



GARDENS

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FRONTISPIECE: Evenly textured concrete elements form a paved and terraced garden concealing a car park below. The garden adjoins the new St. Thomas's Hospital in London on one side and Westminster Bridge on the other. Architects: Yorke, Rosenberg and Mardall.

FRONT COVER: The garden at Michelmersh Court, near Romsey, Hampshire. The white painted wirework structure suggests a domed Victorian folly and covers a lead cupid on a concrete plinth. It will eventually be backed by a dark yew hedge, and closes a vista seen through an archway from the main forecourt of the house. The path is of concrete slabs in two tones of grey. Landscape architect: A. du Gard Pasley, FILA.

The Year of the Garden

Not everyone knows that this is supposed to be the Year of the Garden. Most people know it as the Year of the Child. Interestingly enough, it was the British Tourist Authority that declared it so, presumably aiming to get tourists out into our countryside to see British gardens. Perhaps they also thought that gardens and children were not unconnected: in fact a rose has been specially named to commemorate the Year of the Child.

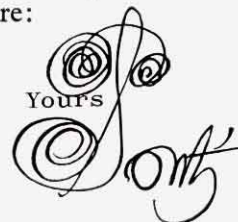
So it is that this issue of *Concrete Quarterly* has been devoted to gardens. The subject is appropriate enough for concrete: the material lends itself particularly well and naturally to use in all sorts of gardens from small back yards (page 10) to large private gardens designed in the grand manner (page 12) and public parks (page 23). Of course, most people would like to use natural stone for paving their gardens, but when this is neither available nor financially possible, which is usually the case, then concrete offers a very acceptable second choice. And nowadays, advances in technology have seen great improvements not only in the quality of concrete paving and associated garden products, but also in the range of textures and colours available. Gnomes and multi-coloured slabs are by no means the main selling line today.

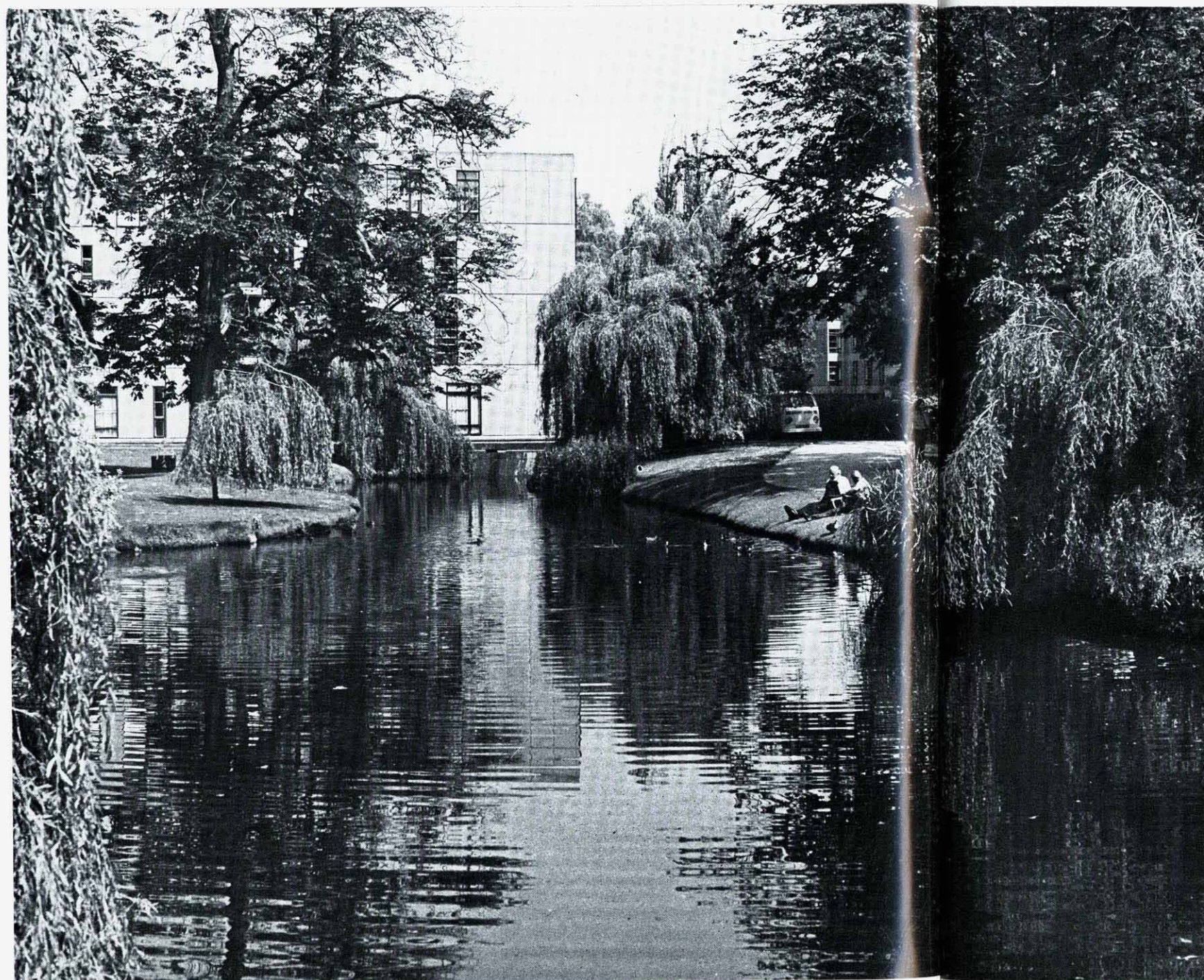
But apart from the practical aspects of concrete in the garden, there is also a principle of aesthetics to be observed—a principle often formulated in the pages of this journal. And that is that the material concrete, being normally grey and hard, is perfectly complemented and softened by the foil of foliage. The two go well together, whether it is in buildings or gardens. And we might note that the proposals for improving the grim and soulless South Bank terraces in London, recently published in the *Architectural Review*, show copious planting on parapets and walkways as a remedy.

Readers who are also gardeners might like to know that there are two booklets published by the Cement and Concrete Association which have proved very useful over the years. These are called *Concrete in garden making* and *Concrete round the house* and they give plenty of ideas and practical advice on the various uses of concrete in the garden. They are available free of charge if you send a post-card to the Publications Sales Unit, Cement and Concrete Association, Wexham Springs, Slough SL3 6PL.

Ponti

Gio Ponti, the well known Italian architect and designer, died in September 1979 aged 87. His range was astonishingly wide and included not only such famous buildings as the Pirelli skyscraper in Milan (CQ 51)—that most elegant of skyscrapers—and Taranto Cathedral (his own article in CQ 91), but also the interiors of Italian liners, the costumes and scenery for La Scala operas in Milan, and everything in interior design from furniture to cutlery and curtains. He was also founder and editor of the leading Italian architectural magazine *Domus* and author of the book *In praise of architecture*. The Cement and Concrete Association once gave a cocktail party for him in April 1957 during his visit to this country when he held 120 guests spellbound with a trilingual talk on design in concrete. He was not only a designer of unusual range, he was also a man of vision with a delicious dry dead-pan humour. He was not a design calculator but he did claim powers of intuition for his materials and what they could do. One of his most interesting remarks was that "Concrete has liberated us from the right angle". When he did the article on Taranto Cathedral for us in 1971 (when he was 80), he wrote a series of charming letters all of which ended with his unique multi-coloured signature:

Yours




The canal by Langwith College.

WATER GARDENS

The University of York

Photographs: Maurice Lee

Architects:

Robert Matthew, Johnson-
Marshall and Partners

Partner-in-charge:
Landscaping partner:
Consulting engineers
(site works):

Andrew Derbyshire
Maurice Lee
Scott Wilson Kirkpatrick &
Partners

Quantity surveyors: Franklin and Andrews
General contractors: Shepherd Construction Ltd
Lake-lining sub-contractor: Gordon Low Plastics Ltd

York University is among the best landscaped post-war universities in Britain. Planting is maturing well and it has at its centre an artificial serpentine lake of about 6 hectares which, while satisfying the mundane need for a balancing reservoir to cope with surface water drainage, offers considerable visual, environmental, amenity and ecological advantages. It was one of the first butyl-lined lakes (and possibly the largest) in the country and in its early years posed many ecological problems from which useful

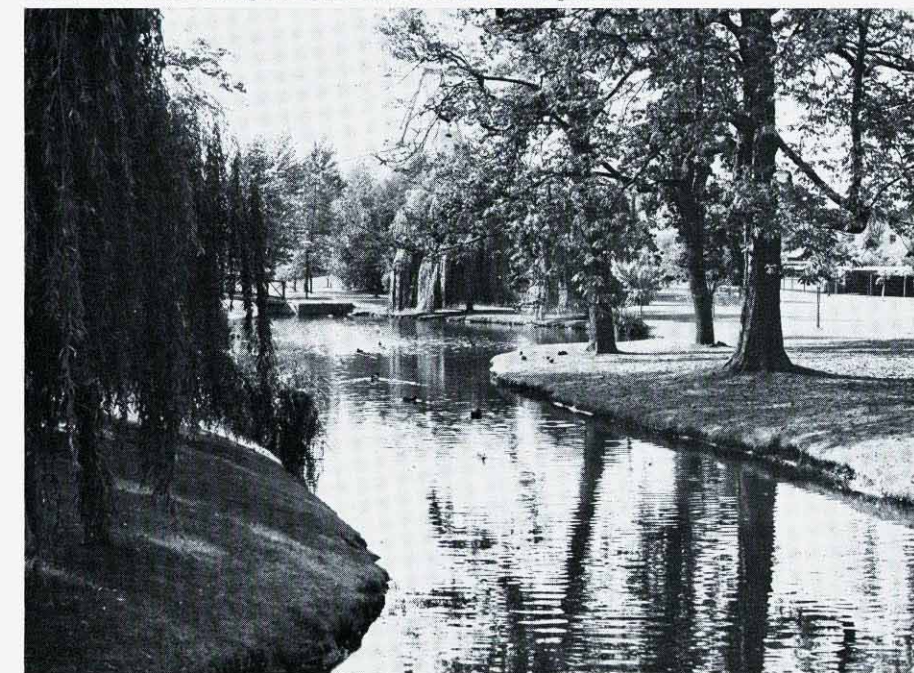
lessons have been learned. The lake forms the visual focus of the whole University, and offers a variety of prospects from its shore walks, two dams and four bridges.

The site for the University of York was chosen in 1960. It comprises about 75 hectares of parkland on the south-west side of the City, and radiates from the existing Heslington Hall which was converted to an administrative centre. The University contains within its campus six colleges as well as concert and assembly halls, a main library, computer centre and laboratories. Easy communication was considered important and there are covered pedestrian ways between most buildings of which the majority were



Above: Waterfront outside the bar at Alcuin College.

Below: The canal linking the upper lake with the new serpentine lake.



built by the CLASP system of construction with exposed-aggregate precast concrete cladding panels.

The planting scheme at York may be considered on three different scales. The first is the main structure of tree belts, reflecting the park and agricultural pattern of the locality, and providing some wind shelter. The second is the medium-scale lawn, roadside and waterside planting of the intermediate spaces. The third is the small-scale shrub, ground cover and wall planting of courtyards, pedestrian ways and other areas. Paving includes both in situ and precast concrete slabs laid over extensive areas.

All planting has been designed for permanence



A landscape for all ages and many pursuits, including concrete landing stages.

Fishing and boating below Wentworth College towards the wild fowl sanctuary.



WATER GARDENS

continued

and low maintenance. Consequently the range of plants has been fairly strictly limited—a policy demanding considerable restraint from those with horticultural aspirations. Seasonal colour planting is generally in containers which can be more easily maintained than bedding-out areas.

The fact that the permanent planting structure is now maturing well is largely due to the foresight of the University in establishing an enthusiastic and co-operative grounds maintenance department very early on. This department not only maintains but also plants each stage specified by the landscape designers. Over the years, the department has built up shrub stocks by propagation from earlier phases of planting. Hundreds of heavy standard trees have been obtained from the forestry department at Castle Howard a few miles away. Trees have been lifted, conveyed and replanted the same day by the University's own staff and equipment, so that mortality has been very slight.

Besides catering for a variety of water sports and amenities including boating, canoeing, swimming and sub-aqua instruction, the lake has been well

stocked with both trout and coarse fish. Fishing is controlled by a thriving University angling club. There is also a wild fowl sanctuary with an island for nesting at the south end of the lake, and with the increase in plant growth in most parts of the lake, the parallel increase in wild fowl population, both of resident species and migrants, has been remarkable.

The University grounds are open to the public and visited by many hundreds of people during the year, particularly on public holidays. Apart from sporadic acts of vandalism, which seem to decrease as the landscape becomes more established, the wear and tear of excessive use poses its problems, particularly now that maintenance costs have to be closely watched.

For the final phases of tree belt planting and a small arboretum of exotic species, very helpful grants have been made available by the Countryside Commission. After this year's planting programme for 1979-80, the main tree structure for the whole University site will be almost complete, and each year should bring its increasing environmental dividends.

Courtyard detail of in situ brushed concrete paving with junipers and ivy.



AN INDOOR GARDEN

Headquarter Offices and Strand Branch
Bank of Coutts & Co., London WC2

Photographs: David Atkins

Architects and
landscape architects: Frederick Gibberd & Partners
Quantity surveyors: L. A. Francis & Son
Structural engineers: Scott Wilson Kirkpatrick & Partners
Services engineers: Steenson Varming Mulcahy & Partners
Landscape contractors: H. Evans & Sons Ltd
Main contractor: Sir Robert McAlpine & Sons Ltd

This is surely one of the most ambitious and spectacular indoor garden courts yet achieved in this country. The fact that it forms a centrepiece for the formal activities of a bank in the centre of London makes it all the more remarkable.

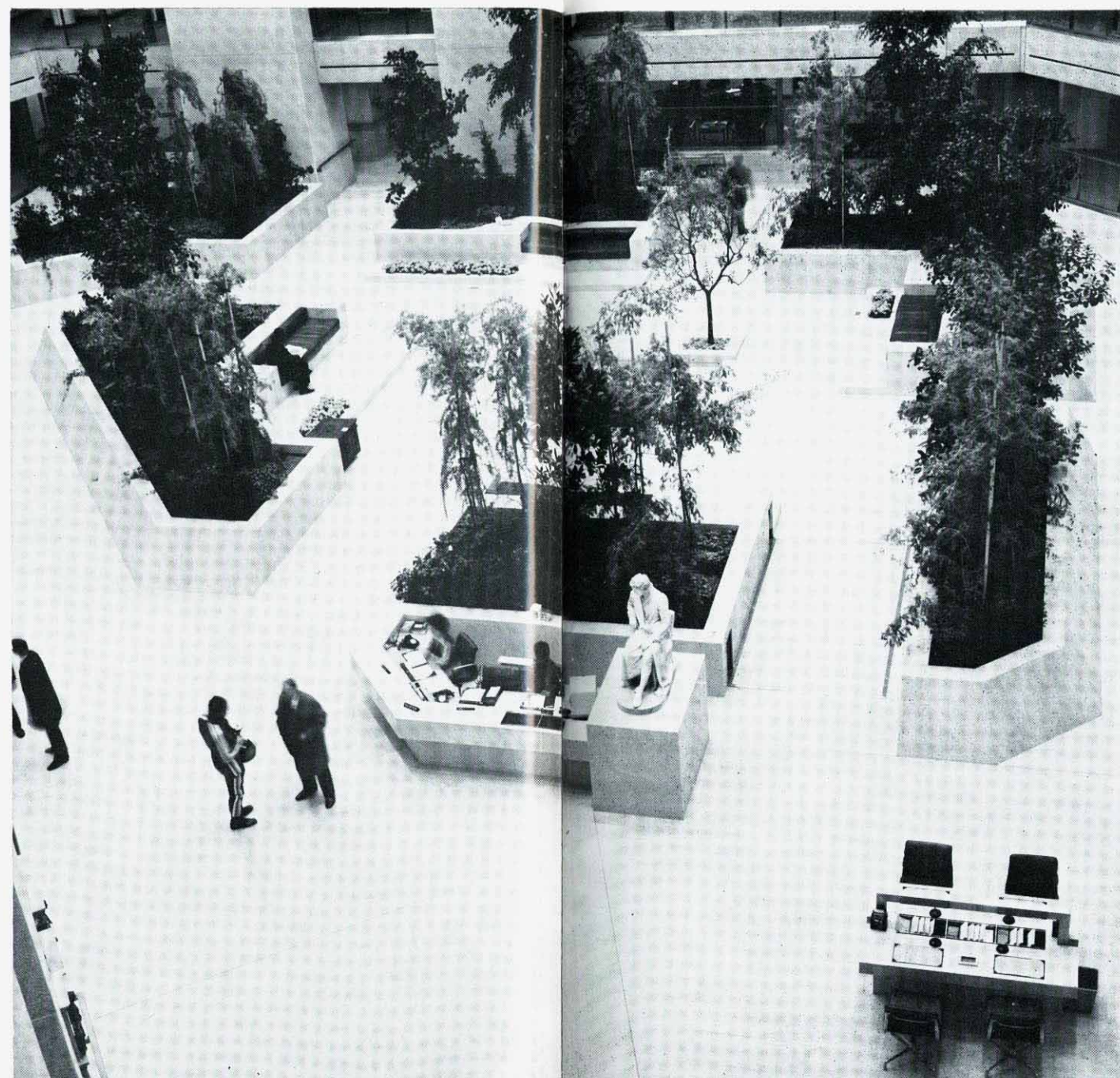
The story of the redevelopment of Coutts' triangular site in the Strand is well known. Briefly, the object was to provide a building for the new head offices and Strand Branch of Coutts & Co. suitable for modern banking methods, at the same time preserving the original Nash facades of the old bank dating from about 1825. As such, it therefore remains one of the very few buildings in the Strand of any architectural distinction.



The restored Nash facade with the famous pepperpot and the new glazed entrance hall.

The fundamental problem with the deep triangular site was to get natural light into the heart of the building. This was solved by the present garden court and banking hall which rises the full height of the building to a glass roof, overlooked by office gallery floors.

Although the garden court serves the simple and essential function of a light well, its character and appearance are far removed from the light wells of earlier office blocks with their white glazed bricks. Apart from its function as a banking hall, the court is



The garden court and banking hall from one of the office galleries. The planters are grouped around a central pool as the focus of the space.

a restful place for the enjoyment of customers and the office staff who overlook it. It also provides space for occasional exhibitions and special functions.

Part of the success of the garden seems to stem from the fact that it is carefully controlled and has not been allowed to develop into an overgrown jungle. The planting is limited to sharply defined areas and is displayed against a background of cool white marble which sheaths all the reinforced concrete elements forming plant troughs, upstands, kerbs, steps, benches, floors, walls and pool.

The building is entered through an escalator hall with a plant bowl by the doors which revolves very slowly to ensure the vertical growth of the mature white-stemmed *Ficus nitida* which it contains.

statue of Thomas Coutts is beside the marble-clad reception desk. Beyond, the

Beyond the escalators at a higher level is the garden court with trees varying in height from 5 to 7 metres. Below them are shrubs and ground cover plants, and a few shallow troughs for seasonal flowering plants.

Although no rain ever falls in the court, the climate is controlled by a computer which monitors the air-conditioning system.

The original conception of the planting was that of a traditional London garden with plane trees and mainly evergreen shrubs. Such plants, however, depend on a cool, humid atmosphere with an abundance of ventilation which would not have been suitable for activities in the banking hall. It also had to be borne in mind that the plants would not have their normal dormant period and that natural

lighting was relatively limited despite the glass roof; also that there would be little variation of temperature by day and night. The usual house plant varieties were rejected because although they would have flourished, they would also have introduced a tropical jungle effect which was considered unsuitable.

Various planting authorities were consulted, but since it appeared that no similar scheme had been previously undertaken in the United Kingdom, the research did not provide much data. It was therefore decided to base the design on sub-tropical



General view of the garden court showing the upper office galleries and the glazed roof.

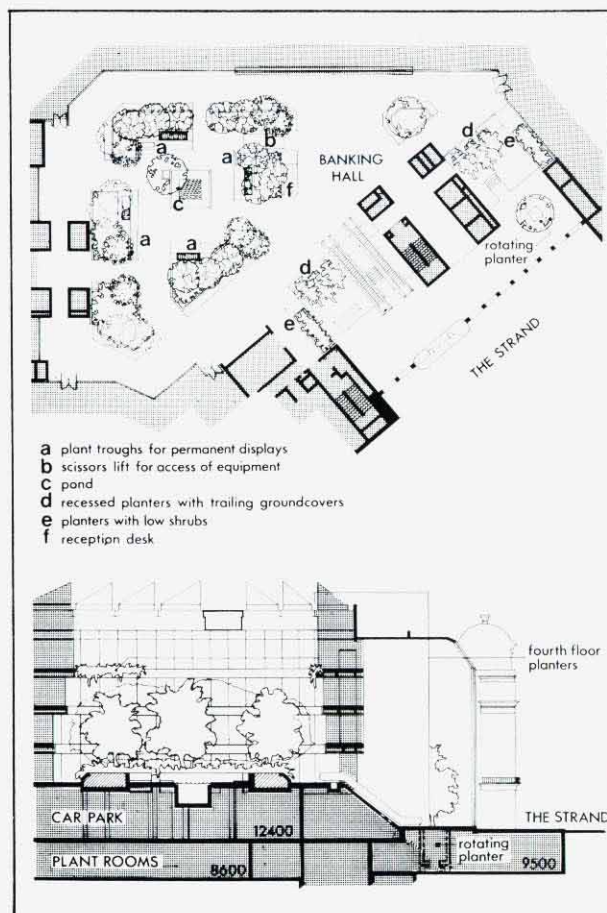
plants, a short list of which included *Magnolia grandiflora*, *Acacia dealbata* and *baileyana*, *Olea europaea*, and varieties of the small leaved *Ficus* species. The trees were imported from abroad since no good specimens of suitable size could be found in the United Kingdom, and visits were made to Italy and Belgium. Shrubs and ground-cover plants were more readily available and the shrubs consist of *Azalea*, *Buxus*, *Camellia*, *Euonymus*, *Fatsia*, *Ficus diversifolia*, *Nephrolepis*, *Phormium*, *Rhoicissus* and *Schefflera*. Ground cover includes *Ficus radicans* and various *Hedera*s.

The landscape contract required the trees to be installed in a special greenhouse two years before being planted in the new building so that they could

be conditioned and advanced to a suitable height of 4-5 metres. Initially, the Magnolias and Acacias responded badly because of the high temperature but some recovered later. Some plants flourished so well that they had to be discarded because they were too big. The pool is stocked with aquatic plants, and carp are to be introduced for whom special recesses are provided so that they can rest out of the light.

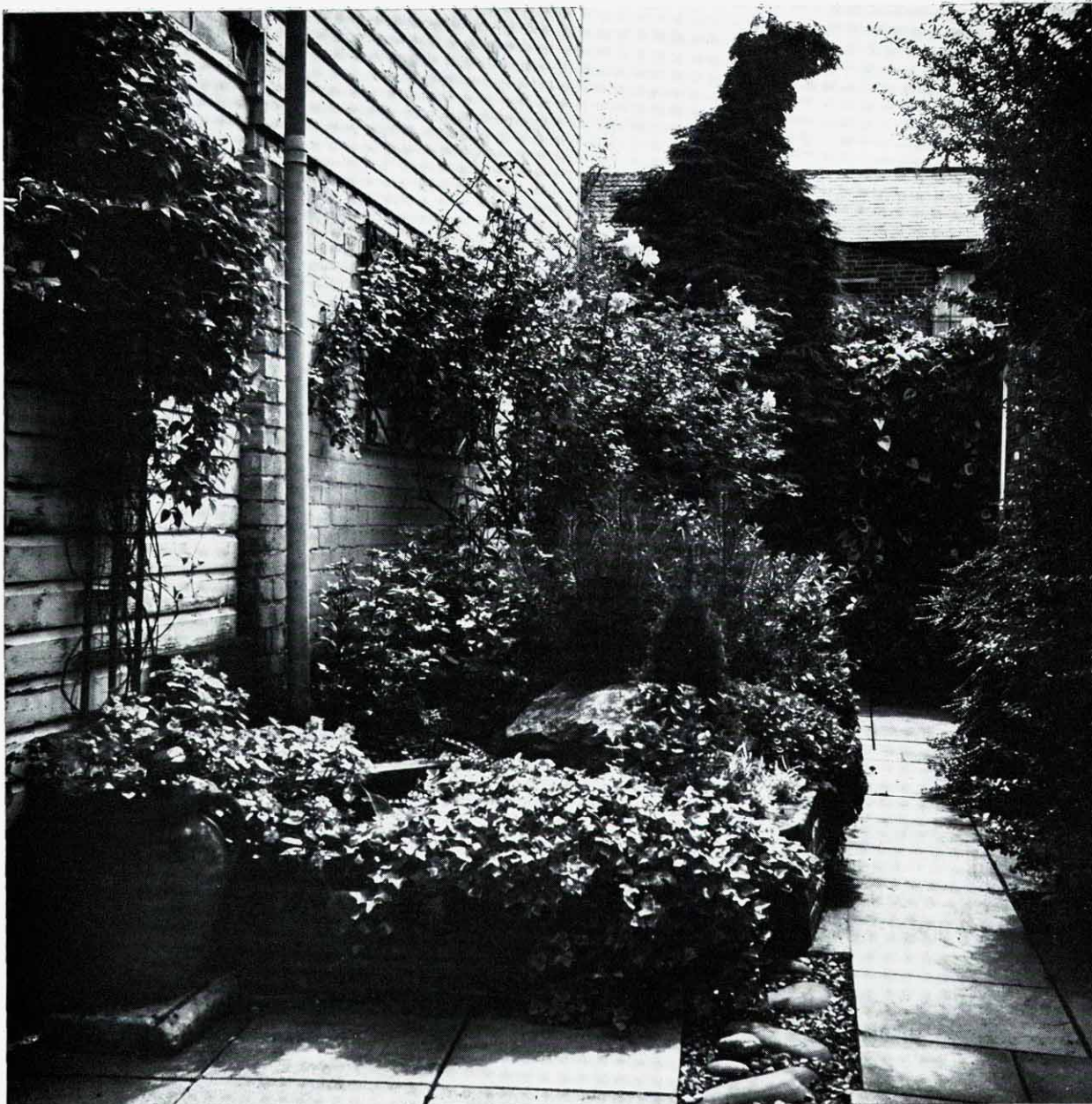
The planting troughs vary in size and depth. All have a 150 mm drainage layer of shingle and a 50 mm fibreglass quilt which acts as a filter to the loam-based compost above; this varies in depth from 750 mm to 1.4 m. All the planting areas are drained and provided with a specially de-ionised water supply.

Day to day attention to the plants is important and includes the usual pest and disease control, weeding and the collection of dead foliage. It is also necessary to clean the foliage at intervals and the trees are sprayed from a mobile maintenance platform.



Main picture: Detail of the reception desk at first floor level with the statue of Thomas Coutts. Beyond is the bank counter. Left insert: View of the garden court with the pool in the foreground and the escalators beyond. Right insert: The pool in the foreground with marble-clad planters for trees, shrubs and ground cover plants grouped around.





General view from the house.

A SMALL LONDON GARDEN

Archway Street, Barnes London SW13

This small enclosed town garden in south-west London was very much a do-it-yourself exercise. The owners, Michael and Julia Roberts, are experienced at doing up old houses and enjoy it as a hobby (they have recently bought an 1877 'Primitive' Methodist Chapel on the Hampshire/Wiltshire borders on which to exercise their talents). The garden is at the back of what ought, strictly speaking, to be classed as a William IV farmhouse, seeing that it was built in 1832. The surrounding area used to be marshland with market gardens, but is now a built-up network of small streets which estate agents are pleased to call 'Barnes Little Chelsea'. The garden

was something of a challenge because, as the plan shows, it is long and very narrow, measuring roughly 8 ft. 7 in. by 38 ft. 4 in.—little more than a back yard. It is also enclosed all round, with the house bordering the west side and north end. Sun, however, comes in for most of the day in summer.

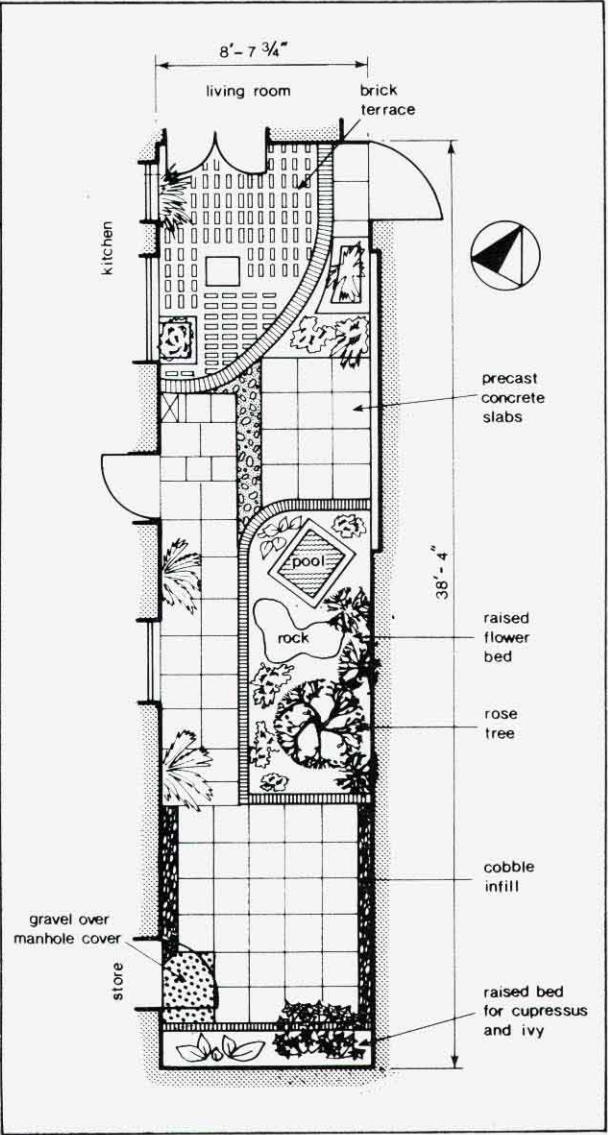
When Mr. and Mrs. Roberts took over some ten years ago, the garden was in a bad state and mainly taken up by a sand pit for small children. There was a path of brick slips to what used to be a cowshed, and these were removed and made into a curved platform outside the french windows to their sitting room. The rest of the garden is largely paved with 'Marley' precast concrete slabs, 18 in. or 12 in. square, of a pinkish-buff colour. The central feature

on the east side is a brick-edged raised flower bed with varied low planting, a large rock, a square fibreglass pool and a yellow rose tree.

Paving slabs have been omitted in places to form plant beds, and the sides of the garden have in parts been infilled with cobble strips; another strip has been infilled with boulders from a Scottish beach and gravel. Plant bowls are included, one of which is a plain common-or-garden sink (now more garden than common) rendered externally with a mixture of cement, coarse peat and sand to give a rough weathered texture; the same treatment has been given to a brick plant box on one side. Where the manhole occurs in the south corner, the paving slabs have been omitted and loose gravel laid over the cover so that it can easily be taken up.

The garden is terminated by a cupressus tree and a wall mainly covered by a large-leaved variegated ivy (*Hedera Picasso*).

Other do-it-yourself enthusiasts might well take heart from this simple scheme of planting and paving which forms a green oasis—albeit with the noise of aircraft constantly descending to Heathrow—in a dense urban environment.



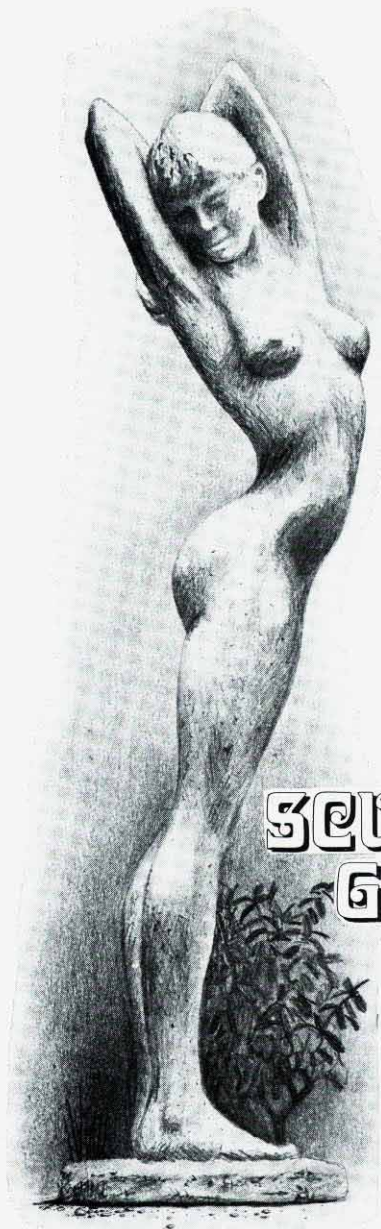
Owner and dog.



View through sitting-room french windows.

Detail of raised flower bed with fibreglass pool, boulder, precast slabs and infill strip.





A SCULPTURE GARDEN

Sir Frederick
Gibberd's garden,
Stort Valley,
near Harlow New
Town, Essex

by George Perkin

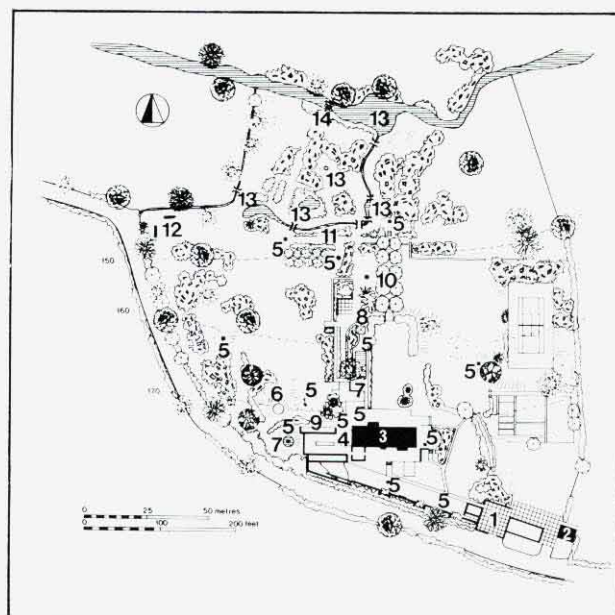
The day I went to Sir Frederick Gibberd's garden, early in June, there was a new piece of sculpture by Paul Mount expected in the afternoon. Sculptor, sculpture, installation plant and labour were due to converge from different corners of the earth. In the event, co-ordination proved perfect and the abstract piece of sculpture was in position on its concrete plinth on the front lawn by tea-time. This absorbing operation very much set the tone for what I discovered elsewhere. For it is surely the sculpture in this eventful garden—glimpsed at the ends of vistas or come upon dramatically in glades—that gives point to the landscaping. This is sculpture of many different kinds, from the craggy eagles on the gate posts and the startled swan rising from a bower of green in the lime walk, to the white nymph stretching herself elegantly in the dark recesses of a leafy arbour, or the bust of Queen Victoria wittily placed in a grotto of champagne bottles and flints.

What is also immediately apparent is that this garden has been a labour of unusual imagination as well as love, and bears all the marks of what its creator has called "a selfish, intense and completely absorbing pleasure" since he bought the site 25 years ago.

The garden extends over six acres and is on one side of a small river valley within the borders of the 'new' town of Harlow—another of Sir Frederick's preoccupations over the years for which he is, of course, Architect/Planner. At the bottom of the garden, all is dark shade or sunlight on bubbling water, with the river forming a waterfall and pool, and a bog garden of lush greenery and streams. This is the low-lying wild part, from where the garden rises to the terraces and more formal surrounds to what Sir Frederick says used to be a rather hideous bungalow of 1905. This he has since rebuilt and made into a spacious white setting for his pictures and sculptures, with windows designed to frame contrasting views of valley, walled garden and conservatory.

The garden has been worked from the house downwards with a good deal of earth moving and ground modelling to make the most of the contours and to create hills, valleys and interesting variations in level. As it descends, the garden unfolds as a series of "compartments or rooms"—interconnecting spaces loosely divided up by screens of planting or walls. Sir Frederick believes that garden design (like architecture) is the art of space. And perhaps it is the alternating sense of enclosure and space that makes this garden an adventure to wander through.

The areas immediately around the house are appropriately more formal than elsewhere with paved terraces, paths and mown lawns. For the paved surfaces, extensive use has been made of concrete in a manner that suits exactly the mature and mellowed character of the garden. The smaller sized standard precast concrete slabs have been used in a particularly attractive way, omitting occasional

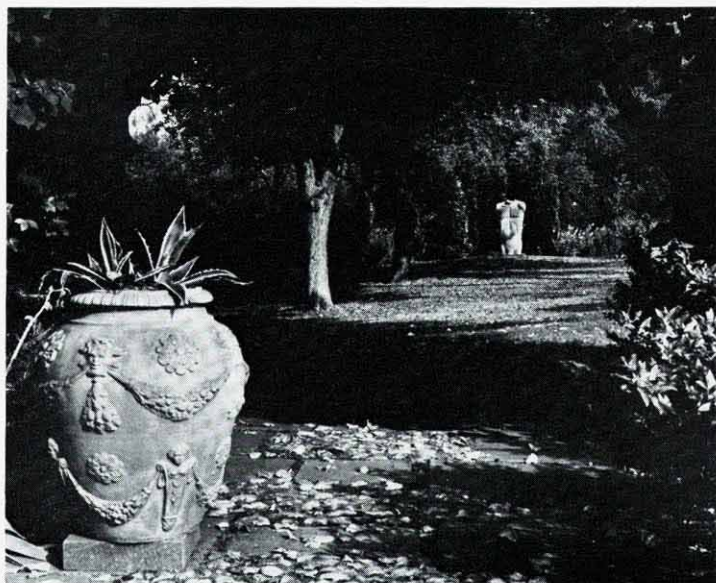


1 Forecourt; 2 Cottage; 3 House; 4 Conservatory; 5 Sculpture; 6 Pavilion; 7 Formal pool; 8 Gazebo grotto; 9 Sculpture gallery; 10 Lime walk; 11 Hazel walk; 12 Temple; 13 Pool; 14 Waterfall.



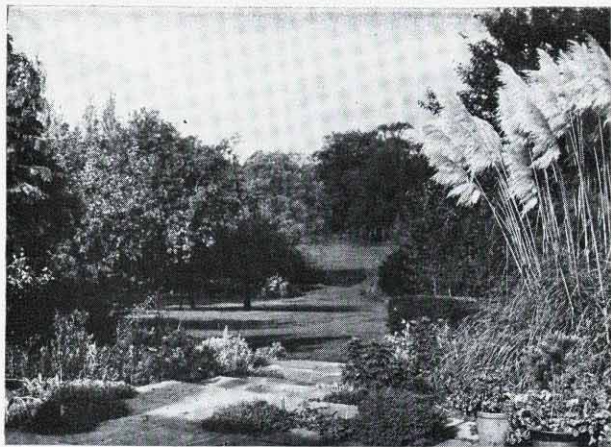
Sir Frederick Gibberd at home in a paved garden court adjoining the house.

Torso by John Skelton seen against dark planting shielding a tennis court.

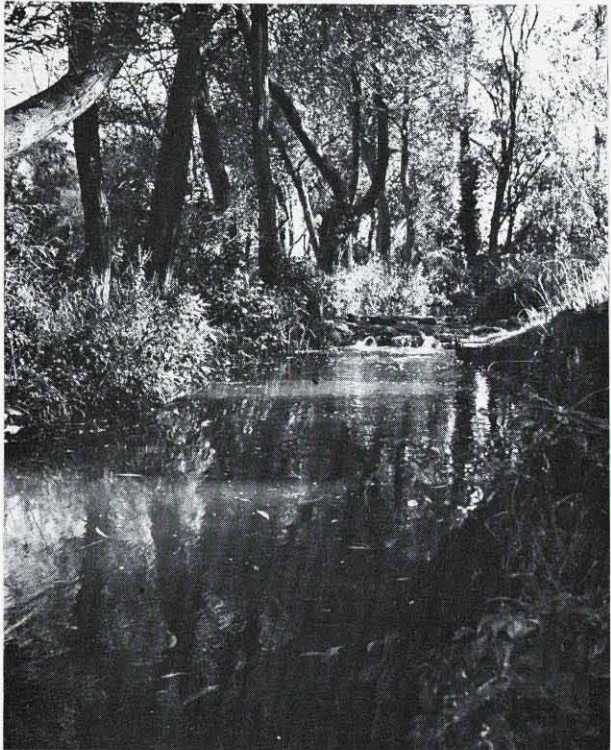


A classical head set on a concrete base.



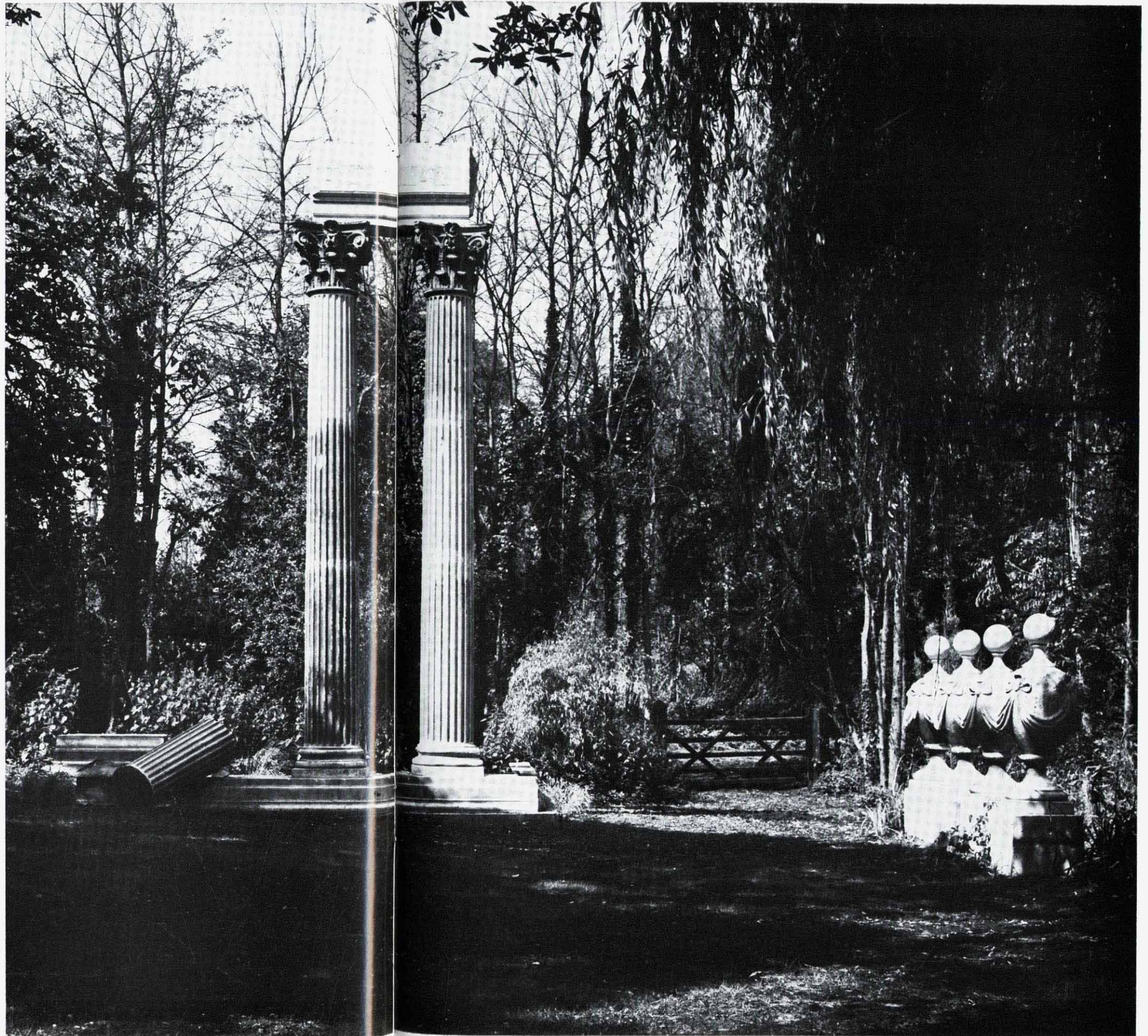
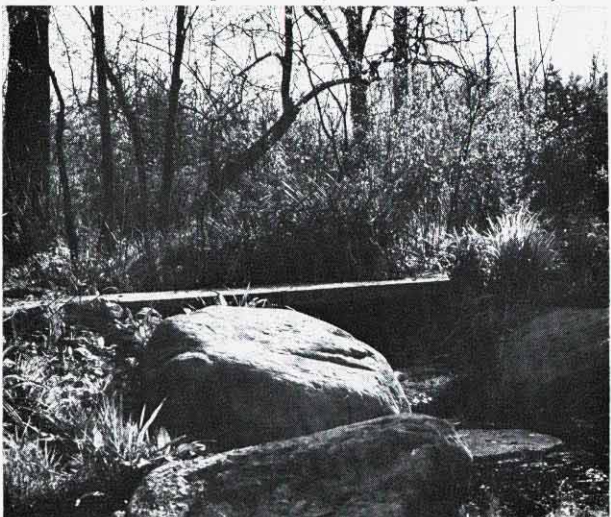


Above: A fine sweeping vista from the house terrace.



Above: River and waterfall.

Opposite right: 'A ruined temple' in the grand 18th century manner: Corinthian columns salvaged from the old Coutts Bank in the Strand, London, at the bottom of the garden. Below: The bridge across the stream is a concrete slab between steel angles. The boulders were rescued from the site of Llyn Celyn Reservoir, North Wales (landscape architect, Sir Frederick Gibberd).





Above and below: Details of the paved terraces around the house showing the small precast concrete slabs infilled with cobbles or flints.



slabs and infilling with cobbles or flints. This gives alternating rough and smooth paved areas similar to the traditional pavings found in the courts and gardens of southern Spain (see page 39). In other parts, the slabs have been laid in staggered or random patterns with edges and intermediate spaces filled with textured in situ concrete. Most of the paths are of exposed-aggregate in situ concrete, usually laid with dividing transverse strips of tiles or timber at close intervals, so that any cracking takes place at the joints. These paths, covered in places with moss or lichen, have weathered with considerable character and were laid by Sir Frederick with the help of a handyman, the texture and colour being varied according to situation.



One of a pair of eagles on the entrance gate posts, sculptured in concrete by Gerda Rubinstein.

Concrete blocks have been used for screen walls in places near the house, colour-washed blue or white and sometimes heavily overgrown with creepers or wistaria. Also near the house are a series of low in situ concrete walls, considered to be an indispensable part of the garden, forming bins for leaf mould, wood ash, sand and compost in varying stages. Only tins and bottles go to the dustman, and even some of the bottles—as already mentioned—were used for the grotto around Queen Victoria.

A particularly delightful and important feature half way down the garden is the summer-house, or folly, built by a previous owner in the early part of this century. This is a two-storey affair, set among a series of stepped terraces built with exposed aggregate concrete blocks and slabs—an unusually romantic use of the material for that time. Originally

Opposite top: The concrete summer-house, or folly, in Sir Frederick Gibberd's garden built by a previous owner in the early part of this century. Opposite lower left: View from the sitting-room of the garden and summer-house. Opposite lower right: The concrete summer-house set among a series of stepped terraces and flower beds.



A SCULPTURE GARDEN

continued

it had a thatched roof, but this has been replaced with a matching concrete pyramidal roof. The summer-house links lower and upper levels of the garden by means of a spiral stair with a sitting-out area at the top. And nestling against the front of the structure is a black lion *couchant*—relic, perhaps, of some country house.

Another important feature inherited from the last owner is the short but stately avenue of limes—a fine vista closed at its lower end by the swan sculpture mentioned earlier. This is a very alive piece—wings protectively spread about its cygnet—sculptured in concrete some 15 years ago by Mary Gorrara. The scooped-out hollows of the wings form, incidentally, effective bird baths. This and the craggy pair of concrete eagles on the entrance gate posts, with their ruffled feathers and noble heads, sculptured by Gerda Rubinstein, are fine examples of sculpture in this medium.

Down towards the river, where a diffused greenish light spreads over the bubbling streams and pools, there are water-loving plants, bamboos and rushes and small bridges across the water. One of these crosses a stream and is made of a simple in situ concrete flat slab cast between angle irons on an asbestos-cement sheet—a small detail that might almost go unnoticed, so naturally does it merge into its surroundings.

In the far corner of this wild part of the garden, there appears suddenly, at the end of a grassy glade, what looks like a ruined temple in the grand eighteenth century manner. This, in fact, is made up of lofty marble Corinthian columns, with some broken fragments, salvaged from the old Coutts Bank in the Strand (Sir Frederick has, of course, designed the recently opened new one)—an inspired idea which, as might be imagined, was not so easy to put into practice. (The internal garden of the new Coutts Bank is featured on page 6).

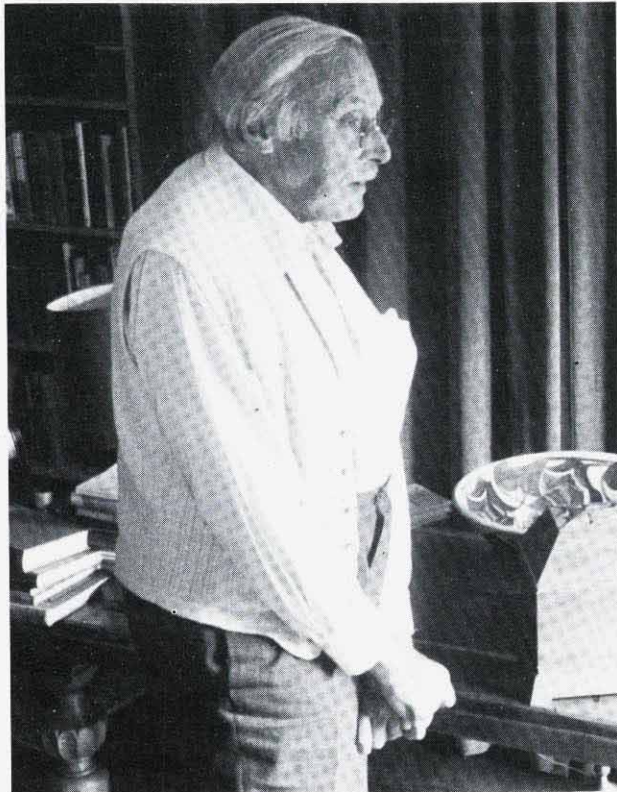
At the end of the day, reluctant to leave in case I had missed some small gem hidden away in a leafy corner, I came to the conclusion that this was surely about the most fascinating garden I had yet visited, representing as it does a fertile imagination and a special eye for what used to be called 'a pleasing prospect'. More than anything, perhaps, it illustrates the value of sculpture in landscaping on a scale rare in modern gardens today.



Top: Sculpture of a young girl by Gerda Rubinstein set in a paved arbour. Lower left: The sculpture above appears dramatically at the end of a dark green vista. Lower centre: The swan sculpture looks down the stately avenue of lime trees. Lower right: Detail of the swan sculpture by Mary Gorrara, cast in concrete.

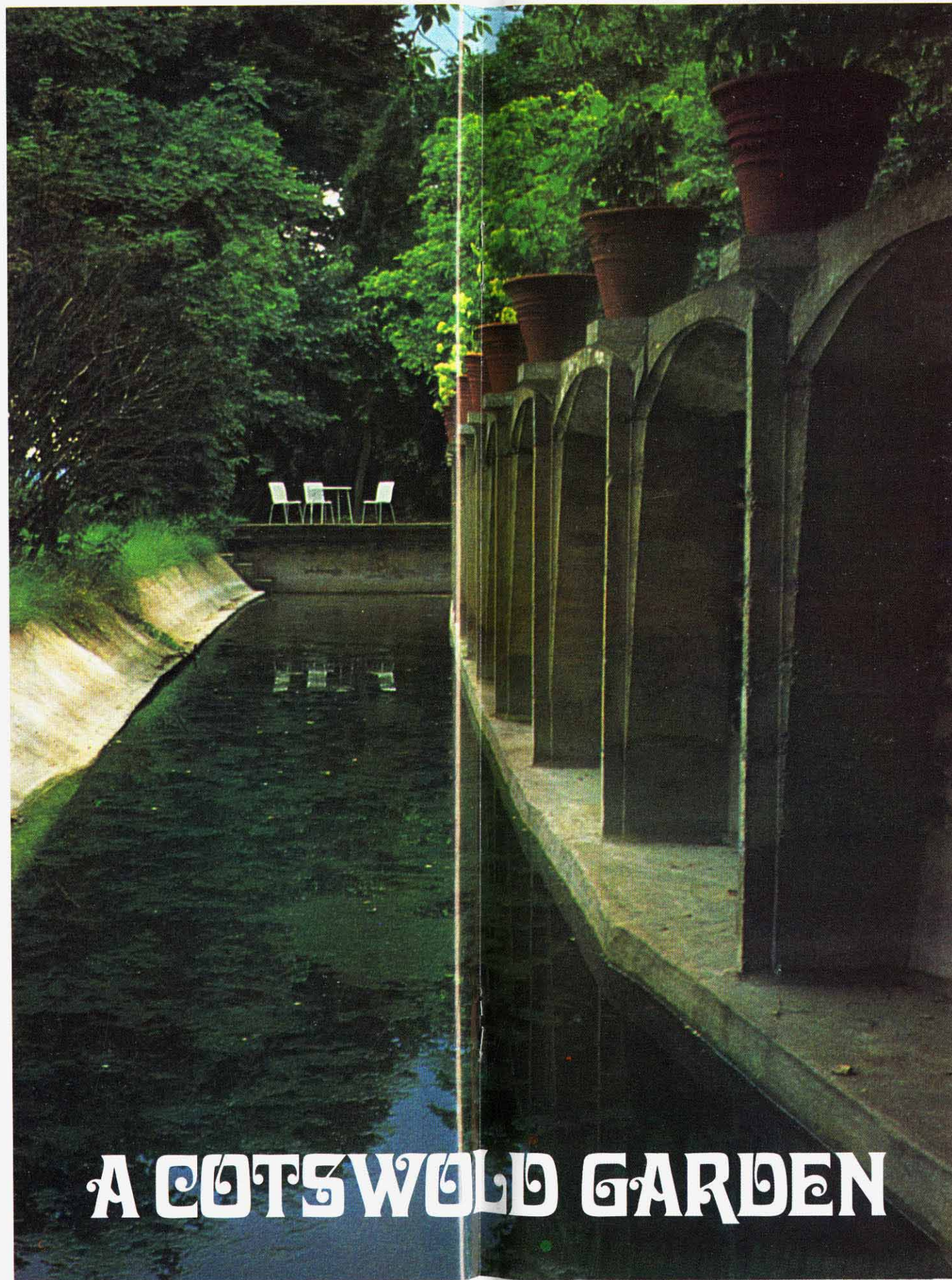
Sir Gordon Russell's garden, Kingcombe, Chipping Campden

Readers may remember Sir Gordon Russell's garden at Chipping Campden featured in *Concrete Quarterly* 98 (July-September 1973). It is included again briefly here because it seemed a pity to leave it out of a special issue on gardens, particularly as the concrete in it is so interesting.



A recent photograph of Sir Gordon Russell (Photo: Roderick Gradidge, Art Workers' Guild copyright).

Sir Gordon Russell, leading furniture designer in this country and for twelve years director of The Design Council, is now 87. Although he has retired as Chairman of Gordon Russell Limited which sells furniture from its showroom in Broadway, he is still a Director of the firm and very much designing furniture himself according to his own deeply held convictions. However, these pieces are not being offered for sale and are purely personal experiments. A recent article about him in *The Guardian* reports him as saying: "I have always wanted to develop the English tradition. I never went over to a passion for flat roofs and the Bauhaus and all that, though I thought some of it very good. But obviously it made it too easy for someone who was purely a businessman to build a block of offices without any trouble, just putting one unit on top of the other. It was money for jam". This is very typical of him. As a craftsman, primarily in wood, it is not therefore so surprising that he should have extended his talents to experimenting with concrete in the fine garden surrounding his Cotswold house, and he has had a good deal of fun with it.



The canal and concrete arches forming a retaining wall.

A COTSWOLD GARDEN

The garden is no set piece. Rather it is a romantic garden, wild in parts, descending steeply to a fine sweep of Cotswold meadows by way of gravel paths, bosky orchards, arbours and—finally—a small canal at the bottom flanked by an impressive curved retaining wall of concrete arches infilled and reinforced with wine bottles. Wine bottles, in fact, seem to come into the concrete quite a lot. The wall is topped by a curving path of in situ concrete slabs broken by bands of rough gravel. The path is edged with concrete projections which hold a series of ceramic flower pots specially designed by Sir Gordon who was also responsible for all the concrete work and cast it with the help of local labour.



Flower pots and concrete path on top of the retaining wall to the canal (left).



Upstand concrete border cast against railway sleepers to give character and texture.

Undoubtedly the canal is the main feature of the garden, but there are others as well such as the arbour above the canal. This has a pergola with column bases formed of standard concrete pipes and the columns above built up of empty bottles bedded in concrete and surrounded with expanded metal lathing which was then plastered externally with a cement and lime mixture. Elsewhere he has enjoyed experimenting with different textured materials used as formwork for concrete. For instance, there are upstand concrete flower borders cast against railway sleepers—normally sold for firewood but often with an interesting rough grain which gives character to the concrete.

From this it will be seen that, in the true crafts-

A COTSWOLD GARDEN

continued



General view of the canal and concrete-arched retaining wall.

man's tradition, Sir Gordon has a fresh and original approach to concrete that is still very much needed today. In fact his remarks in our article six years ago seem, if anything, more valid now than then:

"Coming at an early age to a country of marvellous stone I have been interested in walls ever since; as a boy, my father showed me the great importance of good pointing. I claim to be a competent stone waller. But when serving in the first war I noticed a German pill-box which had, as usual, been cast in concrete but with hurdles for shuttering. These had rotted and left a texture which intrigued me, for it showed clearly that concrete was a plastic material whereas I had always seen it imitating stone.

As early as 1926 I was experimenting with combining stone and concrete—stone for pillars carrying a concrete lintel with specially made basketwork in the shuttering. I added a good deal of stone dust to the mixture so as to avoid the harsh grey which is so common, and it has weathered beautifully to have a strong affinity with the adjacent

stonework. Since then I have made many experiments. What could be more suitable for a kitchen window lintel than cabbage leaves? The mixture comes away sharp and polished from their waxy surface and the matt of the scaffold board to which they were pinned forms a delightful contrast. And then I have used paving with a screeded surface—with gaps at six foot intervals into which cobbles were grouted or washed gravel laid loose, giving a pleasant crunchy sound. But these have always related to the dominating stone.

There is room for far more experiments in the use of concrete. Multi-coloured paving, gnomes and sundials pall and rock-faced walling set in a horrible recurring pattern—like a large jumper, two medium blocks and three smaller—doesn't make a good wall. Research into the imaginative use of an excellent material is urgently necessary—and I know some interesting work has been done at Wexham Springs from where I have from time to time received helpful technical advice."

A GARDEN OF FOUNTAINS

The Schlossgarten, Stuttgart

Photographs: George Perkin



A typical view of fountain, water, concrete paving and planting in the Schlossgarten, Stuttgart.

The Schlossgarten in Stuttgart is surely one of the most splendidly landscaped municipal parks in Europe. It gains from its position right in the centre of the town adjoining the main railway station, and is therefore something of a green lung for the townsfolk. In recent years it has been made more easily accessible to pedestrians because it is linked directly with the subterranean shopping concourse in the station, with its cafés offering beer and sausages, and with the newly pedestrianized Königstrasse, the main artery of Stuttgart. It is thus possible to walk from the centre of the town right through the station and on to the end of the Schlossgarten without meeting any traffic. The park is open 24 hours a

day (in the summer a lot of people sleep there) and is a cheerful place to visit in the daytime and evening with its fine displays of plants, open-air cafés and—in particular—moving water.

The plan of the garden, covering some 130 acres, is long, attenuated and divided up into three main sections—the Upper, Middle and Lower Schlossgartens.

It dates from 1807 when it formed part of the Royal Park built at the same time as the Neuer Schloss. It was subsequently replanned for the Gartenschau of 1961 and more recently that of 1977, and is in a constant state of evolution, ably supervised by a team of landscape architects working for the Park Authority.



Fountain detail.



A footbridge formed of a simple slab crossing a stream, with grass and concrete paving on the banks.

The restaurant projecting into a lake in the Schlossgarten, constructed of cantilevered concrete beams and piers.



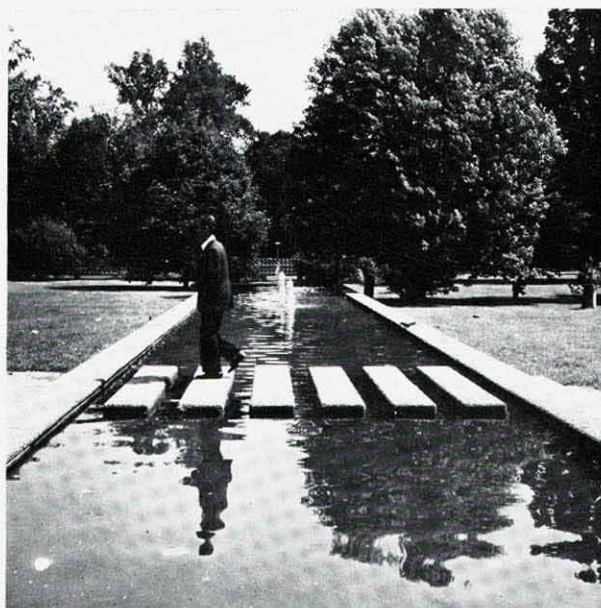


Typical detail showing concrete slabs forming stepping stones.

Detail of concrete fountain pool and paving.



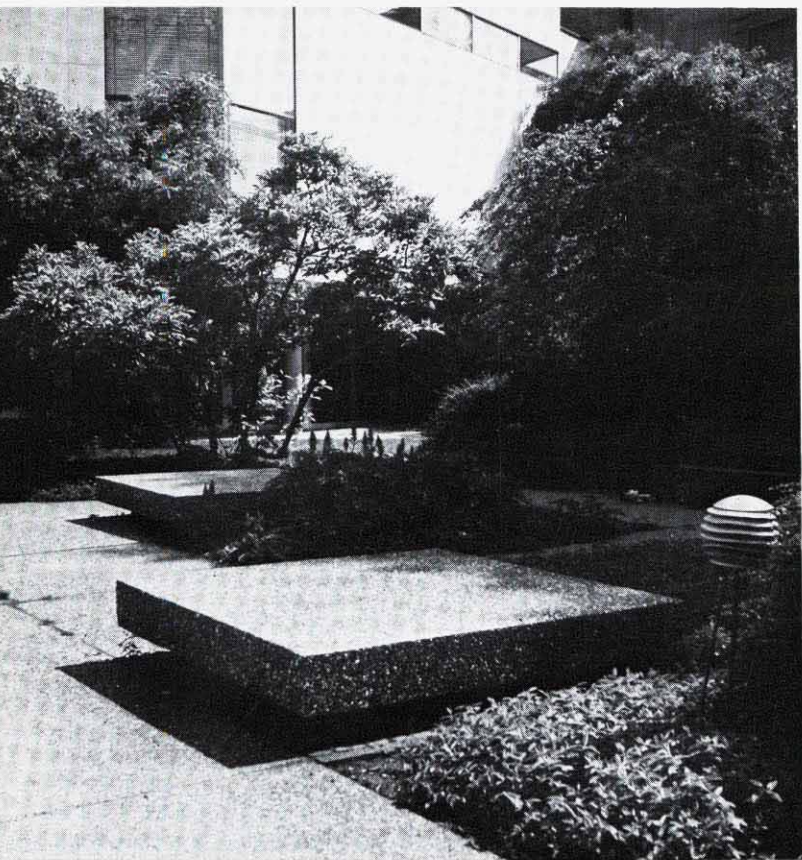
Concrete stepping stones across a fountain pool.





Concrete and granite paving slabs set in a circular pattern around a pool.

A concrete seat or table forms an extension of the paving. Note the lantern set low in the foliage.



These landscape architects exercise continuing control over maintenance and evolution, and work closely with the city engineers.

The Upper Schlossgarten is ringed with public buildings—a theatre, concert hall and art gallery—and is therefore more directly linked with the city. The Middle Schlossgarten is enclosed, set apart from the city, and contains the most interesting displays with its restaurant built over a naturally planted



Fountains formed of flat circular plates with stems of varying height lit

lake, water gardens and outdoor games including chess and bowls. The Lower Schlossgarten is a wilder park than the other two with streams and an ancient double avenue of plane trees; it also contains the spectacular new experimental glass-reinforced concrete shell which is said to be the longest-spanning and thinnest in the world.

The concrete paths and surrounds to the fountain pools and lakes are particularly successful, mainly because of their extreme simplicity. Large precast slabs are generally used with a brownish, rounded exposed aggregate finish. These form a pleasantly

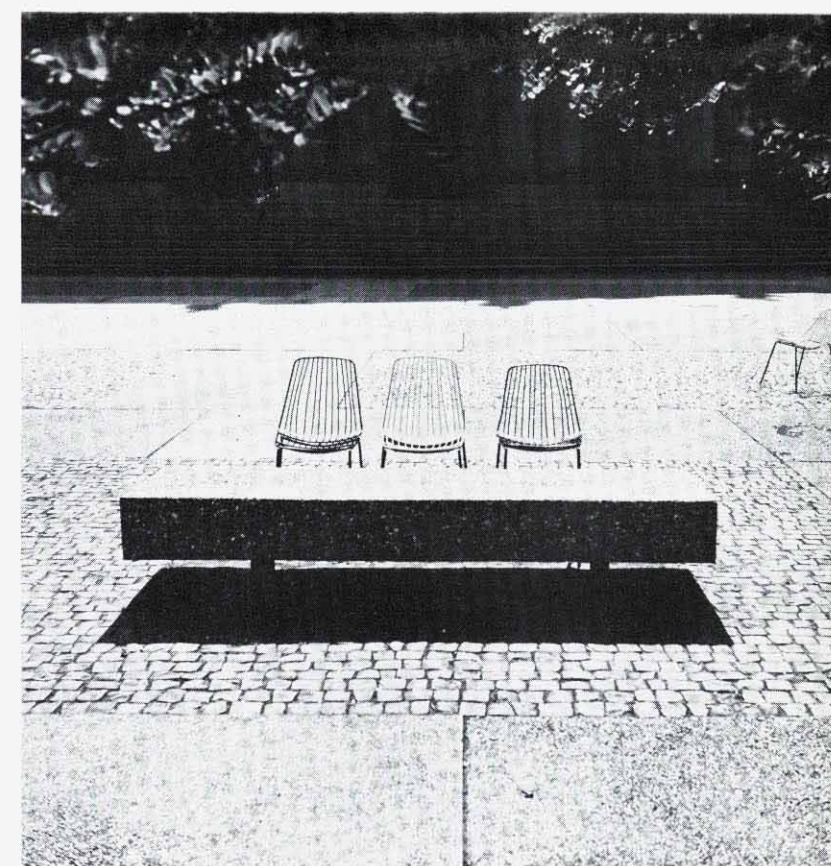
textured neutral background to plants, foliage and water. They cover extensive areas and are used absolutely plain without any form of pattern. Where pools occur, the slabs are often simply omitted so that there is a sharp clean-cut transition between path and water without any intervening kerb or upstand. Frequently the slabs are used in the water as stepping stones. They are also raised up in places to form benches or tables so that the furniture



from the base at night.

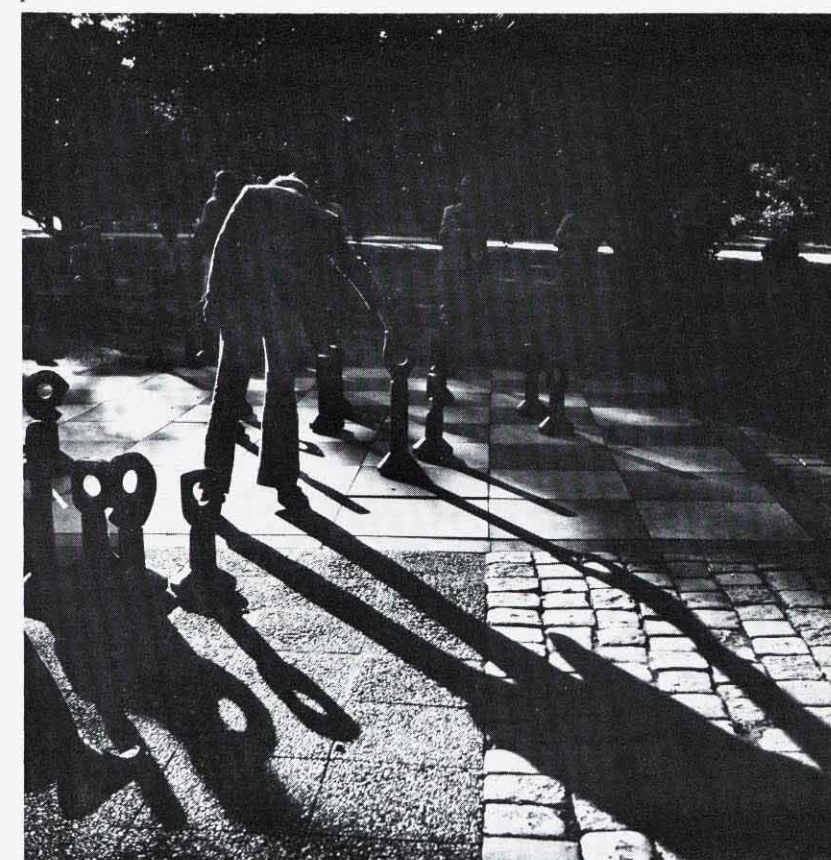
forms and extension of the paving.

Lighting is particularly effective and is generally kept low on the ground so that it shines through the foliage. It is also placed at the bases of the fountain jets and pools so that the full effect of the water is heightened and dramatized at night. The fountains vary a good deal: some are simple jets of water of varying heights bubbling up out of pools, and these again look particularly splendid lit from below at night. There are also the circular fountains like mushrooms on stalks of different heights, with round flat plates and curtains of water falling down around



A seat of exposed aggregate concrete matching the paving slabs used as a picnic table.

Outdoor chess on paving of varied textures – a common national pastime.



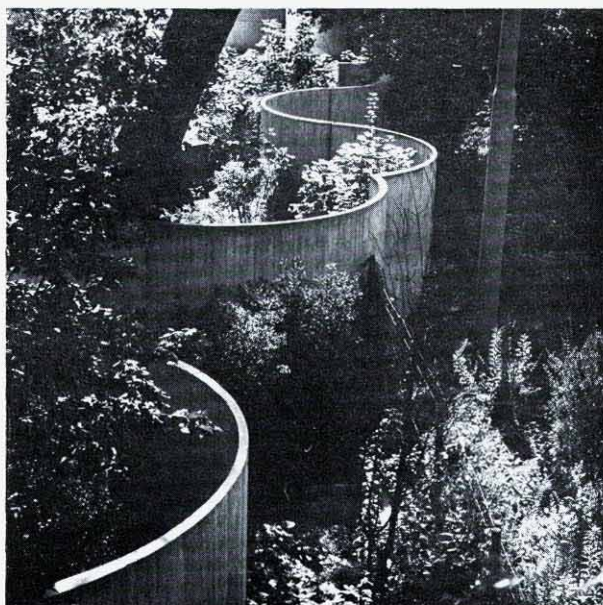
the edges. The stems are once more lit from the base. Elsewhere there are pools set at different levels so that water is constantly flowing in a gentle stream from one to the other. This general movement of water is a particularly attractive feature of the park.

People congregate in the park at the focal points of games areas and cafés. Outdoor chess is among the most popular of the games, played with giant wooden pieces on chequerboard paving of black and white concrete slabs, and nearly always attracting a lot of spectators. The open-air restaurant built out over the lake has a wooden deck on cantilevered beams and piers of reinforced concrete; this is perhaps the most lively spot in the park with music and dancing in the evenings.

Down at the end of the Schlossgarten, the recently constructed GRC shell, mentioned earlier, makes a stunning impact with its elegantly curved membranes of unbelievable thinness, reminiscent of Felix Candela's restaurant at Xochimilco in Mexico (*Concrete Quarterly* 42)—a similarly spectacular shell but of ordinary reinforced concrete. The Schlossgarten shell was originally put up for the 1977 Gartenschau as an experimental structure forming a flower market. It is being kept longer than originally intended to test its structural performance. The shell is all free-flowing curves and has a clear span of 31 metres and a thickness of 1 centimetre, so that it not

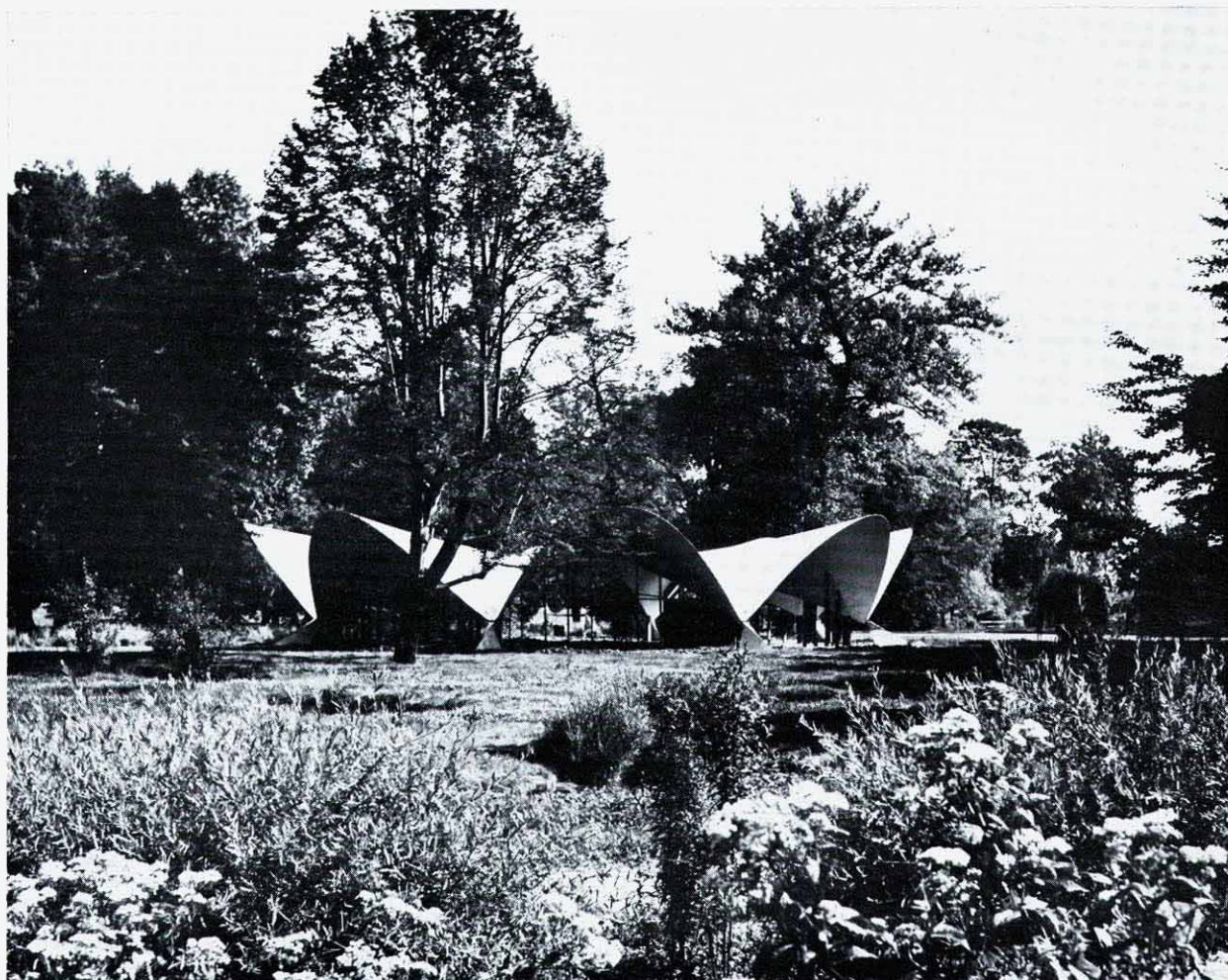
surprisingly claims to be a world record.

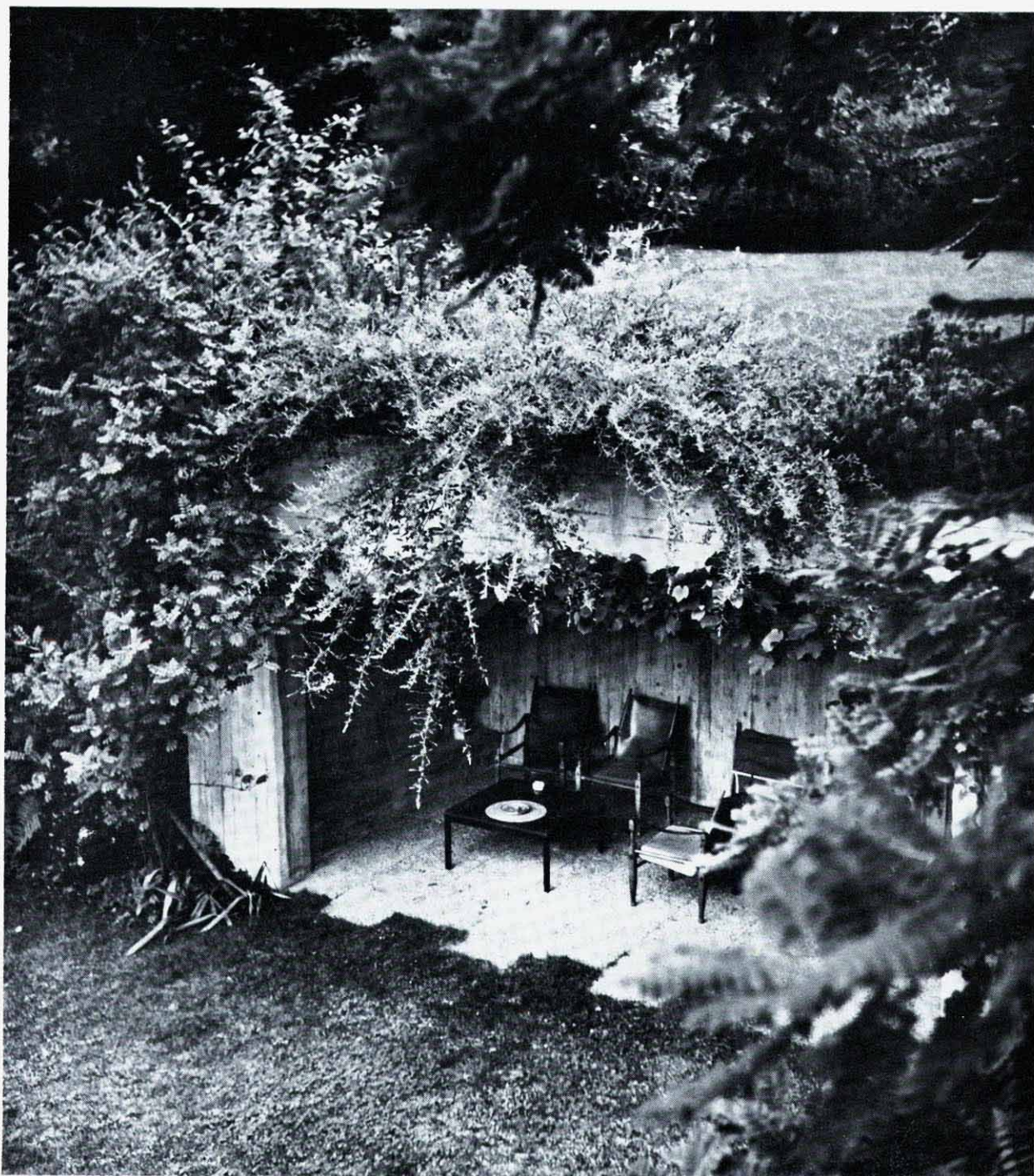
Perhaps the most important lesson of the Schlossgarten for us is the apparently effortless and simple way in which its best features are contrived—the epitome of un-fussiness in landscape design.



Part of the boundary wall to the Schlossgarten formed of curving segments of concrete.

The glass reinforced concrete shell spanning 31 metres and only 1 centimetre thick.



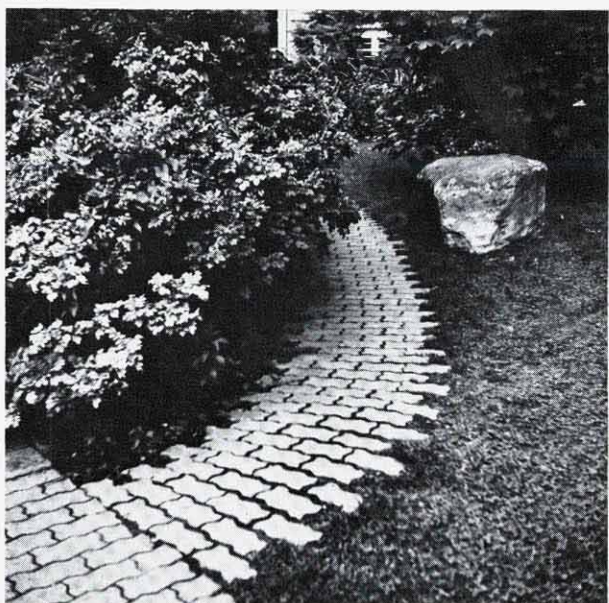


Summerhouse of in situ concrete carved out of hill in the garden of a series of three houses designed by the architect Andres Liesch and terraced into a steep slope. The architect lives in the top house and likes to enjoy the marvellous view over Zurich from the summerhouse. The houses are in the Bergstrasse, Zurich.

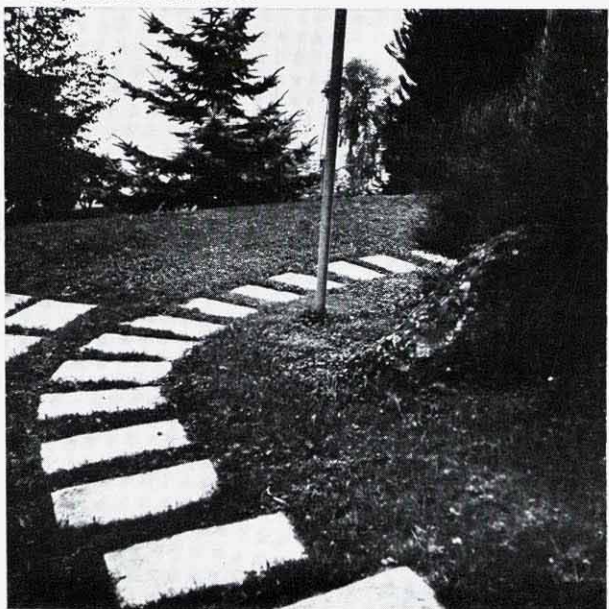
THE GARDENS OF ZURICH



Above: Interlocking paving slabs and water in the Kantonschule, Zurich.



Above and below: Two forms of curved path, one laid with paving blocks, the other with slabs.



The Swiss have a way with concrete in the landscape that seems natural and uncontrived. The random examples illustrated here are nearly all in or around Zurich—a marvellous centre for anyone who wants to study this kind of thing. The Swiss have long understood the importance of using plants with exposed concrete—particularly in situ concrete—and most modern concrete buildings incorporate it, either by including plant boxes as an integral part of design, or by planting trees, shrubs and evergreens as a foil to the rigid geometry common to many exposed concrete buildings. Details of paving are also well understood in Switzerland, and these are often

Detail of the summerhouse shown on page 29.



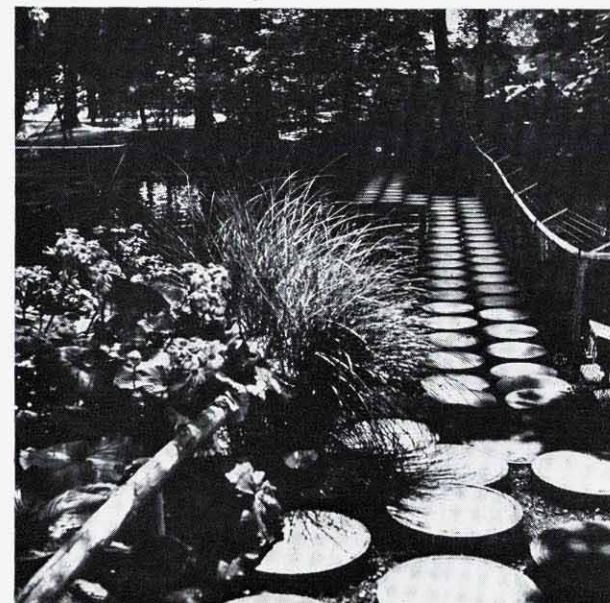
varied with different textures, small plants and water in a way reminiscent of Japanese gardens.

The examples picked out here for illustration include different treatments of garden paths—straight or curving with concrete paving blocks or slabs, the use of concrete elements with water, the softening effect of foliage on two concrete buildings of an institutional nature, and a delightful concrete summer-house, designed like a grotto by an architect for his own family use, scooped out of a hillside and heavily overhung with evergreens and creepers.

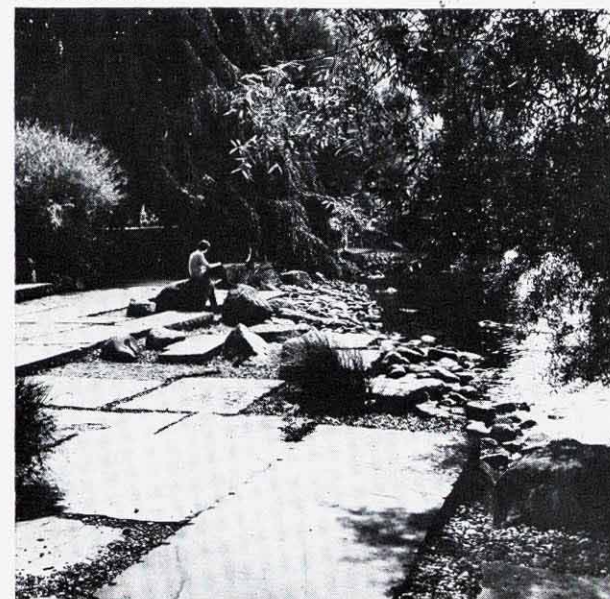
The article is followed by another showing the new Botanical Gardens in Zurich.



Above: The simplest form of path—small slabs laid in the valley of two small hills adjoining a school.



Above and below: Details of the gardens and promenade beside the Zurich-See.

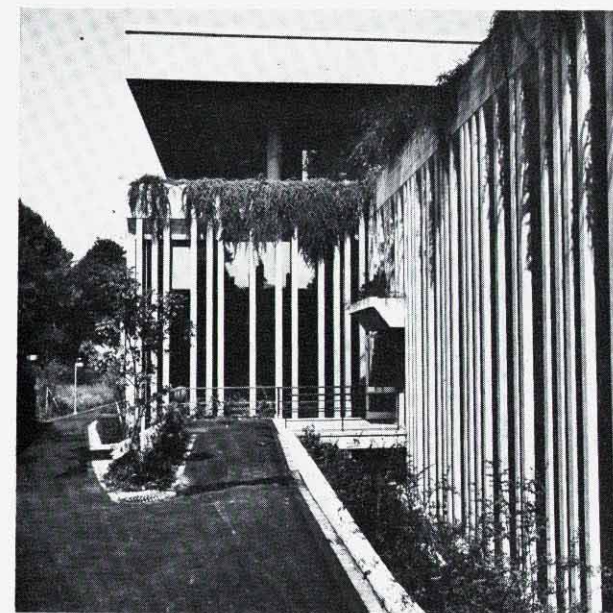
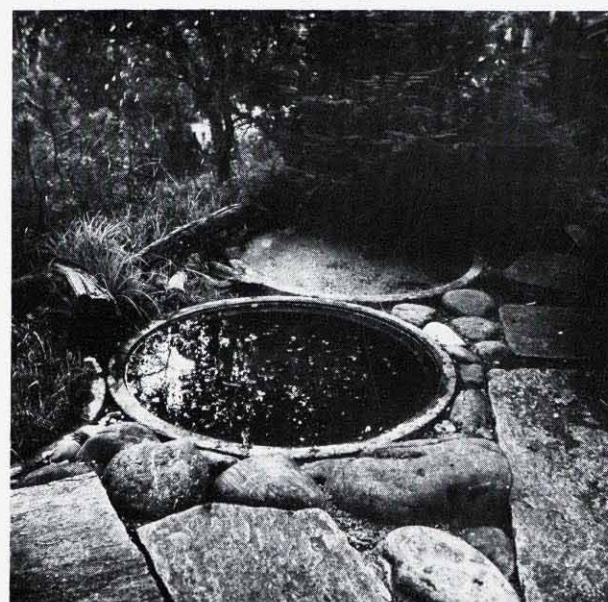


THE GARDENS OF ZÜRICH *continued*



Excellent in situ concrete paving divided by precast slabs, Uto Quai – the promenade beside the Zürich-See.

Below left and right: Details of paving, planting and water in the gardens of the Parkschulhauser, designed by Eduard Neuenschwander.



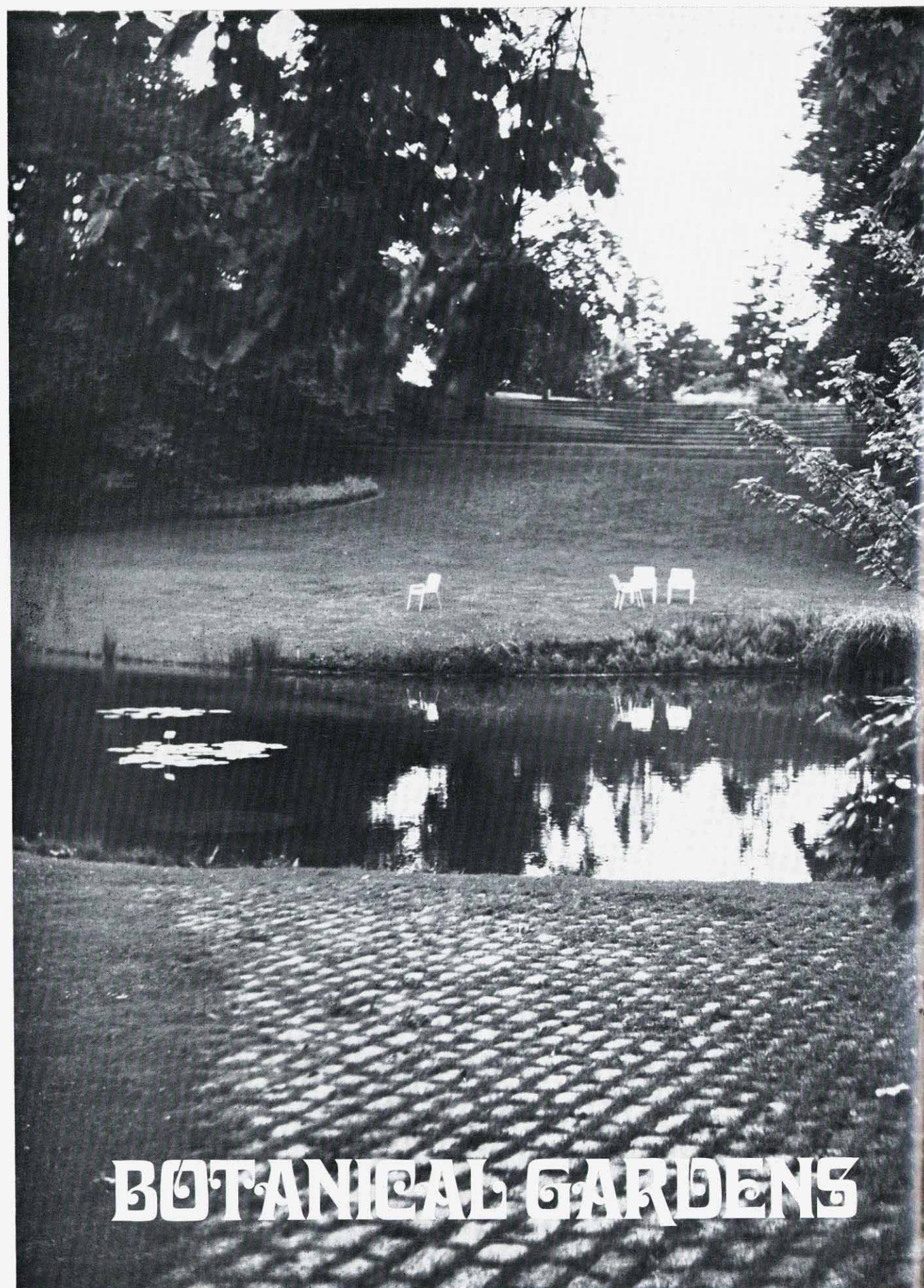
One of the most elegant concrete buildings in Zürich – the Refectory Building in the Polytechnic. The building has overhanging plants at parapet level (see detail below).

Planting detail and terrace of the Refectory Building in the Polytechnic, shown above left.



Above: An interesting entrance detail to a school, with concrete steps, boulders, planting and light standard.





In the centre of the gardens, there is a grand sweep down to the pond by way of the turfed and paved steps shown above right.



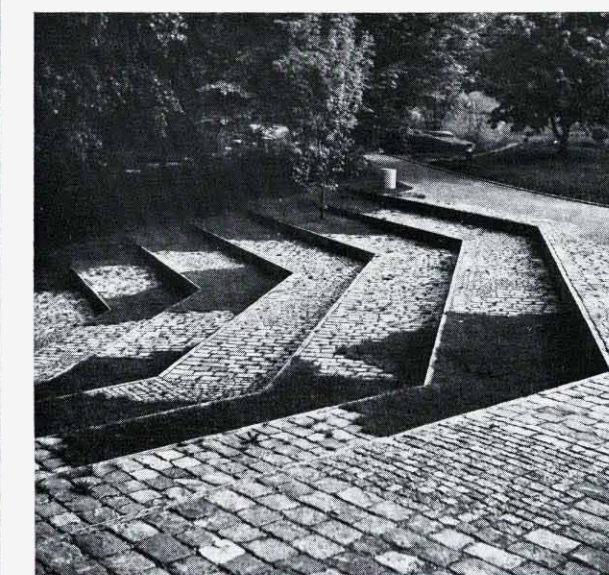
Botanical Gardens, Zurich

Director: Dr C. Cook
 Landscape architects: Fred Eicher and Ernest Meili
 Architects: Hans and Annemarie Hubacher,
 Peter Issler

The new Botanical Gardens in Zurich are superbly landscaped. Covering over 56,500 square metres, the gardens contain a wide range of plants from tropical to alpine on a spectacular site that dips down in the middle to a stream feeding a pond. It is certainly one of the sights of Zurich and has attracted a vast number of visitors since its opening in the spring of 1977.

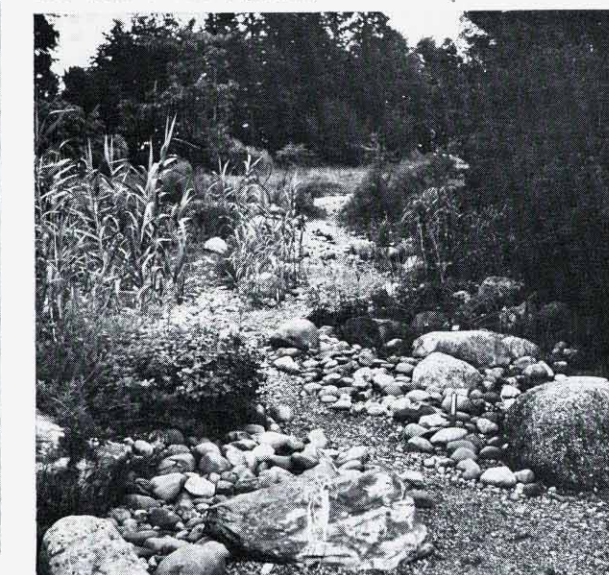
Dr Cook, Director of the gardens, writing in *Anthos*, has this to say about them:

"The story of the botanical garden in Zurich is almost identical to that of most botanical gardens in Europe. Their original purpose was the scientific study of medical plants. With the passage of time,



The turfed and paved shallow broad steps descending to the pond.

The 'Wadi' or boulder garden.



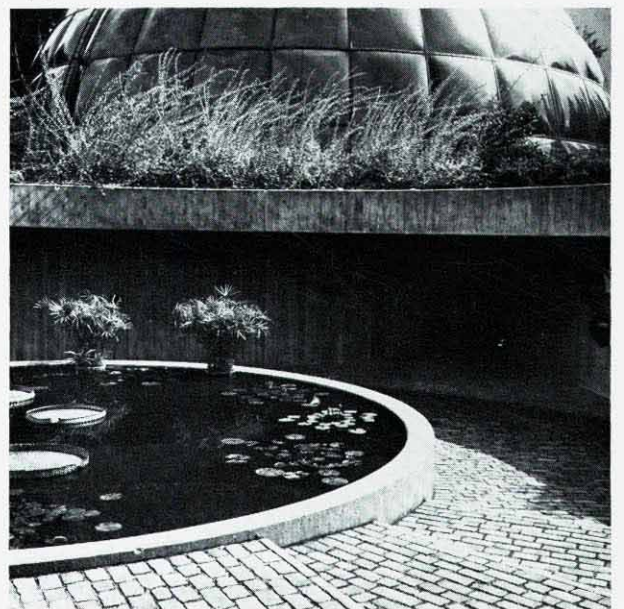


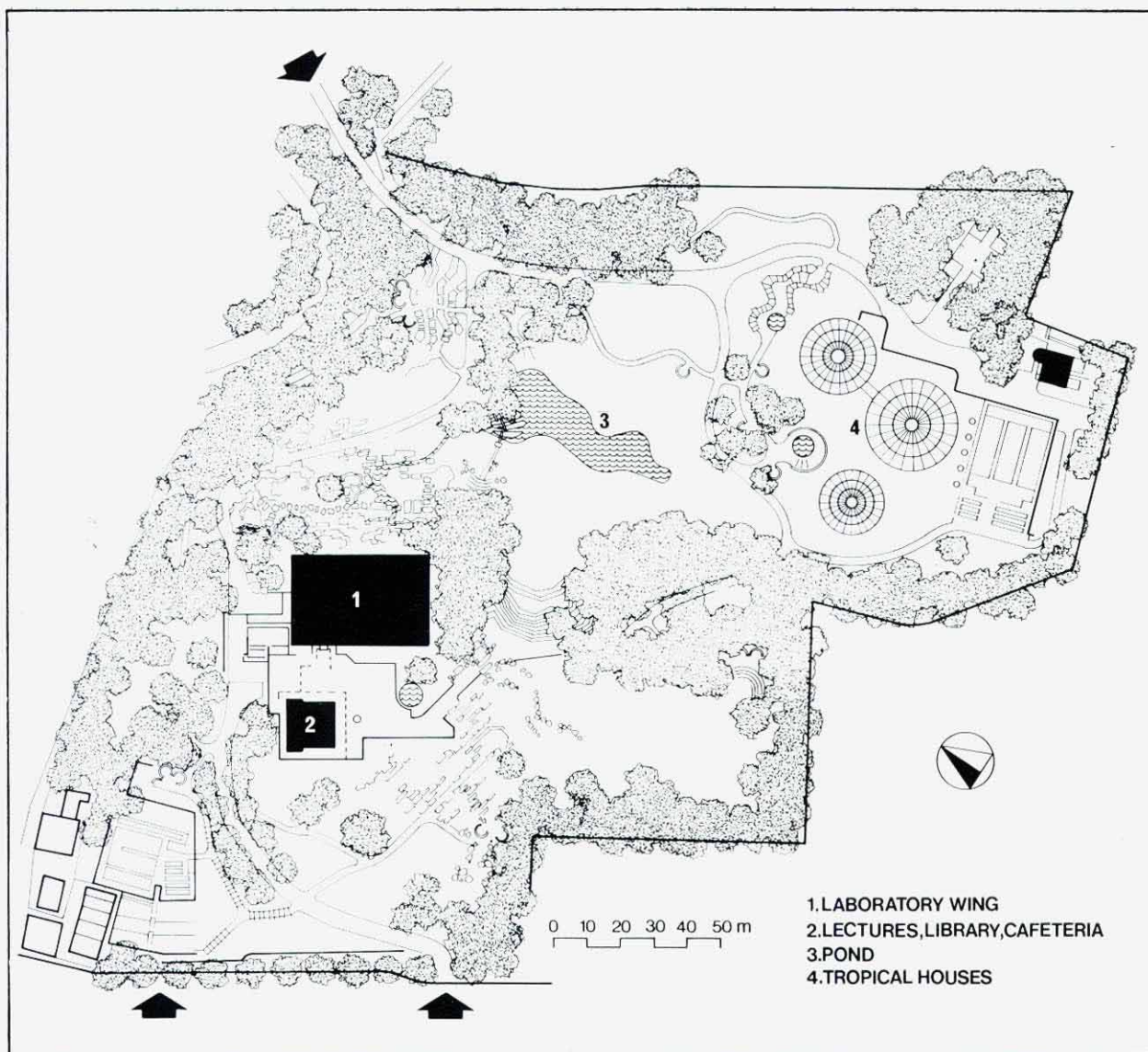
Curved segments of precast concrete form a very satisfactory informal edging to a wooded corner.

Curved precast seats outside the tropical houses.

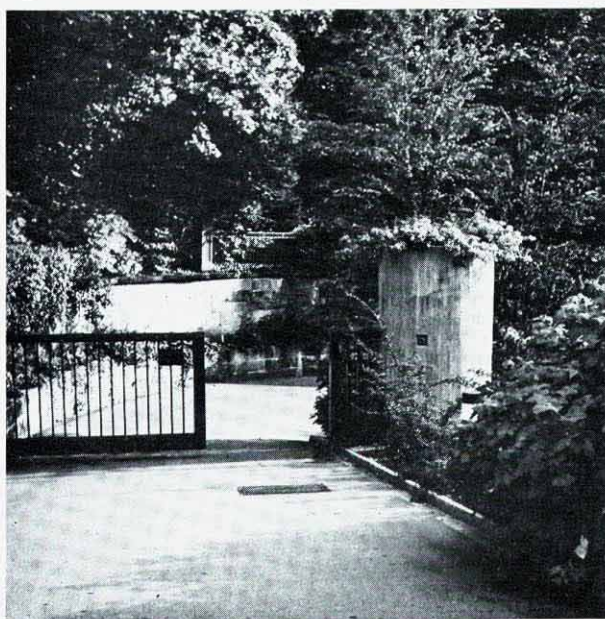


Beautifully detailed entrance to the tropical houses with heated lily pool (see also over).





A planted concrete drum flanking the entrance gates.



other useful plants found their way into them, and the gardens themselves became more or less experimental gardens for all newly imported plants. Towards the close of the last century, these gardens gained importance as instructional institutions. Only during the past fifty years has it been realized that plant lovers of all kinds might be interested in them and so the gardens were thrown open to the public as a whole. However, it was soon revealed that the majority of visitors were interested in the aesthetic rather than the educational aspects of botanical gardens . . . All the same, the necessity for conserving nature, particularly plants, as natural resources for the future was recognized. Even now, the potential value of a large number of plant species is still unknown to us. It is quite possible that some of them possess no more than aesthetic value for mankind. But who knows where the next drug that heals cancer will come from?"

The gardens were built for the University of Zurich and have two main buildings as a centre-



Detail of the heated lily pool outside the entrance to the tropical houses, with a curved and planted wall of in situ concrete in the background.

BOTANICAL GARDENS

continued

piece—one a laboratory wing, the other containing lecture halls, a library and a cafeteria. Apart from these, there are three beautifully designed and landscaped circular buildings with glazed domes at the lower end of the site—the savanna house, the tropical and the sub-tropical houses.

The entrance to these is particularly well detailed with a circular heated pool for tropical water lilies and curved walls of boardmarked in situ concrete set off by planting at roof level. The concrete finish is of exceptionally good quality and continued through to the interiors where it provides just the right neutral silver-grey background for exotic plants and foliage, as well as for the brilliantly lit fish tanks in the aquarium.

Perhaps the two most spectacular aspects of the gardens are the slope down to the pond and the 'wadi'. The former has broad shallow steps with part-grassed and part-paved treads sweeping down to the water in the grand manner; the latter is an extraordinary boulder and pebble garden of infinite variety with specimens from all over the world, bordered by rock plants.

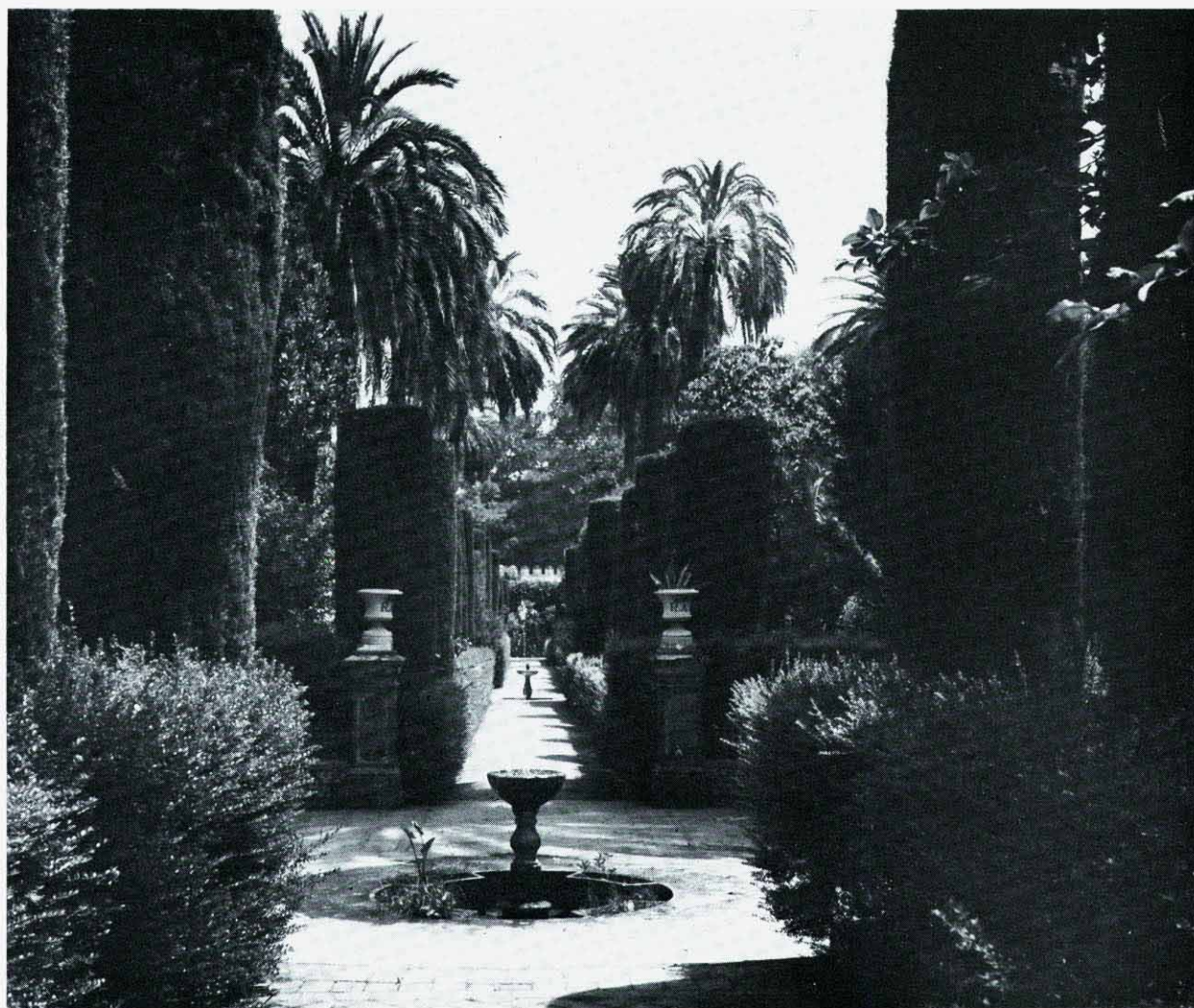
But from the concrete point of view, one of the most pleasing details in the garden is that of the low concrete benches placed in various corners. These are precast in boldly curving sections and linked together in various ways, thus avoiding rigid straight lines. They are particularly effective in one wooded corner—an essentially irregular and informal space defined by the benches which form an undulating curved line of demarcation between the public grassed area and the wild woodland beyond.

THE GARDENS OF SEVILLE

by George Perkin

All the other gardens in this issue of *Concrete Quarterly* are in the temperate zone of Europe. These pages show Sevillian gardens in the heat of the Andalusian summer, where shade and the cool

splashing of fountains are the most important elements. Flowers are secondary, except for geraniums in pots which adorn every balcony, doorway and courtyard even in the poorest quarters. During

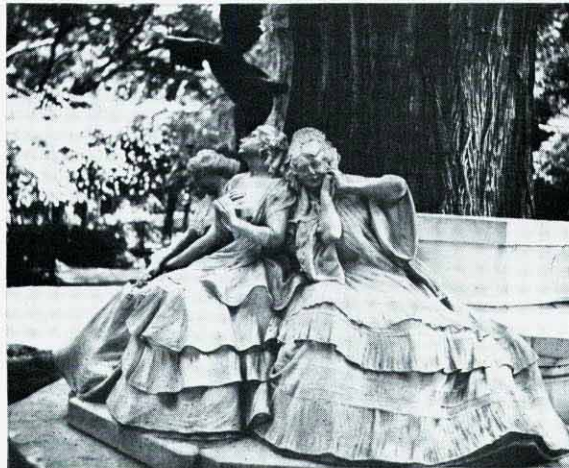


Stately vista in the grand classical manner – gardens of the Alcazar.

Formal seat and clipped box hedges, Alcazar gardens.



A charming sculpture group of three ladies arranged around a tree trunk in the Maria Luisa Park, commemorating a poet.

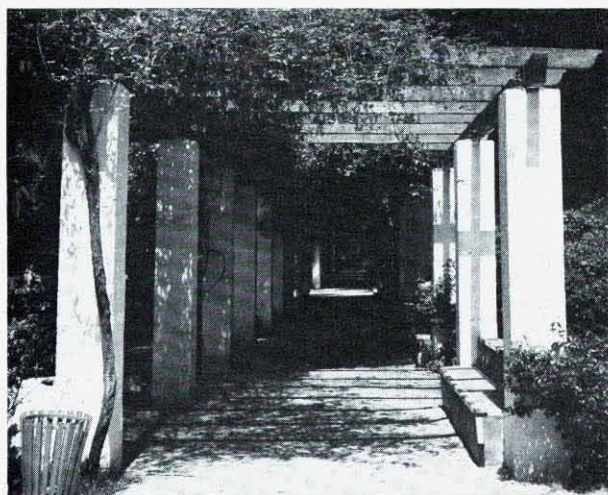


the summer months there is hardly any rain, and yet the public gardens of Seville are constantly watered with hoses and sprinklers which are sometimes kept going all day. From 1 pm until about 4 pm in high summer, the Sevillian parks are dotted with motionless figures, dreaming away the hot afternoons in the shade, rising occasionally from benches to cool themselves in the fountains.

In Andalusia, the Moorish strain is ever present, reminding us that Africa is only just across the way. And in Seville it is the Spanish-Arabian garden, often remote and withdrawn, that has served as a pattern throughout the ages. On a domestic scale, there are the whitewashed houses of the Barrio Santa Cruz, the ancient Jewish quarter, which are entered through iron grilles and small patio gardens decked with flower pots. On a medium scale there

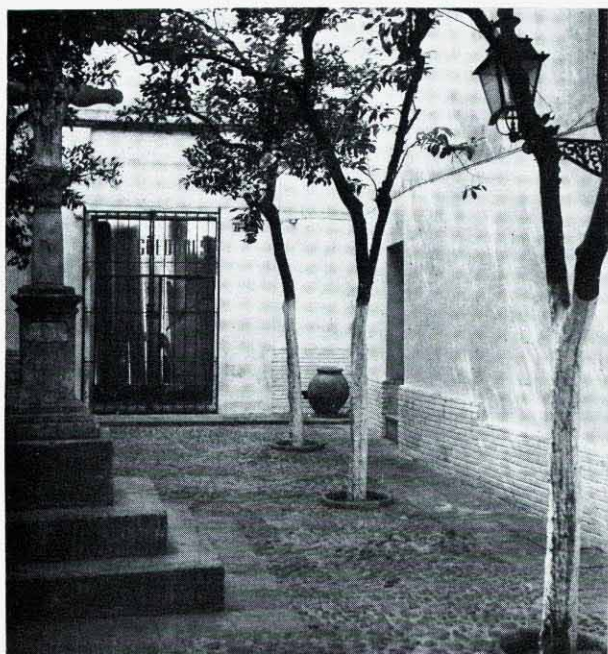


Traditional paving lined with orange trees outside the Alcazar.



Pergola in the Maria Luisa Park formed of concrete elements.

A typical small enclosed Sevillian square with trees, stone cross and cobbled paving.



Courtyard entrance to a house in the Barrio Santa Cruz.

are the charming small enclosed squares such as the Plaza Dona Elvira with its central fountain and symmetrical arrangement of trees and benches. On the grand scale, there are the formal box-hedged gardens of the Alcazar and the classical Maria Luisa Park with its pavilions, statuary and stately avenues of trees. In all these, paving is traditionally an important element with varying textures of smooth slabs and cobbles, or multi-coloured patterned tiles. Quite often a garden will be little more than a paved space with orange trees growing out of it and, of course, a fountain.

But it is, perhaps, in the warm and jasmine-scented nights that the magic of the Sevillian garden is really felt. For this is the country of *Cante Jondo*, where the haunting lamentations of the Flamenco singer can suddenly pierce the air like an electric shock, proclaiming the whole tragedy that is Spain. To experience that from the stillness of a Sevillian garden is something not easily forgotten.

CASTING AROUND

a quarterly column of notes and comments

This issue of *Concrete Quarterly* is all about gardens and it reminds me that I have been having a little trouble with my office plant. Its proper name, I believe, is *Fatsia japonica*, or castor oil plant, and it has strong shaped seven-pointed leaves. I expect you know it well. If you put it outside it grows into a handsome bush. Normally it thrives easily even in difficult conditions, and mine did all right for a year or so and then stopped. It developed a stunted sickly look with small drooping leaves. Thinking it needed more light, I moved it onto the window sill, but to no advantage. I tried fertilizers, repotting. Still nothing. So one day I put it into a carrier bag and took it home to my conservatory in Barnes where I felt it might improve. En route, I bumped into a friend who knows all about plants. What do you suppose, I asked, is the matter with this poor old plant? He opened the carrier bag and sniffed professionally at the leaves. Been in a bad atmosphere, he pronounced. Needs a change of air. So that was it, I thought. And if it does that to plants, what about people . . . The plant has now been in my conservatory a little over three weeks and already it has put out one of its strange clusters of white flowers like berries as a mark of appreciation, something it has not done in its three years of living in Victoria. Oh well, with any luck these offices will have moved up six storeys by the end of the year, where no doubt the air will be fresher, my normal sickly drooping appearance will improve and—who knows—perhaps even my withered talents might burst into flower. Makes you think, though.

* * *

As you might surmise from page 39 I have just been in Seville doing nothing in particular except sit in exotic gardens listening to the cool splash of fountains. The thing I like about Spain (away from the coast, of course) is that much of it still seems to belong in the 19th century. How one appreciates clean linen tablecloths and freshly laundered courteous waiters. What exasperates me about it is that you can't get any reliable or consistent information about anything, even in official places. For instance, it seemed bizarre, to say the least, that at Barcelona airport all the luggage of the passengers bound for Seville, together with the passengers—who were made to go through customs and fill in forms as if they were staying for ever—should be decanted from the plane



The mountain town of Ronda, southern Spain.

and then poured back in again, without any word of explanation. So perhaps I should not have been surprised at the goings on later in my holiday when I decided to visit the little mountain town of Ronda which leans literally out of a cliff hanging over a gorge and is said to be one of the great sights of Spain. The travel bureau said that I must go via Malaga and take a bus. The railway station said that I could go all the way by train but, they added, with much wagging of fingers, *I must change at Bobadilla*. The hotel said that I should not go at all, it was too far in one day. Finally I took the middle course, and one fine early morning full of promise saw me sitting in a full railway carriage. Shortly the ticket collector came, looking like a Spanish general, and inspected my ticket. Adjusting his pince-nez, he gave me to understand in grave and ponderous tones that *I must change at Bobadilla*. I said yes, yes, I knew. Soon the word was being passed round the carriage: there was an Ingles on the train going to Ronda who had to change at Bobadilla. The plump senora opposite plied her fan in a speculative fashion and discussed the matter with her husband. People exchanged knowing glances, and the words 'Ronda' and 'Bobadilla' flew back and forth. As the time came near for the change, everyone began to peer anxiously out at every halt. Was this it? No it was Santa Maria de Andaluz. And this? No, Moron de la Frontera. And this? No, only Olvera. At last, the name Bobadilla showed large and triumphant on the platform. With one accord, the carriage rose to its feet and I was propelled towards the door with my bag where I descended to the platform amidst encouraging little smiles and waves. So far so good. Now for the train to Ronda. I asked the station master. He

pointed to the train I had just got out of. I said No it could not be that. He insisted. I countered. He became angry. I asked a porter. He pointed back at the train. I said No. He said Yes. Still not believing, I went into the driver's cabin: at least he should know where he was going. He was sitting at the controls in a vest smoking a very whiffy black cigarette. Yes, he confirmed laconically without turning round, the train went to Ronda. So I had to go all the way back and sit down in the seat I had just left. The senora opposite was still plying her fan but with a curious enigmatic knowing little smile on her face, like the Cheshire cat.

* * *

This column was supposed to be all about gardens, but as we seem to have got onto trains I am reminded about the graffiti in the trains that I go to work in every morning. Most of us have got so used to it that nobody bothers either to look or comment any more. But last week we were all roused into high states of moral indignation, if not actual shock, by the latest offering. People averted their gaze and riveted it to their newspapers. A lady got in at one station and out at the next looking pale. Nobody could believe that any human being could have sunk to such miserable depths of perverted thinking. For written in giant letters of purple aerosol all over the carriage ceiling were the dread words: "Len Roberts likes modern housing estates".

George Perkin