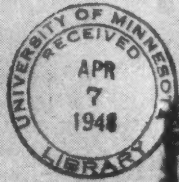
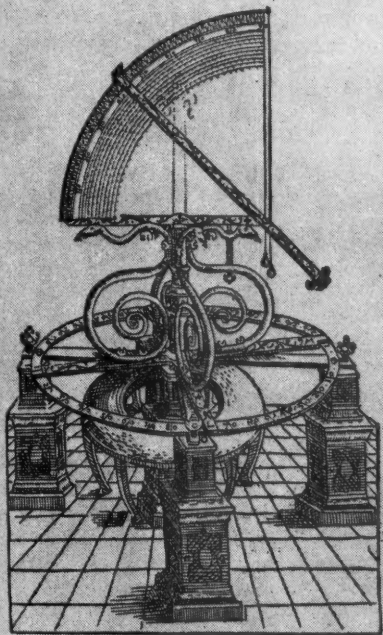
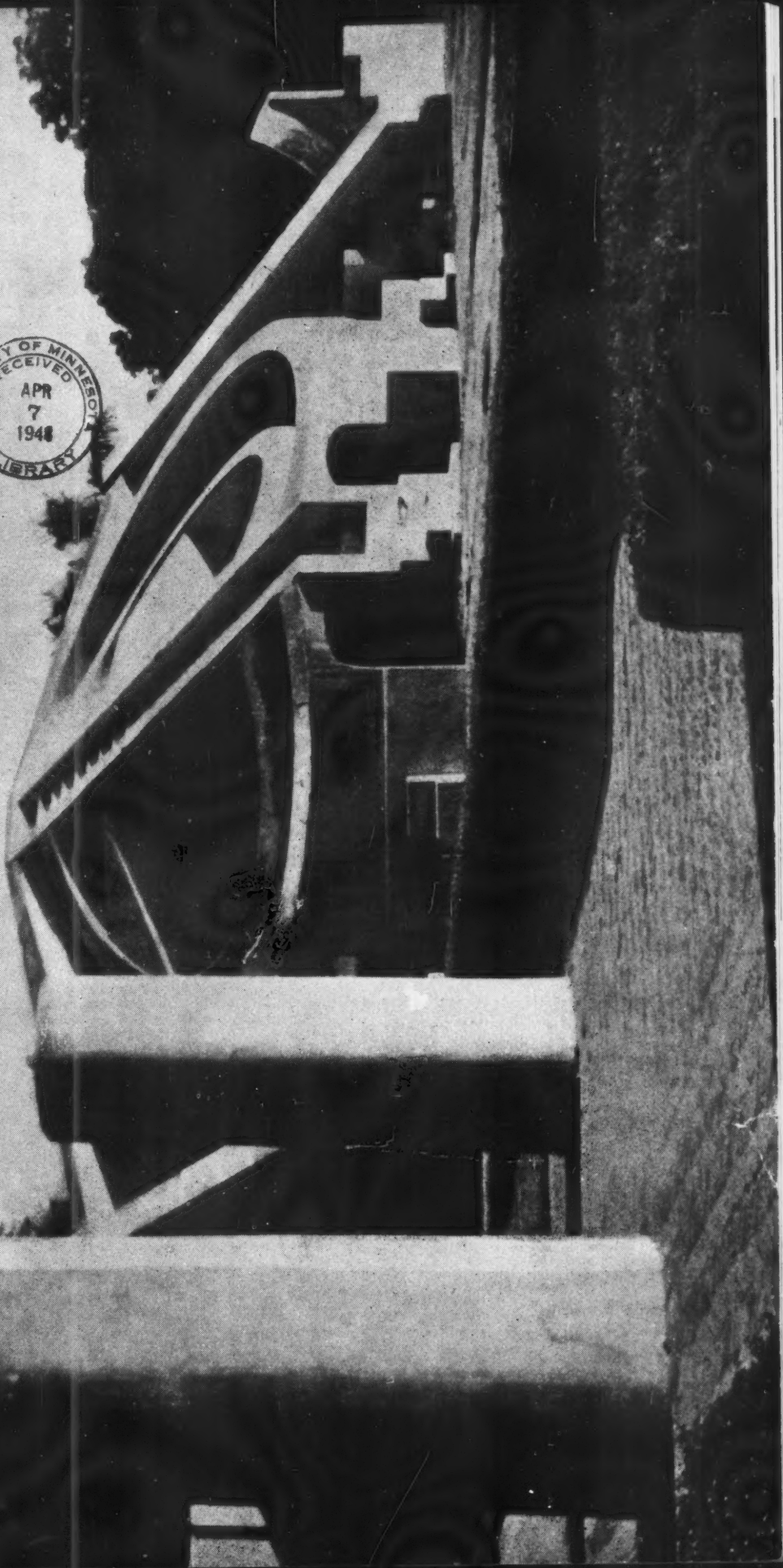


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THE ARCHITECTURAL REVIEW
Volume CIII Number 618 March 1948



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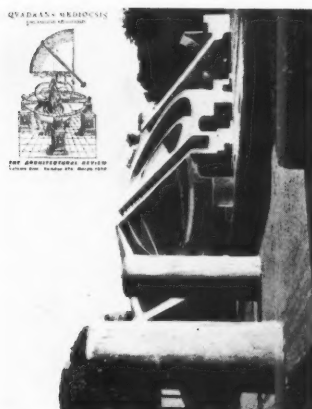


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THE ARCHITECTURAL REVIEW



The Cover The Misra Yantra, or mixed instrument, is the most complicated of the giant astronomical instruments at Delhi. It is thought to have been erected after the time of Jai Singh, originator of the immense project, by his son Madhu Singh. Although the stimulus which Jai Singh gave to astronomical observation did not survive long after his death, as the Astronomer Royal points out in his article on page 111, 'his work was, nevertheless, an outstanding development in Hindu astronomy.' It is true that much smaller metal instruments such as the Azimuthal-Quadrant from Tycho Brahe's *Mechanica* 1602 would have done the job better. The problem of how to achieve a monumental effect by the use solely of abstract forms is one that is exercising the minds of many architects today. Jai Singh's astronomical instruments show that it is not an insoluble problem.

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THREE SHILLINGS AND SIXPENCE

Beginning with this issue the page size of the REVIEW is temporarily reduced from its former eleven by fourteen inches to nine and three-quarters by twelve and one-eighth inches. This change has been necessitated by increasingly severe paper rationing, which has so diminished the number of pages as to jeopardize the standards which the REVIEW has tried to maintain over the last fifty years. The smaller size page at once brings with it an increase in the number of editorial pages, and when the paper position allows of a further increase it will be possible to return to the old size without prejudice to the extra pages. This change could of course have been made in the war, but would have appeared then almost as a defeat. To-day the REVIEW feels free to consult the needs of its readers. More pages are urgently needed and controls allow no other way of getting them than cutting down the old page size. This means that advertisement margins are cut off without reducing the actual area of the advertisements. Handsome as these margins were, they were by austerity standards waste paper, and the decision was taken to re-employ them as useful space. Since the dates for the allocation of paper supplies do not coincide with the beginning of REVIEW volumes, the issues for January and February, 1948, will for purposes of binding be included with those for July to December, 1947, and a separate index for them will be issued simultaneously with that for the volume ending December, 1947.



The architect of the contemporary public park landscape has to cater for a multitude of activities. Many of them tend to conflict in their requirements. The pleasures of contemplation and the promenade demand quiet and an absence of vigorous activity, but space often dictates that they shall take place in close proximity to noisier and more active pleasures. There are several devices open to the landscape architect who must achieve this separation of function, while avoiding a resort to that most final and emphatic of hazards—the wall. On pages 99-104 various of the subtler hazards are described and illustrated for the contribution they can make to the renaissance of the English town square. This Stockholm example is a “change of level” hazard, used with brilliant understanding by the Parks architect, Holger Blom, on the lakeside walk of Nor Mälarstrand. Here by the planting of boulders and trees—with an almost Chinese restraint—by the raised mound and the grass ramp, Holger Blom has shown what the imaginative use of the hazard can do to achieve that necessary separation of function in public park or square without inhibiting the eye.

A LETTER FROM THE U.S.S.R.

In May 1947 the ARCHITECTURAL REVIEW published three articles under the heading *Reconstruction in the U.S.S.R.* These articles, which had been requested by the REVIEW, were the work of three Russian architects, D. Arkin, A. Bunin and N. Bylinkin. It was the opinion of the Editors that the importance of these contributions, combined with the banality, by western standards, of the buildings illustrating them, demanded editorial comment of rather more than the usual length. Nevertheless, such is the complexity of the problem posed by the aesthetic expression of Russian architecture that it was not possible in the space then available to deal with as many aspects of the subject as the Editors would have wished. The preference, therefore, was given to an introduction to the western viewpoint on Russian architecture than a detailed consideration of it, and because of this a special effort was made to emphasize the positive aspects of buildings in Russia as far as sincerity would allow. In December 1947, the letter which follows (alongside it is reprinted the Preface* to which it refers) was received from Moscow through the Soviet Embassy. Its nature has prompted the Editors to give some further consideration to the phenomenon of Russian architecture, and the article which appears on pages 77-80 is the result.

On the pages following is a selection of photographs from the exhibition of Russian architecture at present being held at the R.L.B.A., with commentary.

1 To the Editor of THE ARCHITECTURAL REVIEW, London.

Dear Sir,

In November 1946, at the request of the editors of THE ARCHITECTURAL REVIEW, we sent you three articles devoted to some problems of town-building in connection with the rehabilitation of towns in the U.S.S.R. These articles were published in the May issue of your magazine.

People of note in political, social and cultural affairs in Great Britain very often speak of the desirability of extending the exchange of information on all cultural and way-of-life questions between the peoples of Great Britain and the Soviet Union. Obviously such mutual information and discussion of all sorts of scientific and artistic questions is possible only if the elementary rules of literary ethics and social honesty are observed, rules which seem to be ignored by the editorial staff of THE ARCHITECTURAL REVIEW.

Interpreting the laws of hospitality in a manner peculiar to themselves, the editorial staff, when they published our articles, supplied them, to our surprise, with a preface, in which they make slanderous and groundless attacks on the whole of Soviet architecture and the Soviet people without touching on any of the actual points made in the articles. Juggling loosely with all kinds of ambiguities, the authors of the preface try to convince the readers that in point of fact there is no such thing as Soviet architecture as a great organically developing socialist art, and that what is being done in the U.S.S.R. in the field of architecture is a

deliberate concession on the part of the statesmen and architects to the Soviet people who, according to the allegations of the authors of this slanderous preface, are too immature to understand real architecture and so forth. All these slanderous fabrications have a purpose—to belittle the great Soviet people and its new socialist culture. But no editorial lie can deny the true facts, for it is a fact that the Soviet socialist culture, including architecture, serves the masses and expresses the great ideas of socialism; that architecture in the U.S.S.R., socialist in content, is developing in national forms which display the vivid originality of the peoples of the U.S.S.R.; that architecture in the U.S.S.R., free from the corrupting influence of the capitalist market, has been able, with the utmost speed, to create superb treasures, to reconstruct old towns and to put up new ones, using for the first time its newly framed principles of socialist town-planning.

Your preface cannot belittle the Soviet people who have given the world great men in every field of human creative endeavour, who have built a great socialist state and whose blood has freed the peoples of Europe from Fascist slavery.

The action of the editorial staff of THE ARCHITECTURAL REVIEW compels us to state publicly that we refuse to contribute any further articles to this magazine, and that we protest against the unwarrantable action of the editorial staff. We trust that you will not refuse to let the readers of your magazine know of our protest against the action of the editorial staff who have abused the confidence of the three authors for the sake of a demagogic onslaught against the people and culture of the country whose citizens they are happy to be.

signed {
A. Arkhipov
A. Bunin
N. Bylinkin

2 After receiving the letter which appears above, it was clear to the Editors of THE ARCHITECTURAL REVIEW that a reply in the same tone would not be profitable, and that even an attempt to take the accusations point by point would not serve any useful purpose; they are better answered by reprinting the preface to which they refer. The letter makes it depressingly clear how wide is the gulf that now separates us from the Russians. Nevertheless, rather than accept such a state of affairs we feel an attempt should be made to discover some meeting ground where, if it has to be, we can at least agree to differ with the Russian architect. Since the prevailing attitude on both sides of the curtain, so far as architecture is concerned, is apparently one of bewilderment, the course which the REVIEW has taken in the article which follows is to survey the viewpoints of both sides, which give rise to this bewilderment. From the survey certain conclusions have been drawn with regard to those factors which, in the opinion of the Editors, are crucial to the relations between the Russian and British architect, in the hope that they will, if nothing else, make the point of view of this paper more comprehensible to the Russians, and the Russian point of view (deduced from the few sources which are available to us) more comprehensible to the British.

not, there is another angle from which Russian architecture must be regarded. Russia is not only a foreign country, but is more foreign than most countries, and her problems are in few respects comparable with ours. It is therefore essential to judge Russian architecture according to its own conditions, rather than to condemn it for not reaching standards it never aimed at. If we seek absolute standards, it may well be that the best of our own and of Western European architecture rests on values of a more absolute kind; but even so it is not enough to condemn the Russian as "bad." "Bad" architecture is too often merely what the critic does not himself like. The uniformly eclectic style of contemporary Russian architecture, which to our eyes appears pretentious, naive and exceedingly bourgeois in taste, is based—we must give this much credit to the Russian regime—on something deeper than the preferences of her own or any other leaders of taste. It is, one may safely say, the result of the tacit acceptance of a policy based on a psychological need, perhaps more than anything else on a need not to outpace the slow growth of popular understanding. It may be that for a generation architecture employing a familiar symbolism will be needed in Russia before pure architectural form is able to evolve a response from a sophisticated public, as it is beginning to do in Western Europe and America now. An architecture of pure form was adopted by the Russians immediately after the revolution as a proof of their emancipation. But they soon saw that by doing so they had got out of touch with the nature of most people's response to architectural art, and were only depriving architecture of the chance to play a proper part in symbolising—to people to whom symbols meant much—the solidity and security of their new society.

This may not seem a complete answer to those who think that the only way of getting "good" architecture is to build "good" buildings, whatever the public's reaction to them. But the Russians have never accepted an absolute good—the Marxist dialectic postulates standards that are always evolving according to the conflicting current of events. Nor have they hesitated to indulge in curious and apparently retrogressive means to achieve theoretically obtainable ends. These words, in any case, are not meant as an apology for contemporary Russian architecture, which is its own apology and is confident enough in its ability to stand on its own broad feet. It is supremely important that what goes on in Russia should be known abroad, whether it be understood or misunderstood. The text and pictures that follow are presented, without further comment or explanation, as an item of contemporary history. It is not our intention to discuss the merits or demerits of the architecture shown, but to show that it is not a matter of taste alone, but a matter of understanding. It is not a matter of taste alone, but a matter of understanding. It is not a matter of taste alone, but a matter of understanding.

3 TO THE BRITISH ARCHITECT Russia is a country of particular fascination at this moment, not only for the scale of its building and town planning programmes but also for its attitude to the aesthetics of architecture, which strikes him as so very different from his own. Involved as we are (or would be, if it were possible to build) in the establishment of a new architectural tradition, which is in many ways but a reflection of a fundamental social upheaval, the architecture of a country whose social system has completely overthrown tradition is of more than academic interest. But the many British architects who, conscious that our new architecture still lacks an appropriate philosophy, have looked to Soviet Russia with special expectations have been unable to discern there anything they recognize as an architecture expressive of a new philosophical outlook. This phenomenon has had many interpreters and many interpretations. In spite of them the gaps in our understanding are still large, and because of them the current exhibition at the R.I.B.A. is particularly to be welcomed.

One factor which, to the foreign architect, seems difficult to explain is the apparently complete unanimity among Soviet architects and architectural students on the rightness of their present eclectic style, which dominates every type of building, although taking many forms from the most scholarly reproductions of past styles to naïve picture-book fantasies. Architects in the West do not fail to appreciate the strength of tradition as instanced in their own national schools of architecture; they understand how a country with as strong a sense of its own past as France goes on reflecting principles (if not forms) of the seventeenth and eighteenth centuries in its contemporary architecture, and they understand how in Britain the power of a past Palladianism is still marked in official buildings. Neither is the influence of popular sentiment on architecture, in the form of ingenious adaptations of sophisticated styles, strange to the West. In Britain—and even more in the United States of America—the grandiloquent palaces of banks and industrial combines have created almost a special style of architecture of their own, the popularity of which is very evident. But side by side with these varying influences there are, all the time, in Britain as well as in America and France, experiments in a style which expresses the many other influences at work in contemporary societies. And the uniqueness of the Russian architectural phenomenon lies in the fact that within what is indisputably one closely knit geographical world, a very large collection of people, inhabiting one-sixth of that world's land surface, have consciously chosen for the architectural expression of new and revolutionary social, political and economic ideals, the architectural styles of past ages—ages of which the philosophies are in most respects antipathetic to them.

The Western architect, therefore, asks himself: how can the Russia of to-day be content with motifs for the most part evolved by the ruling classes of pre-revolutionary days? And he goes on to wonder at the apparent absence, among Russian architects, of any aesthetic experimentation on lines which elsewhere in the world represent the hope and the enthusiasm of those who are recognized as revolutionary and forward-looking. Owing to difficulties of intercommunication, it is impossible to verify that there are really no such experiments going on. Indeed, from what will be quoted later on, it would appear that the experimental approach does exist, if only in an indistinct form. But always it seems to be checked by one means or another before it even reaches the stage of publication. It would be misleading, however, to speak as though this came about through the conscious suppression of attempts to rebel against authority. So strong in Russia is the tradition of conformity, so religious in character—it seems—the faith with which the validity of the line of policy laid down as dialectically correct is accepted, so powerful is the logic of theory, that whoever fails to act consistently with it becomes a useless and irrelevant part of the whole complex mechanism. Independence of judgment is not so much an act of opposition as one of resigning all participation in the steady march forward, the direction of which is irrevocably set.

To comprehend the impact of this state of affairs on the Soviet architect and the architecture he creates, it is necessary to obtain as clear an idea as possible of his position in Soviet society, both as a professional man and as an artist. This is made easier by the study of a number of *Architectural Chronicles* which were published in Moscow in the English language during 1945 and 1946. So far these have received little, if any, attention in this country; the extracts quoted below have never, so far as is known, been quoted before. The first thing that becomes clear when the architectural situation is studied through the medium of these *Chronicles* is that in Russia, in

the years up to 1946, there was no clearly defined aesthetic theory. General statements were made from time to time by political and professional leaders, but no aesthetic theory had been evolved out of the general philosophy, as it has been in nearly every other branch of Russian life. Karo Alabyan early in 1946, when president of the U.S.S.R. Academy of Architecture, commented on this at a meeting of the Presidium of the Academy. He pointed out that:—“So far we have no systematized work on the theory of architecture, throwing light on the principal phenomena of current architecture and the history of architecture as treated from the viewpoint of scientific thinking, from the viewpoint of Marxism-Leninism. This has a negative effect on our architectural constructive practice and our scientific work.”

He went on to explain that this was to be rectified. “The A.A. (Moscow's Academy of Architecture) has at last—a most late, true—undertaken the solution of this problem. At one of its recent meetings the Presidium passed a decision to pay almost serious attention to setting up a Soviet architectural theory.”

The events of August, 1946, gave special urgency to this work. In the words of the editors of *Architectural Chronicle* No. 11:—“Soviet architectural circles showed a quick response to the historic decision of the Central Committee of the Communist Party (Bolsheviks) of the U.S.S.R. of August 14, 1946, concerning the journals *Zvezda* and *Leningrad* on the repertoires of theatres, and on the film ‘A Great Life.’” *Horizon* has described and made its own comments on the implications of these events on literature. One of the magazines mentioned was suppressed, the other given a new approved editor, and two well-known writers who had been connected with them were forbidden to publish anything more because, among other things, they introduced elements of ideological disjunction and disorganization among Leningrad writers. Soon afterwards Alabyan corrected the rather stark impressions that his earlier statement on the subject of the omissions of Soviet architecture in the field of theory must have given. In the December number of the *Architectural Chronicle* (No. 12: the last to be received in this country) he is reported as saying:—“I am not suggesting that nothing has been accomplished in the sphere of architectural theory. Although there are many shortcomings in the field of theory, at the same time within the last few years many new and complex problems of Soviet architecture have been raised. Theoretical thought has developed in a tense struggle with alien influences and tendencies. Theoretical studies in the sphere of Soviet architecture have helped to overcome formalist influences which were fairly widespread in the first decade following the Soviet Revolution in 1919. To our architectural theory goes the credit for its penetrating and extensive criticism of formalism in architecture, of architecture that lacks all ideology, for its critical analysis of the position of West European constructivism.”

What is clear from these quotations is that the aesthetic theory Soviet architects are evolving is basically opposed to any attempt at launching into new architectural experiments of the kind which have aroused the enthusiasm of modern architects in the rest of the world. That individual Soviet architects have at times shown an interest in such experiments is further suggested by a speech by Alabyan at a Plenary Meeting of the Presidium of the Union of Soviet Architects of the U.S.S.R. held on October 11, 14 and 16, 1946, in which he said:—“It is clear that design organizations and institutions concerned with matters of architecture bear responsibility for architectural creative work lagging behind the demands of life. If these organizations and institutions lack the correct ideological creative principles, unless they can correctly orientate, allocate and utilize architectural personnel, unless they are in a condition to give the right channelling to creative architectural work, the

Architectural Chronicle, No. 11, November, 1946, pages 2-3. Editor: D. Arkin. The U.S.S.R. Society for Cultural Relations with Foreign Countries, Moscow.

Architectural Chronicle, No. 11, November, 1946, pages 17-18. Editor: D. Arkin. The U.S.S.R. Society for Cultural Relations with Foreign Countries, Moscow.

Horizon, October, 1946, pages 205-214. Decree of the Central Committee of the Communist Party of the Soviet Union, of August 14, 1946. Quoted in *Horizon* from *Pravda*, August 21, 1946.

Cino Severini points out in *The Artist and Society*, that Russian writers often misuse the adjective “formalist”, applying it to all non-conformists especially if they are essentially concerned with pictorial and artistic things. In this sense, for example, Chagall is called a formalist.

Architectural Chronicle, No. 12, December, 1946, page 8. Editor: D. Arkin. The U.S.S.R. Society for Cultural Relations with Foreign Countries, Moscow.

results will inevitably tell on the success of architecture as a whole. The architect who holds aloof from the vital concerns of actual construction, who remains indifferent to the needs of his people, who forgets that the very foundation of his work is in the Stalinist solicitude for people, cannot create new architectural ideas and forms in consonance with our epoch. The architect who is not guided in his entire activity by the policy of the Communist Party and the Soviet Government and who stands to one side of it, can hope for no creative progress. For those who fail to appreciate this, it will not be amiss to recall Andrei Zhdanov's words: "The level of our people's demands and tastes has risen very highly, and he who refuses to, or is incapable of, rising to this level, will be left behind."

These remarks bring out strongly the difference between the attitude of Russia and that of the West. The Western architect believes his own independence of action to be the essential basis of creative endeavour; in Russia, so strong is the prestige of philosophical theory that conformity is not a defeat for the individual but the opportunity of access to the central fount of inspiration.

It may be useful at this point to go back and survey briefly the events which led up to the situation in Russia as it has just been outlined. The period immediately following the revolution was one of vigorous flux. In the contest for power from which the Bolshevik Party eventually emerged victorious, the majority of contestants were intellectuals, for they were best fitted to engage in the battle of polemics with which the new era in Russia opened. Many of them had spent years in exile abroad, and were conversant with the revolutionary theories evolved elsewhere in Europe, and not least with those of the cultural revolutions which were taking place everywhere. It was, therefore, not surprising that a style of architecture should be favoured that reflected revolutionary thought, and thus it was that many adventurous architectural experiments were initiated in Russia during this period. But, as is well known, they had no lasting effect. The principal reasons are not hard to understand: with the consolidation of power of the Bolsheviks, proletarian opinion, in accordance with the teachings of Marx, Lenin and Engels, was brought to bear in every field, and this opinion, unversed as it was in technics and the sophisticated arts, could hardly be expected to appreciate the technical, let alone the symbolic, significance of the 'new' architecture. In addition, owing to the absence of a highly mechanized building industry similar to that from which the new architecture in the West had emerged, the standard of finish and workmanship was poor and the modern movement in Russia thereby discredited. What was demanded, largely on psychological grounds, was a bigger and better version of what the people had always understood architecture to be. The man in the street wanted to be able to enjoy the architectural splendours that had previously been the perquisites of the rich and powerful.

Those responsible were not slow to react to this demand. Architecture once again exhibited the old symbols, whether in the simplified version of the W.O.P.R.A. style, the rich Imperial Classical, or the Vernacular/Regional, but with their meaning turned inside out. Where before the symbols represented either the culture of an imperial outpost of the Renaissance or of a pre-industrial regionalism, they now represented the 'fairy-tale come true.' From the quotations given above, it is apparent that this style is now ripe to receive the backing of a full-dress aesthetic theory along the lines of Marxist-Leninist teachings, with the stamp of present-day official approval.

It has been said earlier that the architect of the West already understands from his own experience how the combined efforts of the impressionable (and usually philistine) public, the state official and the commercial publicity man can produce a popular architecture of a kind, if by this term no more is meant than any architecture which people in general admire, or at least feel to be evocative and, therefore, in some degree acceptable. But the Russians seem to understand by popular art something deeper than this. They clearly wish to give the words their full and accurate meaning of art by the people for the people. In order to achieve once again, however, an architecture truly created by the people it would be necessary to make fundamental changes in the socio-political structure of society. In the Western view the devolution of control and, even more,

unbounded freedom for small-scale experiment and individual thought alone make an art of this kind possible. But if this freedom is inconsistent with some tendencies in the Western democracies, it is utterly opposed to those in contemporary Soviet society.

The architect in Russia, by his situation, becomes the purveyor of certain approved styles; and, therefore, if he may not be in a position to stimulate a true architecture of the people, he may yet be accurately described as creating an architecture for the people. He fills in the highest degree—it would seem by compulsion of circumstances—the same role that in the Western democracies is played by a certain number of architects, but especially by the speculative builder. To say this is not to disparage the contribution that such men make towards the popularization and the wide acceptance of new art forms. But when a whole profession of architects plays this part, as it does in Russia to-day, and in playing it harps exclusively on variations of old themes which have already been so exhaustively explored, it is hard to see how a devaluation of style can be avoided. Russian experiments in new styles cannot of course be expected to follow the same course as those in the West, but they could be equally valuable just because their recent history would lead them along lines so different from our own. Here a distinction must be drawn between the background of the West and that against which this process would have to take place in Russia. The search for a new vernacular in the West has coincided with the emergence of a machine-age pattern in the world of everyday things, and designers have taken their inspiration from these things either consciously or because the qualities these things possess—their freshness, their spare economy of means, their capacity for progressive refinement—have made them symbolic of contemporary aspirations. But the Russians were not surrounded thus by visual evidence of a potential machine aesthetic. While our light industry was in full production, and new styles of household goods, for example, were accustoming the Western eye to changing visual values, the Russians were concentrating on heavy industry and capital equipment. And during the war, expansion into light industry was held up by the Russian sacrifice of everything for war-production purposes; the consumers' market continued to be starved. Manufactured goods having only a utility character, and their clumsiness of form, therefore, standing no chance of developing into refinement, they were unable to form the basis of a new aesthetic vocabulary. When the circumstances in Russia demanded the search for more sensual qualities in design, it was understandable therefore that the architect should look for them either in the eclectic products of the age before mechanization, or in regional characteristics where some sort of organic qualities happen to have survived, however irrelevant they may seem to-day.

That these factors make experiment harder for the Russian architect is undeniable. But, given the vast architectural opportunity of Russia to-day and to-morrow, the Western architect cannot but feel that Russian architects are using their immense ingenuity and resourcefulness only to enliven the themes of a dead past, and are missing a gigantic chance of contributing towards solutions truly of the twentieth century.

It is not easy for the architect trained in Western methods to see things otherwise. The Western democracies are at present undergoing a period of vigorous transformation and adaptation to conditions which have been developing over the last centuries, but these conditions have always been allowed to work themselves out—in fact, it has been regarded as a test of democracy that they should do so—on the basis of maintaining one fundamental principle, the principle of the integrity of the individual, from which follows another principle, that of the respect for minority opinion. These are principles which specially affect the artist, whose privilege it is, in the eyes of the West, to choose to be in a minority. He may from time to time be ignored, he may be left to starve or be killed by kindness, but his work, it is felt, does represent one of man's most worthwhile activities, and must be allowed to express itself without purposeful outside interference.

In terms of architecture this frankly implies a certain degree of *laissez-faire* so far as style is concerned. The Western democracy welcomes the kaleidoscopic scenery which reflects its complex social relationships and claims that there exist in a democratic state enough checks on irresponsible individualism and class egotism; that elected representatives can be put in a position to promote some tendencies and leave others to fend for themselves. In the field of aesthetics, however, which is so much less accessible to rule than others, the Western democracies are by no means sure that they are evolving quickly enough a theory or even an empirical method that allows full scope

*Architectural Chronicle, No. 11, November, 1946, page 19. Editor: D. Arkin. The U.S.S.R. Society for Cultural Relations with Foreign Countries, Moscow.

†See THE ARCHITECTURAL REVIEW, May, 1932; The Russian Scene, Pt. II, The Builders, by Berthold Lubetkin, THE ARCHITECTURAL REVIEW, November, 1942; Soviet Architecture To-day, by Edward Carter.

for popular participation in the adventure of modern architecture. Hence the current demand for the humanization of the modern architectural idiom, for something more organic to set against the over-abstract, for recognition of the emotions as of equal importance with the intellect. It may, indeed, be that we are pursuing the same ends as the Russians, albeit by an almost opposite technique, in our efforts to recapture the evocative qualities in architecture without which no vernacular idiom can flourish.

If we are, indeed, but choosing a different way of approaching the same objectives, there seems little reason why this should not be stated openly, and why we should not agree to differ on it. This outspoken essay (and the much less outspoken preface which caused the angry reply from our three Russian colleagues) does not reflect a desire to belittle the architectural endeavour of Russia, or to uphold

the Western method at the expense of the Russian. The proof of the pudding will be in the eating—or, perhaps, two different puddings best suit different digestive processes. At the moment the air is thick with perplexity and misunderstanding, and our intention is not to pass judgment on the Russian architect and his work, but to formulate the reasons for the British architect's very real bewilderment at the course Russian architecture has recently taken. That the Russian architect feels equally bewildered, to put it at its mildest, at our architecture, and sees no reason to take part in what we regard as a promising adventure of architectural experiment, we have to accept. This acceptance, so necessary, for the sake of mutual understanding between Russia and the West, can be arrived at neither by silence nor by harangue. It is in such a spirit that this essay has been written and in a similar spirit THE ARCHITECTURAL REVIEW would welcome a reply.

In view of the necessity for increased international understanding, since May 1947 THE ARCHITECTURAL REVIEW has printed résumés of the contents of each number in French, German and Russian. As the article above is addressed to Russian as well as British readers, the usual practice has here been abandoned and the article translated in full.

В мае 1947 г. были напечатаны в нашем журнале три статьи русских архитекторов Д. Аркина, А. Буннина и Н. Былинкина на тему о послевоенной восстановительной работе в СССР. В декабре 1947 г. Редакция было получено от авторов письмо, в котором выражался в весьма резкой форме протест против предпосланных этим статьям вступных редакционных замечаний. Содержание и форма этого письма показывают насколько глубоко различие между взглядами относительно архитектуры, господствующими в Великобритании и в СССР. Обвинения авторов по отношению к Редакции носили слишком общий характер для ответа по пунктам. Это побудило Редакцию попытаться дать в настоящем очерке общий обзор этих двух различных точек зрения с целью сделать точку зрения нашего журнала более понятной для русских, сделать русскую точку зрения более понятной для британцев, а кроме того, найти общую почву, на которой обе стороны могли бы сойтись.

Письмо из СССР

В настоящий момент Россия приковывает к себе интерес британского архитектора с особенной силой не только из-за огромности масштаба ее программ строительства и градостроительства, но благодаря ее особенному отношению к архитектурной эстетике, поражающему его своим отличием от его собственного отношения. Как глубоко ни погрузится наш британский архитектор, задача об установлении новой архитектурной традиции, являющейся во многих отношениях отражением глубокого общественного сдвига, архитектура в стране, которая в своей социальной системе свалила вековые традиции и установила совершенно новый строй, представляет для нас гораздо больше, чем чисто-академический интерес. Однако многие из нас, кто, сознавая недостаток философского обоснования у нашей новой архитектуры, смотрели с особым озабоченным на Советскую Россию в поисках ответа, не сумели, при всем старании, найти в ней ничего такого, что они могли бы признать за архитектурное выражение нового философского мировоззрения. Явление это имело много толкователей и много толкований. Несмотря на это, в нашем понимании этого явления есть еще много пробелов. Бетая, в виду этого обстоятельства следует особенно приветствовать текущую выставку в Королевском Институте Британских Архитекторов.

Есть одна черта, которая иностранному (т.е., несветскому) архитектору кажется трудно объяснить, это повидомому полное единодушие, с которым советские архитекторы и изучающие архитектуру признают безусловную правильность их нынешнего эстетического стиля, который господствует во всех типах построек, хотя и принимает самые различные формы. Важная со строго-научных воспроизведений стилей минувших времен и кончал важными фантазиями на детскую книжку о картинках.

Нельзя сказать, чтобы западные архитекторы недооценивали силу традиции в их собственных национальных школах архитектуры; они отлично понимают, как страна с таким сильным чувством своего прошлого как Франция продолжает отражать в своей современной архитектуре принципы (если не самые формы) XVII-го и XVIII-го столетий; они не удивляются тому, что монументальная мощь так называемого «палладианства» прошлого по-прежнему дает свой отпечаток на официальных зданиях Великобритании. Равным образом, не является чуждым для Запада влияние на архитектуру популярных настроений в форме остроумного применения изысканно-упадочных стилей. В Великобритании, и даже в еще большей степени в США, напечатанные приемы банков и промышленных компаний создали собой нечто не особый, только им присущий стиль, популярность которого совершенно очевидна. Однако в Великобритании, равно как и в Америке, и во Франции, всегда существовало, как и в этих популярных направлениях, эстетическое направление в стиле, отражающее множество иных влияний в современном обществе. В архитектурном

отношении беспримерной особенностью России является то, что в этом неоспоримо тесно переплетенном географическом мире великое множество народностей, населяющих шестую часть земной поверхности, сознательно избрало для архитектурного выражения новых, революционных социально-политических и экономических идеалов стили прошедших эпох, не видя в существование противоположность присущей этим эпохам философии.

Поэтому западный архитектор ставит себе вопрос: почему же нынешняя Россия довольствуется архитектурными мотивами, главным образом созданными революционными правящими классами? Кроме того, его удивляет то, что среди русских архитекторов повсюду отсутствует какое бы то ни было эстетическое экспериментирование в тех направлениях, которые ввиду на свете представляют надежды и восторги тех, кто смотрит вперед, глядящими революционными глазами. Проверить, действительно ли это так, нет возможности из-за трудности сообщения с архитектурными крутками СССР. Более того, судя по приведенным ниже цитатам, экспериментальный подход, хотя бы и в несколько туманной форме, как будто бы все-таки существует, но... тем или иным путем он как будто бы пресекается даже еще раньше, чем он достигает стадии публикации. Однако говорить об этом как о сознательном подавлении попыток востания против авторитета, значило бы вводить в заблуждение. Дело здесь в другом. Настоящая сильная традиция признания авторитетов, настолько неоспоримо принимается (какучаясь религиозной по своему характеру) вера в неотвратимость линии действия, положенной свыше за диалектически правильную, настолько мощная логика теории, что всякий, кто отклоняется от нее в своих действиях, становится ни с чем, на связанном и беспомощном частью всего этого сложного механизма. Независимость суждения — это не столько акт оппозиции, сколько акт отказа от всякого участия во всенародном мерном шествии вперед в непреложно установленном направлении.

Для того, чтобы понять как отражается такое положение дел на советском архитекторе и на его архитектурных творениях, необходимо составить себе по возможности ясное представление о его положении в советском обществе как члена своей профессии и как артиста. Некоторый свет в этом отношении проливает журнал «Архитектурная Хроника» («Архитектурал Кроник»), на английском языке, издаваемый в Москве в 1945 и 1946 гг. Пока что этот журнал повидомому не привлекал к себе никакого внимания в Великобритании или, во всяком случае, оно было самым невнимательным. Поскольку нам известно, приводимые ниже выдержки из сих пор никак в нашей стране не цитировались. Первое, что становится очевидным из этого журнала, это то, что до 1946 г. в России не было ясно сформулированной эстетической теории. Правда, заявления общего характера делались по этому поводу время от времени политическими и профессиональными «вождями», но все же эстетической теории на основной философский выверен не было; не в пример тому, что имеет место почти во всех других областях русской жизни. В первой половине 1946 г. Каро Алабян, в то время Президент Академии Архитектуры СССР, высказался по этому поводу

следующим образом на заседании Президиума Академии:

«В области Теории Архитектуры мы пока еще не имеем систематической работы, которая пролила бы свет на главные явления в современной архитектуре и в ее истории, трактуя их с точки зрения научной мысли — в точках зрения наравнения-сравнения. Это имеет отрицательные влияния как на нашу архитектурно-конструктивную практику, так и на нашу научную работу».

Продолжая свою речь, Президент Академии указывает, что это положение вещей надлежит исправить:

«Академия Архитектуры, правда, в некоторых западных, приняла за решение этой задачи. На одном из своих заседаний Президиум вынес постановление о необходимости «обратить серьезное внимание на разработку эстетической Теории Архитектуры».

События августа 1946 г. придали этой работе особую срочность. По словам Редакции «Архитектурной Хроники» (№ 11):

«Советские архитекторы и критики быстро откликнулись на решение П. Р. ВКП(б) от 14-го августа 1946 г. насчет журналов «Звезда» и «Ленинград», относительно реорганизации театров и относительно фильма «Богдан Хмельницкий».

События эти были отмечены и обсуждены в журнале «Хорайон» (№ 11):

По словам этого журнала, в результате этих событий один из только что упомянутых русских журналов был закрыт, а у другого был смещен редактор. Кроме того, два связанных с этими журналами известных писатели были лишены права публиковать свои произведения за то, что они, помимо всего прочего, «вносили идеологический раздор и сумятицу в среду ленинградских писателей».

Вскоре после этого Алабян сгладил резкое впечатление, которое должно было произвести его первоначальное заявление о провалах в теории советской архитектуры. В № 12 «Архитектурал Кроник», за декабрь 1946 г. (последнем номере, полученном в Англию) приводятся следующие его слова:

«Я не оспариваю, что в области Теории Архитектуры у нас ничего не сделано. Проблем, разумеется, существует. Все же надо признать, что за последние несколько лет возникло множество сложных эстетических проблем. Теоретическая мысль развивала интенсивную борьбу с лучшими явлениями и тенденциями. Теоретическая работа в области советской архитектуры пошла вперед, начиная с формальных теорий, сильно распространенных в течение первого десятилетия после Советской Революции. Заслуга нашей теории заключается в широкой и глубокой проникновенной критике формализма в архитектуре».

В критике архитектуры, в которой отбрасывается всякая идеология, и в критическом разборе должны быть западно-европейского конструктивизма».

Из этих цитат ясно, что эстетическая теория, разрабатываемая советскими архитекторами, в основе своей противоположна тем понятиям предприн-

*) «Архитектурал Кроник» № 11, стр. 17-18, декабрь 1946 г., изд. ВКП(б).

**) «Хорайон», октябрь 1946 г. «Хорайон» («Горисон») — это один из самых известных, и обычно считающийся одним из самых передовых журналов по искусству.

***) См. Постановление ВКП(б), от 14-го августа 1946 г., цитированное в «Хорайон» и в «Практи» от 31-го августа 1946 г.

****) Каро Алабян указывал в своей книге «Артисм и Формализм» на то, что друкские писатели употребляют термин «формализм» неправильно, применяя его ко всем произведениям с господствующими взглядами, особенно в области философских наук. В этом смысле, например, Шагал или наместник «формализма».

*****) «Архитектурал Кроник», № 12, стр. 8.

*) Увы! Пока это еще только в области планов и предположений, ибо все актуальное строительство обзавидовано для восстановления военных потерь.

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A SURVEY OF RECENT BUILDINGS IN THE U.S.S.R.

An attempt has been made in the article on the preceding pages to define the difference between the Russian and the Western approach to the question of contemporary architectural style, and thus make it possible to look at the fruit of either in relation to its own background. Recent Russian buildings can also, however, be looked at simply as architectural designs. Some of the work shown at this month's exhibition at the R.I.B.A. is illustrated here with comments on the way it strikes the eye of the Western architect, who inevitably compares it with the recent architectural developments with which he is already familiar.



1, the Frunze Military Academy, Moscow, by Lev Rudnev and Vladimir Munz, 1937. A remarkable combination of elements—the main block of a type first developed in America about 1890, and then by men such as Behrens in Germany: a utilitarian structure crowned by a few very restrained classical elements. The ground floor screen on the other hand is bare, forbidding and wholly of a twentieth century monumental style, including its inset ornamental panels which succeed in making of hammer and sickle a pattern reminiscent of Paris and Western Avenue. The tank is a monument to the purpose of the building as well as to socialist realism in sculpture.



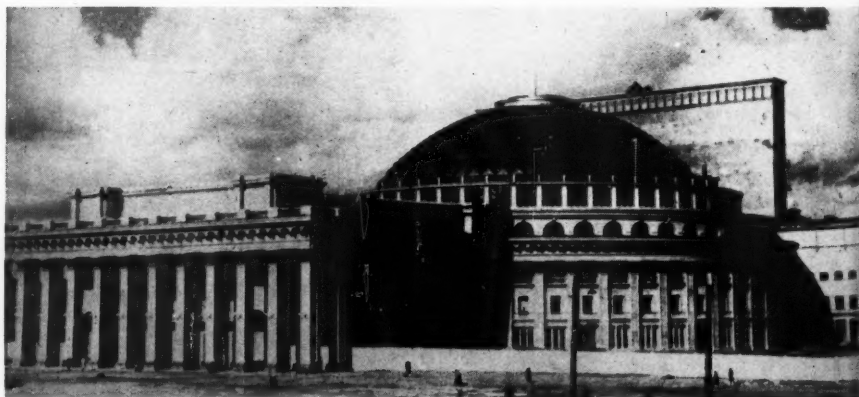
2, the Dynamo Aquatic Stadium at Khimki, Moscow, by Gennady Movcham, 1938. It is interesting to note that the contrast in architectural expression of the classical pavilions, classical pergolas and classical symmetry altogether with the bold construction of the grand-stand and the diving boards, apparently did not worry the architect.



3, the Dynamo Stadium, Tbilisi, by Archil Kurdiani, 1939. As bewildering a contrast as in the previous pictures—but this time not between Classical and Functional but between a regional Monumental and the classical Monumental of Roman coffered vaults. The piers in the corners are the places where the two sets of motifs meet. An attempt at understanding this and similar contrasts would probably have to take into account the fact that the reactions to architecture of the man-in-the-street are of necessity more associational than visual. If his wishes are the architect's laws, as they are in Russia, then he has no reason not to continue what is reminiscent of imperial grandeur and of local lore. Objections on the grounds of aesthetic incompatibility are considered formalism (as against realism).

3

4, the State Theatre of Opera and Ballet, Novosibirsk, by Alexander Greenberg, 1940. There are few photographs in the R.I.B.A. Exhibition (from which the photographs on these pages are taken) that may actually deceive the observer as to their date. But this combination of a giant portico with a vast rotunda might well come straight from Durand or another of the sumptuous French publications of Napoleon's time. Russia in this case is both more restrained and of more real greatness than England in such an attempt at a similar general effect as the Manchester Public Library.



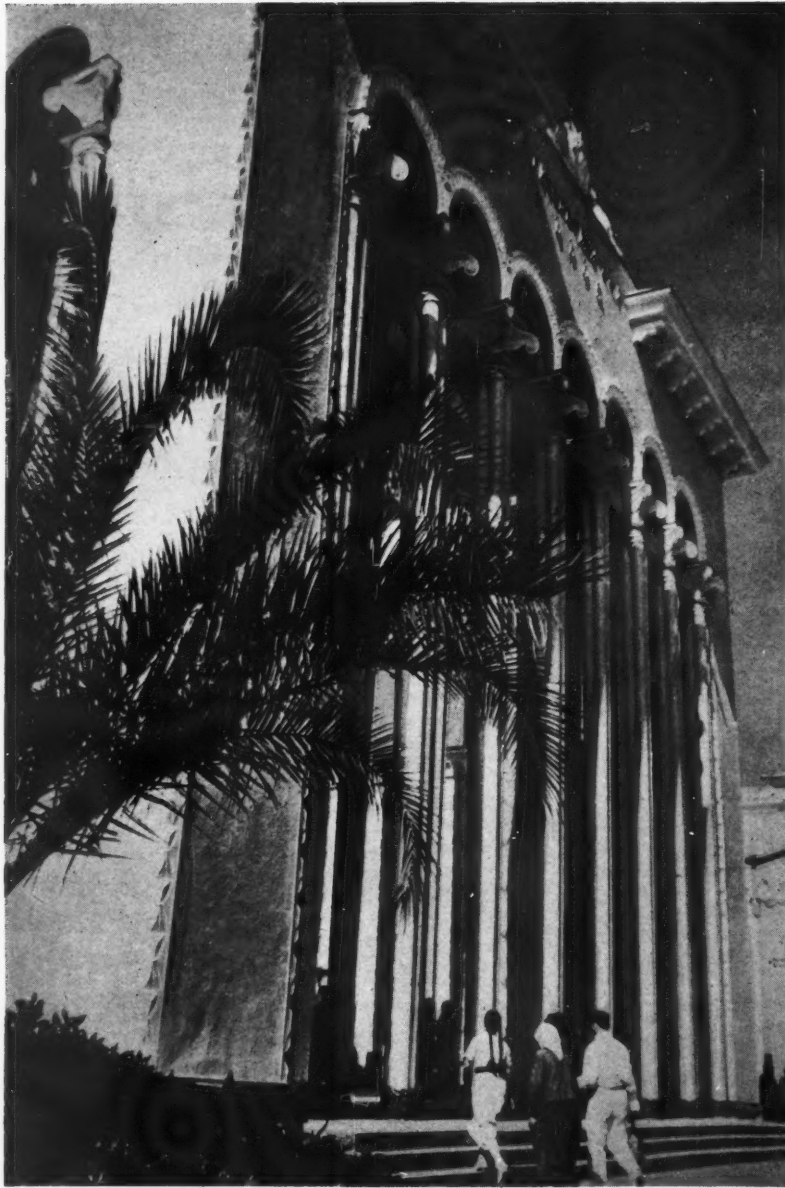


5, the House of Soviets, Leningrad, by Noah Trotsky, 1941, is strangely unrepresentational according to the Russians' own standards. The conventional rhythm of the block and the tubular columns emphasizing the general grid effect is more like the large factories than like the civic centres of the West. The lack of entasis in the columns represents a typical twentieth century adaptation of its classical inheritance.

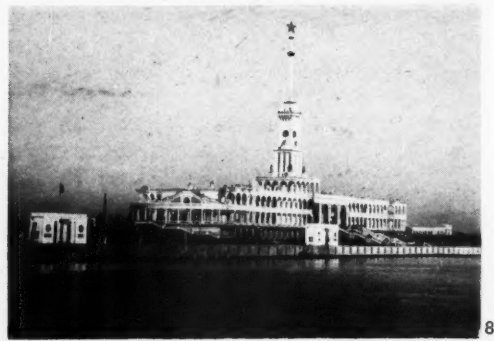
7, the structures on the Karamyshevo Dam by Alexei Rukhlyadev are in an Italianate style of a kind hardly revived by the Anglo-American traditionalists. As for 6, the Control Tower of Lock No. 3, however, the building itself might be transferred to any suburban shopping centre and called a branch of one of the big British banks, without anybody noticing its true nationality. But whereas one could imagine

that everyone from the chairman to the clerk in a firm of bankers would love to place on top of their branch a gigantic grasshopper instead of keeping it modestly within a metal sign by the doorway, in England there would be too many men of taste or men afraid of men of taste for this to happen. These qualms are missing in Russia, and it is not necessarily Western culture that scores over this in the long run.

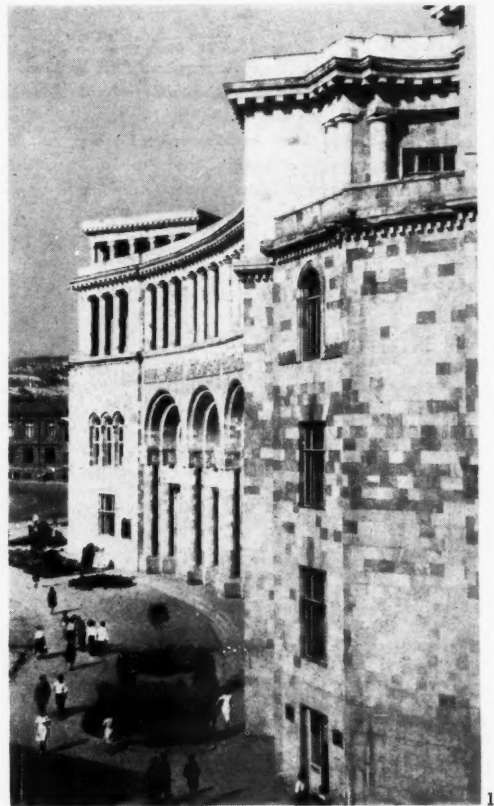




9, Pavilion of the Georgian S.S.R., Agricultural Exhibition, Moscow, 1938, by Archil Kurdiani. 10, Government House, Erevan, Armenia, by Alexander Tamanvan, 1941. The possibilities of architecture in the more distant countries of the Soviet State range over a wide field, from the Vernacular to the Imperial. At Erevan the details are specially interesting. Just as it has been happening at Washington lately and had happened in Germany after 1933, traditional classical motifs are stiffened and deprived of their refinements. Columns become tubes, and modillion cornices have oversized dimensions.



8, the Khimki passenger pier on the Moscow-Volga canal, by Alexei Rukhlyadev. The material is artificial marble the colour of malachite. The building is planned to deal with four hundred and thirty people at one time. It has a lightness reminiscent of a Mississippi steam-boat or of some of the exhibition buildings in the 1938 Agricultural Exhibition at Moscow, an example of which is given on this page in 9.

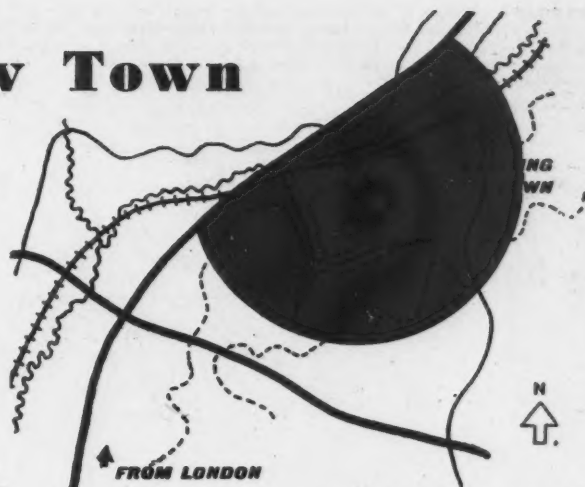


Landscaping the New Town

by Frederick Gibberd

The problem of designing an urban landscape for 60,000 people with illustrations taken from the plan for Harlow New Town

The factors which have to be taken into account in designing a town for 60,000 people are described in the following article by Frederick Gibberd, Consulting Architect for Harlow New Town. The accompanying illustrations are taken from the author's plan for Harlow. The article explains how the author evolved a plan which provides an alternative to the well-known extremes of the vertical garden city or the garden city dispersed at "twelve-to-the-acre."



The new town of Harlow in its region

AS A RESULT of the extensive research into town planning over the last 50 years, the technical solutions to the problems that a new town for 60,000 people raises are now generally agreed, at least in broad outline. They consist in making a distinct separation between areas for work, homes and play, in connecting those areas by a road pattern free of building in which traffic can flow easily, and in surrounding the whole by a well-defined agricultural belt. Industry is planned as a zone adjacent to the railway, with access to the regional road pattern; housing is arranged as a series of distinct neighbourhood units of from 6,000 to 15,000 people, each with its own schools, shops, and other services; and the town centre, with its business, shopping, and civic groups, is placed near to the railway station and industry.

It is a condition of any work of art that it has the qualities of both unity and variety. A new town must be a balanced composition with all its parts in proportion to each other and to the whole. With a town built to the accepted canons of planning in a relatively short space of time, there will be an obvious unity; in fact, the chief danger is that it may be too obvious, producing a uniform dullness. Variety and the subtleties of its impact on unity are not easily obtained, but if a new town is to come alive visually it must attain the qualities in which variety of contrast, rhythm, and surprise resides.

The site for a new town will have its own individuality and character, and in the first place major contrast, and therefore variety, can be obtained through the juxtaposition of building groups with the landscape. Until comparatively recently towns were built compactly mainly for reasons of defence and the slowness of transport. There was thus always a sharp contrast between the urban landscape (as THE ARCHITECTURAL REVIEW calls it) within the town's walls and the natural landscape outside them.

Because the nineteenth century town broke through these boundaries in an unprincipled straggle, Ebenezer Howard and his followers established a principle of limiting and defining growth by an agricultural ring. But a town of some 60,000 people, designed on Howard's principles and built to a normal standard of density, would cover a vast area

of land and would invite monotony by its very size. There would not be sufficient contrast between areas of building and non-building inside the town.

The most obvious solution to this is to house the population in a series of multi-floor structures, covering relatively little land. But however exciting and spectacular such a solution may appear at first glance, man is not yet prepared to renounce so completely his contact with the soil. He still wishes to create his own personal world on his particular patch of land.

Ebenezer Howard's agricultural ring is now a partial solution only. The agricultural land requires to be extended into the town itself in the form of tongues or wedges separating areas of building. The size and shape of these wedges is largely a matter of aesthetic selection once the space-needs of farm units and the connecting links to the agricultural hinterland have been determined. There will be required further open spaces, such as urban parks and recreation areas, and these, together with areas of natural landscape preserved for their own sake, can be combined with the agricultural wedges to form a definite landscape pattern.

The reasons have been established elsewhere for arranging housing areas as a series of distinct neighbourhood units. Aesthetically, this distinction must go further than just dividing up low density housing groups by parkway strips. If an urban character is to be achieved, housing groups must be to a comparatively high density—over 80 persons per acre—and they must be compactly planned. Their separation must be either by broad strips of landscape or by a natural barrier—such as a wood. After the built-up area has been broken down to obtain a major contrast between building and landscape it has to be welded together again into an aesthetic whole. It is a town that has to be created, not a series of independent villages. If the landscape is learnt and felt and the building groups designed into it, the landscape pattern itself will form a structural framework which will fuse together the built-up areas of the town.

The various systems of communication about the town have very important aesthetic implications, not as lineal patterns on paper (although an ordered pattern may be sensed

even though it may not be seen in totality), but because from them a series of pictorial scenes are viewed, and because as paths of movement they form important visual incidents in the landscape.

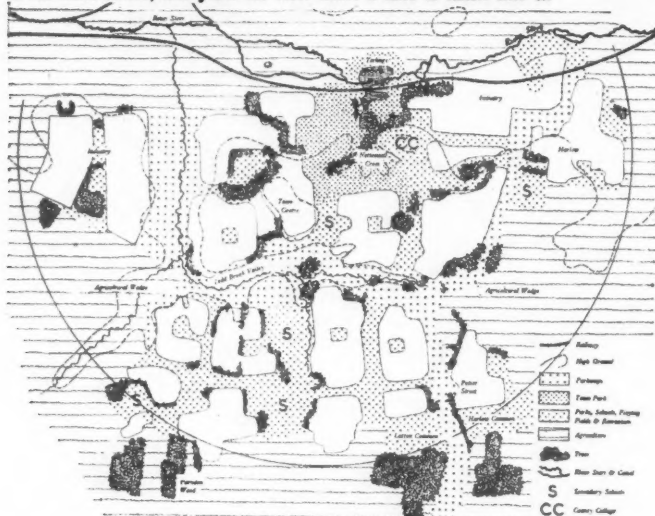
The modern dual carriage road, connecting the parts of the town to one another and to the region, is a very large scale design element, and the broad sweeps and runs of the light coloured carriageways are the visual indication of these connections. From them a series of pictures of the town are seen in rapid sequence, and these pictures may be heightened and dramatized by siting the roads with a view to the different building groups and landscape compositions which will burst into view.

Quite independent of the main road system will be a secondary circulation connecting the centres of the neighbourhoods to each other and to industry and the town centre. Here the roads pass through the built-up areas. The scale of the design may be much smaller, and it is not so necessary to seek major contrasts, as they are provided by the alternating areas of building and open space through which the roads pass.

For the pedestrian quite different design principles apply. The footpath makes no visual disturbance in the landscape, and the prospects from it can be of infinite variety. If the usual practice of siting footpaths along the routes of roads is abandoned and the path is regarded as a design element in its own right, it is possible to get the maximum sensory effect. Existing lanes and footpaths will be incorporated in the design, and by linking the footpath system with the green wedges it will be possible for the inhabitants to walk out of the town from their own neighbourhood without traversing any other area of bricks and mortar.

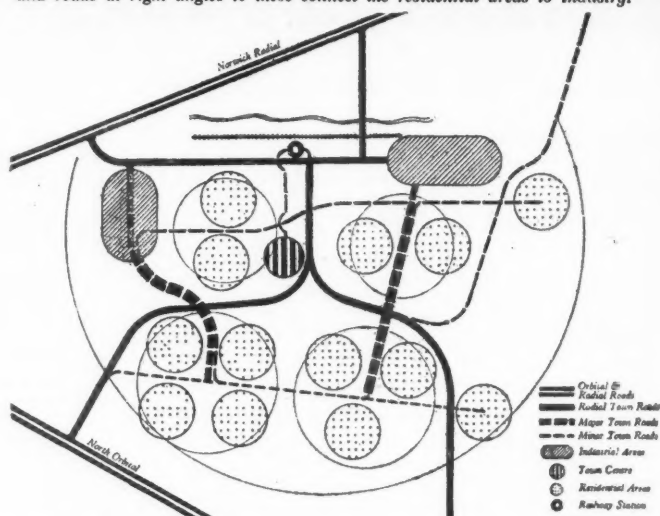
The industrial area of the town has its own particular aesthetic problems. The prevailing tendency is to plan it as one single estate, usually separated from the town, with the consequent danger that it may cease to be part of the town at all, and be a place where one goes to make money to live in the town. This is particularly likely in the modern lineal plan form, where industry is situated in a long ribbon along one side of the regional line of communication, with the rest of the town or towns on the other. Apart from any

LANDSCAPE Wedges of agricultural land are brought into the town and these are linked up with the landscaped valley across the centre of the site. In the centre of the base-line the Netteswell Cross valley is preserved to form a town park next to the town centre, and from the river Stort a lake is taken into it.

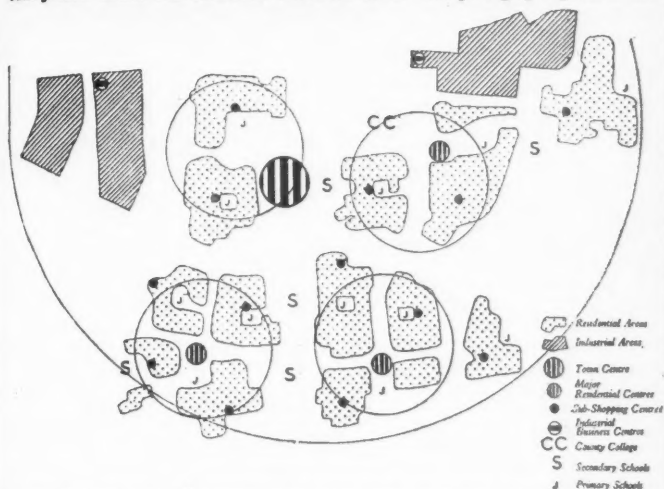


MASTER PLAN The site lies to the south of the Stort Valley, with the existing village of Harlow on the east. The regional motorway, railway, and river run in a valley along the north boundary beyond which are the Hertfordshire hills. The three main lines of communication form the base-line of the town; the station is placed in the centre of this base-line with the town centre extending from it southwards. Industry is sited on the base-line, but in two distinct areas so that it does not cut off the landscape to the north. From the centre a semicircle is struck, within which, as the diagrams above show, the rest of the town is contained.

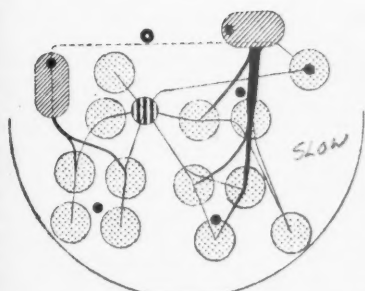
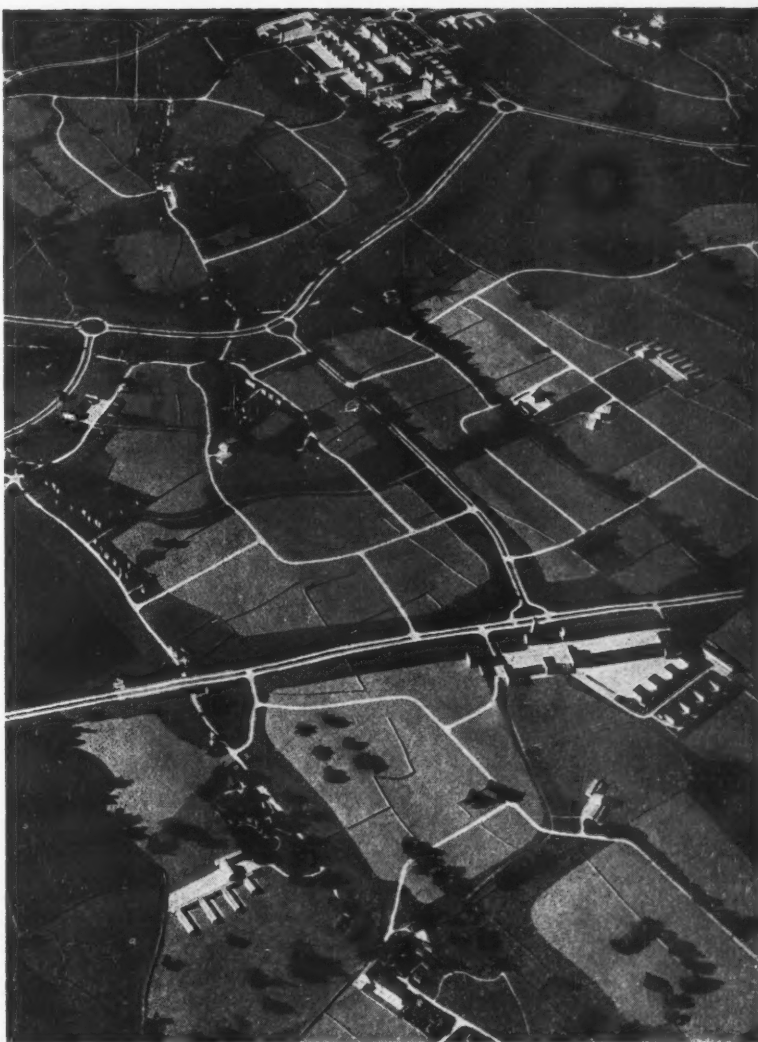
CIRCULATION Access to the town is by the new motorway on the north boundary, from which branches lead to the industrial areas and the town centre. Radial roads connect the south-east and south-west corners of the site to the town centre, and roads at right angles to these connect the residential areas to industry.



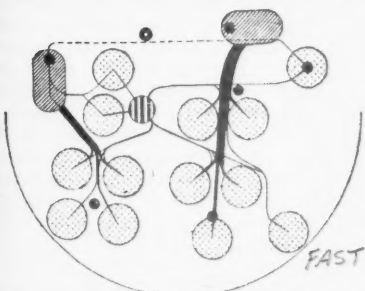
HOUSING Residential areas are arranged in compact groups on the high ground. Natural features such as woods and valleys act as barriers between them. The groups are clustered round three major centres, which can, therefore, be large in scale. These, in turn, cluster round the central area itself. Each area has its own junior school and sub-centre contained in it. The photograph of the model



on the right shows the four residential areas in the south-west, grouped round their centre. The shapes of the areas are determined by the existing topography; the field patterns, trees, valleys, and existing buildings being worked into the design so that each has its own character.



INTERNAL CIRCULATION An independent system of minor roads and of cycle tracks and footways runs through the residential areas giving connections between their centres. There are two methods of circulation. For fast



traffic, top, the roads pass between the residential areas so that there is an uninterrupted traffic flow and no disturbance to buildings. For slow traffic, above, the roads run through the centres of the areas connecting them together.

social question, there is the strong visual argument against this separation, for industrial buildings have their own architectural qualities which should contribute to the town's scene.

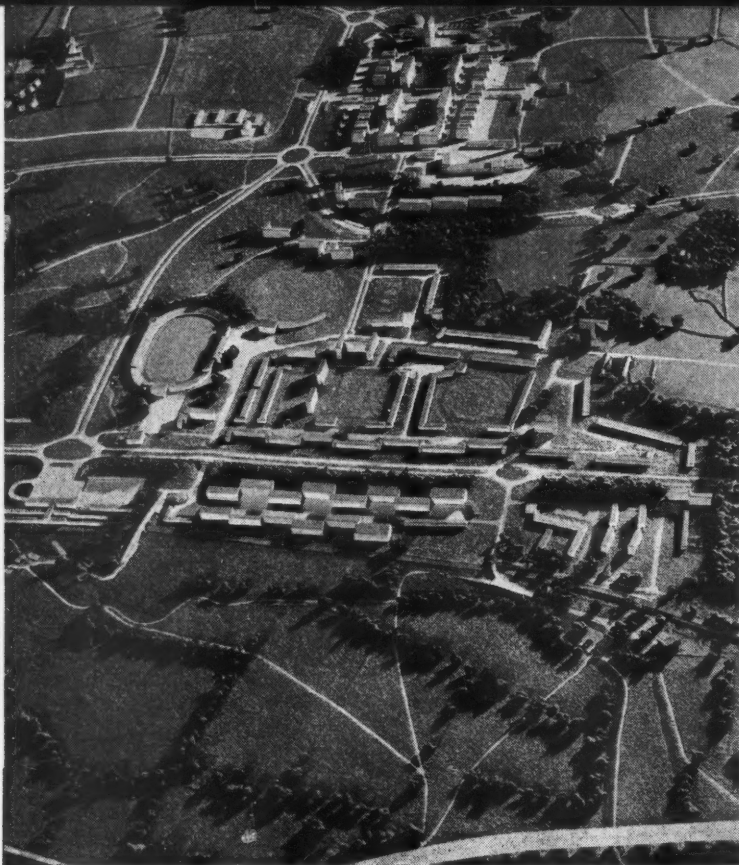
As with housing, the actual land coverage of industrial buildings—five to six hundred acres for a town of sixty thousand—forms a very large area for one use. There may be towns where industry can be planned as one single unit without swamping the rest of the town. But it is more likely that two or even three sites will be necessary if the unity of the total design is not to be disturbed—beyond this number the dispersal of industrial traffic will tend to destroy the unity again. The splitting up of the industrial area is perfectly feasible since not more than a third of it requires direct access to the railway.

Some interesting problems arise in the design of the suburbs, or, to use the more fashionable term, the neighbourhood units. To obtain contrast with the landscape compactness is desirable. It is almost impossible to obtain this with large neighbourhoods of ten to fifteen thousand people without their becoming dull. Furthermore, such large units make it necessary to take a bus to get about them, and this at once gives a sense of leaving one's particular area. It

can be argued, therefore, that the size of the neighbourhood should be prescribed by an easy walking distance, say ten minutes walk, or a quarter of a mile. This brings the size down to five thousand people or less. Certainly, existing towns point to this smaller unit for in them such a service as the local shopping centre almost invariably occurs within easy walking distance.

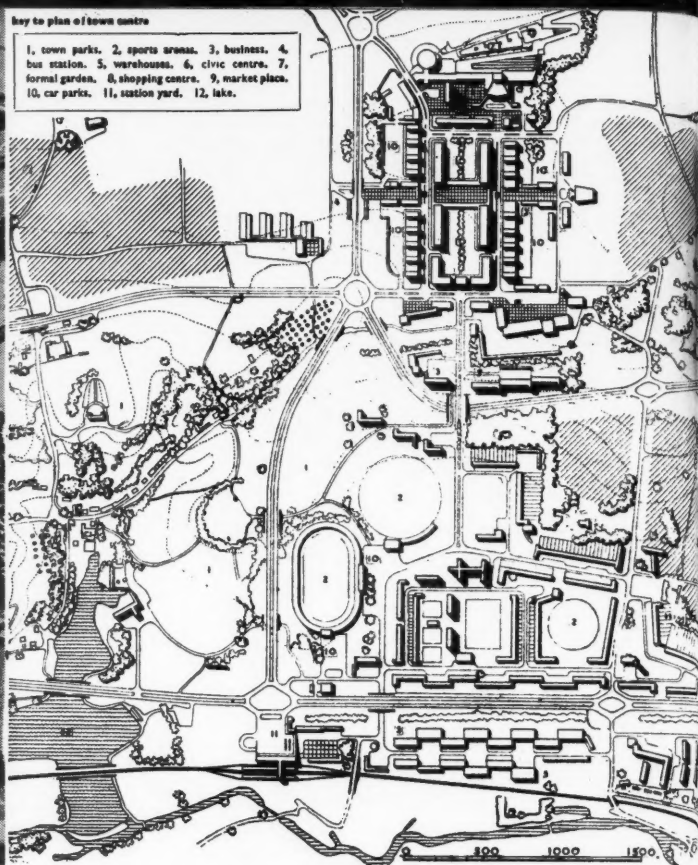
Apart from the question of the appearance of individual houses both unity and variety can be achieved by developing and incorporating the spatial qualities and textures of the topography into the design. Instead of leaving vast neighbourhood units to be subsequently worked out at "twelve to the acre," the town planner must study the existing landscape pattern, the existing building groups, and show how the new housing is to be related to them. By this integration of new with old the inhabitants will have roots with the past and not be so conscious of living in a brand new environment.

The neighbourhood centres with their shops, churches, and other community buildings, will form a series of dominant groups throughout the design, on a secondary key to the town centre. More vital and urbane centres can be obtained by planning fewer

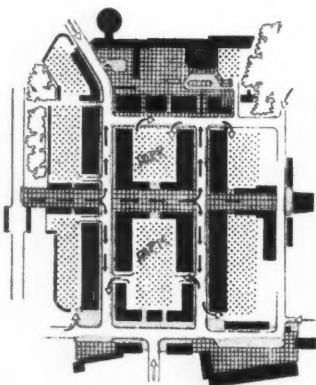
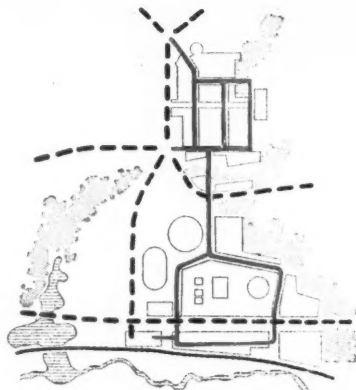


Key to plan of town centre

- 1, town park; 2, sports areas; 3, business; 4, bus station; 5, warehouse; 6, civic centre; 7, formal garden; 8, shopping centre; 9, market place; 10, car park; 11, station yard; 12, lake.



THE TOWN CENTRE



major centres to serve groups of neighbourhoods, with additional sub-centres of a few shops inside each neighbourhood.

Another recurring element in the design, which through the scale and individuality of its buildings can help both the unity and variety of the town, is that of the school system, provided of course the schools are sited so that they make a visual contribution to the scene and are not shut in behind back gardens—a common method.

The town centre contains the buildings that serve the town as a whole and is, therefore, an expression of its corporate life. It is not sufficient that the area should be defined by a ring road and left to be filled in as the town is built. The building groups—shopping centre, civic centre, business area, and so on—are the most impressive and the largest in scale in the town. They must be grouped and sited so that, not only are they seen to the best advantage in themselves, but form the climax to the design of the whole town—the dominant element in the town's unity.

As main traffic is kept out of the town centre, the roads need no longer form the structure about which the buildings are disposed, but should encircle them and allow them to be grouped freely. Although this precinctual system is now generally recognized there is still a tendency to arrange the buildings as if the roads were still there. This does not mean, however, that there should

not be ample direct service access to the buildings, and in the case of the main shopping streets there will be both car and pedestrian traffic, as it is natural to shop by both methods.

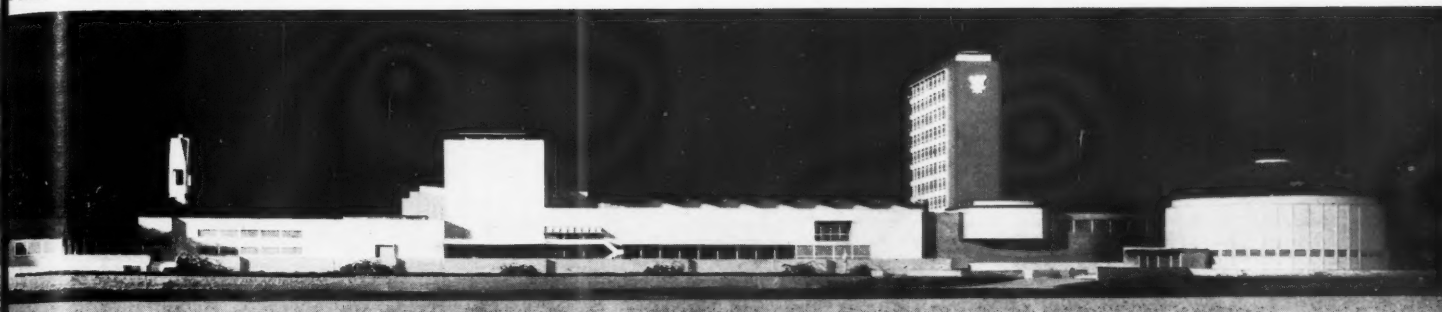
It is a fundamental of civic design that the "square" or "close" should be small. Once the horizontal planes get beyond a certain size the vertical planes become separated and the walls of the open-air room fall apart. To keep them small provision for parking cars must be made outside them. Car parks are ugly; they must be large and they must be dispersed throughout the area. We have, therefore, to plan another series of open spaces, in association with the squares and streets, but visually independent of them.

It is possible to obtain subtle contrasts through the spatial qualities of the various squares, and through the interpenetration of their spaces. It is also possible to arrange for contrast in movement between the squares; thus people sitting at restaurants and cafés will form part of the visual pattern of one square, while a stream of motor cars drawing up to the theatre will contribute their pattern to another. The number of alternatives that present themselves to the designer are almost limitless and can only be discovered and illustrated with reference to an actual problem. For this purpose the example of Harlow New Town is given in the accompanying pages.

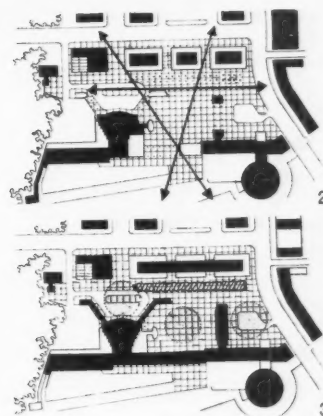
The town centre, shown in the photograph and plan above, extends from the railway and river in the valley to the top of a hill overlooking the town. On the east the existing very pretty valley is preserved to form a town park, and this is extended into the main sports area with its stadium, cricket and football grounds. The diagram, left above, shows how the area is built up between the existing pattern of trees and woods, and shows its own road system, in green, independent of the main bus and heavy traffic roads. The main town centre, left below, consists of a series of parallel shopping streets which

expand at each end into building groups overlooking the valleys to the north and south. On the north are the business and market squares, on the south the civic squares. The plan allows for expansion towards the west. A pedestrian way, printed in green, runs at right angles to the streets and through their centre connecting them to the bus station. Large shops and stores would be sited on the main streets and more intimate shops on the pedestrian way. The large areas required for car parking are dispersed throughout the centre as a series of enclosed spaces visually independent of the main squares and streets.

THE CIVIC CENTRE

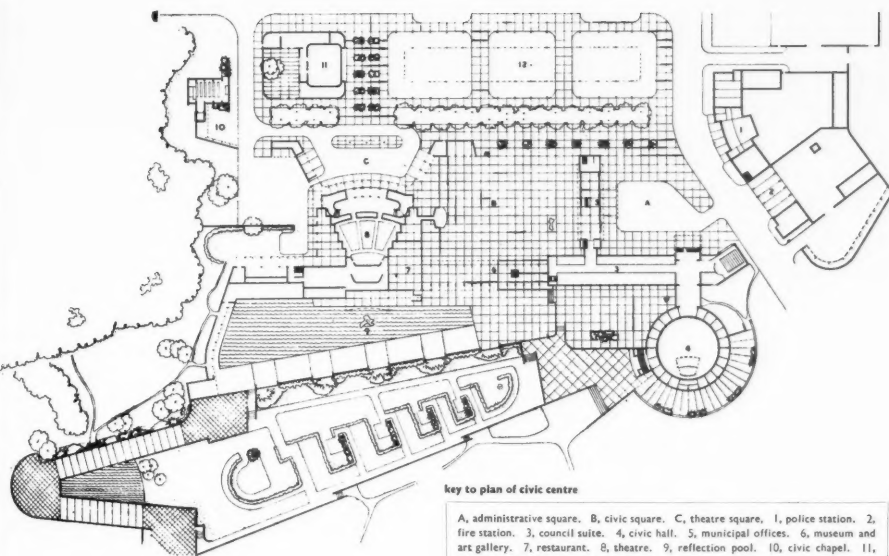


1



2

3



key to plan of civic centre

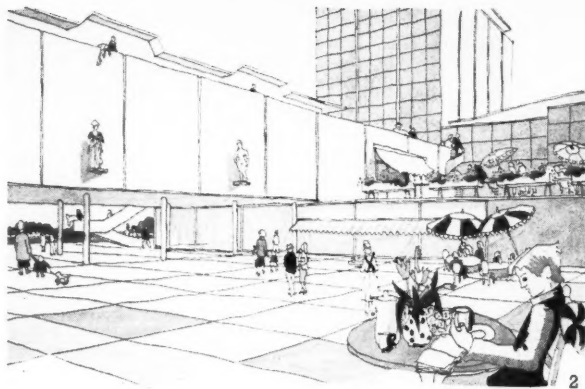
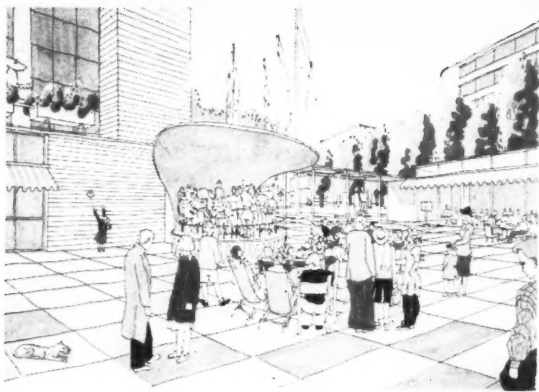
A, administrative square. B, civic square. C, theatre square. 1, police station. 2, fire station. 3, council suite. 4, civic hall. 5, municipal offices. 6, museum and art gallery. 7, restaurant. 8, theatre. 9, reflection pool. 10, civic chapel. 11, library. 12, showrooms.

The civic centre is composed so that it forms a broken skyline dominating the town. 1. The tall tower is the municipal offices; the concert hall on the right is semicircular as the radial roads swing up to it in a broad curve. On the left is the art gallery and museum extending into the town theatre. The buildings are grouped round three interrelated squares at the focus of the town's radial roads. The squares, in 2 and 3, extend into the shopping streets on the north, and on the south they are merged into the landscape by a stepped formal garden. 4. Each square, shaded areas 3, has its own intimate spatial qualities, but from certain viewpoints, shown in 2, they merge into one large square, or into the rest of the landscape.

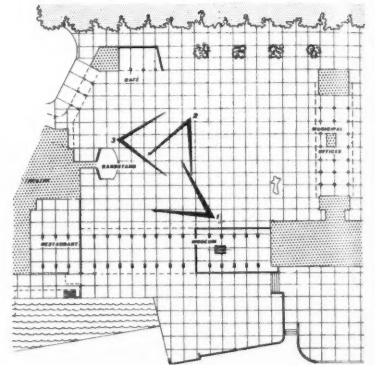
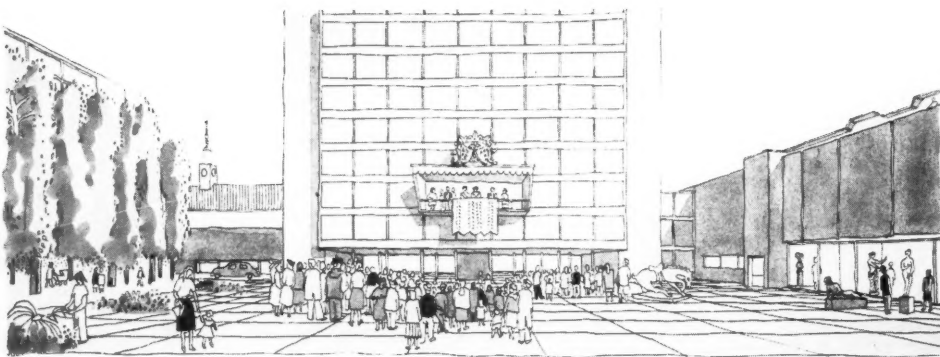


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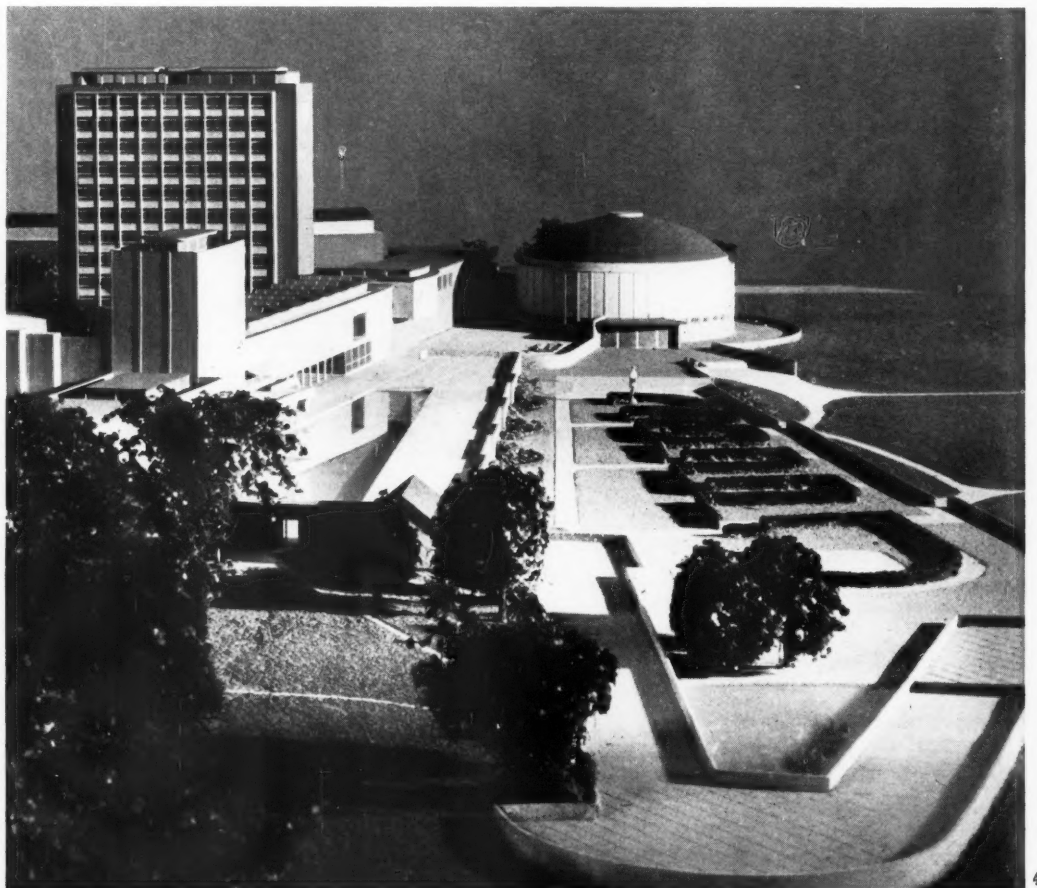
THE CIVIC CENTRE



1, the handstand before the town theatre, with a café in the background over to the right. 2, the museum with restaurant below. 3, looking towards the town hall and municipal offices. The plan below shows the three viewpoints of these sketches numbered.



4, a photograph of the model of the town centre. In the background beyond the stepped gardens and the ramp which leads to the park is a circular concert hall. A radial road sweeps up to the hall in a broad curve from the valley below.





Gothic Survival and Gothick Revival

by H. M. Colvin

IT USED TO be customary, when discussing the origins of the Gothic Revival, to begin by paying a brief tribute to "the rivulet of Gothic construction, which flowed on in a sluggish, bucolic, but not a contemptible stream"¹ far into the eighteenth century, before turning to consider the influences, literary and historical, which produced the Revival itself. The reader was left with the impression that "in rural England from Tudor days on . . . the essentials of Gothic craftsmanship never actually died out but remained *sub rosa* or *sotto voce*, so to speak, ready to appear again with the Revival"²—that Gothic survival merged imperceptibly into Gothick revival, and that the continuity of Gothic architecture in this country was in fact never broken. Eighteenth-century classicism, according to this view, was a parasitic growth imposed on English architecture by aristocratic pressure—an exotic product of the Grand Tour rather than a natural expression of English taste. Once the pedantry of Palladianism was broken (so the argument went), the native style burst forth once more "like the fresh green sprouts which owe their existence to the life still lingering in some venerable forest oak,"³ only perverted at first by the dilettante enthusiasm of amateurs like Horace Walpole, or by the ignorance of architects like James Wyatt.

The unfavourable attitude towards English renaissance architecture implied by this argument is now in full retreat, but so far no serious attempt has been made to discover whether there is any truth in this legend of the continuity of Gothic. Was there really a subterranean current of Gothic ready to spring up, like the submerged Celtic art of Roman Britain, whenever the chains of classicism should be removed? To answer this question it is not enough merely to demonstrate chrono-

logically that Gothic churches were still being built up to the very date when Walpole and Bentley were busy planning Strawberry Hill, though it is quite possible to do so. It is necessary either to show that the revivalists employed country masons who still practised Gothic building, or to prove that the local masons who were still at home with buttress and pinnacle themselves built Gothick villas or churches which might have passed the Strawberry Hill Committee.

As for the first possibility there is, as Sir Kenneth Clark has rightly said, nothing to show that Walpole or his kind sought for such men.⁴ Their craftsmen, like their architects, were more accustomed to classical than to Gothic work, but when their patrons demanded Gothick, they executed it—in brick and plaster. Walpole himself admitted that "neither Mr. Bentley nor my workmen had studied the science [of Gothick];"⁵ and at Strawberry Hill and elsewhere it was employed, not as an alien method of construction, but as a style of decoration of much the same character as "Chinese" (for which indeed it was sometimes mistaken). At Strawberry Hill there was singularly little mason's work, the only important exception being the chapel, which had a Portland stone front copied from Bishop Audley's tomb at Salisbury.⁶ This was executed by Thomas Gayfere the elder (1720–1812) who, as master-mason to Westminster Abbey, may be supposed to have possessed more than a superficial familiarity with Gothic architecture. But there is little to support this supposition. Gayfere was the son of a mason of Wapping, and almost certainly served his apprenticeship under Andrews Jelfe, one of the mason contractors for Westminster Bridge, before becoming Abbey mason.⁷ Jelfe, who designed the town hall at Rye in Sussex,⁸ was not the man to train his apprentices in

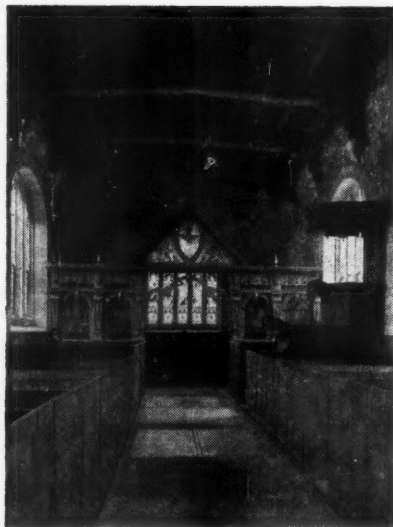
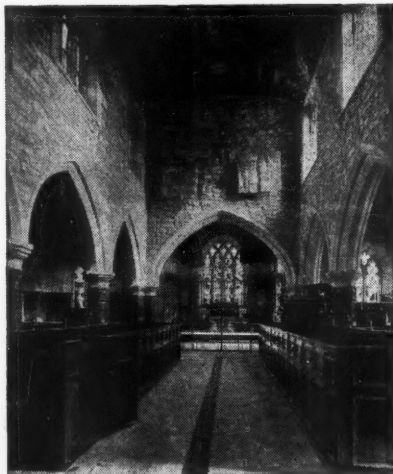
The problem of the continuity of Gothic in eighteenth-century England has been touched upon by many writers, but fruitful discussion of it has been hampered by the scarcity of documented fact. To prove that such continuity existed it is necessary to show either that the early revivalists employed masons to whom Gothic was still a traditional way of building, or that there were such masons who could, and did, produce work that satisfied the dilettanti to whom Gothic was essentially a mode of decoration akin to "Chinese." In this article Mr. Colvin discusses the architectural work of the Gloucestershire masons Thomas Sumson of Colerne and Edward and Thomas Woodward of Chipping Campden, and shows how their careers and work throw light on the question.

Gothic traditions, and when the Jerusalem Chamber in the Deanery was remodelled in 1769 to the designs of Henry Keene, the Abbey surveyor, with Gayfere as mason, the elaborate Gothick detail was all carried out in woodwork and plaster.⁹ If Gayfere is "the only definite link between survival and revival" he is not a very strong one, and we are left to make the most of what Sir Kenneth Clark has called "the stream of Gothic sentiment."

Occasionally this produced an actual building, like the Gothic chapel which Browne Willis built at Fenny Stratford in 1724–30.¹⁰ But he had to gothicize the master-builder's elevation himself: however important antiquarian sentiment may have been in keeping alive an interest in Gothic, it could not keep Gothic itself alive. There was, indeed, a time when architectural historians pointed to Oxford—the Oxford of Gibson, Hearne and Anthony à Wood—as the last home of Gothic, and it was tempting to see a connection between the political and antiquarian conservatism of Oxford and "the late, or debased, Gothic buildings" so carefully described in Parker's *A B C of Gothic Architecture*. No one would dispute that Oxford is the *locus classicus* for seventeenth-century Gothic. But Sir Kenneth Clark has questioned the view that this was due to mere conservatism. Gothic, as he points out, was still the normal way of building churches, chapels and colleges in the seventeenth century, and the late Gothic of Oxford owes its prominence simply to the accident that comparatively few other ecclesiastical or collegiate buildings were erected at the time.¹¹ But such as there are—Fulmer Church, Bucks (1610), Lincoln's Inn Chapel (1620–3), Godmanchester steeple (1623), Charles Church, Plymouth (begun in the 1640's, but not consecrated until 1665), the remarkable church at Staunton Harold in



THE SEVENTEENTH-CENTURY SURVIVAL During the first two-thirds of the seventeenth century in England Gothic was still the natural way of building a church, and more seventeenth-century Gothic churches remain than is generally realized. Above: Goudhurst tower (1638-40). Upper right: Staunton Harold (begun 1653). Lower right: Foremark (1662).



Leicestershire, begun by Sir Robert Shirley in 1658,¹² or that at Foremark in Derbyshire (1662)—are at least as Gothic as the more familiar Oxford examples. Indeed, apart from St. Paul's, Covent Garden, and what is now Marlborough House Chapel, no complete classic church was built in England until after the Great Fire. It was not until Wren rebuilt the City churches that the architecture of English protestantism emerged in the form of which St. James's, Piccadilly, is the prototype. Until 1666 Gothic was still normal for ecclesiastical architecture, and there was nothing singular in its employment at Oxford.

Nor did Oxford by any means enjoy a monopoly of masons who worked in Gothic. Merton Great Quadrangle (1608), Bodley's End of Duke Humphrey's Library (1610), and the Schools Quadrangle (1613) were designed and built by Yorkshire masons,¹³ and when Dean Fell commissioned the Hall Staircase at Christ Church with its fan-vaulted roof, he got one Smith, "an artificer of London" to build it.¹⁴ In 1638-40 the tower of Goudhurst church in Kent was rebuilt in the traditional style by three London masons—one of them a past, another a future Master of the Masons' Company.¹⁵ Gothic in the seventeenth century was still a living style, one which was practised in the towns as well as in the country.

But in London the Great Fire did much to break down the ancient monopoly of the Masons' Company by necessitating the admission of "foreigners" to assist in the rebuilding,¹⁶ and although the conservatism of more than one City parish insisted that the tower at least of their church should be rebuilt in the traditional style,¹⁷ the result was architect's, not mason's Gothic.

At St. Dunstan's-in-the-East it was not conservatism, but Wren's own fondness for structural experiment which led him to demonstrate the principles of Gothic with the intellectual enthusiasm of one who was a Fellow of the Royal Society as well as an architect: and it was Wren, or his assistant Dickinson—perhaps even Hawksmoor, who later claimed the credit for "that noble tower of St. Michael's Cornhill"¹⁸—who designed the other Gothic steeples. But it was the architecture of the Renaissance which Wren's masons learned from him, not the principles of Gothic, and after 1666 no one would have thought of sending to London for a mason to build a Gothic church. He would have had no difficulty, however, in any part of the country where the mason, rather than the carpenter or the bricklayer, still dominated the building trade. For Gothic is essentially a mason's architecture (what carpenter's Gothic could be

like Batty Langley was soon to demonstrate), and its survival was bound up with the survival of the mason as an independent craftsman. In eighteenth-century London the mason was in retreat before the surveyor on the one hand, and the builder on the other—the latter a new phenomenon who was usually a carpenter, sometimes a bricklayer, but rarely a stone-mason, and therefore an alien to Gothic traditions.

And so Gothic retreated with the mason to the stone districts of the Midlands, the West and the North. Here it was kept alive almost exclusively by church-building and repairs. But of this there was far more than is generally realized (thanks largely to the thoroughness of Victorian "restoration"), and much of it was carried out in by no means contemptible Gothic. It was the work of masons who were architects in the sense in which *The City and Countrey Purchaser and Builder's Dictionary* (1703) defines the term: "A master-workman . . . who will contrive a Building, and draw a Draught, or Design thereof, as well as most (and better than some) Surveyors." The Smiths of Warwick, the Grumbolds of Cambridge, the Townsends of Oxford, are familiar examples of men of this kind, "who dominated a locality, and yet were not confined to it,"¹⁹ and there are many more who

await identification by the architectural historian. It is the purpose of this article to introduce readers of THE ARCHITECTURAL REVIEW to Thomas Sumsion of Colerne and the Woodwards of Chipping Campden, because their careers throw some light on the problem of the continuity of Gothic which has been discussed above.

Colerne is a Wiltshire village lying at the S.E. extremity of the Cotswolds, between Bath and Chippenham. It is built wholly of the local stone, and in the churchyard the diligent searcher will find a table-tomb with inscriptions to a family of masons surnamed Sumsion or Sumption. Those on the S. and W. sides of the monument are quite illegible, and those on the E. and N. almost so. One of the legible inscriptions, however, commemorates "Thomas Sumsion of this Parish Freemason who died October the 21, 17[41]²⁰ aged 72 years."

No doubt there are cottages in Colerne built

by Sumsion and his family (a mason of his name still lives in the village), but it is twenty miles away to the north, at Dursley in Gloucestershire, that we first find any record of Sumsion as more than a village mason. Dursley steeple fell down on January 7, 1698-9, and was rebuilt in 1708-9 with the aid of a Brief. The churchwardens' accounts for 1708 record the spending of 5s. 8d. "Att ye Bell wne tower builders came first," and an account of the expenditure of the Brief money drawn up in 1711 contains the entry "paid Barker and Samsion for building the Tower £500 0s. 0d." Who Barker was I do not know, but a comparison between the towers of Dursley and Colerne will leave no doubt that "Samsion" was Thomas Sumsion. For Dursley tower is not, as is sometimes supposed, a reproduction of its predecessor (of which no representation is known), but of the still existing fifteenth-century tower of Colerne. The north, south

and west faces of both towers present the same sequence of four-light Perpendicular window of identical design (the insertion of windows in the north and south walls of the lowest stage being a characteristic feature of Gloucestershire towers generally), rectangular traceried panel occupying almost the whole of the second stage, with a central niche flanked by narrow, single-light windows, and paired belfry windows with pierced stone panels almost filling the upper lights above the transom. Even the offsets and string-courses occur at identical intervals, though at Dursley the buttresses are diagonally placed, whereas those at Colerne are set at right-angles to the walls. The only other conspicuous difference appears in the parapet, which at Colerne is formed of a series of trefoils, while Dursley boasts the pierced battlements and openwork pinnacles of the "Gloucester coronet."^{20a}

This tower at Dursley is one of the most



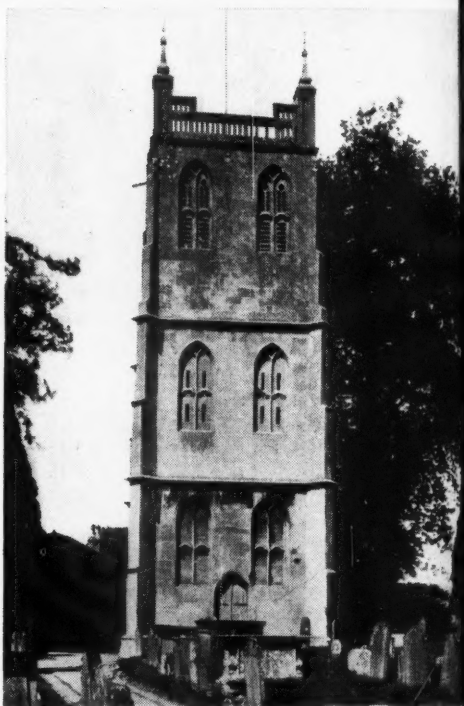
SUMSION OF COLERNE The tower of Dursley church (left) was rebuilt in 1708-9 and is thus contemporary with Aldrich's All Saints, Oxford, and the design of Archer's St. Philip, Birmingham. The builders were Thomas Sumsion and an otherwise unknown Barker. The fifteenth-century tower of Sumsion's native Colerne (upper photograph above) obviously served as model. Sumsion also designed, in 1730, Sherston tower (lower photograph above).

impressive examples of Gothic survival in the country. Completed the year before the Act for Building Fifty New Churches which gave London St. Mary-le-Strand and St. George's, Bloomsbury, only the detail of the niches and the shallow reveal of the windows and panels betray its true date, and if it be objected that it is a mere copy of another and an earlier tower, then in this the methods of its builders were fully in accordance with medieval precedent. For Mr. John Harvey assures us that in the fifteenth century the conscious imitation of existing buildings was already a common feature of building contracts.²¹ Unfortunately the contract for Dursley tower does not survive, so it is impossible to say whether Colerne was deliberately chosen as the exemplar with the approval of the churchwardens, or whether they left the masons to determine the design themselves. It may, however, be suspected that the latter was the case, for at Sherston, near Malmesbury, there is another late Gothic tower reminiscent of that at Colerne, and here the churchwardens' accounts leave no doubt that Sumsion was the architect. It was found necessary to take down the old central tower in the spring of 1730, and on March 25 one Moses Rice received a shilling "for his sones goeing to Collourn to give notice to Thoms. Sumption to come the second time." The tower was pulled down in April, and on May 9, £1 15s. 0d. was paid to "Thomas Sumshon for the draught of ye Tower & Journeys." For this modest sum Sumsion provided the churchwardens with another version of the tower of his native village, repeating the elaborate pierced parapet and pinnacles which he had built at Dursley. But the buttresses had to be left out in a central tower, and the mouldings are noticeably inferior to those at Dursley. The whole tower is, in fact, much less convincingly medieval than its twin at Dursley, and this may be due to the fact that the mason employed was not Sumsion, but one Thomas West, who came from Corsham. He completed his work in 1733, and on Guy Fawkes Day that year the churchwardens were once more able to spend their customary five shillings "for ringing ye 5th of Novem."

Sumsion seems to have died in 1741,²⁰ but he was not the last of his kind, for when the detached bell-tower of Berkeley Church became so unsafe in 1748 that it had to be taken down, its successor was built in the same conservative tradition as those of Dursley and Sherston. Unfortunately the parish records are not explicit as to the designer: in 1747, when the state of the tower first gave cause for alarm, £1 7s. 4d. was paid "To the Masons for giving in a plan for the Tower and Expens. at meeting ye same time," but the contractor, who received £740 for his work in 1753, was a certain "Mr. Clark." Unfortunately neither his trade nor his place of origin is mentioned in the accounts, but it is tempting to identify him with William Clark, of Leonard Stanley, Glos., carpenter, who in 1750 contracted, together with John Bryan, of Painswick, and Joseph Bryan, of Gloucester, masons,²² to take down and rebuild the tower of Great Witcombe Church.²³ For this little tower, which cost only £80, and was completed within a few months of the signing of the contract in July, 1750,²⁴ is yet another example of the survival of Gothic in the

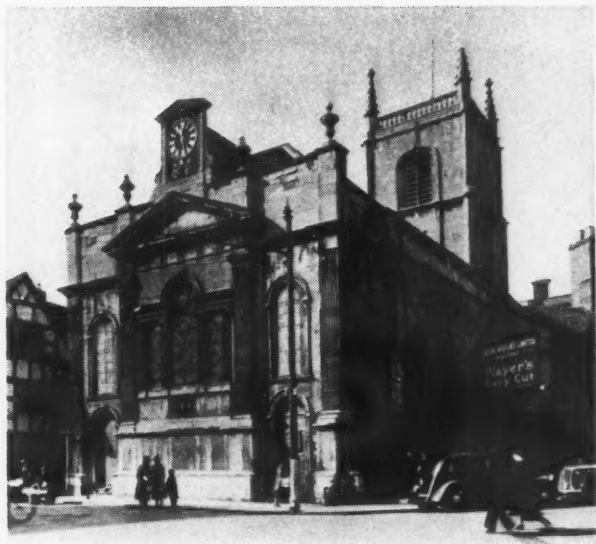
Cotswolds, and its belfry windows are closely akin to those of the Berkeley bell-tower. The same William Clark is doubtless to be identified with a master-carpenter of that name who was one of the innumerable witnesses in that *cause célèbre* of eighteenth-century architectural history, the repair of Tetbury Church in 1740-1,²⁵ but this does not help us to decide whether he designed the towers at Berkeley and Witcombe, and it may be that, as a carpenter and not a mason, he is a doubtful candidate.

But, whoever designed them, the record of these Gloucestershire steeples proves that in the first half of the eighteenth century Gothic was still the accepted style for church towers in the Cotswolds, and that as late as 1750 there were men who were capable of building something which, superficially at least, is scarcely to be distinguished from the work of 300 years before.²⁶ It illustrates the tenacity of Gothic in a district where stone was still the only regular building material, but it does not prove that there was any continuity between the Gothic of Berkeley tower and that of Ratley Roundhouse,²⁷ between the Gothic of a Sumsion and that of a Palmer of Bath.²⁸ Yet there are monuments at Colerne to men who made their fortunes as builders in Bath a generation after Sumsion,²⁹ and Thomas was by no means the last of his family to follow the mason's trade. But architecturally as well as socially Bath followed the standards and conventions of London, and its Gothick chapels have no connection with the rural Gothic of the Cotswolds. When Horace Walpole visited Berkeley in 1774 he merely noted that the "steeple" had been "rebuilt, but at a distance from the body."³⁰ Its builders were not in search of "the true rust of the barons' wars" and the creator of Strawberry Hill displayed no more interest in their work than if it had been put up by a London bricklayer. Their Gothic is wholly local in inspiration, and owes nothing to the antiquarianism of a Walpole or a Sanderson Miller. Gothic was for them the natural way of designing church towers, and fundamentally the only way in which their work differs from that of their medieval predecessors is in the lack of that experimentalism which was so rarely absent from medieval work. Gothic for them was a traditional way of building, not a continuously evolving technique of planning, arching, and vaulting. The Berkeley bell-tower, it is true, presents all the essential features of a great Gothic steeple, except a spire, but it is almost devoid of mouldings, and quite without any of the subtle enrichments which a medieval mason would have considered essential—and which architects of the Strawberry Hill school mistook for the spirit of Gothic itself. Even the openwork battlements are reduced to a series of simple uprights and cross-bars, and the pierced "sound-holes" of the belfry windows fulfil a strictly utilitarian function. In spite of these shortcomings Berkeley tower is an impressive thing—perhaps the last considerable monument of English Gothic. But its qualities are entirely inherited, and it is difficult to see in it any encouragement for those who believe that Gothic had further fields to explore had it not been killed by the great frost of classicism. The Sumsions and their kind were living on the architectural capital of the Middle Ages, and Berkeley tower shows that by 1750 that capital was very

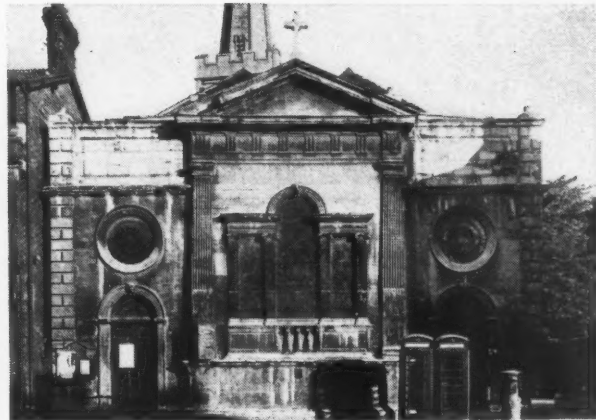


THREE GOTHIC TOWERS
The Gothic tower of the church of Kingston St. Michael, Wilts. (top) dates from 1725; no record of its designer or builder has survived. Berkeley church tower (centre) was built between 1747 and 1753. The Gothic of these towers is still that of the Survival, and when Horace Walpole saw the Berkeley tower he merely noted that it had been rebuilt: it did not seem to him of any particular interest in itself. The contractor was a "Mr. Clark," who may be identifiable with the William Clark who helped to build the tower of Great Witcombe church in 1750 (right).





THE WOODWARDS Thomas and Edward Woodward were masons of Chipping Campden, and just as Thomas Sumson copied Colerne church tower at Dursley and Sherston, so the Woodwards reproduced features from Chipping Campden tower (above) at Blockley (top centre photograph) and St. Swithin, Worcester (top right). Blockley tower, by Thomas Woodward alone, dates from 1725-7; the Worcester church, by Edward and Thomas in partnership, from 1734-6. Bedfont House, Chipping Campden (lower centre photograph), is an example of domestic Cotswold classic attributed to the Woodwards. They certainly both designed and built St. John, Gloucester (bottom right), in 1732-4. Both at Worcester and at Gloucester the Woodwards had to provide main entrances at the east end, in an age which was particular about the orientation of its churches, and in each case they solved the problem in the same way. The clock on the Worcester church was originally surmounted by a figure of Time.



nearly exhausted.

But further to the north there was another family of Cotswold masons whose work deserves investigation before we conclude that Gothic survival and Gothick revival had nothing in common.

The Woodwards of Chipping Campden are unknown to architectural scholarship, but their work is to be found in three counties, and their name deserves to be recorded as that of a leading family of West Midland masons in the first half of the eighteenth century. The family tomb in Chipping Campden churchyard, now almost completely overgrown by ivy, provides the essential genealogical facts.³¹ Thomas Woodward (c. 1672-1748) was the father of Edward Woodward, who died in 1766 at the age of 69,³² and, as the inscription states, "built this Tomb."³³ He also "made and erected" a tablet in the neighbouring church of Mickleton to his grandfather Thomas of Aston Subedge (who died in 1716, aged 71), which is surmounted by the masons' arms, and so proves that at least three generations of the family were in the building trade. Thomas junior took a lease of Westington Quarries in 1719 for the lives of himself, his wife and his son Robert.³⁴ But nothing is known of the latter's career, and it is Edward who appears in partnership with his father in later years.

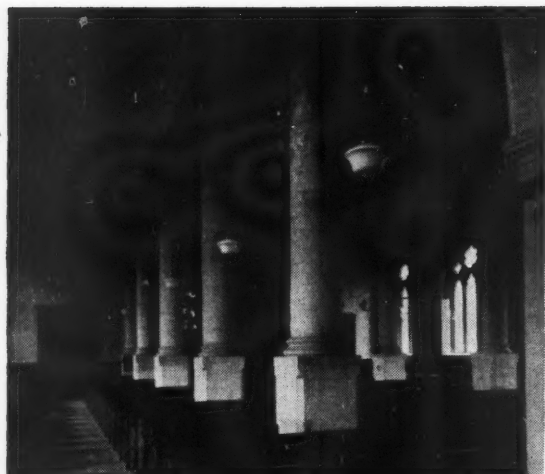
The first work which can be connected with

a Woodward is the rebuilding of the tower of Blockley Church in 1725-27. Blockley lies in a detached portion of Worcestershire not far from Campden, and the original contract, with plan and elevation attached, is among the documents from Northwick Park now in the county record office at Worcester.³⁵

It places on record that for £500 Thomas Woodward the elder of Chipping Campden, mason, will, before June 24, 1727, "in the best and most complete workmanlike manner, well and substantially erect, build, sett up and finish a new Tower at and to the parish church of Blockley . . . according to the Modell, several platforms, Draughts, or Schemes thereof hereto annexed." He was also to provide floors and bell-frames, to cover the tower with lead and to glaze the windows at his own charge, and bound himself in £1,000 for the performance of his contract. Payment was to be in seven instalments, carefully related to the progress of the work. The drawing is unsigned, but its homely draughtsmanship is just what we would expect from a master-mason like Woodward, more familiar with moulds and models as a medium of architectural design than with sections and elevations. His tower is medieval in outline, with offset buttresses, Gothic belfry windows and crocketed pinnacles. The west door and window, however, are typical Cotswold classic, and the cornice below the parapet is

also of renaissance character. The result is attractive, but scarcely distinguished, and shows that Woodward had little contact with the work of London architects. The same is true of Bedfont House in Chipping Campden, which must date from the 1720's or '30's and is said to have been built by the Woodwards.³⁶ With its Corinthian pilasters and modillioned cornice, it is the classic which its mason-architects had learned, at second or third hand, from Wren and his contemporaries. There is nothing in this Cotswold classic to show the Palladian influence of the architectural copy-books which in the second quarter of the eighteenth century were beginning to set the standard for the provincial as well as for the London builder.

Blockley tower was built by the elder Woodward alone. But in March 1729-30 he appears in partnership with his son in the contract whereby Edward and Thomas Woodward of Chipping Campden undertook to rebuild Alcester church in Warwickshire. They agreed "to rebuild or cause to be rebuilt . . . the said church of Alcester from the foundation of the same as figured in the Draught hereunto annexed of the said intended New Church . . . and build the said walls with Buttresses Battlements and pinnacles with Cross Iron bars to Each pinnacle as figured in the sd. Draught . . . to build and erect . . . new large substantial Pillars or Columns of the Doric Order



THREE WOODWARD INTERIORS Alcester church (top left) was rebuilt by Edward and Thomas Woodward in 1730-33. It combines classical columns to the nave and a Gothic exterior in a way not uncommon later on in the century, and its mason's Gothic is already more than half dilettante's "Gothick." The later interior of St. John, Gloucester (above) is purely classical. But there is more than a hint of "Rococo Gothic" in the ceiling of St. Swithin, Worcester (right).



to support the middle Isle of the said Church [whose roof was to be retained, and to rebuild the chancel] of the same height forme and proportion as the middle Isle of the said Church." They were to employ Alcester workmen, and throughout were to "be under the advise direction & Government of . . . Mr. [Francis] Smith so as to do alter or amend anything of the said worke which hee shall think fitt to have done or altered."³⁷ Francis Smith was, of course, the great master-builder of Warwick, who had designed or erected houses all over the Midlands, and was probably the most successful provincial architect of the eighteenth century before Carr of York. It must not, however, be supposed that the draughts (now lost) to which the Woodwards were to work, were necessarily drawn by Smith. At a time when there was no such thing as an architectural profession in the modern sense, it was common practice to employ a surveyor or a master-builder to see that a contract was properly performed, to decide (as the Alcester document itself provides) how far the old materials might be reused, and to measure up the work when completed, without going to him for the design, which was regularly provided by the contractor himself. At Alcester the work of

1730-3 (so far as it has survived alteration by Preedy in 1870-1) bears too much resemblance to the Woodwards' later church at Gloucester, and is too lacking in the comparative sophistication of Smith's style, to leave much doubt that it was designed, as well as built, by the Woodwards. The interior, with its "Doric" columns, does not call for much comment, but the exterior is Gothic, with large four-centered windows separated by pinnacled buttresses—Gothic which, although it must be classified as "survival," has about it nevertheless a suggestion of the thin and self-conscious medievalism of Tetbury or Stony Stratford, forty years before either of those churches was built. Here, if anywhere, the transition from Gothic survival to Gothic revival can be seen in progress.

The Woodwards' next contract was the rebuilding of all but the steeple of the church of St. John the Baptist in Gloucester. Here there is no doubt that they were the designers as well as the builders, for in 1729 the churchwardens "Payd the two Mr. Woodwards, for surveying, giving in an Estimation & draught of our church 10-6." The contract was not signed until 1731, after a year in which the churchwardens had been busy buying timber for the roof in Staffordshire, and the founda-

tions were laid on June 1, 1732. The church was reopened for worship on August 4, 1734.³⁸ The interior of St. John's, with its "Doric" columns and barrel ceiling, is very similar to that of Alcester. There is, however, no suggestion of Gothic in this town church, and its architectural features are concentrated in the east front, which presents a Venetian window and a pediment to Northgate Street. The total cost was £1,100, of which the Woodwards appear to have received about £600 for building and masonry: the timber was purchased direct from the owners by the churchwardens, and the fittings were made by Messrs. Thomas Nest and John Collett under a separate contract. The original seating has been destroyed, and the east end is somewhat disfigured by Victorian stencilling, but the admirable altarpiece given by Mrs. Bridgett Price has fortunately been spared.

St. John's was scarcely complete before the Woodwards had taken on another contract—the rebuilding of St. Swithin's church, Worcester—which necessitated their becoming freemen of the city in January 1734-5 on payment of a fine of £20.³⁹ A brass plate over the west door records that "This church was rebuilt by Ed. and Tho. Woodward in the year of our Lord 1736. Tho. Hoskyns, Tho. Wake-

man, churchwardens." Unfortunately there is a gap in the churchwardens' accounts between 1719 and 1739, but the parish chest contains the Woodward's bond in £2,000 to fulfil the obligations "mentioned in certain Articles of agreement bearing date the Thirteenth day of August last past [1738] . . . concerning the Rebuilding of the parish church and Tower of Saint Swithin, and in one deed or Instrument in writing annexed to the said Articles relating alsoe to the rebuilding the said church and bearing even date with these presents [25 March, 1734]." Attached is a receipt for £291 "in part of the Money for rebuilding St. Swithin's church," signed by Edward Woodward of Campden and dated 2 October 1736.

St. Swithin's has sometimes been attributed to Thomas White, the designer of the Worcester Guildhall, and a prolific monumental sculptor,⁴⁰ but there is nothing to show that he had any connection with its rebuilding, and the close resemblance between the east front of this Worcester church and that of St. John's at Gloucester is conclusive proof that here, as at St. John's, the Woodward's were their own architects. There is, indeed, another feature of St. Swithin's which betrays the identity of its designers. Just as Thomas Sumson reproduced Colerne tower at Dursley and Sherston, so the influence of the great tower beside which the Woodward's are buried is clearly traceable in their work. At Blockley it was the tracery of the Chipping Campden belfry windows which the elder Woodward reproduced in his own tower of 1725-7. Here at St. Swithin's the surround of the belfry windows is carried up to the parapet in the form of an ogee in a manner which immediately recalls the distinctive ogee arches which are such a prominent feature of the Campden tower.

Externally, St. Swithin's is a classical

church with a more or less traditional tower. But internally it is prophetic of the Gothic revival which was so soon to influence English taste. The fittings, happily little altered, are typical examples of eighteenth century joinery. But the plaster roof is in the form of a shallow Gothic vault, with moulded ribs resting on corbels which curiously combine Gothic and classic forms. Unfortunately the name of the plasterer is unknown, but it is difficult to believe that the younger Woodward had no hand in the design, for sixteen years later he remodelled the church at Preston-on-Stour in Gloucestershire⁴¹ in the authentic Radway-Strawberry Hill Gothic of the 1750's. The work was paid for by James West, of Alscot House, a well-known antiquary, and it was doubtless West who wanted a Gothic church in the first place. But Woodward's enthusiasm evidently somewhat outstripped his patron's intentions, when he proposed to pull down the old church altogether and rebuild it in an elaborate Gothic style which he fortunately described in some detail. "Its chief features were [to be] a square western tower with a lofty spire rising from four arched supports springing from the corners of the spire [*i.e.*, a spire like that of St. Dunstan's-in-the-East]. The whole surface of the tower and aisles to be ornamented by a series of shallow tabernacles, with pinnacles terminating in metal vanes." There was to be an aisled nave, with embattled parapets, and an altar-piece of freestone. The estimate for this remarkable building (only equalled at the time by Henry Keene's octagonal church at Hartwell, Bucks. (1758-55), with its plaster fan-vaulted roof and Gothic fittings) was £1,855. In fact, all that Woodward was allowed to do was to remodel the existing church piecemeal between 1753 and 1757. He began with the chancel,

which was rebuilt to the same dimensions as before, but with three "gothick" windows costing £90. The tower was strengthened by building up the staircase, and the nave was reconstructed with more Gothic windows "like the great one" in the chancel. The result is far less elaborate than Woodward's original proposals, but it is none the less remarkable as one of the earliest churches of the Gothic revival, and the only one of its kind known to have been designed by a mason with a traditional background, and not by an architect like Keene or by an amateur like Miller.⁴²

West had bought Alscot Park in 1749. Within a few years he had reconstructed the great hall and the south front in the Gothic manner "in the same style as the church, with plaster ogee arches, painted and gilt," and as Woodward was certainly responsible for designing an obelisk (now destroyed) which West erected in the garden in 1757, there can be little doubt that it was he who was responsible for the alterations to the house.⁴³ If so, it shows that Edward Woodward could gothicize a house as well as a church, and this is not without interest, for it was, after all, as a domestic style that the Gothic revival began. As Whitehead wrote in *The World* for 1753 "a few years ago every thing was Gothic; our houses, our beds, our bookcases, and our couches were all copied from some part or other of our old cathedrals." That was the authentic spirit of Strawberry Hill, and if Alscot Park can be attributed to Edward Woodward, then in him the transition from Gothic survival to Gothick revival is complete, and for once we have a clear case of continuity to quote in our text-books.

But one case of continuity—interesting though it may be—does not prove that it was of any real importance as a factor in the

GOTHICK ACHIEVED At Preston-on-Stour Edward Woodward was not allowed to rebuild the church to the plan he would have liked, but his existing remodelling, carried out between 1753 and 1757, is a remarkable instance of a definitely Revival church by a mason of the Survival.



history of the Gothic revival. Woodward may not have been unique, but the real architects of the earliest Gothic revival—apart from the amateurs—were men like Henry Keene⁴⁴ and James Essex ("the first professional man," according to the *A.P.S. Dictionary*, "who made Gothic architecture his study and practice") or Kenton Couse of the Board of Works, who gothicized the interior of St. Margaret's, Westminster, in 1758;⁴⁵ it was surely not they who learned Gothic from men like Woodward, but Woodward who must have learned Gothick from them in the sixteen years which elapsed between the church at Worcester and the work for West at Alscot Park and Preston-on-Stour. However this may be, it is probably in connection with the architects rather than the masons that further research into the early history of the Gothic Revival can most profitably be directed. But when that first chapter on the survival of Gothic comes to be rewritten, Edward Woodward will deserve at least a footnote to himself.

¹ Kenneth Clark: *The Gothic Revival* (1928), p. 19.

² R. H. Newton: *Town & Davis Architects* (Columbia University Press, 1942), pp. 211-12.

³ C. L. Eastlake: *A History of the Gothic Revival in England* (1872), p. 4.

⁴ *The Gothic Revival*, p. 18.

⁵ Quoted by W. S. Lewis: "The Genesis of Strawberry Hill," *Metropolitan Museum Studies*, V (1936), p. 65.

⁶ P. Toynbee: *Strawberry Hill Accounts* (1927), p. 153.

⁷ See numerous references to Gayfere in Jelfe's letter-book in the British Museum (Add. MS. 27587).

⁸ Illustrated in *Arch. Rev.*, vol. 60, pp. 76, 77.

⁹ Westminster Abbey Muniments, 24836 (Paper Book of "Workmen's Bills to the Jerusalem Chamber, and Cloister Gates, 1769").

¹⁰ See *Records of Bucks II* (1863), p. 8.

¹¹ *The Gothic Revival*, pp. 14, 15.

¹² Described and illustrated in *Proc. Soc. Anti-quaries*, 2nd Series, XXVI (1913-14), pp. 121 ff.

¹³ See Hanson: "Halifax Builders in Oxford," *Trans. Halifax Antig. Soc.* (1928).

¹⁴ W. G. Hiscock: *A Christchurch Miscellany* (1946), p. 208.

¹⁵ *Archæologia Cantiana*, XXVIII, pp. 10-13.

¹⁶ Knoop & Jones: *The London Mason in the Seventeenth Century* (1935), pp. 10-11.

¹⁷ See E. Jeffries Davies in *Journal of the Royal Society of Arts* (1935), p. 909.

¹⁸ In a letter to the Dean of Westminster printed in *Wren Society*, XI, p. 33.

¹⁹ A. Dale: *James Wyatt* (1936), p. 2.

²⁰ The last two figures are almost obliterated, but 1741 appears to be the most likely reading, and is consistent with an entry in the Parish Register under 23 Oct., 1741: "Thomas Symson buried."

^{20a} Although, as F. J. Allen observes in *Great Church Towers of England* (1932), p. 111, the parapet and pinnacles of Colerne "appear to have been restored," Buckler's drawing of c. 1809 in the B.M. (Add. MS. 36,391, No. 59) shows that the design of the parapet has not been altered since his time; the present conical termination to the stair-turret has, however, been substituted for the simple pinnacle shown by Buckler.

²¹ J. H. Harvey: *Gothic England* (1947), pp. 24, 97.

²² A pyramidal tomb in Painswick churchyard commemorates "John Bryan late of this Town Carver," who died in 1787, aged 71, and the name is frequently met with in Gloucestershire building accounts of the eighteenth century.

²³ From a transcript of the original contract in a MS. history of Great Witcombe in possession of Mrs. Hicks Beach, of Witcombe Park, by whose kind permission I was allowed to copy it.

²⁴ The date 1752 painted on the south side of the tower is that of the sundial.

²⁵ See his deposition in Gloucester Public Library MS. R.R. 300, 1. For the story of the building of Tetbury church see Marcus Whiffen in *THE ARCHITECTURAL REVIEW*, July 1944, and H. M. Colvin in *Country Life*, 27 Dec., 1946 (correspondence).

²⁶ Another late Gothic tower of this group is that of Kingston St. Michael, Wilts. (1725), but as no parish records of this period have survived, nothing is known of its builders.

²⁷ The local name for Sanderson Miller's Gothic tower at Edgehill (completed 1750), described by E. A. Greening-Lamborn in "The Shields on Ratley Roundhouse," *Notes and Queries*, vol. 184 (1943), p. 157.

²⁸ Architect of All Saints Chapel (1790-4, destroyed 1942), and St. James's Church (1768-9, with T. Jelly), both Gothic.

²⁹ A tablet in the church commemorates "Mr. John Ford Builder / of the City of Bath / died 6 September, 1787 / Aged 56 years. / Whose abilities and Enterprise / In Business in a great Measure / Contributed to the Erection / of the Handsome Buildings / and Streets of that / City" also his son

John Ford statuary who died 23 Feb., 1803, aged 67. In the churchyard there is a slab to "Stephen Ford, of the City of Bath Builder" who died 9 March, 1785, aged 72.

³⁰ *Journal of Visits to Country Seats* (Waipole Soc. XVI, 1927-8), p. 76.

³¹ The inscriptions are given by P. C. Rushen: *History of Campden* (1911), p. 141.

³² His will (P. C. C. Tyndall 165), in which his (eldest?) son Thomas is literally "cut off with a shilling," adds little to our knowledge of the family.

³³ Edward was also a monumental sculptor, and his tablets, signed "Edwd. Woodward of Campden Fecit," can be seen in many Cotswold churches. I have noted the following: Alcester: John Brandis d. 1724, and probably the unsigned William Halford, d. 1731; Blockley: Edward & Jane Croft; Mickleton: Graves monument, erected 1721; Pebworth: Robert Martin, d. 1720. At Chipping Campden the unsigned John Martin d. 1757 may be his work. The possibility cannot be ignored that this Edward Woodward who was carving monuments as early as the 1720's was not the same as the Edward Woodward whose work is described in this article. Of this, however, there is no genealogical evidence known to the writer, though Edward (died 1766) had a son and grandson with the same Christian name.

³⁴ Rushen, p. 38.

³⁵ Bundle 31/1. "The Rebuilding of Blockley Church Tower" is described by E. A. B. Barnard from the original documents in *Evesham Journal*, 8 April, 1939, p. 3.

³⁶ Rushen, p. 141.

³⁷ Original contract among parish records of Alcester.

³⁸ From C. H. Dancey's transcripts of the Churchwardens' Books in *Gloucester Parochial Records*, vol. III, pp. 28 ff. (Gloucester Public Library MS. 14261).

³⁹ See the *Corrigenda et Addenda* to W. R. Buchanan-Dunlop: "Thomas White of Worcester," *Trans. Worcestershire Arch. Soc.* (1943), with reference to the City Chamber Orders.

⁴⁰ For White see reference in previous note, and Marcus Whiffen in *Country Life*, 7 December, 1945. There is a good account of St. Swithin's, with plan, by G. Cogswell in *Associated Architectural Societies' Reports*, XXXII (1913-14).

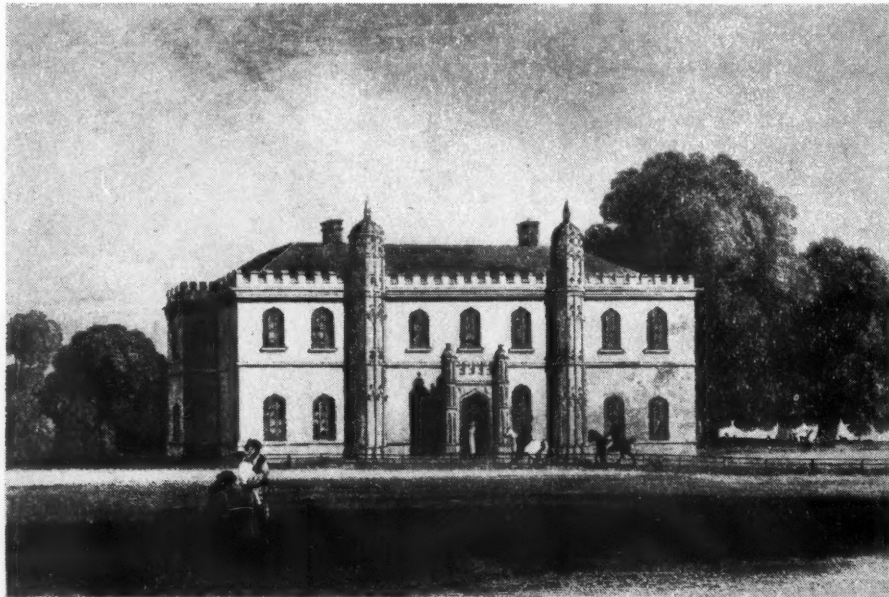
⁴¹ Now Warwickshire.

⁴² The rebuilding of Preston Church is described by J. H. Bloom: *History of Preston-upon-Stour* (1896), pp. 78-9, from the documents at Alscot.

⁴³ Bloom, pp. 13, 71, 78.

⁴⁴ For Henry Keene and the Gothic Revival see *Country Life*, 27 April, 1945, p. 738.

⁴⁵ Parish Records at Westminster City Library. Couse's work has been destroyed.



THE TRUE RUST Alscot Park was largely Gothicized for the antiquary James West in the 1750's. The work was almost certainly carried out by Edward Woodward, who had remodelled Preston-on-Stour church for him, so that here we have a mason of the Survival working in the sphere of domestic architecture, in which the Revival began. The porch was added by Thomas Hopper. (Engraving from Neale's Views of Seats.)

HAZARDS or the art of introducing obstacles into the urban landscape without inhibiting the eye



The drawings are by Gordon Cullen



The war-time removal of railings from the London Squares may have swept away the barricades of privilege, but it has equally effectively destroyed the public's enjoyment of the squares. Without some form of obstruction, whether by railing, water, shrub, ditch, or hillock, it is impossible to prevent the maraudings of the short-cutter, seen on the left. The problem is how to preserve the amenities of these spaces without stringing them with wire and padlocks. Enter the Hazard. The Hazard can provide any desired visual effect as the illustrations on the following pages show, even such a visual subtlety as the once hidden street vista in the photograph above (see the Concealed Hazard, page 102).

Materials of the visual planner are lumps of rock, cement, wood, earth, metal, tar, glass, in various states, processed or otherwise, and hills, water, people, the stuff of which the world is made. His urban job is so to dispose and relate these lumps of matter as to create out of the demands of the human race for shelter and communications, leisure and ceremonial, a humane kind of urban scenery, a humanized townscape. Although many of his problems may be large ones dealing with such matters as the siting of traffic arteries, their realization depends on more nuances of design, a truth which perhaps amongst visual planners only architects perceive in all its sinister meaning. Selected here in illustration of this truth is a problem described as the problem of the HAZARD, a problem dismissed by most planners as a mere matter of fencing, hedge or railing, wire or yew. Thus regarded the problem seems simple, but as realized in our cities the insensitive borough engineer's methods of enclosure are the most common, and most fruitful sources of visual crime. One of the war's advantages was that the removal of many kinds of not strictly essential fencing had something of the effect of the removal of restrictions; they opened out prospects of a more freely flowing world. Today as the restrictions pile up again the authorities are beginning to remember amongst other things their railings, and this makes the moment propitious for the consideration of what might be called the *theory of hazards*. Fencing is a way of creating hazards, but hazards are of many kinds. Sometimes they are merely moral, as when a piece of mown grass is surrounded by a stone curb with the unwritten command "Keep off." Where space and distance are wanted this is an acceptable form, though the acceptance of the moral hazard demands a society with a desire to honour conventions. More practical expedients are the ha-ha and the water hazard, but there are cases in which the practical as well as the scenic requirements demand a visual obstacle or a sense of enclosure, and here railings or walls may actually be an asset to the scene. The notes that follow try not to lay down general principles but to explore the visual possibilities of the hazard regarded as a component of the urban scene and as one of the many tricks in the box of tricks of the visual planner.



The False or Pseudo-Hazard

A short walk through any town will bring to light countless existing hazards. They may be typified under three main headings: 1, physical. 2, part moral—part physical. 3, moral. A few examples: under 1, hedges if thick, walls and fences, tall railings and stretches of water if too wide to jump. Under 2, the bollard—partly moral for bicycles; the ha-ha, low wall, chain railing or wire—moral for all but invalids. 3, the Belisha crossing—moral for, and by implication complimentary to, the motorist, and such notices as “keep off the grass” and where it is unenclosed “private property.” The same walk will disclose as many half-hearted and ineffectual hazards as decisive and successful ones. This page illustrates just a few of them.



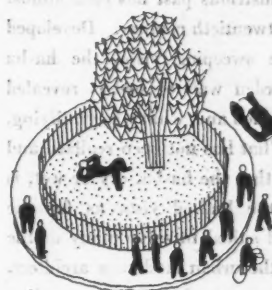
1, Where once a raised shrubbery concealed the railing for those on the inside, dogs and short-cutters have done their worst. The moral of this is, if you want the hazard by raised shrub, plant it thick and clip it so that it stays thick. Most of the thin privet in our parks and squares should be cut down to a few inches from the ground. It renews itself at once. 2, This low stone wall may have served to boost civic pride,

but since no hazard is needed (the wide grass strip already there is fully as effective and much pleasanter) the money might have been spent to better advantage. 3, It was left to the age of austerity to protect its once graceful urban squares with chicken-wire. This almost needs a new heading of its own in the categories of hazards—the actively repellent. Some of it, however, is only temporary.

THE RAILING HAZARD

The contribution that the English town square has to make to our lives today was explored in a previous article.* Since salvage-time when nearly every square lost its original cast-iron railings, many changes have occurred. First there were the shelters, surface or semi-submerged, then grass gave way to large tracts of mud. With the war's end the forces of privilege once more asserted themselves in the form of chicken wire and chestnut palings. In many cases, however, although ownership was unchanged, those for whom the privileges were kept had gone. Offices, embassies, clubs, schools and flat-dwellers had replaced them. In very few cases have the owners yet caught up with the new requirements that a changing society and its consequent shifts in urban population have brought about. Once the new demands on squares are realized, certain problems will arise as to their planning and upkeep. On the following pages proposals are made which closely affect both these problems.† This page goes

*A Square for Every Taste. THE ARCHITECTURAL REVIEW, October, 1947.
†A further article will consider the more detailed problems of planting and layout.

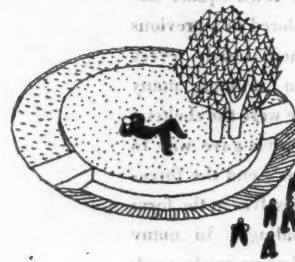


Below, part of the be-railinged sweep of Bedford Square. A good example of a physical hazard, well-designed and, in this case, well worth retaining.

to show that the suggestions put forward here are based not on an overriding dogma, but on a desire to see things as they are. In several places the enclosed and guarded square still fulfils its function. Where this is the case, it should continue to be allowed to do so, and for this purpose the simple, spiky, cast-iron railing could hardly be bettered. Its clean sweep and repetitive rhythm has an exciting architectural quality, and the glimpses it affords and guards, of emerald green lawns are as refreshing to the passer-by as to those who live overlooking them.



This hazard with an illustrious past has been almost entirely ignored in the twentieth century. Developed for enjoyment of the sweeping vista, the ha-ha substituted for the garden wall or hedge, revealed that all nature was a garden and, what was gratifying, a *jardin anglais*. What has not been realized and acted upon is the fact that the ha-ha, dry or wet, is equally effective for the limited vista as for the distant one. It is well suited to solve many of the problems which beset the urban landscape architect. For the unenclosed square, where the concealing mystery of the shrub or raised mound is not desired, it reveals the prize, while at the same time enhancing its appeal, by making it relatively hard to attain.

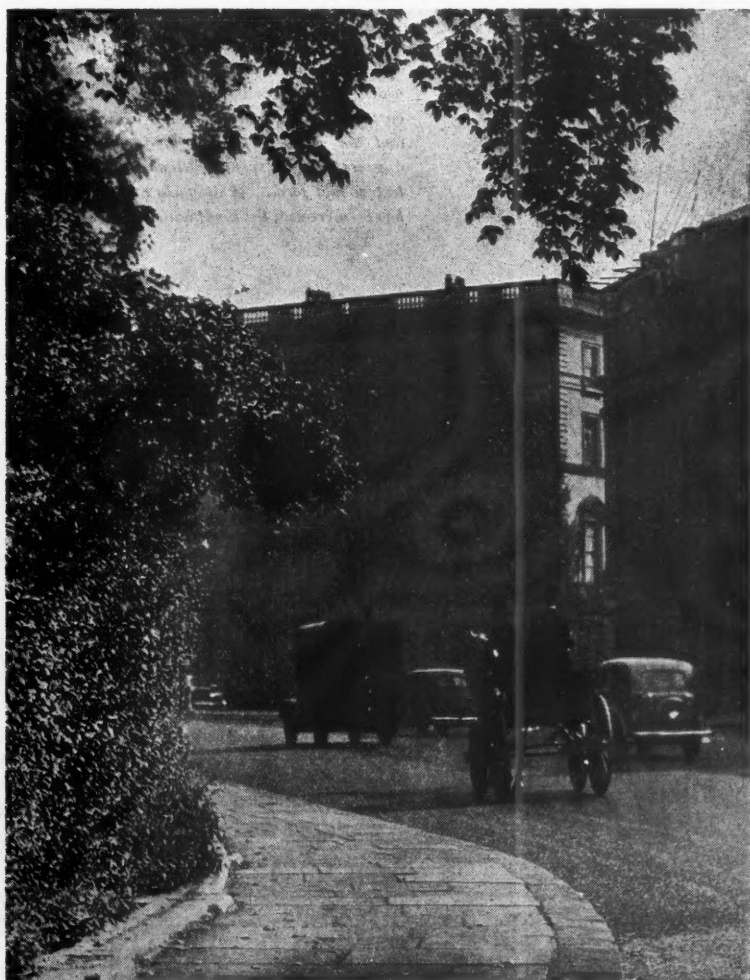
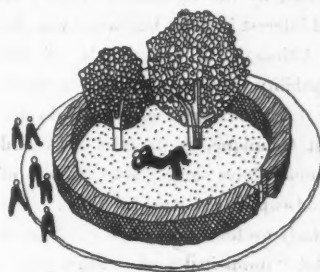


Below, this canalized brook at Fountains, although not strictly a ha-ha, is in the same category and serves exactly the same purpose. In most ways it is better suited for urban use, at least in England, where despite a growing social consciousness the ha-ha might still prove too attractive a receptacle for tin-cans and toffee-papers as well as a trap for toddlers and drunks.



THE PLANTED HAZARD

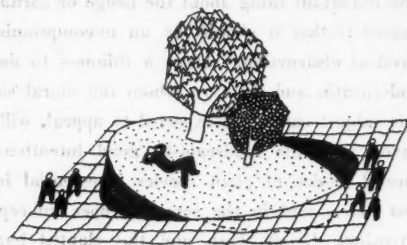
The important thing about the hedge or shrub as a hazard is that it should be an uncompromisingly physical obstruction. Allow a thinness to develop underneath, and dogs, to whom the moral side of this subject cannot be expected to appeal, will play havoc with the landscapist's good intentions. A careful choice of plant species is essential in the first place, and in the second proper upkeep and attention. Given these, and the planted hazard's thick green walls will provide that contrast of the square's secluded inner world with the outer expanses of road and traffic, and that surprise at whatever the landscapist may have provided inside them; both of which effects are an important part of the English landscape technique.



On the left, Belgrave Square after the removal of the railings and before the austerity fencing was put up. This good thick "woodland" hedge, kept in check by the railings and growing out above head level would have been quite an adequate safeguard—so long as it had received the proper attention—to the amenities of the square. It made at the time a real contribution to urban landscape — thick planting, growing out and not trimmed to the municipal gardener's conception of the ornamental.

THE CHANGE OF LEVEL HAZARD

A device much used by the eighteenth century to provide additional interest in a flat landscape was the raised hillock. Although in the hands of the imitators of Capability Brown it tended towards monotony owing to a similarity of outline in his mound-clump-belt technique, St. James's Park and Green Park in London have some good examples of imaginatively landscaped changes of level. The mound is particularly useful if an area is endangered by the ornamental "municipal park" atmosphere. As a hazard the change of level is perhaps the most subtly persuasive of them all, guiding the eye and the foot where the landscapist wills, and substituting for the keep-off notice a bank which most people in a city will avoid like the plague.



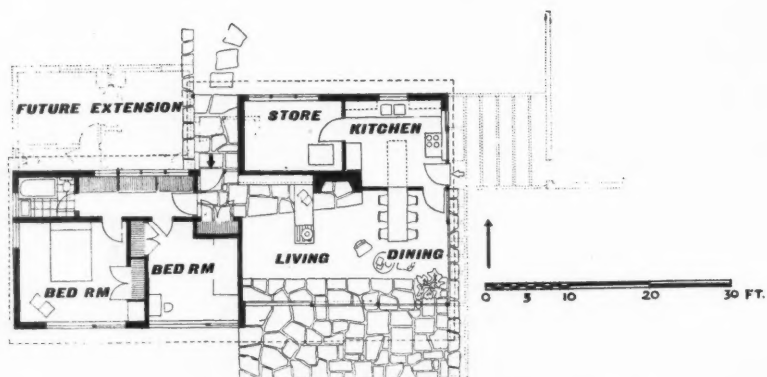
Previous illustrations have shown singly a few of the immense variety of hazards at the beck and call of landscapists. It is not likely, however, that hazards will be used just one at a time like this. Their intricacy in which lies their special visual appeal, is only realized in juxtaposition. This drawing shows a piece of urban park landscape which incorporates the changes of level described on this page, as well as the low wall, the bollard and the shrub. The call of function is thus answered by the visual delights of contrast in texture and form. A uniquely English landscape has been created, the kind that solicits exploration.





TWO HOUSES BY EARL KOCH

HOUSE AT WESTON, MASSACHUSETTS



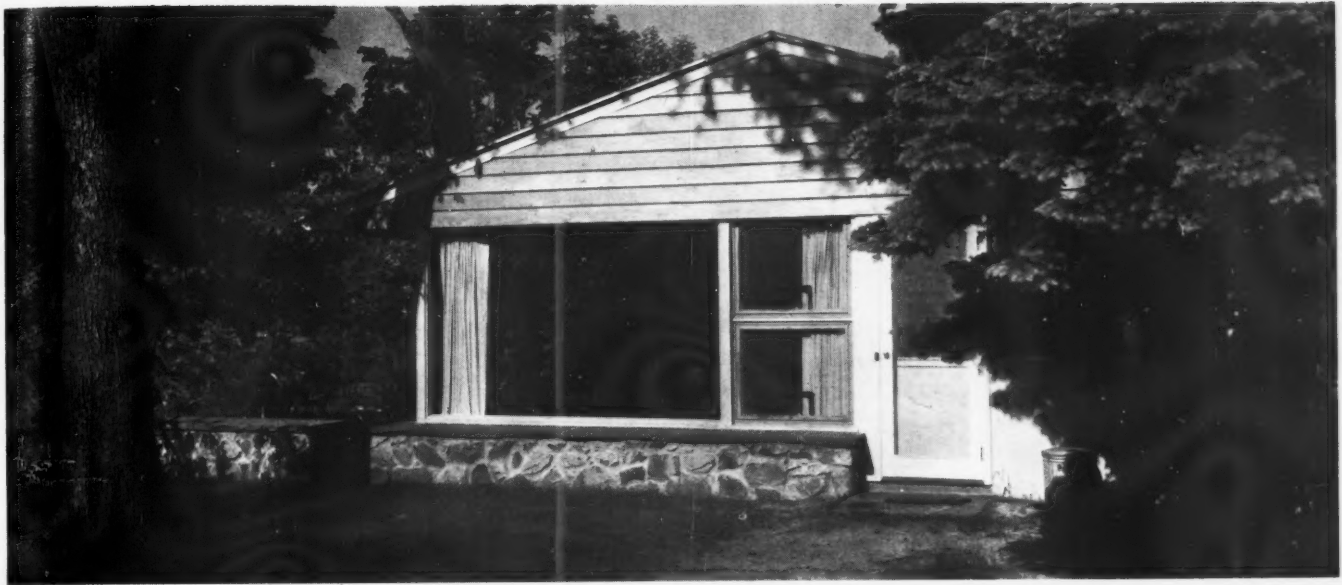
This house has been designed to permit indoor-outdoor living as far as is feasible in the climate of New England, with its wide range of temperatures. Exterior walls are of concrete block construction, with a one inch air space and wood furring waterproofed with asphalt paint. Internally, walls are plastered; floors are concrete, painted with dark green rubber paint; outdoor paved areas are Vermont slate. The roof is asphalt-covered. Stones for the foundation and for the fireplace and chimney were taken from the site. In the living room two of the three large panes of the glass wall are fixed and one slides; cross ventilation is provided by two small windows flanking the kitchen door. Heating is by coils within the concrete floors. The dining table slides between the living room and kitchen to facilitate laying and clearing.

1, south side of the house with the glass-walled living room. 2, east elevation, with kitchen entrance. 3, the living room.



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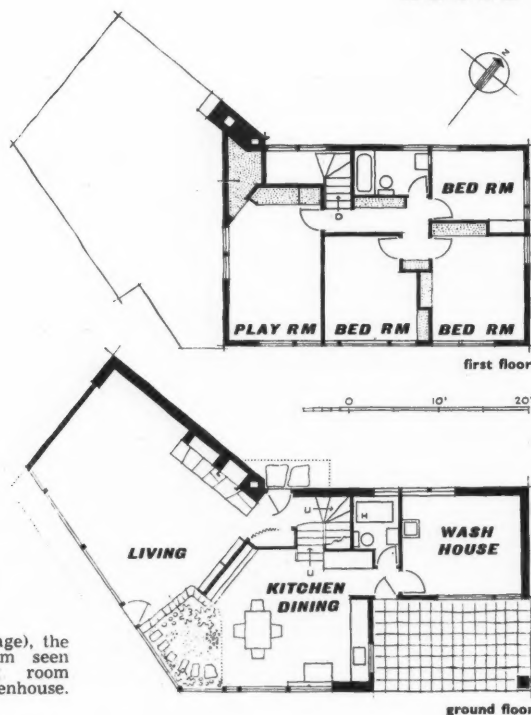


4, the house from the south-east, showing its relation to the trees on the site. 5, the living room, with the sliding dining table half out.



4
5

HOUSE AT LINCOLN, MASSACHUSETTS



1 (on the facing page), the kitchen-dining room seen from the living room through the greenhouse.

The plan of this house, which occupies a site on a wooded New England hillside, has been determined by two main factors—accommodation to the contours of the ground and the wish to orientate the different rooms for varying amounts of sunlight penetration. The most unusual feature is the irregularly shaped greenhouse connecting the single-storey living-room portion with the two-storey part lower on the hillside. The owner of the house is an expert gardener, and this greenhouse, opening up into rooms on two sides, is designed to bring the lushly planted hillside indoors. In the combined kitchen and dining room the dining table area is illuminated at night by a spotlight, in such a way as to leave the kitchen part in shadow. The need for economy restricted the planning of the house in one or two respects; for instance, the entrance hall area would have been larger had funds permitted. The greater part of the house is of standard frame construction on a concrete slab foundation, but the kitchen-laundry section is of cement blocks. Heating throughout is by floor panels.



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2, the house from the south. 3, the greenhouse interior, looking from the kitchen-dining room up to the living room, which is at a higher level.

India's four great observatories were built by Maharajah Sawai Jai Singh II of Jaipur in the eighteenth century. In the following article the Astronomer Royal describes the purpose of the giant masonry instruments and shows why, though plausible in theory, they are inherently unsound in practice.

The Astronomy of Brolidingnag

by Harold Spencer Jones

THERE are in India, at Delhi,* Jaipur, Ujjain and Benares, four observatories, each provided with large massive masonry instruments, which are unique in their conception and not paralleled elsewhere. They are objects of curiosity and interest to visitors and stand today as monuments to a remarkable man—the Maharajah Jai Singh II of Jaipur.

Jai Singh was born in 1686, the year in which Newton completed the *Principia*. In 1699, a few years before the death of the Mogul Emperor Aurangzeb, he succeeded to the Amber territory (now Jaipur State) where he founded the city of Jaipur as a new capital. In 1719 he was appointed by the Emperor Muhammad Shah governor of the province of Agra and soon after to Malwa. He died in 1743. His reign coincided with a dark period in Indian history, during which anarchy and warfare were prevalent. But Jai Singh was a statesman rather than a soldier and this troubled period was one of progress in Jaipur. Caravanserais were erected in many of the provinces and the capital became a centre of learning. Jai Singh took a special interest in astronomy and acquired a thorough knowledge of its principles. He found that the astronomical tables then in use were defective and decided to undertake the task of preparing improved ones. He set about this task in a thorough manner. He collected and studied all the available astronomical books, including Hindu, Muslim,

1, interior of the Ram Yantra, at Delhi. This instrument consists of two buildings with central pillars. The height of the walls and pillars is equal to the inside radius of each building. The walls and floor are graduated to read altitudes (in scales of tangents) and azimuths. 2, looking down on to the Jai Prakas, "the crest-jewel of all the instruments," from the Samrat Yantra—a vast equinoctial sundial—with the Ram Yantra beyond. 1



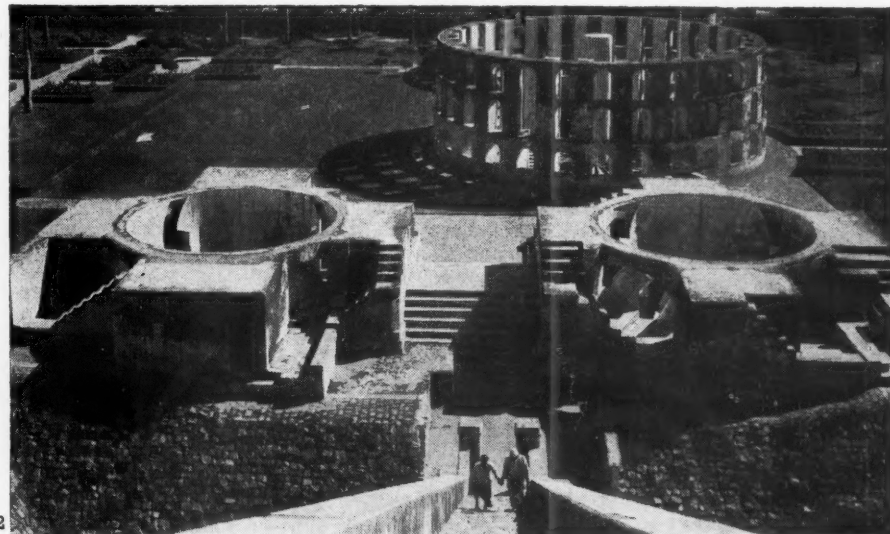
and European: some of these he had translated, including Ptolemy's *Almagest*. He sent some of his workers to foreign countries to collect information and invited several European priests interested in astronomy to Jaipur.

In 1710 (or, according to another authority, in 1724) he built a large observatory at Delhi, furnished with instruments of his own design, based on the ideas taught by the Muslim astronomers. There he made observations for seven years with a view to preparing a new star catalogue. Afterwards he built four other observatories at Jaipur,

Ujjain, Benares and Mathura. The last of these has been destroyed but the others remain.

The preface to the astronomical tables prepared under the direction of Jai Singh (called the Muhammad Shah tables) gives the reasons which caused him to undertake the construction of large fixed instruments. He had come to the conclusion that a satisfactory degree of accuracy could not be obtained with armillary spheres and astrolabes, because of their smallness, the impossibility of dividing them into minutes, the wear and play in their axes, the eccentricity of the centres of the circles, and the instability of their planes. He therefore invented instruments of large size, made of stone and lime, carefully adjusted to the meridian and to the latitude, and accurately divided to minutes, which should have perfect stability and be entirely free from the defects of the usual small instruments made of brass.

The arguments in favour of large instruments are plausible but are inherently unsound. It is interesting to compare the parallel developments in Europe in the time of Jai Singh. There, improvements in the accuracy of observation were being secured by the use of telescopic sights and by the application of the vernier and the micrometer. It was recognized that errors of adjustment could not be avoided; but by determining these errors, their effects could be allowed for. With large fixed instruments, such as those constructed by Jai Singh, errors of inclination and of azimuth could neither be corrected nor determined and their effects on the observations became systematic in nature.



*An earlier article described the instruments here: *Delhi Observatory, the Paradise of an early Cubist*, by Penelope Chetwode. *THE ARCHITECTURAL REVIEW*, February, 1935, pp. 57-60.

It is stated in the preface to Jai Singh's tables that he himself devised the three principal instruments, the Samrat Yantra (Yantra means an instrument), the Jai Prakas, and the Ram Yantra. Examples of the first of these are at Delhi, Jaipur, Ujjain, and Benares; of the other two at Delhi and Jaipur.

The Samrat Yantra, 3, or supreme instrument, is the most important of the instruments. It is, in effect, a gigantic equinoctial sundial, with a massive masonry gnomon, triangular in shape, standing in the plane of the meridian and with its hypotenuse parallel to the earth's axis, so that its inclination to the horizontal is equal to the latitude. The length of the hypotenuse of the Delhi instrument is 128½ feet. At Jaipur there is a still larger one, with a hypotenuse of 174 feet, as well as a smaller one, 5. On either side of the gnomon extends a quadrant of a circle, whose centre is on the edge of the gnomon, parallel to the plane of the equator and several feet in width, supported by masonry. The radius of the quadrant of the Delhi instrument is 49½ feet. Each edge of the quadrants is graduated in hours and minutes, as well as in degrees. The graduations on these quadrants serve to measure hour angles, by the position of the shadow of the gnomon thrown by the Sun or Moon; and, in the case of the Sun, give a measure of apparent solar time. Each of the two edges being graduated, the instrument is in effect duplicated. The edges of the gnomon have two scales of tangents, one from the centre of the lower edge of the quadrant upwards and the other from the centre of the upper edge of the quadrant downwards. These scales serve to measure north and south declinations of the Sun respectively by observing at noon the position of a rod, which can be moved along the gnomon, when its shadow coincides with the appropriate edge of the quadrant.

The Jai Prakas, 2, which is described as the crest jewel of all the instruments, is a sort of armillary sphere. In principle it consists of a hollow hemisphere, on whose concave surface azimuth lines, altitude circles, the tropics, declination parallels, and circles of the sign of the zodiac have been marked. Cross wires are stretched from north to south and from east to west across the rim of the instrument. The shadow of the intersection of the wires, falling on the concave surface, indicates the position of the Sun. The positions of other heavenly bodies (altitude and azimuth, or declination and hour angle) can be observed by placing the eye at the graduated point which is in line with the body and the intersection of the wires. In order that the eye can be placed in the proper position six passages are cut into the hemisphere and the instrument itself is duplicated, the passages in either bowl corresponding to the portions between the passages in the other.

The Ram Yantra is supposed to have been named after Ram Singh, a predecessor of Jai Singh's. It consists of two large complementary buildings, each cylindrical in shape,

open at the top and having a vertical circular pillar, of the same height as the building, at its centre. The height of the walls is equal to the inside radius of the building; in the Delhi instrument this is 24½ feet, the diameter of the pillar being 5 feet 3 inches. The walls and floor are graduated to read altitudes (in scales of tangents) and azimuths. To facilitate observation, the floor is cut up into thirty sectors, each of six degrees angle, supported on pillars three feet high, so that the observer can place his eye at the level of the floor. The graduated walls are broken by openings, at the sides of which are notches in which sighting bars can be placed. The pillar is graduated by vertical stripes, each six degrees in width. The sectors in the floor and the openings in the walls are complementary in the two buildings. The Delhi instrument is shown in 2, the central pillar and the sectors in the floor being shown in 1.

A fourth instrument at the Delhi Observatory is known as the Misra Yantra or mixed instrument, 4. It was probably erected after the time of Jai Singh by his son, Madhu Singh, who inherited his father's love of science. There is no similar instrument at any of the other observatories. It is a curious and complex instrument. The middle of the building, known as the Niyat Chakra, consists of a central gnomon with two graduated semicircles on either side. These semicircles lie in planes inclined to the plane of the Delhi meridian at angles of 77° 16' W, 68° 34' W, 68° 1' E, and 75° 54' E and correspond to meridians at places whose longitudes differ from Delhi by these angles. According to tradition these correspond to the meridians of the observatories at Greenwich and Zurich, of Notkey in Japan where there is said once to have been an Observatory, and of Serichew, a town in the Pic Island in the Pacific. This interpretation is doubtful. The Greenwich Observatory was indeed founded in 1675, at least 35 years before that at Delhi, but the Zurich Observatory was not founded until 1759. Nor does there seem to be any particular reason why the places named should have been selected.

On either side of the Niyat Chakra is half of an equinoctial dial constructed on the same principle as the large Samrat Yantra. On the east wall of the building, which lies in the meridian, is a graduated semicircle, called Dakshino Vritti. It is used to find the altitude of a heavenly body at meridian transit, by viewing along a thread, held by an assistant, from a central peg, the thread being moved until it lies along the line of sight. The north wall of the Misra Yantra, which is inclined to the vertical at an angle of 5 degrees, is marked with a large graduated semicircle, whose centre is at the top. This is called the Karka Rasi Valaya or Circle of the sign of Cancer. When the Sun is in Cancer its meridian zenith distance at Delhi is 5° 10' so that the Sun then shines over the north wall for a short period, the shadow of a pier at the centre of the graduated circle then falling on the circle.

In addition to the instruments already described, mention may be made of the

Rasi Valaya Yantra at Jaipur, and of the Nari Valaya Yantra at Jaipur, Ujjain, and Benares, neither of which is to be found at Delhi. The Rasi Valaya Yantra, or ecliptic instrument, which is probably of later date than Jai Singh, is really a collection of twelve dials, one for each sign of the zodiac. Each dial is constructed after the same design as the Samrat Yantra, but the gnomons and quadrants are differently oriented. The quadrants of a particular sign lie in the plane of the ecliptic when that sign is on the horizon and the edge of the gnomon then points to the pole of the ecliptic; the instrument then gives the sun's latitude and longitude. Nine of these instruments at Jaipur are shown in 5; beyond them is the Jai Prakas and the small Samrat Yantra. In this same plate can be seen the circular southern face of the Nari Valaya Yantra. This instrument consists of a masonry cylinder, about 10 feet in diameter, with its axis horizontal and in the plane of the meridian. The two faces are parallel to the plane of the equator and form dials, which are graduated in hours and minutes.

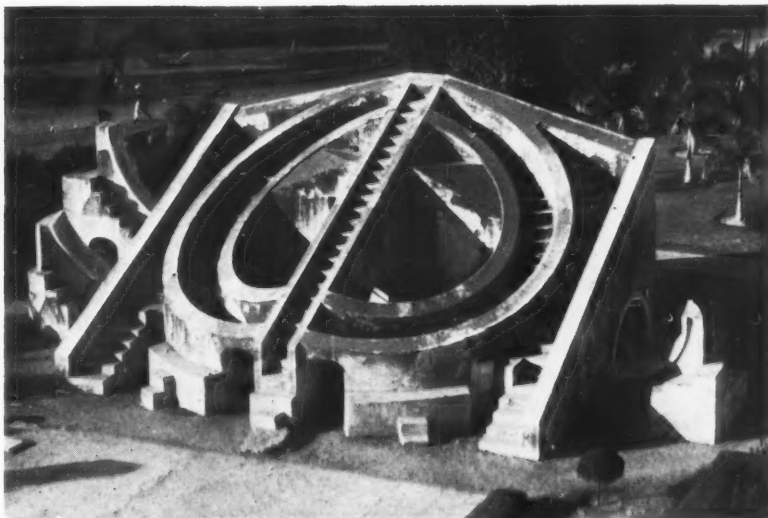
The astronomical work of Jai Singh was out of the line of development of Hindu astronomy and owed nothing to Hindu tradition. The Hindus, in general, were not observers and showed no interest in making observations of the heavenly bodies. Their work was restricted mainly to calculating positions of the planets, eclipses, etc., on the basis of the rules and elements given in their approved works. Jai Singh does not appear to have made much direct use of the works of the Hindu astronomers. His inspiration was Moslem and Arabic, and particularly Ulugh Beg and his observatory at Samarquand. The Arabs were the inheritors of the Greek tradition; like the Greeks, but unlike the Hindus, they were interested in verifying, correcting, or improving results which had previously been obtained. Jai Singh brought up to date Ulugh Beg's catalogue of stars and his instruments were designed according to the principles taught by the Muslim astronomers. The purpose of his observations was primarily the rectification and improvement of the calendar, including the prediction of eclipses. It is somewhat surprising that with his European contacts he was so little influenced by the newer developments in astronomy in Europe; this may be due in part to the fact that he had built the Observatory at Delhi and was well embarked upon his observations before he became acquainted with these developments. It has been suggested that his indifference to European developments may be attributable to the fact that his European advisers were Catholic priests; the works of Copernicus and Galileo had been placed on the Papal Index and Catholic priests would not on that account have been anxious to spread their teaching abroad. Jai Singh therefore failed to establish a living school of research and, in the troubled state of the country, the stimulus which he had given to astronomical observation did not survive for long after his death. His work was, nevertheless, an outstanding development in Hindu astronomy.



3

The Astronomy of Broddingnag

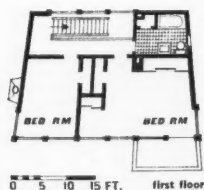
3, the Samrat Yantra, or supreme instrument, a gigantic equinoctial sundial, standing in the plane of the meridian, with its hypotenuse parallel to the earth's axis, so that its inclination to the horizontal is equal to the latitude. 4, the Misra Yantra, or mixed instrument. This instrument whose complex structure serves several purposes, is unique. 5, the Rasi Valaya Yantra, or ecliptic instrument, a collection of twelve dials, one for each sign of the zodiac. This shows nine of the instruments at Jaipur, beyond them is the Jai Prakas and the small Samrat Yantra. The instrument with the circular face is the Nari Valaya Yantra.



4



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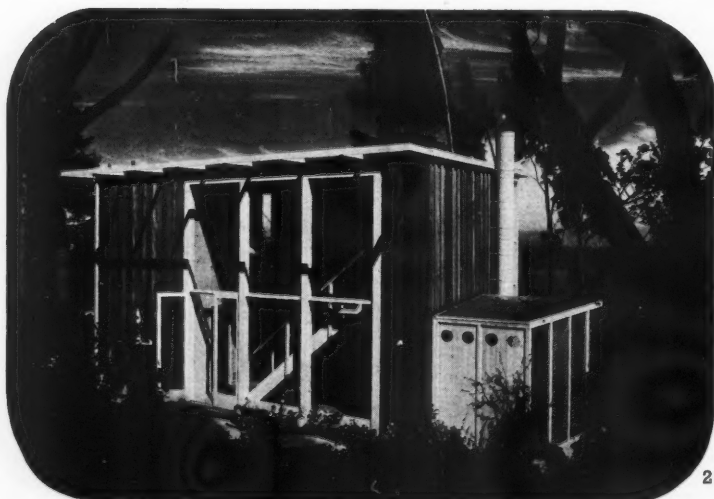
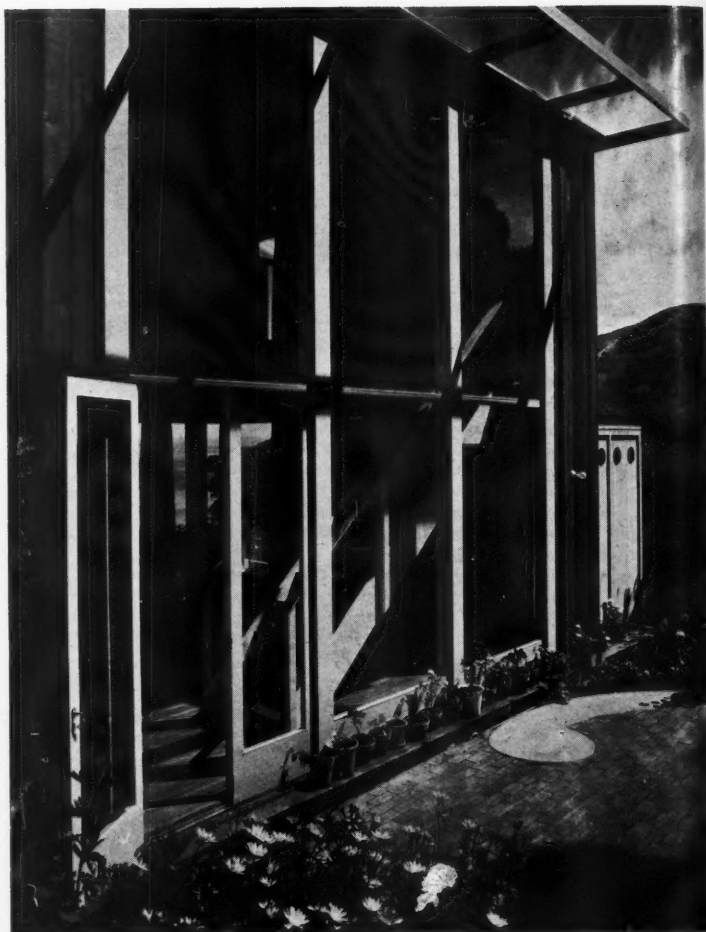


1, the glass wall to the staircase hall. 2, the north-west side of the house from the hillside. 3 (facing page), the main entry, with living room on the right.

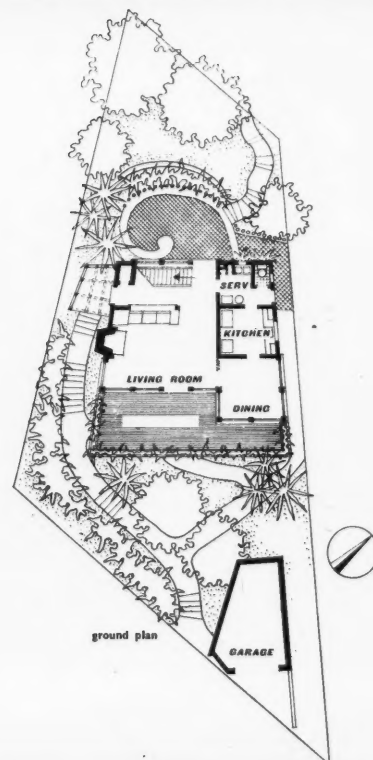
HOUSE IN CALIFORNIA

GARDNER A. DAILEY: ARCHITECT

This house, at Sausalito, occupies a steep and narrow site overlooking San Francisco Bay and has views at both front and rear, the former over the bay and the latter on to a small garden and the wooded hillside. The plan has been determined by the shape of the site, with the north-east and south-west sides of which the end walls of the house are parallel. The structure is timber-framed and faced with vertical weather-boarding of California redwood; window frames, roof and pergola are painted. Doors are hung directly on studs. The object of the circular holes in the entrance porch is to cut down the resistance of a porch enclosed on three sides and at the top to the gusty winds of the locality. The large expanse of glass on the staircase side of the house does not entail lack of privacy, since the bank which this faces cannot be overlooked.



2







HOUSE IN CALIFORNIA 4, looking across the living room to the staircase hall; the front door is on the left. 5, the stairs from the main entry.

SOLSTICE OF THE SUNFLOWER



One of the last of Paul Nash's paintings, number two in a sequence of four entitled 'Sunflower and Sun' which Nash did not live to complete. (See note on the opposite page.)

SOLSTICE OF THE SUNFLOWER

This month there opens at the Tate

Gallery an exhibition of the work of Paul Nash, in which the painting reproduced opposite will be included.

It was one of the last paintings Nash ever did. Entitled 'Solstice of the Sunflower' it was the second picture in a planned sequence of four called 'Sunflower and Sun'. Nash only lived to paint two of them, the other one being 'Eclipse of the Sunflower'. (The titles of the remaining two were to have been 'The Sunflower Rises' and 'The Sunflower Sets'.) Nash himself wrote of this sequence: "Sunflower and Sun" consists of four pictures in which the image of the Sunflower is exalted to take the part of the Sun.

In three of the pictures the flower stands in the sky in place of the Sun. But in the Solstice the spent Sun shines from its Zenith encouraging the Sunflower in the dual character of Sun and fire wheel to perform its mythological purpose. The Sun appears to be whipping the Sunflower like a top. The Sunflower wheel tears over the hill cutting a path through the standing corn and bounding into the air as it gathers momentum. This is the blessing of the Midsummer fire.

The painting is reproduced by courtesy of its owner, Mr. Roderic Thesiger. A memorial volume on Paul Nash, edited by Margot Eates and containing articles by Herbert Read, John Rothenstein, E. H. Rieu, and Philip James, is to be published by Lund Humphries and Co. in the spring.



The Spirit of Potsdam

by F. Hopner

FREDERICK the Great's Tea House in the grounds of Sanssouci is one of the most enchanting and characteristic documents of its age, the age of Enlightenment, of rationalism, of the *opereus* and the *Encyclopédie*. Voltaire, Frederick's friend and then unremitting enemy, is the incarnation of all that is witty and wise, sophisticated and malicious in the *Dichotomie*; and from his *Essai sur les mœurs et l'esprit des nations* to his *Lettres Chinoises* he used his malicious wit to contrast the Europe of his day with the tolerance and peacefulness of the Chinese Empire. The fashion of *chinoiserie* was not entirely new in 1754-56, when Frederick built the Tea House. The Portuguese had been the first to bring goods from the Far East, and as early as the middle of the seventeenth century their merchants sold Chinese bric-à-brac and textiles at the fair of St. Germain-en-Laye. The prosperous Dutch mynheer soon decorated his dining room with real 'china,' as porcelain could not yet be produced in Europe. When the East India Company developed the tea trade, such things found their way also to England. Hence, for instance, the City of London took pride in presenting a collection of real porcelain to the Princess Sophie Charlotte

of Hanover when she married the Elector of Brandenburg at the end of the seventeenth century. In 1670 Louis XIV, the *arbitrer elegantiarum* of the age, built his *Trianon de Porcelaine*, and about 1700 he gave a ball at Marly, introduced by a play, *The King of China*, to which society went in appropriate fancy dress. Soon the Chinese style was imitated at Delft, Rouen, Sincency, Nevers, Amsterdam and London not only in pottery but in metal work, furniture and textiles, especially lace and embroidery, and later on for wall-paper. The ornamental engravings from Bérain to Watteau show the most charming designs of this kind. How far architecture followed this pattern is not easy to ascertain as the majority of Chinese buildings were of light material and have perished. An exceptionally early surviving example is the 'Pagodenburg' at Nymphenburg near Munich, designed by Effner in 1716.

A new impulse to *chinoiserie* came from England in the fifties of the eighteenth century. William Chambers, as is well known, had seen China—or at least a very small part of China—as a youth about 1745, and published his volume of *Designs for Chinese Buildings* in 1757. The date of the Pagoda in Kew Gar-



HOUSE IN GARDEN



Statuary groups and palm-tree columns at Frederick the Great's Chinese Rococo tea house at Potsdam. The former, in sandstone, are the work of two South German sculptors, Benkert and Heymüller.

dens is 1761. Frederick the Great was very interested in this fashion, as he was in all the æsthetic innovations of the countries around Prussia. The philosopher king adorned his Potsdam with buildings utterly different from what German schoolmasters and nationalists would make out 'the spirit of Potsdam' to be. He did not travel himself: the eminently conscientious way in which he considered himself the first servant of his State prevented him from seeing what he would have liked to see. But his court circle (composed largely of foreigners) and his correspondents kept him advised of styles and fashions abroad, in France, in England, in Italy.

Thus Frederick had in his library an engraving of the Kew Pagoda. This, however, obviously cannot have inspired the Tea House, as its date is several years later. But Frederick also possessed a copy of Emmanuel Héréc's *Recueil des Plans* etc., published in Paris 1750-3. Héréc, the architect responsible for Stanislas Lescinski's new Nancy, included in his publication a Chinese kiosk at Lunéville, called the Trèfle because of its trefoil groundplan. This plan was taken over for Potsdam by Frederick, when he scribbled on a sheet of paper his ideas for the Tea House. This was the usual way for him to convey to his architects what he wanted done. The architect of the Tea House was J. B. Büding.

Büding had also built the picture gallery in Sanssouci and the church of St. Hedwig in Berlin, the first Roman Catholic church in the city after the Reformation. He was a baroque artist of a rather pompous kind. The intentions of the King and the work of his architect are not quite correctly reflected by my photographs, which reproduce the Tea House and its surroundings as they have been since 1930. Shortly before the erection of the Tea House Frederick had been in Holland where he took a fancy to the knot-pattern of Dutch gardens. Thus the setting of the Tea House, as we know from contemporary engravings, was by no means picturesque in our sense of the word. As for the building itself, its roof was originally surmounted by metal pagodas, which turned with the wind.

Two artists from South Germany, Benkert and Heymüller, supplied the splendid sandstone groups of tea-drinking and music-making Chinese around the building. They had no doubt been recommended by Frederick's sister Wilhelmine of Bayreuth, who, although on the whole not a very agreeable woman, had a more consistently trained taste than her brother. Photographs of her own rooms at Bayreuth show that she knew how to blend Chinese with Rococo motifs. Compared with them Frederick's chinoiserie in the town palace of Potsdam—destroyed in 1945—seem heavy. The grace of the Tea House is due neither to the King nor to his architect. It reflects the domination of Rococo society by sensitive and intelligent women.

Finally, at the end of the eighteenth century, it was once more a woman who at last gave the Tea House a congenial setting. Frederick William II's mistress did away with Frederick the Great's pedantic carpet bedding and converted the surrounding of the Tea House into an English park of the kind which had surrounded the chinoiserie of Kew or Alton Towers ever since they had been erected.

THE POTSDAM TEA HOUSE

The Chinese tea house at Potsdam was built for Frederick the Great in 1754-6, the architect being J. B. Büding. The plan derives from that of Emmanuel Hérés Chinese building at Lunéville, called the Trêfle, and was dictated to the architect by Frederick himself. 1, shows the building in its present landscape setting, due to Frederick William II's mistress; originally the roof was ornamented with metal pagodas. 2 and 3, sandstone sculpture by Benkert and Heymüller.



1



2



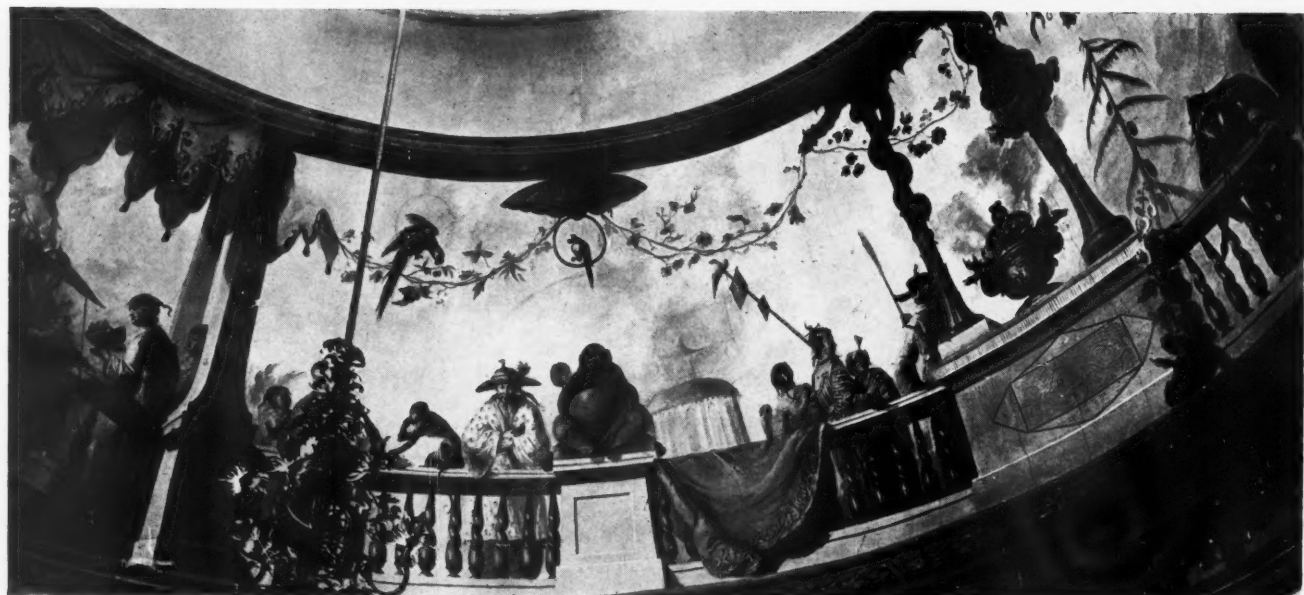
3

THE POTSDAM TEA HOUSE

4, further examples of Benkert and Heymüller's sculpture, with a glimpse of the landscape setting of the tea house under snow beyond. 5, a corner of the tea house and gardens in autumn. 6, mural painting in the dome, showing a mixture of oriental and African motifs.



4
5



6

BOOKS

The A.A.

THE ARCHITECTURAL ASSOCIATION, 1847-1947.
By John Summerson. Published for the Architectural Association by Pleiades Books. 12s. 6d.

WHO has not at some time or other been irritated or bored by some firm's or institution's bulky centenary volume, knowing that it would be filled with irrelevant items ponderously presented? Mr. Summerson's centenary history of the A.A. is neither irritating nor boring, neither irrelevant nor ponderous. He has assembled on fifty pages a great amount of data selected for their topical or historical significance and treats them with an exemplary mixture of scholarly gravity and amateur grace.

The story of the A.A. is in itself remarkable enough. Founded first by a few architectural draughtsmen and then, after a few years, re-founded by a group of architectural students, its object was to provide a meeting-place, a debating ground and whatever mutual help young architects could give each other. Papers were read, designs and drawings compared, conversazioni held. The prevailing taste was not Gothic. It was progressive in the sense that the need for a style of the nineteenth century was admitted and freely discussed. Works by some of the early leaders such as Kerr, Gray and Truefitt are indeed, as Mr. Summerson says, "robustly careless" and have "plenty of go." We shall no doubt hear more about these relatively little known Early Victorians, when Mr. Summerson's *Victorian London* comes out.

Of the later Victorian leaders, however, we hear little in the A.A. papers, although Nesfield, Shaw and Webb became members in 1851, 1853 and 1855 respectively. The only architect of real importance amongst the late Victorians who played a leading part in A.A. history was Leonard Stokes, whose re-organization of the A.A. after forty-odd years of vicissitudes was what finally converted a happy-go-lucky club for self-improvement into a sensibly organized school. Yet long before Stokes's time the A.A. had begun to plead for an architectural diploma (1855). It had shown immediate agreement with the first R.I.B.A. rules for a voluntary examination (1862) and seriously reconsidered its courses, when compulsory examination for associateship came in (1882). This was the moment when Stokes appeared on the stage; and Mr. Summerson has excellent things to say about him and the rules and routine of the A.A. at that time.

As he writes for members chiefly and no doubt exclusively for English readers, he need not enlarge on what remains a mystery to most visitors from overseas—the fact that the leading architectural school in the country is a private school working towards examinations controlled by a private body, that the school staff is not all "professors," and many other such things. But then for our part we do not know much about the professional and scholastic systems of Switzerland, Sweden or the United States.

Between the Stokes era and the Battle of Focus—that is between the nineties and 1937—there is little of fundamental importance to record, though the opposition of Shaw and his friends and followers against the registration of architects (1891-92), the first woman A.R.I.B.A. (1901), the opening of the A.A.'s day school (as late as 1901), the exemption from the R.I.B.A. Intermediate Examination (1906), the extension of the day course to three years (1913), the admission of girl students (1917) and women members (1920), and finally the introduction of the five-year course (1920), are all duly listed.

As for the Battle of Focus Mr. Summerson is

wonderfully fair. His comments are so perfect in precisely what they say and do not say that I cannot do better than re-print them here in full.

"A certain number of students had developed strong, if imprecise, notions on the subject of architectural education. These notions, which were the reverse of academic, bore a close relationship to the concepts of the *New Architecture*, with its insistence on analytical investigation as the prelude to the act of designing, and on the irrelevance of traditional theory. The attitude of the Students' Committee was crystallized in a Report issued in June, 1937. Mr. Goodhart-Rendel, as Director, took his stand on the Beaux Arts platform, which was exactly the platform which the students had no inclination to tolerate. A battle of wits, reaching at moments to a pitch of melodrama, ensued but the whole matter was eventually brought to a close by an agency independent of either of the parties. The Board of Education, which had for some years contributed a substantial grant to the School, became apprised of the fact that under the Association's constitution it was possible for students to be elected members of the Council and thus to participate in the administration of their own School. Since the Association had been founded by students, this state of affairs was not really very surprising. But with student opinion in an inflammable state, obvious dangers were disclosed, and it was represented to the Council that under such conditions the grant could not be continued. This was not the first time that a proposal to form a non-voting 'probationary' class of members had been made; but such a proceeding now became, in the Council's view, imperative. Since the matter could not be fairly decided at a meeting in Bedford Square, where a preponderance of student votes was inevitable, a postal ballot was held, with the result that by 976 votes against 358 the new non-voting probationary class was approved. Thus, 91 years after its foundation by students, the Architectural Association excluded students from the management of its affairs. It is the present custom to regard the series of incidents belonging to 1886-1938 as a troublesome chapter in our history, now fortunately closed. But a historian must be forgiven for noticing these events and, indeed, for distinguishing them as an instance of student initiative comparable in vitality to that initiative of the 'forties which resulted in the foundation of the Association itself."

It would be a pity to add a word to a passage so characteristic of Mr. Summerson's mind and style. So it need only be said in conclusion that the selection of the illustrations is intelligent and enlightening. The historian will find some surprises in them. Mr. G. C. Carter for instance (who is he?) who in 1896 designed the porch shown in figure 19 was amazingly up to date in his knowledge of what the most daring Glasgow boys were doing, while Mr. Nisbet's Sanatorium (figure 23) shows that seven years before *Focus* the A.A. was by no means averse to the concepts of the *New Architecture*.

NIKOLAUS PEVSNER

Beauty of Bath

THE BUILDING OF BATH 47-1947. By Bryan Little. Collins. 15s.

IN spite of its really splendid illustrations—far and away the most intelligent photography that has yet been focused on Bath—and the patient research and very likeable enthusiasm which have clearly gone into the making of it, this is a slightly disappointing and sometimes irritating book. Had it been more simply written, and above all had it stopped short of that last chapter on "The New Plan," it would have gained notably in coherence and authority.

The compulsion of the title's nineteen hundred years' compass has resulted, among other things,

in a disproportionate attention to Neo-Gothic churches. These are after all wholly alien to the vista of a terraced urban scenery, classic in its detail and mass, classic in its ordered sweep and serenity, that the name of Bath spontaneously conjures up before the mind's eye. Mr. Little, I am sure, would be the first to admit it, for all that his harrowing eclecticism can discern "a balanced and distinguished exterior" in the laughing-gas nightmare of the Royal School; docket the flyblown Pump Room Hotel " (without sarcasm) a stately classic pile "; pronounce the Assembly Rooms to have been " beautifully restored and redecorated " in 1938; and pass in indulgent review " Bath Clause " structures designed in keeping with Beau Nash and All That. Just when the cup is brimming over we encounter almost the only downright stricture in his pages. " Recklessly untraditional modernism " is exemplified, not, as well it might be, by the *modernesque* frills of the new fire station near Cleveland Bridge, but in a simple and inoffensive ground-floor infilling of glass prisms in Broad Street intemperately (and inaccurately) denounced as " a multi-coloured slab of architectural bad manners put up in 1946 by the Ministry of Labour."

Mr. Little's apparent dislike of exterior colouring may explain one of his only two noteworthy omissions: the absence of any reference to the painting of whole house fronts in gay Mediterranean shades which is still traditional in older suburbs like Larkhall (though more isolated examples of painted stone can be seen all over Bath), and makes Lambridge Place something almost unique in England. His other oversight is not to have pointed out that the strata of Bath stone from which all that is memorable or pleasant in the city's streets is built were worked out a century ago; and that with their exhaustion vanished the superlative skill of local masons in laying it—to which, incidentally, many residents owed their lives during the Blitz of 1942. Comparison between the knife-edge fineness of jointing up to about 1835 and the often coarse cement-mortaring of subsequent decades is a humbling one for blind believers in Technical Progress. This is, naturally, not to deny that Bath's own stone, even if no longer of such choice grain as formerly, remains Bath's logical building material.

The occasional irritation Mr. Little provokes is caused either by purist prejudices the reader is scarcely prepared for in a critic whose architectural sympathies are so comprehensive, or else by his too frequent indulgence in superlatives. Thus Rosewell House in Kingsmead Square (to which Plate 40 does something more than justice) is exalted into " so unique a treasure " that he would be willing to spare " yard upon yard of second-hand Bath Palladian provided it were left inviolate. This little gem would not be out of place in Bamberg or Innsbruck."

Unique in a sense it is (though if it comes to that there is a Georgian version of the Swiss chalet in Bath which has a much better claim to this adjective). But Rosewell House is neither good Baroque—I only wish it were—nor even " thoroughly Baroque " (Mr. Little admits the Palladian doorway but glosses over the second-floor windows); and its attic storey would look very odd indeed set among the roofs of either of those periwiggish Germanic cities.

If Mr. Little frowns on external colour he is still more hostile to plain surfaces. Darlington Street and Caroline Terrace, " whose starkness," he declares, " is definitely ugly, aided by the smaller size of windows and the resulting bare spaces of disproportionate, unadorned stone," are certainly not among the best or most felicitously fenestrated of Bath's continuous Georgian façades. But the implication that they are ugly (an exaggeration to say the least of it) because, or largely because, they are without carved decoration is altogether misleading. Much the same note recurs in his myopic

comment on the friendly-looking little artisan dwellings of Locksbrook Place (Plate 113): "not unseemly, bald and a little grim."

Yet Mr. Little's summing up of Georgian Bath is both just and sober. What he says of it has long needed to be said and could not have been better put:

"Its architectural quality . . . owes almost everything to the basic soundness of the tradition in which it shared. There are many good buildings but few real masterpieces."

All the same his emphasis on the far-reaching implications of the "essentially unprovincial quality of Bath's social life" requires some qualification as regards continuity. This was true enough right up to 1914; it has not been so since. Bath never recovered culturally from the depression of the Nineteen-Twenties when two out of three houses in her stateliest streets dismally announced they were "to be let or sold," and even the exquisite villas on the middle slope of Bathwick Hill—which face their gardens' seclusion, and not the road, so as to command Mr. Little's favourite view of "those breathlessly lovely cow-studded sheets of pastoral greenery" beyond them—could then have been bought for less than the price of an arterial bungalow on the Bristol Road to-day.

Mr. Little has deserved well of Bath. But I hope Bath will never indulge his darling hope of seeing the Circus's oval of genial turf transformed into a (doubtless academically more correct) waste of blank paving by uprooting its noble old plane-trees.

P. MORTON SHAND

A National Park

ONE HUNDRED YEARS IN YOSEMITE. By C. P. Russell. University of California Press: England, Cambridge University Press. 21s.

IN 1850, the year Wordsworth died after half a century's peaceful life in the English Lake District, a savage tribe of Indians, the Yosemite, issued from a rocky canyon in the Californian Sierra Nevada to raid a white man's trading post on the river below the gorge. 'Ahwahnee' was the Indians' name for this deep canyon of the Merced River, but this was not known in 1851 when it was christened Yosemite, after the natives. In 1890 it became one of America's best known National Parks, Yellowstone being the first in 1872.

By 1855, Chief Tenaya had been stoned to death by an adjoining tribe and the first tourists began to visit Yosemite—a terrifying descent by mule from the top of the canyon. (There is a hair-raising contemporary description of this.) The credit for the first glimpse is given to a fur-trapper, Joseph Walker, who peered down the chasm in 1833 at the streams which 'precipitate themselves from one lofty precipice to another, until they are exhausted in rain below.' A drawing made in 1855, compared with a modern photograph of the same view on the book's cover, shows no difference at all after ninety years: even the same trees in the valley bottom are there.

It is difficult to appraise the scenery of Yosemite from afar and this book only sets out to tell its history, and tells it conscientiously though a little dully. Nevertheless the subject is of intense interest to us, because of our own country's slow approach to the formation of National Parks, hastened by the admirable report made to Parliament in July last year by the Minister of Town and Country Planning.

On the map Yosemite is curiously similar to the Lake District area recommended for our first National Park. Both are about 30 miles across by 45 miles north to south. Yosemite lies 150 miles due east of San Francisco, the Lake District 50 miles from the cities of Liverpool and Manchester.

Further comparisons show how different from the American problems ours will be. Yosemite

was a completely wild region without one building in 1850. In 1864 it had already become 'protected' under an act signed by President Lincoln. There is only one industry there now—tourists. There are no private holdings. The whole object of National Parks in America and elsewhere is to preserve wild life and nature first. Closely populated England, on the other hand, is full of people, industries, farms, buildings, private houses. The landscape here is often man-made and its fine quality lies in its more subtle, interesting, and varied beauties. The problem of its preservation is a much more difficult one. In fact a living thing can hardly be preserved: it rather needs guidance in its constantly changing growth—a difficult thing in the country, where wild life and nature, not man, are normally dominant. That control is wholly desirable no one will dispute. Whether it will be adequately sensitive must still be seen.

HERBERT TAYLER

SHORTER NOTICES

LOUIS H. SULLIVAN: Kindergarten Chats and Other Writings. Wittenborn, Schultz Inc., New York 1947. \$4.50.

In England Sullivan is perhaps better known as Frank Lloyd Wright's "lieber Meister" than on his own account. Yet Sullivan's buildings of the late eighties and early nineties are the most exciting contribution to the formation of the Modern Movement which America made between Richardson and Wright. They can be looked up in Hugh Morrison's excellent book and also in Dr. Giedion's *Space, Time and Architecture*; but Sullivan the theorist, as florid and wild, and as sound as Walt Whitman was virtually unknown until this new edition of the *Kindergarten Chats* came out. The *Chats* were published in an obscure magazine in America in 1901-1902, and in book-form by an obscure Middle-West publisher in 1934. Now at last they will be available to a wider public, bound together with—which in a way is even more important—Sullivan's earliest writings, especially *Ornament in Architecture* of 1892. The following quotations will prove the revolutionary character of his short articles, one of the *incunabula* of functionalism.

"Ornament is mentally a luxury, not a necessity . . ."

"It would be greatly for our aesthetic good if we should refrain entirely from the use of ornament for a period of years, in order that our thought might concentrate acutely upon the production of buildings well formed and comely in the nude."

"A building which is truly a work of art . . . is in its nature, essence and physical being an emotional expression."

"An ornamented structure should be characterized by the quality, that the same emotional impulse shall flow throughout harmoniously into its varied forms of expression—of which, while the mass-composition is the more profound, the decorative ornamentation is the more intense."

"A decorated structure, harmoniously conceived, well considered, cannot be stripped of its system of ornament without destroying its individuality."

"If we wish to insure an actual, a poetic unity, the ornament should appear, not as something receiving the spirit of the structure, but as a thing expressing that spirit by virtue of differential growth. . . . So, an ornament or scheme of organic decoration befitting a structure composed on broad and massive lines would not be in sympathy with a delicate and dainty one. Nor should the ornamental systems of buildings of any various sorts be interchangeable as between these buildings."

RECORDS OF BUCKINGHAMSHIRE: CENTENARY NUMBER. Published for the Buckinghamshire Archaeological Society by Hazell, Watson and Viney. 7s. 6d.

One of the earliest papers to be read at a meeting of the Architectural and Archaeological Society for the County of Buckingham (to give it its full title) was called *A Plea for the Faithful Restoration of our Ancient Churches*; the author and reader was a Buckinghamshire parson's son who had made good in the profession of architecture, George Gilbert Scott. That was in 1848. The society had been founded in November of the previous year, and this

latest issue of its *Records* commemorates the centenary with a new format, conceived on generous lines, and larger and more varied contents.

Although it would in any case be a privilege to salute a society with so long and distinguished a history, there are other good reasons for drawing the attention of REVIEW readers to this publication. For at least two of the articles in it have a more than local interest. In *The Renaissance Monuments of Buckinghamshire* Mrs. Katharine Esdaile pursues her subject church by church up and down the county, and in so doing lets fall much of the greatest interest from her vast store of knowledge. And Mr. H. M. Colvin contributes an *Architectural History of Marlow and its Neighbourhood*, which not only is a model of its kind for its scrupulous documentation but also sheds new light on the general question of the relationship of the architecture of the nearer provinces to that of London in post-medieval times.

THE COTSWOLD VILLAGE. Puffin Building Books. Penguin Books. Nos. 1A, 1B and 1C. 2s. 10d. each.

Shades of Guy Dawber! If Penguin Books have the excellent idea of branching out in building books for children to cut houses out of paper and group them into a village, if the constructional designer, Mr. L. A. Dovey, takes the trouble to mark and explain his sheets more fully and more intelligently than had been done in this country so far—why must the first set to come out be a Cotswold village as pretty-pretty as Margaret and Alexander Potter can make it? Surely for a man of such known educational enthusiasm as Mr. Allen Lane, it would have been more satisfying to start with something in our own idiom, or at least with one set of to-day and one of the past, or perhaps with something that would allow for a mixture of old and new (as for instance the Dutch Metropolia cut-out sheets which, by the way, are otherwise so much more primitive than the Penguin Sheets). To show to children how happy modern cottages can look, and how pleasantly and freely they group, is surely more worth while than to offer to them a railway station with seventeenth-century drippstone labels.

Other Books Received

PRACTICAL DESIGN OF SIMPLE STEEL STRUCTURES. Vol. I. By David S. Stewart. Constable. 15s.

POST-WAR CHURCH BUILDING. By Ernest Short. Hollis & Carter. 30s.

OF THE ATMOSPHERE OF A CHURCH. By J. N. Comper. The Sheldon Press. 1s. 9d.

PLANNING AND CONSTRUCTION, 1948. By F. J. Osborn. Todd Reference Books. 25s.

SAMUEL PALMER, THE VISIONARY YEARS. By Geoffrey Grigson. Kegan, Paul, Trench, Trubner. 42s.

BOMBED BUILDINGS OF BRITAIN. Edited by J. M. Richards with Notes by John Summerson. Architectural Press. 25s.

B.C.A.S. HANDBOOK ON PNEUMATIC EQUIPMENT. British Compressed Air Society. 20s.

JUAN GRIS. By Daniel Henry Kahnweiler. Lund Humphries. 52s. 6d.

NEW IDEAS FOR FARM BUILDINGS. Farmer & Stockbreeder. 30s.

DESIGN THIS DAY. By Walter Dorwin Teague. The Studio. 35s.

CONSTRUCTION AND MAINTENANCE OF BUILDINGS. By Otway Cave and Russell A. Earthrowl. Estates Gazette. 35s.

PLANNING: THE ARCHITECTS' HANDBOOK. By E. & O. E. and Edwin Gunn. Gilbert Wood. 21s.

THE JOURNALS OF CELIA FIENNES. Edited by Christopher Morris. The Cresset Press. 8s. 6d.

THE CONNOISSEUR YEAR BOOK AND DIARY, 1948. By H. Granville Fall. The Connoisseur. 28s.

REVISION TO THE STANDARD METHOD OF MEASUREMENT OF BUILDING WORKS. By Arthur J. Willis. Crosby Lockwood and Son. 2s. 6d.

ARCHITECTURAL PRACTICE. By Clinton H. Cowgill and Ben John Small. Reinhold. \$12.00.

NEIGHBOURHOOD UNIT PLAN. James Dahir. Compiled by Russell Sage Foundation. U.S. \$1.

VILLAGE HOUSING IN THE TROPICS. Jane B. Drew and E. Maxwell Fry. Lund Humphries. 4s. 6d.

SOLID AND FIBROUS PLASTERING. W. Verrall. The Technical Press. 15s.

THE SMALL HOUSE, TODAY AND TOMORROW. Arnold Whittick. Crosby Lockwood and Son. 15s.

OXFORD STONE. By W. J. Arkell. Faber and Faber. 25s.

THE CITY OF TOMORROW. By Le Corbusier. Architectura Press. 15s.

THE BIOGRAPHY OF THE COMMON MAN OF THE CITY OF YORK. By J. B. Morrell. B. T. Batsford. 12s. 6d.

THE AGE OF ADAM. By James Lees-Milne. B. T. Batsford. 21s.

STUART AND GEORGIAN CHURCHES. By Marcus Whiffen. B. T. Batsford. 18s.

[Inclusion of a book in the above list does not preclude review in a future issue. Nor is the list necessarily complete up to publication date of the current issue.]

ANTHOLOGY

The Invisible River

The chief ornament which London derives from the Thames, it is indebted for to nature alone: human industry, far from contributing to increase or shew it to advantage, seems to exert itself only to destroy or conceal it. . . . The spacious canal formed by the Thames might present us with as noble and striking an object as the great canal of Venice, lined with palaces of the most sumptuous magnificence, and the most pleasing variety, and which have upon that canal their principal front: but the banks of the Thames are occupied by tanners, dyers, and other manufacturers, who then have an opportunity of easily supplying themselves with water. The streets where these manufactures are carried on, are the dirtiest in the city: in fine, the bridges have no prospect of the river, except through a balustrade of stone, with a rail of modillions three feet high, very massy, and fastened close to each other; the whole terminated by a very heavy cornice, and forming a pile of building of about ten feet in height. The old bridge was about twenty years ago covered with houses, as the bridge of Notre-Dame at Paris is to this day; upon clearing it of these houses, it has been railed with modillions after this manner: Westminster bridge itself is built upon the same plan. In a word, in the first excursion which I made in order to take a survey of London, I could not have a full view of the Thames, either on the side of the city or on that of Southwark, unless I entered the houses and manufactories, which stand close to the river.

The reason which some assign for this is the natural bent of the English, and in particular the people of London, to suicide. It must be owned, that above and below London, the banks of the river, entirely unencumbered by buildings, offer a fine opportunity to those who have an inclination to drown themselves: but the length of the way thither, and the consequent opportunity of reflecting, are circumstances most likely to prevent such mischief. It should, moreover, be considered, that imaginations, struck with a sort of enthusiasm, glory in publicly encountering death.

M. GROSLEY (*A Tour to London*; translated from the French by Thomas Nugent, 1772).

MARGINALIA

Sir Charles Reilly

The death of Sir Charles Reilly on February 2 leaves a gap in the English architectural world that will not easily be filled. Born in London in 1874, Charles Herbert Reilly was son of an architect and surveyor who for forty years held the position of Surveyor to the Worshipful Company of Drapers. He was educated at Merchant Taylors' School and Queens' College, Cambridge, where he took a First in the Mechanical Science Tripos. Subsequently he worked in his father's office and then in that of John Belcher, passing his A.R.I.B.A. in 1898. His first academic post was that of Lecturer in Architecture at King's College, London, an appointment which he held until his appointment to the Roscoe Chair of Architecture in the University of Liverpool in 1904. Meanwhile he entered into partnership with Stanley Peach and competed for Liverpool Cathedral—his being the only classical design to be commended by the assessors.

It is for his educational work at Liverpool, where he held the chair until he retired for reasons of health in 1934, that Sir Charles Reilly will be chiefly remembered; his influence through it on the course of twentieth-century architecture in England could hardly be exaggerated. Thanks to him, Liverpool became the first school of architecture in the country to offer whole-time day courses (and the first to win the English architectural *Prix de Rome*). Secondly he will be remembered as a town-planner and as one of the epoch's liveliest writers on contemporary architecture. His activities in these other directions necessarily limited his work as a

practising architect, but after his retirement from Liverpool he became consultant to the John Lewis Partnership and was thus associated with the building of the Peter Jones store in Sloane Square (William Crabtree and Slater and Moberly, architects). Of his own buildings he himself said he would like to be remembered by the (Byzantine) Mission Church of St. Barnabas, Dalston.

An appreciation of Sir Charles Reilly's work and career will appear in a future issue.

An International Competition

The Museum of Modern Art and Museum Design Project are sponsoring an international competition for designs for low-cost furniture. Two kinds of design are eligible, seating units and storage units, and in each section there are a first prize of \$5,000 and other prizes. The jury of assessors will include Catherine Bauer, Rene d'Harnoncourt, Ludwig Mies van der Rohe and Gordon Russell.

Intending competitors should notify the competition director, Edgar Kaufman, Jr., Department of Industrial Design, Museum of Modern Art, 11, West 53 Street, New York 19, U.S.A., from whom further particulars may be obtained. The competition closes on October 31.

'Westminster Regained' at the Tate

An exhibition of THE ARCHITECTURAL REVIEW plan for Westminster is to be held at the Tate Gallery, Millbank, by courtesy of the Trustees and Director, from March 10 to April 6. It will comprise drawings, photographs and models, and will be open from 10 a.m. to 6 p.m. on weekdays, from 2 to 6 p.m. on Sundays.

Acknowledgments

Acknowledgments for photographs in this issue are due as follows:

Frontispiece, page 74, C. G. Rosenberg; *Landscaping the New Town*, pages 87, 88, A. Cracknell, page 89, no. 4, H. L. Wainwright, page 90, no. 4, A. Cracknell; *Gothic Survival and Gothick Revival*, page 92, left, F. E. Howard, top and bottom right, Country Life, page 93, top right, Rev. F. Sumner, bottom right, National Buildings Record, page 94, top, National Buildings Record, middle, Sydney Pitcher, page 95, top left, E. Shirley Jones, top middle and right, National Buildings Record, bottom left, Nathaniel Lloyd, bottom right and all on page 96, National Buildings Record, page 97, bottom left, William A. Clark, right, James Nelson; *Hazards*, page 100, no. 1, Sydney W. Newbery, no. 3, News Chronicle, page 102, British Council, page 105, bottom, Sydney W. Newbery; *Two Houses by Karl Koch*, pages 106 to 110, Ezra Stoller; *The Astronomy of Broddingnag*, page 113, nos. 4 and 5, Indian Railways Bureau; *House in California*, pages 114 to 116, Roger Sturtevant; *The Spirit of Potsdam*, pages 117 to 120, Dr. F. Hepner.

This Month's Contributors

H. M. Colvin, B.A. (London), was born in 1919; served in the R.A.F. from 1940 to 1945; since 1945 has been Assistant Lecturer in History at University College, London. A specialist in medieval history, he is also engaged in research on English architects and master-builders of the seventeenth and eighteenth centuries. Published work includes: 'Aberystwyth's Architecture' (*Wales*, IV no. 6, 1945); 'Victorian Malta' (*THE ARCHITECTURAL REVIEW*, June 1946); 'The Architectural History of Marlow' (*Records of Buckinghamshire*, 1947).

Frederick Gibberd, F.R.I.B.A., A.M.T.P.I., who was appointed consulting architect to

Harlow New Town in 1947, was born in 1908 and has been in practice as an architect since 1930; was Principal of the Architectural Association 1942-4. He is town planning consultant to the boroughs of Nuneaton and St. Pancras. His chief buildings have included Pullman Court, Streatham (1934-5); Park Court, Crystal Palace (1935-6); Ellington Court, Southgate (1937), a nurses' home at Macclesfield (1938), and the B.I.S.F. steel framed house, 35,000 of which are now being erected. He is author (with F. R. S. Yorke) of *The Modern Flat*, 1937, and of *The Architecture of England*, 1938.

F. Hepner, Ph.D., historian and photographer, is part-author (with P. Wagner) of *Das Haus rund um den Ofen* (Munich, 1924), and author of *Baroque Orgel Emporen* (Atlantis, 1932), *Geschichte der Kunstgewerbes: Barock und Rococo* (Berlin, 1935), and *Architectural Photography with Simple Means* (1932), in addition to many articles in periodicals, including *Das Warenhaus im alten Rom* (Forum Trajanum, 1928) and *Mittelalterliche Befestigung auf Rhodos* (1929).

Sir Harold Spencer Jones, F.R.S., has been Astronomer Royal since 1933. Born in 1890, he was educated at Latymer Upper School, Hammersmith, and Jesus College, Cambridge (triple First, Isaac Newton Student and Smith's Prizeman, Fellow 1914, Hon. Fellow 1933); has held many important astronomical posts (including that of H.M. Astronomer at Cape of Good Hope, 1923-33); was awarded the Royal Medal of the Royal Society in 1943, the Gold Medal of the Royal Astronomical Society in 1943 and the Gold Medal of the British Horological Institute in 1947; is President of the International Astronomical Union; is Associate of the Incorporated Association of Architects and Surveyors. In addition to papers in journals of learned societies his publications have included: *General Astronomy* (1922); *Worlds without End*

(1935); *Life on other Worlds* (1940); *A Picture of the Universe* (1947).

CORRESPONDENCE

To the Editors of

THE ARCHITECTURAL REVIEW

SIRS,—I was much interested in the photographs of statues at Wotton, Surrey, published in your December issue (page 206, *Time, Weather and Sculpture*). The Captain George Evelyn who is mentioned as having had a hand in the laying out of the garden there, was a cousin of the diarist. On January 26, 1648-9, the latter noted: 'Came to see me Captain George Evelyn, my kinsman, the great traveller, and one who believed himself a better architect than really he was; witness the portico in the garden at Wotton; yet the great room at Albury is somewhat better understood. He had a large mind, but over-built every thing.'



The Doric building at Wotton, Surrey, designed by John Evelyn's cousin. (See Correspondence, above.)

Albury Park (where, too, John Evelyn laid out the grounds) was, I believe, remodelled last century. But Captain Evelyn's 'portico' at Wotton remains. My snapshot is not too brilliant, but perhaps helps to explain what John Evelyn meant by 'over-built' in this context. In any case your readers may be interested to see a representation, however imperfect, of this work of one of the earliest of that long line of amateurs to which English classical architecture owed so much.;

Yours, etc.,

A. HAMMER.

Great Bookham.

RÉSUMÉS

Mars 1948

Page 74: *Le Frontispice* donne un exemple de jardin paysager étudié par Holger Blom, à Stockholm.

Page 75: *Une lettre reçue de l'U.R.S.S.* En mai 1947 LE ARCHITECTURAL REVIEW a publié trois articles ayant trait aux aspects de la reconstruction dans l'U.R.S.S. par les architectes de l'Union Soviétique D. Arkin, A. Bunin et N. Bylinkin. Ces trois articles furent introduits par une préface éditoriale avec une appréciation de l'état de l'architecture russe d'aujourd'hui. Récemment les éditeurs ont reçu une lettre des susdits architectes, se plaignant et du ton et de la substance de cette préface. La lettre est citée ici en texte intégral, ainsi que la réponse du ARCHITECTURAL REVIEW.

Page 81: *Un aperçu de Constructions Récentes dans l'U.R.S.S.*

Page 85: *Dessinant le paysage de la nouvelle ville, avec des illustrations prises du dessin de Harlow, par Frederick Gibberd.* Les solutions techniques des problèmes qui s'élèvent dans une nouvelle ville de 60,000 habitants sont en général acceptées d'un commun accord. Une nouvelle ville doit avoir une composition bien équilibrée, ayant tous ses composants en rapport les uns avec les autres et avec l'ensemble. Le paysage naturel est l'aide de première importance de l'architecte de nouvelles villes. Il peut être utilisé comme charpente par laquelle les agglomérations seront réunies. Les problèmes sociaux à part, il y a un argument fort, contre la séparation de la zone industrielle de la ville même. Les constructions indus-

[continued on page 126]

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trielles ont leur caractère architectural à eux, qui doit contribuer au succès de l'aménagement de la ville.

Page 91: *Survivance gothique et renaissance gothique*, par H. M. Colvin. Le problème de la continuité du gothique dans le 18^{me} siècle en Angleterre a été touché par maints écrivains, mais le manque de faits documentés entravait la discussion utile. Pour vérifier qu'une telle continuité subsiste encore, il faut mettre à l'épreuve ou que les constructeurs de la première renaissance aient employé des maçons auxquels la façon gothique était encore de tradition, ou qu'il y avait de tels maçons qui pouvaient faire et qui en effet, ont fait l'ouvrage donnant satisfaction aux dilettanti auxquels le gothique symbolise une mode de décoration ressemblant au "chinoise". Cet article parle de l'ouvrage architectural des maçons de Gloucestershire, Thomas Sumson et Edward et Thomas Woodward et montre comment leurs carrières éclaircissent le problème.

Page 99: *Les Hasards, ou l'art d'introduire des obstacles dans le paysage urbain sans choquer la vue*. La tâche de l'urbaniste est de créer un paysage urbain humanisé en rapport avec la demande naturelle humaine de jouir d'un chez-soi et des moyens de communication, de loisir et des formalités. Le problème des hasards, banni par la plupart des urbanistes comme question seule de palissades, de haies ou de clôtures, est discuté et illustré. Les moyens de clôture, généralement considérés comme des problèmes simples d'enceinte sont une des sources les plus communes produisant une crise visuelle. Le déplacement de maintes sortes de clôtures inutiles pendant la guerre, ouvrirent des horizons plus étendus d'un monde moins restreint. Aujourd'hui quand les restrictions s'accumulent et les palissades reparaissent, l'instant semble propice pour discuter la théorie des hasards. Nous ne formulons pas un principe fondamental, mais nous désirons examiner les possibilités visuelles du hasard comme composant de la vue urbaine.

Page 106: *Deux Maisons dessinées par Karl Koch*, en New England et à Lincoln, Massachusetts, États Unis, décrites et illustrées.

Page 111: *L'astronomie de Broddingnag*, par Harold Spencer Jones. Le Maharajah de Jai Singh de Jaipur (1686-1743), homme d'état, plutôt que soldat, avait un intérêt spécial dans l'astronomie et inventa des

instruments uniques. Il tira son inspiration des Moslems et des Arabes. En premier lieu son but était le perfectionnement du calendrier, y inclus la prédiction des éclipses. Quoique le zèle pour les observations astronomiques qu'il fit naître ne lui survécût guère sa mort, ses travaux étaient un développement important dans l'astronomie Hindoue.

Page 114: *Maison à California* (Gardner A. Dailey, architecte), décrite et illustrée.

Page 116: *Le Solstice de la Hélianthe annuel*, un des derniers tableaux peints par Paul Nash (qui mourut 1946) est reproduit en couleurs.

Page 117: *L'Esprit de Potsdam*, par E. Hepner. Quand Frédéric le Grand fit construire en 1754-56 son salon de thé à Sans Souci par J. B. Büding la mode des chinoiseries n'était pas nouvelle en Europe. Le Pagodenburg à Nymphenburg près de Munich, par Effner avait été déjà construit en 1716, et en Angleterre la chinoiserie reçut une nouvelle impulsion en 1757, quand William Chambers publia son tome avec dessein de bâtiments Chinois.

März 1948

Seite 74: Auf dem Titelblatt ist eine Gartenanlage von Holger Blom, Stockholm, abgebildet.

Seite 75: *Ein Brief aus U.S.S.R.* Die ARCHITECTURAL REVIEW hat im Mai 1947 drei Aufsätze über den Wiederaufbau in U.S.S.R. von den Sowjet Architekten D. Arkin, A. Bunin, und N. Bylinkin veröffentlicht. Diesen Aufsätzen war eine kurze Betrachtung der Redaktion über die russische Architektur der Gegenwart vorangestellt. Kürzlich erhielt die Redaktion einen Brief von den oben genannten Architekten, die sich über Inhalt und Ton dieser Betrachtung beschwerten. Der fragliche Brief und die Antwort der ARCHITECTURAL REVIEW sind abgedruckt.

Seite 81: Bericht über neues Bauen in U.S.S.R.

Seite 85: *Das neue Stadtbild*, illustriert nach dem Plan für Harlow von Frederic Gibberd. Ueber die Lösung der technischen Fragen, die die Anlage einer neuen Stadt für 60.000 Menschen stellt, herrscht heute im wesentlichen Übereinstimmung. Eine neue Stadt muss eine abgewogene Anlage sein, deren Teile unter einander und mit der Gesamtanlage zusammenstimmen. Die gegebene Landschaft ist von grösster Bedeutung. Sie bildet den natürlichen Rahmen, der

die einzelnen Teile zusammenhält. Abgesehen von der sozialen Bedeutung gibt es ein ausgesprochen visuelles Argument gegen die Abtrennung des Industrie-Gebietes. Fabrikanlagen haben ihre eigentümlichen architektonischen Werte die zum Gesamtbild beitragen.

Seite 91: *Nachleben und Wiederaufleben der Gotik von H. M. Colvin*. Verschiedene Verfasser haben das Problem der Kontinuität der Gotik in England im 18. Jahrhundert untersucht, aber infolge fehlender Urkunden ist man zu keiner eindeutigen Lösung gekommen. Um die Kontinuität zu beweisen, wäre es notwendig, festzustellen, dass die frühen Gotiker Handwerker beschäftigt haben, für die die gotische Bauart noch eine lebendige Tradition hatte, oder, dass es Steinmetzen gab, die so gearbeitet haben, dass sie die Liebhaber zufrieden gestellt haben, für die Gotik im wesentlichen eine dekorative Mode war wie etwa "Chinoiserien". Der Verfasser untersucht die Bauten von Thomas Sumson und Edward und Thomas Woodward in Gloucestershire, und gewinnt damit dem ganzen Fragenkomplex eine neue Seite ab.

Seite 99: *Schranken, oder die Art Hindernisse in das Stadtbild einzuführen ohne das Auge zu beleidigen*. Aus den Forderungen des Menschen für Schutz und Verkehr, Mäse und Representation muss der Städtebauer ein Stadtbild schaffen, das diese Gegensätze zu einer Einheit verbindet. Das Problem der Hindernisse, das von den meisten Städtebauern als Frage von Zaun, Gitter und Hecke abgetan wird, wird untersucht und illustriert. Während die Frage im allgemeinen als etwas Nebensächliches angesehen wird, führt ihre Lösung zumeist zu visuellen Gräueln. Die Entfernung von Zäunen aller Art während des Krieges hat die Vorstellung einer weniger streng abgeschlossenen Welt erweckt. Da Abgrenzungen wieder auftauchen, scheint der Augenblick günstig, um sich mit dieser Frage zu befassen. Die Absicht ist nicht, Regeln aufzustellen, sondern die visuellen Möglichkeiten der Hindernisse, als eine Komponente im Stadtbild zu untersuchen.

Seite 106: Zwei Häuser von Karl Koch in Neu England und in Lincoln, Massachusetts, U.S.A. Beschrieben und illustriert.

Seite 111: *Die Astronomie von Broddingnag von Harold Spencer Jones*. Der Maharadschah von Jai

[continued on page 128]

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Singh auf Jaipur (1688-1743), mehr Staatsmann als Soldat, hatte ein besonderes Interesse für Astronomie und hat einzigartige Instrumente erfunden. Er stand unter dem Einfluss von Muselmännern und Arabern und interessierte sich besonders für Verbesserungen des Kalenders und die Vorhersagung von Sonnen- und Mondfinsternissen. Obgleich sein Beitrag zu astronomischen Untersuchungen ihn kaum überlebt hat, war er doch von wesentlicher Bedeutung für die Entwicklung der Astronomie der Hindus.

Seite 114: Haus in Kalifornien. Architekt Gardner A. Dailey. Beschrieben und illustriert.

Seite 116: Sonnenblumen, eines der letzten Bilder des 1946 gestorbenen Malers Paul Nash. Farblich reproduziert.

Seite 117: Der Geist von Potsdam von E. Hepner. Als Friedrich der Grosse sein Teehaus in Sans Souci 1754-56 von J. B. Büding bauen liess, war die Lust an Chinoiserien nicht neu in Europa. 1715 bereits hatte Effner seine Pagodenburg in Nymphenburg bei München errichtet, und ein neuer Antriebs kam 1757 aus England als William Chambers seine Entwürfe für chinesische Gebäude veröffentlichte.

Март 1948 г.

Стр. 74. РИСУНОК НА ОБЛОЖКЕ дает пример художественной разработки сада в Стокгольме по проекту Холгер'а Блом'а.

Стр. 75. ПИСЬМО ИЗ СССР.

В мае 1947 г. были напечатаны в нашем журнале три статьи советских архитекторов Д. Аркина, А. Бунина и Н. Былинкина, в которых освещались различные стороны послевоенной восстановительной работы в СССР. Статьям этим была предпослана вводная редакторская заметка о современном состоянии архитектуры в России. Недавно Гедакцией было получено от авторов письмо, в котором выражалось резкое неудовольствие как по поводу существа этой заметки, так и по поводу ее тона. Мы печатаем в настоящем номере письмо это, равно как и наш ответ, целиком на обоих языках.

Стр. 81. ОБЗОР НЫНЕШНИХ СТРОЕНИЙ В СССР.

Стр. 85. ФРЕДЕРИК ГИББЕРД. СОЗДАНИЕ ЛАНДШАФТА НОВОГО ГОРОДА НА ПРИМЕ-

РАХ ИЗ ПЛАНА ГОРОДА ХАРЛО.

В настоящее время существует уже общее согласие относительно технического решения вопросов, возникающих при планировке нового города с шестидесятилетним населением. Все составные части нового города должны быть в надлежащей пропорции как по отношению друг к другу, так и по отношению ко всему целому. Великим союзником планировщика нового города является естественный ландшафт местности, который может быть использован в качестве рамы, органически связывающей застроенные участки в одно целое. Сепарация промышленных районов города является нежелательной не только с обществено-структурной точки зрения, но и с точки зрения зрительно-эстетической, ибо промышленные сооружения вносят в городской ландшафт свою положительную долю благодаря присущим им архитектурным качествам.

Стр. 91. Х. М. КОЛВИН. ГОТИЧЕСКИЕ ПЕРЕЖИТКИ И ГОТИЧЕСКОЕ ВОЗРОЖДЕНИЕ.

Проблема непрерывности Готики в Англии XVIII-го века затрагивалась многими писателями. Однако недостаток документально-обоснованных фактов препятствовал плодотворному ее обсуждению. Для доказательства существования такой непрерывности, необходимо раньше доказать либо то, что ранние возрожденцы готики пользовались услугами каменщиков, для которых готика все еще являлась традиционной формой постройки, либо то, что в то время существовали каменщики, которые были в состоянии создавать, и действительно создавали, работы, могущие удовлетворять дилетантов, для которых готика была существенно видом украшения, вроде так называемого "китайского" стиля. В этой статье обсуждается архитектурная работа Глостерширских каменщиков Томас'а Сампсон'а и Эдуард'а и Томас'а Вудворд'ов, показывая как их карьера бросает свет на этот вопрос.

Стр. 99. ЭЛЕМЕНТ СЛУЧАЙНОГО В ГОРОДСКОМ ЛАНДШАФТЕ ИЛИ ИСКУССТВО ПРОЕКТИРОВАНИЯ ГОРОДСКИХ ИЗГОРОДЕЙ.

Эстетической задачей градопланировщика является создать облагораживающий городской ландшафт на основе человеческих потребностей крова и сообщений, досуга и церемониала. Автор обсуждает, иллюстрируя примерами, проблему введения изгородей в городской ландшафт таким образом, чтобы они не резали глаза, указывая при этом, что обычно градопланировщики

смотрят на это просто как на изолированные задачи об отдельных заборах, перилах, балюстрадах, живых изгородях и пр., что составляет, по мнению автора, эстетическое преступление. Снятие многих лишних изгородей во время войны открыло во многих случаях дотоле скрытую перспективу. Так как теперь эти заграждения снова возвращаются во многих случаях на место, то вопрос о роли "случайных элементов" в городском ландшафте становится весьма своевременным. Автор не задается целью установить общие принципы в этой проблеме; он хотел только исследовать открывающиеся здесь зрительно-эстетические возможности.

Стр. 106. ИЛЛЮСТРИРОВАННОЕ ОПИСАНИЕ ДВУХ ДОМОВ ПО ПРОЕКТУ КАРЛА КОХА В НОВОЙ АНГЛИИ И В ЛИНКОЛЬНЕ, МАССАЧУСЕТС, САШ.

Стр. 111. ХАРОЛД СПЕНСЕР ДЖОНС. АСТРОНОМИЯ БРОДДИННАГА.

Магараджа Джэй Синг'а из Джэйпур'а (1686-1743), скорее государственный деятель чем воин, проявлял особый интерес к Астрономии. Он изобрел единственные в своем роде астрономические инструменты. Он черпал свое вдохновение из мусульманской религии и из арабской культуры. Он главным образом интересовался улучшением календаря, включая предсказание затмений. Его вклад представляется совершенно исключительным в индусской астрономии. Однако толчок, данный им астрономическим наблюдениям, ненадолго его пережил.

Стр. 114. ИЛЛЮСТРИРОВАННОЕ ОПИСАНИЕ ДОМА В КАЛИФОРНИИ ПО ПРОЕКТУ АХРИТЕКТОРА ГАРДНЕР А. ДЭЙЛИ.

Стр. 116. РЕПРОДУКЦИЯ В КРАСКАХ ОДНОЙ ИЗ ПОСЛЕДНИХ КАРТИН ХУДОЖНИКА ПОТА НАША (СКОНЧАЛСЯ В 1946 Г.) „СОЛНЕЧНОЕ ПОДСОЛНЕЧНИК“.

Стр. 117. Е. ГЕШНЕР. ДУХ ПОТДЕМА.

Когда 1754-1756 г. архитектор И. Б. Бюринг строил для Фридриха „Великого“ Чайный Домик в Сан Суи, мода подражания китайскому стилю не была уже новостью в Европе. Еще в 1716 г. Эффнер воздвиг Пагоденбург в Нимфенбурге близ Мюнхена, а в 1757 г. новый толчок этой моде пришел из Англии, когда Вильям Чэймбер опубликовал свой том проектов в этом стиле.

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by using "ACE" reinforced felt with "SLAGBESTOS" mineral wool.

In these days of fuel shortage it is more than ever necessary to conserve as much heat as possible. The ideal method for houses is to underlay the tiles with "ACE" Reinforced Felt and to spread loose SLAGBESTOS between the ceiling joists. This will give you perfect roof insulation and a warm dry house.

SLAGBESTOS is completely fireproof, verminproof and does not disintegrate.

We are exhibiting at the Building Centre.

Slagbestos

PERFECTED MINERAL WOOL

AND "ACE" REINFORCED BITUMINOUS ROOFING FELT

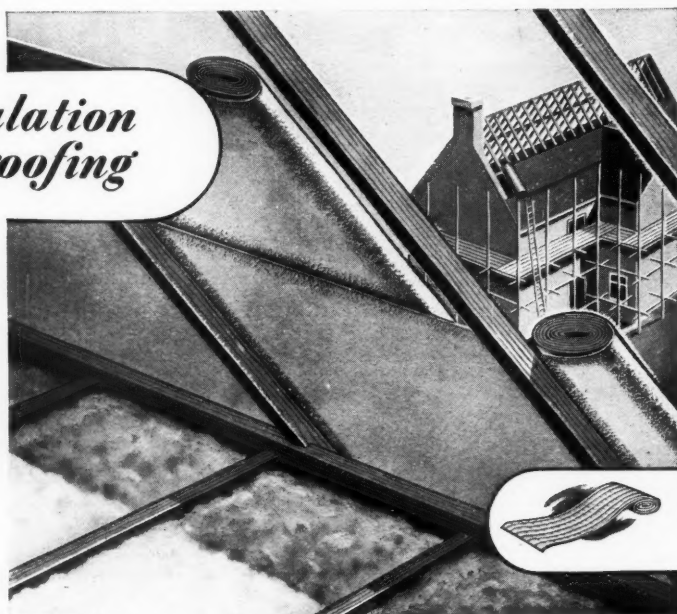


Illustration shows loose SLAGBESTOS between ceiling joists, and inset in blanket form. Full particulars, samples and prices of SLAGBESTOS and "ACE" will be sent to you on request.

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