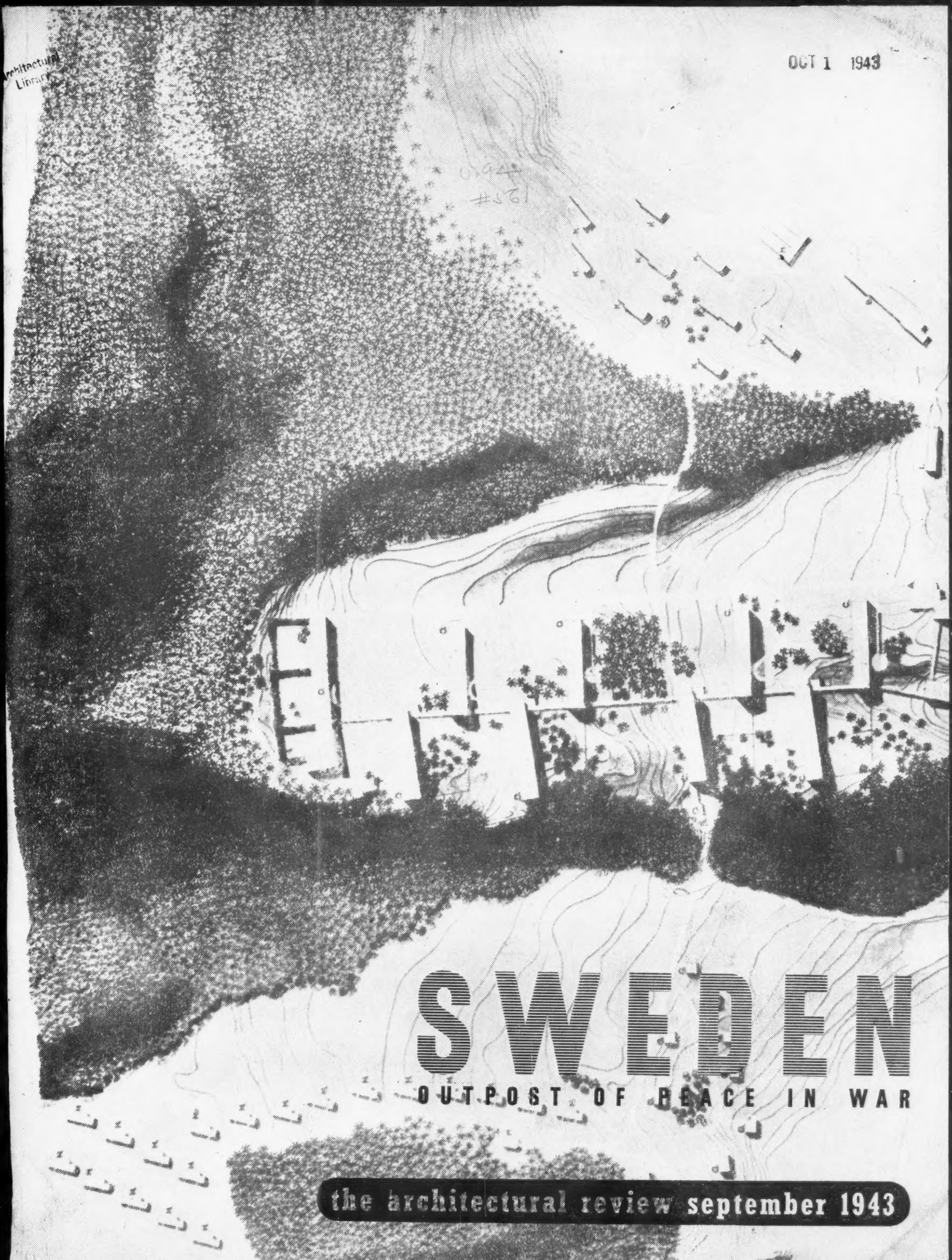


SWEDEN

OUTPOST OF PEACE IN WAR

the architectural review september 1943

The Architectural Review

CONTENTS FOR SEPTEMBER, 1943

SUBSCRIPTION RATES : United Kingdom, £1 5s. 0d. per annum, post free. U.S.A., $8 per annum, post free. Elsewhere abroad, £1 5s. 0d. per annum, post free. An index is issued every six months, covering the period January to June, and July to December, and can be obtained without charge on application to the publishers :

THE ARCHITECTURAL PRESS,
War Address:
45, The Avenue, Cheam, Surrey
Telephone: Vigilant 0087

Vol. XCIV *No. 561*

TWO SHILLINGS AND SIXPENCE

THIS MONTH'S COVER

is an enlargement of a small portion of the ground plan of Hakon Ahlberg's Sundsvall Hospital. It is a typical example of the way in which Swedish architects succeed in interpreting their appreciation of landscape even in terms of ground plans. The whole plan is illustrated on page 73 of this issue.

1

2

SWEDEN PAST AND SWEDEN PRESENT. Nicodemus Tessin's Royal Palace in Stockholm, 1, one of the grandest examples of Berninesque planning, a proud, massive square declining any connection with the surrounding scenery of town and lakes—and a street on the Hammarby estate with blocks of flats, by Sture Frölén, 2, is a piece of planning just as bold as the Royal Palace, but built for anybody who can pay the rent, and embedded in a scenic setting in which rocks and trees are part of the buildings (or the buildings are part of the rocks and trees). Its democratic character, its landscaping genius, and its "charm," are the three great contributions of modern Swedish architecture.

This special Swedish number of THE ARCHITECTURAL REVIEW has been made possible by the help of the Swedish Legation in London, the Federation of Swedish Architects, and Mr. G. E. Kidder Smith of New York; Hakon Ahlberg, the President of the Federation, kindly consented to collect the most recent information of Swedish buildings designed and built since 1939, and to contribute an introduction which appears on this page. Mr. G. E. Kidder Smith has visited Sweden under a special fellowship of the American Scandinavian Foundation of New York and has taken a set of photographs of buildings which he has put at the disposal of THE ARCHITECTURAL REVIEW. The majority of them have not appeared before. Mr. Kidder Smith also wrote some notes for this number on his Swedish impressions. They appear on pages 87 and 88. Of pictures by other photographers, figs. 8, 11, 12, 14, 15, 16, 17, 38, 46 and 49 are by C. G. Rosenberg of Stockholm, who took, it will be remembered, the brilliant photographs for THE ARCHITECTURAL REVIEW'S special issue on the Stockholm Exhibition of 1930. On page 80 a short article appears in which Sven Backström presents the Swedish architect's comments on war-time building in Sweden. The main article, however, was written by William Holford immediately after his return from Sweden this year. There is much we have to learn from Sweden, and Professor Holford's eloquence should convince those who still believe that the admiration of "Swedish Modern" is just another fashion to replace Swedish-1923, the Östberg style, and Paris 1925. Swedish housing is the most progressive in Europe in its social organization. The Co-operatives build better than anywhere else, and building societies don't lag behind. Prefabrication is used more widely and sensibly than anywhere else. Most public buildings, especially the smaller accessory ones, are pleasant, light-hearted, almost playful, and yet strictly contemporary. A few larger public buildings have achieved a true monumentality in terms of the twentieth century. Detail is as generally sensitive as any of the eighteenth century. And even where, as sometimes occurs even in Sweden, the design of the buildings is not particularly distinguished, the way they are placed on the site and set off with rocks (see opposite) and conifers or silver birch—the way in fact they are landscaped—provides an object lesson for the English town-planner and landscape architect.

SWEDISH PEACE IN WAR

Being a review of Swedish building activity during the war and immediately before

INTRODUCTION

By the President of the Federation of Swedish Architects

The Editor has asked me to send a message from architects in Sweden to Anglo-American readers of THE ARCHITECTURAL REVIEW. I am delighted to make use of this offer.

Only a few years after the first World War a lively contact was established between architects in the Anglo-Saxon world and in Sweden. This led to a fertile interchange of ideas, at first between England and Sweden, and to many ties of personal friendship. I may mention the exhibition of Swedish architecture in the R.I.B.A. in 1924, the visits of groups of English architects to Sweden in 1925 and 1930 and the return visit of Swedish architects to England in 1931. All these events were due largely to the initiative of Mr. F. R. Yerbury.

The English magazines of architecture and in particular THE ARCHITECTURAL REVIEW have on various occasions shown great and kind interest in Swedish architecture. In Sweden there has always existed a keen interest in English and American architecture.

As for the United States of America, many architects have found their way to Sweden, especially since the Stockholm town-hall and since the 1930 exhibition in Stockholm had become famous. A number of Swedish architects have been lucky enough to visit the United States and to get into personal touch with architects there. At the World Fair in New York in 1939 Swedish architecture was represented by the pavilion designed by Sven Markelius.

In this way, Swedish architects have been able to study the development of architecture in England and the United States and to learn from the important work of their Anglo-Saxon colleagues. Our mutual exchange has taught us that there exists a certain correspondence in the ideas of modern architects in Anglo-American countries and in Sweden. This correspondence has led to mutual sympathy and to a fertile professional exchange.

Since the beginning of this war we have had little chance of following the work done by architects in England and the United States. But the little we know has given us the impression that our ways are leading us still closer to the same goal. In your countries, as in ours, architects, it appears, are becoming more and more aware that their work is not a purpose in itself, but is a social function for the benefit of the community.

A prominent English architect who recently visited Sweden described the houses which architects will build for the England of the future as "homes for citizens." It struck me how close this definition comes to the ideal we here in the North have set up for our work: architecture should serve man and humanity.

It thus seems to me that we can hope to meet again with still better understanding.

HAKON AHLBERG

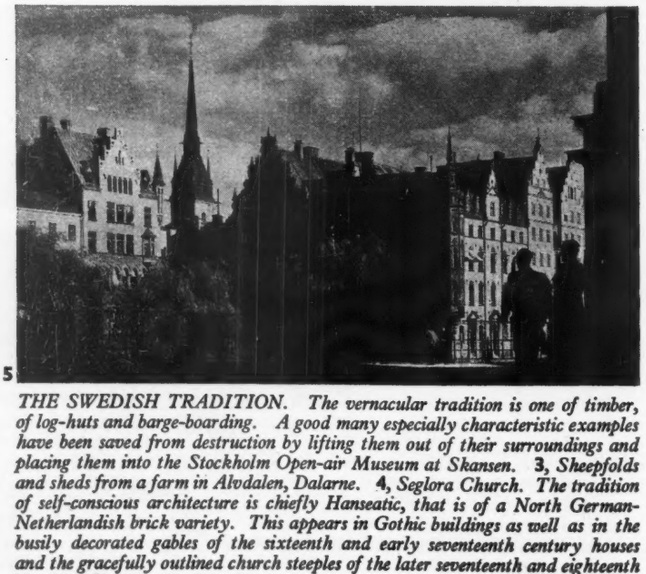
THE SWEDISH SCENE

An English Architect in wartime Sweden

By WILLIAM HOLFORD

3

4



5

THE SWEDISH TRADITION. The vernacular tradition is one of timber, of log-huts and barge-boarding. A good many especially characteristic examples have been saved from destruction by lifting them out of their surroundings and placing them into the Stockholm Open-air Museum at Skansen. **3,** *Sheepfolds and sheds from a farm in Alvdalen, Dalarne.* **4,** *Seglora Church. The tradition of self-conscious architecture is chiefly Hanseatic, that is of a North German-Netherlandish brick variety. This appears in Gothic buildings as well as in the busily decorated gables of the sixteenth and early seventeenth century houses and the gracefully outlined church steeples of the later seventeenth and eighteenth centuries,* **5.**

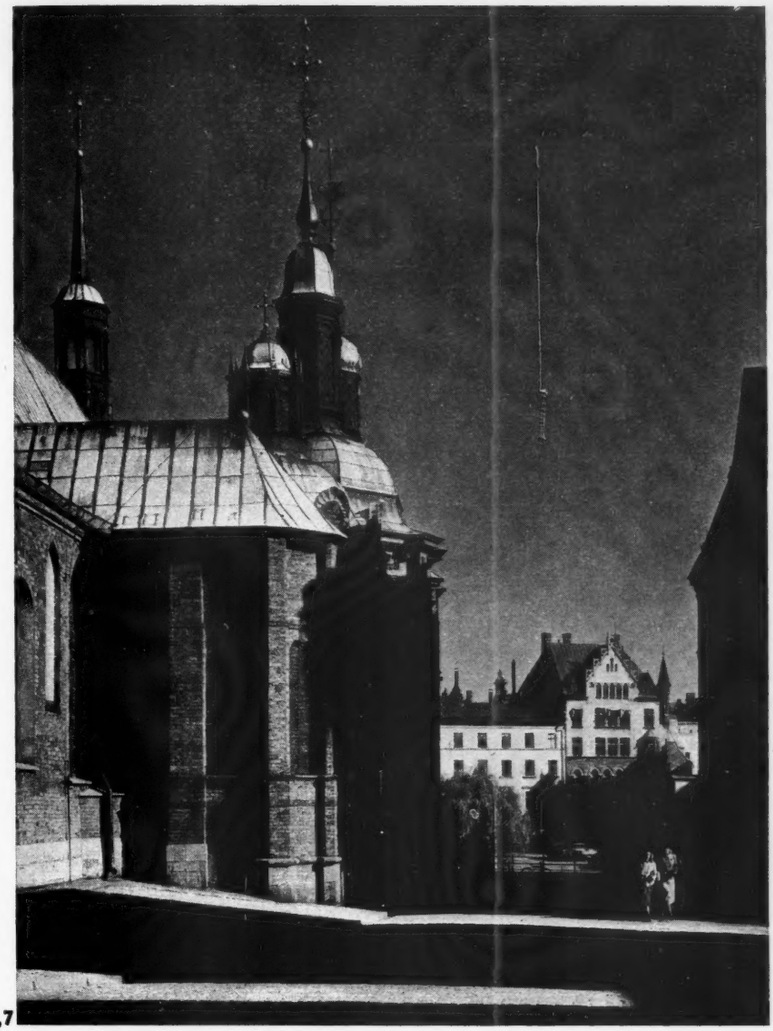
THE first and most lasting impression is one of light—the plan of Stockholm picked out in street lamps, the reflected lights in the lagoons and harbours, the brilliant flood pouring out of the airport building at Bromma, across the tarmac, gilding the wings of the dark and menacing shapes of planes that have come, like moths, out of the night. This impression of having moved from an atmosphere of blackout to that of artificial light is one that must stamp itself on the memory of any wartime visitor to Sweden. To the architect especially it conveys the sense of excitement that floodlighting gives, a sense of gaiety and simplicity, of carefully studied effect, of impermanence, novelty and—in ever so slight a degree—of unreality. He is brought at once under the spell of the Exhibition of 1930 and the still pervading influence of Gunnar Asplund. He is conscious of an architecture that has more charm than companionship; that is competent, imaginative, experimental and essentially well informed. He exchanges for a few weeks the compulsory utility of wartime building in his own country, for an architecture which is utilitarian of its own free will; but which is the product of so much selection and refinement in respect of materials, construction and setting, that it achieves also a high degree of success as decoration.

Many things are the same as in 1930, but the perspective is different. The buildings that were then so new and so much remarked have, on the whole, worn well. Those that were museum pieces then are museum pieces now, only the patina has improved; and those that photographed well, with their bright surfaces of stone or stucco or cement, look well still; thanks to the attention to detail which the severity of the climate compels. But the functionalism that was so uncompromising a creed in 1930 had been broadened and mellowed by 1940, and is now, in the crucible of wartime experience, being boiled down to more impressionable metal.

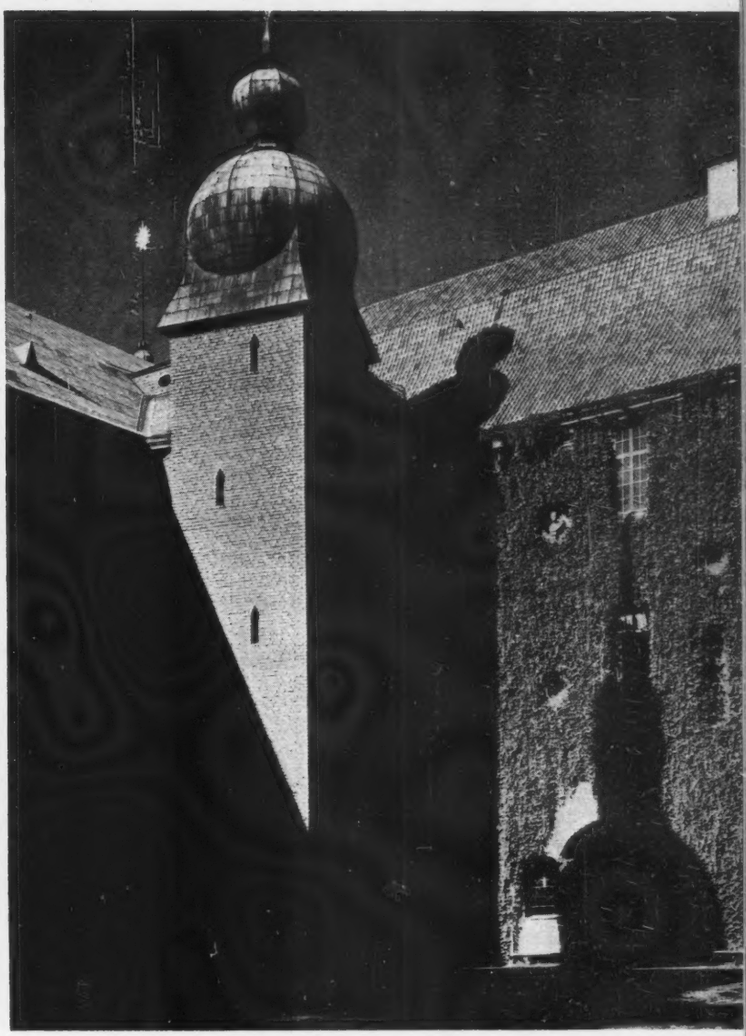
The material facts about Swedish wartime building are little known outside Scandinavia—a state of affairs which demonstrates her isolation so far as the arts and social sciences are concerned, notwithstanding Stockholm's position as one of the listening posts of Europe. Before the war Sweden exported over a quarter of its entire production, and imported mainly raw materials and fuel. Until April, 1940, this situation continued. When the commercial blockade became stringent, export industries were severely reduced, imported articles such as soap, wheat, margarine or rubber were rationed, and the cost of building rose so steeply that in that year only one-tenth of the previous volume of building was carried out, and building trade unemployment became critical.

In this emergency, under the necessity of protecting herself economically and strategically against the risks of war, Sweden started to rationalize production, introduce price controls, recruit labour for agriculture and forestry, and rely more and more on one of the greatest of her natural resources—timber. Timber had always been her chief material for houses: it now became fuel, clothing and—in some metamorphoses—food and drink as well.

Economic planning hastened the adjustments which Sweden had to undergo. They were not made with the all-compelling urgency which dominated this country after the fall of France; but they succeeded by the autumn of 1941 in stabilizing employment, though not at a very satisfactory level. The building industry—and the very much changed building materials industry—began to recover; and the threat of a grave housing shortage, the cure of which in this country has had to be relegated to the post-war period, brought the house-building figures for 1942 to something under half what they



6,7



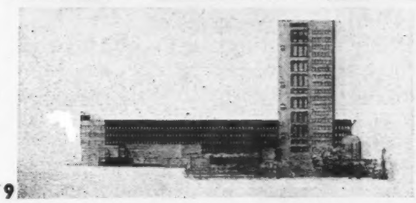
THE SWEDISH TRADITION CARRIED ON TO 1923. *From the brick and copper work of the Riddarholm Church,* **6**, *where Sweden's kings are buried, there is only one step to Ragnar Östberg's famous Town Hall of* 1923, **7**, *one of the best examples of period inspiration, intelligently chosen and feelingly handled. The result is original and has inspired this country more than any Swedish building since.*

were in 1938. In addition to this there has been a considerable amount of building for direct war purposes, and a slow but steady continuation of pre-war programmes for hospitals, schools, offices and public buildings.

In contrast to our own experience, architecture in Sweden has not been totally submerged. Indeed, if one thinks of architecture as an attitude to life, as well as the art and science of building, it is doubtful whether Sweden could ever bear to sacrifice it. Looked at in a philosophical light, the alternatives before her at the outbreak of hostilities in Europe were —War or Architecture. And Sweden has consistently chosen the latter. Situated as she was she probably had no alternative : but although she has elected for architecture, she has had to wear it with a difference, since of all nations upon earth she was artistically the least self-sufficient. Thrown thus upon her own resources, with only Denmark and Finland as company, Sweden has paid more attention to the social aspects of architecture, and has turned to the Scandinavian background for her inspiration in art. At the very darkest period, in the spring of 1940, the National Museum, cleared of its standing collections, started the first of a remarkable series of short-term exhibitions. And the first of these was an exhibition of Swedish Arts and Crafts, purchases being made by the Government as well as by private individuals, which marked the beginning of a very flourishing revival.

During the later stages of a war, inflationary tendencies are bound to declare themselves. These put a premium on works

8



9

ERIK GUNNAR ASPLUND (1885—1940). *In the Stockholm Exhibition of* 1930, **8**, *Asplund founded a new and, this time, wholly contemporary Swedish style. It goes back, of course, to the innovation of the Gropiuses and Le Corbusiers, but adds a lightness and a sense of materials wholly Swedish.* **9** *is Asplund's last project : Municipal Offices for Stockholm,* 1938-40.

of painting and sculpture, on *objets d'art*, antiques, furniture, and the decorative arts. It is therefore not to be wondered at that as many as thirty separate art exhibitions could be simultaneously shown in Stockholm in the autumn of 1942, and that at many of these more than half the exhibits were purchased: this in spite of the fact that only a fraction of the works shown were in any way outstanding. Even at a privately shown collection of the paintings of a veteran woman painter from Finland, Helène Schirfbeck, few remained unsold. The Director of the National Museum, Erik Wettergren, has remarked that the Swedish Press pays more attention to literature and art than that of any other country. Whatever may be the reason, there is little doubt about the interest of the average Swede, nor of his desire to participate in the production of works of art, and also to possess them. It may even be that the feeling for what is distinctively Swedish may develop once again into a significant movement.

Architecture, however, is only on the fringe of this movement; its works, being neither portable nor the products of a single brain or hand, do not reap even a temporary benefit from inflation. And since the translation of a design into building terms is becoming continually a more complex matter of organization, there has not been time for a full reflection of this change in architecture. There are signs of it in the latest work of Asplund (see, for example, the designs for the Crematorium at Skövde, **18-21**, or the interiors of the Stockholm Crematorium Chapels, **14**, **15**,) and in the details of summer houses and restaurants; but there is not sufficient evidence to say whether this influence is more than transitory.

Of the growing importance of "social architecture," however, there is no doubt whatever. The schools of Sweden are a delight; the assembly halls, concert halls, baths, hospitals and stadia are such perfect settings for the social activities for which they were designed, that at times one takes them for granted. It is easy to lose the architecture in the social occasion, to lose the stagecraft in the play. Only in afterthought does one come to realize how competent the setting is, and how impersonal, how undemonstrative, how almost monastic the spirit in which its was conceived. Not that the modern Swedish architect in his daily life could be described with truth as monk-like. But he belongs in a sense to a learned brotherhood, whose professional faith at least is pledged to the service of humanity, and to the exercise of discipline and self-restraint in its calling. It is true that the religious orders in the past have been responsible for a great variety of architecture, from the most frugal and aspiring Gothic to the most theatrical Baroque. If, without pressing the resemblance too far, this recent Swedish architecture may be described as kin to that of any previous period, it would be to the simple schools and cloisters of the Cistercians rather than to the magnificent palaces and churches of the Renaissance. The comparison is not as far-fetched as at first sight it might appear. Consider, for example, the work of the Architect's Office of the Co-operative under Eskil Sundahl—the shops, the factories such as those on Kvarnholmen, **26**, the City Bus Garage at Stockholm; or Paul Hedqvist's Home for Children, Nybodahemmet; or the Eriksdal School, **39**, by Ahrbom & Zimdahl; or the Hospital, **37**, at Sundsvall, by Hakon Ahlberg; or even purely recreational buildings such as Hedqvist's Vanadisbadet, **49** to **51**, the Råsunda Football Stadium, **58**, by Borgström & Sven Ivar Lind, or that characteristic bandstand at Skansen, **45**, by the architect of the famous Gothenburg Concert Hall, Nils Einar Eriksson. All of these are examples of architecture dedicated to the everyday use of the common citizen, yet subtle and discerning in their self-effacement. They are the civic garments cut by a first-class tailor; in the shop window they look formal and empty, but when they are worn as they should be, they are so good as to be inconspicuous.

There are, of course, grander, more luxurious, and more frivolous examples to be found; but already they belong, in character if not in period, to the pre-austerity, plutocratic age, the age represented in Sweden by the Stockholm *Stadshus* and the Kreuger office building. Though Östberg is now more or less in retirement, Ivar Tengbom is still in active practice, and his Swedish Institute at Rome, **27**, **28**, is a simpler variant of his monumental style. Commercial architecture is still rich; but even that feigns simplicity, though it be of the priceless kind. An interesting example is the Headquarters Building of the Swedish architects and builders in Stockholm, by Sven Markelius. This city block, comprising offices, restaurant and post office, as well as the Builders' Club, is full of inventive detail, rare woods, decorative plants and the confidential atmosphere that goes with close carpeting throughout. Other highly individual buildings are Backström & Reinius' Villa Engkvist, **25**, at Västberga, with its modern variant of the conservatory; the Draken Cinema, by Ernst Grönval; the luxury flats at Gärdet, **70**, by Sture Frölén and others; almost everything designed by Sigurd Lewerentz, **24**, **83**; and—most striking of all—Asplund's Crematorium at Enskede, **10-17**, in South Stockholm, barely completed at the time of the architect's death in October, 1940.

This last deserves a special pilgrimage, even from the hurried wartime visitor, for it is the most considerable recent monument in Sweden, and a superb composite design of landscape and buildings. To this pilgrim, it must be confessed, the interiors of the three chapels, **14**, **17**, proved sadly disappointing; although he would allow that the strangeness which baffled him might be the very essence of the "excellent beauty" discerned by others. But of the exterior, the setting and the approach—all consciously shaped to the designed effect—there cannot possibly be two opinions. In a composition of this kind a false quantity would have made the whole thing pretentious, unsuitable materials would have made it look temporary and trumpery, external ornament would have detracted from the vast serenity of the pine trees and the grassy slopes, under a sky that is sometimes vivid, sometimes darkly overcast, but always dominating. Against it the great marble-faced cross stands out with almost terrifying certainty, **10**, **16**. One cannot but wonder at the sureness of touch which accomplished so stark but yet so imaginative a design. The details are Greek in their refinement. The upright of the cross has the most subtle slope and entasis; the marble piers and the fascia of the monumental covered court are modelled and composed with infinite care to catch the light at all times of day; the great grille that sinks into the ground at the chapel entrance is a magnificent piece of craftsmanship: yet all the time one is conscious that every resource of modern building technique is used to achieve the results. Though the total effect is of archaic simplicity there is no pretence of primitive methods of construction. The marble is frankly a facing material; the clocks, the light fittings and the mechanical devices are the best that contemporary Sweden can supply.

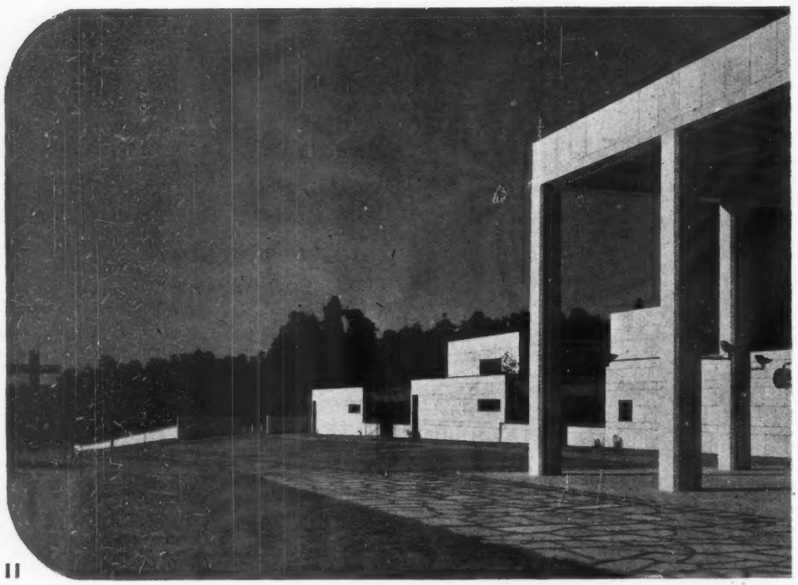
We have nothing quite like it in this country, but the man whose work comes perhaps nearest in sympathy to it is Charles Holden. There are elements in the design of London University, and equally in those of some of the Underground Stations, that will call to mind this work by Asplund and Lewerentz.

Preoccupation with the more curious details of construction in the fine materials such as marble, bronze, glass and the hardwoods is a characteristic of modern Swedish architecture. Down in Malmö, in South Sweden, from whose roof-tops one could see across to Denmark—and even trace the spirals made by Allied aircraft in the sky over Copenhagen—there is another cemetery, with crematorium chapels by Sigurd Lewerentz, that should be visited after, and not before, the one at Enskede. Lewerentz collaborated with Asplund on the Stockholm Crematorium, and here at Malmö, on a flat site and in a totally different landscape, he has designed a complex of buildings which must be among the most minutely studied in the world. Again there is the colonnaded court, the curious link with the main buildings—composed of overhanging glass canopies so arranged that the walls of the two structures do not touch, the same type of funeral chapel, shaped like a shell, and with the windows slanted like leper squints to illuminate the altar. But at Malmö the walling material is marble slate about an inch deep, laid like Roman tile brickwork with wide mortar joints. The teak grilles guarding the ante-chapels have plate glass let into the interstices to keep in the warmed air in winter; and the very heads of the bronze screws make a pattern.

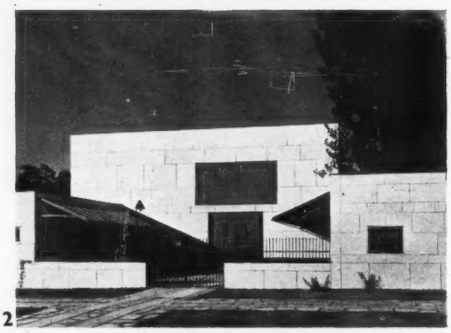
Malmö is on a flat uninteresting site, and being a mercantile city it is not graded as high as Stockholm, Gothenburg, Uppsala, Lund, Norrköping, Lingköping or Helsingborg in the archi-

10

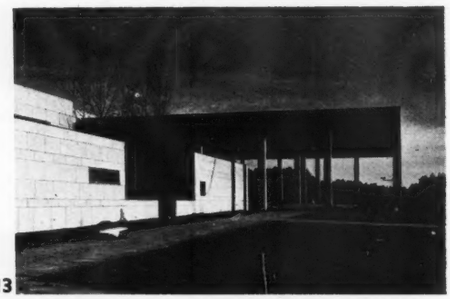
ASPLUND'S CREMATORIUM



11

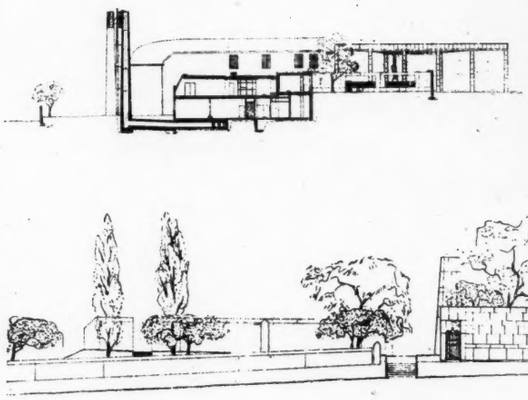


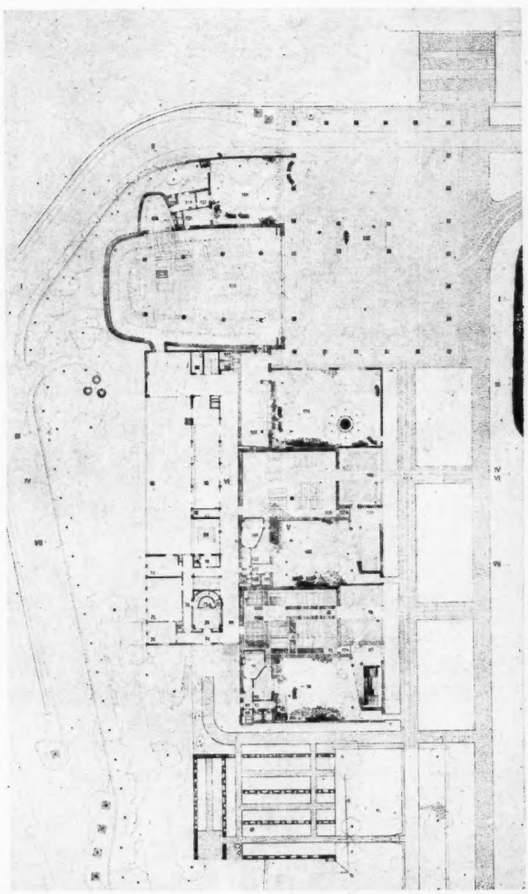
12



13

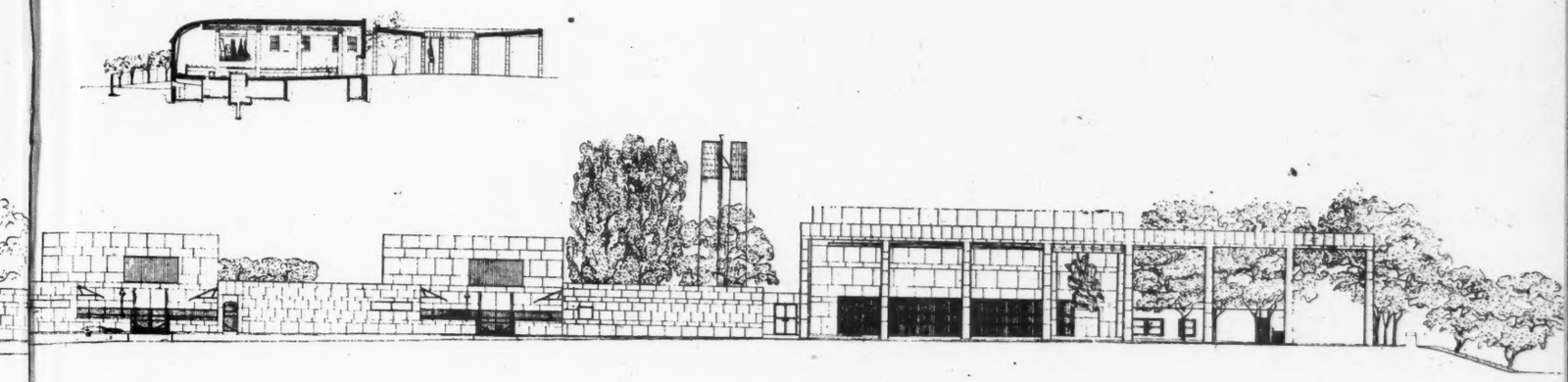
The Crematorium on the Forest Cemetery of Enskede, Stockholm, 10-17, is Asplund's last and most consummate masterpiece, perhaps the highest achievement of present-day monumental building in Europe, neither swaying towards the traditional because of its sacred function, nor of that self-conscious modernism occasionally found where ecclesiastical architecture has tried to be wholly of our century. The cemetery was designed by S. Lewerentz and Asplund as the result of a competition held as early as 1915. Asplund designed the first of the chapels in 1920, Lewerentz the second in 1926. The Crematorium was begun in 1935 and completed in 1940. The plan shows the Holy Cross Chapel, top left, with the vast flat-roofed atrium on its square piers to the right. South of this—see the drawing on top of this and the following page—is a walled-in garden, then the Chapel of Hope, then again a garden, the Chapel of Truth, and a third garden. The insertion of these gardens—there is yet another one north of the Holy Cross Chapel—with their trees and small patterns of lawn amid walls is characteristic of the highly developed Swedish sense of planting. The south end of the Crematorium is formed by a system of low walls or screens in the open, with niches for the urns.



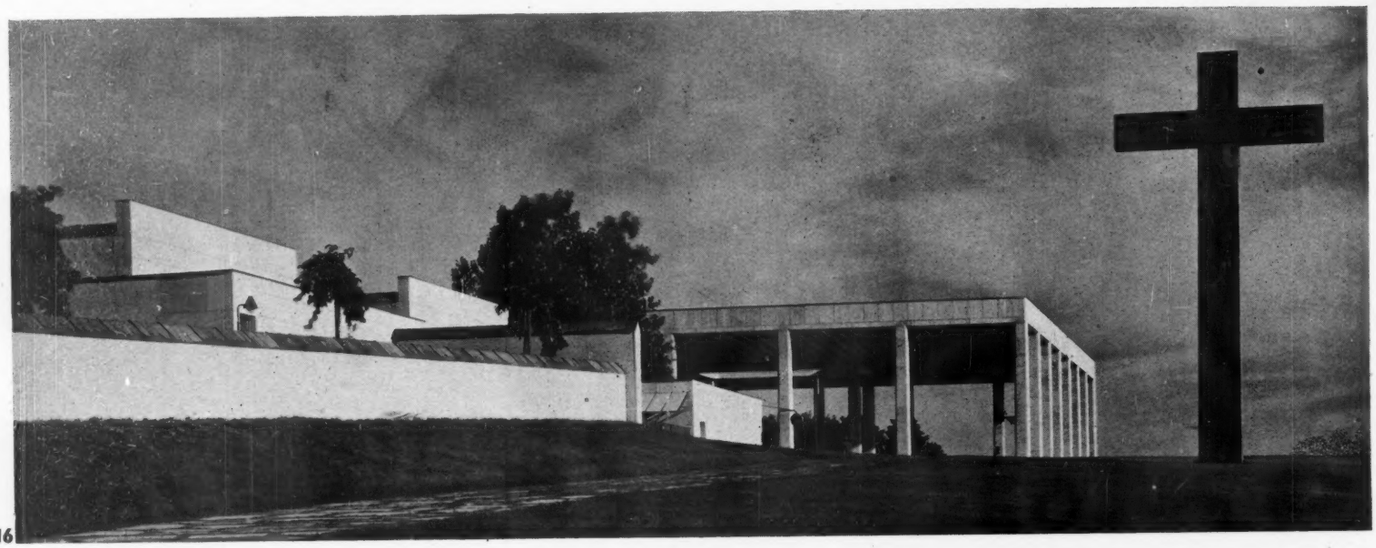


14

15



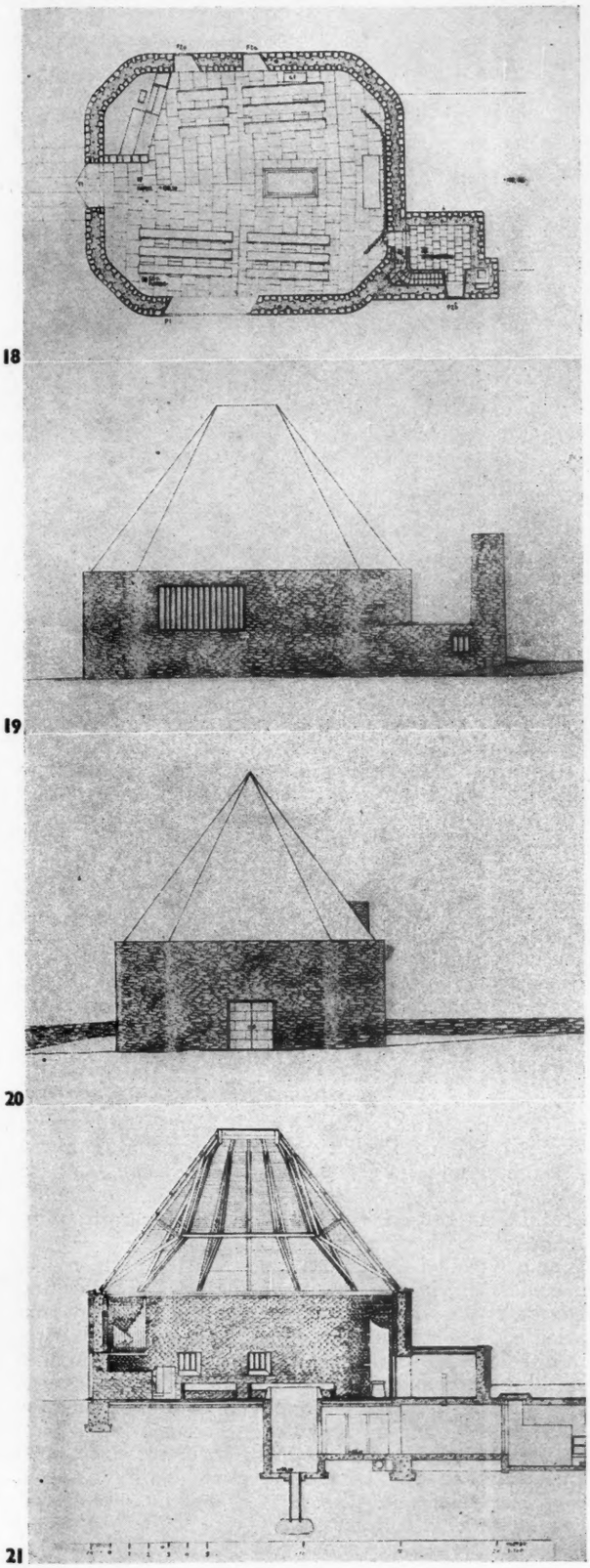
15



16

17

***17** shows the whole group, looking up towards the atrium and the exquisitely placed monumental cross in front of it, **16, 10,** and **13** are close views up the same processional way. **11** looks down from the atrium towards the entrance of the smaller chapels, **12** is the front of the Chapel of Hope. The two interiors illustrate the Chapel of Hope, **14,** with Otte Skjöld's mosaic, and the Chapel of Truth, **15,** with Ivar Johansson's reliefs.*



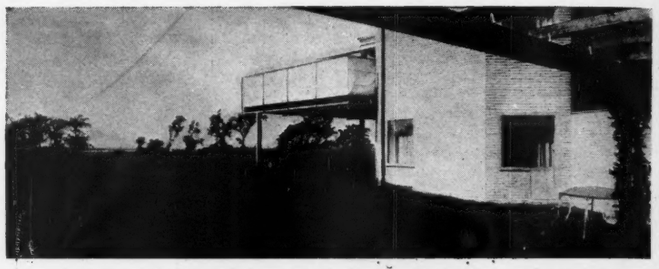
18, 19, 20, 21, *Asplund's designs for the Crematorium at Skövde,* 1937-40.

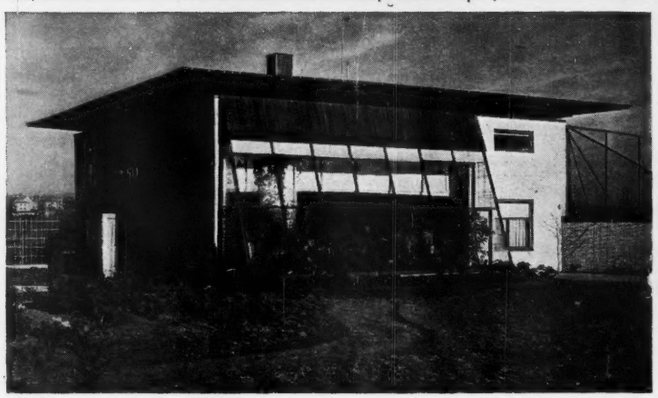
tectural guide books. For all that it is a most interesting example of good planning and sane civic development. Erik Hübe, the city engineer and planning officer, has made parks out of waste land, and playgrounds for children in the midst of the most densely populated parts of the town. Even at the final scene in the life of the individual citizen, Hübe has seen to it that his environment should be suitable, well-designed, dignified and peaceful. At Malmö the columbarium and burial ground are side by side. Everything from the landscaping of the cemetery to the details of box hedging, or the form of the commemorative plaques, is thought out as part of the design. In this setting Lewerentz's crematorium is only one degree more scrupulous than its surroundings.

From the sombre to the gay is not such a long step in Swedish architecture as it is with ours, or with that of the Latin countries. There is something light-hearted in their most monumental buildings, and even their most ephemeral are seriously designed. Some factories in Sweden are impressive, but they are never grim. Offices and schools are alike cheerful and businesslike; they have an early morning breeziness about them. Perhaps the most formal structures of all are the gigantic hospitals, which chill by their standardized perfection and their air of impeccable asepticism. One has to be really ill to appreciate to the full the quietness, the cleanliness, the controlled temperature and humidity of these clinical palaces. For the touring architect their main interest is in details of structure and equipment rather than in their architectonic values. The great Central Hospital now being completed in Stockholm is probably the largest independent building in the city. When its brick walls were completed, the whole structure was wrapped round with a layer of featherweight concrete insulating slabs before being plastered; for all the world as if it were a gigantic jacketed stove of the Aga type, cooking its patients back to health in a moderate oven. The smaller hospitals, however, including the sanatoria and children's hospitals, are usually extremely attractive, both in their site-planning and their architecture. In anything to do with children the Swedish architect seems particularly happy; and of the many who have designed buildings for them, Paul Hedqvist is one of the best. Students of Swedish architecture will already know something of his Stockholm schools: the Bromma High School (see THE ARCHITECTURAL REVIEW, August 1943) and the Communal School in South Stockholm, **40**, date from 1936–7; the Fredhäll Elementary School, **38**, and the Stockholm Trades School were built in 1938, and in the same year he designed the Children's Home and Nurses' Quarters of Nybodahemmet (see THE ARCHITECTURAL REVIEW, July 1943). The planning principle is much the same in each case; and it involves the grouping and banking of classrooms in a main block with south-east aspect, and the grouping of faculty rooms adjoining. Science rooms and laboratories are arranged separately, with a different aspect; gymnasia and auditoria are usually, but not always, distinct buildings; and the main blocks are linked together with glazed corridors, in the manner of articulated joints. The scheme is simple, but it is the lightness of touch, and the continual inventiveness of the variations on the main theme that brings home to one, after a time, that here is a master hand in the designing of educational buildings. The interior of the school hall in the South Stockholm School, **40**, is certainly one of the nicest that has ever been built. It has proportion and scale; it is simple, practical and unforced in its dignity; and the use of wood, the graceful curves of the platform, and the sounding panel, add a touch of the playful which endears it to the memory.

The same qualities are present in the enclosed suncourt of Nybodahemmet, with the fine pine trees and the grass slopes

22, 23





24, 25

giving character to the garden, and the shutters in the garden wall opening to frame the view from the hillside. In the Fredhäll Elementary School, **42**, the proportions of fittings and furniture are adjusted to suit the pupils. This school also, like the one in South Stockholm, has a particularly well-designed auditorium.

Hedqvist's open-air baths, Vanadisbadet for example, **49** to **51**, are also quiet, thoughtful and cleanly designed. Stockholm lives another life in summer, as compared with the winter months; and it is then that one should see the Vanadisbadet in use. The sun is cultivated with almost Mithraic fervour, and here the long terraces of wooden slats hold an amphitheatre of pale brown devotees on every sunny day. As in all Hedqvist's work, from the Hangar at the airport and the waterworks at Lovön, down to the desks in the science room of the Bromma High School, the architecture is smooth, serviceable and self-effacing.

In the same tradition is the work of the Gothenburg architect Nils Einar Eriksson. The well-known Concert Hall was completed in 1935, and must be visited, for no photograph can do justice to the interior. The building is also remarkable for its decoration, especially the enormous tapestry in bold colours by Sven Erixson, which is a most satisfactory foil to the plain polished wood, polished glass and polished marble of the foyer, being rough in texture, vibrant in colour and dramatic in its composition. The Mässhallen in Gothenburg—a large covered sports hall in steel, concrete and siporex—is also by Eriksson; so is the office building there, known as Centrum. Both were completed in 1939.

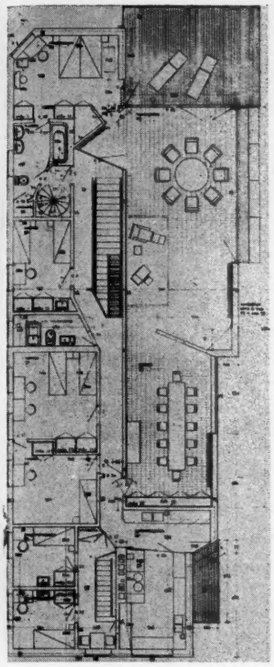
Gothenburg, home of shipbuilders and manufacturers, full of Scotch names and Gleneagles architecture, and with a very independent newspaper of its own which is so like the *Manchester Guardian* that one is surprised not to find articles in it by Professor Reilly, is known in Sweden as "Little London". Though it boasts some extraordinarily interesting individual buildings —including those in the square in front of the Art Gallery, with the Concert Hall, the Theatre and the Milles fountain, and Asplund's much-debated extension to the Court House— much of the architectural visitor's interest is likely to be centred in town planning and housing. Uno Åhren, the City Planning Officer until the end of 1942, has now gone to Stockholm, and Tage William-Olsson has taken his place: both names are quite well known in this country. So also is that of Erik Friberger, the apostle of the prefabricated house, who has designed and assembled in various combinations some of the most exactly machined components of building that have ever been produced. His Sporthus and the private house for Miss Lange in Gothenburg are both built according to his Element-hussystem, **76**, **77**, in wood and steel.

Most startling of all are the *Småstugor*, counterparts of the semi-detached speculative builders' villas in England; but in Sweden usually self-standing. What is an architect to say of these decently designed, standardized houses for workers, each standing in its little plot of ground and each with its trim little garden and its own flagstaff?

In Stockholm the broken and irregular character of the sites, the outcrops of limestone, the birch and the fir trees, and the omnipresent stretches of water, all tend to break up the regularity of these villa colonies, so that one sees but few units at a time. But in Gothenburg, amid scenery that is almost English in the character of its trees and vegetation, and on sites which are often flat or gently sloping, the whole difficulty of architectural composition with similar and separate units is clearly exposed.

The Planning Officer has made a gallant attempt to avoid losing the architecture in the housing. The rows of villas are well spaced for light and air and fire prevention, they are properly oriented, the site plans are not over-burdened with streets nor intersected by traffic arteries, public gardens and playgrounds have been skilfully laid out, the communities are not too large for sociability, and communal buildings such as crèches, elementary schools and shops are conveniently located. Very exacting by-laws are complied with; there are no blatant nonconformists among the trim and rather plain facades; the colours are varied, but not discordant; and there is general consistency of material. And yet . . .

"In a few years, when the trees have grown up, it will be better," said the Planning Officer, "because we have asked each tenant to plant at least one tree in his garden, and one day the houses will only peep out of the landscape."



The Swedes have a very ingenious way of handling timber. In **22** *the floor beams are mitred into the outer wall, and a steel member carries the span of the window.* **23** *is typical Swedish flat construction, with reinforced concrete floors and walls of brick or concrete blocks (Gärdet, Stockholm).* **24** *with the plan above is a golf fan's house at Falsterbo, by Sigurd Lewerentz. You can step out of the house straight on to the course and start your game.* **25** *is one of the most exquisite and lavish recent houses in Sweden: Villa Engkvist, by Sven Backström and Leif Reinius.* THE ARCHITECTURAL REVIEW *is going to illustrate it soon in more detail. An excellent example of how to place simple geometrical forms opposite each other and in relation to nature to create an industrial architecture of dignity and humanity is Eskil Sundahl's macaroni factory at Kvarnholmen near Stockholm, for the Co-operative Society,* **26**. *Employee housing is also part of the general scheme.*

26

One is left wondering whether the æsthetic perception of a new generation, brought up to such things as Social Security and a House for Every Family, will discover a harmony in this type of settlement to satisfy the eye as well as the mind. Those who have read Aldous Huxley's *The Art of Seeing*, will remember his insistence on the close relation between the physical faculty of sight and the mental faculty of perception. Aesthetic is, in fact, perception; and it is quite possible that in a generation from now our apprehension of the social value of standardized democratic housing, grouped by architect and site-planner into visible communities, will be so strong and so complete that it will extend the power of our eyes, and give us an æsthetic satisfaction that at present we do not achieve.

Apart from appearances, the Swedish *Småstugor* present some very interesting social problems. By the end of 1939 various organizations in Stockholm and Gothenburg and elsewhere, known as *Småstugeverksamhet*—or *Build-Your-Own-Cottage-Schemes*—had built something like 6,000 cottages. John Dower, who made some notes on the Stockholm *Småstugeverksamhet* in 1939, reported that over 1,000 acres, owned by the city, had been developed in this way for the benefit of families in the lower income group of £200–£300 a year. The land is developed by the city and ground-rented at £8–£12 per annum for a plot of 360 to 600 square yards; the density being roughly 6 to 10 to the acre. The cottages are usually either of one floor and a basement (including three habitable rooms and a kitchen)

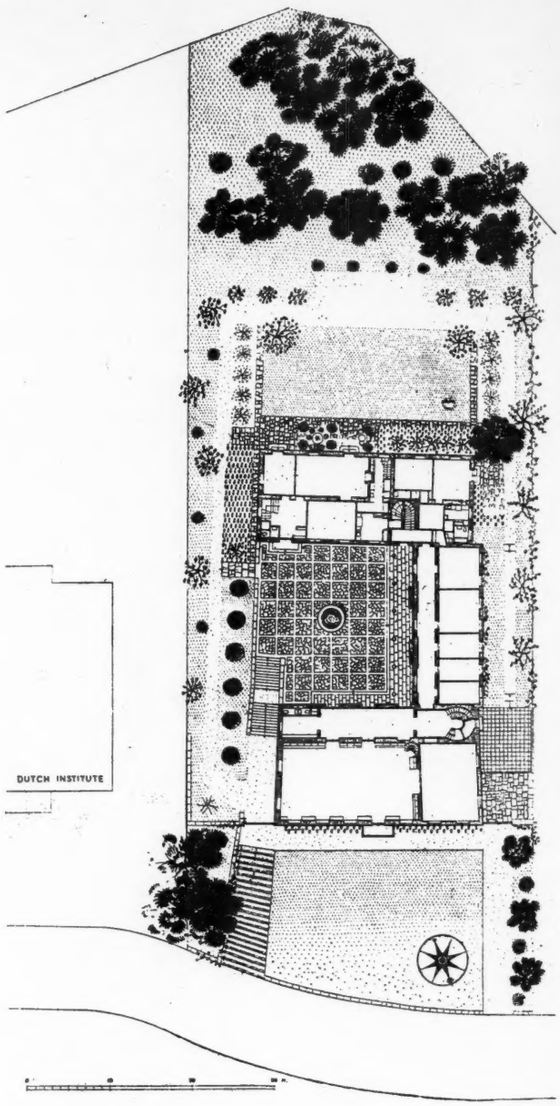
or of two floors and a basement (including four or five habitable rooms and a kitchen). The basements all contain a bath and wash-room (generally combined), a workroom, a boiler and fuel room and—especially in wartime—a food store with a large potato rack. The cost is about £650–£800 (recent examples being as high as £950); and of this the owner's labour, carried out in the summer months, is worth about 10 per cent.–15 per cent., the whole of the remainder being raised on mortgage, if desired. The mortgage is provided by the city in the form of standard materials, some skilled labour and specialist services; and the inclusive annual costs come out at the equivalent of rents from £50–£60.

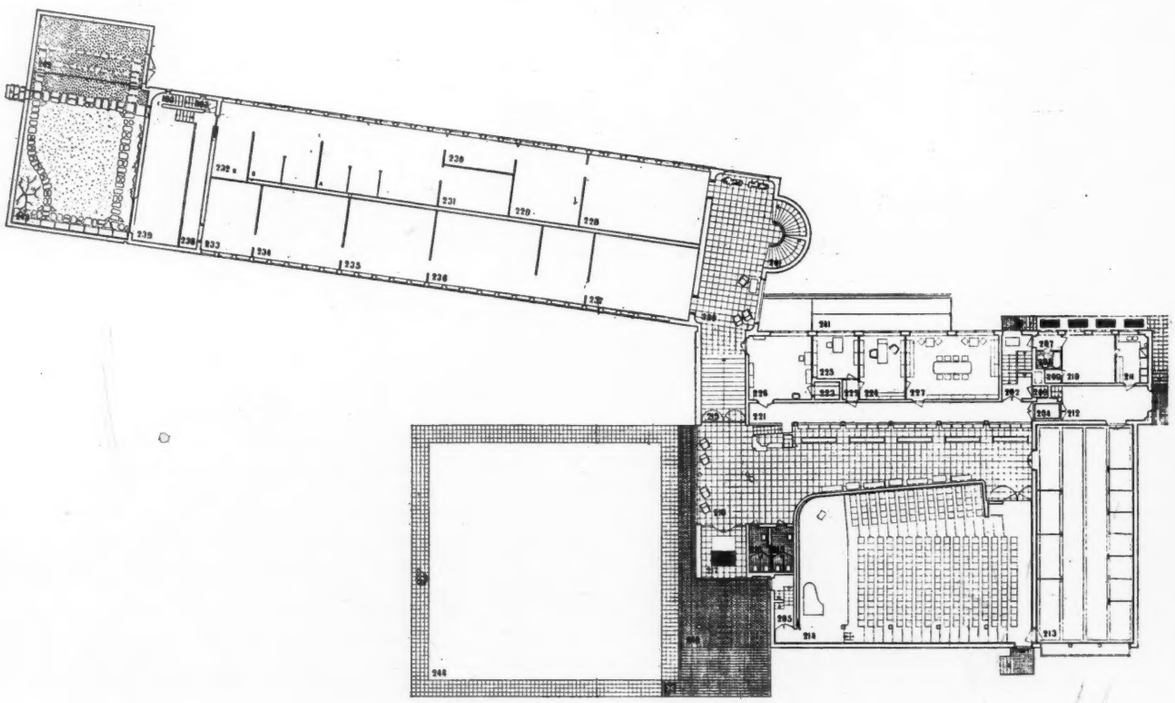
Naturally the building trade unions do not look on such schemes with favour. And the great housing co-operative, H.S.B., prefers to build everything for its members, from furniture to summer houses. H.S.B. stands for *Hyresgästernas Sparkasse- och Byggnadsförening*, or Tenants' Savings Bank and Building Society, and it is one of the most enlightened housing corporations in the world. Its chief executive is an architect, Sven Wallander, and it is probably true to say that his influence on public taste, through the multifarious industrial, financial, social and propagandist activities of H.S.B., is enormous. It is of particular interest to us in Britain, where local authority houses one class of population and private enterprise another, that the tenant membership of the Stockholm H.S.B. before the war was composed roughly as follows:

60 per cent. skilled and unskilled manual workers,
24 per cent. shop assistants,
10 per cent. clerical workers and officials,
6 per cent. higher officials, scientific and professional workers.

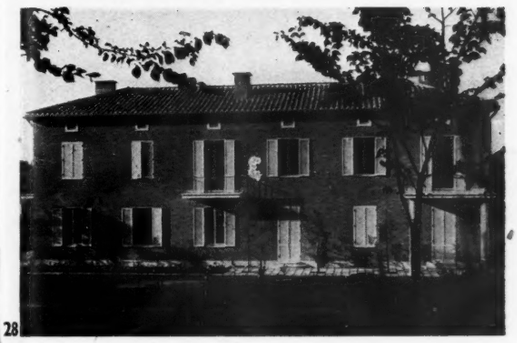
It should also be noted that not only H.S.B. but other housing corporations in Sweden build nurseries and paddling pools, set up furniture and textile shops, undertake lectures, films and exhibitions to educate the public in house management and hygiene, and organize sporting and holiday clubs in the summer resorts. Having an all-round social function, these various housing corporations—co-operatives and others—have levelled out the difference between a subsidized and an unsubsidized dwelling, and have removed a cause of snobbery which is still active in this country and the United States.

Externally there is not much difference between working-class flats and luxury flats in Sweden: space is what you pay for. Compare, for example, the workers' houses at Hammarby, 2,





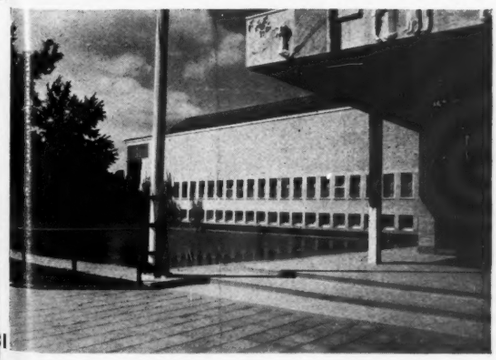
27



28

29

30



31

PUBLIC BUILDINGS

One of the best known representatives of the older generation of Swedish architects is Ivar Tengbom. His Swedish Institute in Rome, 27, 28, plan on page 70, top, shows him in a mood which we would call Neo-Georgian over here. However, the building is in a neighbourhood which would have made a more uncompromising design something of a venture. On native soil, the Swedish architect does not evade such a venture. At Halmstad, 29, Yngve Ahlbom and Nils Steener designed a new town-hall which proudly declines any rapprochement to the half-timbering of the adjacent building. 30 and 31 introduce another of the most successful architectural partnerships in Sweden : Nils Ahrbom and Helge Zimdahl. Their Museum at Linköping, see also the plan on page 70, bottom, is delicately proportioned and in its plan charmingly linked up with a children's play pool. Behind the low wall with the glass casing above is the lecture theatre. The main exhibition rooms are in the recessed wing, 31. 32 gives a first impression of Asplund's Bacteriological Laboratory. More on this will be found on the following pages.

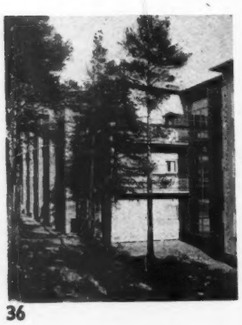
32

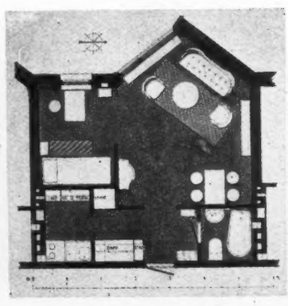
33

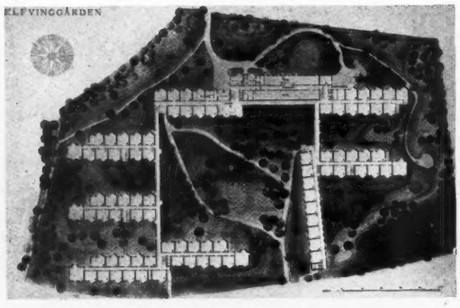
34

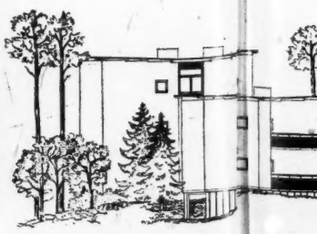
35

ALMSHOUSES





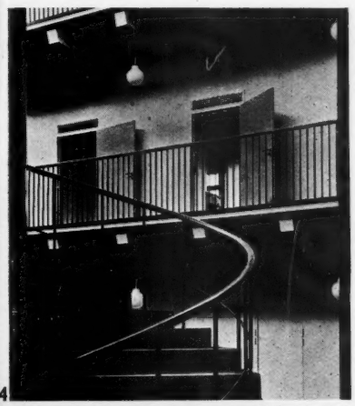




36

HOSPITAL

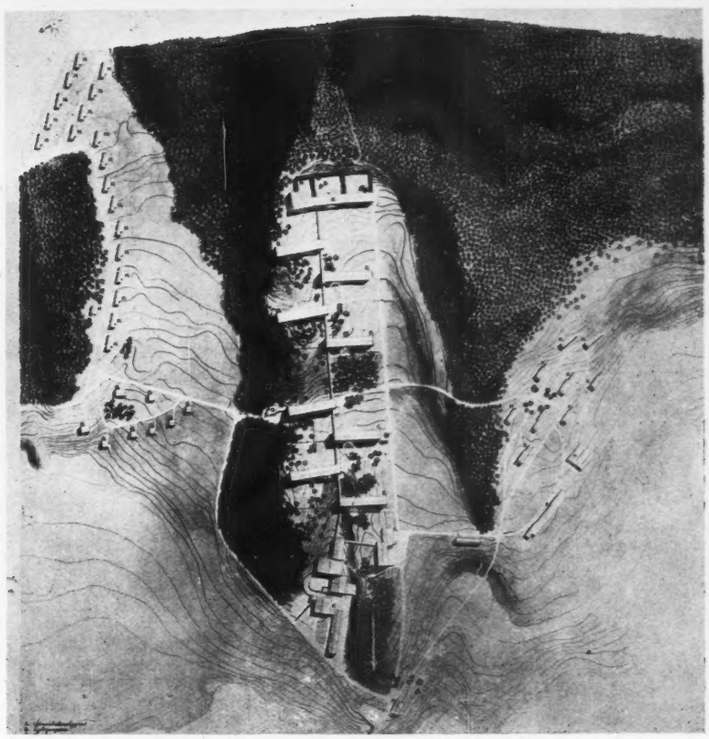
Asplund's Bacteriological Laboratory in Stockholm is an aggregation of some twelve or more buildings. The main block is seen in 32 towards the south-west corner, in 33 towards the south front and the projecting east wings. The relation between nature and building is again admirable. The interior of the central hall with its spiral stair, 34 and 35, has all the lightness which enchanted English visitors to Asplund's buildings for the 1930 Exhibition.



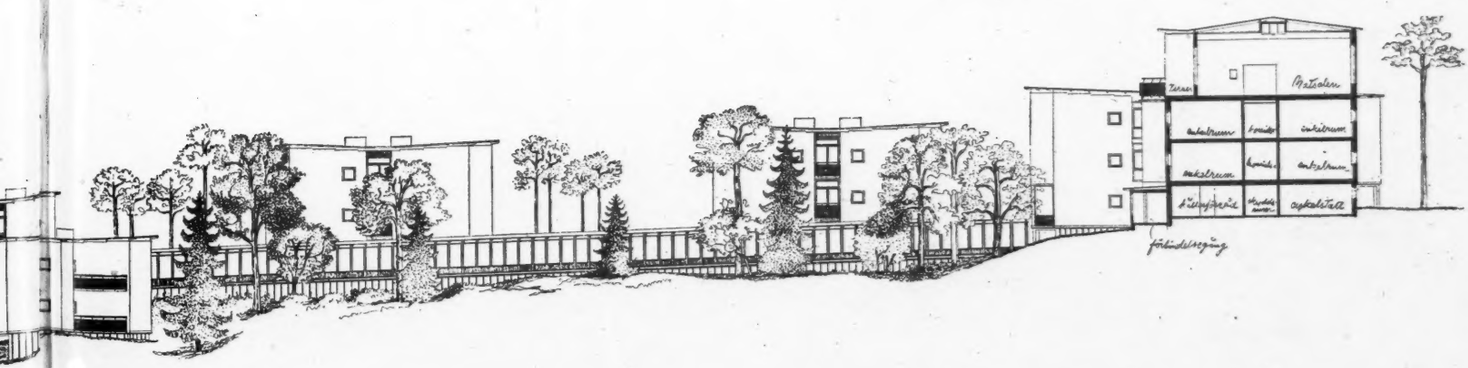
34

35

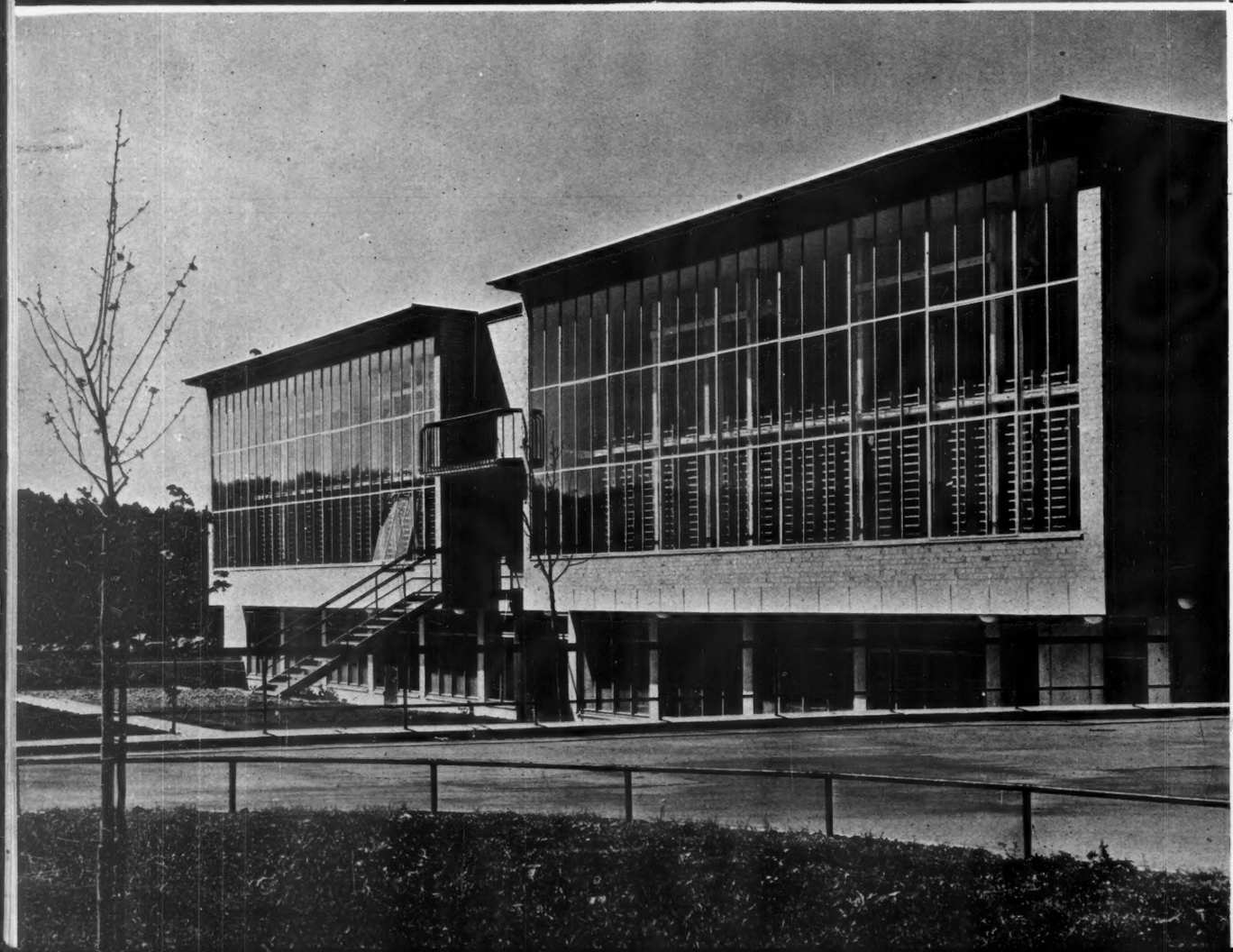
37



The Sundsvall Hospital, 37 and plan below, is Hakon Ahlberg's work. It was begun in 1939 for the Royal Medical Department. The plan with its spurs either side of a central covered way is especially interesting. The technique of the drawing (a fragment of which makes the cover of this issue) reveals the Swede's keen appreciation of trees and their character. Compare for this quality also the plans and drawings on page 75. 36 and the adjoining drawings illustrate Elfvinggården, Stockholm, an almshouses scheme by Backström and Reinius with 235 bed-sitting-rooms and 36 double rooms, all with kitchenettes and bath-rooms. The triangular bay-windows are introduced to combine privacy with the best angles to insolation. The blocks are again connected by covered ways.



38



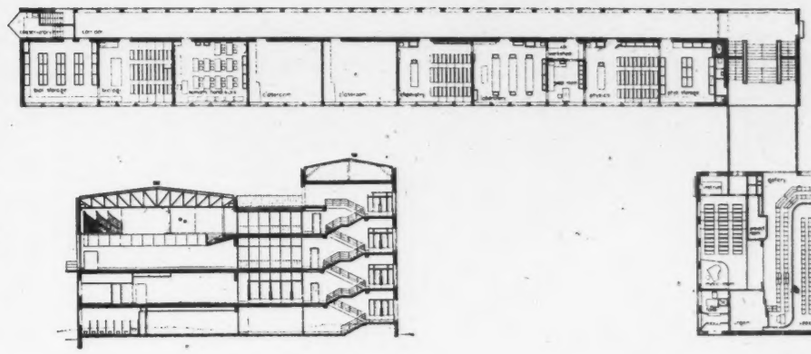
39

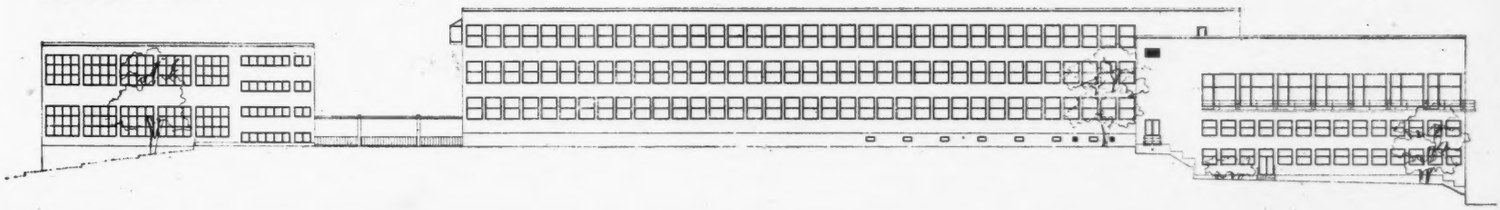
40,41

42,43

SCHOOLS

Of all types of jobs covered by contemporary Swedish architects none has resulted in a more amazing sum total of outstanding work than schools. Only a few can here be illustrated, and even these only inadequately. More will follow in later numbers. Fredhäll Elementary School at Stockholm, 38, with the delightfully airy hall, 42, is by Paul Hedqvist. The hall in 40 is in Hedqvist's Southern Communal School. The elevation, plan and section on the right and below are of the same school. The large gymnasium of the Eriksdal School and Community Centre, also in Stockholm, appears, 39 and 41. It is the work of Ahrbom and Zimdahl. The Northern High School for Girls 43, and 44 (on the next page) is also by Ahrbom and Zimdahl. Gymnasia are the pride of most new Swedish schools. Their sizes and equipment put many a modern school over here to shame.



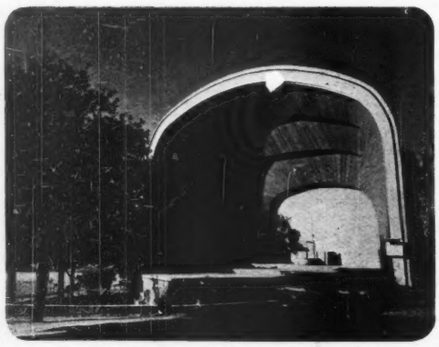


40,41

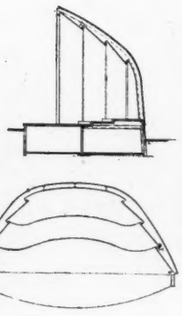
42,43

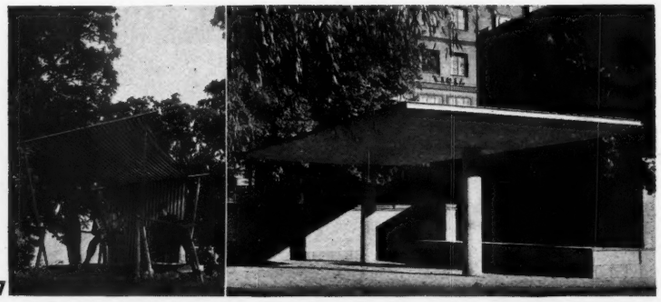
44

ACCESSORIES

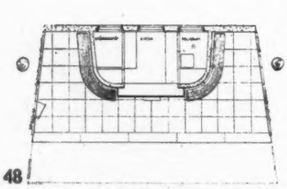


45

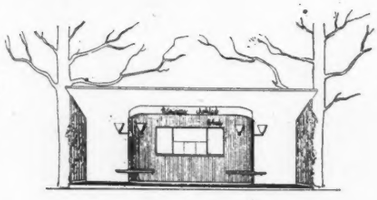


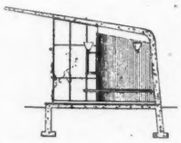


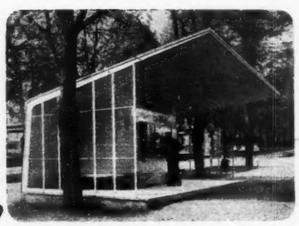
46,47



48



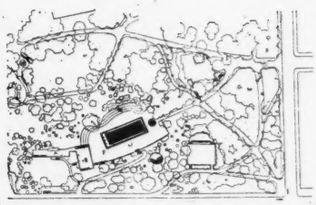




49

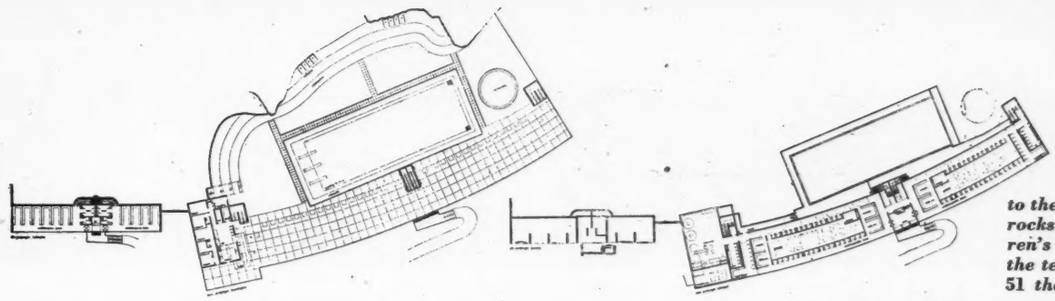
The magnificent treatment of minor accessories in the urban scenery of Swedish towns shows how the modern style has become second nature to architects, municipalities and the public. 45, Nils Eriksson's lovely bandstand at Skansen; 46 a miniature bandstand by Erik Glemme, charmingly casual; 47 a modern example of the Picturesque "umbrello" of eighteenth century origin; 49 an enquiries pavilion by Yngve Ahlbom.

BATH



49,50

51

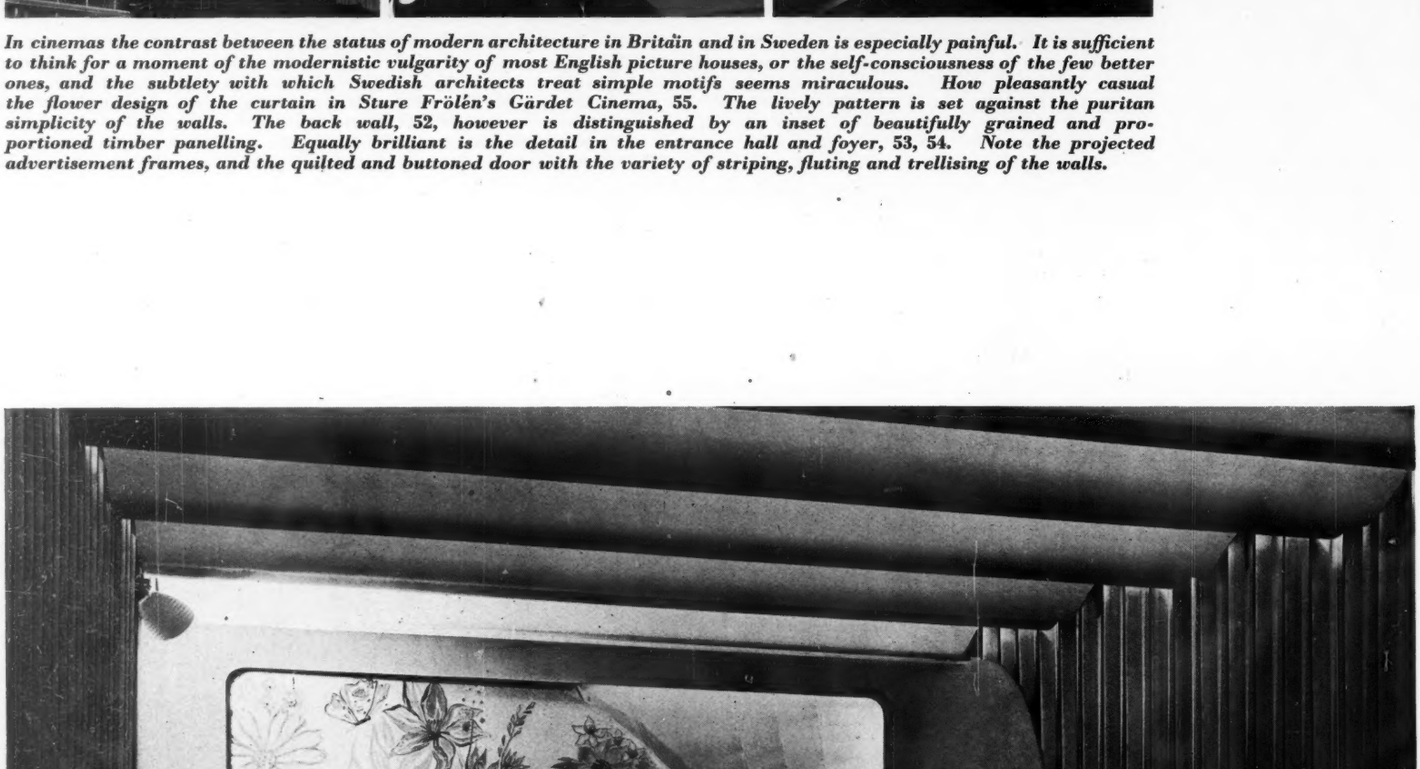


England has much to learn from Paul Hedqvist's Vanadis Swimming Bath in Stockholm. Number and placing of the dressing cabins are exemplary. A vast sun terrace is on the floor above. The steep slope of the ground has made it possible to raise the pool to the level of this terrace and yet keep ground-floor access to the dressing rooms. **50** *looks from the rocks above the bath down on to the children's play pool and the sun terrace;* **49** *is the terrace opposite, built into the rocks;* **51** *the entrance to the dressing rooms.*

CINEMAS

52, 53, 54

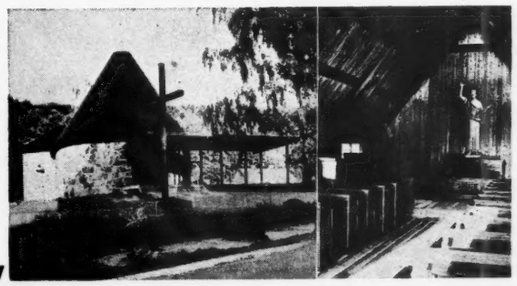
In cinemas the contrast between the status of modern architecture in Britain and in Sweden is especially painful. It is sufficient to think for a moment of the modernistic vulgarity of most English picture houses, or the self-consciousness of the few better ones, and the subtlety with which Swedish architects treat simple motifs seems miraculous. How pleasantly casual the flower design of the curtain in Sture Frölén's Gärdet Cinema, **55**. *The lively pattern is set against the puritan simplicity of the walls. The back wall,* **52**, *however is distinguished by an inset of beautifully grained and proportioned timber panelling. Equally brilliant is the detail in the entrance hall and foyer,* **53, 54**. *Note the projected advertisement frames, and the quilted and buttoned door with the variety of striping, fluting and trellising of the walls.*



55

with shops below; the apartments recently built at Abrahamsberg by Cyril Marcus; Markelius' Kollektivhus of 1935; and the new expensive flats at Gärdet, **23**, also with shops, in most cases, on the ground floor. In all cases the balconies are a decorative feature, being manœuvred in different ways to catch the sun; there are lifts—elegant little cages of wood and metal—for all buildings over three floors nowadays; and the stainless steel sinks, the refuse chutes, the refrigerators do not differ either in quality or good design, between the moderate and the expensively rented apartment. Only areas and numbers of rooms make the difference: space is the rarest commodity in Swedish houses.

Not so externally, however. It is only gradually that the visitor realizes how much that is good in the Swedish scene is due to careful and imaginative landscape gardening. The free planning of the blocks of flats and houses in the southern suburbs of Stockholm, in Gärdet and Djurgården and Bromma, would be robbed of half its value and all its charm if the trees and gardens and public parks were not laid out with as much care as the buildings. Men like Holger Blom—well known to members of C.I.A.M.—who has been responsible for some of the most remarkable achievements of the City Parks Office, must be included among the leading architects of Stockholm. The Stockholms Stads Parkavdelning is a big affair; it has a staff of over 600, even in wartime, and a glance at the park and parkways system of Stockholm and its immediate surroundings will reveal the fact that—apart from the old town on the island—it is literally a town set in a park. Projects for the loosening up of London show a system of green spaces and wedges which, in Stockholm, is already a reality. The site, of course, has wonderful natural advantages; but they have been conspicuously added to by redevelopment and replanting which should count as a model for our own reconstruction schemes after the war. Among recent layouts which can now be fully appreciated are the little hilltop scheme at Fåfängen, Rålambshovsparken between Drottningholmsvägen and Mälarstrand, the populous Fredhällsparken, the Berzelii Park in the very centre of the city with its amusing band pavilion, lily



56,57 *Two examples of minor sacred architecture: Melchior Wernstedt's Surte Cemetery Chapel, and Cyrillus Johansson's Chapel at Nikkaluokta (near Gällivare) for the Lapp Mountaineering Club. (The image of Christ is by Aron Sandberg).*

ponds and sunshaded tables, the new layout of Tegnérlunden, the recent additions to Humlegården including the well-designed kiosks, and the parkway from the Stadshus to the Traneberg Bridge.

The versatility of Swedish architects is considerable. A typical cross-section of the activities in design of an architect in private practice is contained in the book written by Cyrillus Johansson, and illustrated by his own works. These range from private and municipal housing to offices and town halls; from music rooms and pavilions to gymnasia and schools; from gardens to nature reserves; from bridge designs to town planning schemes. An architect with a range of experience like this has an opportunity to develop a philosophy as well as a technique of design. This is so much the case in Sweden, and so rare with us, that it cannot fail to be a cause of envy. A factory owner at Lund—a man of business who subscribed to the English version of the *Economist* (reprinted in Stockholm)—was conducting a party around his works, when he was asked if he had employed an architect. He replied, "But, of course"; in much the same tone as he would have answered an enquiry as to whether he included baths in his workmen's houses. Yet the R.I.B.A. of Sweden—the Svenska Arkitekters' Riksförbund—has only 500 members compared with our 8,000.

Industrial buildings are not so outstanding an element in the Swedish scene as the houses and bridges and parks: they have to be sought out; and sometimes they are too remote or too important for the wartime visitor to see. On the other hand, many of them are so inconspicuous, so clean, and so normal in scale, that they pass unnoticed among shops, office buildings and flats. Perhaps the most consistent work is that of the Architects' Office of *Konsum*, the Swedish Co-op. This includes the Luma Works at Stockholm, the Crispbread Factory (and related factories) at Kvarnholmen, **26**, **63** to **65**, the Charkuterifabrik at Skara, and the Hardware Factory at the

58 *The Råsunda Stadium, near Stockholm, by Birger Borgström and S. I. Lind.*

famous Gustavsberg Porcelain Works; all fairly recent except the first named. Two of the most significant of industrial structures are the complex of works and offices for the Ericsson Telephone Company at Midsommarkransen, near Stockholm, by Ture Wennerholm, and the City Bacteriological Laboratory at Stockholm, by Gunnar Asplund, **32-35**. The Steelworks Building at Norrköping, by Yngve Ahlbom, is a reinforced concrete structure with good clean lines; and so is the Laboratory at Södertälje, by Nils Ahrbom & Helge Zimdahl (now in course of completion), and the same architects' Printing Works at Lund. Here is a well-known school building firm designing factories: equally interesting is the fact that the head of the Architects' Office of *Konsum*, Eskil Sundahl, does work outside it; the chief parks architect, Holger Blom, builds industrial buildings; the professors and teachers in all the schools have private practices; and throughout the architect comes first and the official second.

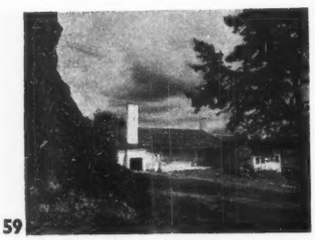
It may very well be that these are the lines on which some of our own pre-war professional difficulties should be adjusted. The Swedish example sets a very high standard of professional competence, it carries specialization only to the point where concentration on a particular problem is needed to produce a standard: after that the tendency is to move on to other fields. It assumes complete liberty of practice for teachers and officials as well as for private architects by bringing the *atelier* system into line with modern methods of education. It links the architect with the artist, the landscape gardener, the engineer and the town planner; and makes him the collaborator, and occasionally the initiator in the big projects that have as their object the improvement of the environment of the citizen.

That is, in fact, the theme of the architectural tunes that one brings away in one's head. Sweden is a country where architecture counts for much; perhaps because some other things count for less; perhaps because it is so far advanced in general culture and education. If there is little that is superlatively good, there is a great deal that is excellent in its way, and almost nothing that is slipshod and unpleasing to the eye. Where monotony exists it is seldom so pervasive as to be inescapable, nor so appalling in design as to force itself on the attention. Standards everywhere are high, from the standard of craftsmanship to the standard of living; and therefore it is only the very unusual—that which is, so to speak, *more* than usual—that stands out of the common run. Of the type of genius which Carlyle described as the "transcendent capacity of taking trouble, first of all," the Swedish architects of to-day must have a large share. It is certainly the hall-mark of advanced civilization. Of that other type of genius, born of intense nonconformity or vivid singleness of purpose, the examples are as rare in Sweden as in any other country.

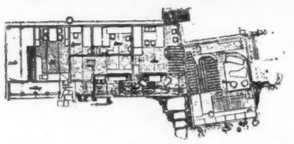
And so back again—but only very temporarily—to the blackout. It is not good for architects to live too long in shadow; and it is to be hoped that at the end of the war, if not before it, English representatives will go and see for themselves what beacons have been kept alight in Sweden.

A SWEDE
LOOKS AT SWEDEN

Sven Backström, the author of the notes on this page, is one of the most distinguished among the younger Swedish architects. His work—that is that of the partnership Backström and Reinius—appears on pages 69, 72, 73, 82, 84 and 88.



59



Asplund's own country house at Stennäs, built in 1937. It is of timber, plastered. The projecting end contains the large living room. Some steps go up the dining room. From here a passage is reached, which leads to bedrooms and kitchen. Nothing grand or pretentious about exterior or accommodation.

ALTHOUGH Sweden has so far managed to keep out of the war, it has, of course, affected us in various ways. Social and economic changes are taking place, and the isolation from which we suffer is very keenly felt. Imports have diminished, and a number of goods have disappeared from the market altogether. This is not least noticeable in the building trade. Iron girders, copper, asphalt and much else are almost unobtainable. We are obliged to have recourse to home goods such as timber, bricks, cement and iron for the reinforcement of concrete. The chief reason for their use, however, is that they do not require too much fuel for their production, since coal, being one of the items on our import list, is scarce.

This limitation of material has naturally had its effect on building. The war has also entailed limitations of another kind for building. The scarcity of material and labour has made it necessary to confine all civil building to a minimum. This means, for us, that factories and perhaps in the first place dwellings are what is chiefly built. There is much building of small unattached cottages, small flats, and to some slight extent also attached houses in rows and a few residential hotels.

Dwellings of the kind here referred to must of course be made cheap. By rationalization and standardizing we have tried to keep costs as low as possible. But the State and the municipalities have been obliged to grant loans at low interest so that flats may be let at reasonable prices. This has also made it possible to exercise a certain control. Thus, for example, the following minimum sizes of flats have of recent years become increasingly general.

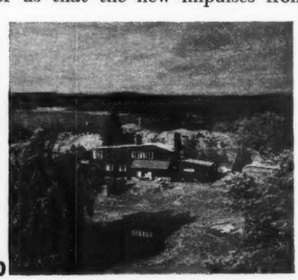
	Square Metres.
Single room	18–24
One room and kitchen ...	33–39
Two rooms and kitchen	43–49
Three „ „ „	58–65
Four „ „ „	71–79
Five „ „ „	87

As regards small cottages, these are as a rule made of wood on a concrete foundation. They contain two to four rooms and kitchen, in exceptional cases five rooms and kitchen. Dwellings for land-workers also come under this category (see **76, 77**).

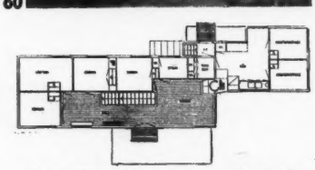
The flats are in three-storey so-called " narrow houses " of brick. The depth of the house varies from 7 to 10 metres. The greater depth is from the fuel point of view more economical, so the house depth generally adopted to-day is 9 to 10 m. The type of flat varies from one room and kitchen to three rooms and kitchen, sometimes even four rooms and kitchen, pages 82, 83.

Attached houses in rows are not common in this country. The Swede likes to live in his own cottage and to be able to walk all round it; and if this is not possible he generally prefers to take a flat in a big block. Of recent years, however, such prejudices have been slackening their grip, and a number of good designs for suburban attached houses have been achieved.

But apart from this development, which has been imposed on us by external factors, our architecture has a line of development to show, as it were, from within. In order to understand this rightly we must go back a matter of some ten years. It was in 1930 that Erik Gunnar Asplund created the Stockholm Exhibition at Djurgårdsbrunnsviken. This meant for us that the new impulses from France and Germany were in a masterly way translated and developed in the Swedish milieu and adapted to the Swedish national temperament. This was the victorious *début* of functionalism in Sweden. The new ideas swept over us like an avalanche and were adopted especially by the younger generation. A clean break was made with the past. There was a determination to clear away all false romanticism and all designing in historical styles. There was a feeling that one was building for new ideal human beings, who were quite different from the older generations. The modern mode of life was considered to be completely new, and consequently the new houses were to be absolutely different from the old ones. Everything connected with tradition was suspect. Architecture was to be objective. The functionalistic principle was the guiding star and everything was to be built in the material of " our time," glass, concrete and iron, and the building had primarily to be right from the point of view of construction. In one word, the architect was to be an engineer.



60



A week-end cottage at Kalvnäs, Sorunda, by Eskil Sundahl, built of timber. Landscaping is as good as any in English eighteenth century. Note the clump and roughly circular pond in the front. The main sitting-cum-dining room also contains the stair to the first room. This has a large store room and two bedrooms, five more are on the ground floor, and two maids' rooms next to the kitchen in the lower annexe on the right-hand side.

61

Entrance path and living room of Rolf Engströmer's timber cottage on Söderholm, between Runmarö and Nämnö. The plan and an elevation appear on page 87. The roughness of the interior appears more natural than in some of the French and English " Neo-Rustic."

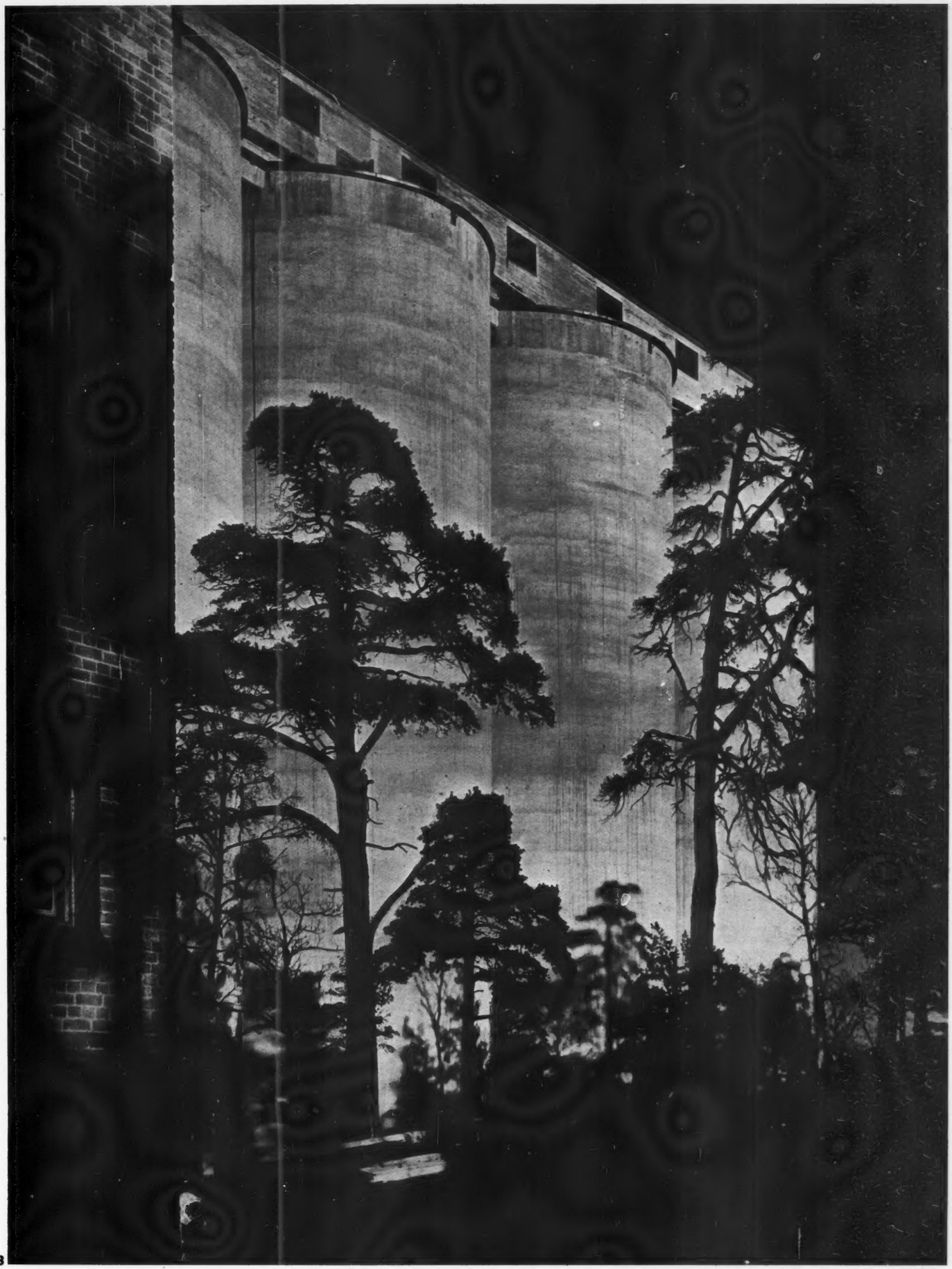
The years passed, and one " objective " house after the other stood ready for use. It was then that people gradually began to discover that the " new objectivity " was not always so objective, and the houses did not always function so well as had been expected. The big windows, for example, were all too effective as heat-conductors, and people found it difficult to accustom themselves to the heat or cold behind them. They also felt the lack of many of the æsthetic values and the little contributions to cosiness that we human beings are so dependent upon, and that our architectural and domestic tradition had nevertheless developed. It was difficult to settle down in the new houses because the " new " human beings were not so different from the older ones. It was found that one could not with impunity break out of the natural course of development. It was realized that one had to build for human beings as they are, and not as they ought to be. And for a true understanding of our fellows both the feeling and the knowledge of the artist are essential conditions. It is not sufficient for the architect to be an engineer; he must also be an artist.

Architecture began to seek its way on new roads. Architects began to develop an ear for the shifting values and phases of actual life. Man was once more to become the point of departure and the criterion. And it was discovered that man is a highly complicated phenomenon that is not to be satisfied or understood with the help of any new epoch-making formulæ. And one result of this growing insight was a reaction against the all too schematic architecture of the 1930's. To-day we have reached the point where all the elusive psychological factors have again begun to engage our attention. Man and his habits, reactions and needs are the focus of interest as never before. One tries to understand them, and to adapt the building in such a way that it really serves. And there is the desire to enrich it and beautify it in a living way, so that it may be a source of joy. The striving is for the true proportion—the neither too much nor too little. But with the delight in experiment that is part of the Swedish temperament, architecture has already tended to a much too exaggerated differentiation and division. This tendency to lose oneself in petty details of various kinds leads one to forget the whole, and simplicity. People sometimes actually need instructions before they can live in the houses!

The goal must be to reach the essential, the simple and the objective things in architecture. We want, certainly, to retain all the positive aspects of what the nineteen-thirties gave us. A house should of course function properly and be rational in its design. But at the same time we want to re-introduce the valuable and living elements in architecture that existed before 1930, and we want to add to this our own personal contribution. To interpret such a programme as a reaction and a return to something that is past and to pastiches is definitely to misunderstand the development of architecture in this country. Something that to a certain extent leads to a confusion of ideas is perhaps the forced return to building materials and methods of construction that the architecture of the thirties did not need to reckon with, and that for the younger generation of architects are perhaps unknown.

If in our democratic community architecture is allowed to progress without too great interference from without, it should be in a position to develop into a functionalism fulfilling the best and deepest requirements of the term.

SVEN BACKSTRÖM



63

FACTORY *The Kvarnholmen Flour Mills, designed by the Co-operative Architects' Office for the Swedish Co-op. Kvarnholmen is one of the most important European experiments in the unified planning of factory and employee housing. Thanks to the landscaping*

64

genius of the Swedes, the effect is spectacular as well as human. The impression of regimentation, so often felt in planning by the industrialist for his workers, is entirely absent. The factory buildings avoid equally successfully the pomposity into which English factories in representational positions fall.

65

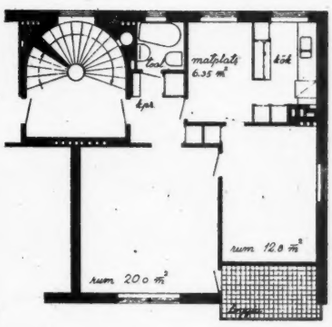
BLOCKS OF FLATS

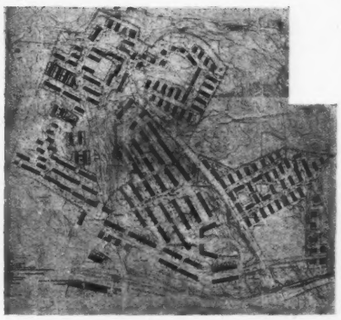
Only very few of the many recent Swedish estates of flats can be shown. The block plan below, of a whole estate, typical of most of them, is Traneberg, Stockholm. Flats and small terrace houses are grouped in a varied composition. The hilly country and the many old trees help considerably in the building up of a convincing unity. 67 and 68 are streets at Traneberg. Rarely is one architect responsible for a whole estate. 69 is from Ekhagen, 70, by Sture Frölén, from Gärdet, 66 and the plan of the one flat, by Hakon Ahlberg and Backström and Reinius, from Nacka.

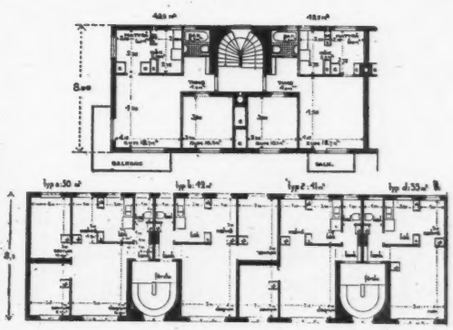
66

67, 68

69, 70



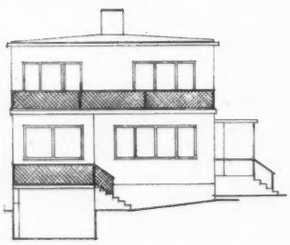




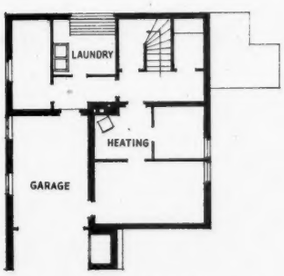
71

HOUSES

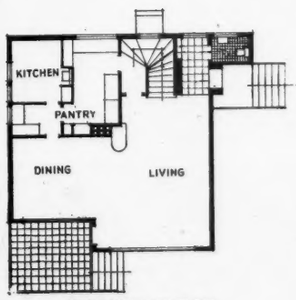
The same thoughtful and human approach is found in houses as in flats and public buildings. Backström and Reinius's Villa Engkvist, 71, is one of the most luxurious recent jobs. For the exterior see page 67. The houses at Södra Ängby, 72, 73, 74, and drawings on the facing page, on the other hand, typify the general level of recent house design—not especially distinguished, if each house is regarded as an individual object, but tactfully merging into the conifer landscape.



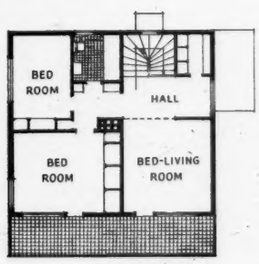
72



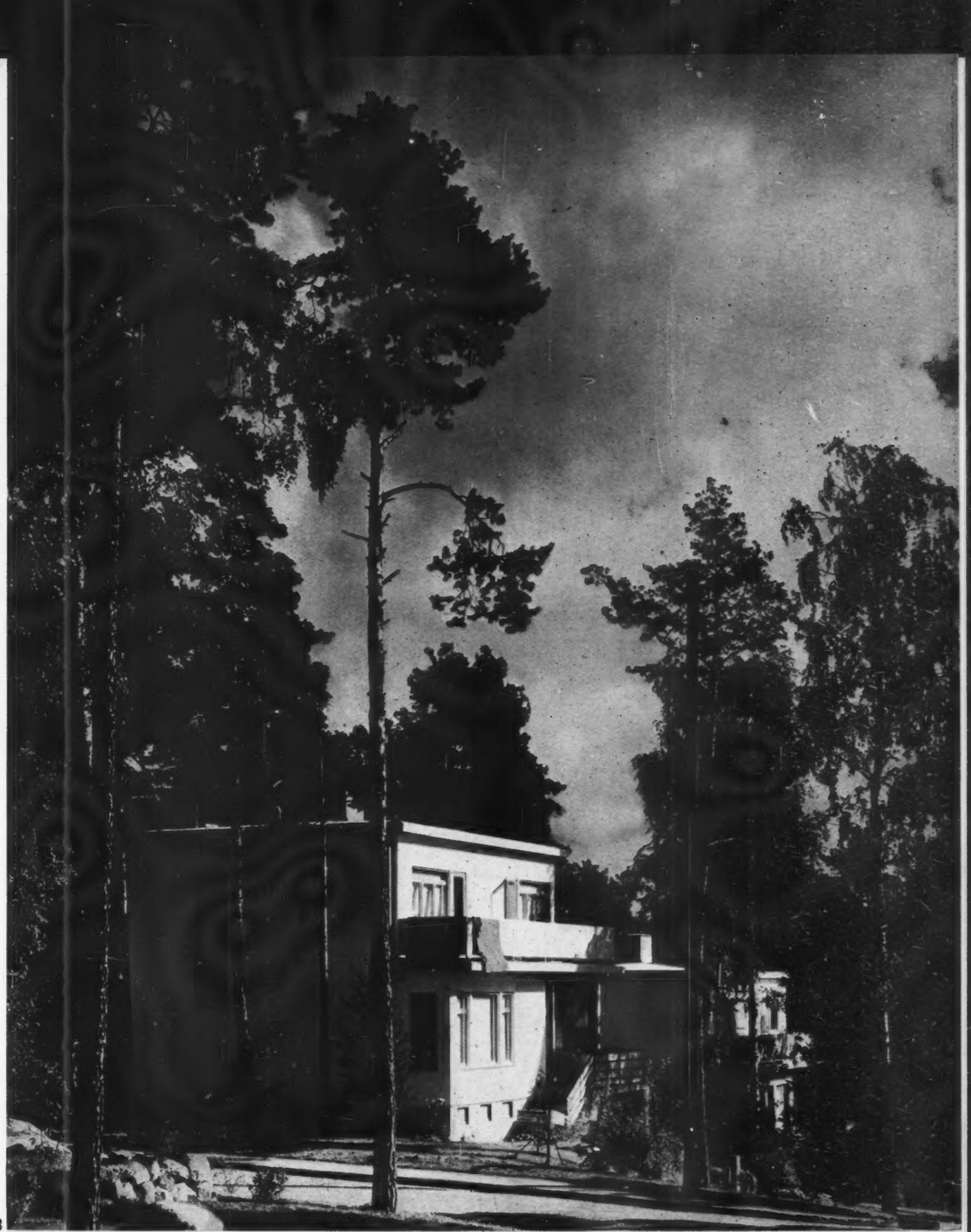
BASEMENT



GROUND FLOOR



FIRST FLOOR

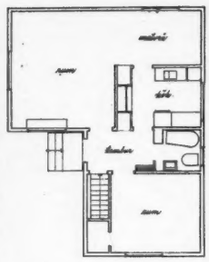


73

74

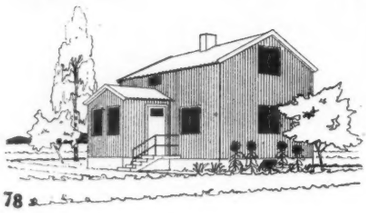
PREFABRICATION

75

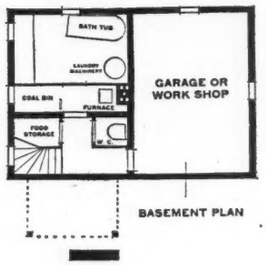


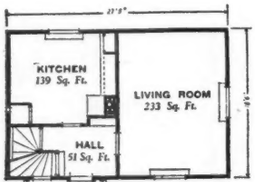
Prefabrication has been brought to a perfection in Sweden which has much to teach other countries. The Swedes were the first in Europe to go in for shop manufacturing of building sections. By 1925 the majority of timber houses built in Sweden were prefabricated. A few were sold to England. Some of these can be seen at Becontree. 76, 77 show one of Erik Friberger's Element Houses. The Friberger system is of the type in which framed-up panels (there are only four units in all) support floors and roofs. 75 is at Höjdhagen near Gustavsberg, designed by Olaf Thunström for the Co-op. Below are three of the nine types of municipal houses supplied by the City of Stockholm Housing Department. All these houses have basements, or rather cellars, as the Scandinavian climate demands. They contain bath rooms and store rooms. Type 3 has living room and kitchen on the groundfloor and two bedrooms on the first floor. Type 6 is a 3-room bungalow, Type 8 has the same accommodation as Type 3 but somewhat larger dimensions. For photographs of houses of these types see pages 84 and 85.

TYPE 3

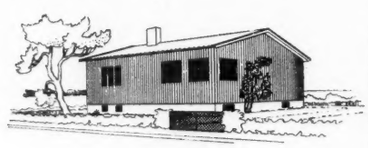


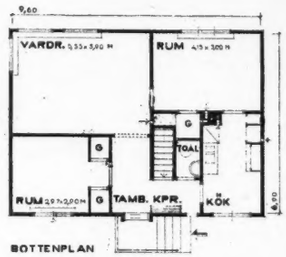
78

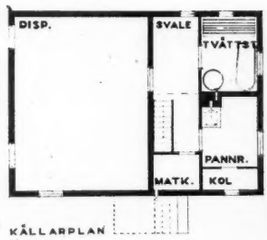




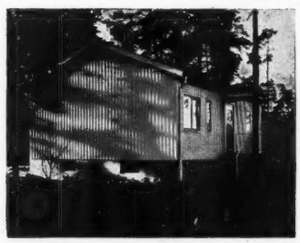
TYPE 6



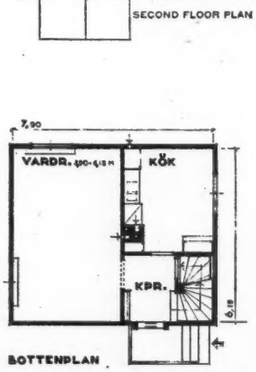


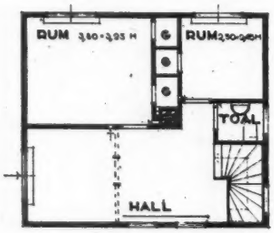


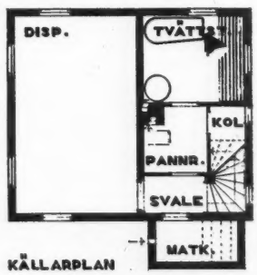
79

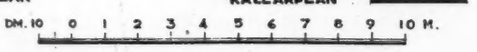


TYPE 8

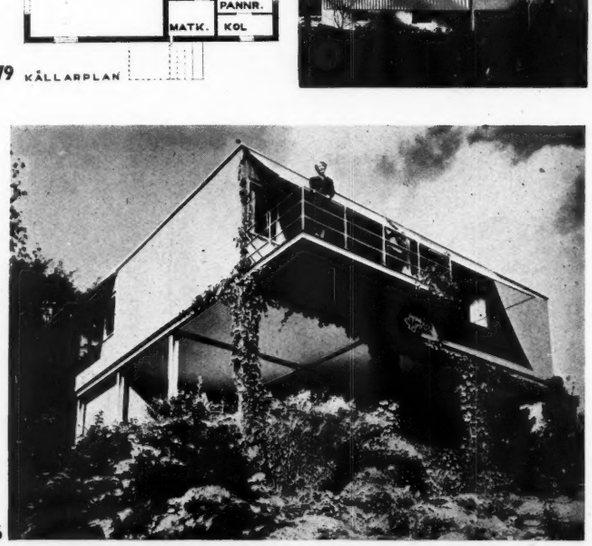




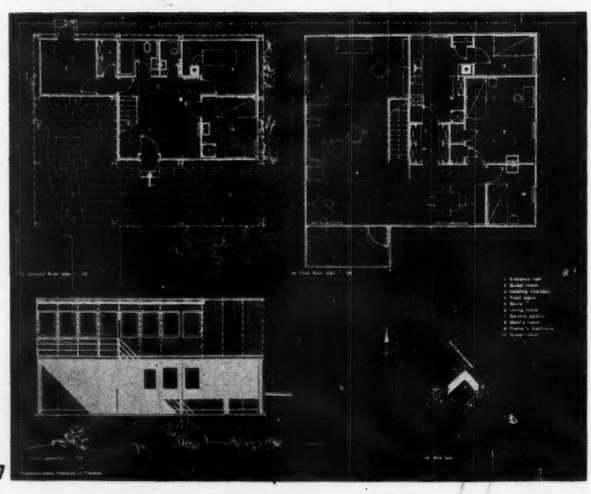




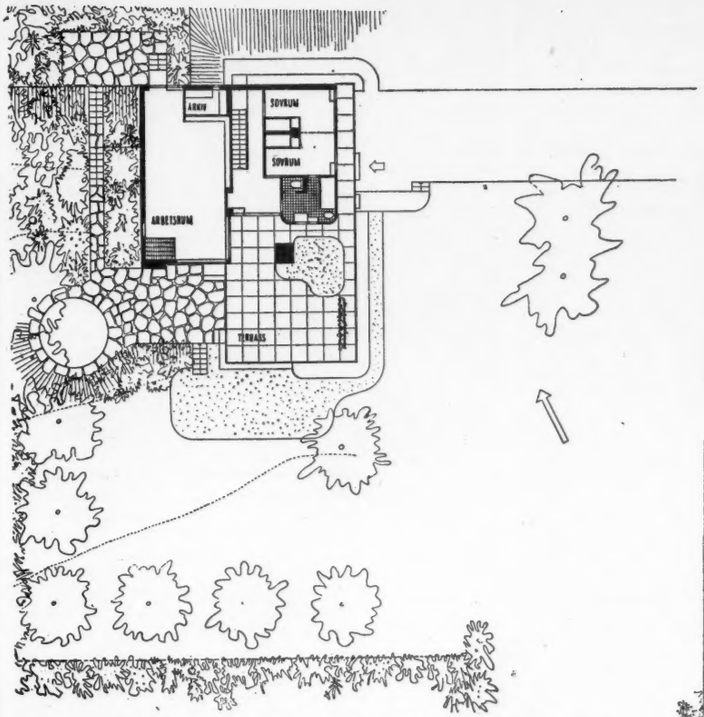
80

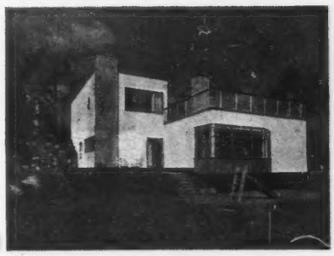


76

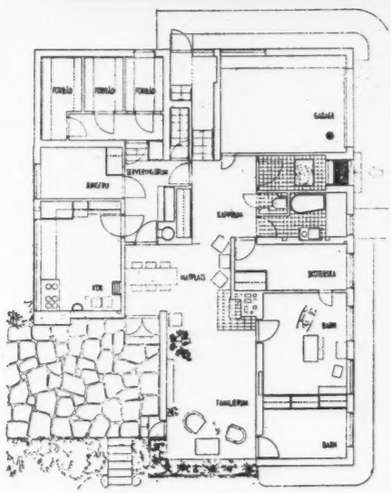


77

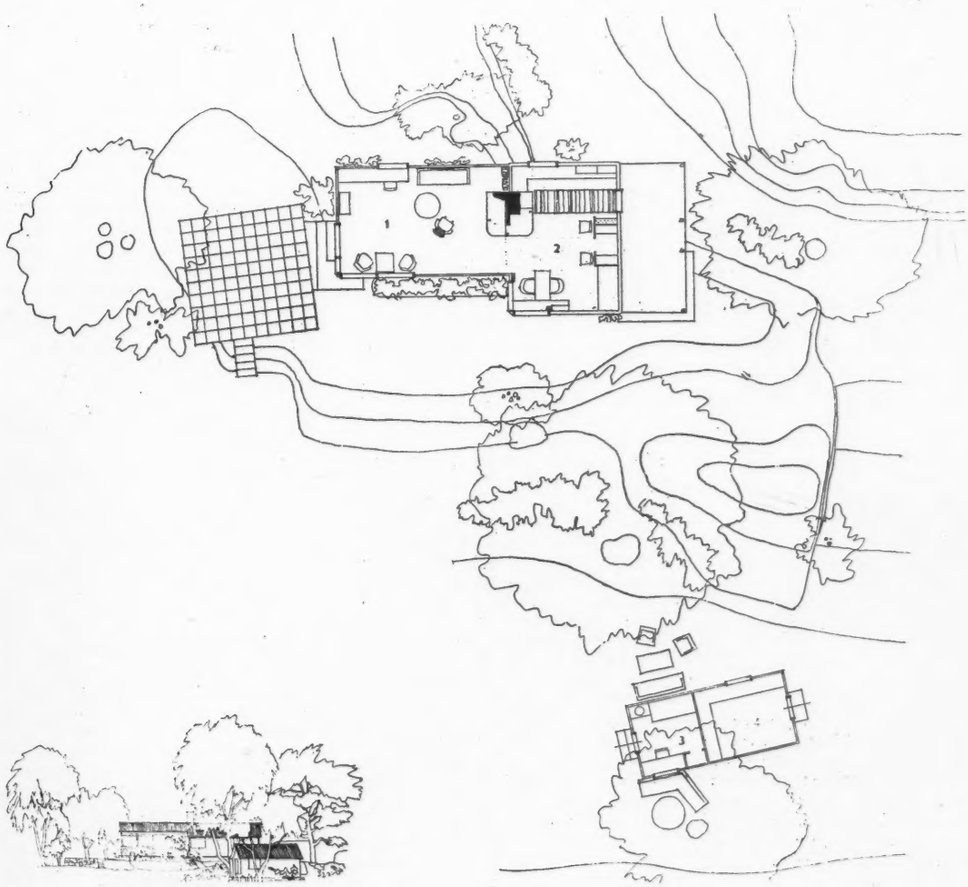




81



Top: Sven Markelius's Villa Myrdal at Bromma, Stockholm, more comparable in the exterior, **81**, *to the so-called international modern style than most new Swedish houses. The plan has the same large living-cum-dining room as most of the private houses illustrated in the previous pages. On the first floor are two small bedrooms and a sun terrace. Bottom: Rolf Engström er's cottage at Söderholm, again with a combined living and dining room. The covered porch on the right faces south-east. Exterior and interior of the house are illustrated on page* 80.

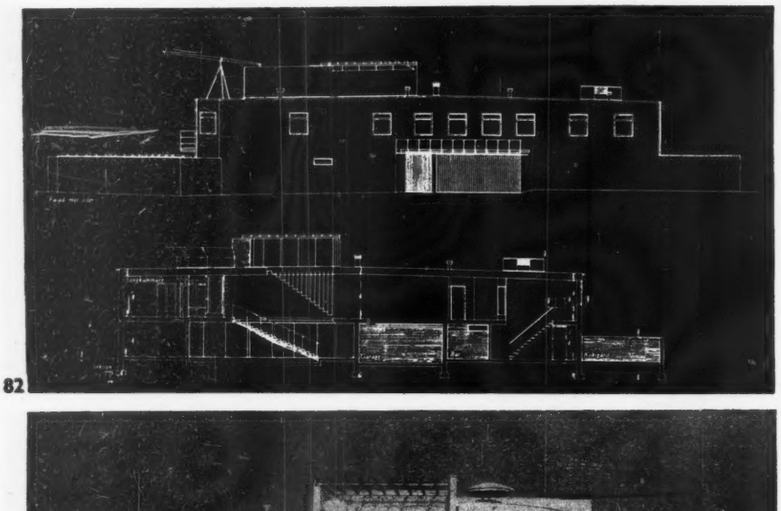


Mr. G. E. Kidder Smith, the author of the following notes, has been to Sweden as the holder of a fellowship given by the American Scandinavian Foundation of New York. He is amongst other things a photographer of genius, and many of the photographs shown in this issue were taken on his tour.

AN AMERICAN LOOKS AT SWEDEN

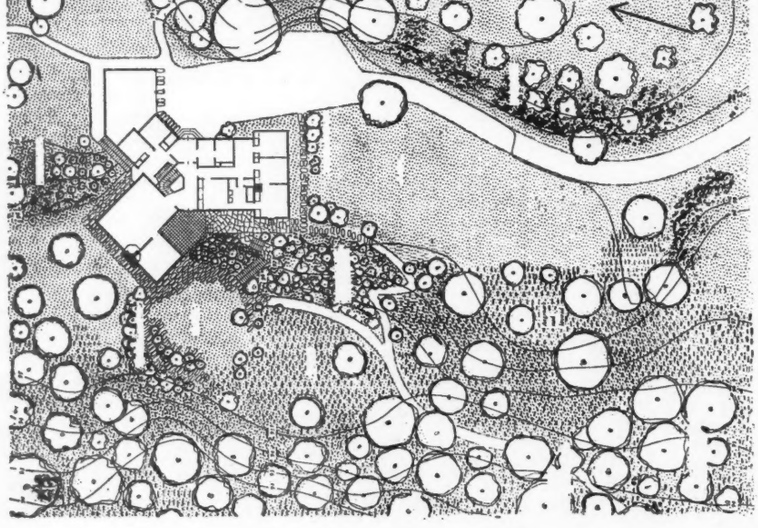
THERE have been few countries in recent years which have achieved what Sweden has in making the public at large, and the various government agencies in particular, conscious of good design. Architecture, furniture, housing and household ware—in fact, design in all its ramifications as it affects the people—have been forced towards certain high æsthetic levels or they will suffer public inattention as a consequence. This rather enviable situation has not come about overnight, nor been accomplished by a clapping of hands or waving of banners. It has been achieved—and it is still progressing, for such a policy can never end—by an intelligent, far-sighted educational programme, which a group of patriotic citizens, the City of Stockholm and the Swedish Crown, have undertaken, to make even everyday Swedish articles attractive from a design point of view. This propaganda is inculcated by the schools, the press, radio and various exhibitions. It has borne such worthy fruit that to-day Sweden has produced so many articles of merit that they are often grouped under the one generic term of "Swedish Modern," which seemingly applies as much to furniture as it does to table ware and houses. Whereas many laymen are familiar with the more portable evidences of this sound policy, except in professional circles, the architecture has escaped the attention its excellence deserves. It is the purpose of this article to take up some of their latest buildings, especially those whose public character would have resulted, in a less advanced community, in facades of Greek, "Moderne," "Federal" or "Egyptian" grandeur.

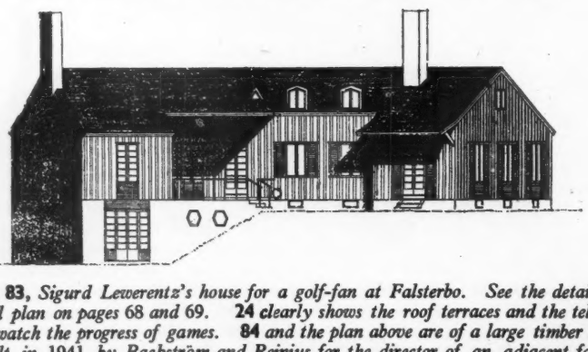
The beginning of this interest in raising the public's taste and fostering design sanity, can of course be traced directly to the Exhibition of 1930 at Stockholm—a small fair of no great importance as an international circus, but one which has had a profound influence on subsequent Swedish architecture. The exhibition was laid out and planned largely by Gunnar Asplund, whose death several years ago took away one of Sweden's most interesting artists. The buildings, many of which raised elderly eyebrows, were modern. Twelve years ago this was unusual in a public fair; few have surpassed it since. The real significance of it lay not so much



82

83





84

82, 83, *Sigurd Lewerentz's house for a golf-fan at Falsterbo. See the detail view and plan on pages* 68 *and* 69. **24** *clearly shows the roof terraces and the telescope to watch the progress of games.* **84** *and the plan above are of a large timber house, built in* 1941 *by Backström and Reinius for the director of an adjacent factory. The complicated, roughly Y-shaped plan avoids north windows. Garage and main entrance are in the north-east corner of the building, living room with terrace and study in the north-west corner. The trunk of the Y is chiefly given to bedrooms. Dining room and kitchen are on the lower floor, which, owing to the fall of the ground, opens in a French window to the south-east.*

in temporary public reaction as in permanent official interest and experiment. Besides the grace and elegance evident in the general pavilions, it was thought that the idea of more serious studies was not out of place. The committee thought the architect should be brought into more "social" problems; consequently they invited a number of outstanding and progressive architects to submit various solutions of the housing question. The best of these designs, built in the form of different apartments, were a feature of the exposition, and a side-by-side comparison of their virtues and faults led to the establishment of many basic principles which guided later developments.

A few years after this, encouraged by the success and rewards which came out of this full-size "housing" competition and the number of ideas that such a competition generated, the city thought it wise to investigate the school situation. They had found modern architecture good—it had solved problems a more traditional approach found difficult; would it not do the same for the increasingly acute mediocrity of most school buildings. Again an invited group of architects was called in, and from all sides the problems were investigated. From the results which different minds created, a synthesis of ideas were culled and, as in housing, basic standards set up to guide the design of future buildings. The ideal school which was assembled by this pooling of ideas towards the common problem had one of its first realizations in the Secondary School for Girls, designed in 1936 by Ahrbom and Zimdahl. Their original design won the competition, but the resulting building incorporated many suggestions of basic merit inherent in other competitive schemes. Since then many new schools have been erected, but not once has the Board of Education fallen back into its "earlier manner" of Northern romanticism or "simplified classic." All concerned have found the new schools infinitely more cheerful and sunny, far better adapted to exigencies of site and terrain (often a problem in Stockholm), easier to run and keep up, cheaper to build; their requests go no further.

Swedish officialdom's concern with the citizens' well-being as regards physical surroundings and architecture has gone beyond mere interest in adapting certain standards of excellence for public schools and housing—besides raising the public's taste to levels not generally reached in other countries; the authorities have seen to it that these high levels will be maintained. This has been accomplished by rigid laws (sometimes, perhaps, too extreme) which govern almost all new building, especially that which affects a community. These laws cover not only location on the site, which in most cases has been determined by the city planning office itself, but considerations of space, amount of window area, etc., and the general æsthetic appearance, especially as it relates to neighbouring structures. Although a housing development may have numerous architects for the various units, the scheme as a whole will be well knit. All the buildings will be prescribed distances from each other and the street; their general orientation will be observed and each will be about the same height. Minimum areas of fenestration will be found and other trade marks of legality can be read on their facades. That wearisome monotony does not result can be traced to several causes; first, such a contingency has been anticipated in the general site-plan, and not too many units of the same height and size are placed together; second, the original plan is so generous as to space between structures that sameness is obviated by distance alone; third, a number of architects are employed, for although the land is public, nearly all building is done privately, and even though the same standards must be met by each there is enough room for pleasant individuality; lastly, the Swedish regard for nature is so paramount in the laying out of nearly all developments that nature itself provides the contrast and variety otherwise needed. As can be seen from the pictures, parks and gardens, green spaces and trees literally flow throughout the site, and each house or apartment is surrounded by its own green belt. In addition to the individual park in which each building is set, there are always greens and sports areas at points where the noises from such spots will be least objectionable.

This modern Utopia has been largely accomplished by the fact that the city owns an extraordinarily extensive amount of ground both within and without the city limits. This property has not been sold, but rented on long (up to 99 years) term leases. Inasmuch as it remains under local control, all buildings erected upon it must meet certain specifications or they will not be passed by the Town Planning Board. In cases of non-city owned land, some of the same by-laws must still be met. This policy of the city's buying of available property has been going on in Stockholm ever since the turn of the century. Its effect is that the push of the growing population toward the country has not led to ribbon development and the incredibly wasteful and destructive "suburban developments" which characterize most American and English cities. I think it can be said that much of the city's charm and the almost complete absence of slums is due to this admirable foresight. Where the city has owned land they have developed it so well that property in other hands has had to raise its own standards or lose out to the attractiveness of the municipal development.

All this has required much time and careful thought; it demands a co-operation from private property owners and the general public that we find hard to realize. But even more than this, it is the product of an energetic and eager government, both local and national, one that somehow takes an interest in good design and logical architecture, instead of hiding behind the eternal facade and frozen columns of a meaningless stage-set. Sweden has much to offer; its forward, interested approach to architectural possibilities has lifted an entire nation to a level which no other has yet attained; its logical planning developments have produced a blight-proof country. Can we not do the same?

G. E. KIDDER SMITH

ANTHOLOGY

Mr. Murray and Paxton's Chatsworth

CHATSWORTH, the superb seat of the Duke of Devonshire, was originally a square Palladian building with central court, erected by the 4th Earl and 1st Duke of Devonshire, in the reign of William III. To this a long wing was added by the late Duke, under the direction of Sir Jeffrey Wyattville. But however much this wing may add to the capacity of the house, it detracts greatly from its architectural character, which was one of dignified uniformity. The proper way to have enlarged Chatsworth would have been by appending a second court of the same shape, size and features as the first. It stands on a gently sloping bank near the margin of the " discreetly flowing Derwent," which runs through the midst of the beautiful park. A velvet lawn reaches to the water's brink, scattered with trees sheltering the lordly mansion, yet allowing the most pleasing glimpses as you approach it, through the intervals between them, or underneath their branches. The first peep of the house seen among the trees coming from Edensor is very pleasing. The river is crossed by a stone bridge, ornamented with statues by Cibber, who was much employed in peopling the park and its groves with stone deities, nymphs, etc. He has recorded in his note-book, that " for 2 statues, as big as life, I had 35*l.* apiece, and all charges borne ; and at this rate I shall endeavour to serve a nobleman in freestone."

In the courtyard, beyond the entrance gateway, the way to which is lined with tulip-trees, stands a beautiful weeping ash, transported in 1830, a full grown tree 40 years old, from Derby, a distance of 24 miles. In order to admit the passage of so huge a mass of branches and roots, with earth adhering to them, the turnpike gates on the road had to be taken down.

It would be tedious to enumerate room by room all the treasures of this superb palace, some of the windows of which, towards the front, though of large dimensions, are glazed with no more than two panes of plate glass, while the sills are of white marble and the external frames are gilt.

THE GARDENS include 80 acres of mown lawn ; they are laid out in the antique formal style, and ornamented with statues, vases, pillars, etc. A lofty wall heated from within and lined with glass, is covered with delicate plants, as casuarinæ, acacias, etc. Near the Italian garden in front of the house is a vigorous young oak, planted by the Princess Victoria when she visited Chatsworth in 1832. Passing through a curious gate formed by a single massive stone moving on a pivot, the visitor enters the grounds appropriated to azaleas and rhododendrons.

The ARBORETUM, a plantation of different kinds of trees from various parts of the globe, as far as they can be naturalized in this climate, occupies 40 acres on the slope of the hill. There are hothouses in the kitchen garden (for which an order is required) for forcing fruit, besides graperies, cherry and strawberry houses.

From the slope of the hill, nearly behind the house, descends a colossal flight of steps, surmounted by a Temple, from every part of which, on opening a valve, gush forth copious streams of water, so as to form, in descending, the flight of a long artificial cascade disappearing into the ground at the bottom. A more pleasing object than this is the Fountain, a very lofty jet-d'eau, rising from the centre of a long sheet of water, sheltered on either side by a shady screen of limes to a height of 267 ft. There is also a curious conceit in the form of a weeping willow, made of metal, every branch of which is a pipe, and which can be made to deluge the unwary trespasser. These are all supplied with water from a reservoir on the hill-top of 6 acres situated near the Hunting Tower, a tall square building with four turrets conspicuous far and near, and marked by a flag on the summit when the Duke is at home. These stately avenues, lawns and waterworks remind, on a smaller scale, of those of Versailles and St. Cloud. The waterworks belong to old Chatsworth, but the horticultural and arboricultural achievements were carried out by the late Duke under the late Sir Joseph Paxton's superintendence.

The CONSERVATORY, the glory of Chatsworth and the most extensive in the world, except that at Kew, is approached through an avenue of rocks, not a mere puny pile of stones, but an immense combination of huge blocks skilfully composed to imitate a natural ravine or gorge. The carriage road—for the conservatory is so large as to be entered and traversed by carriages—is so contrived that nothing is seen till the visitor reaches the threshold and the folding gates are thrown open. This palace of glass consists of coved sides, surmounted by a semi-circular arcade, supported on slender iron pillars, having arched projections at both ends. It is 276 ft. long, 126 ft. wide and 65 ft. high, and covers nearly an acre of ground. It contains 40 miles of sash bars, made at the rate of 2,000 ft. a day, by a machine designed by Sir Joseph Paxton. The framework is of wood, the arches formed of bent deal planks, applied together by iron fastenings ; the panes of glass are disposed obliquely, in alternate ridges and furrows, like the folds of a fan or the plaits of a frill, so as to throw off the hail. A gallery runs round it, from whence you can look down upon a forest of tropical foliage, palms and cedars, pines and ferns. In one corner a pile of artificial rock serves for the growth of ferns, orchidaceæ and cactæ, while it conceals the staircase leading to the gallery. Eight large furnaces heat this house through pipes 7 miles long, which alone cost 1,500*l.* They are supplied with fuel by a subterranean tramway, through a tunnel ½-mile long. The whole was planned by the late Duke and Sir J. Paxton, under whose superintendence it was executed.

(*From Murray's Handbook of Notts, Derby, Leicester and Stafford*, 1874)

MARGINALIA

Civic Diagnosis

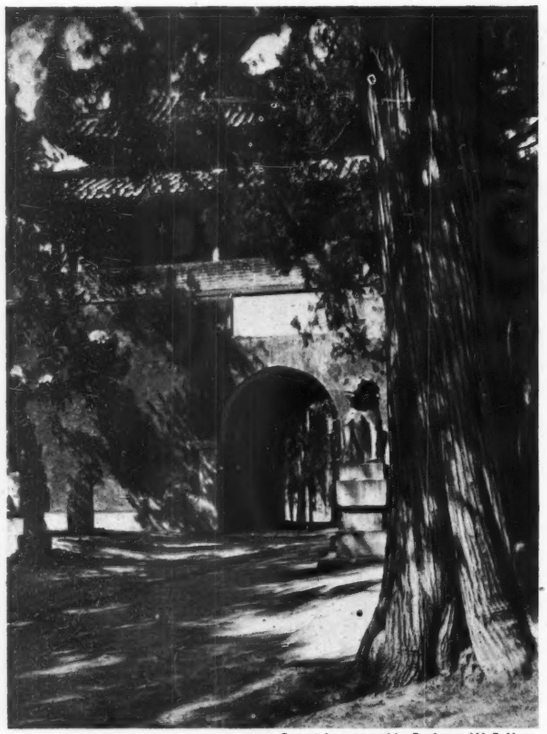
This was the name given to an exhibition at the Housing Centre in which the present state of Mr. Max Lock's regional survey of Hull was shown. The survey is the most comprehensive and the most detailed so far produced by the changing conditions of wartime—Britain and the effects of bombing. Max Lock was enabled by a Leverhulme Research Fellowship and grants from several local industrialists to embark with some of his former students on a surveying adventure which has now occupied them for well over a year and may in another year be completed. An Interim Report is shortly to be published. This and the excellently devised and drawn maps should be an invaluable help to those who will advise the Corporation on the actual re-planning of Hull. The experts so far appointed by the Corporation are Professor Abercrombie and Sir Edwin Lutyens.

For in Mr. Lock's survey not one of the ten sections is given to suggestions for reconstruction. With exemplary sobriety the survey remains a survey. It deals with the geographic, social, economic, administrative and physical conditions of Humberside. The location and mobility of industry, the extent of atmospheric pollution, the circulation of road, rail, air and water transport are analysed and the intensity of traffic congestion, accidents and level crossing delays are carefully worked out.

The location and distribution of shops and indoor and outdoor leisure-time facilities clearly demonstrate the nature of the problem of the under-supplied outlying housing estates as against the over-congested central housing areas, neither of which give real satisfaction for living.

The extensive central areas—areas of chronic " urban blight "—have received special consideration. Following American recommendations, transparent maps have been used, each map showing a different adverse factor which is superimposed on the one below. This set of maps reveal that out of Hull's 86,000 houses (25.6 per cent. of them are over sixty years old), 39.3 per cent. have no baths or hot water, 29.2 per cent. are built on a greater density than fifty to the acre, and 23.7 per cent. have exceeded their economic life. These transparent maps placed over one another build up a cumulative picture which exposes the worst plague spots of decay or blight. On these will ultimately be placed blitz maps which will give the final picture of the areas ripe for bold surgical treatment and for wholesale reconstruction in the city.

Of the wealth of other maps on show only a few can here be mentioned. They range from the geology of the area and the historic development of Hull with its characteristic shift of the economic and social centre from one part to another to such detail surveys as traffic restrictions and parking places in the central area, location of pubs (85 per cent. are in the central 2½ per cent. of the Hull area), and daily train journeys from neighbouring towns and villages to Hull. It is interesting



Copyright reserved by Professor W. P. Yetts.

Second gate to K'ung Cemetery. The palace of the Confucian Dukes is nearby. See the note on this page.

incidentally to see that the south bank of the Humber is almost entirely outside the orbit of Hull traffic and other relations. Many of the statistical data supplied will be indispensable to the future planners of Hull. The five main level crossings of Hull, for instance, have 500 closings in fifteen hours and cause 1,000 minutes delay.

Hull is amongst the towns of over 100,000 inhabitants, the second for deaths from tuberculosis, the third for pneumonic deaths, and the fourth for infant mortality. So there is a good deal that planners can achieve to increase the sum total of Hull's happiness.

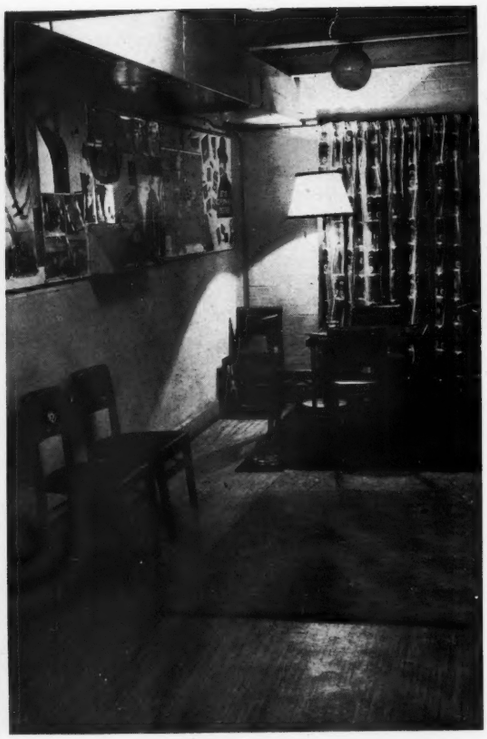
Chinese Landscaping

The photograph on this page was taken for Professor Yetts and was with many others on show at the Courtauld Institute of Art in an exhibition on the Legend of Confucius. It shows one of the gates to the temple precinct which contains Confucius's tomb. It is a noble example of the great Chinese planting and gardening tradition. The way in which trees, buildings, sculpture interplay is worthy of the best English eighteenth and Swedish twentieth century standards. It will be remembered that the beginnings of picturesque gardening in Britain coincided with Sir William Chambers's discovery of the principles of the Chinese garden.

Leicester Square *v.* Grosvenor Square

It will be easier after the war for replanners of different schools to come to terms than for rebuilders. There is in planning principles so much more that can be fruitfully discussed than in matters of æsthetics. It must be very hard going to convince men in favour of the façades in the Royal Academy perspectives of London of their lifelessness and senselessness. Here is an example of what we shall be up against immediately after the war. Viscount Wimborne pleaded some weeks ago in the House of Lords for rebuilding London "with suitable materials" and "good design" as "a harmonious whole." Now what would his example be for the good that could be achieved? Grosvenor Square "which had the benefit of single ownership, and when completed will be a fine example of modern town architecture. That could have been done elsewhere," he added, "had there been an authority charged with the duty of protecting the amenities of London." So this Bankers' Georgian, disproportionately grand for a West End square, and uneasily verbose compared with the restraint of genuine eighteenth century urban architecture, is Viscount Wimborne's idea of the stuff that will bring harmony for all.

[continued on page liv



A civil defence rest room furnished by Geoffrey Dunn.

continued from page lii]

Replanning Bath

Professor Abercrombie is engaged with Mr. J. Owens, city engineer of Bath, on the replanning of Bath. Improvement of shopping facilities are being considered, but the character of the town is to remain quiet and recreational. Chief amongst the special problems is that of the future of Georgian residential streets and houses. How should they be kept alive? Interior rearrangement while keeping exteriors untouched is suggested as one of the most promising methods.

Civil Defence—A Rest Room

Apropos THE ARCHITECTURAL REVIEW's article on the decoration of British Restaurants, two photographs are reproduced on this page of a rest room at a Civil Defence Control which Geoffrey Dunn (of Dunn's of Bromley) furnished last year. With very simple means a lavish effect has been achieved. The lamp shade and curtain material give a comfort to the narrow room which is in contrast to the usual minimum or utility character of such shelter-like structures. The wall boards with montage photographs, of which the majority can be changed, introduce a grateful rhythm; most wardens have to get used to staring at plain whitewashed brick walls.