only perpetuate existing, inefficie transport systems. This does not me immediate needs. It goes no wa towards integrating the various tran port media. It seems we are fallin into the same trap as we have do in the past, of thinking too small a building ostensibly for today's b actually for yesterday's needs a conditions—rather than to those o future into which economic pressur are rushing us.

Distribution is the most costly oper tion in commerce today. Where bulk homogeneous cargoes have be transported effectively for ma years, the world's goods are still bei handled in an uneconomic way: individual boxes, crates, bags or bal of random size and shape. Containe provide the answer to the proble but they call for the creation of n shared depots ('inland ports' we ha called them) for the four transpo media and they require that the depots be built on a greater scale th so far envisaged.

Most of our seaports have poor acce insufficient space for handling co tainers on a large scale and an quated buildings and equipment not to mention habits of mir Rather than try and modernize th it would be better to transfer ma of their functions to inland contai depots. All these would then ne would be deep berths, preferal under cover, with mechanical load to transfer containers to road and r vehicles.

These inland container depots sho

11

11, *suggested location of inland ports.*

key:

1a, between Stansted and Tilbury.
1b, near M2 on the south side of the river.
1c, between M4 and M1.
2, near Almondsbury to serve the Brist Welsh ports and airports.
3, between Manchester and Liverpool, on M
4, between Teeside and Newcastle on A1.
5, between Glasgow and Edinburgh, to ser industrial Scotland and the Clyde Valley.
6, near Southampton, on the projected M motorway.
7, near Plymouth.

By using railways to transport the containe from depot to ship, these numbers could reduced.

What a relief!

nd what a design breakthrough! A totally new, three dimensional concept that ives a fascinating ripple, stippled effect to suspended ceilings. And what a relief hat it comes pre-decorated! Windsor is the very newest addition to the famous Minaboard range and has all the same practical advantages. It's hardwearing, asy to install, low on labour costs and reduces sound attenuation. Available in ' x 4' size and suitable for installation on exposed grid systems. Send for free Windsor sample and see for yourself what an advance it is in design.

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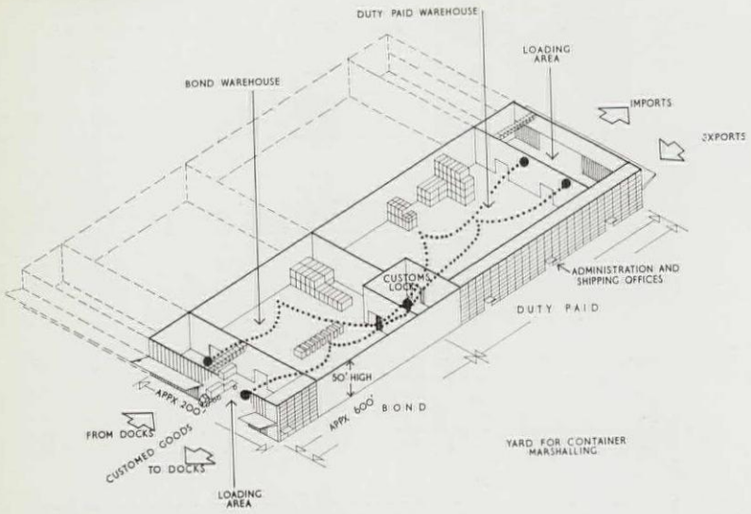
mstrong Cork Company Limited, Ceiling Systems Department, Woodgrange House, oodgrange Avenue, Kenton, Middlesex. Telephone: 01-907-0151



12, the basic accommodation required at an inland port.

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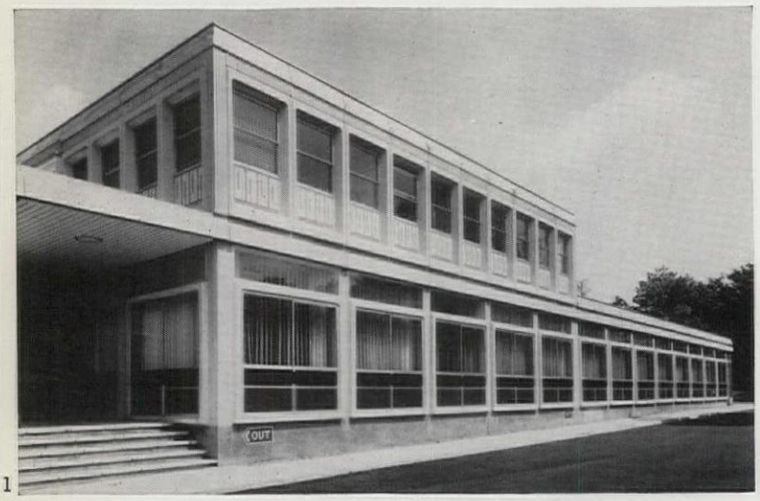
be built to an internal height of 48 ft. (for container stacking to this height is already possible) and should have very large marshalling yards, 12. They should all be within 20 miles of a port, have rail links, adjoin a motorway and have easy access to the main airports. This faciliity, linked to world-wide computer control of all container movements, would bring great economies.

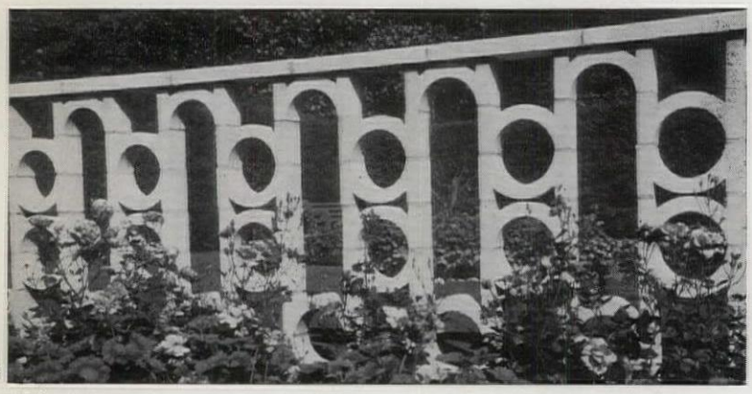
The Industry: New Products



1

Aluminium sliding windows

The new Luminair range of vertically and horizontally sliding aluminium windows has just been introduced by the Crittall Company. Many of the designs are entirely new, though some of them are developments of the previous Essex, Suffolk and other patterns. All the windows are available in mill finish, anodized or acrylic sprayed in colour, and most of them are factory glazed. There is a wide range of standard sizes, but with most types special sizes can be provided at the standard price as long as they are ordered in quantities of 50 or more. Weatherstripped top-hinged flap ventilators are available with some of the horizontal sliders, and the sliding leaf is locked with a plastic bolt which also engages with a stop to provide a 2 in. opening for night ventilation. Plastics skids in the bottom rails of the moving panels slide on a rib standing up from the sill track; side weatherstripping is in neoprene with wool pile for the horizontals. An entirely new design, HS3, is a double slider especially for the exposure conditions and safety requirements of high rise buildings, the head concealing a safety mechanism which restricts the opening and can only be released by an adult reaching up to the head bar and sliding the window at the same time. There is also an internal sill and track which seals off and 'pressurizes' the sill to counteract gale force winds which would otherwise force rain through into the room. 1 shows both horizontal and vertical sliders in John Laing's new Mill Hill offices.
The Crittall Manufacturing Co. Ltd., Braintree, Essex.



2

Screen walling

The Monoscreen wall design, 2, is based on two basic units, both 12 in. wide and 6 in. high and made in thicknesses of 4, 6 or 8 in. for walls of different heights. The blocks have no frogs or tongues as they are intended to be used either horizontally or vertically, but this does not affect stability as long as a reasonably rich mortar is used. The blocks are made in two colours, white with a fine grain finish, and charcoal grey with an open texture, and the mortar should be made with white sand and cement, or black pigmented. A considerable variety of open patterns is possible and solid walls can be made with the blocks used on their sides. Weathered copings and pier caps are made as accessories. While the blocks are intended mainly for screen walls in gardens, with conventional footings and piers, they can also be used as infill panels within a structure and the panels can be quite large if they are positively supported on all sides, particularly at the top.
Iancrete Ltd., Oxclose Lane, Mansfield Woodhouse, Notts.

Venetian blind

The Silverflex Venetian blind, 3, is a low cost type which is available in nearly 300 standard sizes up to a maximum width of 8 ft. and a drop of 7 ft., though the total area of any blind is limited to about 40 sq. ft. The blind slats are made of aluminium strip $1\frac{3}{8}$ in. wide, finished in white and the cords are terylene. Headrails are only $\frac{1}{2}$ in. deep, the whole assembly is quite neat, and installation is easy. Prices are about 30s. per sq. ft.
Dexion Ltd., Silverflex Division, Dexion House, Empire Way, Wembley, Middlesex.

Contract carpeting

The very old-established firm of Brintons of Kidderminster have for many years been concerned mainly with retail sales, but have now started a contract division. They have introduced a considerable number of new Wilton patterns in wool, 4, which is made in two sets of colours, though there are others available in a wider selection of colours. There is also an enlarged range of 18 colours in the Bell Twist weave, including ranges of orange, gold, blues and green in solid colours. Bell Twist is made in a new way on looms developed by Brintons themselves, and in a traditional Wilton weave, 80 per cent wool and 20 per cent nylon, with a strong cotton and jute backing coated with a non-fray latex compound. The carpet can be neatly and easily cut at any angle and re-joined at any

3

point without the join showing. T carpet is stable dimensionally wit firm tuft anchorage and does shade or show pressure marks. T standard grade has 64 tufts square inch and is suitable for hea domestic or medium contract u and there is also a Super grade w 72 tufts per square inch and a grea depth of pile for heavy contract u Bell Twist should be butt join and taped and the latex backing

4

not affected by underfloor heati The carpet is made in widths of 27 and 36 in., and in 9 ft. and 12 broadloom.
Brintons Ltd., Contract Division Giltspur Street, London, EC1.

Spray taps for washing

For about twenty years it has b quite common practice to use circu fountains with water sprays in fact washrooms, since washing is quic and there is also a saving in water. Following this idea Wa Crossweller introduced a spray U tap some years ago for use in offi restaurants and public buildings mounted on an ordinary washba The Unatap is connected to both and cold supplies and has a sp nozzle for washing. As the tap opened the water temperature gressively increases from cold to required heat. Washing is quick the quantity of water used is sm tests having shown savings of up 85 per cent in hot water consump

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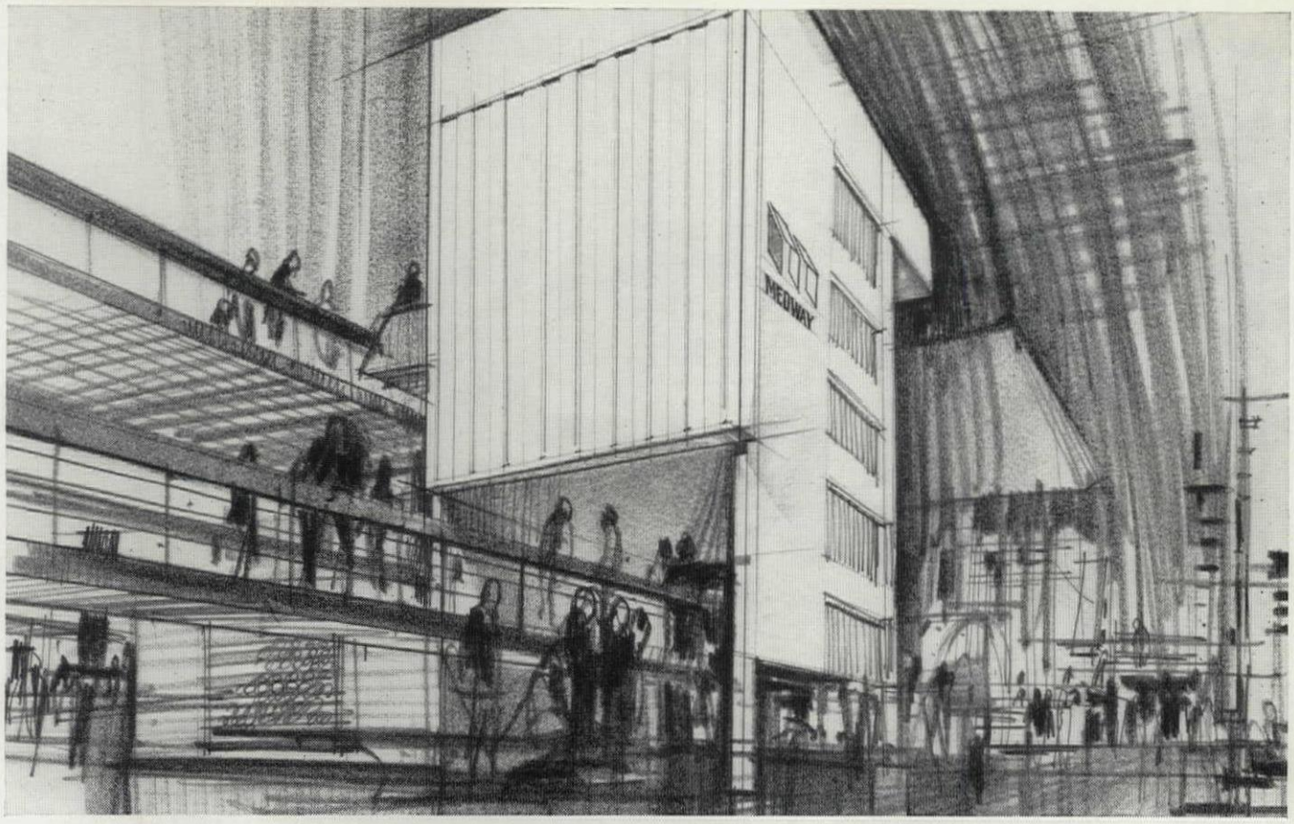

THE SUCCESS OF THE SHOW

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The Medway Building Method

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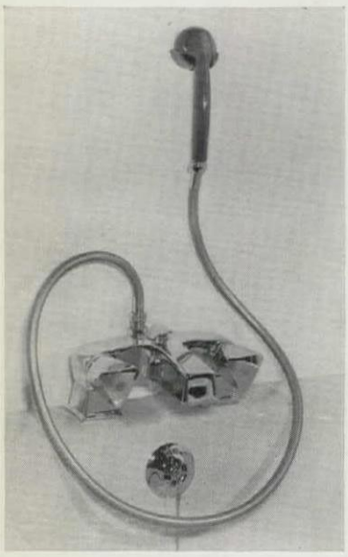
5



6

continued from page 484]
so that the cost of the taps is relatively quickly offset. From the users point of view the flow of water through the basin keeps the bowl relatively clean and one is not defeated by the all too common absence of a plug for the outlet. There is now a new model II Unatap, 5, which has adjustable flow restrictors on both water supplies so that the volume of the spray can be controlled to prevent splashing and the tap can also be used where hot and cold water pressures differ even by as much as 2 to 1. The spray rose can be unscrewed for cleaning and the whole spray nozzle can be adjusted and locked in the most convenient position. There is a lever model as well as the type illustrated.
Walker Crosweller & Co. Ltd., Cheltenham, Glos.

7

Taps and shower fittings

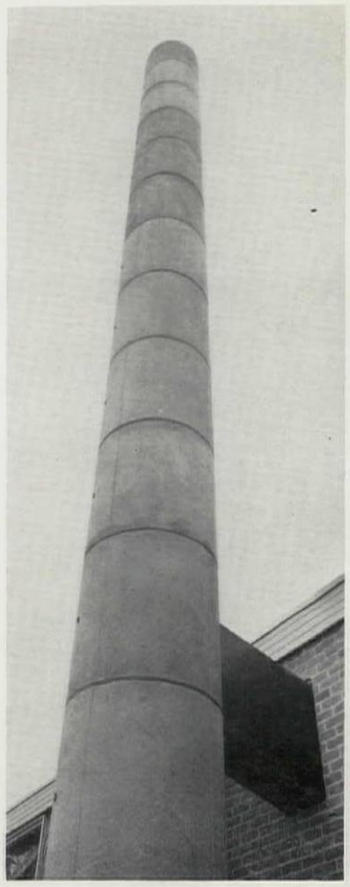
Ideal-Standard, whose recently introduced range of sanitary fittings based on the Kira report has already been mentioned in these notes, have just announced a series of New Kingston taps and shower fittings for basins, baths and bidets. They have apparently been sold already with considerable success in France and Germany, and are now available here. They are made as simple pillar taps, as combination basin fittings with concealed valves, an exposed spout and a pop up waste, and in various other forms such as the combination bath mixer and hand spray, 6. The triangular tap heads are very easy to turn and the spindles are non-rising.
Ideal-Standard Ltd., Ideal Works, Hull.

Artificial stone

Brontë stone, 7, is made from York stone aggregate and cement, and provides a surface which weathers well in both industrial and sea areas. The stone is available in brick sizes but is made in double brick size and steam cured, after which it is split in half and then dressed on one header or one stretcher face, or both. The stone can be used in any normal brick bond and the internal leaf of the cavity wall can be in ordinary brick or any of the usual insulating blocks; and at a cost of 260s. per thousand the price of walling is very much lower than natural stone. In many areas where stone is the local material it is often possible, of course, to obtain grants for the extra cost over brick facings. The makers are members of the Redland group.
George Greenwood & Sons (Halifax) Ltd., King Cross Street, Halifax, Yorks.

Precast concrete chimneys

The Mitchell Construction Kinnear Moodie Group has designed a standard range of precast concrete chimneys, 8, which can be supplied in heights up to 152 ft. The chimneys are normally made in a circular cross section, but ovals and rectangles can also be made as well as various surface finishes such as exposed aggregate. The chimneys consist of an outer shell or wind shield and an inner shell, or lining, in moler concrete. The liner has a high insulating value and ensures a minimum drop in flue gas temperature and at the same time insulates the outer shell. The lining units can also be divided internally by diaphragm walls to provide multiple flues in a variety of shapes. Chimney tops are special combined units in high alumina granolithic concrete and are steeply weathered into the flue to minimize staining and acid attack on the outer surface. The units are made in standard 4-ft. lifts and are quick to erect. By extending the system combined water tanks and chimneys can be provided in a variety of forms.
Refractulation Ltd., Arcade Chambers, Eltham High Street, London, SE9.



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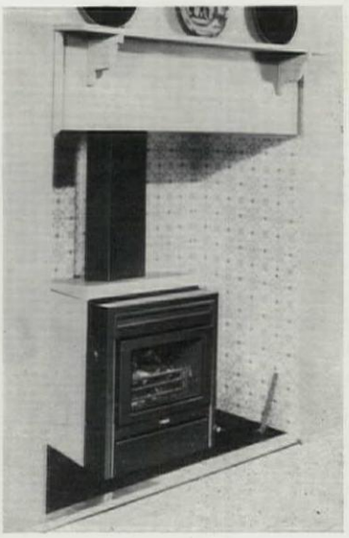
Solid fuel heater

Radiation's new Freeplan heater, 9, is the only free-standing solid fuel room heater with a high-output back



9

boiler, and will provide domestic h water and at the same time will f up to 120 sq. ft. of radiating surf plus heating for a room of 1,200 cu. These figures are for the boiler maximum output with the dam open, but with the damper closed t hot water output is decreased and t room heating volume goes up 1,700 cu ft. The standard finish blue and white and special flue p fascias to match the heater front made in appropriate lengths. T boiler is made with an adjusta thermostat and a gas ignition burn It has the advantage that it can installed in two stages, to give part central heating with low boiler o put, so that more radiators can added later on to use the full outp
Radiation Parkray Ltd., Radiat House, North Circular Road, Lond NW10.

Contractors

Town Centre, Cumbernauld New To
Chief architect-planner: Dudley L ker. *Contractors: Several works, str tural frame, roadworks and pa areas:* Duncan Logan (Contract Ltd. *Lift and escalator installati* Marryat & Scott Ltd. *Fire servi* Atlas Sprinkler Co. *Main drain works:* Duncan Stewart (Bon bridge) Ltd. *Mechanical ventilati* Air Control Installations Ltd. *Ph ber work:* Wm. Anderson Ltd. *E trical installations:* B. French L *Gas air heating system to penthou* Crownall Equipment Ltd. *Carpe and joiner work:* Dougall & *Asphalt work:* Limmer & Trini Co. *Asbestos tiles and felt roofing:* R. Douglas, Asphalt & Paving *Coppered felt roofing, metal roof d ing, metal wall cladding:* The Ruber Co. *Smith work:* Frederick Braby Co. *Asbestos cement roofing and tra lucent sheeting:* Lowlands Roofing *Patent glazing and rooflights:* A Wright & Co. *Aluminium wind and curtain walling:* Bull's Metal Marine Ltd. *Glazier work:* Camer McLean & Co. *Plaster and cem work:* David Robertson & S (Denny) Ltd. *Floor and wall work:* A. S. Wright (Tiling Contr tors) Ltd. *Patent suspended ceili* R. F. Morrison & Co. *Rubber f finish:* Pirelli Ltd. *Structural st work:* J. Cameron McLean & *Painter work:* R. Graham & S (Decorators).

House and Kennels, Pirbright, Sur
Architects: Beryl Hope Associa *General contractor:* E. C. Hughes I *Sub-contractors: Copper roofing:* Br erick Insulated Structures Ltd. *H ing:* M. S. Rose Ltd. *Electrical:* G den Thake Ltd. *Doors:* Ellic (Reading) Ltd. *Ironmongery:* G. & Allgood Ltd. *Sanitary fittings:* S sons Sanitary Fittings Ltd. *Pa* Screeton Paintmaker Ltd. *Light tings:* Rotoflex Ltd.; Merch Adventurers Ltd.

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.

S.O.S.

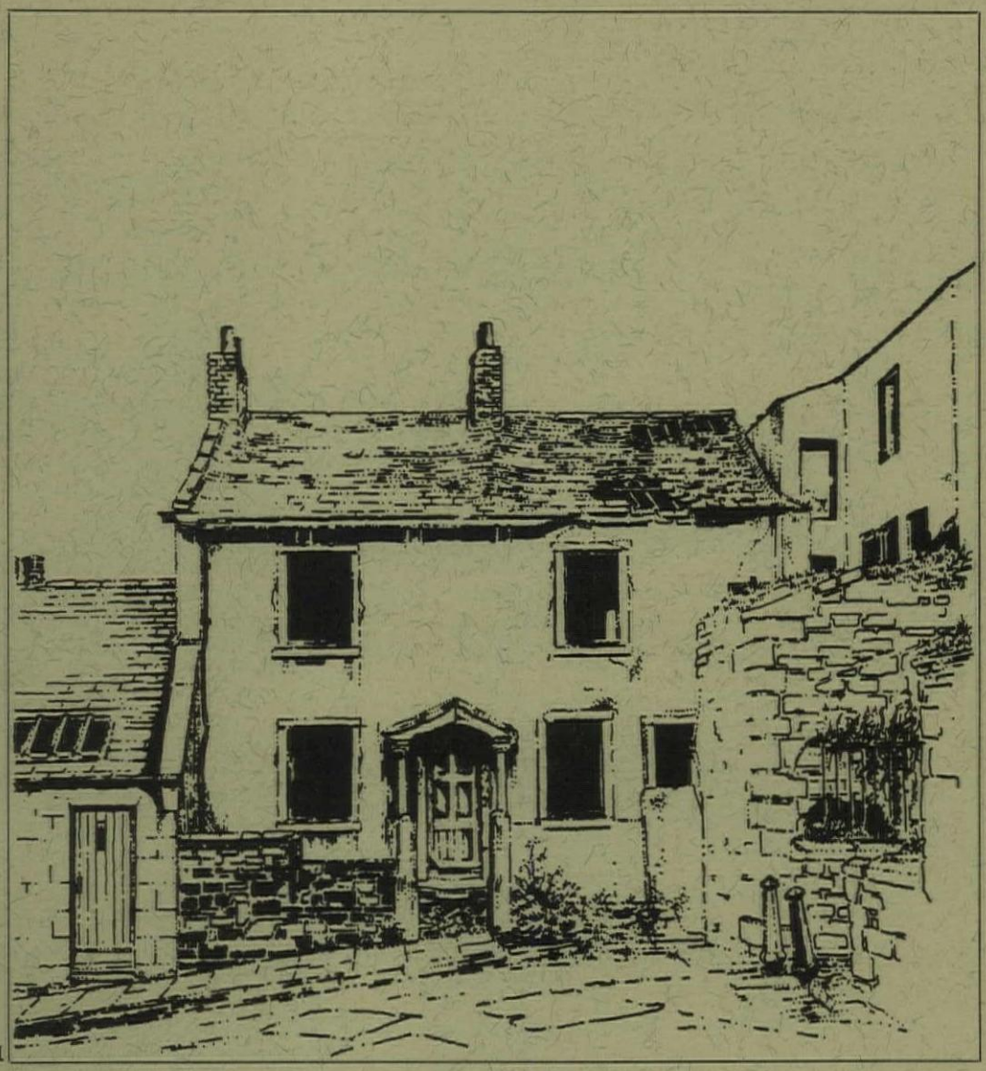
MARYPORT, CUMBERLAND
An SOS for the remaining old buildings in the port area of Maryport, 1 and 2, and also for a better standard of new

2

buildings, 3 and 4. The site would be a splendid place for a really good council estate; backed by a low cliff, with the sea only a few yards away. But who cares, in the John Peel country?

OUTRAGE

HAILSHAM, SUSSEX
A shopping precinct for swinging 1967, 5, in a town which has a good deal of character but no startlingly antique buildings. So anything goes.



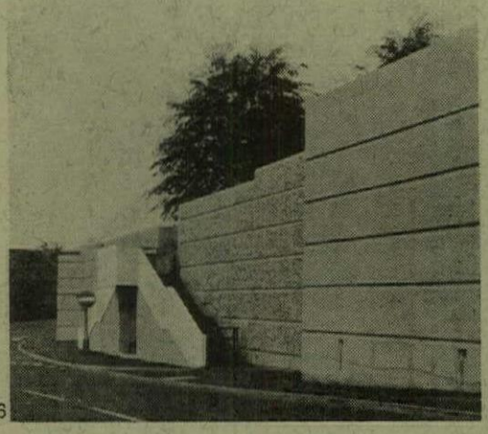
1

3

4

5

DOWNHAM MARKET, NORFOLK
An astonishingly overdesigned 'improvement' in front of the church of this small market town, 6, 7. Flint panels, blue brick steps, reconstructed stone, naked concrete: the full repertoire of trying-too-hard. Yet all the time a perfectly good tradition in flint walling, modest and appropriate—and surely less expensive—was ready to hand, 8.



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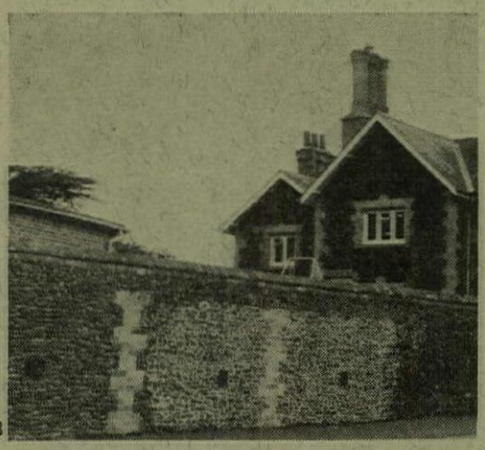

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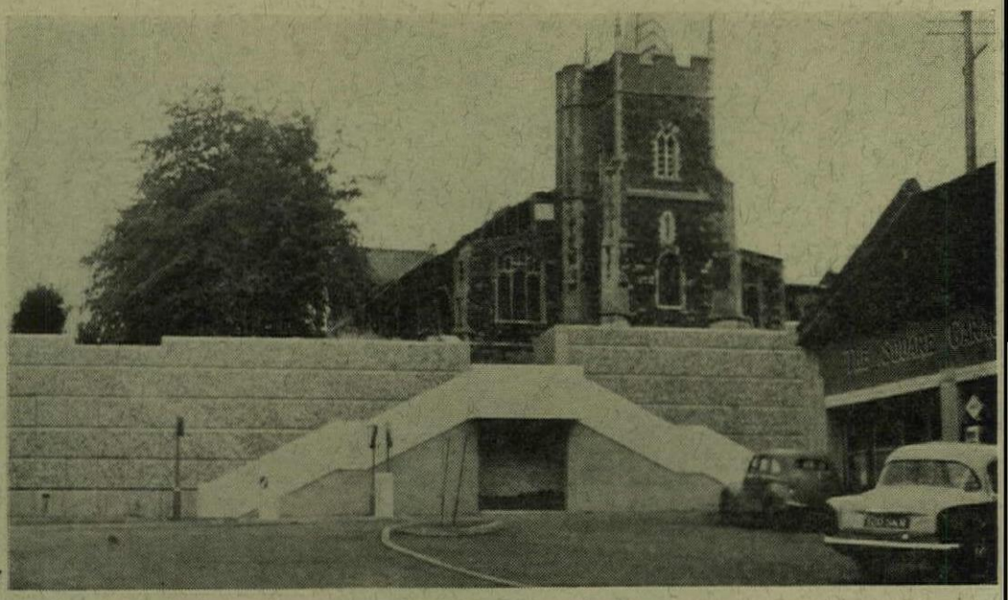

7

9

CAUTION

GRANGEMOUTH, SCOTLAND
The central square of a recently completed competition-winning estate, 9. The lighter patches show where beds of cobbles have been removed by a town council unconcerned with finer matters of detail. Yet, having seen the site before and after, I am sure the result is an improvement. And the moral is that cobbles should be used functionally to make the ground speak, not just as a quick means to an abstract and ankle-twisting pattern.

CREDIT

DEVIZES, WILTS
One of the buildings for which an SOS was put out in April, now repaired and used as offices, 10. Architects, Rendell Woolgar Associates.

10

TAILPIECE

11, without comment, from a recent magazine: 'A 3ft. high pedestal urn sculpture, an exact replica of 12th century Romanesque carving, made by a secret process in a Spanish workshop from reconstituted natural stone which resists weathering.'

11

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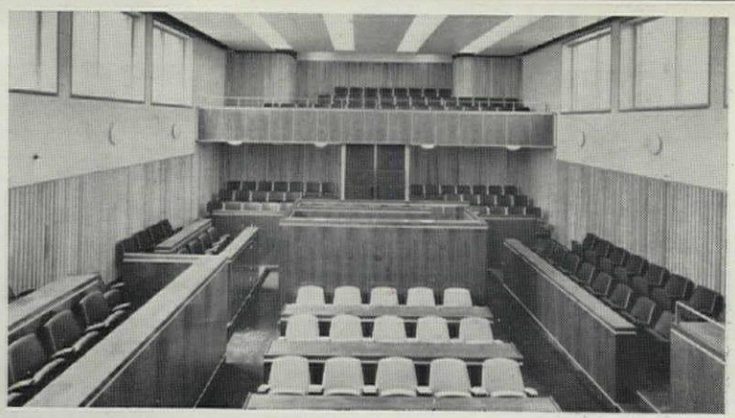

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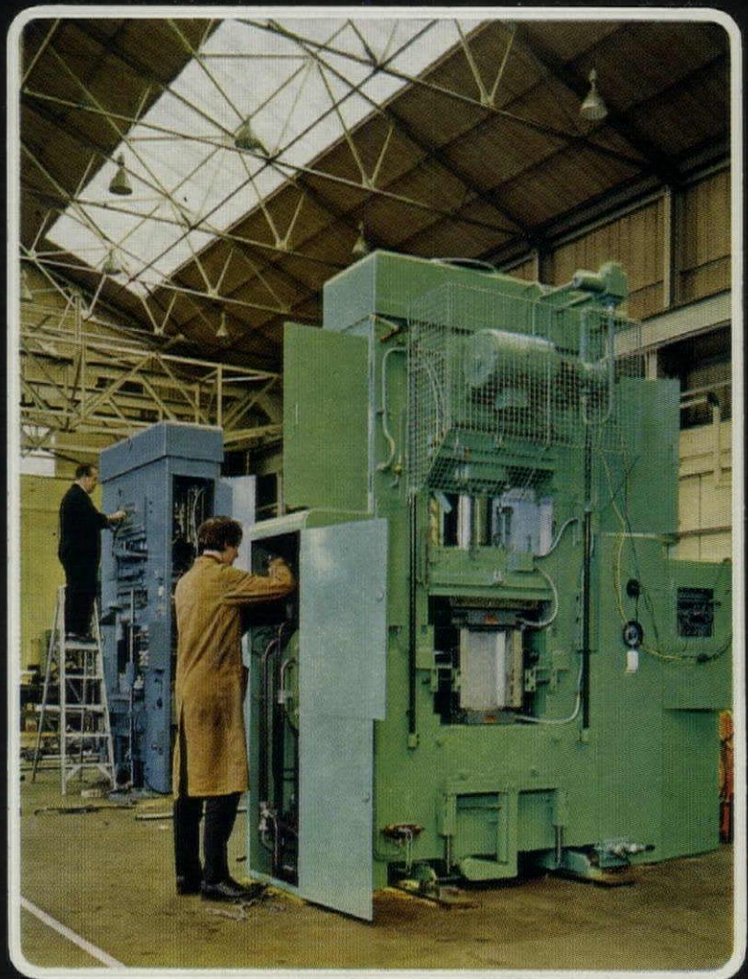

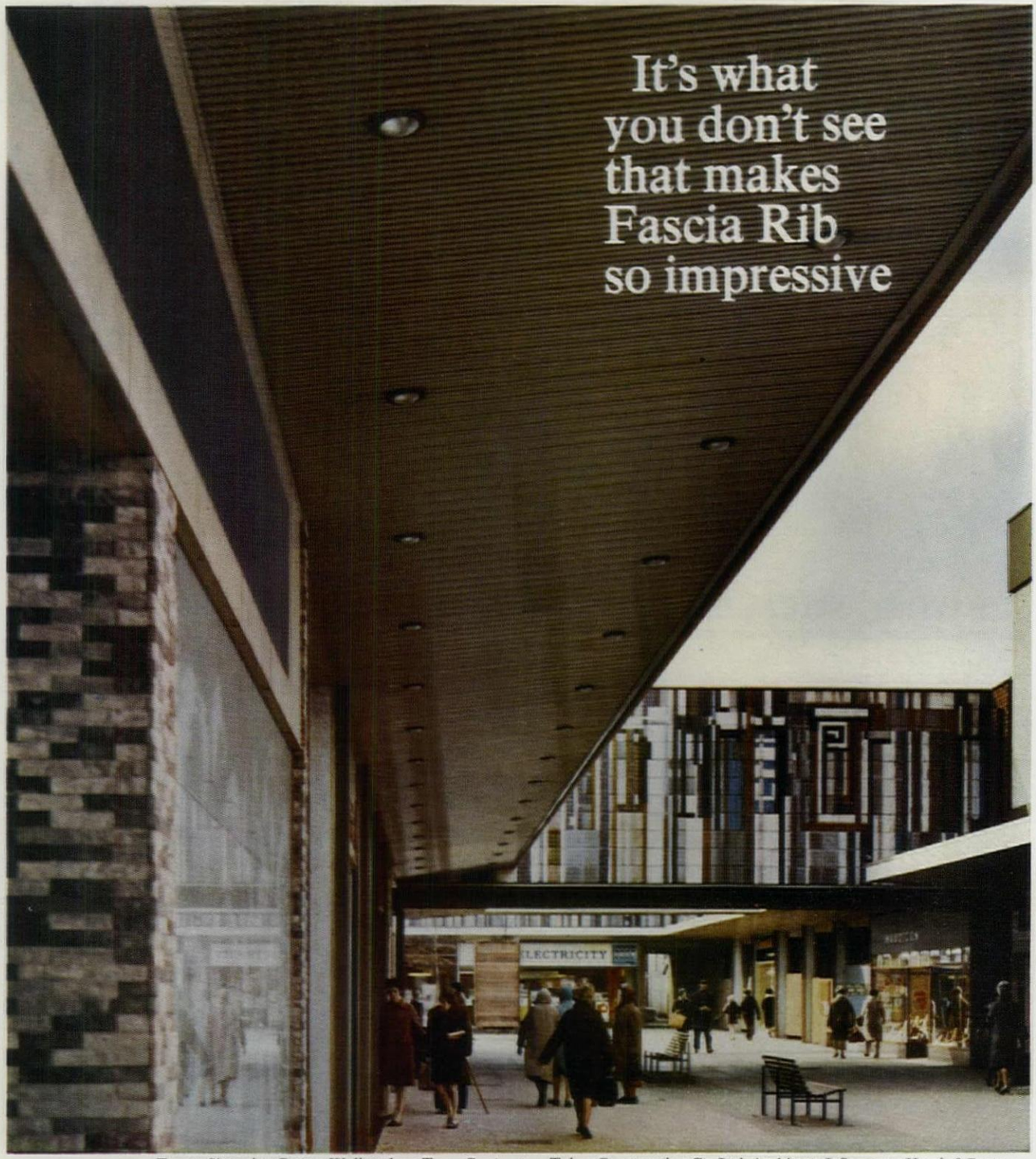

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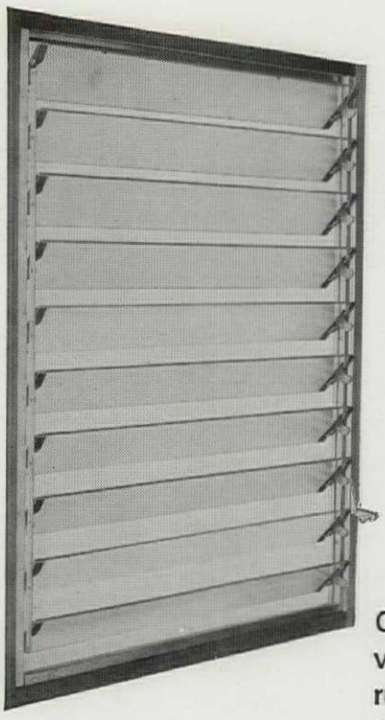

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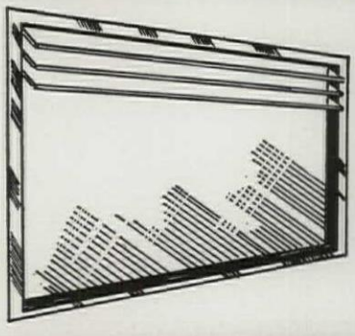

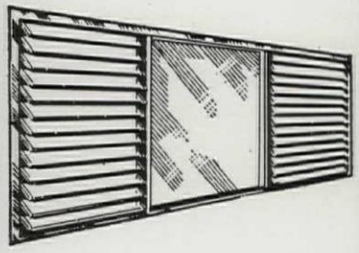

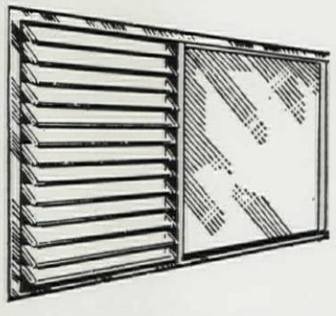

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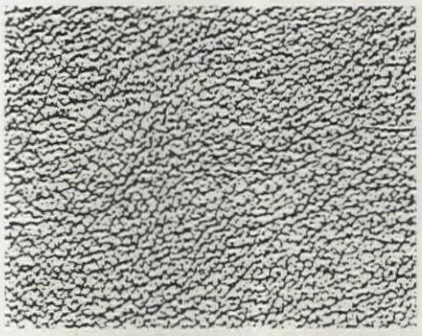

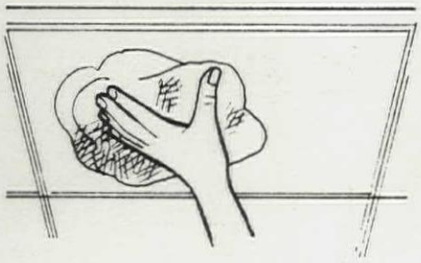

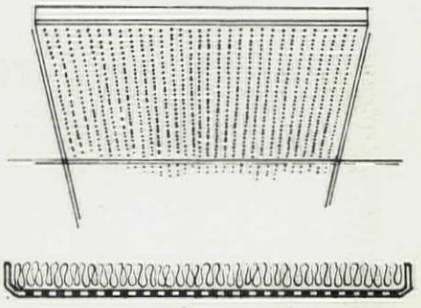

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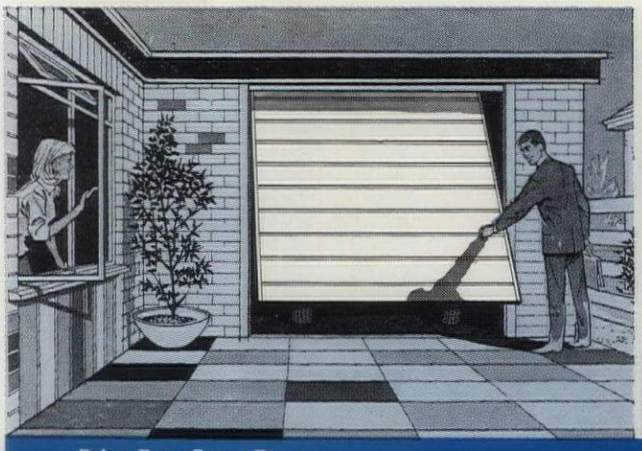

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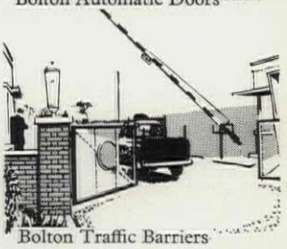

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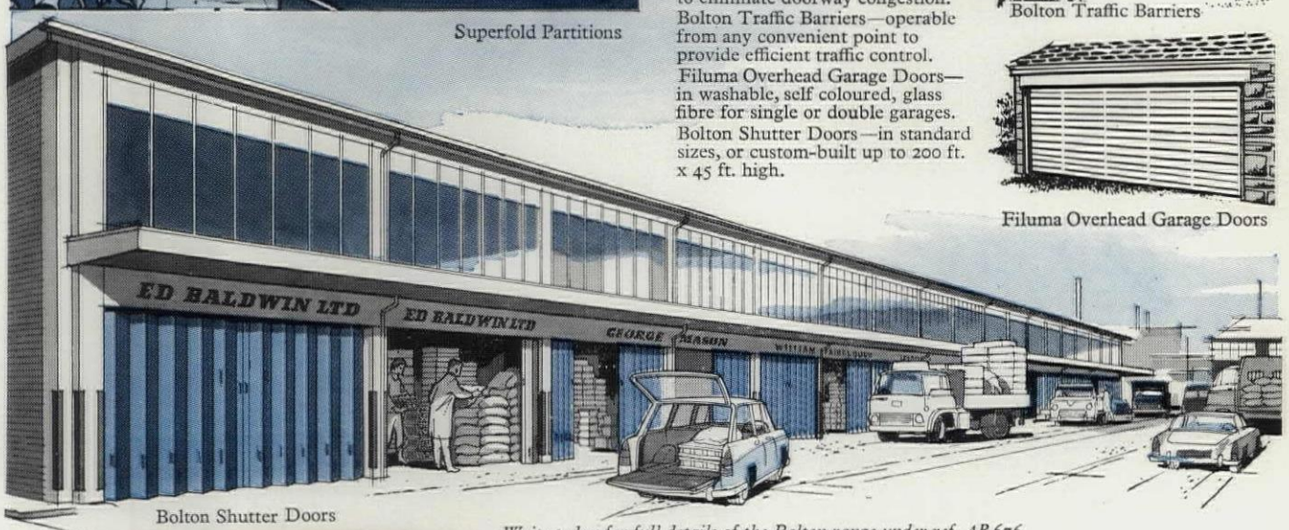

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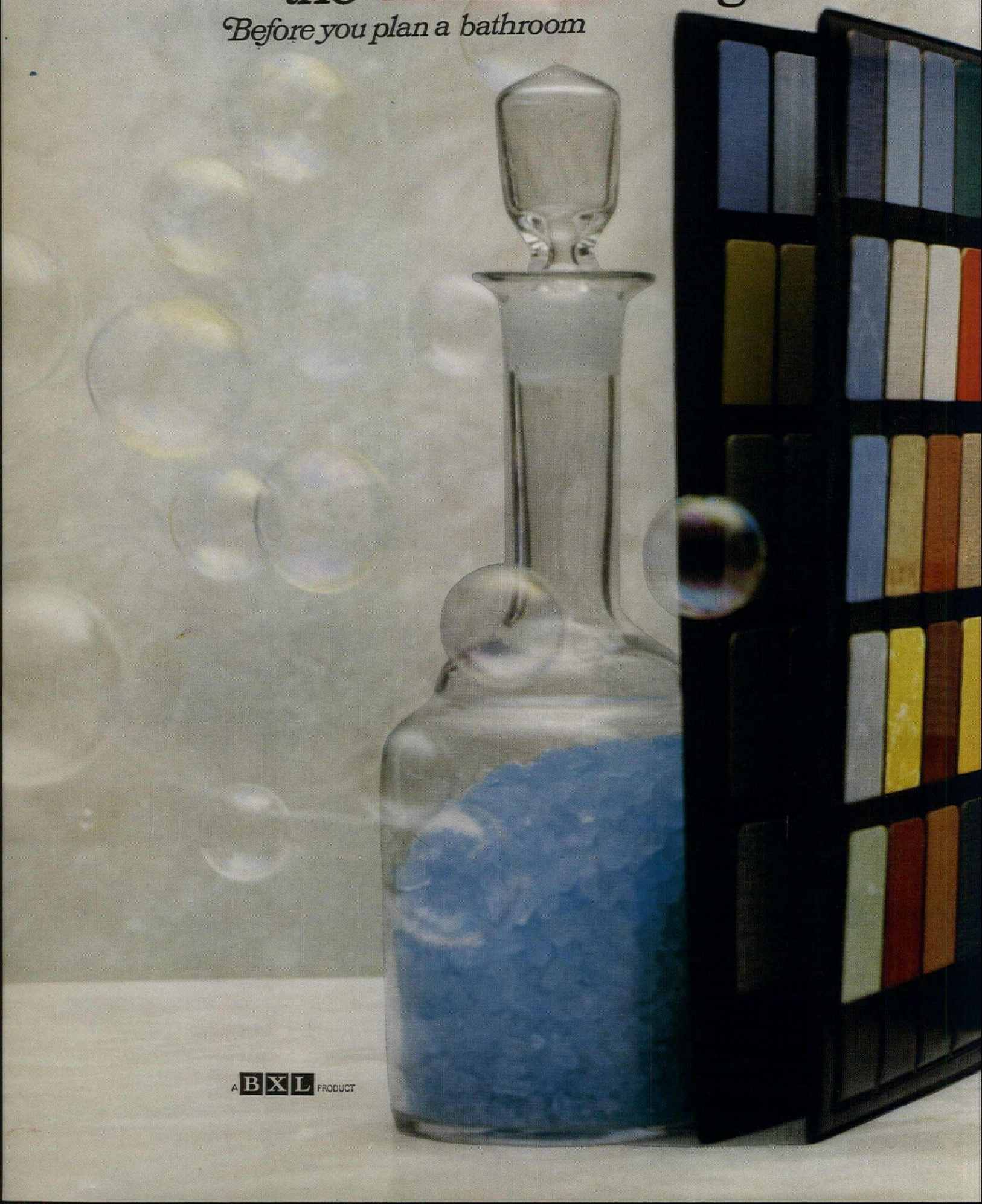

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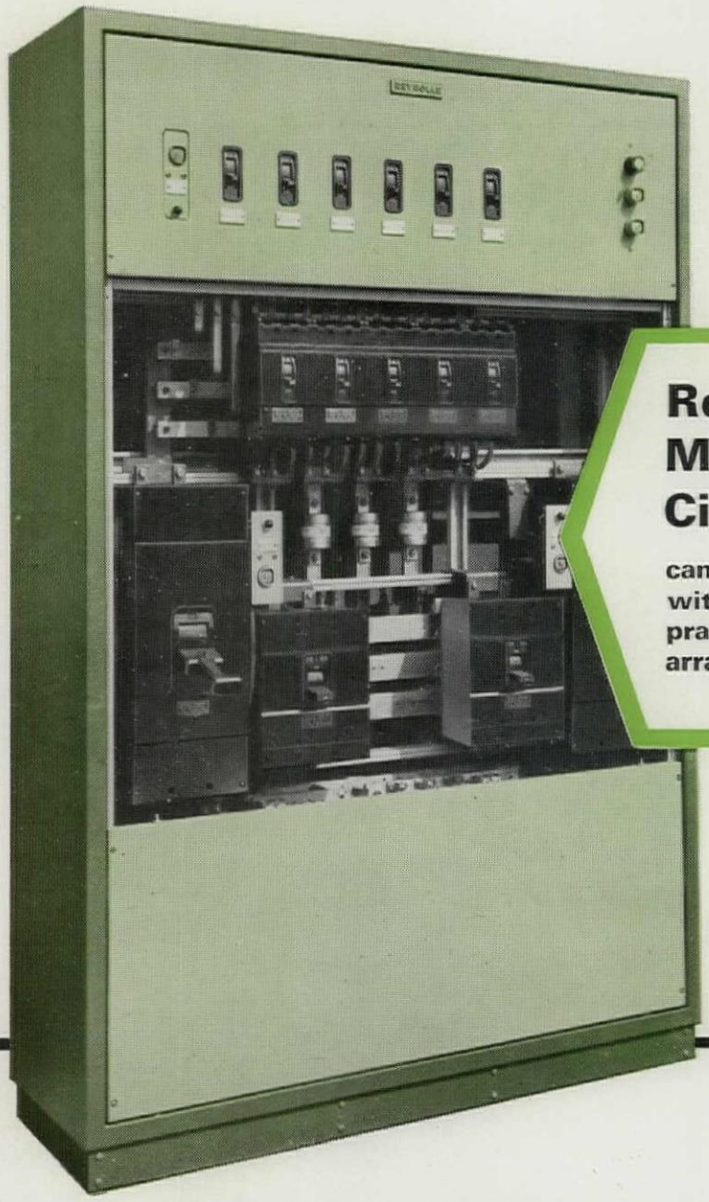

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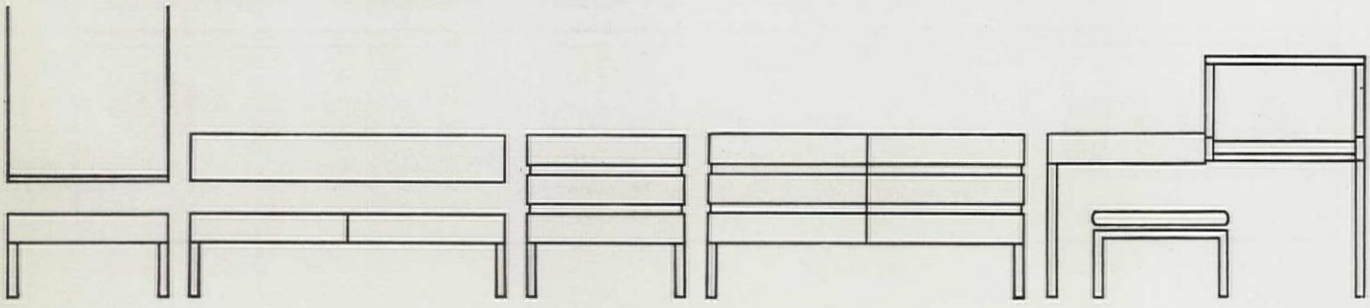

K. W. Schmitt

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