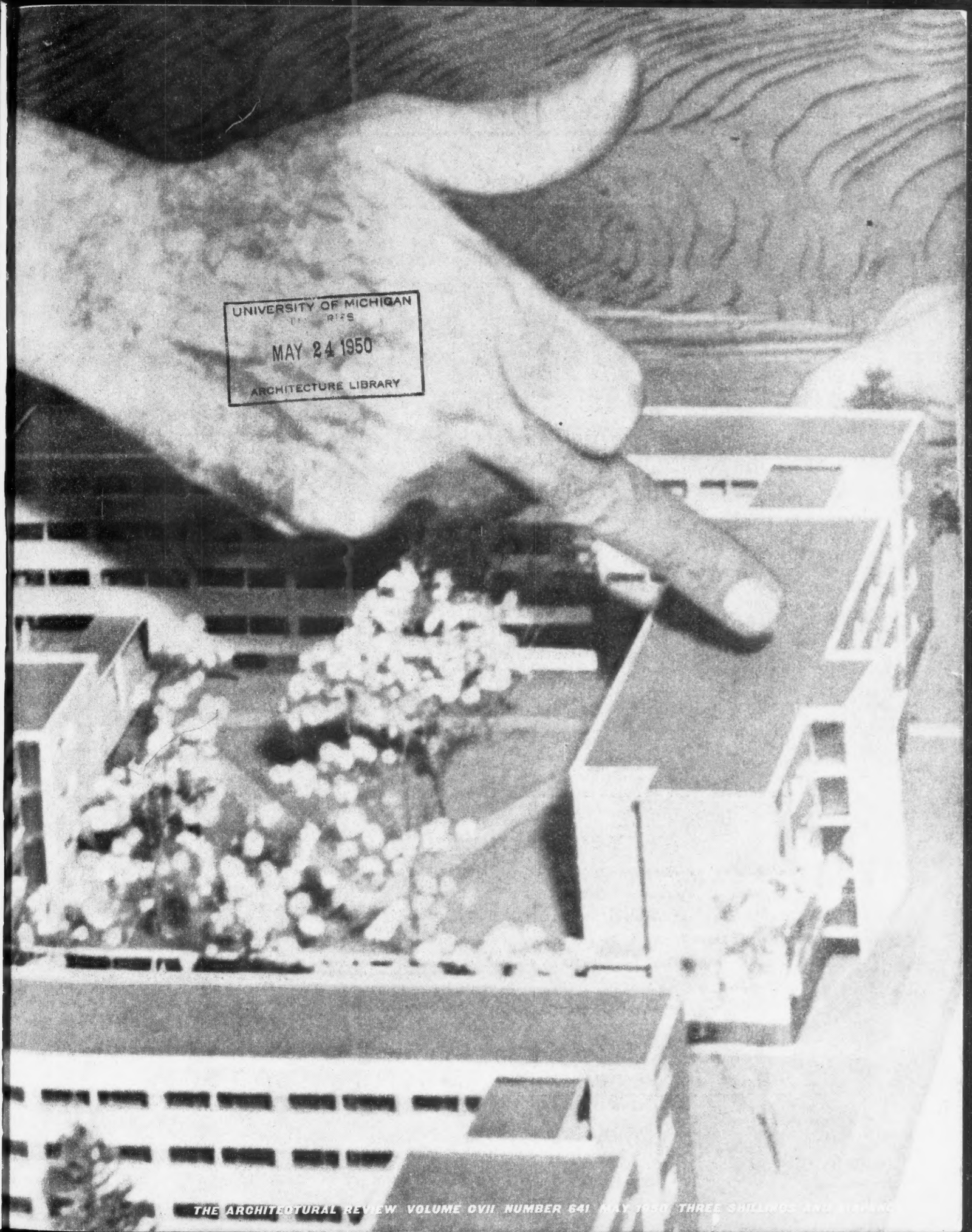

THE ARCHITECTURAL REVIEW VOLUME CVII NUMBER 641 MAY 1950 THREE SHILLINGS AND SIXPENCE

Traductions Übersetzungen Переводы

THE ARCHITECTURAL REVIEW MAY 1950

Mai 1950

Page 289: *Le Maniérisme et l'Architecture Moderne, par Colin Rowe.* Le Maniérisme dans l'architecture, pour employer le terme ainsi qu'il a été défini par les historiens d'art au début de la troisième décade du présent siècle, ne fait l'objet que depuis peu de cette sorte d'attention que l'on consacrait autrefois au baroque. A vrai dire, jusqu'à nos jours, seulement deux tentatives semblent avoir été faites en Angleterre pour définir ce terme par rapport à l'architecture, à savoir l'article de Nikolaus Pevsner dans la revue intitulée *The Mint* (la Monnaie) en 1946, et la conférence donnée par Anthony Blunt devant la RIBA (Institut Royal d'Architectes Britanniques) en 1949. Cependant, la conception du Maniérisme est quelque chose qui est susceptible de stimuler une meilleure compréhension de l'art et de l'architecture de maints autres périodes et endroits. En mars, Nikolaus Pevsner nous démontra comment il serait possible d'utiliser cette conception pour jeter un jour nouveau sur l'énigme intéressante du style anglais dit 'Elisabéthain'; dans cet article, Colin Rowe l'applique à l'architecture du Mouvement Moderne. En agissant ainsi, il s'engage sur une voie tout à fait nouvelle, et arrive à des conclusions que trouveront peut-être bien étonnantes ceux qui se sont contentés d'accepter, à sa valeur superficielle, l'explication de la raison d'être du Mouvement Moderne fournie par le mouvement lui-même.

Page 309: Punch (*hebdomadaire illustré*) *en tant qu'Arbitre d'un Siècle de Goût Domestique—Introduction par James Laver, avec Commentaire par William Gaunt.* L'historien d'art s'intéresse aux pionniers et aux présages, c.à.d. aux premiers augures des manifestations à venir. L'historien du goût, d'un autre côté, étudie l'influence de ces éléments nouveaux sur le public en général—ou sinon sur le public entier, tout au moins sur cette partie qui sert d'autorité en matière de goût à une époque déterminée. En Angleterre, depuis cent ans, ce sont les classes moyennes qui donnent le ton en fait de goût, et l'exercice de ce privilège se trouve documenté de manière frappante dans les pages de *Punch*. Cette documentation est d'autant plus importante du fait que la période allant de 1850 à 1900 constitue une étape que les historiens du goût, semble-t-il, ont considérée jusqu'ici comme une sorte de désert. William Gaunt fournit ici un commentaire sur une sélection de dessins tirés des pages de *Punch*, avec une introduction de James Laver, dont l'objet est de montrer le progrès enregistré par le goût domestique.

Page 331: *Le Béton de nos Jours, par F. J. Samuely.* En passant en revue le progrès signalé dans le domaine de la technique du béton armé, F. J. Samuely rappelle que les plans de construction architecturaux sont demeurés presque statiques en Angleterre jusqu'au moment où la nécessité, survenue récemment, d'économiser en fait d'acier et de coffrage, fit naître un élan vers de nouveaux développements. Il analyse ces développements sous quatre chapitres: les améliorations dans les méthodes de production du ciment armé ordinaire, l'introduction de nouvelles formes de structure, le béton prémoulé, et le béton précontraint; le progrès le plus remarquable a été atteint par ce dernier procédé, méthode qui, par suite de son économie en matériaux, est susceptible d'être appliquée sur une échelle très étendue—bien qu'il reste encore nombre de problèmes à résoudre, y compris celui de rendre le béton encore plus réfractaire. Celui-ci est le premier d'une série d'articles sur les nouveaux développements techniques qui paraîtront de temps en temps.

Mai 1950

Seite 289: *Manierismus und Moderne Architektur von Colin Rowe.* Manierismus in der Architektur, der Ausdruck in dem Sinne gebraucht, wie er von Kunsthistorikern im beginnenden 20. Jahrhundert definiert worden ist, hat erst in jüngster Zeit die Beachtung gefunden, die man dem Barock zubilligt. Tatsächlich gab es bisher in England nur zwei Versuche diese Bezeichnung in Verbindung mit Architektur zu bringen: Nikolaus Pevsner's Aufsatz in *The Mint* im Jahre 1946 und Anthony Blunt's Vortrag im RIBA im Jahre 1949. Aber der Begriff Manierismus gehört zu jenen, die für das Verständnis von Kunst und Architektur in verschiedenen Ländern und Epochen ausserordentlich fruchtbar sein können. Im März d. J. hat Nikolaus Pevsner in der AR, nachgewiesen in welchem Masse der Manierismus das fesselnde Problem des Elisabethanischen Stiles von einer neuen Seite beleuchten kann. Im vorliegenden Aufsatz wendet Colin Rowe es auf die Architektur unserer Zeit an. Damit betritt er Neuland und kommt zu Schlüssen, die jene erschrecken können, die sich damit zufrieden gegeben haben, die moderne Bewegung an sich anzunehmen, ohne nach ihren Beweggründen zu forschen.

Seite 309: *Der* Punch *als Sachverständiger für den Geschmack der Mittelklasse in den letzten hundert Jahren.* Einleitung von James Laver, Text von William Gaunt. Für den Kunsthistoriker kommen Pioniere und neue Strömungen in Betracht, die ihre Schatten vorauswerfen und Dinge andeuten, die im Werden sind. Die Aufgabe des Historikers, der den Geschmack einer Zeit untersucht, ist der Wirkung dieser Formen auf die grosse Masse des Publikums nachzugehen, oder zum mindesten auf jene Kreise, die den Geschmack ihrer Zeit bestimmen. In den letzten hundert Jahren war die Mittelklasse in England in Geschmacksfragen ausschlaggebend, und die von ihr festgelegten Anschauungen haben im *Punch* einen einzigartigen Niederschlag gefunden, der um so wertvoller ist als die Zeit von 1850 bis 1900 von den Historikern, die den Geschmack einer Epoche untersucht haben, bis jetzt als herrenloses Gebiet angesehen worden ist. Hier setzen William Gaunt's Untersuchungen ein. An einer Auswahl von Zeichnungen aus dem *Punch* weist er den Wandel im Geschmack der Mittelklasse nach. Wertvolle Andeutungen in der Einleitung von James Laver.

Seite 331: *Neue Möglichkeiten für die Verwendung von Beton von F. J. Samuely.* F. J. Samuely gibt eine Uebersicht über neue Möglichkeiten in der Benützung von verstärktem Beton. In England war die Entwicklung im Betonbau mehr oder weniger stationär, bis in neuester Zeit die Notwendigkeit Stahl und Schalung zu sparen ihr einen neuen Auftrieb gegeben hat. Der Verfasser behandelt diese Entwicklung unter vier Gesichtspunkten: Verbesserung in der Herstellung von gewöhnlichem verstärkten Beton, Einführung von neuen organischen Formen, Serpig-Beton und Spannbeton. Die grössten Fortschritte wurden im Spannbeton gemacht, eine Methode, die infolge ihrer sparsamen Materialverwendung grosse Möglichkeiten hat, obgleich verschiedene Probleme noch ungelöst

sind, so der Versuch seine Widerstandskraft gegen Feuer zu erhöhen. Dieser Aufsatz gehört zu einer Serie von Aufsätzen über technische Entwicklungen, die in gewissen Abständen erscheinen werden.

FUER ZUKUENFTIGE ABONNENTEN

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Май 1950 г.

КРАТКОЕ СОДЕРЖАНИЕ СТАТЕЙ

Стр. 289. **КОЛИН РОУ.** „МАНЕРИЗМ" И СОВРЕМЕННАЯ АРХИТЕКТУРА.

„Манеризм" в архитектуре (употребляя термин „манеризм", как это определялось историками искусства в начале двадцатых годов этого века), только недавно удостоился внимания подобное тому, какое, в свое время, было уделено стилю „Барокко". Действительно, в Англии, до сих пор, были только две попытки определить этот термин по отношению к Архитектуре, — статья Николая Певзнера в „*Минт*", 1946 г., и лекция Антони Блянта в Королевском Институте Британских Архитекторов в 1949 г. И все же, концепция „Манеризма" является одной из тех идей, которая обещает многое в направлении лучшего понимания искусства и архитектуры не только данного периода и данной местности.

В Мартовском выпуске нашего журнала Николай Певзнер показал, как можно, руководясь этой идеей, осветить обворожительную „энигму" Английского Елизаветинского стиля. В этой статье Колин Роу рассматривает „Манеризм" в отношении Современного Движения в Архитектуре. Он подходит к этому вопросу с совершенно новой точки врения и приходит к заключению, которое может поразить тех, которые были вполне удовлетворены анализом Современного Движения архитектуры, как оно было представлено его сторонниками.

Стр. 309. **ВВЕДЕНИЕ ДЖЕЙМСА ЛЕЙВЕРА И КОММЕНТАРИИ ВИЛЛЬЯМА ГОУНТА.**
„ПАНЧ" (юмористический журнал), КАК РЕФЕРИ АНГЛИЙСКОГО ДОМАШНЕГО ВКУСА ПОСЛЕДНЕГО СТОЛЕТИЯ.

Историки искусства интересуются пионерами и предвестниками, как показателями будущих форм. С другой стороны, историки общественного вкуса интересуются эффектом этих форм на публику — или, если не на публику вообще, то на ту часть ее, которая определяет вкус того времени. За последние сто лет, направление вкуса в Англии определялось средним классом, и результаты этого руководства нашли, единственное в своем роде, отражение на страницах „Панча", отражение тем более ценное, что оно иллюстрирует общественный вкус периода 1850–1900 г., того периода, который историки вкуса, до сих пор, как будто, рассматривали, как „нейтральную территорию" (период не отличающийся никаким определенным стилем). В этой статье Вилльям Гоунт комментирует по поводу выбора рисунков со страниц „Панча", представленные Джеймсом Лейвером, и собранные с целью показать прогресс домашнего вкуса того периода.

Стр. 331. **Ф. ДЖ. САМЮЭЛИ. НОВЕЙШИЙ БЕТОН.**

При обозрении недавнего прогресса в железобетонной технике, Ф. Дж. Самюэли указывает, что в Англии планирование в этой области было почти стационарно до тех пор, пока не появилась потребность в экономии стали и шаблонов, которая дала толчок по направлению новых усовершенствований. Ф. Дж. Самюэли разбирает эти усовершенствования под четырьмя заголовками — улучшения в методах продукции обыкновенного железобетона, введение новых структурных форм, заранее отлитый бетон и „пристрессинг" (преднапряжение); исключительный прогресс был сделан в области „пристрессинг", метод, который благодаря своей экономии в материалах, получил широкое распространение — хотя, некоторые из задач, включая и попытку сделать его, более огнеупорным, до сих пор еще не вполне разрешены.

Эта статья является одной из серий на тему новых усовершенствований в технической области, которые, время от времени, будут появляться в нашем журнале.

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THE ARCHITECTURAL REVIEW

Volume 107 Number 641 May 1950

The Cover For thirty years the architectural policy of Harvard University was the timid one of matching up the buildings which she already had. Then in 1948 she reverted to the older and bolder tradition that gave her Richardson's Sever Hall, and commissioned a vast new Graduate Centre from Walter Gropius and the Architects' Collaborative. The cover shows part of the model of this project; the poised finger is that of Walter Gropius himself. Progress photographs and further details of the scheme will be found on page 357.

The Authors *C. F. Rowe, MA,* architect. Is at present lecturing at the Liverpool School of Architecture. Is convinced that analogies between the architecture of the sixteenth and the present century cannot be ignored in any attempt to formulate a consistent theory for contemporary architecture. *William Gaunt*, a graduate of Worcester College, Oxford, has produced several works of art history: 'The Pre-Raphaelite Tragedy,' 'The Aesthetic Adventure' and 'The March of the Moderns.' Has in preparation a book on classic influences on Victorian art to be entitled 'Victorian Olympus.' Interested in the social aspect of architecture, and practising draughtsmanship as well as writing Was art critic of the *Evening Standard*, 1946-7. *Felix J. Samuely* is senior lecturer in charge of structural engineering at the AA School and a member of the RIBA Architectural Science Board. Has worked as consultant on many well-known buildings which include the De La Warr Pavilion, Bexhill; Simpson's, Piccadilly, and the Technical College at Hatfield. Publications include 'The Welding and Cutting Year Book, 1936-7,' 'Building Design and Construction, 1939,' and 'Civil Protection, 1939.'

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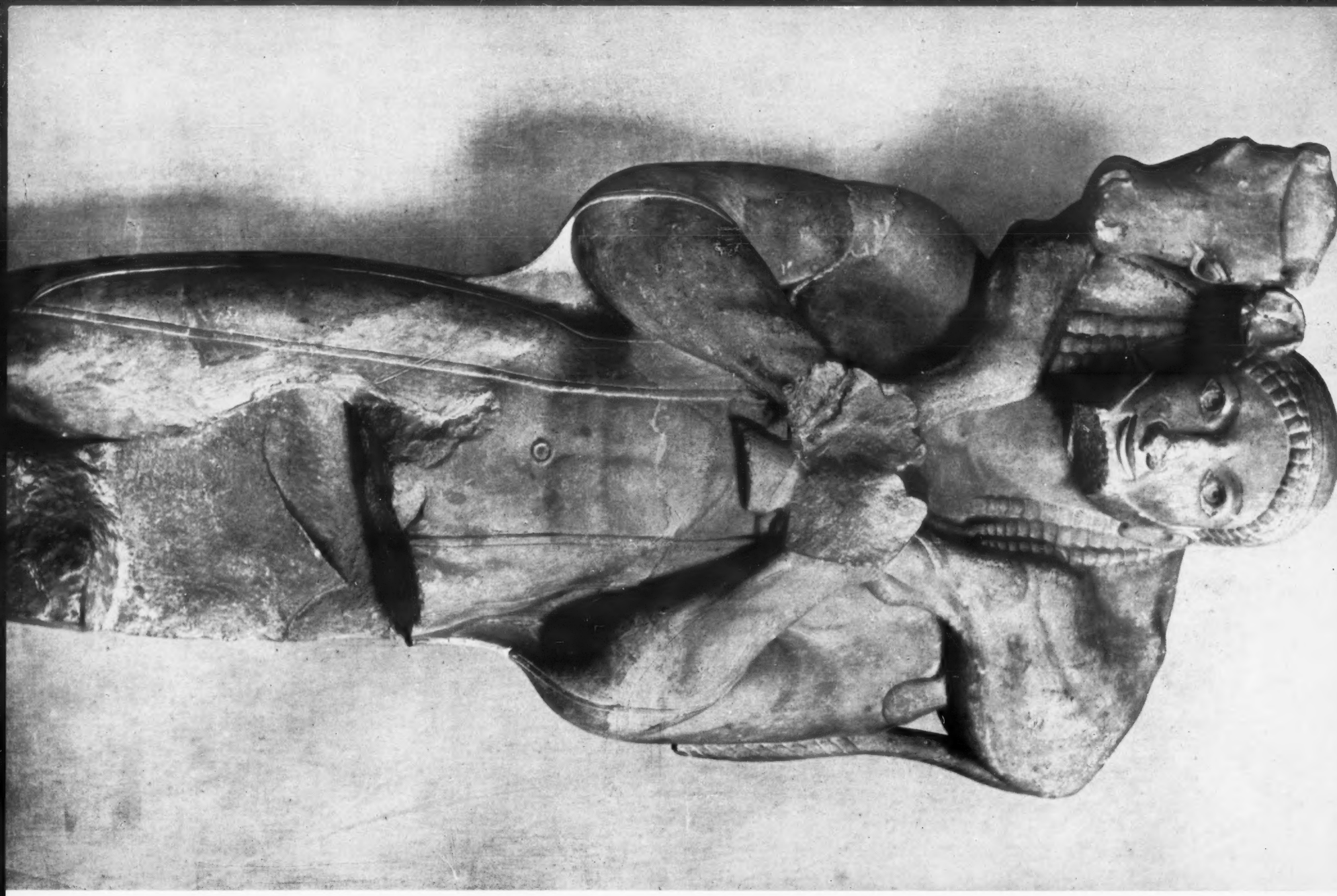
THREE SHILLINGS AND SIXPENCE

Indexes *As from, and including, the January 1950 issue a half-yearly index will be published as a supplement to the* REVIEW *and will appear in an issue shortly after the completion of the current volume.*



the Moschophorus *The history of polychromy in sculpture was straightened out by the archæologists long ago: we know that in archaic Greek art, for instance, there was a development from complete to partial polychromy, and that in this sixth-century Moschophorus from the Acropolis Museum only the nude parts of the body were free of colour. But the æsthetics of polychromy in sculpture is still a vexed question—to which one of the answers will be found on page* 348.

Colin Rowe

The term Mannerism cannot yet be said to have become a necessary part of the vocabulary of every educated man or woman, but it should not be assumed that its uses are limited to those of a plaything for art historians. As Nikolaus Pevsner showed in his article on Wollaton Hall (March, 1950), it may be used to throw light on the fascinating enigma of the Elizabethan style in architecture; it is Colin Rowe's contention, in the following article, that it provides the key to a fuller understanding of the architecture of the Modern Movement. But how precisely did the term arise, and what does it mean? To answer this question it is necessary to glance back to the 1880's, when the term Baroque came into being to make it possible to distinguish between styles represented by Raphael and Bramante, say, on the one hand and Rembrandt and Vanbrugh, say, on the other—styles which had hitherto been lumped together indiscriminately as Renaissance. This distinction between Renaissance and Baroque received its final form in the writings of Wolfflin and Sehmarsow in the '90's and after, but it very soon became clear that a simple dichotomy was not enough to meet the case; for there still existed an art which was emphatically not Renaissance, but equally emphatically not Baroque either—the art of such painters of the later sixteenth and early seventeenth centuries as Bronzino, Pontormo, Tintoretto and Greco. Basically this art was cold, perverse, intricate and intellectualized; more superficially it was consciously imitative of the manner of Michelangelo—and hence the term Mannerism. The isolation, so to speak, of Mannerism in painting was achieved in the early 1920's by Dvorak, Pinder, Pevsner and some others; the fact that this should have happened in the age of Picasso, Chirico, Mondrian, etc., has a significance which will be appreciated when it is remembered that the first awareness of the Baroque as a distinct style had coincided with Impressionism's re-discovery of Dutch and Spanish seventeenth century painting and with the most baroque phase of nineteenth century architecture. Attempts to apply the term Mannerism to architecture have been more recent; in fact the only general attempts in English have been Nikolaus Pevsner's article in *The Mint* for 1946 and Anthony Blunt's lecture at the RIBA in 1949. In applying it to the architecture of the Modern Movement Colin Rowe breaks completely new ground—and turns a number of stones which have been hiding other things than some people thought.

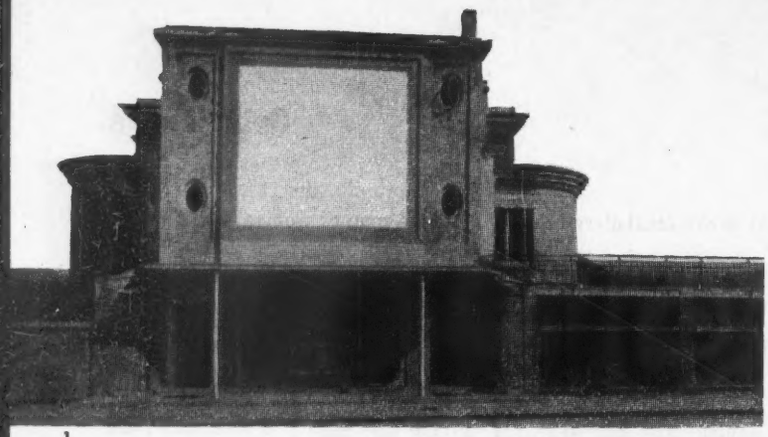
MANNERISM AND MODERN ARCHITECTURE

THE VILLA BUILT by Le Corbusier at La Chaux-de-Fonds, his first considerable work to be realized, in spite of its great merits and obvious historical importance, finds no place in the collection of the *Oeuvre Complète*. This building, in a sense, is out of key with his later works, and by its inclusion, the didactic emphasis of the collection might have been impaired; but the omission is all the more unfortunate, in that six years later, the design was still found sufficiently serious to be published as an exemplar of proportion and monumentality.[1]

The house is of nearly symmetrical form, and in spite of a general lightness deriving from its concrete frame, its conventional character is fairly emphatic. The principal block is supported by flanking wings; and a central hall, rising through two storeys and crossed by a subsidiary axis, establishes for the plan a simple, balanced, and basically cruciform scheme. Externally the appearance of these same characteristics of restrained movement and rational elegance seems to invite appreciation in Neo-Classical terms. Thus the elliptical windows are part of the stock furniture of French academic architecture; and while the lack of ornament with the simplified cornices suggests the influence of Garnier, and the expression of the concrete frame in the flanking walls indicates an obvious debt to Auguste Perret, the building as a whole, compact, coherent and precise, is an organization which the late eighteenth century could have relished, and a work towards which a Ledoux, if not a Gabriel, might have found himself sympathetic.

One may, it is true, admit innovation in the simplification of elements, although adequate Austrian and German prototypes could be suggested: one might also perceive in the two bedroom suites of the first floor a premonition of later spatial complexity; but having made these observations, in plan and in three façades at least, there is little to be found, which detracts from a conventional, conservative excellence. But the fourth and entrance elevation presents quite distinct problems of appreciation. Behind its wall, the presence of a staircase continued to the second floor has led to an increase in height, which somewhat detaches this part of the building from the rest; and this elevation affects a severe and obvious distinction from the mass behind, with which on superficial examination it seems indeed scarcely to be related. Its succinct, angular qualities are foreign to the curvilinear arrangements of the block, and its in-

[1] In the *Vers Une Architecture*. According to the English translation 'This villa of small dimensions, seen in the midst of other buildings erected without a rule, gives the effect of being more monumental, and of another order.'



1

The villa by Le Corbusier at La Chaux-de-Fonds, built in 1916. *It was omitted from the* Oeuvre Complète *presumably because 'the didactic emphasis of the collection might have been impaired' by its inclusion. The formal ambiguity it displays, with the remarkable focus on a blank, framed panel, provides an interesting comparison with some designs of the sixteenth century Mannerists in Italy.*

clusive, rectilinear, self-sufficient form seems to deny the type of pyramidal composition, which reveals itself from the garden.

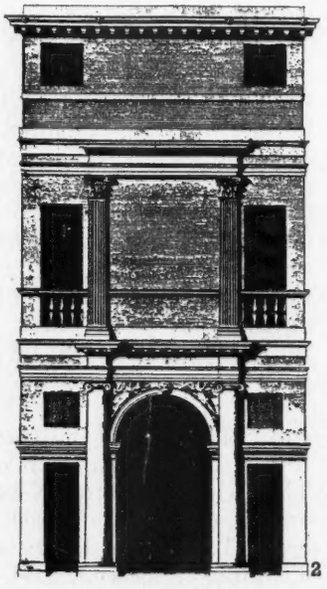
The flat vertical surface of the two upper floors is divided into three panels. The outer ones, narrow and vertical, are pierced by elliptical lunettes, while the central one, elaborately framed, comprises an unrelieved blank, white surface. It is towards this surface, accentuated by all the means within the architect's control, that the eye is immediately led. The low walls, screening service rooms and terrace, are curved inwards rising towards it; two entrance doors prepare the duality to be resolved; the projecting marquise with its supporting columns completes the isolation of the upper wall, where the composition is to be focused; the emphatic elliptical windows in the outer panels increase the demand for a dominant; and with the mind baffled by so elaborately conceived an ambiguity, the eye comes to rest on the immaculate rectangle and incisive detail of its brick frame.

Contemplating this façade for any length of time, one is both ravished and immensely irritated. Its mouldings are of extreme finesse, lucid and complex; the slightly curved window reveals are of considerable suavity: the contrast of wall above and below the canopy is permanently exciting; the sharp and dogmatic change of texture refreshes and soothes; but the blank surface is both a disturbance and a delight. The masses and the modelling impel the eye towards it, but it is the activity of emptiness, which the intellect is called upon to enjoy.

Since this motif was presumably intended to shock, its success is complete, for it imbues the façade with all the qualities of a manifesto. In this abrupt composition, if nowhere else in this villa, there appears a tension which seems to foreshadow the later development; and it is the panel with its intensifying frame which establish for other elements of the façade—columns and canopy—their apparent precocity. Distinct and deliberate, drawing attention to itself, and yet without apparent content, at once distributing attention over the rest of the house; by its conclusiveness the whole building gains significance; but by its emptiness it is, at the same time, the problem in terms of which the whole building is stated. Thus, as an apparent outcome of its systematically opposite values, there issue a whole series of disturbances, of which it is both centre and periphery.

Behind the panel lies the staircase, the lighting of which can only be impaired, and one must assume that an architect as apt as Le Corbusier, could, had he wished, have chosen some alternative and functionally more satisfactory organization; while even if it were to be supposed (improbable as it appears) that the frame was intended to receive some fresco or inscription, it is still a motif sufficiently abnormal and recondite to stimulate curiosity and encourage a hunt for possible parallels. The most probable and certainly the most rewarding field of investigation seems to be Italian; not that with Le Corbusier any direct allusion could be expected, but that in general terms he so frequently appears to be descended from the architectural traditions of Renaissance humanism.

In early Renaissance loggia and palace façades, sequences of alternating windows and panels do not appear to be uncommon. In such more frequent sequences from the sixteenth century, panels and windows acquire almost equal significance. Panels may be expressed as blank surfaces, or become a range of inscribed tablets, or again they may form the frames for painting; but whatever their particular employment may be, the alternation of a developed system of panelling, with an equally developed system of fenestration, seems always to produce complexity and duality of emphasis in a façade. This quality must have given considerable pleasure to the generation of architects subsequent to Bramante; and in the pages of Serlio, for instance, panels occur in an almost embarrassing profusion.[2] Sometimes they are to be found in the typical alternation, or on other occasions absorbing entire wall surfaces; in elongated form they are used to intersect two whole ranges of windows, or they may appear as the crowning motif of a triumphal arch or Venetian palace. It was probably Serlio who first employed the panel as the focus of a façade. In some cases he has groups of windows arranged on either side of this reduced but evocative form of central emphasis; but it also seems likely that in only two instances does the panel make a central appearance within an eleva-



2

The use of the blank panel to provide central emphasis is illustrated in the first two of the façades above. 2, *the so-called Casa di Palladio at Vicenza,* 1572, *a subtle exercise in the inversion of classical rules, bears an obvious relationship to the villa at La Chaux-de-Fonds.* 3, *Zuccheri's casino at Florence,* 1578; *the design of this house remained in the repertoire of academic archi-*

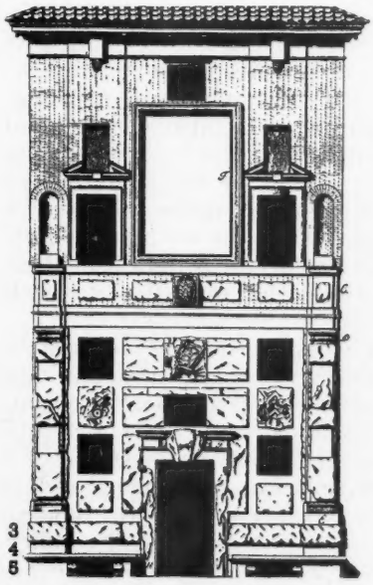
[2] See Serlio: *Tutte l'Opera d'Architettura.* The panel alternating with windows occurs in Book IV, pages 15, 23, 25, 27, 29, 33, 43, 45, 49, 53, 151, 159, 187, 221, 229. The example in Book VII, p. 187, suggests itself as a possible source for Palladio's scheme. It was perhaps through the influence of Serlio that this motif penetrated France, where for instance, alternating with a range of attic windows, it is to be seen in such a scheme as Lescot's Louvre.

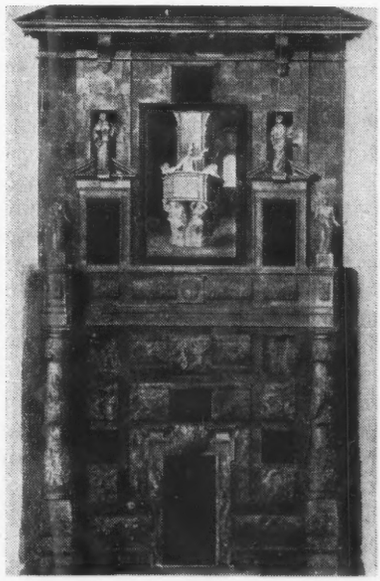
tion so restricted as that at La Chaux-de-Fonds. Although comparisons of this sort are frequently tendentious and overdrawn, the so-called Casa di Palladio at Vicenza and Federico Zuccheri's casino in Florence do show a quality sufficiently remarkable to permit their interpretation as sixteenth century commentaries upon the same theme. Dating from 1572 and 1578 respectively, small houses of a personal and distinctly precious quality, it would be pleasant to assume that they represented a type, a formula for the later sixteenth century artist's house.

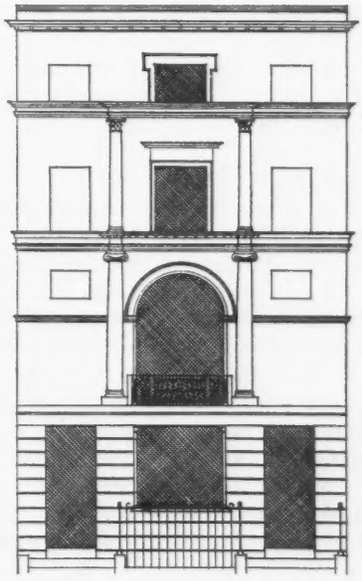
Palladio's building is apparently generated by the combination of a domestic façade and an arcaded loggia, which in its ornaments assumes the role of a triumphal arch. Unlike the conventional triumphal arches of antiquity, in this instance a developed Corinthian superstructure is included; and although on the ground floor the two functions of the loggia as part of a house and as part of a triumphal arch are closely integrated, in itself the arch is even more intimately related to the panel formed by the Corinthian pilasters above. The breaking forward of the Ionic entablature about the arch provides a direct vertical movement through the two orders, emphasizing their interdependence, so that the panel retains the focus developed by the arch below, but seems otherwise to read as an intrusion projected upwards into the *piano nobile*. Its anomalous character is further increased by details which suggest a respect for the functions of the domestic façade; and thus such a feature as the balcony rail of the windows, which emerges from behind the pilasters to appear in the panel as a continuous string course, only serves to exaggerate, as it was presumably intended it should, an already inherent duality.

It need scarcely be pointed out that we are here in the presence of a formal ambiguity of the same order as that which Le Corbusier was to provide in 1916; although in lucid, academic dress, the disturbance is less perceptible and perhaps more complete. Palladio's inversion of the normal is effected within the framework of the classical system, whose externals it appears to respect; but in order to modify the shock to the eyes, Le Corbusier's building can draw on no such conventional reference. Both state the problem of their complex duality with an extreme directness and economy of means, which by comparison, causes Federico Zuccheri's essay in the same composition to appear at once redundant and bizarre.

His approach is altogether more violent, his building a *jeu d'esprit* conceived as part of a programme of personal advertisement, and illustrating his triple profession as painter, sculptor, and architect. Unlike Palladio, his two elements of focus, the void of the entrance below, and the solid of the panel above, are not placed in direct relationship; but each, as the dominant interest in strongly contrasted stone and brick surfaces, appears set within an arrangement of incident, which both diminishes and accentuates its importance. Two triangles of interest are established. That below is formed by the three tablets with their reliefs of mathematical instruments, and has as its apex an heraldic cartouche. That above is organized by windows and niches about the central panel, in this case, as in the Palladio house, intended to receive a painting. This diffused incident, which is still concentrated within the strictly triangular schemes, establishes a form of composition different from







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tecture for a considerable time. Both the elder Wood of Bath, and Sir John Soane comment on its rustication, and both too are aware of its symbolism. Soane refers to the scheme as 'an uncommon and singularly curious specimen of the Rusticated System of building.' The lecture diagram, with which Soane presumably illustrated his remarks on the building, offers a most interesting commentary upon the Neo-Classical approach to a Mannerist scheme. Soane or his draughtsman was aware of Ruggieri's more or less correct representation of Zuccheri's façade; but in this form it was scarcely acceptable. In Soane's version 4, the pilasters have been turned into columns, and the brick upper stage has been transformed as masonry. The niches above the pilasters have disappeared and their place is now taken by Flaxmanesque statues, which also occupy the now more elongated recesses above the first floor windows. The new flavour which the design acquires is further sustained by the suppressing of the mezzanine windows, whose place appears to be occupied by reliefs of suggestively neo-Grec outline; while minor details of keystone, cartouche, and brackets also suffer distortion. In the presentation every effort is made to reduce the rude and discrepant impact of Zuccheri's competing forms. 5, a house in Suffolk Street, London. Palladio's building has here been elevated on a normal London ground floor, and the 'panel' conventionally glazed. Misunderstanding is complete.

Palladio's, so that with Zuccheri, the particular ambiguity of the panel is of less importance, when compared with that of the entire façade.

The composition of the lower wall is framed by rusticated pilasters, which seem to restrict its detail between quite rigid boundaries; but these pilasters receive no downward transmission of weight. Two advanced surfaces in the upper storey carry a form of triglyph or bracket, which seems to suggest for them a function of support; but they are displaced by niches from the position above the pilasters, which reasonably they might be expected to occupy; while the insertion within them of elaborately framed windows invalidates still further their apparent function. The niches in themselves, on first examination, seem to expand the interest of the upper wall and create there the appearance of an organization as open, as that of the wall below is compressed; but, within this organization, it becomes clear that the different elements—niches, windows and panel—are crushed in the harshest juxtaposition, so that on second analysis, the contrast compels one to attribute to the supposedly compressed basement an almost classical directness and ease.

The complexities and repercussions which such schemes provoke are endless and almost indefinable, but patience perhaps exhausts itself in the explanation. It would seem to be abundantly clear that it is a dilemma of dual significance, a distinction between the thing as it *is* and as it *appears*, which seems to haunt all these three façades; and if Zuccheri's building by comparison with the more lucid expositions seems to be something of an exercise in genre, its second-hand qualities perhaps enhance its value as a document, almost as a text-book illustration of deliberate architectural derangement.

The two examples from the sixteenth century are characteristic late Mannerist schemes, the most apt registers of that universal *malaise*, which in the arts, while retaining the externals of classical correctness, was obliged at the same time to disrupt the inner core of classical coherence.

In so-called academic, or frankly derivative architecture, the recurrence in 1916 of a form of composition, which at first glance appears intrinsically Mannerist, need perhaps cause no undue surprise; but, occurring as it does, in the main stream of the modern movement, it is remarkable that this motif at La Chaux-de-Fonds should not have aroused more curiosity. It is not in any way suggested that Le Corbusier's use of the blank panel is dependent on the previous instances, and it is not imagined that a mere correspondence of forms necessitates an analogous content. Such a correspondence may be purely fortuitous or it may be of some deeper significance.

* * *

Apart from Nikolaus Pevsner's article *The Architecture of Mannerism*[3] and Professor Blunt's recent lecture at the RIBA, in its accepted sense as a style Mannerism has been the subject of no popular discussion. Such discussion must obviously lie beyond the scope of this present essay, which for a frame of reference relies to a great extent on the article and lecture already cited. In the most general terms, works produced between the years 1520 and 1600 are to be considered Mannerist, and it is hoped that the particular analysis of two sixteenth century schemes has provided some illustration of types of ambiguity that are characteristic.

An unavoidable state of mind, and not a mere desire to break rules, sixteenth century Mannerism appears to consist in the deliberate inversion of the classical High Renaissance norm as established by Bramante, to include the very human desire to impair perfection when once it has been achieved; and to represent, too, a collapse of confidence in the theoretical programmes of the earlier Renaissance, which it is able neither to abandon nor to affirm. As a state of inhibition, it is essentially dependent on the awareness of a pre-existing order: as an attitude of dissent, it demands an orthodoxy within whose framework it might be heretical. Clearly, if as the analysis of the villa at La Chaux-de-Fonds suggests, modern architecture may contain elements analogous to Mannerism, it becomes essential to find for it some corresponding frame of reference, some pedigree, within which it might occupy an analogous position.

Among sources for the modern movement, the characteristic nineteenth century demand for structural integrity has rightly received greatest emphasis. Dependent to some extent on the technical innovations of industrialism, this demand was unexpectedly reinforced by the Revivalists, both Gothic and Greek; and it was they who transformed its original rational basis and imbued this structural impulse with a dynamic emotional and moral content. In this possibly fallacious form, the structural tradition has remained one of the most crude, indiscriminate, and magnificently effective forces which we have inherited from the nineteenth century.

But it remains apparent that a system of architecture cannot enjoy a purely material basis, and that some conception of form must play an equal and opposite role. Although formal derivations for the modern movement often seem to impose too great a strain on the imagination, at a time no more remote than the later nineteenth century, it is noticeable that advanced architecture from the seventies onwards belongs to one of two discernible patterns.

The programme of the first is certainly closest to our sympathy, and its outlines clearest in our minds. It was the heroic process of simplification, representing an intense and consistent æsthetic effort, the direct assault upon nineteenth century pastiche of a Philip Webb, a Richardson or a Berlage, and it would seem that the central tradition of modern architecture does proceed from the personal conflict, which such individuals experienced between the authorities of training and reason. Obedience to the nature of materials, to the laws of structure, consecrated by the theorists of the Gothic Revival and everywhere recognizable in the products of contemporary engineering, seemed to offer an alternative to purely casual picturesque effects; and from within such a framework, it was felt that an architecture of objective significance might be generated. For archi-

[3] Nikolaus Pevsner: *The Architecture of Mannerism*. The Mint, 1946. Anthony Blunt: *Mannerism in Architecture*, RIBA Journal, March, 1949.

tects of this school an inevitable tension is clearly experienced between a pictorial education and the more purely intellectual demands which a structural idealism imposes. Trained in pictorial method, but insisting on an architecture regulated by other than visual laws, their forms frequently bear all the marks of the battleground from which they had emerged.

The alternative tendency apparently owes nothing to this dialectic; but equally concerned with the rational solution of the mid-nineteenth century impasse, it found in physical attractiveness its architectural ideal. Without either the former school's consistent vigour or narrow prejudice, the architects of this second school look down the perspectives of history with a liberal eye and are anxious to co-ordinate its suggestions. From an analysis of function, there emerges a discipline of the plan; and from the impressions of a visual survey, that research into architectural composition which has engrossed so many subsequent theorists. Adhering to no distinct formula of revival, there is willingness in this second school to combine motifs from several different styles, and in the resultant amalgam, they appear as 'telling' features in a composition, rather than for any further significance which they might possess. Thus we find Norman Shaw is able to support late Gothic effects of mass with detail from the school of Wren; and concerned chiefly with broad effects of movement, mass, silhouette and relationship, architecture is valued more completely as a source of visual stimuli.

Neither of these two schools can be considered as completely independent, nor as completely unaffected by, the other's activities; but while for the one, an architecture objectively rooted in structure and craftsmanship is an emotional necessity, the other neither finds such objectivity possible, nor perhaps desirable. For the first school, architecture still possessed a certain moral quality, among its purposes was that of imparting a truth; for the second its significance was more exclusively æsthetic, its purpose was to convey a sensation. The architects of this second school saw the possibilities of a rational manner to lie in the expression of the sensuous content common to all phases of art, and in this emphasis they are perhaps more typical of the late nineteenth century.

The great distinction of this period, its insistence on purely physical and visual justification for form, appears to separate its artistic production from that of all previous epochs—from the Renaissance by its failure to represent public ideas, from the later eighteenth and early nineteenth century Romantic phase, by its elimination of private literary flavour. For although in intention the architecture of the early nineteenth century was romantic, pictorial and literary; in practice, particularly through its Neo-Classical exponents who have with justice been interpreted as the legatees of the Renaissance tradition, it inherited a good deal of earlier academic thought. For the later nineteenth century, the Renaissance is no longer a positive force but an historical fact; and it is by the absence of the Renaissance theoretical tradition, with its emphasis upon other values than the purely visual, that particularly the academic productions of this time are most clearly distinguished.

Just as the Renaissance, in opposition to the eighteenth and nineteenth centuries, conceives Nature as the ideal form of any species, a mathematical and Platonic absolute, whose triumph over matter it is the purpose of art to assist; so in painting it seeks an infallibility of form. Scientific perspective reduces external reality to a mathematical order, and in so far as they can be brought into this scheme, the 'accidental' properties of the physical world acquire significance. The artistic process is not the impressionist record of the thing seen, but rather the informing of observation by a philosophical idea. In its architecture, imagination and the senses function within a corresponding scheme, proportion is the result of scientific deduction, and form by these means becoming a visual aspect of knowledge, typifies a moral state, acquiring the independent right to existence, apart from the sensuous pleasure which it might possibly convey.

It was not until the later eighteenth century that with Romanticism and the empirical philosophy of the Enlightenment, there emerged their corollary, the direct pictorial approach to architecture, and its evaluation according to impact on the eye. When Hume was able to declare that 'all probable knowledge is nothing but a species of sensation,' the possibilities of an intellectual order seem to have been demolished; and when he could add that 'Beauty is no quality in the things themselves;' but 'exists merely in the mind which contemplates and each mind perceives a different beauty,'[4] rationalism, by emancipating the senses, appears to have provided the stimulus and apologetic of the great nineteenth century free for all. Eclecticism and an individual sensibility emerged as necessary products; and personal liberty was as effectively proclaimed for the world of forms, as in 1789 it was asserted for the political sphere. But just as politically the *ancien régime* lingered on, so with earlier attitudes persisting, the Romantics saw indirectly according to the associational value of their forms; and it was not until the *furore* of the movement had spent itself, that late nineteenth century 'realism' regularized the situation.

After the mid-nineteenth century, with Liberalism and Romanticism no longer in active and revolutionary association, that moral zeal which had once infused their programme is less frequently found; and in all activities with a spirit of analytical detachment, the attempt now seems to have been made to systematize the Romantic experience, to extract 'scientific' formulæ from its subjective enthusiasms. Thus in architecture the Romantic forms and their *sensational* implications are codified. While the earlier phase had been sensible of literary and archæological overtones, for the later these suggestions tend to be discounted. An eclectic research into elements and principles of architecture arises, which is distinguished from the analyses of the Renaissance theorists by its exclusively functional and visual frames of reference.

The development of the idea of architectural composition might be cited as typical of these generaliza-

[4] Hume: *Of the Standard of Taste*, 1757. For this quotation I am indebted to Professor Wittkower's *Principles of Palladio's Architecture*, Journal of the Warburg and Courtauld Institutes, Vols. VII and VIII.

tions. The conception of architectural composition was never during the Renaissance successfully isolated, and while Reynolds and Soane were alive to the scenic possibilities of architecture, architectural composition as such does not play a large part in their lectures. A developed literature upon the subject is of comparatively recent growth; and as representing the co-ordination of a subjective point of view, the idea seems to be characteristic of the later nineteenth century.[5]

Apart from an expressed antagonism to the exponents of the late nineteenth century, modern architects have still not clarified their relationship to its ideas. Although these ideas now usually called academic have never been effectively replaced, modern architects generally have expressed a decisive but undefined hostility towards them. 'Moi je dis oui, l'académie dit non,' Le Corbusier inscribes a drawing; and in the same spirit functional, mechanical, mathematical, sociological arguments have all, as extra-visual architectural sanctions, been introduced to provide counter-irritants to the prevailing theory. But mere reaction from a system of ideas is scarcely sufficient to eradicate that system and it is more than probable that in the sense of providing a matrix, the attitudes of late nineteenth century analysts were historically effective in the evolution of the modern movement.

It is a defect of the pictorial approach, taking account chiefly of masses and relationships in their effect upon the eye, that frequently the object itself and its detail suffer a devaluation. Subjected exclusively to the laws of human sensation, it is seen in an impressionist manner, and its inner substance, whether material or formal, remains undeveloped. It is a defect of a universalized eclecticism that it must inevitably involve a failure to comprehend both historical and individual personality. Its theorists perceive a visual common denominator of form, but are unable to allow the non-visual distinctions of content; indisposed to permit the internal individuality of particular styles, but affirming the idea of stylistic reminiscence, the late nineteenth century academy destroys the logic of the historical process, while insisting on the value of historical precept.

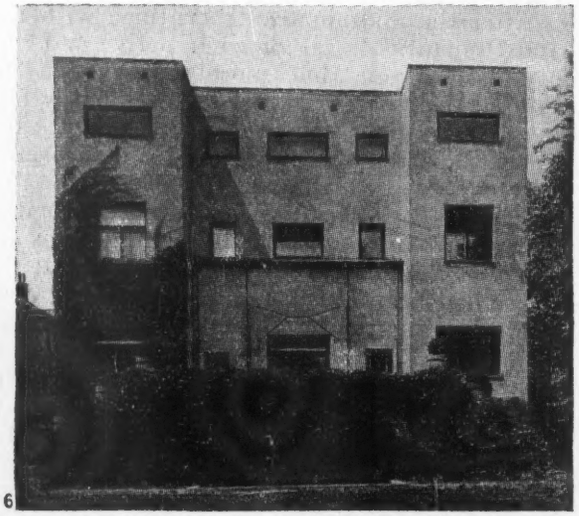
By all-inclusive tolerance history is neutralized, and eclecticism, which as a principle demands a fundamental prejudice, is seriously weakened. The specialized eclecticism of the early Romantics no longer convinces, and the reduced effects of the eclectic method are rationalized in order to support a more abstract investigation of sensuous properties in mass and proportion. Thus almost by negative action a most powerful solvent of revivalism is provided; and in advanced circles, by the early twentieth century, with the identity of the past destroyed and revivalist motifs reduced to mere suggestion, there is in general circulation a developed and systematic theory of the effects of architecture upon the eye.

With this conception the Art Nouveau, the more expressionist schools of contemporary architecture, and the current of Neo-Georgian taste could certainly be associated, and in their direct sensory appeal, those Mendelsohn sketches[6] representing film studios, sacred buildings, observatories and motor-car chassis factories, might be considered a logical conclusion of the idea of architecture as pictorial composition. Within the terms of this vision it seems probable that advanced architects of the structural tradition came to interpret the formal suggestions of 'the styles,' and in Mr. Philip Johnson's recent monograph there has been demonstrated the partial dependence of Mies van der Rohe's early designs on the works of Schinkel. Schemes of Gropius have suggested a descent from the same sources; but it should be noticed that this early twentieth century admiration for Neo-Classicism was not exclusive to the modern movement, for so many commercial palaces and domestic monuments betray the same affinity. In these buildings although attempts are made to enforce classical detail, the necessarily increased scale or elaborated function leads either to inflation or a too discreet suggestiveness; and it is in reproducing the blocking, the outline, the *compositional* elements that greatest success seems to have been experienced.

The Edwardian Baroque in fact offers admirable examples of the impressionist eye brought to bear upon the remnants of the classical tradition, and outside the strictly academic limits we find architects functioning within the structural tradition whose point of view remains decisively impressionist. With the early Gropius a *compositional* norm rather broadly derived from Neo-Classicism is actively balanced by the promptings of a mechanized structure.

As arising from such an antithesis between newly clarified conceptions of vision and structure, those early buildings which are rightly considered to belong to the modern movement can be understood, for by other means it seems difficult to account for the stylistic differences which separate the works of these years from those which appeared in the 1920's. The buildings of Perret, Behrens, Adolf Loos, to

[5] See the Bibliography to Howard Robertson's *Principles of Architectural Composition.*



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House at Vienna by Adolf Loos, 1910. *Although the naked quasi-abstract forms of this house have endeared it to the polemical modernists its composition is still uncompromisingly Neo-Classical.*

[6] See Arnold Whittick: *Eric Mendelsohn,* 1940.

name architects illustrated by Professor Pevsner in his *Pioneers of Modern Design*, are not naïve, nor primitive; they are evidently precursors of the later development. But comparing for instance the Adolf Loos house of 1910 at Vienna with any typical production of the twenties, it becomes clear that there are differences of formal ideal, which neither nationality, nor the temperament of the architect, nor technical innovation, nor the maturing of an idea, can fully explain.

Loos, with his fanatical attacks on ornament, might possibly from one point of view be considered already as showing Mannerist tendencies; but allowing for an elimination of extraneous detail and a certain mechanical excellence, this house with its extreme severity and 'its unmitigated contrast of receding centre and projecting wings, the unbroken line of the roofs, the small openings in the attic,'[7] even in the horizontal windows, is not entirely remote from the more naked types of Neo-Classical villa as projected by Ledoux. Without injustice it can be evaluated by the pictorial criteria which we have discussed; and although a late nineteenth century academician might not be overjoyed in the contemplation of this façade, there is nothing here to which he could raise theoretical objection.

Such is certainly not the case with the villa at La Chaux-de-Fonds.

* * *

A work of art lives according to the laws of the mind, and some form of abstraction must clearly form a basis for all artistic achievement; but it is apparent that over and above this minimum, a work may possess those specifically cerebral qualities to which the term 'abstract' is more conveniently applied, and it has in this sense been commonly employed in the definition of the Cubist and subsequent schools of painting. The Cubist experiment which can now be seen, not as an arbitrary break with tradition, but as the necessary development of an existing situation, is the single most striking artistic event of the early twentieth century. Its influence, and that of abstract painting in general upon the modern movement in architecture has been consistently emphasized, and its effects are obvious—simplification and intersection, plane as opposed to mass, the realization of prism-like geometrical forms, in fact the developed manner of the modern movement in the twenties. But it is clear too, that though working with a visual medium, the abstract art of today is working with a not wholly visual purpose, for abstraction presupposes a mental order of which it is the representative.

Here it is important to distinguish between its process in the Renaissance and at the present day. Abstraction occurring in Renaissance art makes reference to a world of ideal forms, asserts what the artist believes to be an objective truth, and typifies what he considers to be the scientific workings of the universe. Abstraction in contemporary art makes reference to a world of personal sensation, and typifies the private workings of the artist's mind.

There is thus in both cases a reluctance merely to report the outward forms of the external world: but, in the one it is related to a world of public, in the other of private, symbolism. That private symbolism might form a basis for art is clearly a point of view inherited from the subjective attitudes of developed Romanticism; and thus, while on the one hand contemporary painting, in abandoning the impressionist programme, denies the value of sensational schemes which had developed since the eighteenth century; on the other it affirms an attitude derived from closely related sources.

This reaction to sensation, at the same time positive and negative, is as characteristic of the output of our own day as it is of certain works of the sixteenth century; and the analogy of the development in painting might conveniently be applied to architecture. Here one might notice how characteristic are Le Corbusier's reactions towards the intellectual atmosphere of 1900. His *Oeuvre Complète* is a production as developed and as theoretically informed as any of the great architectural treatises of the sixteenth century; and his published writings form perhaps the most fertile, suggestive and exact statement of a point of view which has emerged since that time. Contradictions in a work of this scale are inevitable, and they are public property. It is not these which require exposition, but rather those more specific contradictions, which emerge *vis-à-vis* the pictorial, rationalistic, universalized premises of the opening century.

In affirming, through the medium of abstraction, a mental order, Le Corbusier immediately dissents from the theory of rationalized sense-perception which was current in 1900; but disgusted by the inflated insipidity of Beaux Arts practice, he yet inherits its whole rationalized position in connection with the 'styles'; and the notes of travel from his student's sketch book represent an eclectic principle which that institution would have fully endorsed. There is here a fine lack of distinction which only the liberalism of the late nineteenth century could have permitted; and although each example is experienced with a passion of personal discovery, this is still the characteristic theoretical programme of the time. The Venetian Piazzetta, Patte's *Monuments Erigés à la Gloire de Louis XV*, the forum of Pompeii, and the temples of the Acropolis offer the material for a deduction of the bases of civic space; while impressions of Stamboul, Paris, Rome, Pisa, and the temples of Angkor Vat are jostled alongside notes from the plates of Androuet du Cerceau—apart from the late nineteenth century, no other phase in history could, with so magnificent a lack of discrimination, have comprised so wide a field.

If *Towards a New Architecture* is read from time to time, and the reader can avoid being absorbed by its legitimate excitement, a fundamental dilemma becomes evident . . . as an incapacity to define an attitude to sensation. An absolute value is consistently imputed to mathematics, which are 'sure and certain,' and order is established as an intellectual concept affirmative of universal and comforting truths; but perhaps even with the word 'comforting' the senses are involved, and it becomes apparent

[7] Pevsner: *Pioneers of the Modern Movement*, 1937, p. 192.

that cubes, spheres, cylinders, cones and their products are demanded as objects governed by and intensifying sensuous appreciation. At one moment, architecture is 'the art above all others which achieves a state of Platonic grandeur'; at the next it becomes clear that this state, far from being changeless and external, is an excitement subsidiary to the personal perception of 'the masterly, correct, and magnificent play of masses brought together in light.' The reader can never be clear to what conception of rightness the word 'correct' refers. Is it an intellectual idea, apart from, but infusing, the object (the theory of the Renaissance); or is it a visual attribute of the object itself (the theory of 1900)? Its definition remains elusive to the end.

Mathematics and geometry are, of course, not the only standards which Le Corbusier erects against the theory of the Beaux Arts and 1900. *Towards a New Architecture* proposes programmes of social realism, within which architecture, generated by function, structure or technique, is to acquire objective significance as symbolizing the processes of society. But it becomes clear that for reasons of the same indecision, the essential 'realism' of these programmes cannot be converted into a system of public symbolism. The attempt to assert an objective order appears fated to result in a kind of inversion of the æstheticism, which was in the first case so much deplored. The mathematical or mechanical symbols of an external reality are no sooner paraded than they are absorbed by the more developed sensuous reaction which they provoke; abstraction, far from making public, confirms the intensification of private significance.

This spectacle of self-division is not peculiar to Le Corbusier. In varying degrees it is a dilemma which the whole modern movement appears to share; and in it the mental climate of the sixteenth century receives its clearest parallel at the present day. Internal stylistic causes for sixteenth century Mannerism seem chiefly to lie in the impossibility of maintaining the majestic balance between clarity and drama, which had marked the mature style of Bramante; but external factors of schism are also represented, and Mannerism's architectural process is to a great extent determined by those religious and political conflicts which devastated contemporary Europe. The Reformation and Counter-Reformation emphasis of religious values opposed to those of the humanists; the threat to the Papacy, and the European schism, which the Reformation itself provoked; the resulting increase of Spanish influence in Italy; all both represent and contribute to the emotional and intellectual disturbance. If, in the sixteenth century, Mannerism is the visual index of an acute spiritual crisis, the recurrence of similar attitudes at the present day should not be unexpected, and corresponding conflicts should scarcely require indication.

In an architectural context, the theory of 1900 might be interpreted as a reflection of the tolerant liberalism of that period; and in our own inability to define our position towards it, we might observe our contempt for the nineteenth century liberal's too facile simplifications. Eclecticism is essentially the liberal style, and it was eclecticism which created that characteristic product, the detached and sophisticated observer. He is a personality who seems to be in fairly constant demand by the modern movement—the Ville Radieuse exists for him to enjoy—but this town also embodies a society in which it seems likely that his detached observation could have no place.

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It is by conflicts such as these that the drama of Le Corbusier's architecture is promoted, and while the villa at La Chaux-de-Fonds might be presented as a first step in such a process of inversion, it would perhaps be more apt to return to the distinctions between the modern movement before 1914 and the modern movement in the 1920's.

In his *Space, Time and Architecture*, Dr. Giedion makes a comparison between Gropius's Bauhaus building of 1926 and a Cubist head, Picasso's L'Arlesienne of 1911-12.[8] From it he draws an inference of which the correctness cannot be denied. In the Bauhaus, 'the extensive transparent areas, by dematerializing the corners, permit the hovering relations of planes and the kind of overlapping which appears in contemporary painting.' But if, as has already been suggested, the programme of Cubism is not wholly a visual one, are we to assume that these works, apart from a similarity of form, are animated by a deeper similarity of content? If so we shall be obliged to admit that Gropius's aims are partly independent of visual justification; and if not we shall be obliged to deduce that either the comparison is superficial, or that Gropius himself had not fully understood the significance of Cubism. Of these conclusions it is surely the first which demands our assent.

A professed lack of interest in formal experiment, and the possibility of extracting an architectural lyricism from the application of rational techniques to the demands of society, appear to form the bases of Gropius's system. Yet Dr. Giedion's successful comparison between the Bauhaus and Picasso shows that in Gropius's work of 1926 abstraction is not wholly denied, and it is this 'abstract' element which most clearly separates the Bauhaus from the productions previous to the 1914 war.

Apart from Gropius's Ahlfeld factory, the Fabrik for the Deutsche

[8] Sigfried Giedion: *Space, Time and Architecture*, p. 402.

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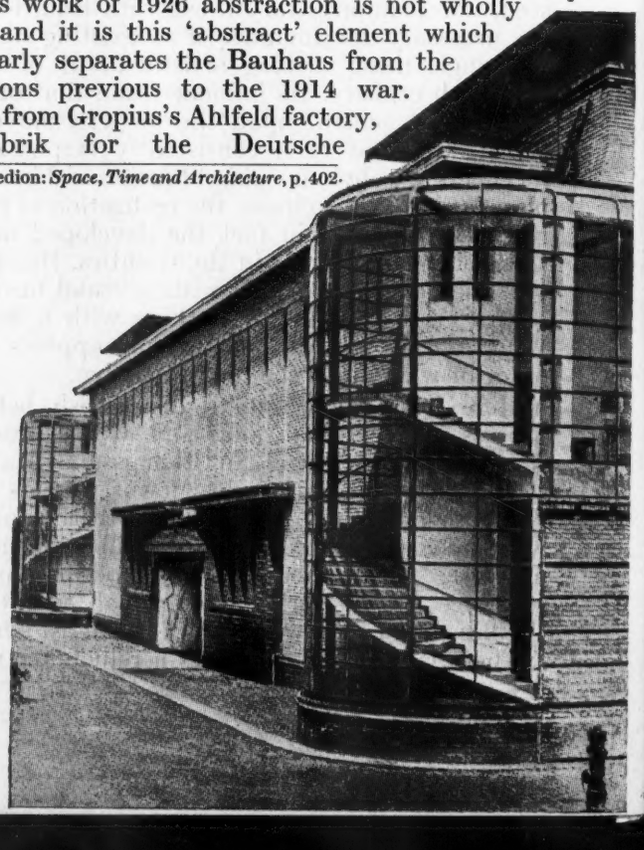

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Werkbund Exhibition represents the most advanced attempt before 1914 to extract architectural feeling from a building's structural skeleton. Specific architectural effects of the past make the slightest contribution, and detail is reduced to the simplest geometrical form; but, although in this building, mass is contracted to an ultimate limit, there appears to be no decisive break with the pictorial ideals of 1900. The motif of the famous staircases, a corner cylindrical element, which appears as wrapping round or bursting through flat façades, can be paralleled in academic architecture before this date; and although the transparent masses of this building represent the supreme affirmation of a mechanistic idealism, they contain in themselves no single element which appears to contradict the dominant academic theory. The famous element of space-time does not enter into this building, and unlike the Bauhaus its complex can be summed up from two single positions.

Even as late as 1923, the experimental Haus Am Horn at Weimar, a simple pyramidal composition of geometrical masses, can be interpreted in these terms, and a parallel with a Neo-Classical monument, Goethe's garden house, could still be maintained.[9] But in the previous year certain schemes suggest that approach, which has come to be considered as characteristic of modern architecture. We notice in these an abandoning of the idea of mass and masses, a substitution of plane, an emphasis upon the prismatic quality of the cube, and at the same time an attack on the cube, which by disrupting the coherence of its internal volume, intensifies our appreciation of both its planar and its geometrical qualities. These are projects which appear as complete illustrations of that Giedionesque concept of space-time for which the Bauhaus is so justly famous. They are compositions which 'the eye cannot sum up . . . at one view;' which 'it is necessary to go around on all sides, to see . . . from above as well as from below.'

In itself the idea of physical movement in the observation of a building is not new. It formed in fact the Baroque's typical mode of observing the rise and fall of masses, and is even more apparent in the irregular schemes of Romanticism. However, even they, let alone such symmetrical compositions as Blenheim, are usually provided with a single dominant element, and seen through the media of distance and atmosphere, the interrelationship of freely disposed masses is combined as a picturesque whole. It is clear that though intellectual limitations do not enter into the romantic megalomania of a Fonthill, the limitations of the eye, of human vision, are scrupulously observed.

At the Bauhaus one registers mental appreciation of both plan and structure, but the eye is faced with the disturbing problems of simultaneous impact from widely discrepant elements. A dominating central element is eliminated, subsidiary units are thus *unable* to play a supporting role; and in a state of visual autonomy they are disposed around the void of the central bridge, which neither provides visual explanation for them as a consistent scheme, nor allows them to assume independence as separate units. Clearly the activities of this bridge as the functional core of the conception, and as the negation of the visual function of a central element, are closely related to those of the blank panel at La Chaux-de-Fonds. In a similar way, it is both central and peripheral; and it is significant that only from a non-visual angle, the 'abstract' view from the air, can the Bauhaus composition become intelligible to the eye.

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[9] Herbert Bayer, Walter Gropius, Ise Gropius: *Bauhaus*, 1919-1928, p. 85.

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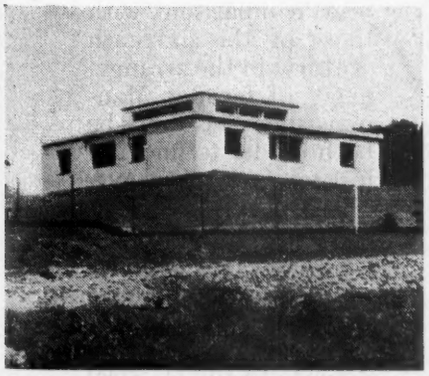

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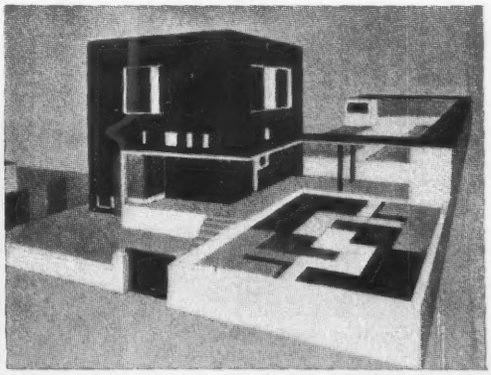

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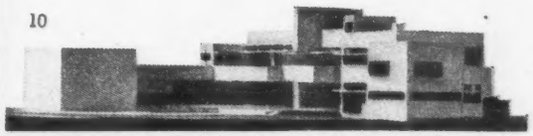

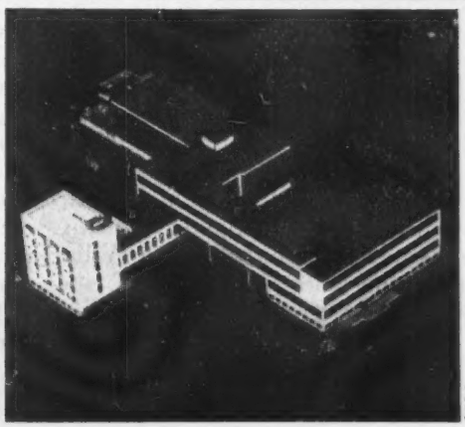

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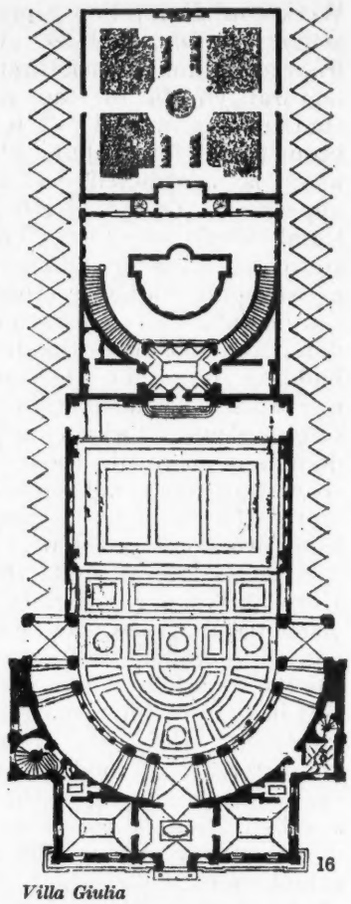
pleasure to the eye, the element of delight in modern architecture appears chiefly to lie. An intense precision or an exaggerated rusticity of detail is presented within the bounds of an overall complex of planned obscurity; and an intellectual scheme is offered, frustrating the eye by intensifying the visual pleasure of individual episodes, which in themselves can only become coherent as the result of a mental act.

Sixteenth century Mannerism is characterized by similar exaggerations—a deliberate and insoluble spatial complexity is, for instance, offered equally by Michelangelo's Cappella Sforza,[10] and a project of Mies van der Rohe's, the brick country house of 1923.

Michelangelo, working in the tradition of the centralized building, establishes an apparently centralized space, but within its limits every effort is made to destroy the idea of focus which such a space demands. It is invaded by columns set on the diagonal, supported by apses of a form both indefinite and tense; and, with the central space in actual competition with the plan space of the sanctuary, distraction rather than ideal harmony is the necessary and intended result. Mies by comparison appears to invert the irregular and freely disposed space of the Romantic plan, but once more there is neither conclusion nor focus. The disintegration of a prototype is as complete as with Michelangelo, and here again form is both precise and undefined. Visual incoherence is apparently an ideal in both schemes, but, where Michelangelo in his use of the orders offers a statement of conventional intelligibility, the recognizable clarity of

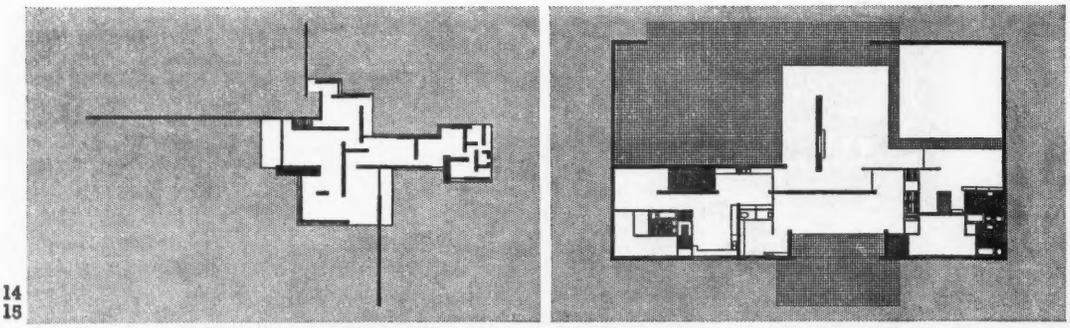
13 *Cappella Sforza*

corps-de-logis, but the unifying quality of the axis is not allowed to appear. As an agent of organization it is constantly interrupted by light screens and small changes of level, which are sufficient to create ambiguity, without making its sources in any way too obvious. At the Hubbe House, Mies imposes a T-shaped building upon his courtyard, but like the axis at the Villa Giulia its role is passive. It is both subordinate and contradictory to the rigid organization of the bounding wall; and while the idea of the T-shape suggests a geometrical form, by an unaccountable advance and interception of planes, the purely logical consequences of the form are studiously avoided. Thus in both schemes, precise compositions of apparently undeniable clarity offer an overall intellectual satisfaction, within which it seems neither to be desired nor expected that any single element should be visually complete.



16 *Villa Giulia*

It is particularly the space arrangements of the present day which will bear comparison with those of the sixteenth century; in the arrangement of façades Mannerist parallels must be both harder to find and less valuable to prove. The Mannerist architect, working within the classical system, inverts the natural logic of its implied structural function; modern architecture makes no overt reference to the classical system. In more general terms the Mannerist architect works towards the visual elimination of the idea of mass, the denial of the ideas of load, or apparent stability. He exploits contradictory elements in a façade, employs harshly rectilinear forms, and emphasizes a type of arrested movement. All these are characteristic occurrences in the vertical surfaces of contemporary architecture; but comparison here is perhaps of a superficial, a more general than clearly demonstrable order.



14, 15 *plan of a brick house, 1923, and the Hubbe House, 1935, both by Mies van der Rohe.*

Mies seems to lie in the private abstraction of his plan.

Similar correspondences could be found between two such widely differing schemes as the Mies project of 1935 for the Hubbe House, and the Villa Giulia of Vignola and Ammanati. Both are developed within the bounds of a tightly defined courtyard scheme; and although in neither is there the exaggerated complexity of the last two examples, in both, elements are neither clearly separated, nor is an unimpeded flow of space permitted. The general layout of the Villa Giulia is axial, emphasizing the hemicycle of its

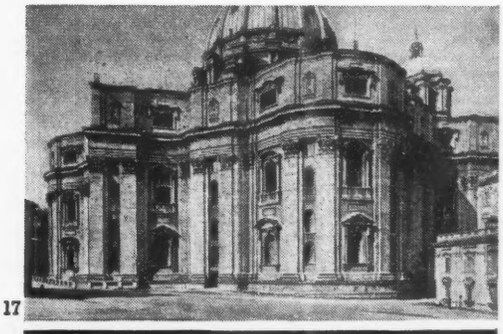
[10] This Cappella was designed by Michelangelo very late in his life, at the request of Cardinal Ascanio Sforza, and finished after his death by Giacomo Della Porta in 1573.

In the choice of texture, surface and detail, aims general to Mannerism can also be detected. The

surface of the Mannerist wall is either primitive or over-refined, and a brutally direct rustication frequently occurs in combination with an excess of attenuated and rigid delicacy. In this context it would certainly be frivolous to compare the preciosity of Serlio's restlessly modelled, quoined designs with our own random rubble; but the frigid architecture which appears as background to Bronzino's portraits is balanced by the chill of many interiors of our own day, and the linear delicacy of much contemporary detail surely finds a sixteenth century correspondence.

A further Mannerist device, the discord between elements of different scale placed in immediate juxtaposition, offers a more valuable parallel. It is familiar as the overscaled entrance door; and it is employed alike by Michelangelo in the apses of St. Peter's, and with different elements, by Le Corbusier in the Cité de Refuge. The apses of St. Peter's alternate with large and small bays, extracting the utmost poignancy and elegance from the movement of mass and the dramatic definition of plane. They are of a perfection beyond the ordinary, and side by side with the gaping, overscaled voids of window and niche in the large bays, there appears the violent discord of the smaller and dissimilar niches, which seem to be crushed but not extinguished by the minor intercolumniations.

In comparing the apses of St. Peter's with the building for the Salvation Army perhaps we really measure the production of our own day. In a composition of aggressive and profound sophistication,



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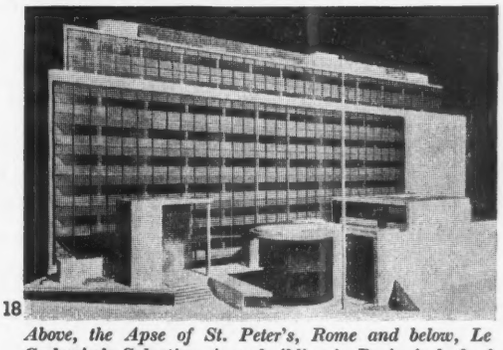

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Above, the Apse of St. Peter's, Rome and below, Le Corbusier's Salvation Army building in Paris, in both of which elements of different scale are juxtaposed to produce an emotion of disturbance and tension.

plastic elements of a major scale are foiled against the comparatively minor regulations of the glazed wall. Here again the complete identity of discordant objects is affirmed; and, as at St. Peter's, in this intricate and monumental conceit, there is no release and no permanent satisfaction for the eye. Disturbance is complete, and although in this mechanized composition there is no element which replaces the purely human poetry of the sixteenth century organization, there is a savage delicacy which makes explicable Le Corbusier's *éloge* upon Michelangelo and St. Peter's, which 'grouped together the square shapes, the drum, the dome,' and whose 'mouldings are of an intensely passionate character, harsh and pathetic.'

The quality of this appreciation penetrates beyond the mere externals of appearance. Even in his choice of adjectives Le Corbusier involves the observer on a plane other than that of visual discrimination; and, although such discrimination may assist the appreciation of Mannerist and Modern architecture, through the standards of the eye neither can be fully understood. St. Peter's as conceived by Michelangelo, Le Corbusier finds the embodiment of 'a passion, an intelligence beyond normal, it was the everlasting Yea'; an eternal scheme, which is beyond the limitations of any time. But it is surely not accidental that it is the Mannerist excess and conflict of this building by which he is most deeply moved; nor presumably is it by accident that this capacity of a modern architect to perceive stridently incompatible details should so closely coincide with the beginning of their investigation by historians of art.

For Burckhardt in the nineteenth century, Michelangelo's Laurenziana, embodying some of his earliest Mannerist experiments, was 'evidently a joke of the great master.' For a subsequent generation the joke became less clear, and although for a time it was only a proto-Baroque sixteenth century which was visible, for the nineteen-twenties an epoch curiously reproducing contemporary patterns of disturbance became apparent. At this time it is as though the eye received a decisive twist, by which, since it demanded visual ambiguity, it could produce it in contemporary works, and to discover it in a previous age, even in works of apparently unimpeachable correctness. Thus, at one time the classicism of the whole Renaissance movement seemed completely clear; and at another the impressionist eye of the Edwardians was everywhere enabled to see the comforting qualities of their own baroque; so the present day seems to be particularly susceptible to the uneasy violence of Mannerism, which marks both its own productions and its historical admirations. It is perhaps inevitable that Mannerism should come to be isolated and defined by historians, during those same years of the nineteen-twenties, when modern architecture feels most strongly the demand for inverted spatial effects.

that cubes, spheres, cylinders, cones and their products are demanded as objects governed by and intensifying sensuous appreciation. At one moment, architecture is 'the art above all others which achieves a state of Platonic grandeur'; at the next it becomes clear that this state, far from being changeless and external, is an excitement subsidiary to the personal perception of 'the masterly, correct, and magnificent play of masses brought together in light.' The reader can never be clear to what conception of rightness the word 'correct' refers. Is it an intellectual idea, apart from, but infusing, the object (the theory of the Renaissance); or is it a visual attribute of the object itself (the theory of 1900)? Its definition remains elusive to the end.

Mathematics and geometry are, of course, not the only standards which Le Corbusier erects against the theory of the Beaux Arts and 1900. *Towards a New Architecture* proposes programmes of social realism, within which architecture, generated by function, structure or technique, is to acquire objective significance as symbolizing the processes of society. But it becomes clear that for reasons of the same indecision, the essential 'realism' of these programmes cannot be converted into a system of public symbolism. The attempt to assert an objective order appears fated to result in a kind of inversion of the æstheticism, which was in the first case so much deplored. The mathematical or mechanical symbols of an external reality are no sooner paraded than they are absorbed by the more developed sensuous reaction which they provoke; abstraction, far from making public, confirms the intensification of private significance.

This spectacle of self-division is not peculiar to Le Corbusier. In varying degrees it is a dilemma which the whole modern movement appears to share; and in it the mental climate of the sixteenth century receives its clearest parallel at the present day. Internal stylistic causes for sixteenth century Mannerism seem chiefly to lie in the impossibility of maintaining the majestic balance between clarity and drama, which had marked the mature style of Bramante; but external factors of schism are also represented, and Mannerism's architectural process is to a great extent determined by those religious and political conflicts which devastated contemporary Europe. The Reformation and Counter-Reformation emphasis of religious values opposed to those of the humanists; the threat to the Papacy, and the European schism, which the Reformation itself provoked; the resulting increase of Spanish influence in Italy; all both represent and contribute to the emotional and intellectual disturbance. If, in the sixteenth century, Mannerism is the visual index of an acute spiritual crisis, the recurrence of similar attitudes at the present day should not be unexpected, and corresponding conflicts should scarcely require indication.

In an architectural context, the theory of 1900 might be interpreted as a reflection of the tolerant liberalism of that period; and in our own inability to define our position towards it, we might observe our contempt for the nineteenth century liberal's too facile simplifications. Eclecticism is essentially the liberal style, and it was eclecticism which created that characteristic product, the detached and sophisticated observer. He is a personality who seems to be in fairly constant demand by the modern movement—the Ville Radieuse exists for him to enjoy—but this town also embodies a society in which it seems likely that his detached observation could have no place.

* * *

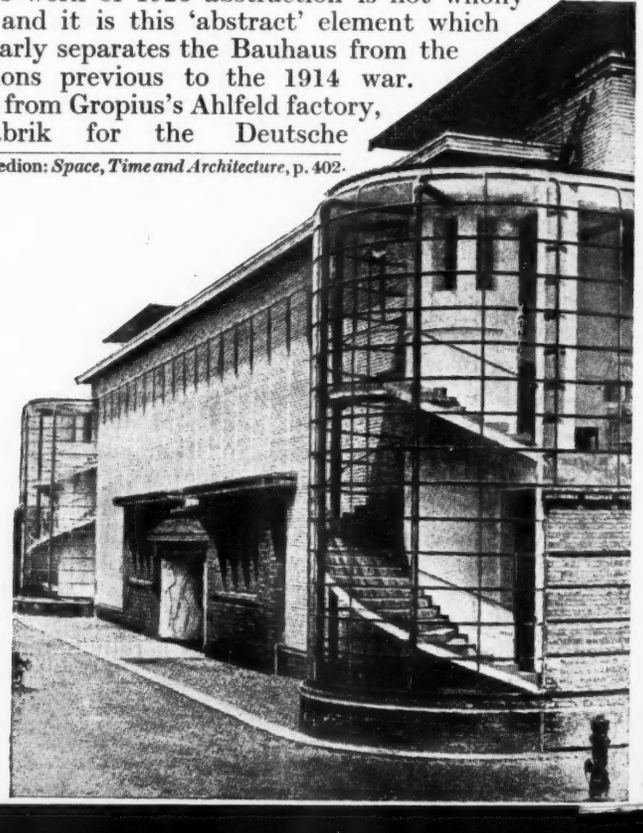
It is by conflicts such as these that the drama of Le Corbusier's architecture is promoted, and while the villa at La Chaux-de-Fonds might be presented as a first step in such a process of inversion, it would perhaps be more apt to return to the distinctions between the modern movement before 1914 and the modern movement in the 1920's.

In his *Space, Time and Architecture*, Dr. Giedion makes a comparison between Gropius's Bauhaus building of 1926 and a Cubist head, Picasso's L'Arlesienne of 1911-12.[8] From it he draws an inference of which the correctness cannot be denied. In the Bauhaus, 'the extensive transparent areas, by dematerializing the corners, permit the hovering relations of planes and the kind of overlapping which appears in contemporary painting.' But if, as has already been suggested, the programme of Cubism is not wholly a visual one, are we to assume that these works, apart from a similarity of form, are animated by a deeper similarity of content? If so we shall be obliged to admit that Gropius's aims are partly independent of visual justification; and if not we shall be obliged to deduce that either the comparison is superficial, or that Gropius himself had not fully understood the significance of Cubism. Of these conclusions it is surely the first which demands our assent.

A professed lack of interest in formal experiment, and the possibility of extracting an architectural lyricism from the application of rational techniques to the demands of society, appear to form the bases of Gropius's system. Yet Dr. Giedion's successful comparison between the Bauhaus and Picasso shows that in Gropius's work of 1926 abstraction is not wholly denied, and it is this 'abstract' element which most clearly separates the Bauhaus from the productions previous to the 1914 war.

Apart from Gropius's Ahlfeld factory, the Fabrik for the Deutsche

[8] Sigfried Giedion: *Space, Time and Architecture*, p. 402.



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[9] Herbert Bayer, Walter Gropius, Ise Gropius: *Bauhaus*, 1919-1928, p. 85.

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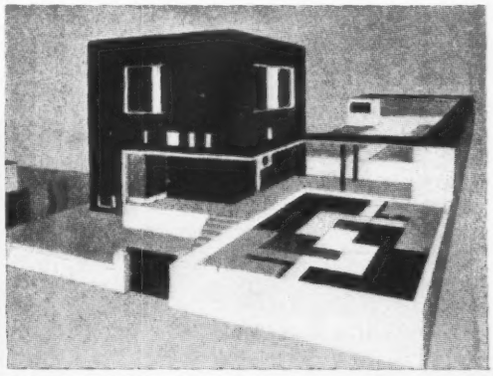

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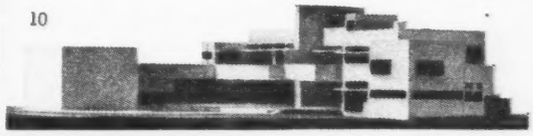

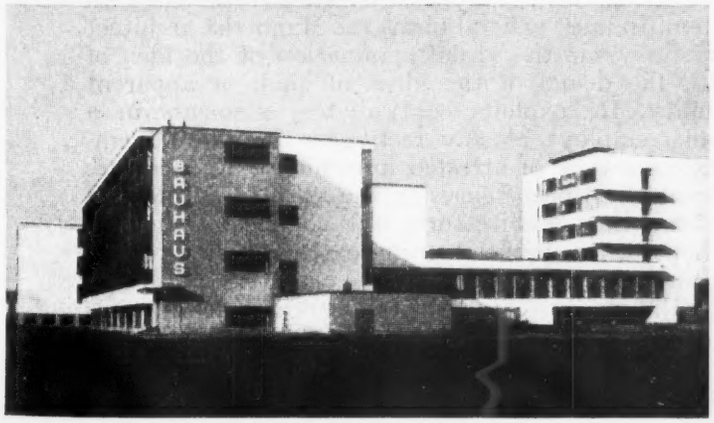

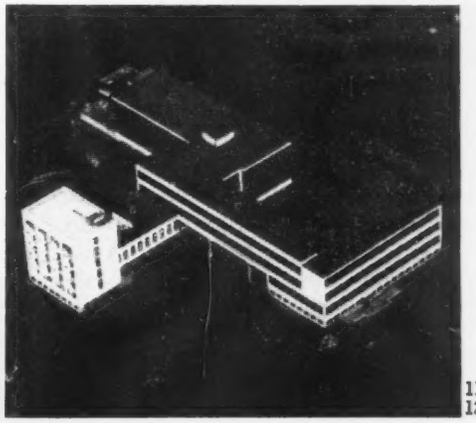

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13 *Cappella Sforza*

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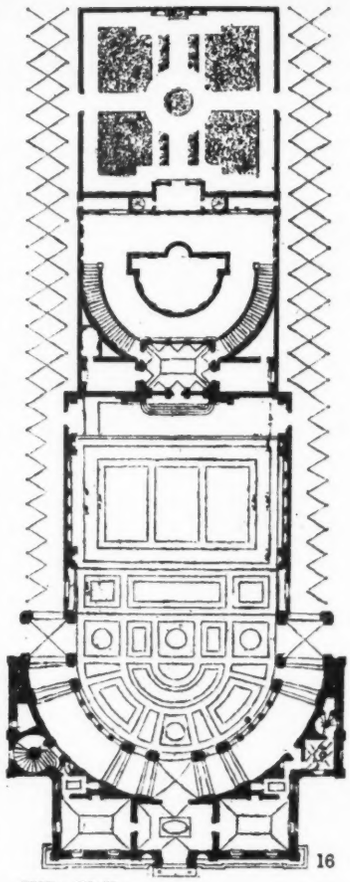

16 *Villa Giulia*

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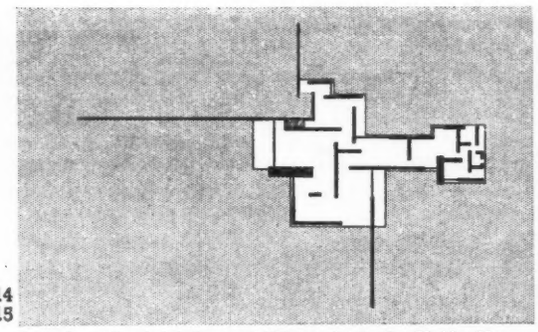

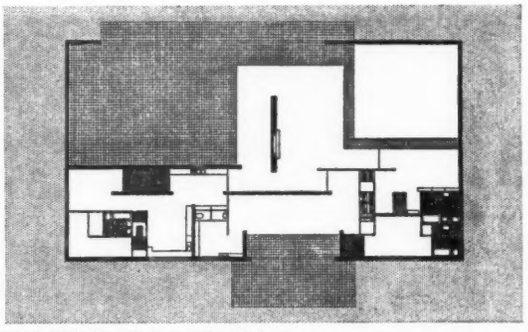

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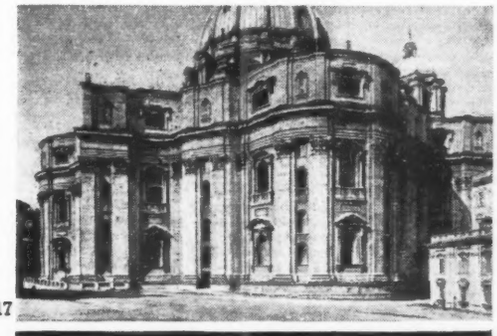
In the choice of texture, surface and detail, aims general to Mannerism can also be detected. The

surface of the Mannerist wall is either primitive or over-refined, and a brutally direct rustication frequently occurs in combination with an excess of attenuated and rigid delicacy. In this context it would certainly be frivolous to compare the preciosity of Serlio's restlessly modelled, quoined designs with our own random rubble; but the frigid architecture which appears as background to Bronzino's portraits is balanced by the chill of many interiors of our own day, and the linear delicacy of much contemporary detail surely finds a sixteenth century correspondence.

A further Mannerist device, the discord between elements of different scale placed in immediate juxtaposition, offers a more valuable parallel. It is familiar as the overscaled entrance door; and it is employed alike by Michelangelo in the apses of St. Peter's, and with different elements, by Le Corbusier in the Cité de Refuge. The apses of St. Peter's alternate with large and small bays, extracting the utmost poignancy and elegance from the movement of mass and the dramatic definition of plane. They are of a perfection beyond the ordinary, and side by side with the gaping, overscaled voids of window and niche in the large bays, there appears the violent discord of the smaller and dissimilar niches, which seem to be crushed but not extinguished by the minor intercolumniations.

In comparing the apses of St. Peter's with the building for the Salvation Army perhaps we really measure the production of our own day. In a composition of aggressive and profound sophistication, plastic elements of a major scale are foiled against the comparatively minor regulations of the glazed wall. Here again the complete identity of discordant objects is affirmed; and, as at St. Peter's, in this intricate and monumental conceit, there is no release and no permanent satisfaction for the eye. Disturbance is complete, and although in this mechanized composition there is no element which replaces the purely human poetry of the sixteenth century organization, there is a savage delicacy which makes explicable Le Corbusier's *éloge* upon Michelangelo and St. Peter's, which 'grouped together the square shapes, the drum, the dome,' and whose 'mouldings are of an intensely passionate character, harsh and pathetic.'



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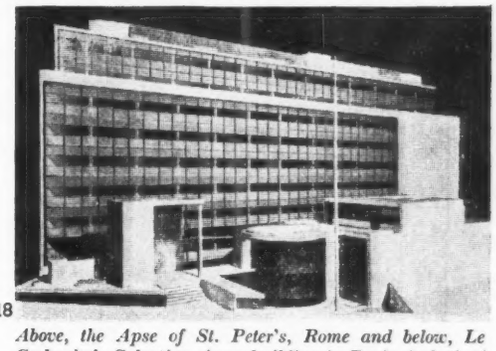


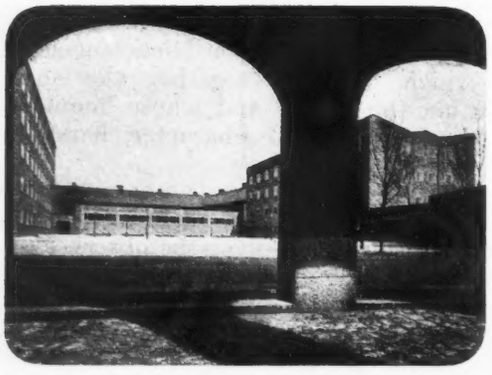
18

Above, the Apse of St. Peter's, Rome and below, Le Corbusier's Salvation Army building in Paris, in both of which elements of different scale are juxtaposed to produce an emotion of disturbance and tension.

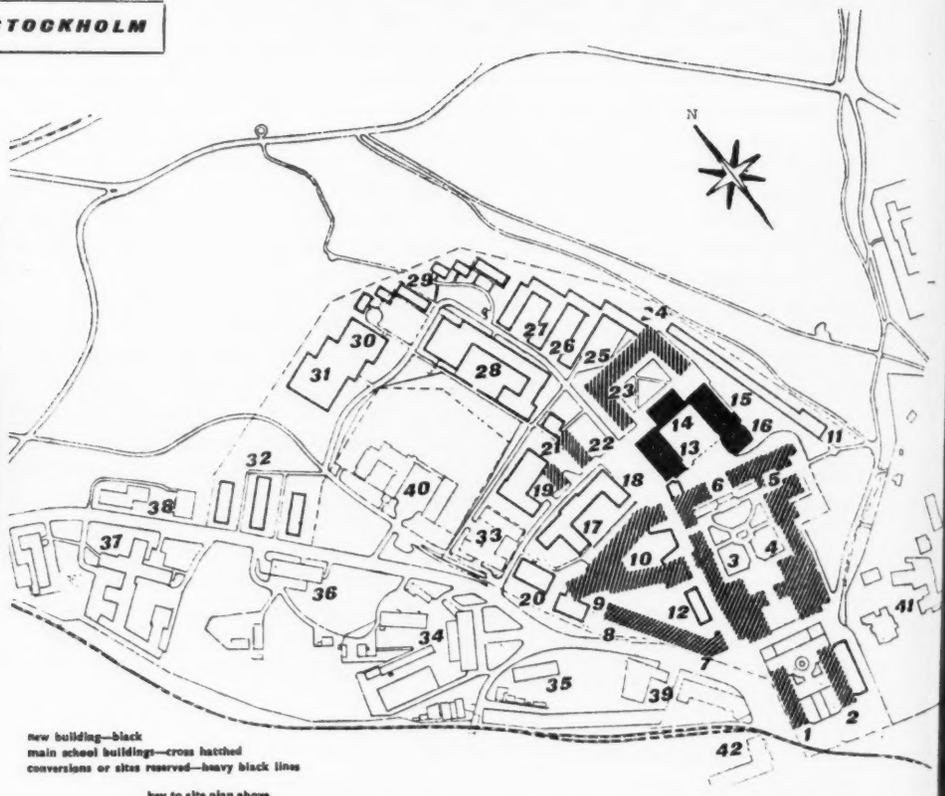
The quality of this appreciation penetrates beyond the mere externals of appearance. Even in his choice of adjectives Le Corbusier involves the observer on a plane other than that of visual discrimination; and, although such discrimination may assist the appreciation of Mannerist and Modern architecture, through the standards of the eye neither can be fully understood. St. Peter's as conceived by Michelangelo, Le Corbusier finds the embodiment of 'a passion, an intelligence beyond normal, it was the everlasting Yea'; an eternal scheme, which is beyond the limitations of any time. But it is surely not accidental that it is the Mannerist excess and conflict of this building by which he is most deeply moved; nor presumably is it by accident that this capacity of a modern architect to perceive stridently incompatible details should so closely coincide with the beginning of their investigation by historians of art.

For Burckhardt in the nineteenth century, Michelangelo's Laurenziana, embodying some of his earliest Mannerist experiments, was 'evidently a joke of the great master.' For a subsequent generation the joke became less clear, and although for a time it was only a proto-Baroque sixteenth century which was visible, for the nineteen-twenties an epoch curiously reproducing contemporary patterns of disturbance became apparent. At this time it is as though the eye received a decisive twist, by which, since it demanded visual ambiguity, it could produce it in contemporary works, and to discover it in a previous age, even in works of apparently unimpeachable correctness. Thus, at one time the classicism of the whole Renaissance movement seemed completely clear; and at another the impressionist eye of the Edwardians was everywhere enabled to see the comforting qualities of their own baroque; so the present day seems to be particularly susceptible to the uneasy violence of Mannerism, which marks both its own productions and its historical admirations. It is perhaps inevitable that Mannerism should come to be isolated and defined by historians, during those same years of the nineteen-twenties, when modern architecture feels most strongly the demand for inverted spatial effects.

TECHNICAL HIGH SCHOOL AT STOCKHOLM



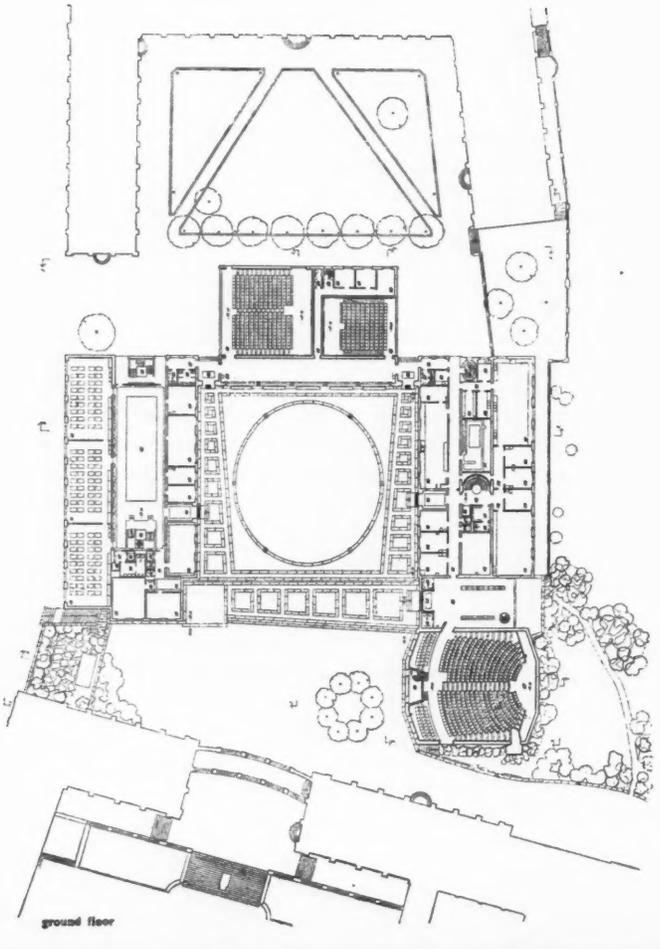
Main Court looking north



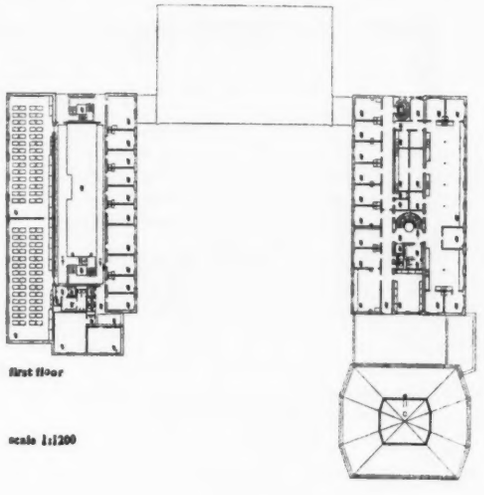
new building—black
main school buildings—cross hatched
conversions or sites reserved—heavy black lines

key to site plan above

1, administrative building and laboratory for building statics; to be moved and replaced by instructors' restaurant. 2, library undergoing reconstruction and extension. 3, mining science department under reconstruction. 4, electrotechnical department. High-tension institutes are being moved and the building reconstructed for low-tension institutes. 5, existing architectural department may be reconstructed for land surveying department. 6, under reconstruction to house departments for mechanical engineering, shipbuilding and aeronautics. 7, 8, laboratory for applied mathematics and mechanical engineering. 9, new heating and power plant. 10, new laboratory for hydraulic construction being built in courtyard of present mechanical laboratory building. 11, site reserved for ship testing tank. 12, new building for machine tools study and High School workshops. 13, new building for junior years. 14, lecture theatres. 15, physics laboratory. 16, lecture theatre. 17, 18, new building for the department of road and hydraulic engineering and possibly architecture. 19, 20, new building for building statics laboratory. 21, aeronautical laboratory with temporary sheds. 22, cellulose laboratory being reconstructed to house institution for food chemistry and technical biochemistry. 23, existing building of chemical department, under reconstruction. 24, new apparatus room for technical chemical section. Ready early in 1950. 25, new laboratory for technical organic and inorganic chemistry. Ready early in 1950. 26, 27, sites reserved for chemical department. 28, new building for high-tension technical institutes within the electrotechnical department. 29, living quarters for laboratory watchmen. 30, proposed new building for internal combustion technology. 31, sites for aeronautical buildings. 32, sites for mining science, metallurgical section. 33, cement and concrete institute. 34, state testing station. 35, road institute. 36, fourth year experimental station. 37, timber research institute. 38, metallographic institute. 39, Technical High School hospital. 40, Red Cross hospital. 41, Sophia hostel. 42, east station.



ground floor



first floor

scale 1:1200

1, the west, drawing office building; an example of a diagrammatic façade (see p. 174, AR, March, 1949), forming the perfect background to, in this instance, a fortuitous display of sculpture

TECHNICAL HIGH SCHOOL AT STOCKHOLM

N. AHRBOM AND H. ZIMDAHL: ARCHITECTS

The first stage, now completed, includes new buildings for the two junior years, laboratories for the physical and photographical institutions and new lecture theatres. Completion of the new chemical laboratory will be followed by the new heating plant and mechanical laboratory. The new buildings surround a court, which is open to the south at the highest point of the site. The west building, containing drawing offices, is of reinforced concrete beam construction over the larger spans and slab construction over the shorter; the skylight over the central hall is steel framed. Staircases are built independently of the adjoining walls. The east building housing the four physical and the photographic departments is of reinforced concrete construction leaving channels for cables and piping, except in part of the geophysical laboratory where the framing is of wood to avoid the risk of magnetic disturbances. The low building at the end of the courtyard contains two lecture theatres with about 300 and 150 seats and preparation rooms. The largest lecture theatre, with 500 seats, is in the south end of the physics building. In the smaller theatres the seating is framed in wood supported on concrete slabs over steel beams. In the large one the construction is wholly of concrete. Its walls are lined with half-bricks, leaving a space between them and the concrete which is filled with 10 cm. of lightweight concrete as insulation. The roof round the skylight is of concrete slabs on steel beams. Reinforcement in walls and roof is interconnected to give rigidity at the corners. Under part of the courtyard a space is

section through main lecture theatre

provided for bicycles, stores and switchgear. This is roofed with slabs of watertight concrete which rest on reinforced concrete beams and columns. The courtyard is surfaced with stone setts, laid in circles.

All the buildings are founded on rock. Basements are lined with hard baked brick and facings are of red Husby brick, with an admixture of lighter colours to enliven the effect. Roofs are of impregnated timber covered with copper sheeting, sloping inwards towards internal downpipes. Outside doors are of oak painted black, inside doors of deal painted white, except those in most frequent use, which are of oak.

Heating is by flat radiators, the sizes of which are so chosen as to occupy the whole width under the windows. To provide for easy and accurate adjustment the radiators have both their inlet and their outlet pipes connected at the bottom. Below the skylight of the central hall radiators are fixed close together so as to act as a single panel and the pipe connections are welded on to them behind. This hall and the cloakrooms have floor heating to avoid draughts and to keep the floor dry. Pipes for the purpose are embedded directly in the limestone floor slabs. This system is used also in the smaller lecture theatres. In the geophysical department heating pipes are of copper to avoid magnetic disturbances. In the physics department ventilation is provided by blowing warmed air into corridors and laboratories. In the darkroom there is a parallel supply of warmed

2, looking from the east across the main court to the drawing office building. The courtyard is paved with stone setts laid concentrically

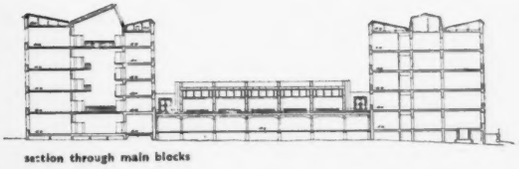
3

4

3, the link between the southernmost end of the east laboratory block and the main lecture theatre. 4, the balcony leading to the instructors' rooms on the fourth floor of the west drawing office building. Colours are white and grey. Radiators are installed on the vertical surface of the walls, between light fittings. 5, the north façade of the drawing office building, showing the link with the single storey building sited on the north side of the courtyard containing the two smaller lecture theatres

and cool air which can be mixed to give the desired temperature, and evacuation is by turbine fans. Each of the three lecture theatres has its own ventilating system with automatic regulation. In the largest the air enters vertically upwards through a ledge in the side panelling and used air is drawn out through the steps under the seats. Fans for doing this and plant for heating the air are in a cellar underneath and the theatre can be quickly warmed by recirculation. In the smaller theatres air likewise enters at the sides but is drawn out partly through the steps and partly through the sound-absorbing roof.

Within the High School site electrical energy at 6,000 volts is distributed through a double ring of conductors (not yet complete) and is transformed down to 3 × 220/127 volts at suitable points, with a separate cable to each building, this voltage being chosen on account of safety considerations in the laboratories.



section through main blocks

5

6

6, the main staircase and the balconies in the west, drawing office block. 7, the ante-room to the two smaller lecture theatres in the single storey building. 8, first and second floor balconies in the hall shown in 6; the panelling is of oak

7

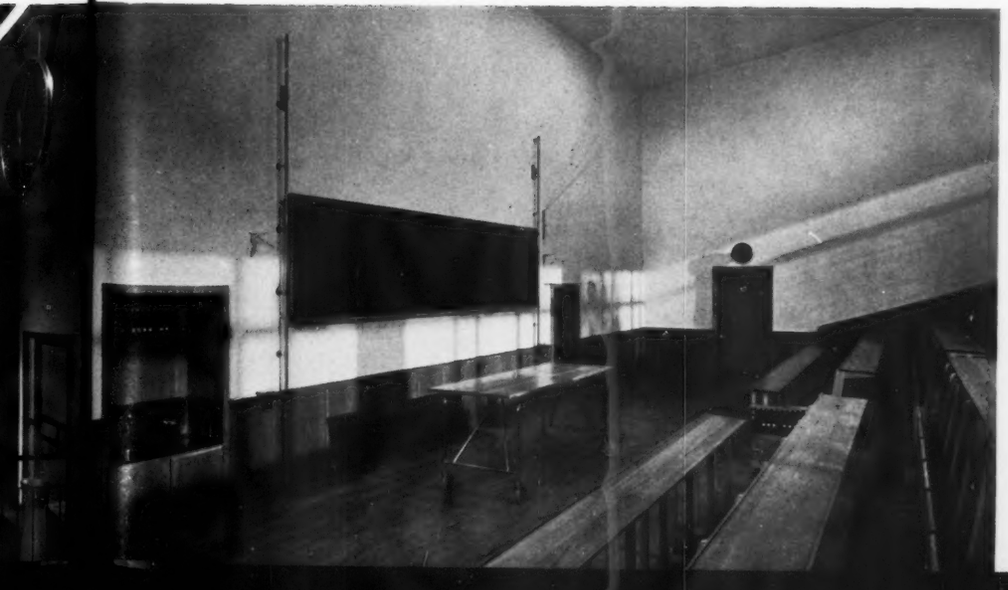
8

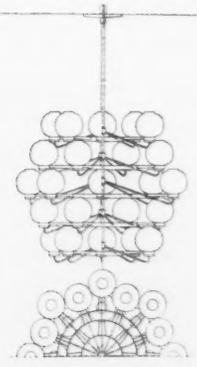
9

9, large lecture theatre for 500 students. Walls and ceiling are of whitewashed plaster, wood is oak. The chandelier of painted iron and opal glass can be lowered. 10, front of one of the smaller lecture theatres, seating 300 students

TECHNICAL HIGH SCHOOL AT STOCKHOLM

10





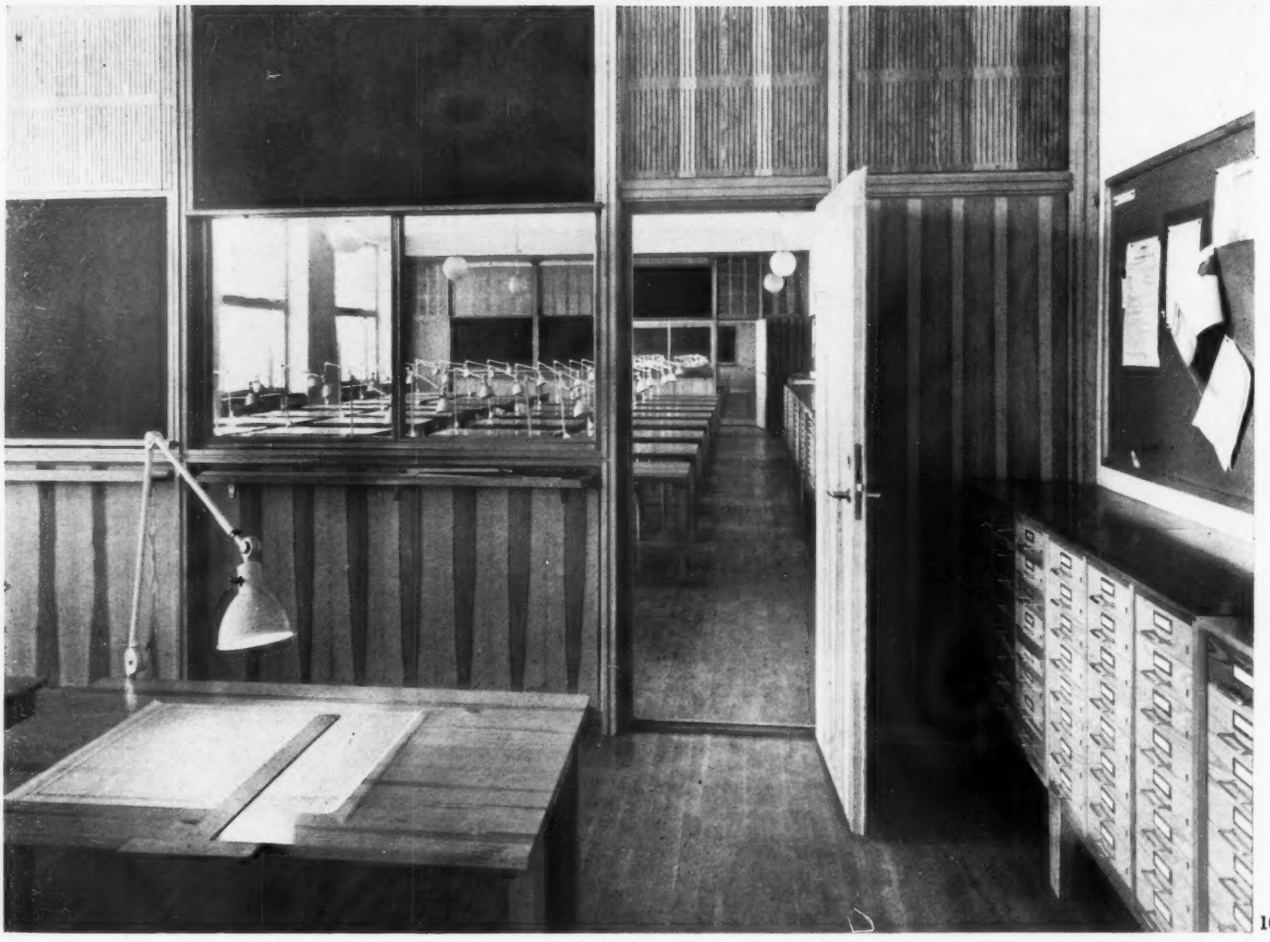
12

13

TECHNICAL HIGH SCHOOL AT STOCKHOLM

11, on the facing page, the foot of the staircase in the main hall of the drawing office building. The floor is cork linoleum, Ekeberg marble and cement mosaic. Fittings are wrought iron and brass; lampshades are opal glass and ash pots are of stoneware. **12** and **13**, the cloakroom to the large lecture theatre. Lamp standards are white painted iron, floor is limestone and walls are red brick

14
15



16

TECHNICAL HIGH SCHOOL AT STOCKHOLM

14, rear of one of the smaller lecture theatres for 300 students. Curtain colour is red on natural linen. Folding seats are of oak. 15, teachers' room. 16, one of the drawing offices. Partitions are deal, cupboards deal and oak

William Gaunt

PUNCH

AS REFEREE OF A HUNDRED YEARS OF HOUSEHOLD TASTE

Introduction by James Laver If anyone wishes to study English interior decoration and goes to the Victoria and Albert Museum Library, or any comparable institution, he will find such a mass of books on the subject that he is likely to retire appalled. The 'literature' of the subject is immense and might discourage the most insatiable thirst for learning. But if the student persists he is likely to make a curious discovery.

The books which have been assembled at so much cost and labour—not to mention the cost and labour of producing them—fall into two categories: those that deal with 'period' decoration, as it is called, and those that profess to be 'up to the minute' and to offer advice on the decoration and furnishing of the modern home. All these are valuable in their way. Some excellent books have been written on the modern home, and they have undoubtedly done much to raise the level of public taste. And many handsome volumes have been published setting before our eyes the glories and the elegances of English homes of the past.

But there is a Gap! The foreground is there; the background is there; but the middle distance seems to be missing. It is very easy to find good photographs of (for example) the furniture of 1750; but very difficult to find good photographs of the furniture of 1850. The facile explanation is that the furniture of 1750 was 'good' furniture, and the furniture of 1850 was 'bad' furniture. In fact all the furniture of the second half of the nineteenth century was bad, although William Morris is vaguely supposed to have done something to improve it. Of course 'modern' furniture is all right. Now at last we have broken with the 'horrors' of the past, and decorate our homes in accordance with the 'Spirit of the Age' *(sancta simplicitas!)*. Our furniture is 'functional,' whatever that may mean, and as we shall all, very shortly, be either working in factories or recuperating in nursing homes for neurotics, we might as well anticipate, as well as we can, the decor of either—or both. It is true that the advent of 'streamlining' has done something to modify the once universal conviction that straight lines were somehow 'better' than

curves. But much modern design is still based on the curious notion that square shapes are somehow more 'functional' than round, even if the object in question is a drinking glass—or a clock.

As for the past, 'good' design ceased somewhere about the accession of King William IV. Mr. Sacheverell Sitwell's excellent monograph on *British Architects and Craftsmen* stops deliberately at the very year 1830. So does almost everybody else who writes on the subject: that is, if they are writing *now*. If they were writing twenty years ago they stopped abruptly about 1810. Twenty years ago it was still something of an oddity to take an interest in Regency furniture, and the late Edward Knoblock was able to acquire his splendid collection for a mere song. Arnold Bennett's liking for papier-mâché furniture with mother-of-pearl inlay was regarded as a personal idiosyncrasy, as indeed it was.

The recent, and still prevailing, scarcity of all kinds of household goods has done something to modify this attitude, and the buyers' interest in furniture even of 1850 or later is reflected in the prices it is now necessary to pay. But the writers of books on the subject have not yet caught up. They still stop at 1830.

If we were not so rigidly wedded to our belief in 'Taste' (one of the few Absolutes still persisting in a world of relativity), these considerations might perhaps give us pause. Perhaps, after all, there is a much larger element of the subjective in our judgments than most people are willing to admit. Be that as it may, 'Taste' is certainly the enemy of historical understanding. In the junk shops the distinction between 'antique' and 'second-hand' may well be a handy way of distinguishing between the things the customers like and the things they don't like (yet); but such notions can have no legitimate place in the perspectives of the philosophic enquirer.

Meanwhile, if we wish to inform ourselves concerning the interior decoration of 'the Gap,' we shall find no ready works of reference. Mr. Osbert Lancaster's *Homes, Sweet Homes* is a brilliant and dashing raid into this almost unmapped territory, but if we want to discover its treasures we must dig for ourselves in whatever contemporary records may come to hand. The *Illustrated London News* for 1851 is full of wood-engravings of the furniture exhibited at the Great Exhibition, furniture which, in its day, no doubt, was considered to be both tasteful and functional. As regards the latter point, at least the drawers in the sideboards did work and the tables didn't wobble.

The best over-all picture of interior decoration for the last hundred years is to be found in the pages of *Punch*, and it is from *Punch*, therefore, that the following article has taken examples which with their commentary provide, for the first time, a serious study of the Gap.

James Laver

William Gaunt

PUNCH AS REFEREE OF A HUNDRED YEARS OF HOUSEHOLD TASTE

IT is the purpose of this survey to enter a number of homes, made accessible by the artist-social historians of Punch, *and there observe the effect which architects and designers have had on taste in the course of the last century.*

The middle-class home is the obvious index; being more susceptible to change than the old aristocratic house where there was reason to maintain the status quo *of decor; or the quarters of the working-class, which could not afford improvements or costly alterations. The middle classes, with money to spend and new houses to furnish, were distinct in their free choice of the products of their own time and their reflection, in the various ways which* Punch *has, uniquely, set on record, of the current tendencies in design and decoration.*

This reflection is, of course, incomplete. Punch *does not profess to tell us when exactly a style was born or how it was inspired. The pioneer works of architects, the exhibition pieces, the first appearance of new designs in the manufacturers' catalogues, the books and essays which have set forth some plan of reform or counsel of perfection, are a separate research. Very often there is a 'time-lag' and several years go by before a type of furniture or furnishing takes hold and is familiar enough (even as a novelty) for the humorous draughtsman to use with certainty that his public is ready to appreciate the pictorial reference.*

On the other hand, in discovering the moment of impact, at which it can be stated confidently that the public is aware of some fresh effort, belatedly or no, with understanding or even with misunderstanding, the time-lag is in itself of value. It, too, is an historical fact concerning taste. In addition, Punch *has much to tell in detail about a process of transition which has not been, otherwise, carefully studied. The second half of the nineteenth century, neglected ground between 'period' and 'modern,' is a gap which historians of style, frowning on 'bad taste' have not been at pains to fill. At this point* Punch *is full of useful suggestions, though at no time does it fail to give some clue to the existence and manner of reception of a decorative mode or inform us of the remarkable changes in progress.*

With our first set of pictures by John Leech (associated with Punch *since its foundation in 1841, now, in the 'fifties, well in his stride as social historian) we are at the point of transition between 'Early' and 'Mid' Victorian. Between the two periods the Great Exhibition has intervened, but in Leech's bedroom of 1857* **(1)** *and his dining-room of 1859* **(2)** *there is little hint of change. The background is pre-Exhibition, the link is still with the Regency, and the coarsened Regency style which is Early Victorian. The general effect is one of simplicity. The bedroom is plain and unpretentious with its four-poster—a not unsightly 'ottoman' at its foot—a Spartan dressing-table, on it a heavy but simple mirror, a rounded-topped mirror over the fireplace. The touch of modernity here is provided by the crinoline which billows emptily while the lady's toilet is being completed.*

1

DARLING: 'Oh, Mama Dear! What splendid Flowers.' MAMA: 'Yes, Dear, put it down. Put it down. That is my Wreath. I'm going to the Opera!' DARLING: 'Oh! And when I grow a big lady, may I wear a Wreath, and go to the Opera?' MAMA: 'Well, dear, I hope so.' DARLING: 'What, and take my beautiful Velvet and Gold Church Service Uncle Charles gave me?'

Without pretensions to anything but solid comfort is also the small dining-room. It is restrained if it is not beautiful. The sideboard and lamp are without ornament. The armchair, over the back of which an Indian shawl is thrown in the fashion of the time, is built for comfort.

2

LADY: 'Resign your situation! Why, what's wrong now, Thomas. Have they been wanting you to eat Salt Butter again.' GENTEEL FOOTMAN: 'Oh no, thank you, Ma'am—but the fact is, Ma'am—that I have heard that Master were seen last week on the top of a Homnibus, and I couldn't after that remain any longer in the family.'

The only element of display is that discarded gentleman's finery of an earlier age, the livery of the man-servant (note his crumb-brush).

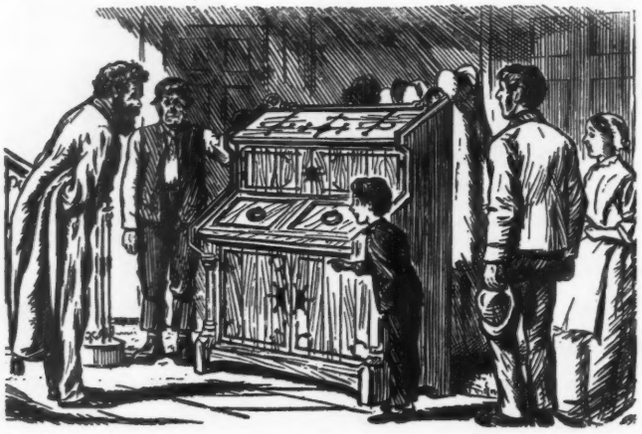
When we come to the drawing-room **(3)**, *a first-floor perhaps in Belgravia or Kensington, it is more evident that we are in the Exhibition decade. The extravagant rococo lines of the couch proclaim it.*

It is a reminder that 1851 had been by no means a single triumph for Pugin Gothic. In the great diversity of its quest for style which impartially explored Gothic, Jacobean, Italian Renaissance and French eighteenth century, rococo was a powerful element which appealed to the growing desire for luxury. The drawing-room is the place for exhibiting such luxurious acquisitions. Another is the ingenious

3

CHARLES: 'I say, Clara, Ain't it jolly? I've made such a Capital Book on the Derby!' CLARA: 'I am sure, Charles, I am delighted to hear it. Any literary pursuit must be better than the horrid practice you were getting into of Betting at Races!'

screen consisting of an ornately framed sheet of plate-glass. Such articles are indicative of a new kind of mind or state of mind at work on the question of decoration. We are no longer in the atmosphere of a quietly and clumsily decaying tradition, but of enquiry and experiment. The manufacturer has been made art-conscious. The utilitarian conscience comes to an arrangement with splendour. The screen, combining ornament and use, would satisfy the requirements which the reformer of design, Henry Cole, has advocated. Its utility is that you can see through it, but Leech suggests that it has a secondary use. It acts as a coquettish barrier between the lady who toys with her fan and the young man who 'contrives' his top-hat with so much adroitness. The low armless chairs are the functional accompaniment of unfunctional dress and the artist gives a pictorial demonstration of their value in accommodating the ample skirts of the period.



4

GOTHIC FURNITURE. MASTER GEORGE *(on the arrival of the new cabinet)*: 'O, Pa! Do let me have it for a Rabbit Hutch.'

It is clear that after 1851 (at Paris in 1855, at South Kensington in 1862, at Paris again in 1867 and so forward) designers and manufacturers of furniture became 'exhibition-minded,' something after the fashion of Academy painters, that is they produced pieces which either by their size or their unusual qualities of design would stand out in the exhibition gallery from neighbouring pieces. For this reason alone they were often out of key with domestic surroundings. The arrival of such an alien presence, the respectful but slightly aggrieved air of the domestic staff which so plainly conveys their unfavourable verdict, is well rendered in Charles Keene's drawing of 1865 **(4)**. *Possibly the 'Gothic' cabinet was an exhibition piece of 1862, which, after a few years of vicissitude, had become a white elephant and a bargain. It would be too much to give it an author on the strength of Keene's sketch. William Burges was active, William Morris had a stall of furniture at the exhibition of 1862, but in none of the various interpretations given it was the secular use of Gothic anything but*

5

MOTHER: 'Will you stay and listen to Dr. Growlers improving conversation or go to Bed?' BOY: 'If you please, Mama, I would much rather go to Bed!'

limited, and its appeal to the middle class was far less than to the imaginative architect or designer.

The average and highly miscellaneous character of the middle-class home in the 'sixties is seen in the drawing-room of 1865 **(5)**. *The indifference to any formal relation between the objects it contains is noteworthy, also the fact that no one object resembles any other. The contrast, for example, between the pseudo-Jacobean chair on which the clerical visitor sits and the lady's padded leather chair (like those which Queen Victoria has had for some years at Balmoral) is complete. Everything is stuffed, padded or covered. The piano has its wad of pleated silk, the table is invisible beneath its cloth, the armchair is formless. It is this period of the nondescript which gives us the 'what not' seen in the corner of the room—its purpose, to hold anything from Bible to ball of wool. The effect is the more oppressive because objects are arranged (by accident or intention) so as to preclude all freedom of movement.*

6

BUTTONS (*as he burst into his Master's room on the night of Wednesday, the 7th: he had just seen that wonderful shooting star*): 'Oh, Please, Sir, them Meteors is goin' off ag'in!' SCIENTIFIC OLD GENT (*startled out of his first sleep, and misunderstanding the intelligence*): 'Oh!—Eh!—What!—Turn it off at the Main!'

The bedroom of 1868 confronts us equally with progress and its lack (6). *The lack is seen in the shallow bath ready for the chill morning sponge-down, a sign of still rudimentary hygiene. The four-poster, however, has gone, in its place is the metal bedstead, now growing in popularity. The first of the iron and brass bedsteads came out in the 'forties. The Great Exhibition included examples, which were commended as 'simple and appropriate.' Birmingham in 1849 had an output of some 400 a week; by the time Charles Keene made this drawing it had grown to 5,000 and was rapidly increasing further.*

7

THE OTTOMAN

The receding canopy and curtains are a mere reminiscence of a supplanted form.

* * * *

Towards the end of the 'sixties a new and exuberant period of crazes and sensations begins. They are the delight of George du Maurier who now follows Leech and Keene, as a social historian with a satiric vein. A foible which catches his attention in 1869 is the so-called 'ottoman' (7). *The word has already been loosely applied to many padded couch surfaces, having some resemblance to an oriental couch. The renewed vogue of travel in the Orient (the Suez Canal opens this year) may have given the name greater popularity and more indiscriminate use. Since the Great Exhibition furniture has had a tendency to 'proliferate,' to bud and blossom into double or triple. Seeing the 'ottoman' in a catalogue, indeed, one might vainly speculate as to its precise purpose, but here the value of* Punch *is manifest. Is the 'ottoman' intended to facilitate discreet embraces? or to prevent them? In supplying the human element du Maurier also supplies the answer. The purpose, he shows, is to permit three conversations to proceed independently between three ladies comfortably seated and three gentlemen who can travel round their perimeter. It is in fact, and has the alternative description of 'sociable.' One of du Maurier's*

8

TEACHER: 'And what comes after S, Jack?' PUPIL: 'T.' TEACHER: 'And what comes after T?' PUPIL: 'For all that we have Received,' etc., etc.

main themes is the fresh impetus in decoration, launched in the 'sixties which penetrates the middle-class home at the end of that decade and during the 'seventies, expressing the awakened middle-class interest in Beauty. The popularity of what is comprehensively called 'Aestheticism' is indicated by frequent Punch *drawings between 1869 and 1879, by scattered hints in the drawings of the 'eighties. Several different influences have contributed to form the Aesthetic movement, but pre-eminent among them is that of Japan.*

Our drawing of 1869 (8), *in which a set of Japanese fans is ranged on the wall together with what look very like etchings by Whistler or Seymour Haden, shows a normal time-lag. It is about 12 years since Japanese prints were 'discovered' in Paris, 6 or 7 years since Whistler brought over to London some prints and blue china from Madame Desoye's Oriental shop in the rue de Rivoli. Rossetti was infected by the craze and was collecting 'blue and white' by 1864. He and Whistler have been steady customers of Farmer and Rogers's Oriental warehouse with its stock of porcelain, screens, fans, prints and lacquer. They have introduced to its manager, Mr. Lazenby Liberty (later to found Liberty & Co.) their friends, Leyland, the 'Liverpool Medici,' the surgeon, Sir Henry Thompson, who have also become ardent collectors. Thus initiated, the vogue by 1869 is spreading, in the next decade is widespread.*

The middle class is in receptive mood, a little ashamed of its proneness to ugly comfort, a little dubious, at the same time, of what

'Eva, did you hear that Lady's Name that's come to see Mamma?' 'Yes, Mrs. Abel.' 'I wonder if she's the mother of those two boys Mamma told us of, And one of them was Naughty, you know, and Killed his brother.' 'What Nonsense, Eva! Why that Happened ever so long ago! If she's *Anybody*, she must be their *Grandmother*!'

9

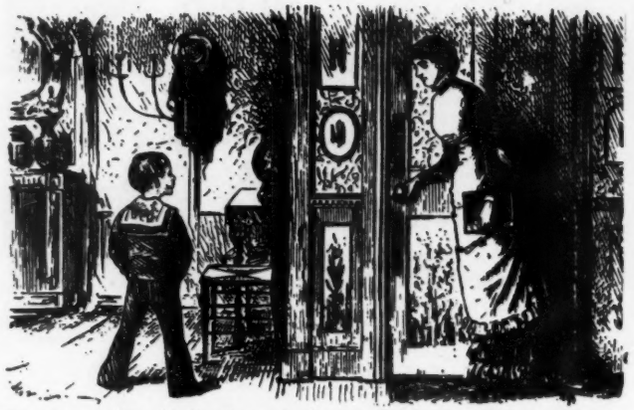
it has now begun to feel were the excesses or aberrations of 1851. It suffers, however, from an embarrassment of mentors. Sir Charles Eastlake's Hints on Household Taste *has advocated a simplified domestic Gothic; but Japan is certainly all the rage. The domestic scene of 1875 presents a curious combination* (9). *A charming young woman, holding a Japanese fan, sits before an 'Oxford Union' fireplace of mediæval aroma, the Western solidity of which incongruously supports an array of Oriental china.*

There are other influences at work, though of each Beauty is the burden. William Morris, following Ruskin, has begun to give voice to the need for beauty in everyday life, Walter Pater to the need for beauty sufficient in itself. By 1876 an amalgam has been made, the 'æsthete' has arrived (10). *His dress, a protest against the ugliness*

BONIFACE BRASENOSE (*an amiable, but aesthetic youth, exhibiting his Art-treasures*): 'That's A—A—Mother and Child, A—A—Fifteenth Century. . . .' FASHIONABLE LADY: 'I should have thought it earlier.' B.B.: 'A—May I ask Why?' F.L.: 'Oh, I should have thought they could Paint better than that, so late as the fifteenth century.'

10

of fashion, is that which Oscar Wilde (now in his second year at Oxford) will make notorious a few years later when he bursts on the world as 'Professor of Aesthetics.' Around are the varied elements which Patience *will parody in 1881. The picture the æsthete displays is doubtless an Italian 'primitive' (something 'Fra Angelican' or Botticellian'). The circular mirror is a favourite Pre-Raphaelite 'property,' reminiscent of the Lady of Shalott, and often used by Rossetti, but on either side of it are Oriental plates, and for the better contemplation of 'blue and white' a wall bracket has been put up.*



TOMMY (*on a visit to his Grandmama in the country*): 'No fear of Thieves or Burglars now, Aunt Mary, with a Man's Hat and Coat hanging up in the Hall.'

11

Japan has dictated the screen and the stripes on the couch, though the screen has an admixture of Pre-Raphaelite design.

William Morris's 'Co.' is producing its wallpapers, fabrics and furniture, 'old English' in feeling rather than stylistically Gothic, with

THE CIMABUE BROWNS (*'Train up a Child,' etc.*). ANTIQUATED GRANDPAPA (*from Ceylon*): 'Now, my Darlings, we're going to make a regular stay of it. First we'll go to the Zoo. Then we'll have a jolly good Blow-out at the Langham Hotel. And then we'll go and see the Pantomime at Drury Lane!' MASTER CIMABUE: 'Thanks awfully, Grandpapa! But we prefer the National Gallery to the Zoological Gardens!' MISS MONNA GIVRONDA: 'Yes, Grandpapa!—And we would soonah heah Handel's Judas Maccabaeus, or Sebastian Bach's glorious "Passions—Musik," than any Pantomime, Thank you!'

12

a marked love of floral pattern, not without effect, but a little too conscientiously repeated in the Hall of 1879 (11), *where pattern overflows from the wallpaper on to the panels of the door. The Morris chair is now a familiar adjunct of the æsthetic interior.*

By 1879 there is specifically an Aesthetic family (12). *The sunflower (the colour of which is to give a yellow stain to the 'nineties) has appeared as a symbol and du Maurier emphasizes the fact by putting it on both tablecloth and rug. There are Japanese prints on the wall, there is a fourfold Japanese screen of the type which is to remain popular for a good quarter of a century. The lady of the house is doing her best to 'live up' to it—and to Jane Morris. Scorning the*

13

LADY OF THE HOUSE: 'Well, Millicent, how do you like your new Horse "Roland"?' MILLICENT: 'O, immensely! But he wants a firm Hand, you know. He'd very soon Run away with me, if I gave him a chance, wouldn't he, Robert?' ROBERT (*first Cousin to Millicent*): 'Run away with you, if you gave him a chance? By George, if I can judge of "Roland's" Feelings by my own, I should just Think he would!'

conventional chignon she allows her hair to float loosely, wears an æsthetic gown and a melancholy Beatrice-like expression.

Contemporaneously, there is the hearty opposite camp for which Matthew Arnold has found the description of 'Philistine,' and du Maurier's impartial satire is bestowed also upon it. The Philistine likes not 'blue and white,' but the ornate vases of commercial manufacture. They are suggested in the drawing-room of 1873 (**13**)*, where*

14

FLIPPANT LADY: 'You seem depressed, Mr. Beauclerc! No bad News, I hope.' ROMANTIC GENTLEMAN: 'Ah! if one could only *Forget*!' FL. L.: 'Dear Me! Hadn't you better tell me all about it? And I'll forget it for you!'

also, in defiance of the new taste, the glass dome still imprisons its clock or bowl of wax fruit. Victorian fashion is opposed to the essentially anti-Victorian æstheticism.

The dress of the æsthetic lady is in itself a protest against the bustle. Accept the bustle and it is necessary to reject not only the 'mediæval' gown but the Morris chair. The connection of fashion in clothes and design in furniture is clearly seen in another picture of 1873 (**14**)*. The bustle has made necessary a type of armchair with openings through which it may conveniently protrude. The æsthetic interior retained, by the nature of the influence upon it, some evidence of a selective principle. The Philistines loved profusion. Compare the*

15

ADONIS (*after his Guests have departed*): 'By Jove, Maria, what a Handsome Woman Mrs. Jones is! She looks Better than ever!' HIS WIFE: 'Ahem! Well, it may be my bad Taste, but I own I have hitherto failed to detect the Beauty of Mrs. Jones. Now, Mr. Jones is good-looking, if you like!' ADONIS: 'Jones Good-Looking! Come—hang it, Maria, Jones is a very good Fellow, and all that; but I must say I've never perceived his Good Looks.'

moderate decoration of **10** *with the differently inspired interior of 1876* (**15**)*, where the paintings in heavy gilt frames are crowded thickly together and partly obscured by the huge vases on the draped overmantel where even the clock occupies ten times the space that would be enough simply for the dial. Comfort and mechanical progress are considered to go together though Aestheticism is somewhat indifferent to the one*

16

AUNT MARY: 'Why don't you read, Tom, instead of lolling about?' TOM: 'Got nothing to read!' AUNT MARY: 'There's your first Prize in Monsieur Jolivet's French Class—A most delightful book.' TOM: 'How can I read that—It's in French!'

and very suspicious of the other. Impossible to contemplate a Sir Galahad in a rocking-chair or a Belle Iseult with a sewing-machine, but America with no leaning towards the Middle Ages produces the sewing-machine and both objects find a welcome in the average middle-class English home during the 'seventies. Luke Fildes, rich Royal Academician with no trace of the Pre-Raphaelite about him, has in his Melbury Road mansion the identical rocking-chair (Austrian bentwood?) which du Maurier carefully draws for us. Rocking-chair and sewing-machine are seen together in their essential harmony in an interior of 1877 (**16**)*, which Mr. Jellaby Postlethwaite would*

17

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Furniture, outside the circle of æsthetic influence and solely comfort-inspired is, it must be admitted, going through some interesting changes. There is a new range of experiment, not, as in 1851, with

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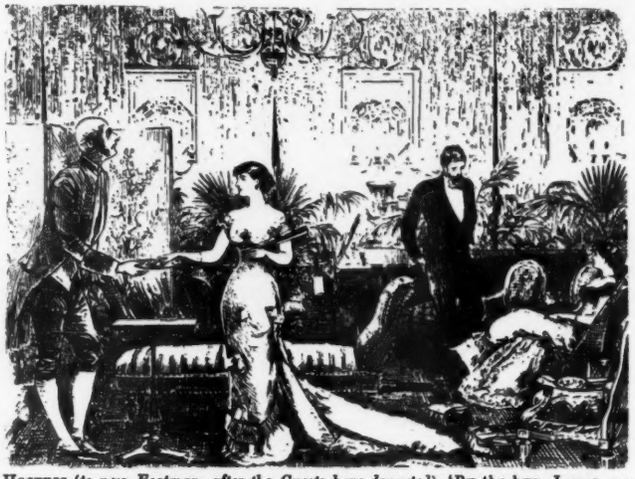
MRS. PONSONBY DE TOMKYNS (*bursting into her Husband's smoking-room*): 'Ponsonby! Quick!! Pen, Ink, and Paper!!!—and write immediately!!!! MR. P. DE T.: 'What is it now, my love?' MRS.: 'Why Monsieur de Paris is coming over with his Family to visit England. Write and secure them for Thursday week. We shall have crowds—all London.' MR.: 'My Love, His Royal Highness will never come to the likes of us!' MRS.: 'You Goose! It's not the Compte de Paris! It's Monsieur de Paris, as they call him—the Public Executioner, you know. Do as I tell you!' (Ponsonby did as he was told—all London came to Mrs. Ponsonby de Tomkyns Thursday afternoon—but Monsieur de Paris didn't. He took his Wife and Children to Madame Toussaud's instead, to see the Guillotine! Faithless Monsieur de Paris!! Poor Mrs. P.T.!!!!)

ornamental style, but with material and structure. The sociable gathering of 1878 **(17)** *(Philistine by its looks despite the sunflower pattern of the mantel) uses two noteworthy examples. The young lady (in an un-young-ladylike posture) on the right sits in a basket-chair of a type which has never since gone entirely out of fashion. The young lady on the left reclines, feet on hassock, on a most unusual chair (for the time), the curving lines of which seem to foreshadow the modern functional theory. The full perfection of Madeira wickerwork with arm and book rest is seen in the interior of 1879* **(18)**, *which strangely assorts the potted palm and rubber-plant with heraldic glass; a chair constructed of bamboo is to be seen in the splendid music room of 1878* **(19)**.

The advent of the palm, waving in jungle prolificacy in the 1878 music room testifies to a feeling for the Orient, near and far. In the previous year Queen Victoria has been declared Empress of India; and Frederic Leighton has added an Arabian Court, after his travels in Syria and Egypt, to his Melbury Road house. His musical evenings have set a standard and there a similar abundance of palms



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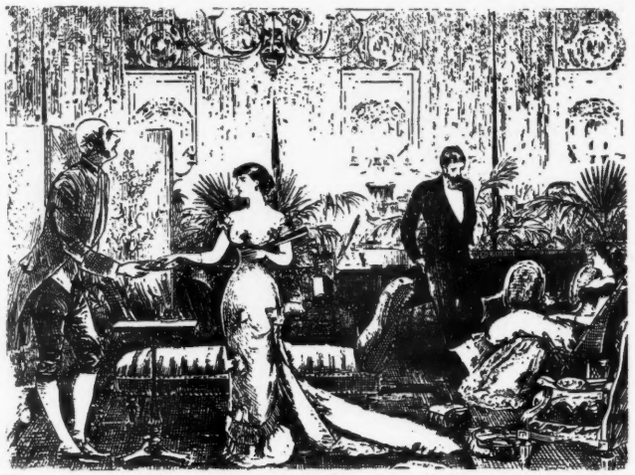

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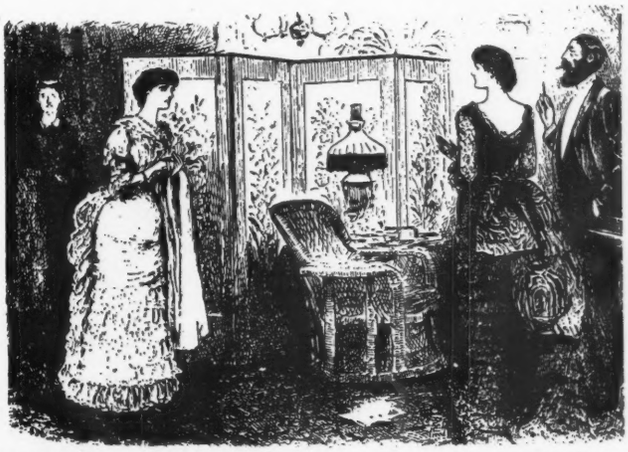

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Leighton's Psyche *than Rossetti's* Beatrix. *The bedroom of 1886* (**26**) *shows us a type, and the influence of the artists is seen also in the peacock fan—the bird has been a motif of design since Whistler painted over Mr. Leyland's Spanish leather with peacocks* (*Leighton has painted them too, and has a stuffed one in his hall*). *The metal bed it may be noted, has remained true to its own type since the 'sixties.*

It is when we come to the 'nineties that Punch *is especially valuable*

25

DIFFERENT EFFECTS OF SHYNESS. (*It impels Jones to extreme volubility, and makes him say things he would much rather leave unsaid*). 'By the way, Mr. Smith—A—talking of Coincidences—a—do you happen to know the Browns, in Onslow Square?—a—a little Man—big Shirt Collar—long Upper Lip—a—that is—a—his Wife Squints—I mean—a—a his Mother-in-Law squints too—only she's thin—a—at least—a they've all three got Red Noses—a—a—not that I object to that—a—a—on the contrary—a—a—I mean, they're most Delightful People—a—can't think what suddenly put them into my Head—a—a—it's of no consequence—a—!' (*Perspires profusely, and tries in vain to find another topic of conversation.*) N.B.—When he next meets the Browns of Onslow Square his wretched shyness will prompt him straightway to tell them how he put his foot in it at the Smiths!

in pointing to the gradualness of evolution. As a distinct social phenomenon, the spirit and character of the 'nineties is habitually sought in the 'Empire,' Romano's, or the Café Royal—that is in the gay life enjoyed in public, rather than the private music-rooms and

26

MARIANA: 'You seem very much attracted by that Mr. Somerville, Bella. You went to Supper with him twice to-night! He's not *Rich*, he's not *Young*, he's neither Clever, nor Goodlooking! What *is* his particular charm?' BELLA (*pensively, after a pause*): 'He hates *Mayonnaise*. So do I!'

dining-rooms we have already visited. Punch, *indeed, although it permits Phil May his rowdy brilliance, is never altogether at ease with such licence* (*either in the 'nineties or the nineteen-twenties*). *In its refusal to abandon the home it is the more useful for the present*

27

PROUD FATHER: 'Yes, He's got his Mother's eyes and his Mother's Mouth, but I'm afraid he's taken my worst Feature!' GRANDMAMA (*on the Mother's side*): 'Yes; and unfortunately he's put it right in the middle of his face!'

purpose, and several points unobscured by glamour and the lights of the Strand become clear.

First, it is only by degrees that the 'eighties depart. The chair on which the mother sits with her baby in the sitting-room of 1896 (**27**)

28

'And I hear your dear little boy is so amusing!' 'Well—yes, considering he's only Four! Did I tell you his Joke with the old Admiral the other day? He handed him the Salt instead of the Sugar; and the Admiral (who's blind, you know) actually put it into his tea!' 'Oh, that's too droll! You must send that to Punch!' Does so.

belongs to the same range of structural experiment as examples in **17**, **18** *and* **19**. *The profusion of potted palms and plants is being diverted now to hotel and restaurant, but they leave a small plant legacy in the aspidistra, which has many years of soot-laden life*

29

HOSTESS (*of Upper Tooting showing new house to friend*): 'We're very proud of this Room, Mrs. Hominy. Our own little Upholsterer did it up just as you see it, and all our friends think it was *Liberty*!' VISITOR (*sotto voce*): 'Oh, Liberty, Liberty how many crimes are committed in thy name!'

30

HER HUSBAND (*going to the continent*): 'Look here, Arabella, from now you and I will speak nothing but French.' ARABELLA: 'Oui.' HER HUSBAND: 'What did you say.'

ahead of it. It stands (1894) on the small, unprepossessing table of the 'eighties (**28**)*, already seen in* **25**. *In the 'eighties Liberty & Co. challenged 'the fiat of Paris' with a 'new school of dressmaking,' in which they had the assistance of the architect, E. W. Godwin. Some may have argued that if an architect could apply himself to dressmaking, dressmaking could be applied to architecture. At all events in the 'nineties there is a use of fabrics (an array of salmon-pinks and blue-greens) which Liberty's crusade has no doubt encouraged, manifest in the interiors illustrated of 1894 and 1899* (**29** *and* **30**)*. The frilly lampshade is obviously authentic. Though there is certainly an exaggeration for humorous purposes it is still not impossible to believe that people tied a satin bow round a Morris chair and stuck three fans on top, or put a scarf round an oriental vase or the leg of the piano.*

The steps by which the 'art nouveau' of the new century is reached

31

AUNT FLORENCE: 'And can you read yet, Ruth?' RUTH: 'I should think so indeed, and I know geography and history and sums and I've got two second teeth.'

are seen also to move very gradually forward. The lightening of the load in the interior, a sign of reaction against Victorian heaviness, is observable in the sitting-room of 1878 (**31**)*. Already the mantelshelf has been cleared of ponderous bric-à-brac, the chairs are of slender lines we have not previously seen in our survey (except for those of Morris). A sinuous curve has already crept into the lines of the stand which supports a bowl of flowers, seen in our other interior of 1889* (**32**)*. At the confluence of its lines is a shelf for a secondary*

32

OUR SEMI-DETACHED NEIGHBOURS. GRACE: 'And yet, Dear, how little we have seen of each other lately—considering there is only a Partition—Wall between us!' EMILY: 'But then, Dear, it is such a comfort to feel that you are on the other side!'

ornament. A variant of this 'occasional' piece is to be seen ten years later (it is by this time popular) in the interior of 1899 (**35**)*.*

The system of curves and radiations, typical of l'Art Nouveau, deriving (for even this revolutionary style has its antecedents) from Japanese, Pre-Raphaelite and European rococo design, is already hinted at in our interior of 1892 (**33**) *by the oval mirror with a radiating design on its frame, the asymmetrical clock, the curls of the stand for fire-irons. (The brackets holding vases, on either side of the mirror, recall the shelves which Jeckyll designed to hold Mr. Leyland's Oriental pots at 49, Princes Gate.) In graphic art Aubrey Beardsley fuses the three influences we have cited into one; the result crossed the*

33

BUTTONS (*fresh from the Country, evidently no French Scholar*): 'I say, Mary, the Guv'nor and Missus are dining out to-night. But I can't for the life of me make out what a R, a S, a V and a P mean on this 'ere Card!' SMART HOUSEMAID: 'Why, of course, it means they're going to have Rump Steak and Veal Pie!'

34

'I have just been to call upon Marie. She has fallen out with her fiancé.' 'Oh! yes, so I hear. Did she tell you all about it?' 'My *dear* girl I was only there an hour or so.'

Channel to be reconverted into Jugend-Stil and Sezessions-Stil. The style acquires a continental verve, is taken up by architects as well as draughtsmen, Victor Horta in Brussels, Otto Wagner in Vienna. It returns to England, a little foreign—the chair, the couch, the screen

35

SHE: 'Ah it was very different before we were married. Then my word was Law!' HE: 'And a very vulgar word, too, my dear.'

in the sitting-room of 1896 **(34)** *have a Viennese look.*

But 'Art Nouveau' is not merely a system of ornament. In a broader sense it is a rejection of the past. With the attenuation of furniture

36

LATEST STYLE OF ROOM DECORATION. THE HOME MADE BEAUTIFUL. **According to the 'Arts and Crafts.'**

goes a new regard for space. The average interior without strongly marked character (1899) **(35)** *shows the clearance. The restoration of space is marked in the complete 'Art Nouveau' interior at which* Punch *laughs in 1903* **(36)**. *The artist has made the obvious fun of the wavy chair backs and writing table, the tapering uprights and*

37

HUSBAND: 'My dear Gwen! Here's the Dressmaker's account again! I thought I gave you the money for it?' WIFE: 'Oh, that went to pay my Bridge losses, Debts of honour first, you know!'

elongated vases. It is the caricature of an interior by Charles Rennie Mackintosh, or Charles Voysey or George Walton. It retains, nevertheless, something of their essential directness and simplicity. As a

38

SPORTSMAN (*after a day's shoot*): 'Just fancy—just by Hayward's Copse, to-day, we saw a couple of foxes!' MISS JONES (*from Clapham*): 'Dear me! That was lucky! And did you shoot them both?'

'style' 'Art Nouveau' does not take firm hold, but it leaves a trace. The chintz covers in the interior of 1905 **(37)** *have nothing to do with it, but the height of the fireplace (bringing it into relation with the lines of the room) has; so too has the central space in the room, an arena of domestic discussion. At the same time there is a return to the past, inspired by an English yearning for the country which grows with the growth of the town. Sir Gorgius Midas was essentially a metropolitan figure; a succeeding generation aspires to be lord of a*

manor. Nostalgia shifts its ground, from the fourteenth and fifteenth centuries beloved by Morris to the sixteenth and seventeenth centuries, to Tudor, Jacobean, Carolean and Queen Anne. In the rehabilitation of the 'English Renaissance' Norman Shaw has taken a leading part since the 'seventies. There is a definite suggestion of his bold and picturesque manner in the setting of 1899 **(38)**, *fit setting as Bernard*

39

NEWLY AFFIANCED ONE: 'May I be your new Mamma, Tommy?' TOMMY: 'I should like it but you must ask Papa!'

Partridge conveys for a new, lean hero—globe-trotter, soldier, big-game hunter (his type reappears in the interior of 1904) **(39)**.

In sympathy with tradition newly defined, the manufacturer of 'period' furniture abandons the Louis Quinze of the late-Victorian ballroom and concentrates on copies or adaptations of Tudor, or of 'Jacobean,' as in the interior of 1904 **(39)**. *The revival of tradition long*

40

'Reading the history of the war, Mother?' 'Why not?' 'Because you can't look at the end first.'

kept its hold—in the interiors of 1904 and 1916 **(40)** *we are in the same climate of society and taste.*

Yet a new simplicity is in the air, not yet a militant theory, but in general a sign of the smaller value attached to the number of possessions and formality of living.

The fireplace in the interior of 1914 **(41)** *is of plain, unadorned brick, and the shelf above it bears knick-knacks, intended to amuse rather than impress. The 'Oxford' chair is notably informal.*

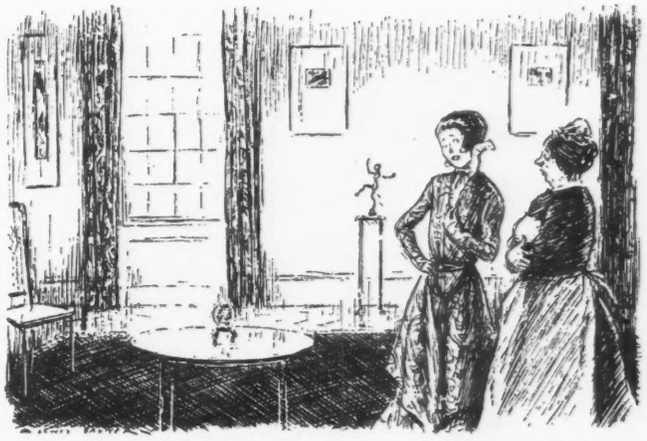
The elegance of Mayfair now comes of elimination, designed however to give an air of luxury and value to small and perhaps trivial works of art like the statuette and the etchings with their

41

HAROLD (*who had the worst of an argument with his father*): 'All right, then, you don't get those six strokes, I was going to give you this afternoon.'

enormous mounts in the interior of 1916 **(42)**. (*'A bit bare-like,' says Cook in* Punch's *verbal explanation. 'I never reely feel an 'ome's an 'ome without a haspidisterer.'*)

Even before the war of 1914-1918 it has become fashionable to dispense with the tablecloth, and by 1922 **(43)** *the habit is well-established—not certain evidence of a new regard for the material of furniture, but a sign of the informality of post-war manners.* Punch, *in implicit alliance with the stable elements in a disordered world, chooses to picture only the milder manifestations of the gay*



42

ARTISTIC LADY (*who has just had her drawing-room redecorated*): 'Well, Cook, what do you think of it?' COOK: 'It's a bit bare-like, isn't it, Mum? I dessay I'm old-fashioned, but I never reely feel an 'ome's an 'ome without a Haspidisterer.'

43

HOSTESS (*to small boy*): 'Wouldn't you like to have your meat cut up for you, dear?' SMALL BOY (*very politely*): 'Oh, no, Thank you. We often have Meat quite as tough as this at home.'

and excessive 'twenties. Mildly 'arty' is the lady who sits in the new Bohemian way on a pouffe in F. H. Townsend's interior of 1920 **(44)** *before a fireplace adorned with tiles which may have found their way hither from the Omega Workshops, though her artiness is more casual*

44

VICAR'S WIFE: 'The Vicar was asking only this morning why you weren't in the habit of attending church.' LATEST INHABITANT: 'Well, you see, it does so cut into one's Sundays.'

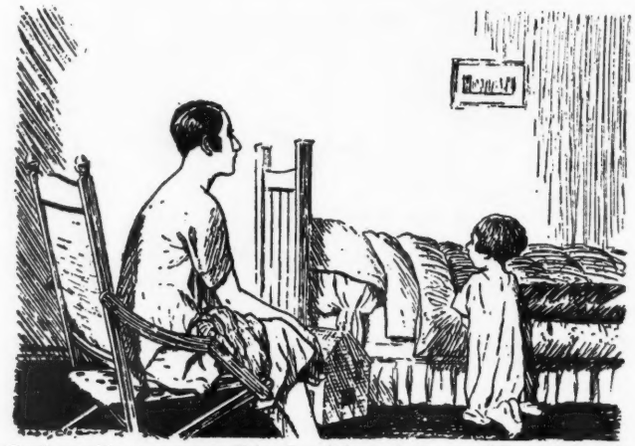
and frivolous than the old æstheticism, as the comic animals on the mantelpiece suggest. The moderate abandon of Chelsea is symbolized in the sophisticated, Eton-cropped woman of 1924 **(45)** *(married, the*

48

LONG-SUFFERING HUSBAND: 'I say, Monica, do let's leave Chelsea and sit on chairs again.'

accompanying joke reassures us, to the gentleman who finds squatting on cushions so uncomfortable). The decor is sketchy but the point is well made for this is the period of exotic borrowings from Ballet Russes, of springy divans and plentiful cushions of hot and sensuous design; but if Bohemia sleeps (when it does sleep) in stagey luxury, there is a steady average of middle-class austerity expressed in the plain wooden bed of 1926 **(46)**.

The simplicity illustrated by these is not that clean sweep of the past, that zeal to solve the design problems of industrial production, that brilliant idea, which it is in Europe and especially in Germany.



46

'Don't mumble your prayers, Helen, I can't hear what you say!' 'I wasn't speaking to you, Mother.'

There is opposition to the thought that an Englishman's home is his machine for living in. Punch *artists tend not to show us credible interiors in which human beings behave humorously but to caricature the interiors themselves. Some of them are incredible, and the social historian must make allowance for them as the pictorial expression of middle-class prejudice rather than of middle-class living. An example is the interior of 1931* **(47)**. *Not even the 'jazz style' surely ever made the picture-frame anything but a rectangle and it is hard to believe*

47

ULTRA-MODERN NIECE: 'So sweet of you to look me up, Uncle! Take the easy chair.'

there were in fact such lopsided and irrational chairs and fireplaces even among those aberrations of 'modernismus' which Mr. Osbert Lancaster has so brilliantly satirized.

Assuming their existence, how came they to exist? Punch *would seem to lay the responsibility on the emancipated woman whose delight it is to astonish and victimize the long-suffering male. Complacent in smartness she stands among the curiosities of 1931.*

48

'I may be old-fashioned, Martha, but I like a mantelpiece one can rest one's elbow on.'

Devout in highbrowism she sits before the fireplace of 1934 (**48**) *and in each case a serious, dubious, middle-aged, middle-class man is her victim. By 1934 we have moved from the phase of 1931. The metal chairs which the Bauhaus designers devised at Dessau in the mid-'twenties are now tolerated. The walls have been swept bare of pictures, modern or otherwise, though, as if to fill the space they have vacated and to proclaim itself an effective substitute, the mantel rises to a freakish height.*

49

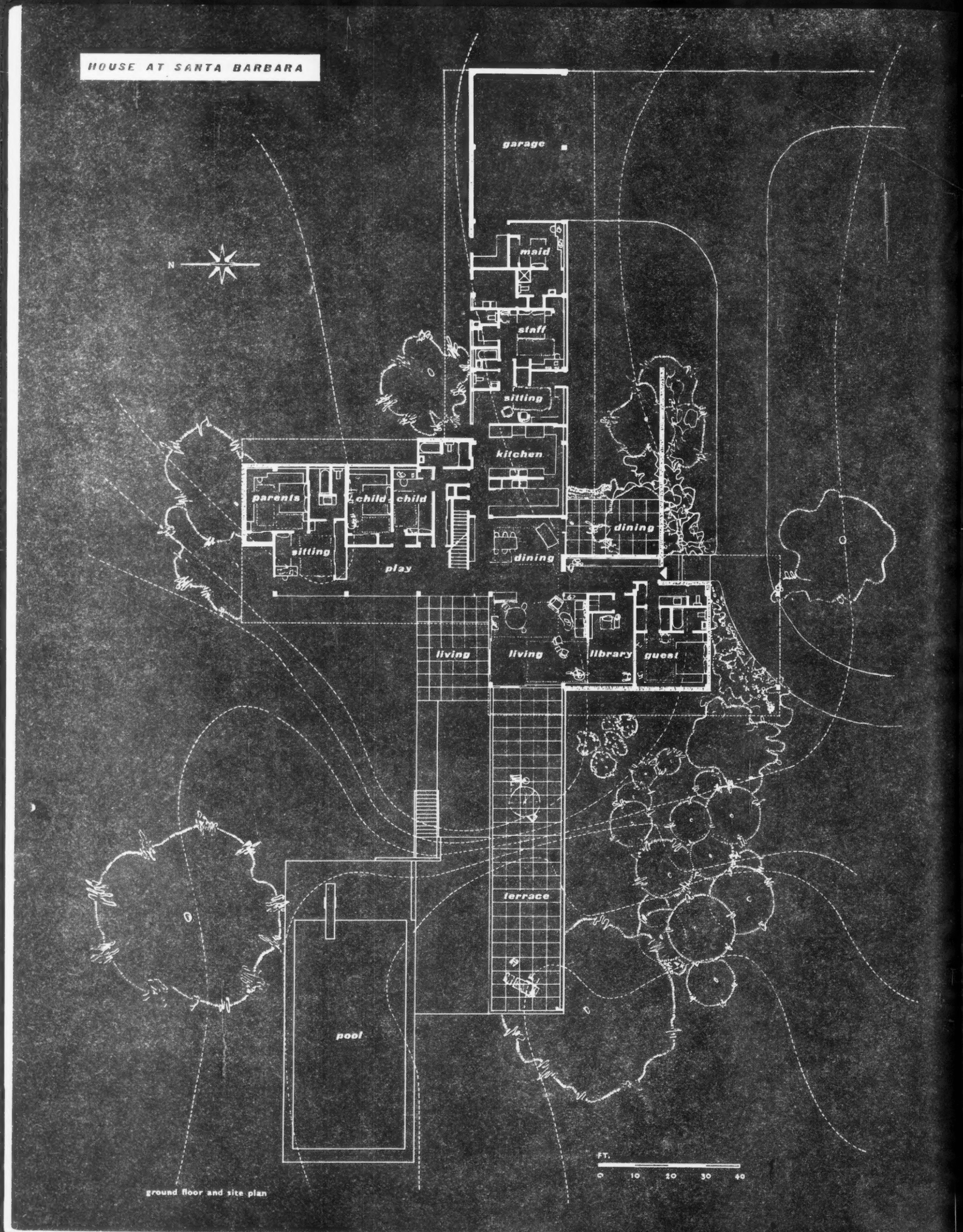
'My lady we've found your hairpin.'

Depicted in 1942 (**49** *and* **50**) *the sitting-room and dining-room, last scenes of this eventful history, are substantially those of 1939. The artists here have been faithful to fact: and the interiors are typical. The end of elimination has been reached, the smart and the 'middle-brow' have made their compromises. The old town house has been 'modernized,' the combined sitting-dining room provided with a flush door, a bar electric fire fitted into the existing fireplace. It is simple enough, though is that portrait perhaps rather flashy? that barrier which is merely a symbol of the room's divided function toylike and useless? Then there is the 'Post-Impressionist' flat with its colour reproduction, its pickled oak sideboard bookcase (one hopes the vase which stands on it is not the mechanical simulation of the hand-made). Better perhaps than they might be these rooms, but not without flaw—though now this becomes academic discussion when design, standardized, is betaking itself to the kitchen and bathroom, leaving the rest of the home to whatever may be found in the second-hand shops of the objects we have gone back to look at.*

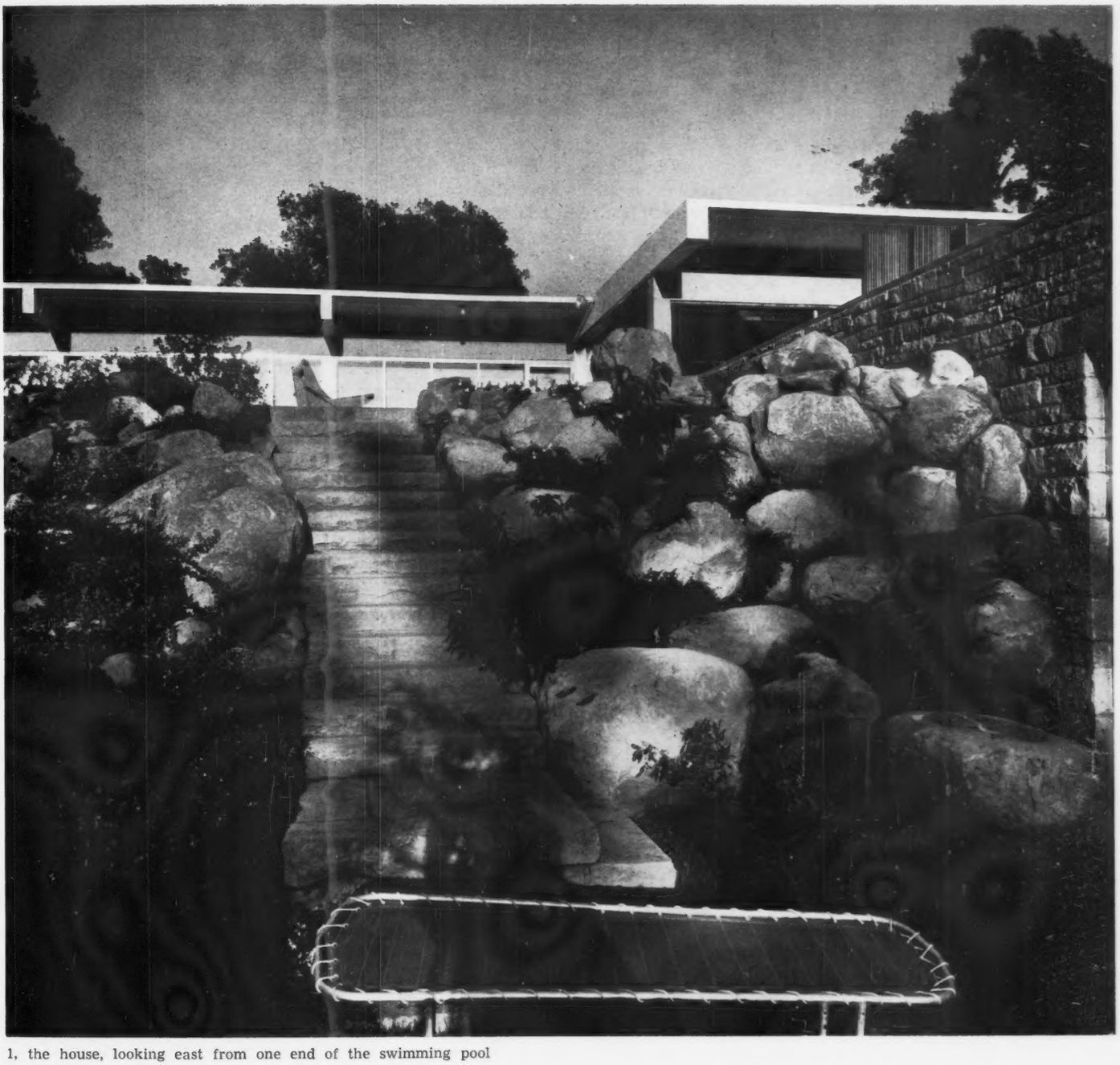
50

'It's a Warden; he says he can see your blackout from the bottom of the road.'

HOUSE AT SANTA BARBARA



ground floor and site plan



1, the house, looking east from one end of the swimming pool

HOUSE AT SANTA BARBARA

RICHARD NEUTRA: ARCHITECT

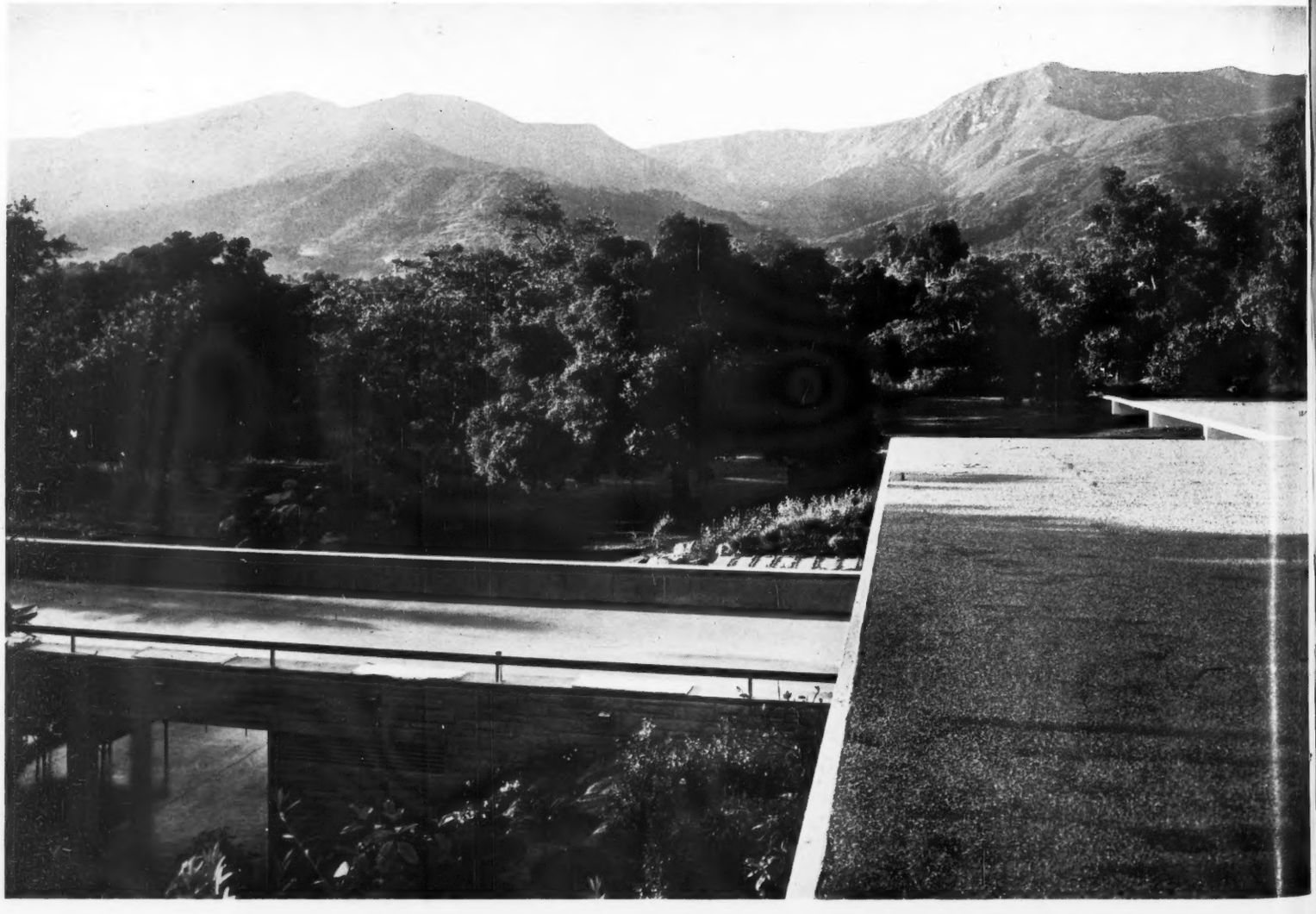
The threat of forest fires necessitated a reinforced concrete structure for this house, which is surrounded by extensive woods. The roof slab is detached from the frontal or spandrel girders which span sixteen feet over the continuous lower openings, doors and windows, and fixed and sliding plate glass fronts. Over and above these wide-span lintel girders, and between far out cantilevering cross beams, extends again a continuous upper tier of openings with windows which are capable of swinging in, to form a horizontal glass shelf. (The architect developed this system of structure first in his designs for Caribbean schools and health centres.) Here an inner portion of the ceiling is suspended lower throughout the building, forming with its projected window-ward edge a shelf concealing a continuous strip of indirect tube lighting. As large portions of the transparent fronts can be slid out of the way like the curtain panels draping them, the continuity of the polished surface of terrazzo floors made of topaz-coloured marble chips and white cement is preserved over the outline of the floor plan. In fact, a borderline of the house is obliterated by a heating system of floor radiation which freely extends to outside terraces and open-air sitting places. Entrance hall, living room, library, dining room, and adjacent covered and roofless terraces are combined and extend to a roof deck as well as through an underground half-tunnel gallery leading to a plate glazed pool and play porch, equipped with its own cooking and

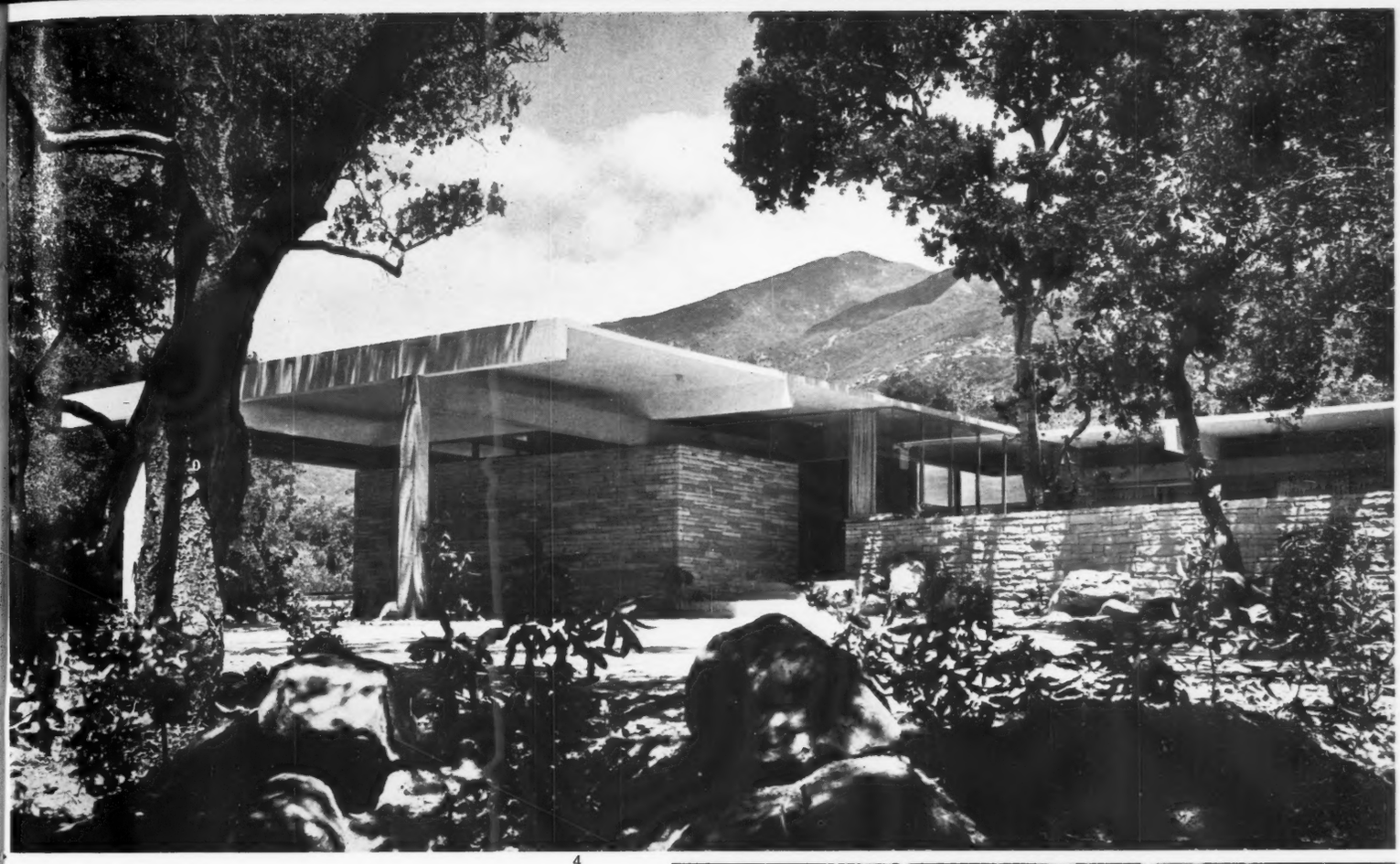
serving facilities. The pool has been designed to mirror the impressive skyline as well as the upper building which appears over the colours of alpine vegetation and heavy boulders. A wide-stretching, undulating meadow forms the north-westerly foreground of the building and borders on the dense woods, the edges of which are lightened up by deciduous sycamores and on a rocky outcrop, which steeply climbs up to the private north wing of the building. The most northerly part of this wing, jutting on to the wooded area, contains the private sitting room and master suite. Wide wardrobes with sliding fronts and a variety of fitted furniture characterize this and all other bedrooms. In the children's room and guest rooms furniture is natural blond birchwood with deep brown paint to set it off. The master suite has a colour scheme in grey with blue textiles. The living rooms are furnished in natural light walnut, which contrasts with the light terrazzo floor, the still lighter canvas-covered lower ceiling and the acoustic tile-faced upper ceiling on the one hand and, on the other, certain areas, like the dining room furniture, which are finished in very dark, reddish brown lacquer. This finish applies also to a floor-to-ceiling partition which is easily removed and stored upright along the east wall of the dining room, at the side of the pantry

2, looking towards the dining terrace and entrance porch, from the east. 3, the perspective of the flat, gravel-surfaced roof and the living terrace on the floor below, provide an ideal foil to the park-like landscape and the bare mountains beyond

2

3





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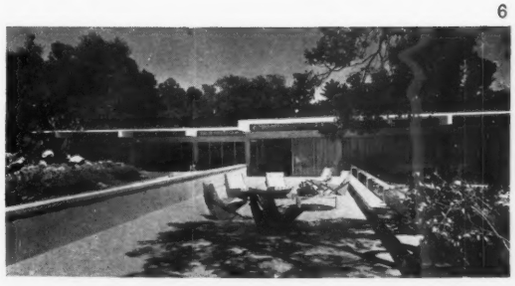
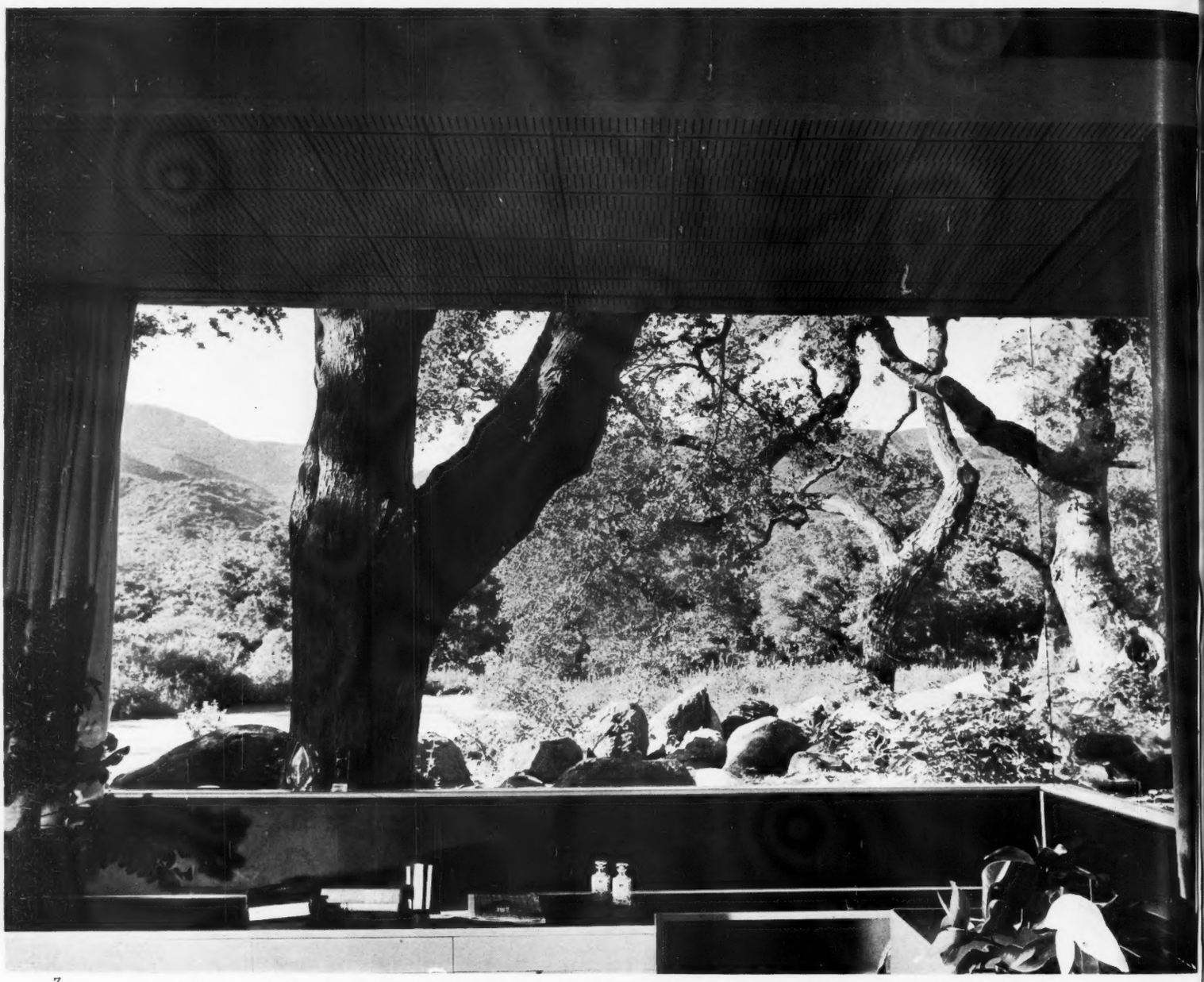


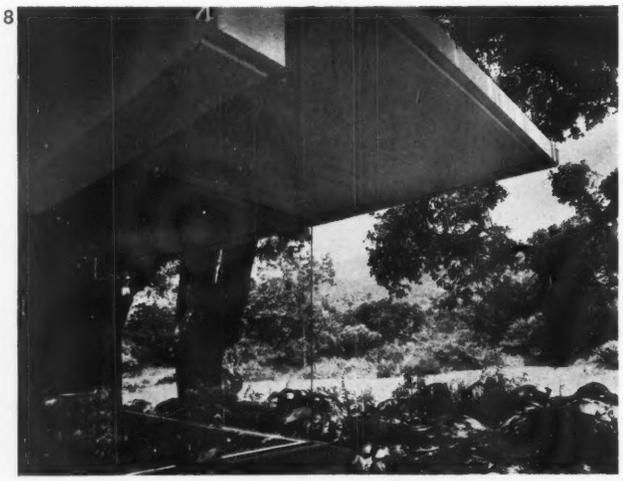
4, the porte-cochere and front door from the south-east and 5, a detail. The roof slab is detached from the frontal girders which span 16 ft. over continuous walls, doors and windows. 6, the terrace which runs over a tunnel (seen in 3, facing page) leading to a play porch and swimming pool



7

7, looking north through the fixed glass wall of the parents' bedroom. 8, the corner wall of the parents' bedroom from the south-east. 9, on the facing page, the living terrace seen from the playroom, and 10, from the living room itself

8

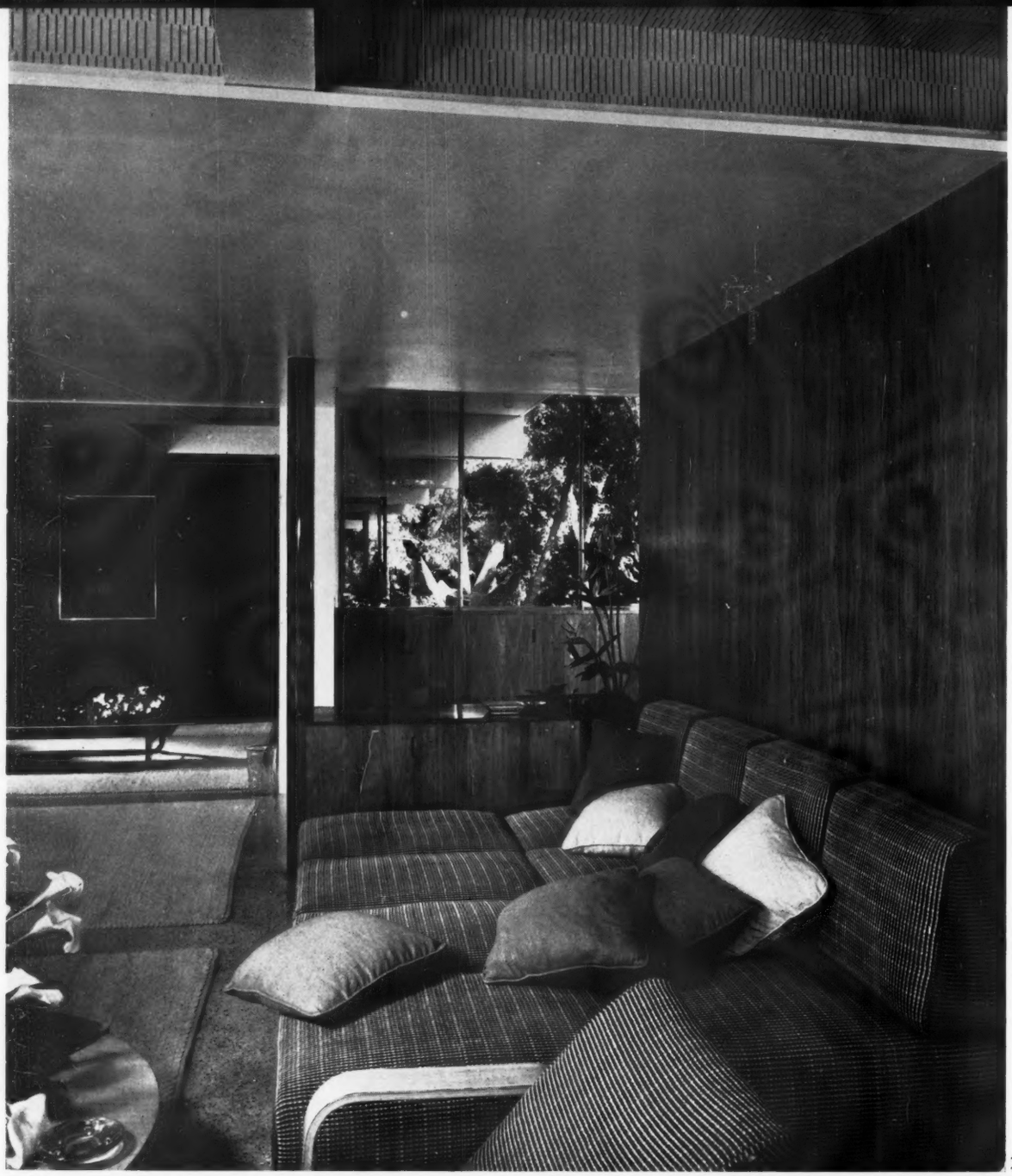


HOUSE AT SANTA BARBARA

9

hatch. The dining room has two outside sitting areas: one to the west with northerly view on to the mountains, and one to the south with easterly sunshine. Pantry, kitchen, and staff dining room form a succession of bays, connected by an aisle on the inner side with exit to service yard. Staff sleeping quarters are placed between this service area and the garage to the extreme east. Hand-woven deep pile rugs are laid as a calculated pattern over the terrazzo floors. The interior furnishings aim at flexibility. Chairs, for example, from all rooms and from exterior terraces can be assembled in living rooms when a number of guests have to be accommodated. A wide, low couch can be divided into a dozen low, cubic ottomans. Two dining tables in dark red-brown lacquer can be lowered in a few seconds by a patented device of the architect, to become occasional living room furniture. The dining-chair seats are covered with white plastic. A service trolley, finished like the tables, can circulate through all living rooms and over all terraces to bring food and drink to guests. The unusually slender, reinforced concrete structure, partly white spraycoated, partly sandblasted, blends with the natural stone masonry of buff-coloured sandstone, available on the site, and with the abundant local vegetation.

10



11

12
13

HOUSE AT SANTA BARBARA

11, looking along the south wall of the living room to the dining space, and the window which gives on to the east dining terrace. 12, the kitchen. 13, the living room at night, the lighting is indirect, by continuous strips

Felix J. Samuely

Improved methods and new inventions have continually tended to lighten concrete construction. Whereas, formerly, it encouraged aesthetic emphasis on the massive, the material is now considered, at least by those who understand it, more productive of elegance than monumentality. This article surveys the developments that have taken place during the last fifteen years. Particularly remarkable is the fact that, whereas ten years ago there was a considerable gap between progress here and on the Continent, and still another gap between the Continent and actual scientific knowledge, since the war both these gaps have narrowed down. In England progress has been especially fast during the last year or so, and there are now a number of structures to be seen which employ the very latest techniques.

CONCRETE UP TO DATE

ALTHOUGH THERE CAN be no doubt that reinforced concrete technique is still in a state of vigorous development, this development is by no means uniform, and the inertia of industry in general is responsible for the fact that many buildings being erected now are barely distinguishable from those designed in, say, 1910. There are sufficient new structures, however, both here and abroad, to indicate the trends of development. The beginnings of all the improvements that have been taking place, go back to the late twenties or early thirties, but in this country, design was almost static until the recent need for saving shuttering and steel provided the necessary impetus for our technique to draw level with, and in some cases outstrip, that of other countries. Progress can be classified under four main headings:—

I. Improvements in the methods of producing ordinary reinforced concrete; this has mainly resulted in increased working stresses, in a reduction of the overall sizes of the structural members of a building and in an increase of possible spans. The effect, therefore, has been more pronounced on planning than on elevations and is not so obvious to the casual observer.

II. The introduction and development of new structural shapes; this is mainly a matter of appearance, and is particularly relevant to the architect.

III. Precast concrete; the latent possibilities of this process will greatly affect the appearance of construction.

IV. Prestressing; this, on the other hand, shows results very much on the lines of the first group, i.e. the production of better quality concrete, the main advantages of which are probably the improvement of the ratio between structural depth and span, and the possibility of large spans becoming economical.

This article will not deal with concrete finishes. In truth, in spite of all efforts, nothing really new has been introduced during the period under review, except in a very few isolated cases. Recently the Cement and Concrete Association has carried out extensive investigations into the varying effects obtained with different sizes and types of aggregate on the surface of concrete. A very impressive show of possible finishes can be seen at the Association's Research Station, but insufficient is known as yet about the weathering of these surfaces and no practical applications can be discussed at the moment. To provide a good outside finish for large concrete surfaces is still a very great problem; all the methods in use today, special concrete, special shuttering, bush hammering, retarding, etc., each has its own drawbacks and a complete answer has yet to be found. Because of the advantages of factory production a comparatively smooth, even finish can, however, be achieved with precast concrete.

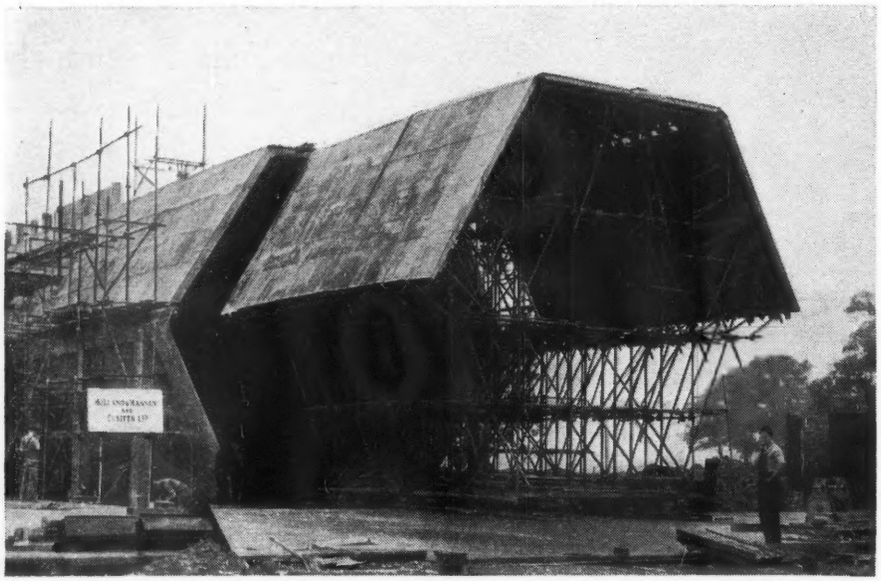
group i. improved methods of standard reinforced concrete

Two new factors concerning the composition of concrete, unknown thirty years ago, which should now be general knowledge are, first, the importance of the water-cement ratio, and secondly, the importance of the grading of aggregate. Even contractors and local authorities know today that the strength of concrete, and incidentally its waterproofing qualities, depend very much on the ratio between water and cement and that an excessive amount of water is the biggest deterrent to good concrete.

A water content for which, even ten years ago, experts fought a losing battle is today considered to be too high. The main obstacle to the general use of a low water-cement ratio was the difficulty of filling a very dry concrete into the forms; the introduction of mechanical vibration has now overcome this.

When vibration was first introduced the lack of proper equipment prevented its use except on very large contracts, but many types of vibrator are now on the market and are easily and cheaply available for any work, so that it is worth while specifying vibration for even the smallest contract, allowing of course for certain precautions. Even the best of vibration is useless if the composition does not allow for a dense concrete and in this respect proper grading of aggregate is essential.

Great progress has been made in the saving of shuttering costs. Before the war these costs averaged 35 per cent. to 40 per cent. of the total price of reinforced concrete. This represented an outlay which brought in no returns, and many attempts were made to cut down on this item. The most successful so far is the sliding shutter; its introduction is particularly useful where large areas, or considerable lengths of constant section, are to be produced.



1, *Propeller Test Beds at Hatfield. The actual building consists of a concrete wall, hexagonal in cross-section, surrounding the test bed. The internal shutter for the top three planes, seen in the foreground, is fixed to a moving scaffold, which is brought forward as the building progresses. The external shutter is made up of small strips that can be moved up and down.*

The fact that large areas of concrete walls can thus be produced fairly cheaply has naturally had repercussions on the design. To prolong the life of shuttering, so that it can be used more times, it is now often made with steel linings or from steel throughout, and during recent years, particularly since the shortage of timber has been acute, much progress has been made along these lines. The cost of shuttering has in some cases been reduced by about one-third. A typical sliding shutter, in this case for use on walls, is illustrated in (1).

One particular application of the sliding shutter, actually used more on the Continent than here, should be mentioned. It is employed to separate temporarily two types of concrete and yet let them finally bond together, for instance between ordinary concrete and special coloured surfacing. A sheet steel shutter is used between the two types of concrete while they are being poured, and is lifted immediately afterwards so that a complete bond is obtained during setting.

group ii. introduction of new structural forms

Certain constructions, well known elsewhere for more than fifteen years, have made a more recent appearance in this country so that they might almost be considered as new. They had, of course, been developed during this time, and their first introduction here was already as an improvement on the early types. To this group belong certain arches and rigid frames as well as flat slabs (mushroom construction). Very satisfactory designs have been carried out with arches and frames, the former mainly for bridges and the latter for large span, single storey buildings like market halls, hangars, grandstands, etc. (15) is an example of the bridges of Maillart, which are particularly well known and (13) and (14) are two impressive Swedish examples.

Flat slab construction has made considerable progress due to the introduction of standard formulæ, applicable for certain given conditions. The design of flat slabs according to correct formulæ is a lengthy process requiring not only considerable mathematical skill but also a great amount of time, which is rarely available. A typical 'bylaw' flat slab, designed according to minimum requirements, is shown in (2).

It is always possible to vary the shapes of columns and column heads by taking the bylaw construction as the minimum basis and building up from this, to whatever outline suits the individual taste. The success of the result is, however, entirely dependent on the abilities of the designer.

The mushroom type of construction has been used recently in Sweden for bridge approaches, but it is doubtful whether this is a happy combination. In the first instance, a bridge has a definite longitudinal axis which is not expressed in mushroom construction. For the same reason it is not likely to be economical.

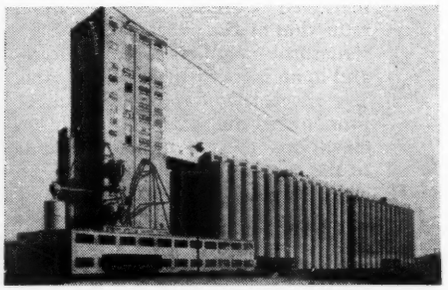
The only entirely new structural form that has made its appearance during the reviewed period is stressed skin-shell-construction. It is one specific application of a method that has been used in the construction of such things as aeroplanes as well as buildings. The aim is to do away with beams and other stiffening members as much as possible, and to use the actual surface as the carrying element. For buildings, this is of particular advantage for roofs, and the two main types that have been developed so far are the vault and the dome.

The factor that made the application of shell construction possible and has led to many new designs is the appreciation that every reinforced concrete slab has considerable stiffness in its own plane, and particularly when such a slab is inclined. This inherent stiffness can be used to avoid beams and for some time advantage has been taken of this in industrial buildings like water-towers, coal bunkers, etc. (3) and (12).

Lately this principle has been adopted for roof construction. In shell roof construction a curved concrete slab is supported only at a few points. Such a slab forms a roof which can be in the form of vaults or domes. Vault construction might be considered as a series of very narrow strips placed side by side (7). Each strip is a type of beam spanning longitudinally which is capable of transmitting forces in its own plane to both ends. Any group of two beams that come together at different angles and lean against each other, are then capable of withstanding forces acting normal to each plane and these forces would resolve into components acting in the direction of the slabs.

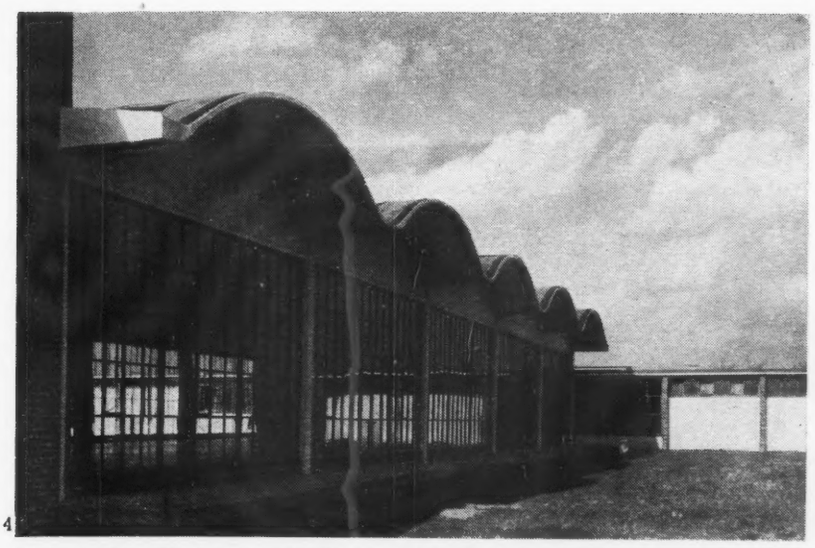
To hold all these strips in position a solid diaphragm is required at the ends of the strips, but irrespective of the length of the vault. No construction is required in between, except possibly stiffening ribs. This type of construction is illustrated here by the canteen building at Dagenham (4), and Chalons-sur-Marne locomotive sheds (5). The factory at Brynmawr (6) is an illustration of the dome principle.

The great advantage of shell construction is that a fireproof roof is obtained with the minimum amount of concrete and comparatively little steel. Shuttering becomes particularly expensive in this case unless the design enables the same shuttering to be used a number of times. The practice adopted in Germany during the war might



2, 3

2, *Store building at Bristol for Messrs. E. S. and A. Robinson. This building, which was erected in* 1939, *is a typical flat slab construction, designed in accordance with the Code of Practice. Sizes of column heads and drops are governed by the regulations, leaving the designer to arrange the spacing of the columns, and their size, depending on the load. Although the Grain Elevator at Kansas City,* 3, *shows no new departure in construction it does emphasize the potential beauty of concrete employed entirely functionally on a large scale.*



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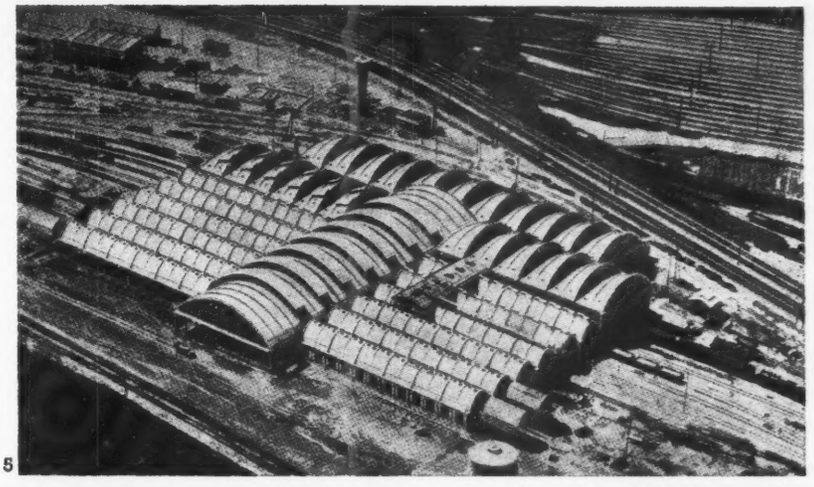

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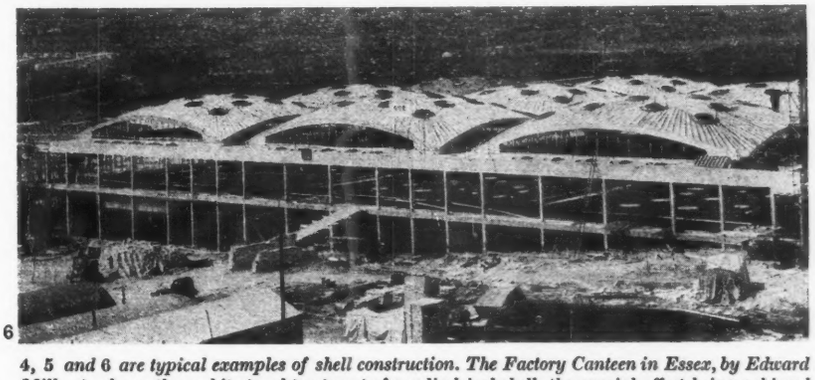


6

4, 5 and 6 are typical examples of shell construction. The Factory Canteen in Essex, by Edward Mills, 4, shows the architectural treatment of a cylindrical shell; the special effect being achieved by cantilevering out only the actual roof, stopping the beams short so that only part of the construction is visible from the outside. The locomotive sheds at Chalons-sur-Marne, 5, is one of the largest shell constructions of this type carried out recently. 6, a factory at Brynmawr by The Architects' Co-operative Partnership, makes the most extensive use of domes of any building in this country The domes are designed on a rectangle, and the spandrils are used for lighting purposes.

often be followed here, that is to have certain standard spans and shapes for which standard mild steel shuttering can be mass produced. The introduction of standard shapes is not so obstructive to planning as might be thought, because it affects the roof construction only. Economic unsupported lengths of vault are in the neighbourhood of 70 ft., which is quite a common width for an industrial building.

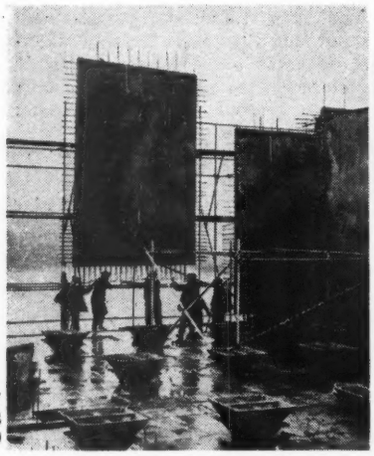
group iii. developments in precast concrete

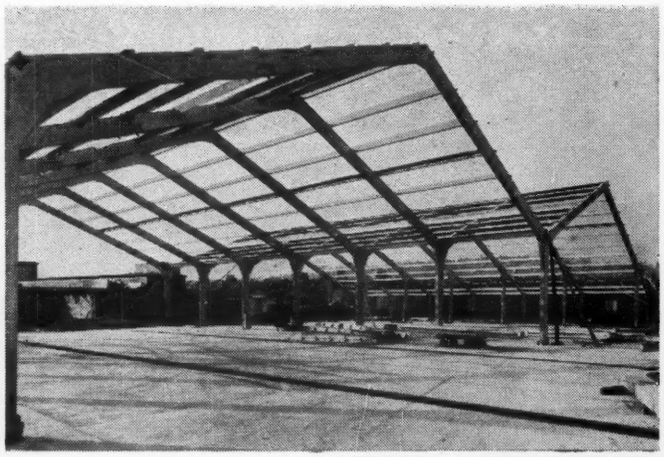
The adoption of precast concrete for many purposes has been speeded up in this country by the shortage of timber for shuttering and, spurred on by this necessity, we have, at least temporarily, forged ahead of other countries in this field. Many people believe that precast concrete has so many other advantages as well that it will remain as one of our main industries even when the present difficulties and shortages have been overcome. Precast concrete units can be fabricated in the factory or at the site, in the latter case on the ground or in a convenient shed, instead of in their final position. At least in the first instance there is a considerable social advantage to be derived from the use of precast units as compared with cast-in-situ work. The men engaged on the work carry it out under factory conditions, they can work at all seasons independent of the weather, and always at the same place. Any observer of our labour market today knows that, unless unemployment increases considerably, concrete work will be doomed if a great part of it cannot be carried out in the factory. However, with a large contract, where much of the work can be precast at the site, some of the advantages of factory work can be retained. The work can be done under cover and under reasonable conditions. There is no doubt also that the improved conditions possible with precasting affect not only the workmen, but result in a much better and more consistent quality of concrete, and finish.

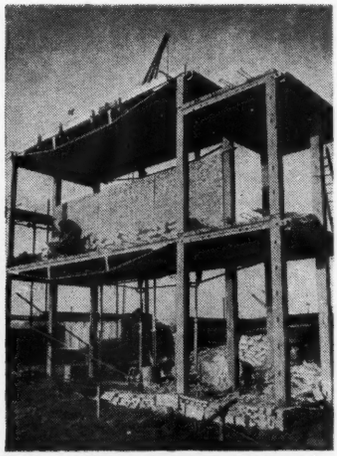
One technical advantage that is most often emphasized but which, although important in itself, is of secondary account to those already mentioned, is the saving in shuttering. It is quite obviously less expensive to produce a mould from which many units can be made than to shutter the equivalent of each member separately in position, and even where only a small number of units is required from each mould, say twenty to thirty, the precasting might still be economical. This advantage has to be balanced against additional transport and erection costs which are small, when precasting takes place at the site, but which can be quite considerable when the factory has an unfavourable situation.

Really the most important source of economy, and one which will in time be of greatest interest to the architect, is the fact that, in precasting, more intricate shapes for beams, etc., can be produced than with in-situ work. With in-situ work any beam that deviates from the rectangular or trapezoidal shape is difficult to shutter. Although it is well known that an RSJ is more economical than a plain rectangular beam, a similar shape is scarcely ever used in reinforced concrete owing to the extra cost of shuttering. With precast concrete, however, it is quite easy to produce this shape. Even more important is the fact that precast concrete work can be latticed, something that is absolutely out of the question with cast-in-situ work.

One point that has always been held against precast concrete is that it might not be possible to provide continuous structures, as in ordinary reinforced concrete. This is actually a misapprehension for, with careful design, it is quite feasible to provide continuity. It can be done in several ways, one of which is to leave the top part of the beams to be cast in situ with the floor slab and to use tensile bars for continuity in this topping. The combination of in-situ concrete and pre-







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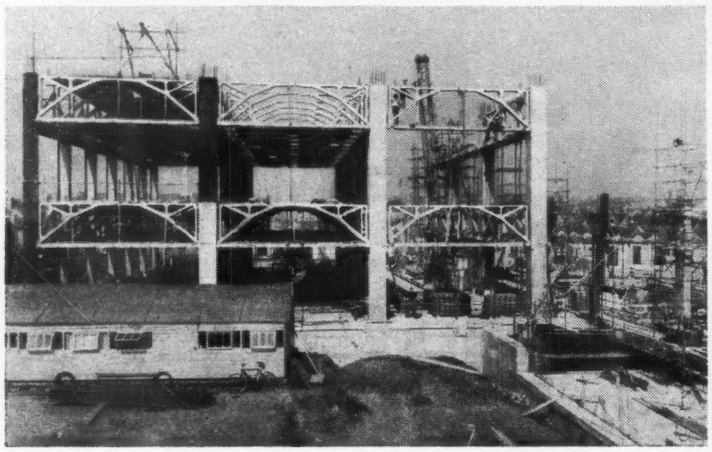


10
11

7-11 show a number of applications of precast concrete. In 7 (Storage Bunker at Colingwood Dock, Liverpool), a whole panel of the wall was prefabricated and the illustration shows it being lifted into position. As the weight is carried on a crane (only the hangers can be seen in the picture), it is comparatively simple for a few men to guide it into position. 8 shows the framework for a bus garage at Lewisham. The main frames and purlins are precast and bolted together at the site after erection. Each frame consists of several members and the joints are clearly visible. Many frames for large spans have been constructed by this, and similar methods. 9 is a prototype building for Hatfield Technical College by Easton and Robertson. This shows that concrete work can be latticed, if the concrete members are precast. The classrooms of 24 ft. 0 in. width are spanned throughout in this way and the floor slab between the beams consists of precast concrete troughs with an in-situ concrete topping (composite method). Another type of latticed construction, somewhat similar to arches, is shown in 10 (factory for Golodense at Bristol). In this building production and service floors were arranged alternately and the precast concrete work was designed to suit this layout. Main trusses spanning 33 ft. 4 in., and secondary trusses spanning 30 ft. 0 in., were both carried out on the same principle, and are both the depth of the service floor. The main trusses carry a total load of 700,000 lb. The tie members of the arches are prestressed by the Hoyer method. 11 shows precast floor troughs for the same building. These are finally covered with in-situ concrete. A different construction is used for the service floor, and the ceiling, which can be seen here, allows a decorative effect of panelling. For the particular floor, the floor slabs and secondary beams are removable.

COOLING TOWERS, WALSALL

These power station cooling towers are shell construction cantilevered from the ground. The shape is entirely dictated by their purpose.

cast units, which is sometimes referred to as the 'composite method,' is extremely useful and it is often maintained that it is the most important application of precast concrete. Usually with this method the lower part of the beams and the soffit of the slabs are precast, thus making unnecessary the use of shuttering at the site. The top part of the beams and slab is cast in-situ and in this way the weight of the precast units is reduced to a minimum and the construction is as monolithic as a completely cast-in-situ structure, whilst retaining all the advantages of the precast units.

The precast and the in-situ concrete act together in taking the stresses and often a system of castellations is introduced to ensure adequate bond between the two parts. This method usually requires small floor spans, and secondary beams are often introduced, thus giving a panelled effect to the ceiling (11).

A second method shown is to make connections between the various precast members to take the required stresses. If the member is latticed, in particular, these stresses resolve themselves into either compression or tension (10).

The foregoing examples were of frames and beams, and these will be the most important applications of precasting from the architect's point of view. One point that is important for the design of precast constructions is that the span of the floor slab should be kept as small as possible.

group iv. prestressing

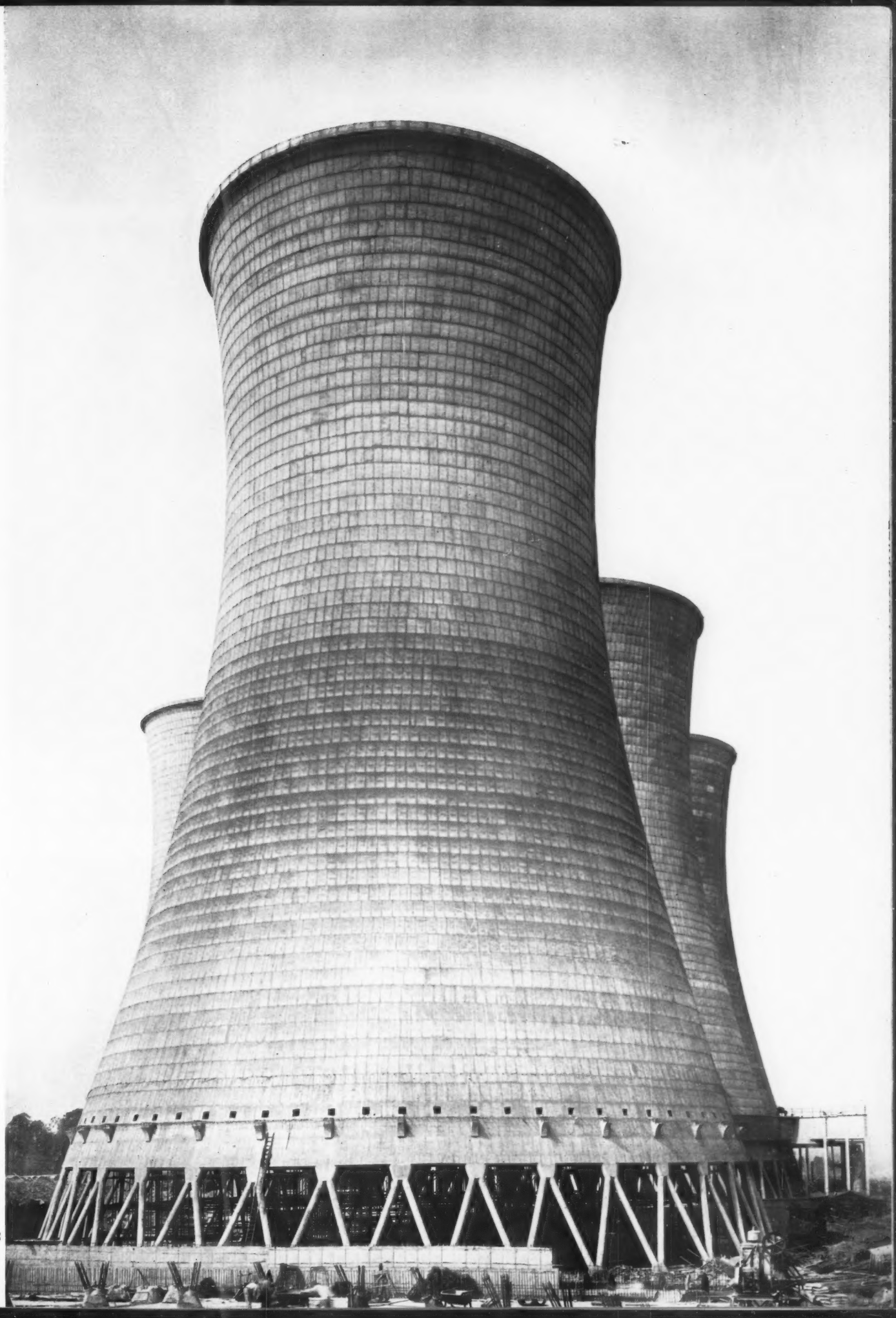
The main advantages of prestressed concrete are as follows:—

1. Considerable saving of steel.
2. Reduction in the size of structural members.
3. Prevention of cracks in tensile members.
4. Greater resistance to shock, which is particularly important for members that have to be transported.

1. The great saving in steel is at present one of the prime factors in the development of prestressed concrete, but although the quantity is less, a special type of steel is required.

2. The introduction of prestressing does not alter the shape of structural members so much as it reduces their size, and this, of course, is its main advantage, but it does mean that no sweeping changes of design concepts are to be contemplated.

3. It is well known that, generally, the stresses in concrete and steel have a certain relationship and normally, when high stresses are being developed in the steel, the concrete would crack seriously before the required steel stress is reached. This is overcome in prestressing by stressing the steel independent of the concrete, either before or after the concrete is cast. If the



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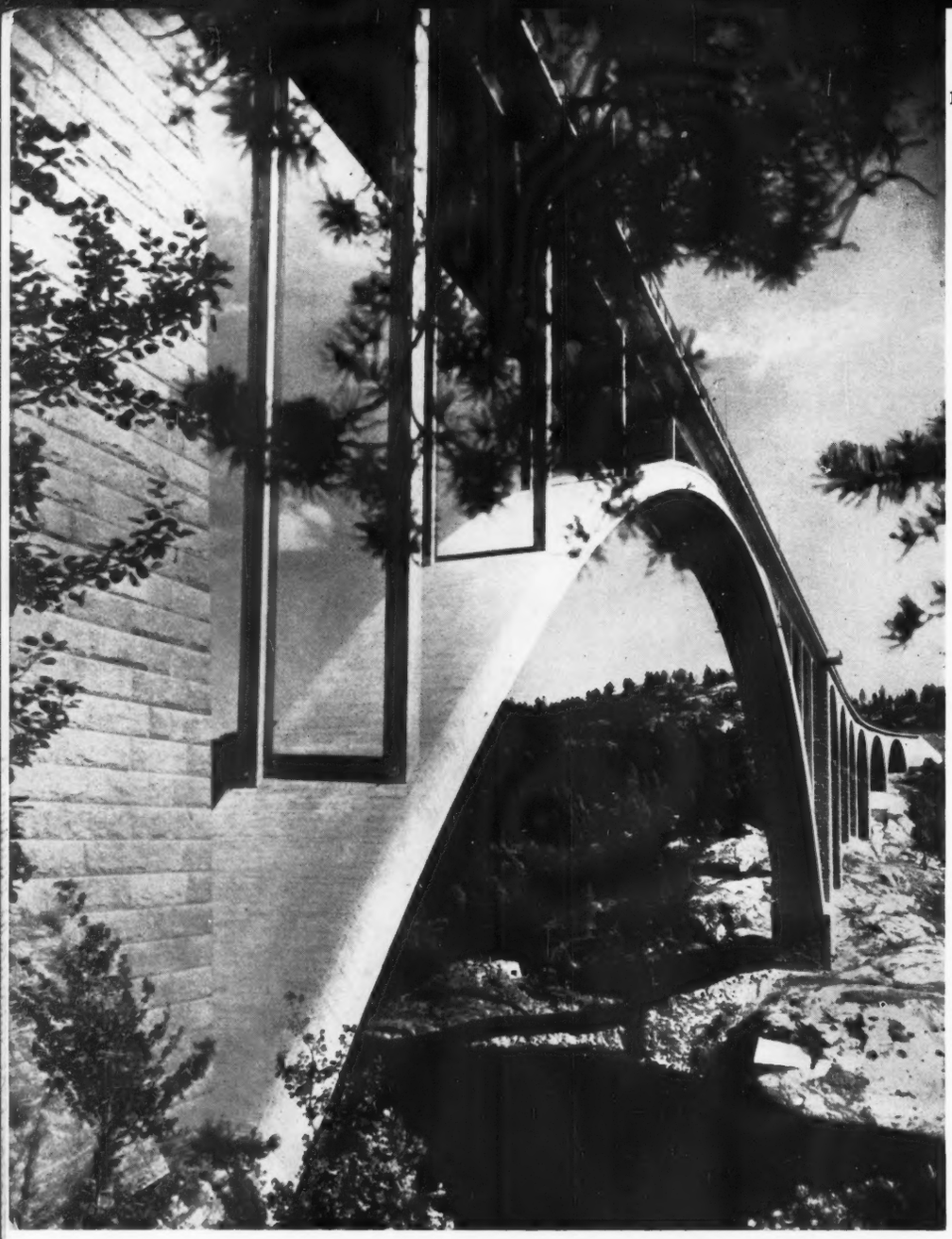

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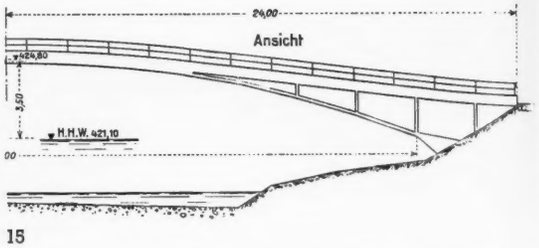


15

14

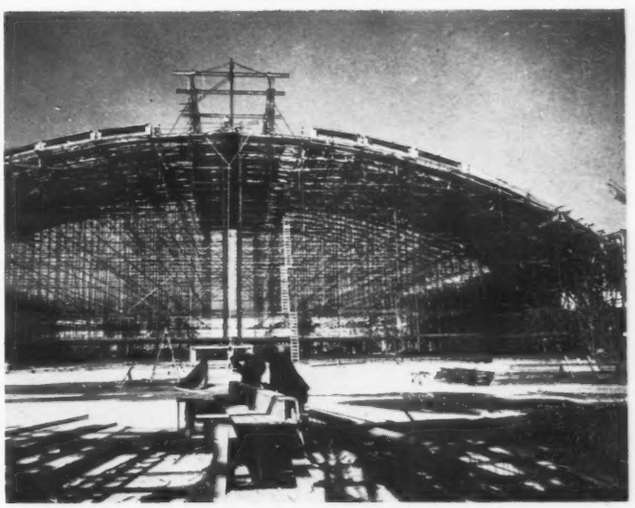
13, the Svinesund Bridge, and 14, *the Lando Bridge, are typical of the bridges recently carried out in Sweden. They are in no way different from many bridges carried out* 30 *or* 40 *years ago and are simply arches receiving their load from a number of columns which support the actual deck. In contrast to these the Swiss bridges, especially those of Maillart, tend to give new strength of expression by forming the arches, and even varying their thickness, in accordance with strength requirements. The number of possible shapes is quite considerable. The footbridge near Winterthur by Maillart,* 15, *is a typical example. Note the very thin arch made possible by the stiffening beam under the deck.*

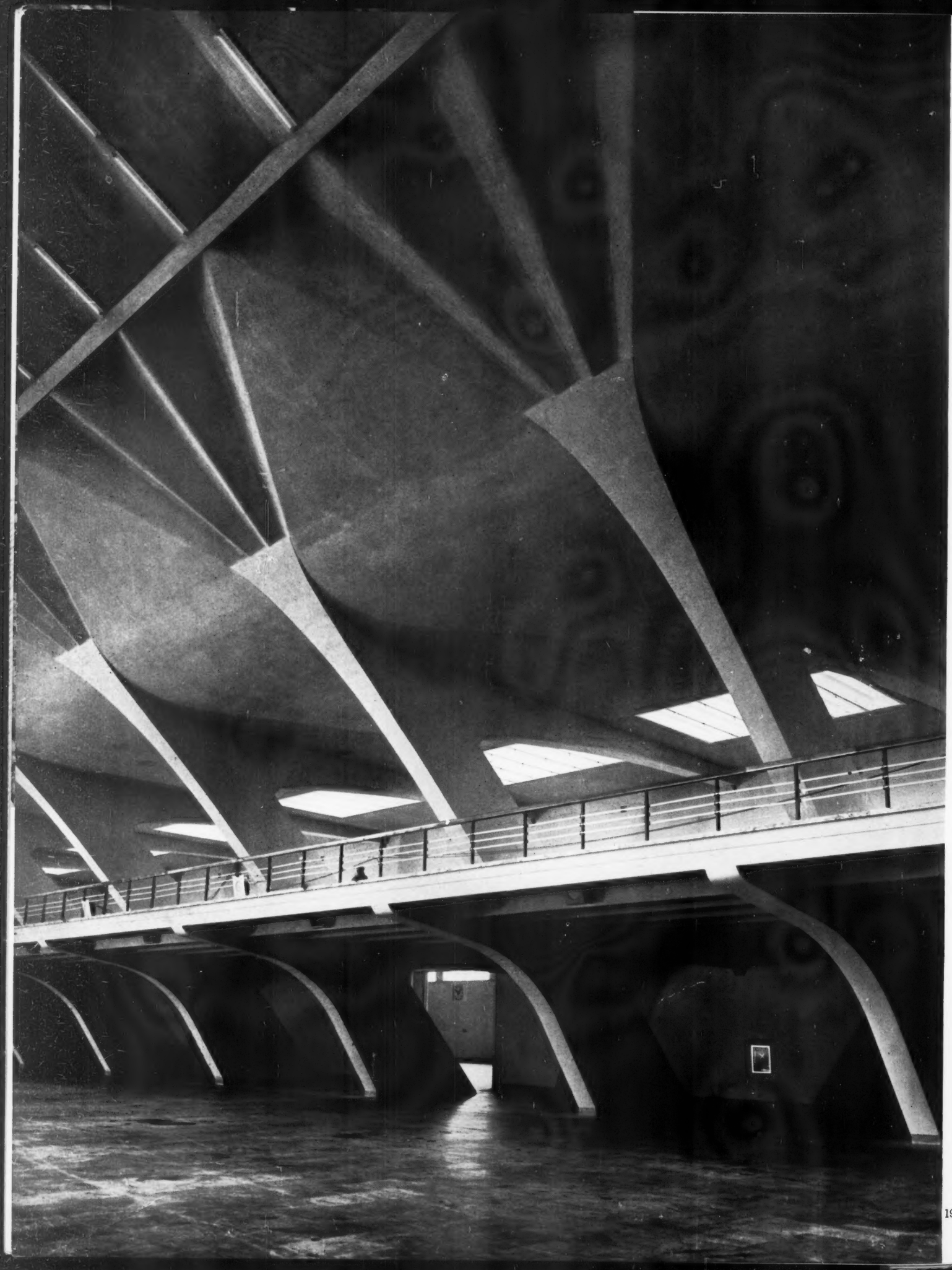
16

EXHIBITION HALL AT MILAN

17
18

This Exhibition Hall, constructed in 1948, *is an example of modern construction worth while studying in detail. The main part of the building is of cylindrical arch construction with a corrugated cross-section giving the necessary strength. It spans* 310 *feet.* 16 *shows a part of the construction just completed, from the outside. The lower parts are cast in-situ, but the actual arch consists of a number of pre-cast members fitted together on top of a scaffold. This can be seen in* 18, *and the scaffold is made wide enough to support a number of the corrugations. After they are completed the scaffold is moved forward for the next part of the structure. In* 17 *one of the main stiffeners is shown being hoisted into position (see* 20 *on page* 339 *for the general effect produced by these stiffeners).*





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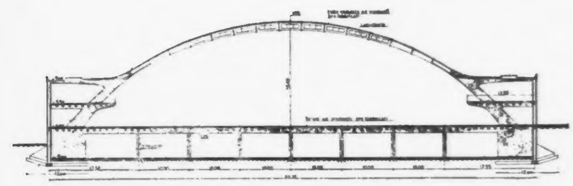
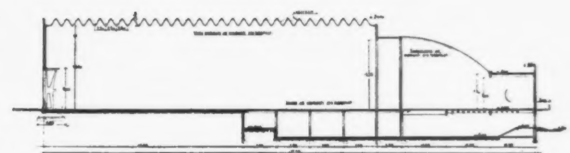


transverse section

22

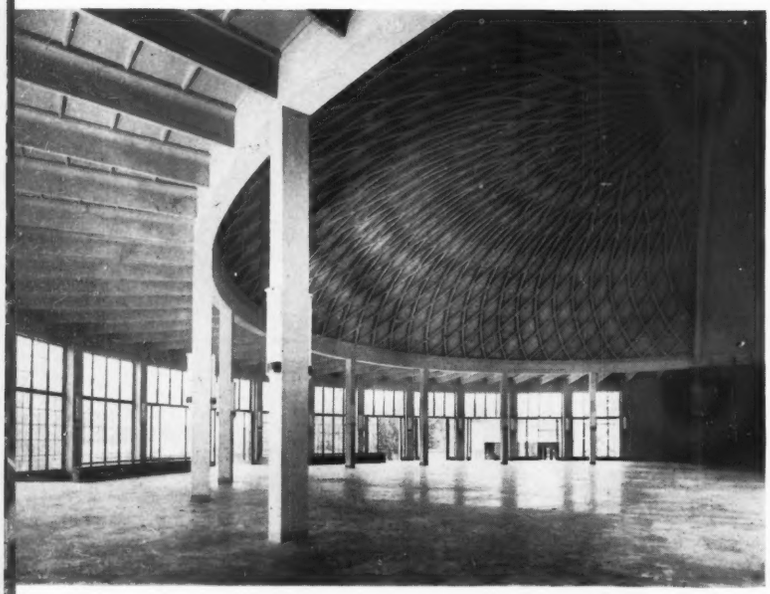


longitudinal section

21

The lines of the roof of the hall come together and are concentrated on a number of abutments with sufficient space between them to permit easy circulation. This collecting of the stresses from the corrugated roof gives an opportunity for architectural expression, which has been particularly well-handled. The fact that the large thrust gives a slope to all the forces allows for a keen cantilever construction for the gallery. 20 can be considered as a continuation of 19. It shows the upper (corrugated) part. Note the pattern that has been achieved by the pre-cast concrete units forming the top and bottom of the corrugations together with the stiffeners shown in 17, which hold the units together both structurally and architecturally. In 21 both the abutments and the corrugated part can be seen together. The gallery is shown in 22 with part of the abutments above, together with the interesting anchorage to the back wall. 23, a general view of the hall.

23



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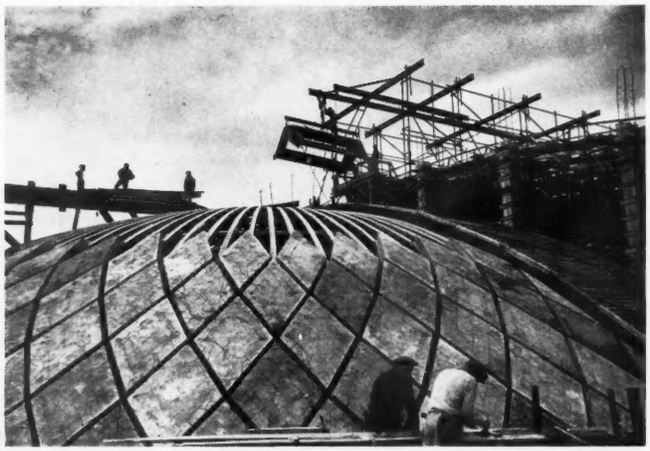


25

exhibition hall at Milan

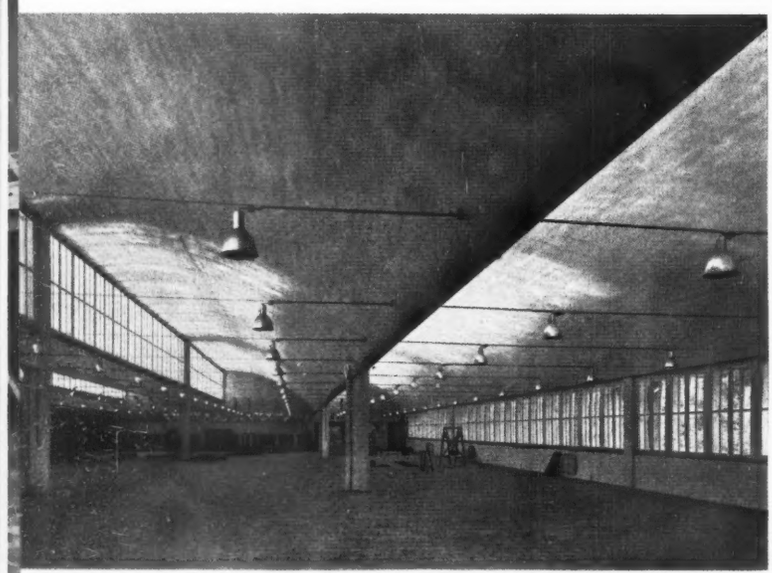
The apse of the building which is formed by a dome over a half circle. Note that the ribs merely act as stiffeners and not as stress carrying members, and it has therefore been possible to make their shape purely ornamental. At the same time these ribs serve to separate the pre-cast slabs which can be seen in 25.

26

FILTER PLANT

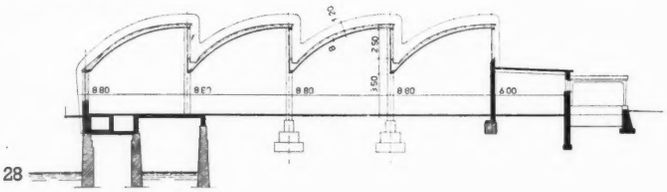
A filter plant at Hibbing, Minnesota. This building is covered by domes made to the theoretically correct shape, namely a rotation ellipsoid coming to a vertical plane all round a circumference; their thickness varies from $3\frac{1}{2}$ *to* 6 *inches.*

27



29

SPINNING MILL



28

28 shows a cross-section through a spinning mill near Lyons (29). *This is a typical north light shell roof spanning about* 30 *feet across the shell and* 90 *feet in the longitudinal direction. It is an example of how large spans can be achieved by means of shell construction. Note that while the glazing is possible on the left-hand side there is similar glazing over the line of columns shown centrally, which lights the right-hand aisle. The horizontal lines are not tie members but serve merely to support the lamps.*

steel is stressed before the concrete is cast (by a system which is called the 'Hoyer' method) and released after the concrete has set, the steel as it contracts transmits compressive forces to the concrete by means of the bond between them (31).

The part of the concrete which is then in compression is capable of taking a considerable amount of tension, until this initial compression has been compensated. When that amount of tension is produced the steel is taking all the load. Only if this tension force is exceeded would there be any tension in the concrete, and a danger of cracks.

If the steel is to be stressed after the concrete has been cast it must be separated from the concrete in such a way that the two do not bond together. There are various ways of doing this, bitumen coating being the cheapest and most common. As the steel does not bond it can be stretched after the concrete has set, but in this case it has to be kept stretched by mechanical means. (French, or 'Freyssinet' and Belgian methods.)

It is obvious that the first method has the advantage of simplicity because adhesion by bond is much easier to achieve than the mechanical device required with the second method. On the other hand, with the first method, the wires have to be stressed before the concrete is cast and this means that the quite considerable counter-force has to be taken by a very strong mould or else the wires have to be anchored to an outside structure. In the second method, where the tensioning is carried out after the concrete has set, the wires can be braced against the actual concrete. As a general guide, therefore, it can be said that the Hoyer method is more suitable for use in the factory and the 'Freyssinet' is for site work.

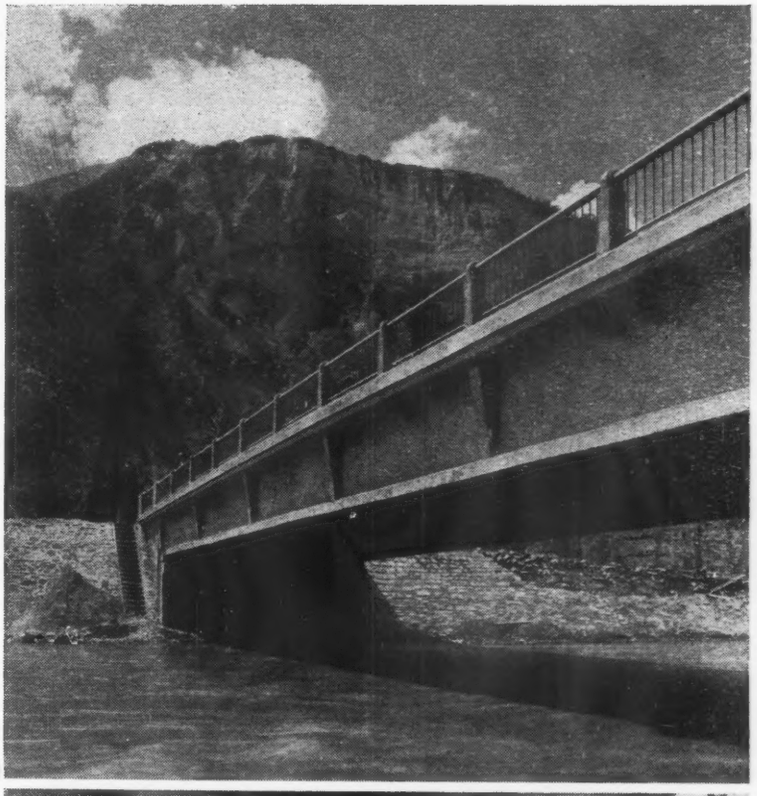
A prestressed, reinforced concrete bridge, designed by Freyssinet, is shown in (30).

Some authors maintain that centrally loaded columns have been effectively prestressed, but as columns are essentially compression members, with stresses that would be increased and not reduced by prestressing, it is difficult to see how prestressing can have been of assistance. Piles have been prestressed to advantage, although they really act as columns. The reason is that while being transported they act as beams carrying their own weight, and when being driven, a prestressed pile is more resistant to shocks than an ordinary precast one.

Because of the need, particularly with the Hoyer method, to prestress a number of beams at the same time, in order to reduce the cost of anchorage, it appears to be important to have the prestressing done mainly in a line parallel to the axis of the beam, while it is very difficult to prestress across a beam. For the time being, therefore, and until such problem is solved, latticed girders with tension diagonals are still not a good subject for prestressing. It should be appreciated, however, that prestressing is still in its infancy and that some of the present difficulties will probably be overcome in due course and latticed girders, etc., be brought into the field. This might even apply to space frames.

The progress made in Great Britain during the last twelve months, as far as prestressed concrete is concerned, has been considerable and in a way surprising, as progress is generally rather slow in this country. This is due mainly to the shortage of steel and timber but also to the fact that prestressed concrete has more decided advantages than is usual with new developments. Large quantities of prestressed railway sleepers are now in use and they seem to have permanently ousted the timber variety. In this application, the resistance to shock makes the prestressed concrete very much superior to ordinary reinforced concrete.

Prestressed concrete has been used effectively for large spans; (32) and (33) show the method of prestressing for beams carried out on the Belgian method for Queen Mary's College, London, and a large building making use of prestressed beams, on the composite method, has been carried out in Edinburgh for the Ministry of Works (34).



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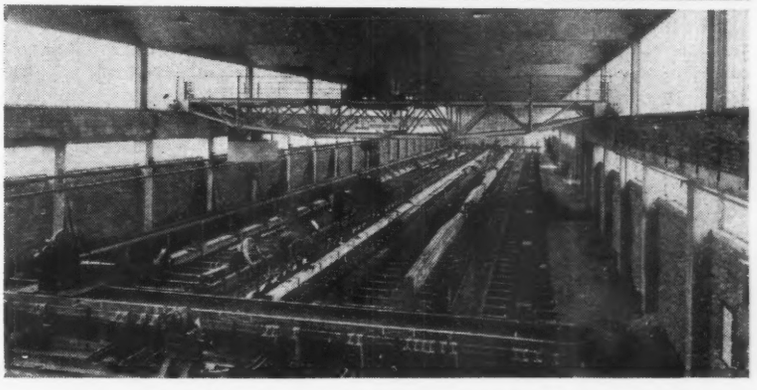
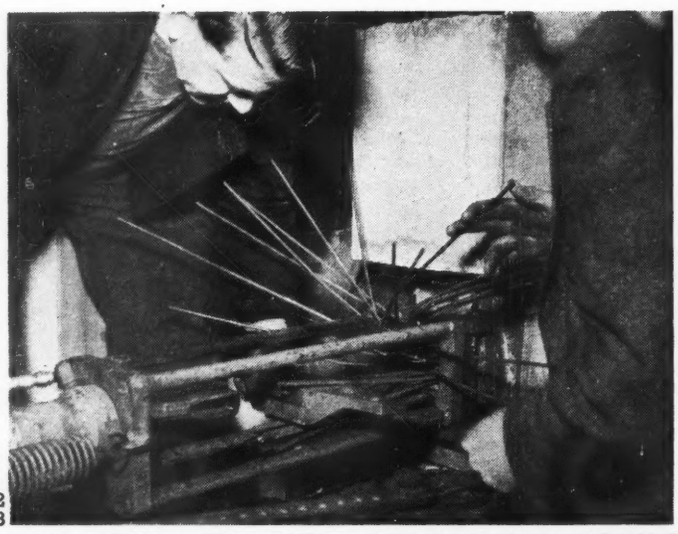
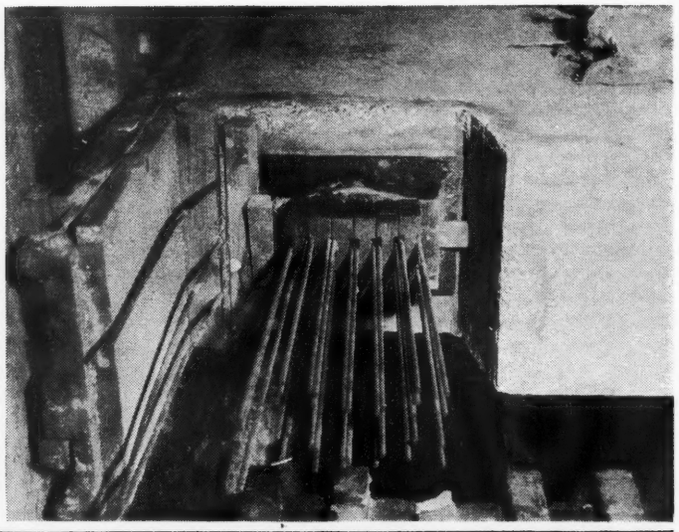
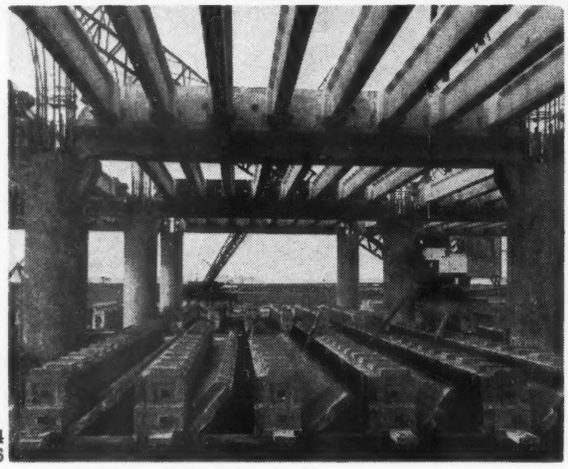


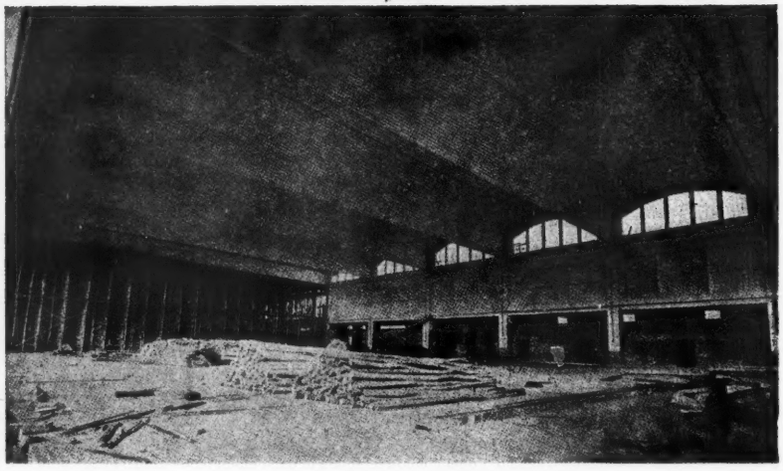
31

30, bridge at Bourg d'Oisans by the French engineer, Freyssinet. Many of the new bridges in France are prestressed by the Freyssinet method, and very elegant structures have been produced. This method of stressing the concrete after it is erected is essentially a method for cast-in-situ concrete and does not, therefore, require repetition. It was possible to have different structures for each of the various bridges over the Scine, which have been built on this method, thus avoiding the rather tedious repetition produced in other countries by standard constructions. 31 *shows the interior of a modern factory for prestressed and precast concrete, using the Hoyer method. Here, the long line method is used with several units strung on the wires, which are continuous from one end of the bed to the other.*







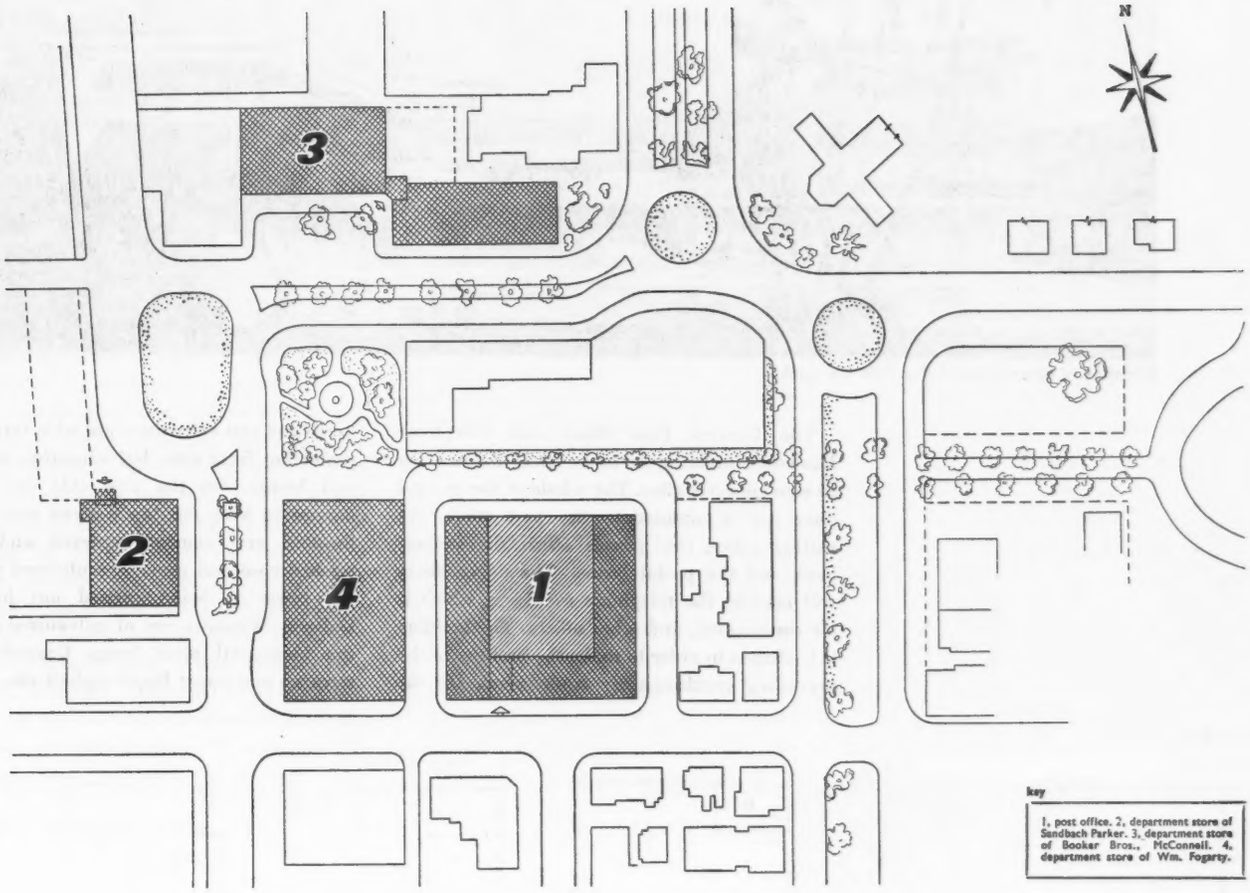


32 and 33 show wires being stressed by the Belgian method. These photographs were taken at Queen Mary's College, Mile End Road, where a number of beams, spanning approximately 36 ft. 0 in., are prestressed by this method. In 32 the jack is visible which tensions the wires, the stress being measured by the elongation. When the wires have been stressed, wedges are driven in to hold them in position after the jack is released, 33. The new HM Stationery Office building at Edinburgh, 34, also using beams prestressed by the Belgian method. The photograph shows clearly the holes for the cables. At a later stage the cables will be threaded through and then prestressed as shown in 32 and 33. There is sufficient repetition to allow steel moulds to be used and they can be seen in the photograph with one side open to allow the units to be taken out. The hangar at Karachi Airport, 35, illustrates an application of shell concrete, with prestressed tie members. The tie members have the appearance of beams, but are not actual beams in the normal sense.

In (10) the tie member of the arch is prestressed (shown in production in (31)), and this combination of prestressed ties with precast concrete is a promising application.

The fact that large spans can be bridged economically with comparatively shallow prestressed beams, has made prestressed concrete very valuable for the present extensive school programme, and the number of schools incorporating this type of structure is likely to increase. On the other hand, attempts to replace ordinary timber beams by prestressed concrete in small houses have failed so far, in spite of considerable efforts on the part of the Ministry, because no economical basis could be established.

One problem that, so far, has still to be solved, and that may retard the use of prestressed concrete, is that of its fire resistance. High tensile steel loses proportionally more strength under the influence of great heat than ordinary mild steel, and the concrete casing may spoil off more easily in prestressed concrete than in precast concrete as in the former case the fire stresses add to the pre-compression. Unfortunately, very little is known about this problem as yet. In France and other countries where prestressed concrete has been developed, the question of fireproofing is not taken as seriously as it is here and therefore the problem has received very little attention. It is to be hoped that sufficient tests will be made to establish what can, or cannot, be done to conform to our rather strict fire regulations.



A NEW TOWN CENTRE FOR

GEORGETOWN, BRITISH GUIANA

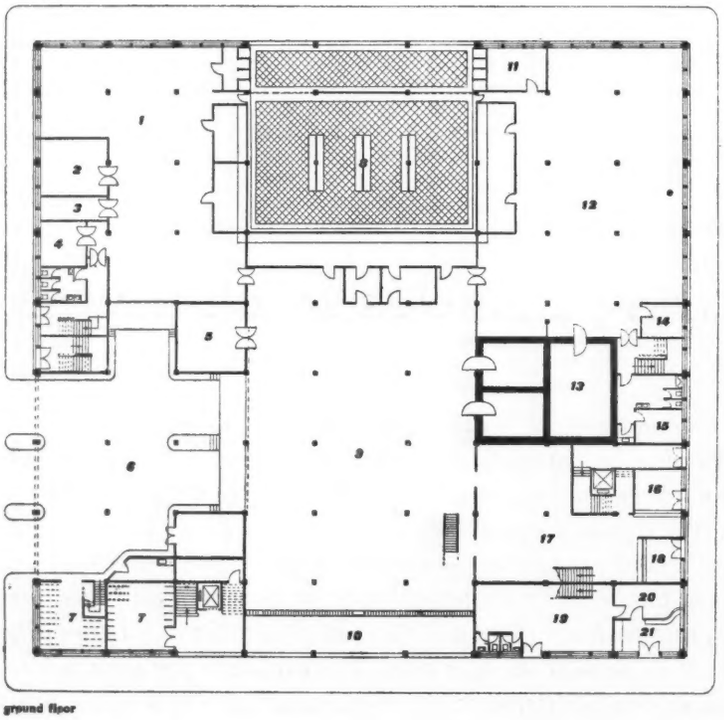
In 1945 a serious fire destroyed several blocks in the centre of Georgetown, capital of British Guiana. Immediately following the fire, the Government appointed Commissioners to draw up legislation to define street improvements and new building regulations for the area. The Commissioners were advised by Gardiner Medwin and Leo de Syllas, Town Planning Advisers to the Comptroller of Development and Welfare for the West Indies. Among the buildings destroyed were the General Post Office, the store of Sandbach Parker, and the head offices and stores of Booker Bros., McConnell, which are now being rebuilt to fit into the new plan. The architects for their reconstruction are W. H. Watkins, Gray & Partners. The department store of Wm. Fogarty is also being rebuilt, to the plans of Mence and Moore.

1 post office

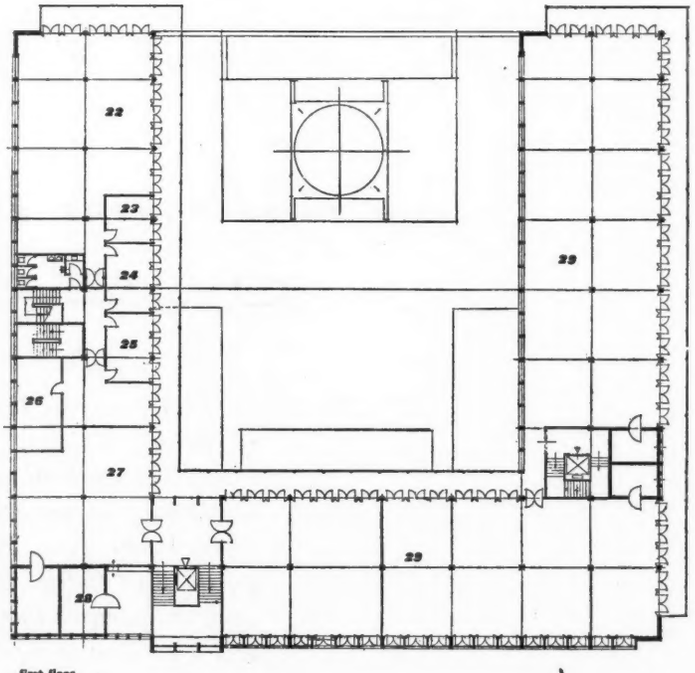
Elevation of General Post Office from the north

The General Post Office and Telephone Exchange building is to be steel framed on *in situ* concrete piles. The whole of the ground floor will accommodate the post office, the sorting office, the parcels office, the savings bank and the postal boxes. The upper floors will contain the telephone exchange, which is air conditioned, and other offices. The building is U-shaped in order to make the best use of the prevailing north-easterly trade wind. On the north and east sides there are wide verandas for protection from rain, but admitting the north-east breeze. On the west side are concrete louvres to keep out the western sun. All wall finishes are cement rendered and colour-washed rose and grey. A sculptured panel for the tower is being carried out by Frank Dobson. Windows are of galvanized steel and are horizontal pivot hung. Ground floor is terrazzo and upper floors asphalt tile.

scale: 1/48 in. = 1 ft.



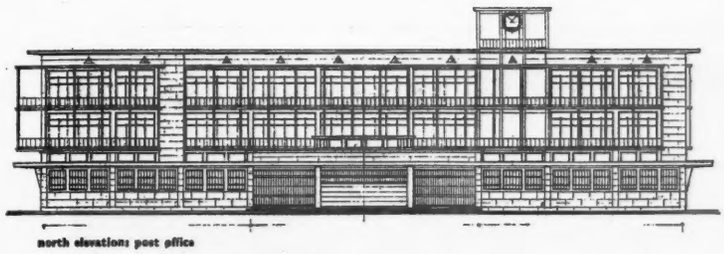
ground floor



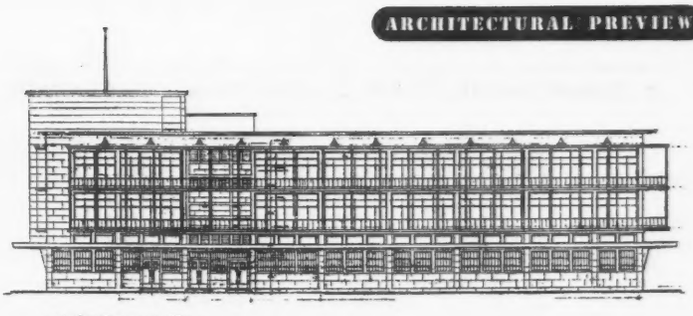
first floor

key

1, parcels. 2, transit mail. 3, bag room. 4, customs. 5, transit mail. 6, yard. 7, cycles. 8, main public office. 9, sorting. 10, private letter boxes. 11, controller. 12, savings bank. 13, vaults. 14, switchboard. 15, men's rest room. 16, issue. 17, stores. 18, receiving. 19, cables and wireless. 20, cables manager. 21, public space. 22, records office. 23, assistant PMG. 24, PMG. 25, chief accountant. 26, records room. 27, accounts general office. 28, vaults. 29, office accommodation.



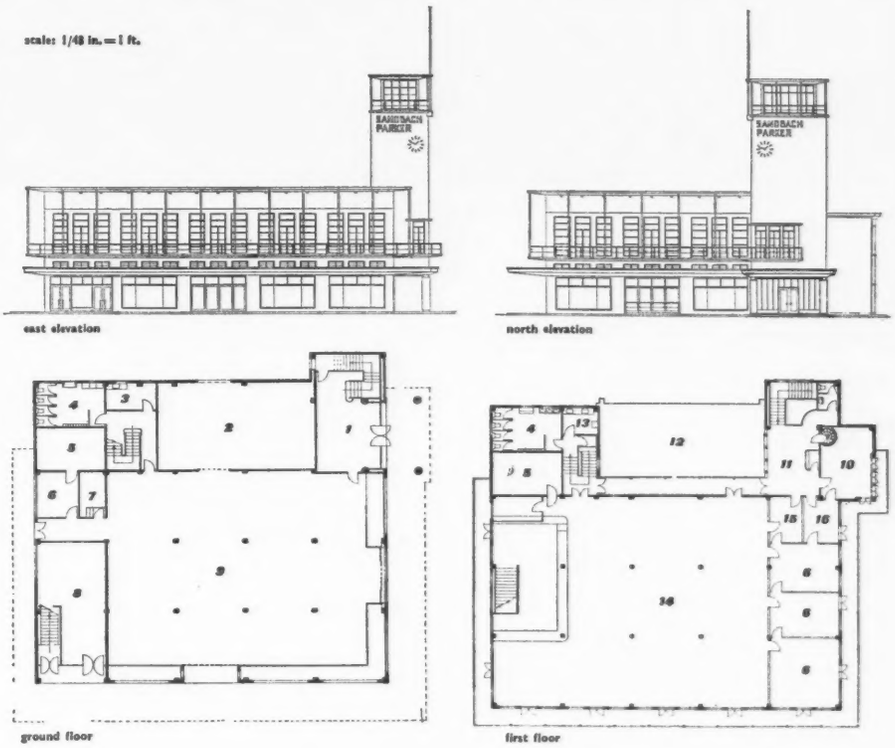
north elevation: post office



east elevation: post office

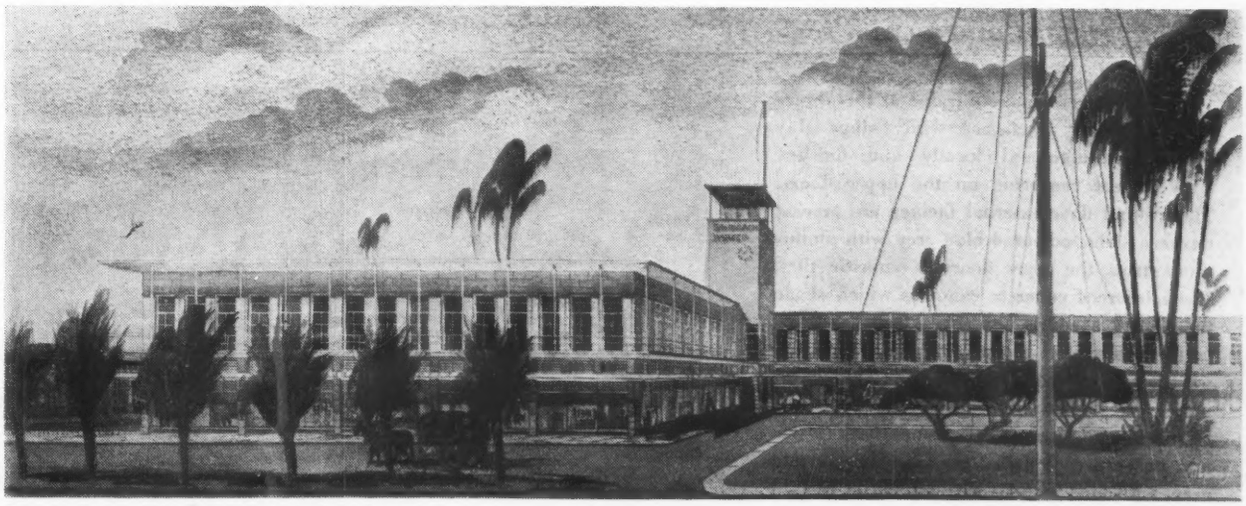
2 department store (Sandbach Parker)

Georgetown, which is flat and below sea level, is distinguished by some excellent towers built of greenheart nearly one hundred years ago. One of these was destroyed in the fire, and the new buildings are to have towers in character. The tower to Sandbach Parker's building, standing just beside the centre vista leading to the Cathedral, rises 60 feet in height. This building rests on *in situ* concrete pile foundations to a depth of 50 feet, necessitated by the soft clay soil. Over a continuous balcony which gives full protection over the pavement is a wide roof cornice, the roof falling to the centre of the building from which the heavy rain is discharged by large pipes to the rear of the building. In this way it is possible to avoid the use of eaves gutters and the usual frequent and unsightly downpipes. Walls are finished in rendered concrete, and colour-washed rose and grey, framing members being finished white. The ground floor is terrazzo and the upper floor of asphalt tiling. Windows are of galvanized steel, horizontal pivot hung, and glazed with non-actinic glass. The frames to the shop-windows are of bronze.



key

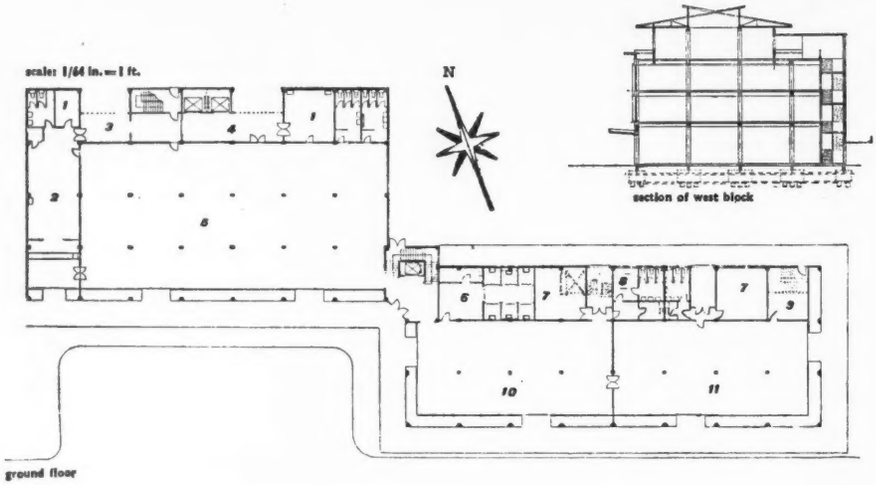
1, vestibule. 2, back store. 3, cleaners. 4, clerks. 5, vault. 6, office. 7, manager. 8, independent office. 9, hardware store. 10, attorney. 11, upper vestibule. 12, upper part of back store. 13, pantry. 14, offices. 15, waiting room. 16, secretary.



East elevation of Sandbach Parker's department store

3 department store (Booker Bros., McConnell)

Elevation of the department store and offices for Booker Bros., McConnell from the south



key

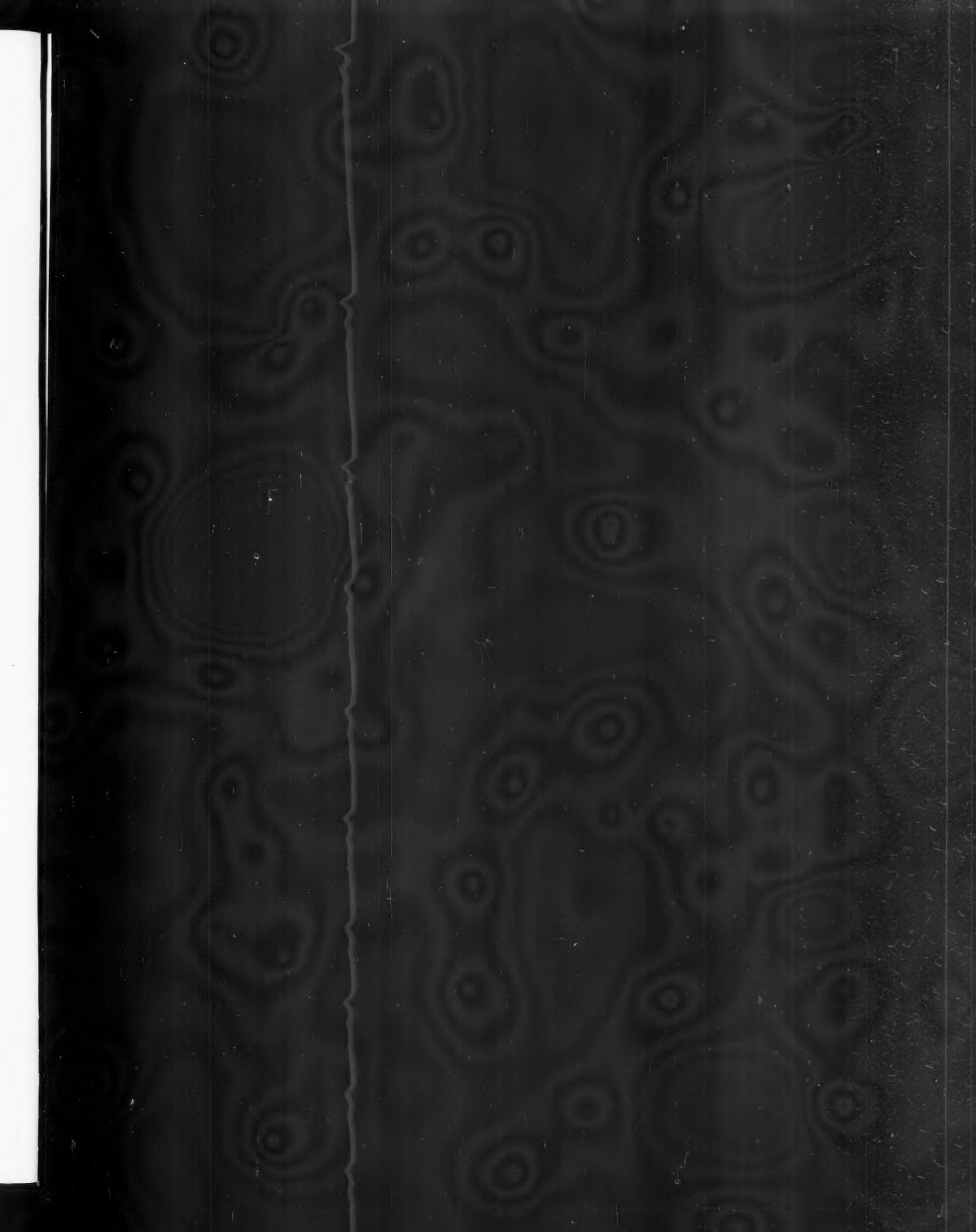
1, bottle room. 2, dispensing department. 3, despatch. 4, receiving. 5, drug store, retail. 6, waiting room for ladies' hairdressing. 7, store. 8, women's rest room. 9, work room. 10, women's shop. 11, men's shop.

A complete department store and the offices of the company are being rebuilt on their former site. The present flat roof of the single-storey east block is designed to allow for the addition of a further two storeys as the company expands. It is to be used for the present as an open-air restaurant. The top floor of the west block contains a technical laboratory connected with the company's sugar estate. The top storey of the tower is open and provides an open-air room. The building has reinforced concrete frames and floors. The walls are of hollow concrete blocks and are supported on *in situ* concrete piles. Wide concrete canopies the full width of the pavements project from all street frontages. Over these canopies clerestorey lights give additional light to the ground floors. The wall finishes are rendered concrete colour-washed grey.

4 department store (Wm. Fogarty)

The reinforced concrete frame of this three-storey building is clothed with hollow clay blocks, manufactured locally and finished with cement rendering on the upper floors. The ground floor external facings are precast terrazzo slabs, coloured blue grey with aluminium strips, the upper floors in semastic tiles. The reinforced concrete canopies which shade the display windows have glass lenses inserted in the centre and corner canopies. Windows, which are of metal with glass louvres for permanent ventilation, have decorative coloured blinds incorporated. The colours both inside and out are cool pastel shades of green and grey, with blue and silver treatment of certain features.

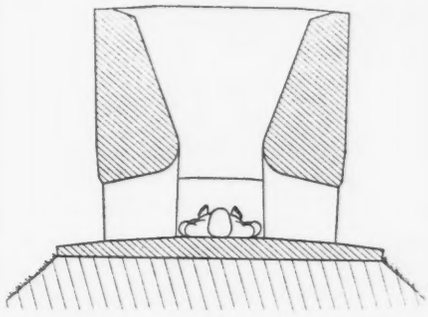
Elevation of Wm. Fogarty's department store from the west



WAR MEMORIALS

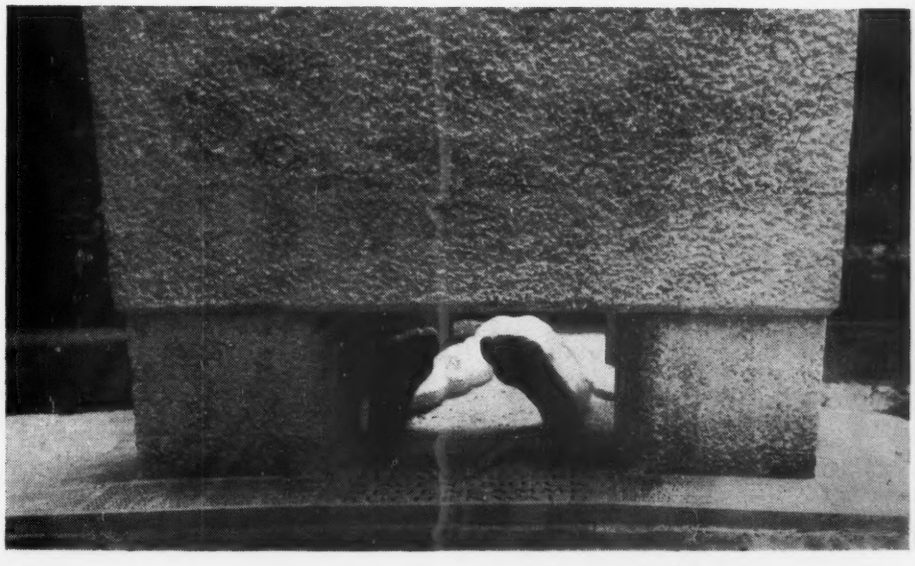
THE WHAT AND THE WHERE

The question of war memorials is generally treated as a question of what; the truth is that it is equally a question of where. It is hardly fair to expect war memorials to be great works of art—for that, after all, is not the first duty of a memorial; a stroll round the tombs at Westminster should convince anyone that the most affecting memorials are not the greatest works of art. Yet if the what can't always be answered in the way purists would like, by looking after the where it is possible to transcend the limitations of any given answer to the what. In the memorial at Nantua to those deported by the Germans from the Ain, no doubt the purist and the pedant would find it easy enough to pick Louis Leygue's monument (metaphorically) to pieces: the emaciated cadaver, they might point out, was a commonplace of late medieval sculpture, and this particular cadaver recalls a celebrated painting by Holbein at Basel; such spot-lighting, they might add, was a cliché of the Baroque. (For the secret of the spot-lighting, see the section.) But neither of them would be able to explain away the immense impressiveness of this monument *in its setting*. This impressiveness is due not



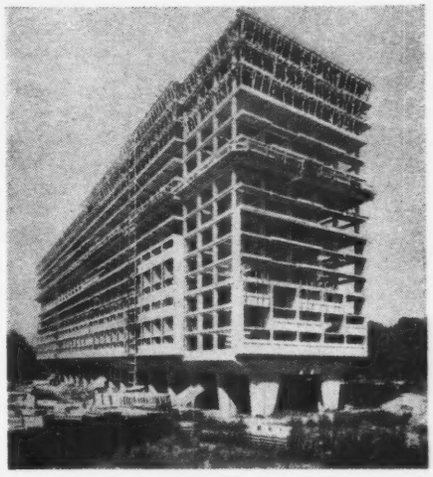
merely to harmony of mood proceeding from the right choice of setting (the right answer to the where), but also to a visual harmony, proceeding from the relationship of form and scale—and also of texture—established between the concrete and stone monument and the shingle-strewn artificial promontory on which it stands. And to make the right answer to the where righter still in this way is the essence of the landscapist's art.

Andrew Hammer

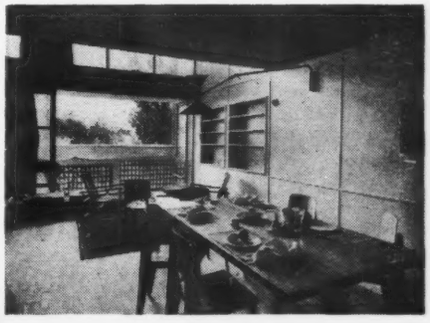


WORLD

FLATS AT MARSEILLES

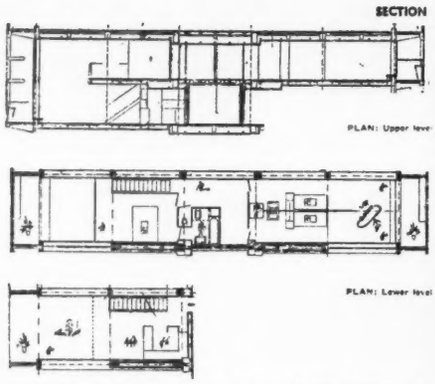


The structural frame of the Le Corbusier flats at Marseilles has now been completed. The two photographs, below, of a finished



flat show the combined living-dining room. The first looks out on to the balcony and the park beyond: the second to the

kitchen and the stairs leading to the bedroom floor (see AR November '47, pp. 147-150). Plans and section overleaf are

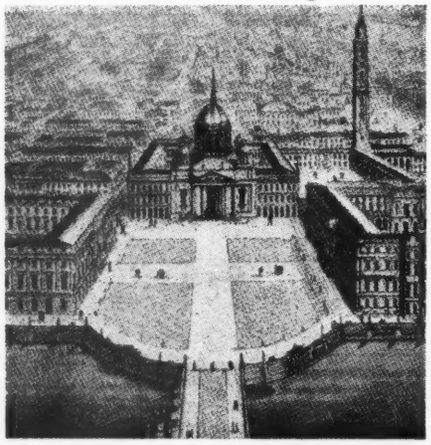


of the flat illustrated, one of 23 different types in the building which will house 1,600 people. **Denise Moutonnier**

TOWNSCAPE

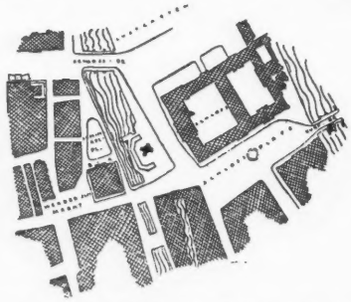
PRUSSIAN PRECINCTUAL

Germany has been prolific of town-planning projects since the war, but few of them have shown so keen a regard for the

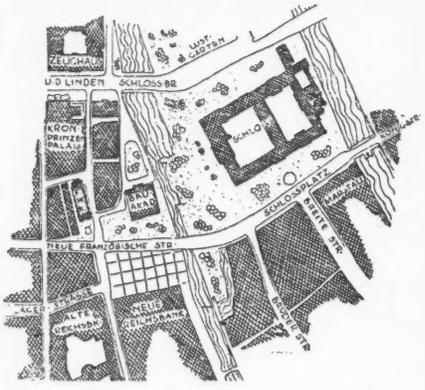


precinctual principle as this one, centring round the Berlin Schloss. The architect Schlüter designed for his building an axial approach across a strictly symmetrical square (first illustration), but by 1830 its setting had taken on the appearance, informal and delightfully arboreal, shown above in the next column. It was not to be for long; as ever, it was tarmac for trees, and what in the early nineteenth century was a weedgrown lake, through which the coaches and landaus of Prussia swam in polychrome elegance, had by 1939 become a barren whirlpool, across which the Opels

and BMWs of the Third Reich tore in metallic frenzy (first plan). Günther Kühne's scheme, as published in *Neue Bauwelt* (second plan), would restore tranquillity by taking advantage of bomb

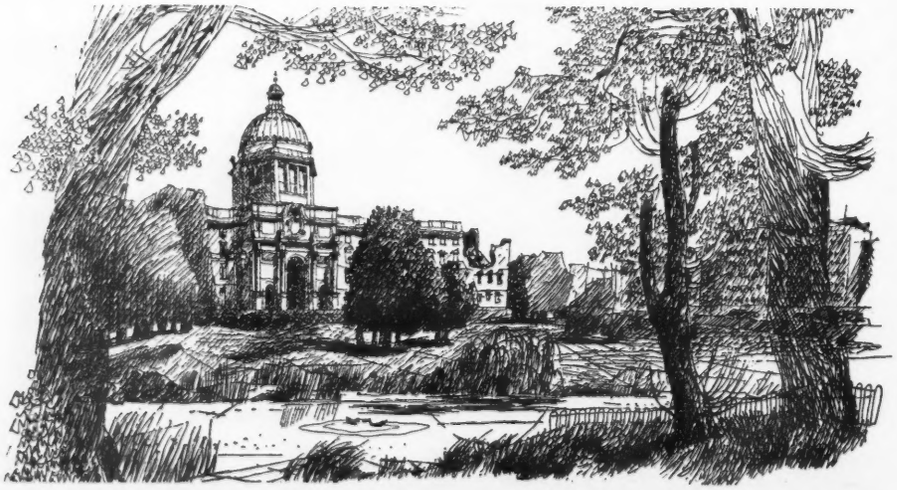


damage, and of the building of a new bridge to the south of the old one, to reduce the Schlossplatz to a manageable road with a strip of grass and trees between it and the Schloss; a similar strip runs along the north



side of the Schloss and—to the AR most interesting of all—the whole of the area to the west is turned into parkland for pedestrian access only. The drawing, by Gordon Cullen, shows how the scheme might look.

Thos. Halcro



COLOUR

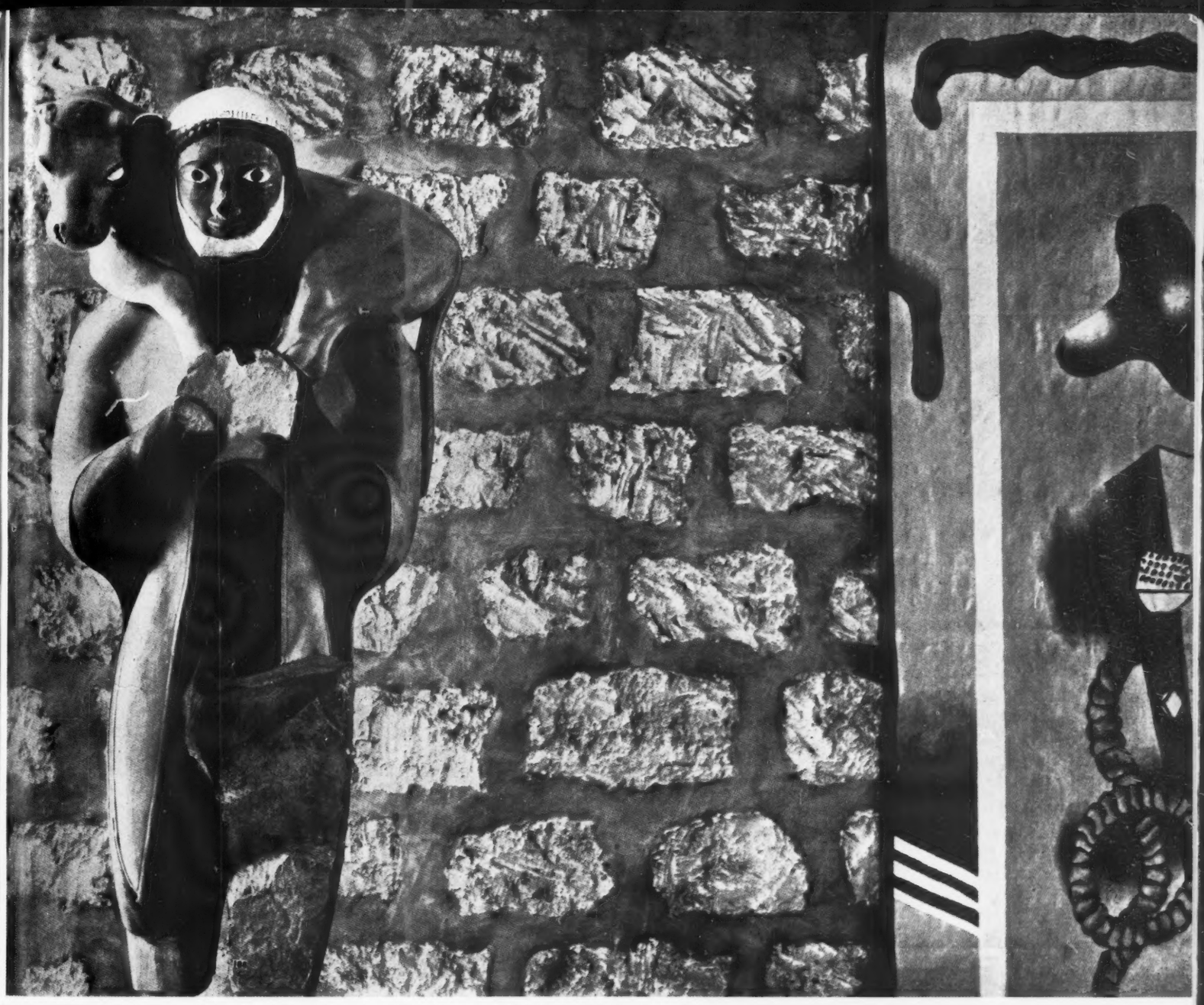
PAINT VERSUS PREJUDICE

One is apt to assume that to paint a piece of sculpture is necessarily to make it either *worse* or *better*. But surely this is a naïve view of the matter. Say you are a professor of archæology, colouring a monument in a cathedral to match your idea of what it must originally have looked like; you are not making it *worse* as a work of art, you are in effect destroying it as a work of art, for the time being, because you are concealing it under something with which the artistic impulse has had nothing whatsoever to do. Say you are Le Corbusier, on the other hand, colouring the cast of the sixth-century Moschophorus on the opposite page (original see inset and frontispiece). You announce, since you have a proper respect for academic scholarship, that what you are doing is based on 'les renseignements archéologiques.' And then, regardless of the

horrified gaze of the archæologists, any one of whom could tell you that practically everything but the bare skin of the figure was originally coloured, you proceed to paint the bare skin and leave practically everything else plain. Are you thereby making the figure any worse or better as a work of art? No, you are turning it into *another* work of art.

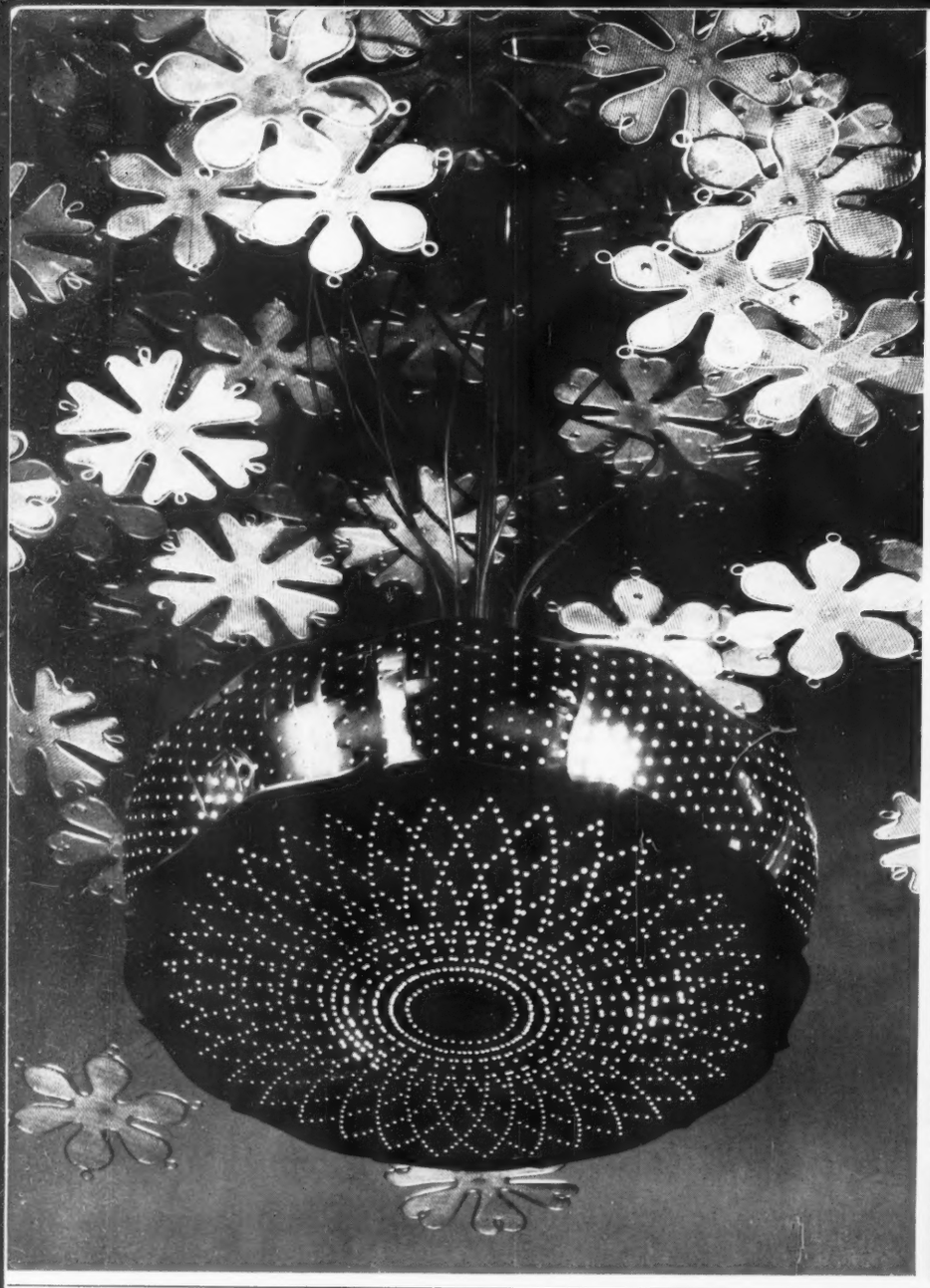
To come nearer home, the two lower photographs on the opposite page show the statue of George III at Weymouth, on the left in its original bronze finish, on the right as it appears after its recent painting. It looked fine as it was, and one's first reaction to it was far from favourable. The odd thing was that one quickly discovered that it looked equally fine in its new polychromy. In fact one came to see that it is neither better nor worse, but *different*.

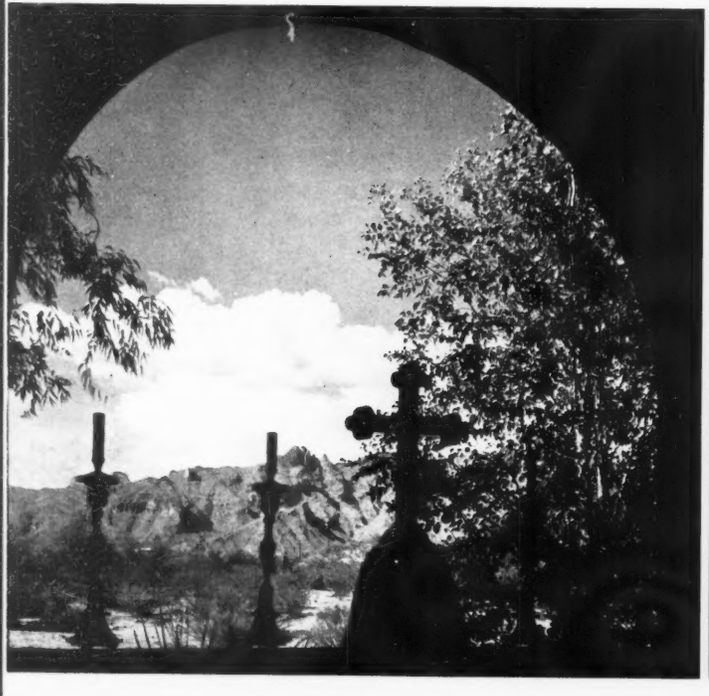
And the moral? Surely that we should not be too solemn, or too timid, about this question of paint, but should recognize that




The grateful Inhabitants
To GEORGE THE THIRD
On His entering the 50th Year
Of His REIGN.
J. HAMILTON,
ARCHT
FORTES
FORTES


The grateful Inhabitants
To GEORGE THE THIRD
Of His REIGN.
J. HAMILTON,





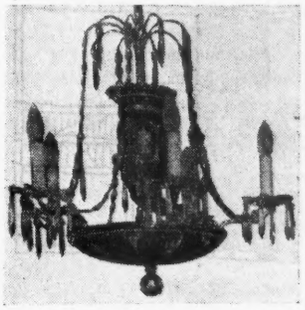
our lesser public monuments provide a field for experiment in which people may do good and cannot do permanent harm. After all, the stuff doesn't last for ever.

Marcus Whiffen

INDUSTRIAL DESIGN

LIGHT FITTINGS

Some of the most significant recent developments in the design of light fittings have come out of the desire to break away from that Cézannesque holy trinity, the cone, the sphere and the cylinder, which used to monopolize this field — the cone and the sphere for shades and reflectors, the cylinder, as a straight tube, for attachment to the ceiling. In the fitting for the assembly hall of Aarhus University (upper inset) the sphere is elongated into a pear-drop and its outline ingeniously broken by a delicate spiral louvre, which by eliminating the need for opal glass also eliminates the rigid outline entailed by that substance. The largest of the three photographs opposite, of examples from Finland House, New York, shows the break absolute; here light is used primarily as a decorative medium, sprayed through the perforations and then deflected by the wire gauze snow-flakes above.



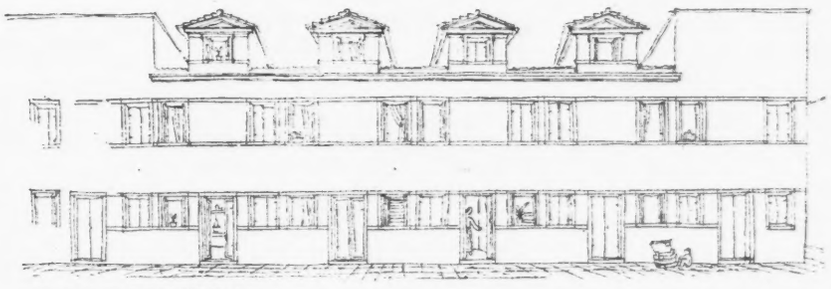
Light as pattern is again to the fore in the upper of the smaller photographs, where each fitting comprises a group of perforated cones aimed into a large reflector, while in the lower one the treatment of the tubing adds much to the decorative value. Here we have one more indication of the impulse to reintroduce ornament into the contemporary scene. The lower inset shows the kind of way none of us wants to reintroduce it.

H. McG. Dunnett

POPULAR ART

WINDOW INTO PICTURE

Pictures are no longer framed windows in the wall, as in pre-Post-Impressionist days. But is there any reason why windows shouldn't be pictures? None at all—if you remember two things. The first is that those windows must come where you would expect pictures. The second is that the framed-window kind of picture did more than depict: it commented. Both these things have been remembered at Tucson, Arizona (left) and at Waiho, New Zealand (right). This is surely an example of the kind of melodrama which could be incorporated into the modern vocabulary—a variation on the theme of bringing the garden into the house. And melodrama, the capacity to appeal to one's less sophisticated fellow-countrymen, is one of the things modern architecture so deeply lacks. This to remember—it is by changing the symmetry of the interior that one rings the changes on the exterior scene. 'Rare,' writes the photographer of the Tucson altarpiece, 'is the man or woman who finds it less than deeply inspirational.' What more can you ask of any work of popular art? **I. de Wolfe**



terrace of cottages in Calle della Mende

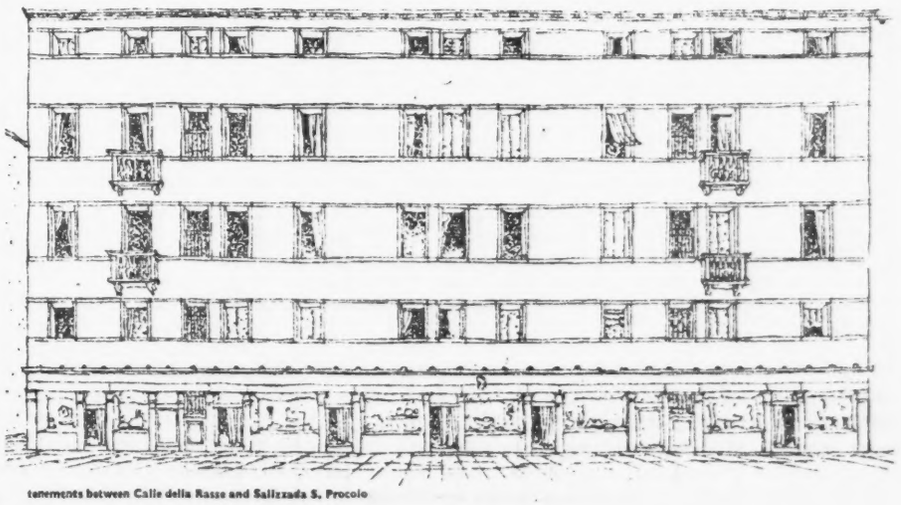
PLANNING

PRIVACY AND THE FLAT: VENETIAN SOLUTIONS

One of the problems which the architect designing flats for tenants of some means is up against (especially on the Continent) is how to give a flat the privacy of a private house. The maisonette (however objectionable the term) is one answer, access to each flat by its own staircase another. In St. Cloud especially very ingenious solutions have been found by which terraces of houses are divided into flats, each with rooms on more than one floor and seemingly in more than one house; here the sense of privacy is almost perfect. And now comes an excellent new Italian book* which shows that Venetian builders have been doing the same kind of thing, and producing the same kind of spatial surprises, for centuries past. In spite of Sitte's and Le Corbusier's hints, students of planning have so far ignored Venice, with its exemplary separation of all traffic into vehicular roads (canals) and the pedestrian network (*calli* and *fondamenta*) and the unparalleled sensitivity of the Piazza-Piazzetta layout; from now on its picturesquely shabby tenement houses of the eighteenth century and earlier must be counted as an additional claim on their attention.

In general appearance many of these blocks of tenements bear a remarkable resemblance to that kind of clean-cut classicism which was the Fascist contribution to twentieth-century architecture. This comes out particularly well in the example illustrated at the foot of this page, which stands between Calle della Rasse and Salizzada S. Procolo; this dates from 1737. It appears again on a smaller scale in the eighteenth-century terrace of cottages above, in Calle della Mende, together with a wonderfully sensitive rhythm in the fenestration. It is of modern Vienna, on the other hand, that one is reminded by the late Cinquecento group of tenement

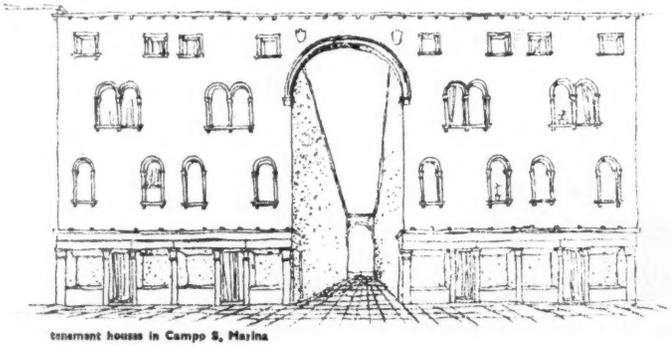
* *Venezia Minore*, by Egle Renata Trincanato, Edizioni Del Milione, Milano, 1948.



tenements between Calle della Rasse and Salizzada S. Procolo

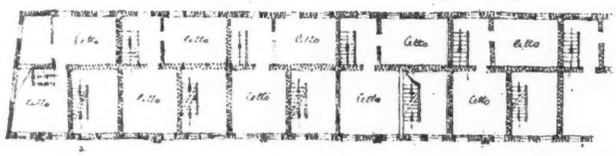
houses in Campo S. Marina, with its great arch and generally monumental treatment, shown in elevation immediately below. The terrace in Calle dei Preti (one of a pair), shown below in plan and elevation, can be proved to be earlier than the year 1500; yet it already displays a great deal of ingenuity in the way in which the flats interlock, the ground and first floors forming one maisonette and the second and third another. Most ingenious of all is the early sixteenth-century arrangement by which two maisonettes form a house of four floors, shown in the coloured plans and section on this page. Here, in Via Garibaldi, access to the first two floors is separate from access to the second two but the staircases interlock in a single well; the upper maisonette has an entrance hall and storeroom on the ground floor and the lower one a gallery and small room on the top floor. The seventeenth-century house in Calle Cappello on the opposite page contains shops on the ground floor and separate flats on the three remaining floors with private access to each, the staircases being side by side but not interlocking.

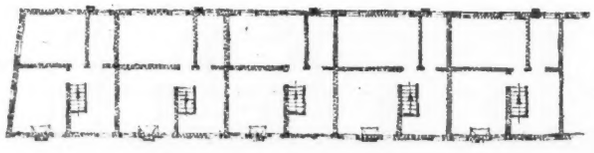
Nikolaus Pevsner

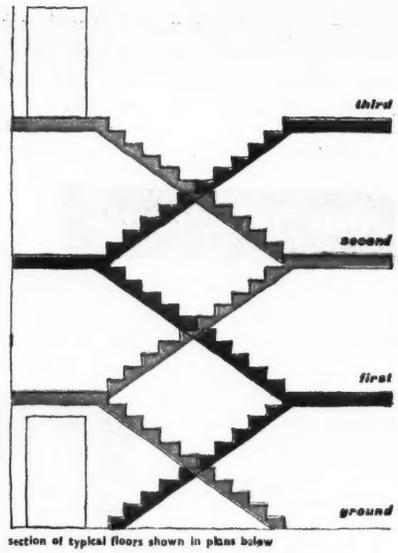


tenement houses in Campo S. Marina

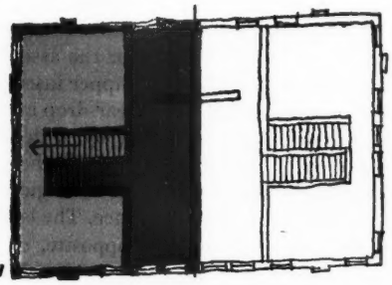
terrace in Calle dei Preti

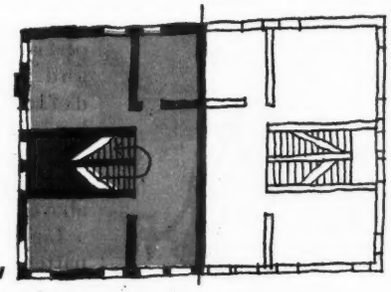


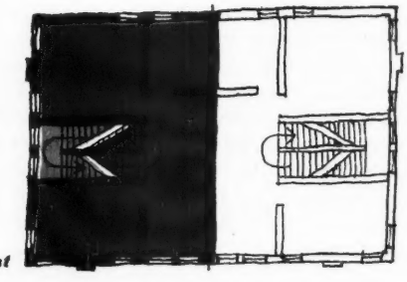


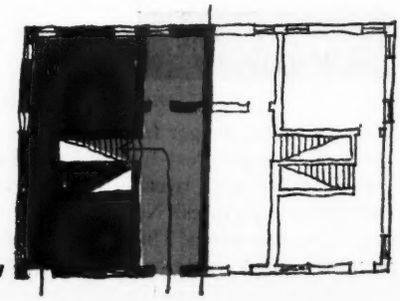


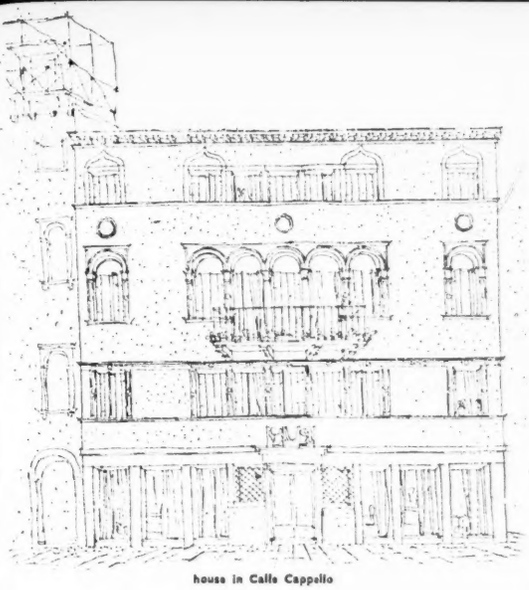
section of typical floors shown in plans below









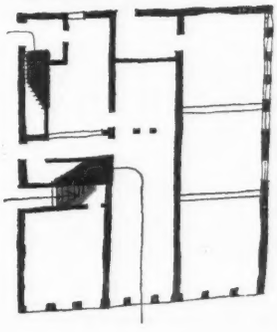


house in Calle Cappello

second

first

mezzanine



ground

BOOKS

THE POLITE PIONEER

HEAVENLY MANSIONS. *By John Summerson. Cresset Press. 21s.*

Mr. Summerson writes of architecture with grace and firmness. His cool Harrovian prose is a treat to read. His learning is unostentatious and his enthusiasms are politely restrained. He is so good a writer and so stimulating that he deserves consideration for himself quite as much as for what he writes about. It is interesting, on the evidence of the essays in this book, to speculate on where Mr. Summerson will next turn his attention. For where Mr. Summerson leads others will follow. Like Mr. Goodhart-Rendel, to whom he undoubtedly owes much, he is a pioneer.

This book contains ten essays arranged chronologically. One deals with Gothic, one with the Quattrocento, three deal with English Classic architecture and two with the Gothic Revival. The last three are about contemporary subjects like planning, modern materials and the future of architecture as a profession. There are fifty half-tone illustrations at the end of the book, and it is a pity these are not better printed for they contrast with the high standard of typography and the spacious appearance of the book as a whole, which at first glance is a pleasure to see and to handle. The new binding, which looks like cellophane sprayed over cardboard and subsequently stamped with gold titling, is said to render a dust wrapper unnecessary and to be 'impervious to solid or liquid dirt and resistant to normal wear and tear.' After just over a fortnight of being carried about in a satchel and pulled out and read from time to time, the joints of my copy are beginning to crack and peel like the stucco of some of the Georgian buildings described within.

Mr. Summerson needs no aid of good typography, pleasurable though it is to see it, to create his effect. He is enough a master of words to let words do all he wants. It is not enough to praise Mr. Summerson with those two tired adjectives 'distinguished' and 'scholarly' which mean, too often, 'dull' and 'pedantic.' Nor must we presume that Mr. Summerson is the cool and measured character that his prose might lull us into thinking him to be. He can make wild statements.

His prejudice and old-world materialism are part of Mr. Summerson's character. They are some of the many things that make him stimulating and likeable. They make him truly distinguished, for they distinguish him from that all too familiar kind of modern bore who will commit himself to no opinion but turns being non-committal into a profession, as a civil servant does.

Then there are the many happy aphorisms of Mr. Summerson's prose, such as 'Wren himself was an ineffective letter-writer; his letters indicate the impatience of literary grace which is often found in company with first-class brains' and 'A building preserved by the State for the nation inevitably becomes an object of prestige, and prestige is a terribly potent anæsthetic where the arts are concerned.'

When he is writing of a particular architect as a man in relation to his time, and when he is describing a particular building, then he is at his very best and has, I think, never been equalled in architectural writing. Then his sympathy with the architect as a person is apparent. For instance, what an engaging discovery he makes about the elder John Wood, a Yorkshireman who worked in London on Cavendish Square before he came to Bath. Wood, apparently, fancied himself as an archæologist and thought he was rebuilding Rome when he built in Bath, and intended the Circus to look like the Colosseum. And how enjoyable is this Summersonian comment: 'I am sure that nothing would have surprised the architect less than to meet a centurion in Gay Street or to find a toga hanging in his front hall at Batheaston.' Perhaps the best essay of all is that on Viollet-le-Duc whose rationalistic interpretation of Gothic seems to have influenced architecture far more profoundly than Pugin's mediævalism. His essay on Butterfield comes next and would have come first with me, had he explained why he thought Butterfield's work was ugly. If it *is* ugly (which I doubt), then why are large expanses of glass and concrete not ugly? If he can write like this of Butterfield:—

> 'How can we see what Butterfield saw in a brand-new, stubbily moulded Early English shaft and capital? To us its hardness and coarseness are dull. To him its hardness and coarseness were a deeply sincere protest against whatever was wiry, soft and genteel.' 'His painted roofs are like huge, ingenious toys from a giant's nursery.' 'Butterfield was a creator of the same stature as Dickens and Emily Brontë—the relationship of *Wuthering Heights* to the Waverley novels is not unlike the relationship of All Saints, Margaret Street, to the Houses of Parliament.'

—if he can write like this, and how original and stimulating and right he is, then he owes it to us to explain what he means by 'ugly.'

Added to Mr. Summerson's gift for appreciating an architect's personality and motives, is his concise and poetic power of description. There is a striking frontispiece to this book which is a photograph of William Burges' church of St. Faith, Stoke Newington, whose west end was destroyed by a flying bomb in 1944. Mr. Summerson describes it thus:

> 'a spectacle of incredible grandeur was created out of a church of very moderate artistic stature. It became a torso—the fragment of something infinitely magnificent. The remote apse was patinaed with sunlight sprayed through open rafters; and the west wall had been torn aside just sufficiently for the noble and still fresh interior to gain by contrast with its rough-hewn shell. Nothing could have been more moving—and nothing less stable. The ruin of St. Faith's will remain a fine thing until it is removed; but the brilliance of the first revelation has gone for ever.'

That is description as Ruskin might have done it. And Mr. Summerson should have no objection to being compared with Ruskin, nor again with that great architect of whose earthly dwelling house he is Curator. I wish that he

were heavily subsidized so that he continues to write about architects and their buildings in his personal, dictatorial, yet appreciative manner until that dread signal comes when he shall lie in Old St. Pancras churchyard alongside Sir John. For, like Soane, Mr. Summerson is unique, inspiring, unpredictable, aloof.

J. Betjeman

GEORGIAN BATH

GEORGIAN BUILDINGS OF BATH. *By Walter Ison. Faber & Faber.* 52*s.* 6*d.*

It is a pleasure to review an authentic record of eighteenth century buildings—especially when accurate research is combined with discriminate selection. The result is shown in this book, which deals with the architecture of Bath in an altogether fitting way. The author has an engaging manner of description; he treats of ordinary details architecturally, misses no point of interest, and at the same time succeeds in an extremely difficult task; that is to say he makes a technical account pleasant to read. Both the student and the average reader thus have the advantage of studying Bath in the form of a microcosm. Mr. Ison's knowledge of the city has enabled him to choose street views and individual architectural compositions which are sometimes overlooked. Moreover, he has recognized the rhetoric of Bath's architecture and has been wise enough to let it explain itself.

It is strange that before Mr. Ison's investigations little was done to collate the various periods of Bath's rise to greatness in the eighteenth century. The late Mr. Mowbray Green was the first architectural historian to call attention to the classic features of this incomparable English city. A great deal is owed to this pioneer for his buildings and studies. It must also be acknowledged that much has been done by professional and private persons interested in Bath to promote its welfare. Thus, in addition to various articles on the city's outstanding features, there have been reports and planning schemes by specialists for modifying the layout of the city as a whole. It is, perhaps, fortunate that schemes for improvement have been delayed until the advent of Mr. Ison's book. Here, at long last, is a record, copiously illustrated both by photographs and charming line drawings, which will appeal to all who consider architecture the first of the plastic arts.

A. E. Richardson

A DERBYSHIRE DUKERY

A HISTORY OF CHATSWORTH. *By Francis Thompson. Country Life.* 63*s.*

English country houses have owed their beginnings to a variety of causes, but Chatsworth must be unique in that it may be said, with only a little more oversimplification than historians are normally guilty of, to have owed its beginning to a blow with a cane. The scene was the Presence Chamber at Whitehall, the date 1685, and the actors were a certain Colonel Colepeper and the fourth Earl of Devonshire (who was to become the first Duke). The Colonel gave the Earl what the latter took to be 'an insulting Look,' whereupon the Earl took the Colonel 'by the Nose, led him out of the Room, and gave him some despising Blow with the Head of his Cane.' The Earl's enemies seized the chance which the incident gave them, and the Earl was found guilty of assault in the Court of King's Bench and condemned to pay a fine of £30,000. To avoid paying it he escaped to the country, where he used the money to rebuild his house.

As the story suggests, the fourth Earl and first Duke of Devonshire was one of those exasperating yet often charming people who carry on their lives largely on a system of trial and error. Certainly it was by a process of trial and error that he carried on the rebuilding of Chatsworth over a period of twenty years. As Mr. Francis Thompson says in this history of the great house, he could not visualize the effect of a mere drawing; no sooner was a piece of work finished than he saw that it was not what he wanted at all, and down it came again. In the same way he adopted the contract system in his building operations and then, after experience had taught him its implications, reverted where he could to direct labour. And in rather the same way, perhaps, he changed his architects.

For Mr. Thompson has discredited once and for all Colen Campbell's statement that the whole of Stuart Chatsworth was designed by William Talman. He produces documentary evidence of Thomas Archer's authorship of the north front, and he shows that Talman cannot have been responsible for the west front either. (My own belief that the inscription in the corner of Campbell's plate of this front—*Ex Authographo. D. I. Thornell*—indicates that it was designed by Sir James Thornhill is fortified by information provided by Mr. Howard Colvin to the effect that the Radcliffe Trustees spelt Thornhill 'Thornell' when considering him as a possible architect for the Library at Oxford; but certainly the attribution needs further corroborative evidence.) In the matter of decorations within the house too, Mr. Thompson, through his examination of the accounts, is able to upset a good many popularly accepted beliefs: he shows that many more ceilings were painted by Laguerre than by Verrio, that woodwork which has been attributed to Grinling Gibbons was carved by Samuel Watson, a local man, that ironwork attributed to Tijou was wrought by John Gardom, a local smith who had earlier on acted as Tijou's assistant, and so on.

It is of the Chatsworth of the first Duke that Mr. Thompson has to tell us most that is new. But he is not concerned with that alone: he takes the history of the place, both of the house and of the gardens and park, right up to the never-too-much-to-be-lamented destruction in 1920 of Paxton's Great Conservatory, the immediate ancestor of the Crystal Palace. No doubt it would be possible to quarrel with him over points of detail: one may feel, for instance, that he gives too much credit to the fourth Duke, and too little to Capability Brown, for the reformation of the grounds carried out in the third quarter of the eighteenth century. But as a whole *A History of Chatsworth* is a quite exceptionally valuable and readable addition to a valuable (but not always readable) class of book.

Marcus Whiffen

BUILDING FOR WELFARE

ARCHITECTURE OF SOCIAL CONCERN IN REGIONS OF MILD CLIMATE. *By Richard Neutra. Gerth Todtmann, Brazil.*

From time to time some of the designs prepared by Richard Neutra for Puerto Rico, schools, health centres and hospitals, have appeared in architectural periodicals. This volume collects many of them together with descriptions and reports by the architect. In this context, the 'mild climate' of the title is what we in England would call sub-tropical, and the 'architecture of social concern' includes those building programmes directed toward the public welfare. The book will, it is to be hoped, be carefully studied by those responsible for such building as it is not concerned to stimulate the sale of a particular building product or material, nor a desire to impress 'natives.' Neutra believes that the only hope of improving educational and health facilities in the so-called 'backward' areas is to aim at an integrated programme of simple standardized constructions that sacrifice nothing to pomp and civic dignity, but remain human and in scale with the communities they are designed to serve. The book is very unattractively got up, small photographs of Neutra's executed works are arranged post-age-stamp fashion on the page and are quite meaningless. It would also have been an advantage if the perspectives of the hospital schemes had been accompanied by plans. The volume, however, is valuable in that it surveys with all Neutra's skill a new area of building activity.

Robert Townsend

Shorter Notices

BAROQUE ART. *By Geoffrey Webb, Annual Lecture on Aspects of Art, Henrietta Hertz Trust of the British Academy,* 1947. *Geoffrey Cumberlege,* 1950. 6*s.*

Only twenty pages, but packed with unfamiliar data and original thought. Baroque Art is a vast subject for one lecture, and so Professor Webb confined his Henrietta Hertz Lecture to a discussion of three phases of English modern architecture: the later years of John Webb, the work of Hugh May with Verrio and Gibbons at Windsor, and the inextricably entwined Wren-Hawksmoor-Vanbrugh style of about 1700-1730. Professor Webb shows how, during these phases, architecture was tied up with painting and sculpture in the typical Baroque way, and how landscape painting, theatrical design, and the æsthetic theories of Hobbes had their determining influences on building.

N.P.

Books Received

AN INTRODUCTION TO THE DESIGN OF TIMBER STRUCTURES. By Phillip O. Reece. Spon. 16s.
WALLS AND WALL FACINGS. By Denzil Nield. Spon. 18s.
OVER THE DRAWING BOARD. By Robert Forman. Cleaver-Hume Press. 10s. 6d.
THE STORY OF SPROWSTON MILL. By C. H. Harrison. Phoenix House. 12s. 6d.
WILTSHIRE. By Ralph Whitlock. Paul Elek. 15s.
OXFORDSHIRE. By Reginald Turnor. Paul Elek. 15s.
SPONS ARCHITECTS' AND BUILDERS' POCKET BOOK, 1949-50 (75th Edition). Spon. 15s.
STYLE IN COSTUME. By James Laver. Geoffrey Cumberlege. Oxford University Press. 6s.
MANUAL OF BUILDING SCIENCE. By John F. Douglas and Lintott Kent. Pitman. 18s.
SOUND ABSORBING MATERIALS. By C. Zwikker and C. W Kosten. Elsevier. 22s. 6d.
ARCHITECTURAL DRAWING PERSPECTIVE AND RENDERING. By Farey and Edwards. Batsford. 21s.
STRUCTURAL ECONOMY FOR THE ARCHITECT AND BUILDER. By Geo. Fairweather. Iliffe. 21s.
BUILDING SCIENCE II. By S. C. Gibbins. Pitman. 6s. 6d.
INNS OF SPORT. Whitbread. 5s.

The Canteen at the British Electricity Authority's power station, Kingston, Surrey.

Photograph by courtesy of the British Electricity Authority

(*A Product of a Company in the* DUNLOP GROUP)

In the selection of any floor covering, initial outlay has to be balanced against the cost of maintenance and repairs. Good appearance and underfoot comfort have to be considered in relation to economy. In an industrial canteen, such as this at the British Electricity Authority's Kingston Plant, serviceability and cleanliness are equally important factors.

The British Electricity Authority has found that the best way of meeting all these requirements is to specify Semastic Decorative Tiles. This is one of a number of installations carried out for the Authority. Semastic Decorative Tiles are easy and economical to instal. They have excellent wearing qualities, yet cleaning and maintenance requirements are of the simplest. They give character and atmosphere to rooms, and they have a pleasant "feel" underfoot. The wide range of plain and marbled colours available affords ample scope for fitting in with any decorative scheme and for originality of treatment.

INSTALLATION SERVICE

Countrywide installation service is provided by the following leading floor laying specialists who represent the highest standard of experience and workmanship available in the country.

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50SE/D7

ANTHOLOGY

Great Expectations

Suburban Sonnets I—Islington.

Thy Fields, fair Islington, begin to bear
Unwelcome buildings, and unseemly piles:
The streets are spreading: & The Lord knows where
Improvement's hand will spare The neighb'ring stiles:
The rural blandishments of Maiden Lane
Are ev'ry day becoming less & less,
While Kilns & Lime roads force us to complain
Of nuisances time only can suppress.
A few more years, & Copenhagen House
Shall cease to charm The tailor & The snob:
And where attornies' clerks in smoke carouse,
Regardless wholly of tomorrow's job.
Some claremont Row, or Prospect Place shall rise,
Or Terrace, p'rhaps, misnomer'd PARADISE!

Suburban Sonnets VI—Minerva Terrace, Islington.

Ye, who are anxious for a 'country seat,'
Pure air, green meadows, & suburban views,
Rooms snug & light, not over large, but neat,
And gardens water'd with refreshing dews,
May find a spot adapted to your taste,
Near Bamsbury *Park*, or rather Bamsbury *Town*.
Where ev'ry Thing looks elegant & chaste,
And wealth reposes on a bed of down!
I, Therefore, strongly recommend to those
Who want a pure & healthy situation,
To choose *Minerva Terrace*, & repose
'Midst *prospects* worthy of Their admiration:—
How long they'll last is quite another thing,
No longer p'rhaps than the approaching Spring.

J.G., Islington, March 25, 1827.

WILLIAM HONE: *The Table Book—Vol.* III *of The Every Day Book.*

MARGINALIA

This Month's Anthology

This month's Anthology was provided by Mrs. K. Michaelson who is researching into the building history of London Boroughs. William Hone (1780-1842) was an unsuccessful publisher and bookseller of radical political views, and a life-long friend of Cruikshank. *The Every Day Book* came out in 1826-27.

Burlingtoniana

It was an excellent idea of the Georgian Group to put on an exhibition of relics of Lord Burlington and his circle at the reception that it held recently in the Royal Academy's rooms at Burlington House. It was also an excellent exhibition, including as it did original drawings, engravings and so on, collected from a variety of widely scattered sources. One's only regret is that it was not opened—if only for a day or two—to the general public. Of course the Georgian Group, like any other body, is perfectly entitled to hold private exhibitions for its members, but to publicize a private exhibition by holding a press view may have an effect opposite to that intended by its organizers; in the present case, it may have had the effect of increasing that suspicion of exclusiveness (unjustified though it is so far as the Georgian Group is concerned) which inevitably attaches to the term *Group*. The REVIEW appreciated the courtesy of the Georgian Group's invitation, but it does not like to see so important and valuable an institution commit tactical errors of this kind.

Protection of Monuments

The American Department of State deserves gratitude for publishing a brief treatise on the legal aspects of the protection of works of art and historic buildings during wars.* The subject is intricate and fraught with juridical difficulties. It is lucidly expounded in this American pamphlet by one of the greatest living authorities on international law, Professor de Visschar of Louvain University, judge at the United Nations International Court of Justice.

* Department of State, Publication 3590 (reprinted from *Documents* and *State Papers*, June 1949).

New Furniture from Scotland

Scottish Furniture Manufacturers are making an ambitious attempt to enter the dollar markets with furniture of a high standard of contemporary design. The leading furniture manufacturers in Scotland have formed a new Company—Scottish Furniture Manufacturers, Ltd.—which will promote the export campaign.

The following designers have been commissioned to prepare designs for these markets: Basil Spence, Brian O'Rorke, R. D. Russell, R. Y. Goodden, Jacques Groag, Dennis Lennon, Neville Ward and Frank Austin. One of the most prominent sites at the British Industries Fair now in progress has been taken by the new company to launch this new export scheme. The stand, which has been designed by Basil Spence, is illustrated above.

1, *Scottish Furniture Manufacturers' stand at the BIF, drawn by Gordon Cullen.*

A Second Edition

The second edition of John Summerson's *John Nash* is now available (Allen and Unwin, 16s.). Although the general appearance of the book remains unchanged, the text incorporates a number of small alterations and additions, items have been added to the list of works, and there is a new appendix mentioning sources of information which have come to the author's notice since the book was first published in 1935. *John Nash* is so far the only full-length biography of an English architect that can properly be described as definitive, and the publication of this revised and corrected edition is a welcome event.

The Lessor Scheme

British Governments, through the agency of their Ministries, have a remarkable and possibly unique talent for doing things behind their own backs. The latest example is provided by what is known in the Ministry of Works as the 'Lessor Scheme,' which ensures that a government that claims to be much concerned about matters of design should house thousands of its officials in new buildings with the design of which it has had nothing whatsoever to do.

The object of the Lessor Scheme is to provide additional office accommodation for government departments without investing public funds in building construction. The procedure is for the Ministry of Works to approach financial interests who it thinks might be willing to invest in office property and offer to grant the necessary building licence for any suitable building on the condition that the accommodation provided by it is leased to the Ministry for a specified number of years (generally forty). If agreement is reached, the Ministry then leaves it to the financiers to find a site and to prepare a scheme for building on it It then remains for the Ministry to approve the accommodation to be provided and the rent to be charged, to guarantee to lease the accommodation, and to arrange for the granting of a building licence. The Ministry then fades out of the picture until it takes over the completed building as lessee.

As J. M. Richards wrote in a recent number of *The Architects' Journal*, 'the Lessor Scheme is conceived in a spirit of putting cheapness and

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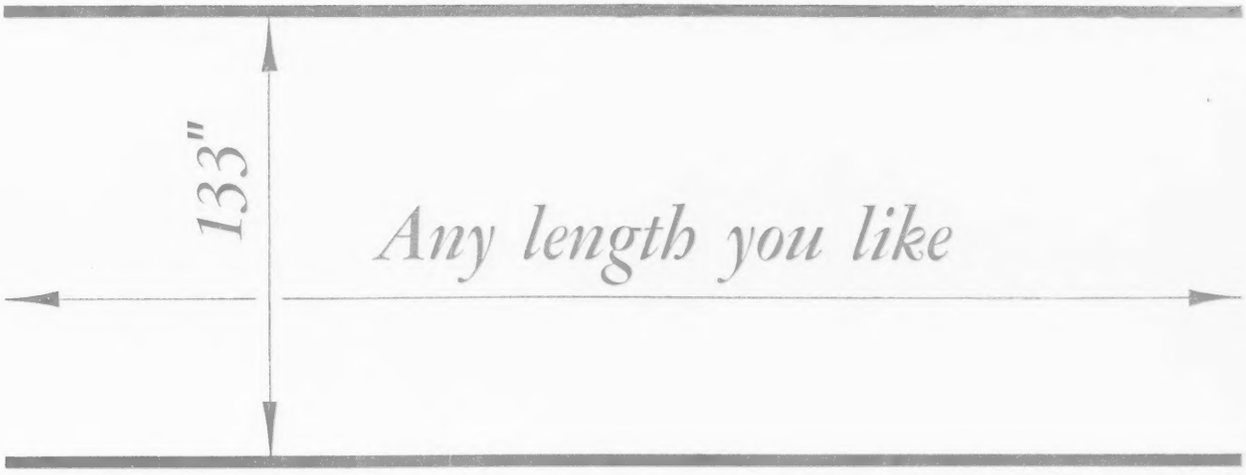
New London office buildings, the result of what is known as the Lessor Scheme, has been the subject recently of critical comment—see note on page 355. 2, street frontage of the two blocks, Belfort House and Lacon House, Theobalds Road, both the designs of Major A. S. Ash; 3, offices in Rockley Road, Shepherds Bush, designed by Collcutt and Hamp; 4, St. George's House, New Oxford Street, by Lewis Solomon; 5, St. Anselm's House in Davies Street, designed by Howard and Souster, and 6, a detail of St. George's House.

expediency first—of driving a good bargain from the point of view of getting a large square footage of accommodation for a reasonable rent in a short time. There is no overall planning of sites and no consideration of the overall effect on the architecture of London. . . . The Ministry of Works leaves the appointment of an architect in the hands of the lessors and exercises no supervision of his efforts. It takes no responsibility—and seems to take no interest—in the standard of design exhibited in the buildings put up under this scheme.'

What that standard is may be seen only too clearly from the accompanying photographs of buildings put up under the scheme in London. They suggest that whatever the practical arguments for and against it, the æsthetic arguments against it in its present form are quite overwhelming. All these buildings, and others now being built under the Lessor Scheme throughout the country (to a total of thirty), although built by private enterprise and designed by private architects, are in effect government buildings for the next forty years. Surely the least that the Ministry of Works can do is require good design as a condition of the grant of a building licence.

40" x 22"

The ordinary, undecorated windows of Fonthill Abbey were "composed of four squares of the very best plate glass, each square measuring forty inches by twenty two . . ." according to John Rutter's *Description of Fonthill Abbey and Demesne.* When James Wyatt designed this overpowering contribution to the "Gothic Revival" for William Beckford, and built it between 1796 and 1799, he used larger areas of plate than were normally employed at that time. Wyatt created a parody of mediaeval architecture, but his generous plate glass windows were ahead of their time. Now you can specify Polished Plate Glass . . .



Supplies are available through the usual trade channels.

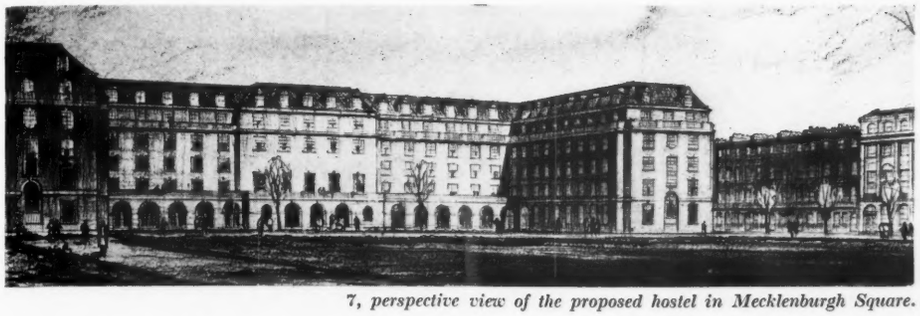
Architects and Architectural Students are invited to consult our Technical Sales and Service Department at St. Helens, or our West End Office at Selwyn House, regarding the properties and uses of glass. Head Office and Works: St. Helens, Lancashire. Tel.: St. Helens 4001. West End Office and Showrooms: Selwyn House, Cleveland Row, St. James's, S.W.1. Tel.: Whitehall 5672-5676.

PILKINGTON BROTHERS LIMITED

This new coreplate and mirror shop for C. A. Parsons & Co. Ltd., Newcastle, is 360 ft. long, 120 ft. wide and 39 ft. 9 in. to the ridge. It has a rigid portal frame structure with crane gantries running full length.

Steelwork by

DORMAN LONG



7, perspective view of the proposed hostel in Mecklenburgh Square.

The Future of Mecklenburgh Square

The Lord Mayor of London's National Thanksgiving Fund, whose object is to provide hostel accommodation for post-graduate students from the Dominions as a return for gifts of food made by the Dominions to Britain during and after the war, seems to have been launched in a peculiarly light-hearted manner, with very little thought given to its implications. The protest made by the Lord Mayors of certain provincial cities at their not having been consulted was rightly given considerable publicity by the Press at the time. Another aspect of the proposal was first pointed out in *The Times* by Mr. S. W. Jeger, M.P., whose letter was quickly followed up by others.

The scheme, it must be explained, involves the building of a vast hostel on the north side of Mecklenburgh Square to balance Sir Herbert Baker's London House, which already occupies the south side. As one of *The Times* correspondents, Mr. Jerry Granger-Taylor, put it, this 'means the end of one of the finest Georgian squares left to London after the war, and this fact ought surely to be admitted: it has so far been glossed over in all public pronouncements. The majestic east side of the square [designed by Joseph Kay, a pupil of S. P. Cockerell] is to be retained, but this will lose a great part of its significance between the two massive red brick and flint hostels with their "free classic" treatment.'

The case against the design of the proposed new buildings was put most forcibly by two AA students, G. F. Sheere and R. Grainger, in a letter in the same issue. 'We feel,' they wrote, 'that it would be nothing short of a tragedy if this tangible expression of our deep-felt thanks should take the form of the buildings illustrated in the Press—buildings that are of a pompous and pretentious character, completely divorced from the way of life of those forced to reside in them, buildings that are lifeless, insincere, and a direct antithesis of all that is expressed in student life to-day. If we are to proclaim to future generations this gratitude we felt in 1950 for the help received from overseas during and since the war, the buildings must above all be as vigorous, imaginative and sincere as the spirit which prompted them.'

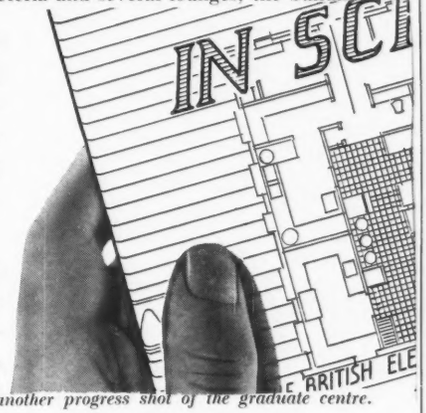
THE ARCHITECTURAL REVIEW associates itself unreservedly with these protests. Mecklenburgh Square, in spite of all that has already been done to spoil it, is still too good a place to be ruined out of hand. If there must be a new hostel in it, Messrs. Sheere and Grainger are obviously right in the suggestion that they go on to make, that the design should be selected in open competition—though their further suggestion, that the assessors should be chosen by the students themselves, raises difficulties which they may not have foreseen.

Gropius at Harvard

The new Graduate Centre at Harvard, part of the model of which is shown on this month's cover, goes ahead with all the expedition one expects of building operations in the United States; the progress photographs on this page were taken in March. The significance of Harvard turning to Walter Gropius and the Architects' Collaborative for the design after thirty years of architectural timidity needs no underlining. The Centre, which will house 600 graduate students and dine 1,000, comprises

8, progress photograph of the new graduate centre, Harvard.

seven dormitory blocks, all linked by covered walks to a community centre which contains a cafeteria and several lounges; the buildings are



9, another progress shot of the graduate centre.

of concrete faced with a buff-coloured cast stone' and Gropius has described them as being so related to each other as to create 'a sequence of surprise effects in space.' The estimated cost of the project is three million dollars.

1951 Architectural Awards

The 1951 Festival Council has decided to make awards for works of architecture completed in Britain since the war. The buildings or other works to be given the awards will be chosen by the Council for Architecture, Town Planning and Building Research. Anyone may nominate a work for the award provided the nomination is made with the owner's permission. Buildings nominated must be sited where they can be viewed externally by the public, must have been begun not earlier than August 15, 1945, and must be sufficiently complete to be susceptible of visual judgment by September 1, 1950. Certificates will be presented to the designers of the chosen works at a ceremony to be held in London when the festival opens, and a plaque will be fixed to each chosen building. The conditions of the award lay emphasis on civic design; in addition to buildings and groups of buildings, improvements to urban and rural landscaping are eligible, but not large projects like whole new towns, or works as small as individual private houses.

Nomination forms can be obtained from the Secretary of the Festival of Britain, 2, Savoy Court, London, W.C.2; nominations must reach him not later than August 31.

INTELLIGENCE

Professor Eliel Saarinen has notified the Royal Institute that to his great regret it will not be possible for him to visit this country later in the year in order to receive the Royal Gold Medal in person.

The London County Council has appointed Mr. Colin A. Lucas, Mrs. R. Stjernstedt and Mr. H. G. Gillett to the new Housing Division of the Architect's Department. Mr. Lucas has, in recent years, been engaged in research on the planning and equipment of houses with the Ministry of Home Security, the Department of Industrial and Scientific Research and the Chief Scientific Adviser's Division of the Ministry of Works. Mrs. Stjernstedt has been employed recently as a senior architect by the Stevenage Development Corporation, and Mr. Gillett has been a member of the LCC architect's department since 1936.

A new programme in city planning, leading to the degree of Master of City Planning, has been established in Yale University's Department of Architecture. The new programme will require two years of study and will be open to a limited number of architects, landscape architects, civil engineers and others who already hold a professional degree in a related field.

Although the various proposals for dispersal from London still fall far short of the ultimate needs, the Minister of Town and Country Planning has decided not to accept the suggestion that a new town should be built at Dideot. The reason is that the scheme would involve too great a loss of exceptionally good agricultural land.

The Industrial Finishes Exhibition will take place at Earl's Court from August 30 to September 7.

EXHIBITIONS

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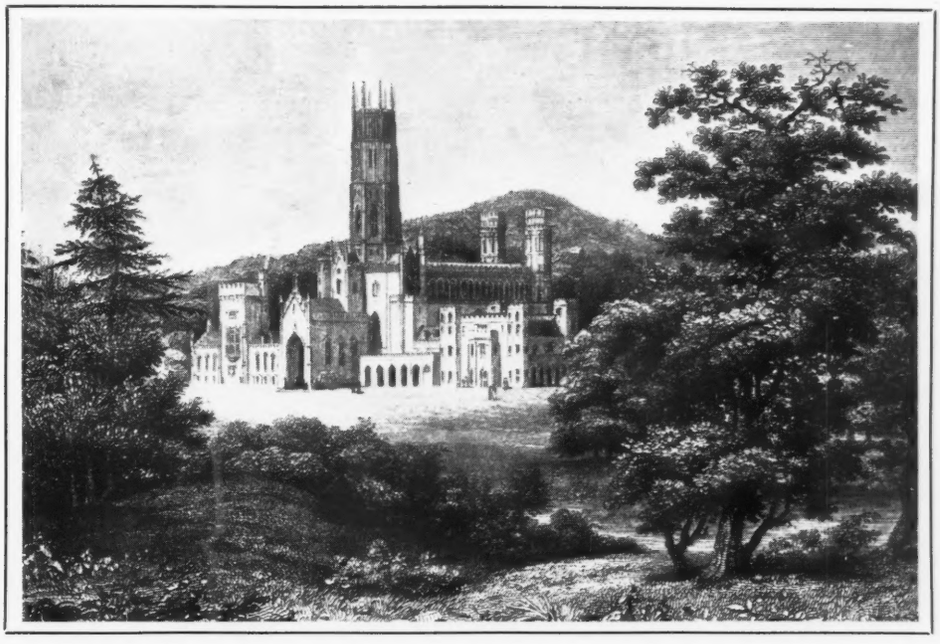
New London office buildings, the result of what is known as the Lessor Scheme, has been the subject recently of critical comment—see note on page 355. 2, street frontage of the two blocks, Belfort House and Lacon House, Theobalds Road, both the designs of Major A. S. Ash; 3, offices in Rockley Road, Shepherds Bush, designed by Collcutt and Hamp; 4, St. George's House, New Oxford Street, by Lewis Solomon; 5, St. Anselm's House in Davies Street, designed by Howard and Souster, and 6, a detail of St. George's House.

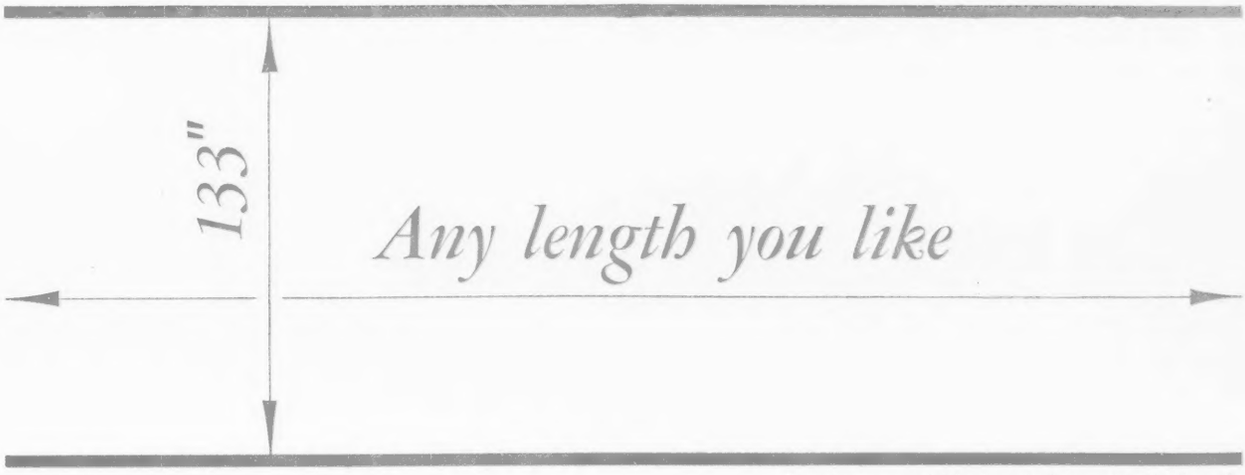
expediency first—of driving a good bargain from the point of view of getting a large square footage of accommodation for a reasonable rent in a short time. There is no overall planning of sites and no consideration of the overall effect on the architecture of London. . . . The Ministry of Works leaves the appointment of an architect in the hands of the lessors and exercises no supervision of his efforts. It takes no responsibility—and seems to take no interest—in the standard of design exhibited in the buildings put up under this scheme.'

What that standard is may be seen only too clearly from the accompanying photographs of buildings put up under the scheme in London. They suggest that whatever the practical arguments for and against it, the æsthetic arguments against it in its present form are quite overwhelming. All these buildings, and others now being built under the Lessor Scheme throughout the country (to a total of thirty), although built by private enterprise and designed by private architects, are in effect government buildings for the next forty years. Surely the least that the Ministry of Works can do is require good design as a condition of the grant of a building licence.



40" x 22"

The ordinary, undecorated windows of Fonthill Abbey were "composed of four squares of the very best plate glass, each square measuring forty inches by twenty two . . ." according to John Rutter's *Description of Fonthill Abbey and Demesne.* When James Wyatt designed this overpowering contribution to the "Gothic Revival" for William Beckford, and built it between 1796 and 1799, he used larger areas of plate than were normally employed at that time. Wyatt created a parody of mediaeval architecture, but his generous plate glass windows were ahead of their time. Now you can specify Polished Plate Glass . . .



Supplies are available through the usual trade channels.

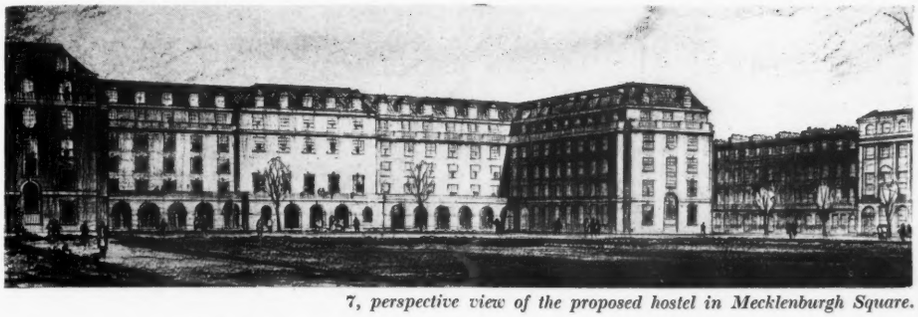
Architects and Architectural Students are invited to consult our Technical Sales and Service Department at St. Helens, or our West End Office at Selwyn House, regarding the properties and uses of glass. Head Office and Works: St. Helens, Lancashire. Tel.: St. Helens 4001. West End Office and Showrooms: Selwyn House, Cleveland Row, St. James's, S.W.1. Tel.: Whitehall 5672-5676.

PILKINGTON BROTHERS LIMITED

This new coreplate and mirror shop for C. A. Parsons & Co. Ltd., Newcastle, is 360 ft. long, 120 ft. wide and 39 ft. 9 in. to the ridge. It has a rigid portal frame structure with crane gantries running full length.

Steelwork by

DORMAN LONG



7, perspective view of the proposed hostel in Mecklenburgh Square.

The Future of Mecklenburgh Square

The Lord Mayor of London's National Thanksgiving Fund, whose object is to provide hostel accommodation for post-graduate students from the Dominions as a return for gifts of food made by the Dominions to Britain during and after the war, seems to have been launched in a peculiarly light-hearted manner, with very little thought given to its implications. The protest made by the Lord Mayors of certain provincial cities at their not having been consulted was rightly given considerable publicity by the Press at the time. Another aspect of the proposal was first pointed out in *The Times* by Mr. S. W. Jeger, M.P., whose letter was quickly followed up by others.

The scheme, it must be explained, involves the building of a vast hostel on the north side of Mecklenburgh Square to balance Sir Herbert Baker's London House, which already occupies the south side. As one of *The Times* correspondents, Mr. Jerry Granger-Taylor, put it, this 'means the end of one of the finest Georgian squares left to London after the war, and this fact ought surely to be admitted: it has so far been glossed over in all public pronouncements. The majestic east side of the square [designed by Joseph Kay, a pupil of S. P. Cockerell] is to be retained, but this will lose a great part of its significance between the two massive red brick and flint hostels with their "free classic" treatment.'

The case against the design of the proposed new buildings was put most forcibly by two AA students, G. F. Sheere and R. Grainger, in a letter in the same issue. 'We feel,' they wrote, 'that it would be nothing short of a tragedy if this tangible expression of our deep-felt thanks should take the form of the buildings illustrated in the Press—buildings that are of a pompous and pretentious character, completely divorced from the way of life of those forced to reside in them, buildings that are lifeless, insincere, and a direct antithesis of all that is expressed in student life to-day. If we are to proclaim to future generations this gratitude we felt in 1950 for the help received from overseas during and since the war, the buildings must above all be as vigorous, imaginative and sincere as the spirit which prompted them.'

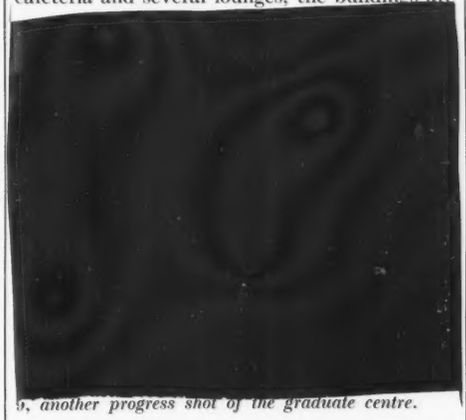
THE ARCHITECTURAL REVIEW associates itself unreservedly with these protests. Mecklenburgh Square, in spite of all that has already been done to spoil it, is still too good a place to be ruined out of hand. If there must be a new hostel in it, Messrs. Sheere and Grainger are obviously right in the suggestion that they go on to make, that the design should be selected in open competition—though their further suggestion, that the assessors should be chosen by the students themselves, raises difficulties which they may not have foreseen.

Gropius at Harvard

The new Graduate Centre at Harvard, part of the model of which is shown on this month's cover, goes ahead with all the expedition one expects of building operations in the United States; the progress photographs on this page were taken in March. The significance of Harvard turning to Walter Gropius and the Architects' Collaborative for the design after thirty years of architectural timidity needs no underlining. The Centre, which will house 600 graduate students and dine 1,000, comprises

8, progress photograph of the new graduate centre, Harvard.

seven dormitory blocks, all linked by covered walks to a community centre which contains a cafeteria and several lounges; the buildings are



9, another progress shot of the graduate centre.

of concrete faced with a buff-coloured cast stone' and Gropius has described them as being so related to each other as to create 'a sequence of surprise effects in space.' The estimated cost of the project is three million dollars.

1951 Architectural Awards

The 1951 Festival Council has decided to make awards for works of architecture completed in Britain since the war. The buildings or other works to be given the awards will be chosen by the Council for Architecture, Town Planning and Building Research. Anyone may nominate a work for the award provided the nomination is made with the owner's permission. Buildings nominated must be sited where they can be viewed externally by the public, must have been begun not earlier than August 15, 1945, and must be sufficiently complete to be susceptible of visual judgment by September 1, 1950. Certificates will be presented to the designers of the chosen works at a ceremony to be held in London when the festival opens, and a plaque will be fixed to each chosen building. The conditions of the award lay emphasis on civic design; in addition to buildings and groups of buildings, improvements to urban and rural landscaping are eligible, but not large projects like whole new towns, or works as small as individual private houses.

Nomination forms can be obtained from the Secretary of the Festival of Britain, 2, Savoy Court, London, W.C.2; nominations must reach him not later than August 31.

INTELLIGENCE

Professor Eliel Saarinen has notified the Royal Institute that to his great regret it will not be possible for him to visit this country later in the year in order to receive the Royal Gold Medal in person.

The London County Council has appointed Mr. Colin A. Lucas, Mrs. R. Stjernstedt and Mr. H. G. Gillett to the new Housing Division of the Architect's Department. Mr. Lucas has, in recent years, been engaged in research on the planning and equipment of houses with the Ministry of Home Security, the Department of Industrial and Scientific Research and the Chief Scientific Adviser's Division of the Ministry of Works. Mrs. Stjernstedt has been employed recently as a senior architect by the Stevenage Development Corporation, and Mr. Gillett has been a member of the LCC architect's department since 1936.

A new programme in city planning, leading to the degree of Master of City Planning, has been established in Yale University's Department of Architecture. The new programme will require two years of study and will be open to a limited number of architects, landscape architects, civil engineers and others who already hold a professional degree in a related field.

Although the various proposals for dispersal from London still fall far short of the ultimate needs, the Minister of Town and Country Planning has decided not to accept the suggestion that a new town should be built at Didcot. The reason is that the scheme would involve too great a loss of exceptionally good agricultural land.

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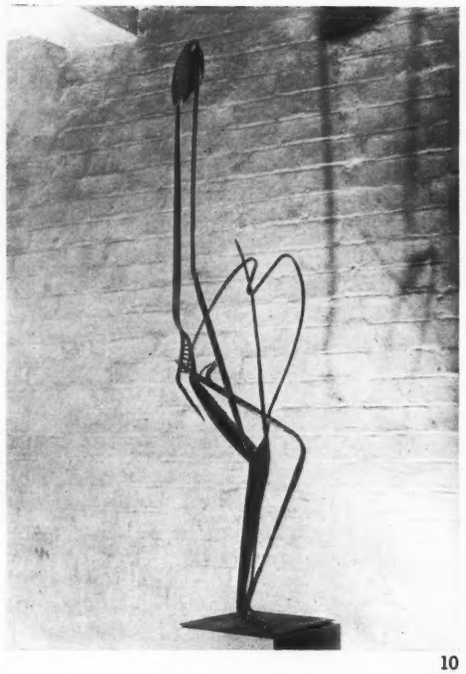
of the heavy-weights of the French side. (But the metaphor, which is becoming excessively mixed, must be dropped.) *The Horned Beast*, illustrated on this page, will not easily be forgotten by those who saw it. That does not mean all who visited the exhibition, since *The Horned Beast* (lent by Mons. Pablo Picasso) was not on show for the whole of its duration. The two other French sculptors represented opposite extremes; André Bloc (founder and editor of *Architecture d'Aujourd'hui* and designer of Le Club des Architectes in the 1937 Paris Exhibition) the purely abstract, and Germaine Richier (who was a pupil of Bourdelle) a decay-fascinated romanticism achieving highly sinister effects through the use of equivocal animal-vegetable forms.

There is nothing in the least sinister about the sculpture of Reg. Butler, whose new *Torso* showed that his interest in the textural possibilities of wrought iron which made itself felt in the seven-foot *Woman* of 1949 (also on show) is seconded by an astonishing technical virtuosity in this difficult material; in terms of structure too this is a remarkably satisfying work. Robert Adams is another very good sculptor, if a rather more conventional one, who was also represented by three pieces which would do honour to any contemporary company. The French painters, like the French sculptors, showed widely divergent trends, from the near-abstract mosaics of Jean Bazaine to the Klee-ish fantasies of Jacques Herold. Most visitors to the exhibition will probably have felt that in this department England, with Bacon, Craxton, Freud, Lambert and Lanyon, more than held her own.

The Leicester Galleries have been showing recent sculpture by Jacob Epstein, including a new large carving, *Lazarus*, in Hopton Wood stone (illustrated on this page). Those who decided long ago that Epstein's portrait bronzes are 'all the same' should take any opportunity that offers of seeing his *Dr. Vaughan Williams*, which in its own *genre* of romantic portraiture is unquestionably a masterpiece.



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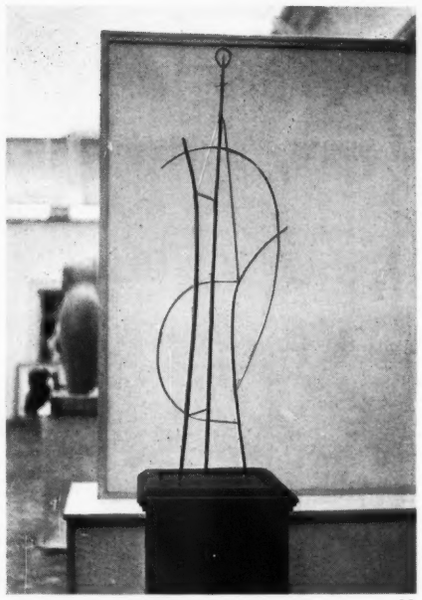

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LONDON [illegible], by Reg. Butler, 11, Figure in Brass, *by Robert Adams*, 12, Horned Beast, *bronze, by Henri G. Adam*, 13, The Bat, *plaster, by Richier, from the Institute of Contemporary Arts Exhibition at the New Burlington Galleries*, 14, Lazarus, *by Jacob Epstein at the Leicester Galleries.*

TRADE & INDUSTRY

Inset Domestic Space Heaters

The roaring log fire is hard to beat when one is a welcome guest and has the best chair. But in these days of full employment when one may be saddled oneself with the job of cleaning up the fireplace and cutting and carrying the wherewithal, apart from financing the depredations of smoke to one's paintwork and the costly luxury of losing over half the heat value up the chimney, the log fire is not so attractive.

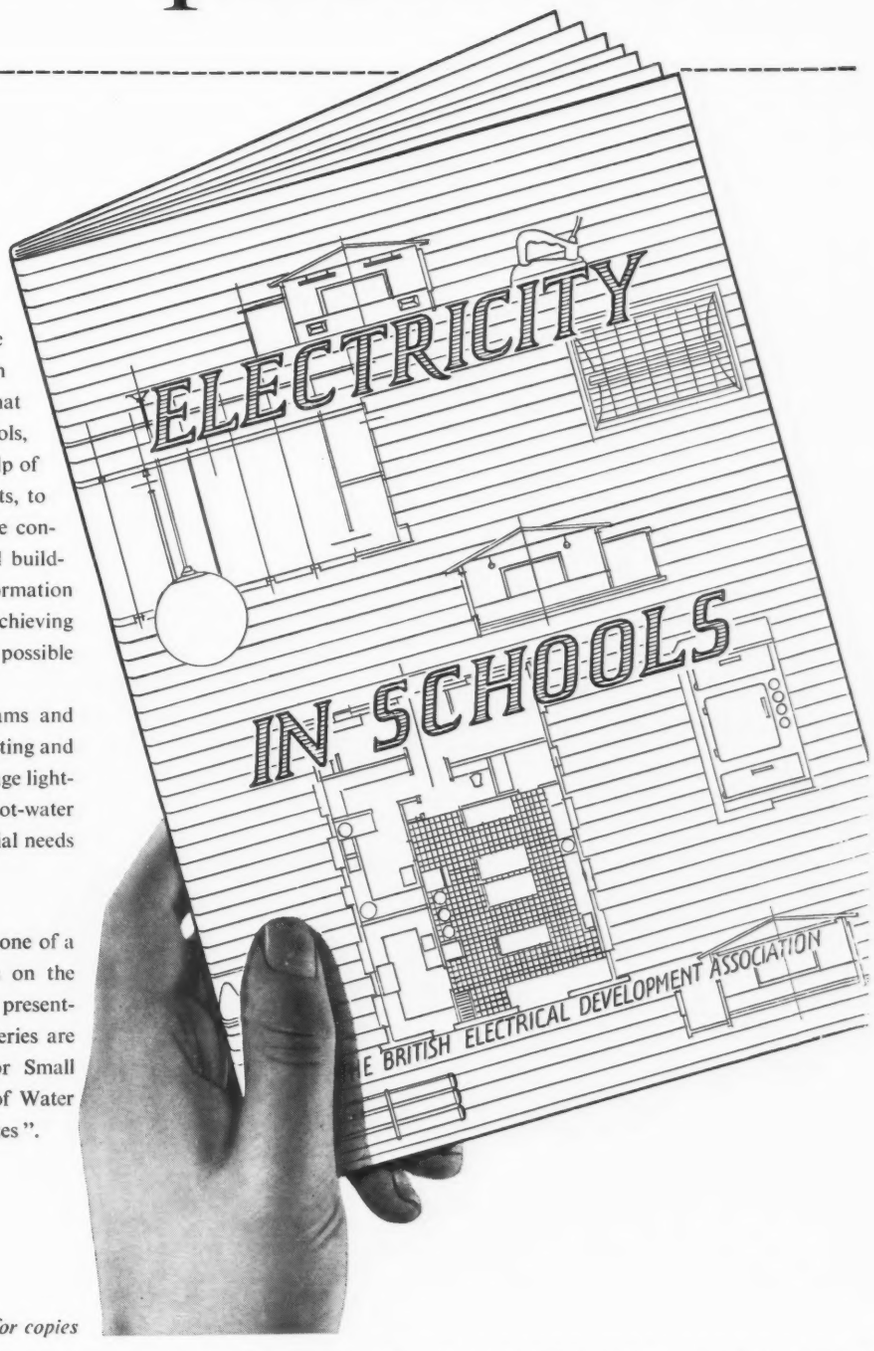
The electricity industry, among others, has long ago convinced the urban flat and house dweller of that. Before the war, radiant heating was giving way to space heating, the process by which the normal habit of hot air to rise was used to obtain a constant temperature throughout a room. In this class the Thermovent electric space heater was one of the first to be marketed. A heater of suitable size for the cubic capacity involved and fitted with thermostatic control, it is capable of maintaining a predetermined temperature which can, of course, be varied according to the purposes for which the room is required. Thus, to maintain a normal temperature of 62°—65°F, 1,200 watts is required for every 1,000 cubic feet of space. Where the temperature required is less, say 55°F, in perhaps a passage, 800 watts of heating is sufficient per 1,000 cubic feet.

This form of heating divorces the source of the heat from its effects. The heater as it were is anonymous and thus makes it a far more flexible piece of furniture. The illustration, which is of a 2 kw. Thermovent space heater, suggests for example that it may even form part of the furniture. This is only possible since the heat transmitted through the casing is negligible and the possibility of its spoiling the woodwork just does not arise. It might equally well be built into a wall without any danger of blackening.

The body of the heater shown is of walnut

[continued on page 360

Send for this new EDA publication



THIS comprehensive E.D.A report which covers all the services that electricity can provide for schools, has been drawn up with the help of a group of consultant architects, to provide relevant data for those concerned in the design of school buildings. It offers complete information about the newest ways of achieving efficiency and the lowest possible maintenance costs.

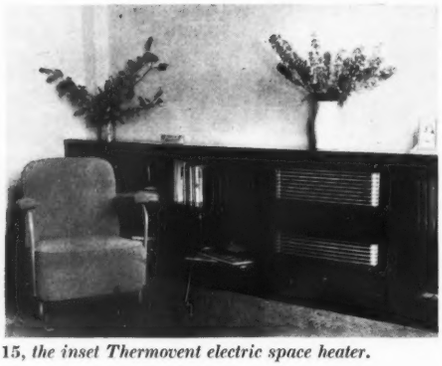
It is illustrated with diagrams and plans, and has chapters on lighting and heating, kitchen equipment, stage lighting, homecraft rooms, the hot-water systems best suited to the special needs of schools, and wiring.

E.D.A PUBLICATIONS

" Electricity in Schools " is one of a series of E.D.A publications on the application of electricity to present-day planning; others in the series are " Electric Kitchen Design for Small Houses " and " The Design of Water Heating Systems in New Houses ".

Architects and builders are invited to write for copies

THE BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION, 2 SAVOY HILL, LONDON, W.C.2



15, *the inset Thermovent electric space heater.*

continued from page 358]

coloured plastic and the grilles are anodized aluminium in old gold colour. This is the standard finish for all domestic models. A standard voltage is used of 220/250 volts AC and DC, but models fitted with thermostat controls are only available for AC mains. Heaters for use on voltages of 100/120 and 200/220 are obtainable to special order.

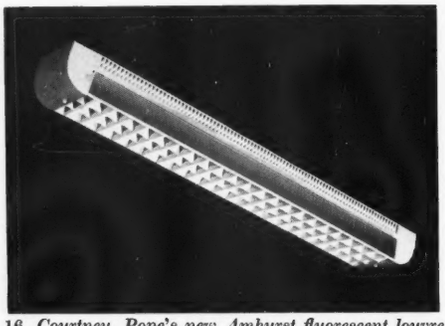
Overall panel dimensions, 1 kw. Inset model: 14½ inches wide by 22¼ inches high by 1⅜ inches projection. Recess dimensions: 12½ inches wide by 18¾ inches high by 5¼ inches deep. 2 kw. Inset model: overall, 23⅛ inches wide by 22¼ inches high by 1⅜ inches projection and recessed 20¾ inches wide by 18⅜ inches high by 5¼ inches deep. Prices with purchase tax range from £10 7s. 9d. to £18 3s. 7d.

Thermovent Heating, E. K. Cole Ltd., Southend-on-Sea.

A New Fluorescent Fitting

The days of the naked fluorescent tube are numbered. Almost unnoticed, rarely acknowledged, the industrial designer has been called in generally now to turn an extremely useful piece of lighting equipment into a decent looking fitting. It is not so easy as it may appear at first sight, for quite a little collection of control gear and wiring has to be dispersed within the casing, and has to be accessible, and the tube itself must be easy to get at. All this before the questions of external detail and lighting proper is dealt with.

Almost every fitting these days has one device or another either to diffuse or shield the glare. One of the most usual forms is the 'egg-crate' louvre illustrated by Messrs. Courtney, Pope's new Amhurst fitting. This is intended mainly for industrial use in conditions where glare and brightness distribution are of prime importance. The shielding angles provided by the louvre panels are 30° longitudinally and 30° laterally. On either side of the fitting are panels of prismatic glass which refract the light downwards at an angle of 45° thus providing an even distribution of light over a wide area. The brightness figures comply with the Home Office regulations. The row of apertures at the top provide illumination from the ceiling and ventilation from the control gear. The fitting is rectangular in shape except for the curved ends and is made for twin 5-foot or 4-foot tubes.



16, *Courtney, Pope's new Amhurst fluorescent louvre fitting.*

Courtney, Pope (Electrical) Ltd., Amhurst Park Works, Tottenham, London, N.15.

Electric Fans

The struggle to keep cool in a sweltering office in mid-August is never helped by the thought of everyone else doing it aided by unlimited sea-water and lashings of iced drinks. Even if you can take yourself back to the days when you never contemplated taking your coat off whatever the temperature or humidity your one solace was probably a large, whirling, brass bladed guillotine of a fan which sounded like a threshing machine and blew a pleasant blast down the back of your neck for one short moment of its regular traverse from side to side across the room.

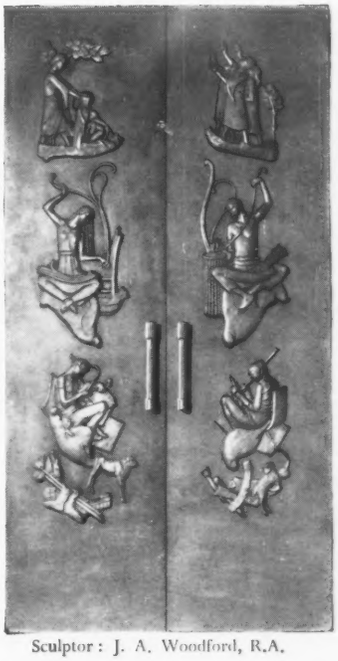
Anyone for whom those blades held a secret terror can now relax, for rubber has replaced the slicing properties of metal in the latest fan produced by GEC. This is a table fan of 8 inches blade radius, with the blades designed in a curve and of sufficient rigidity to produce, according to the makers, 600 cubic feet of displacement per minute. Though it is rather difficult to visualize what that actually signifies, it is nevertheless quite a lot of wind. What is more, if one puts one's hand in the fan when it

[continued on page 362

Hope House, Westminster. Five minutes from Big Ben.

A TECHNICAL ADVISORY SERVICE FOR THE ARCHITECT

The Morris Singer Company announce the extension of their architectural metalwork section at Hope House, Great Peter Street, Westminster. The purpose is to provide architects and designers with a more comprehensive service in the detailing of designs and all the technical assistance that may be required in designing for cast and hand wrought ferrous and non-ferrous metals. Those interested are cordially invited to take full advantage of this newly extended service.



Sculptor: J. A. Woodford, R.A.

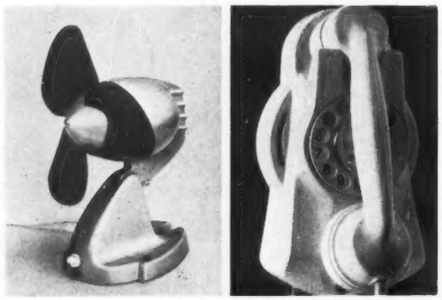
MORRIS SINGER COMPANY LTD

ESTABLISHED OVER 100 YEARS

continued from page 360]

is at full blast there is nothing worse to fear than reproving slaps on the hand at the rate of 2,100 r.p.m. for one's temerity.

The base and motor housing are of pressure



17, 18, *a new rubber bladed fan and the 'Muraphone' both manufactured by GEC.*

die-castings hinged where they join so that the fan may sit on a table or be mounted on a wall. Finished in silver grey, it is made from 220/230 volts, though it may be had in other voltages. Price £4 1s. 3d., including purchase tax.

The GEC 'Muraphone' is another satisfactory example of contemporary industrial design. Manufactured in a plastic material it is available in a selection of four standard colours: black, ivory, green and red.

General Electric Company, Ltd., Magnet House, Kingsway, W.C.2.

CORRESPONDENCE

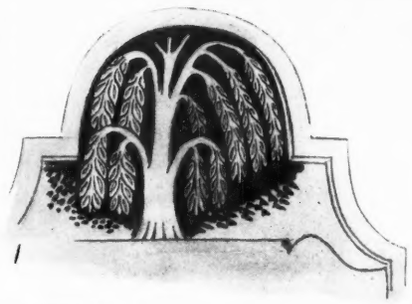
To the Editors
THE ARCHITECTURAL REVIEW

DEAR SIRS,—Your contributor* is wrong in supposing that the New Orleans willows are either unique or essentially American, or the original of this form. The accompanying examples of willows from headstones in Dorset show affinities to those from New Orleans too striking to be attributed to chance. They come from a very narrow area centring on Bridport which has six such headstones in its

19, *BRIDPORT*, 1833.

parish churchyard. Burton Bradstock, a small village three miles to the east, has no fewer than ten, and Symondsbury, even smaller, about equidistant on the opposite side, has several. Other village churchyards as near or nearer show none, nor do the neighbouring towns of Axminster or Lyme Regis.

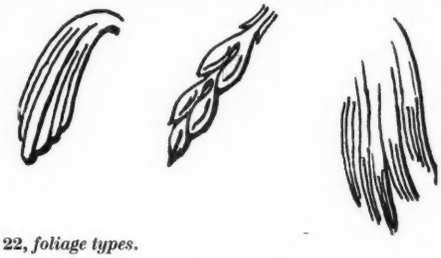
20, *LODERS*, 1834.



21, *BURTON*, 1869.

It is impossible to attach a precise date to the earliest of these stones, for weathering and a variety of stonecrop have added colour and charm but obscured some dates. A Bridport example (19) though puzzling as stylistically the most sophisticated, bears the earliest indisputable date—1833. Another (20), which has some unique characteristics, is dated 1834. The willow vogue reached its peak by 1850 and extended to about 1870. Example (21), dated 1869, is remarkable for its bold unsophistication.

The stylized treatment of foliage is of three



22, *foliage types.*

distinct types (22). Variety is present, too, in the depth of relief. The three-pointed, leafless shoot

[continued on page 364

* THE ARCHITECTURAL REVIEW, February, 1950, p. 132.

continued from page 362]

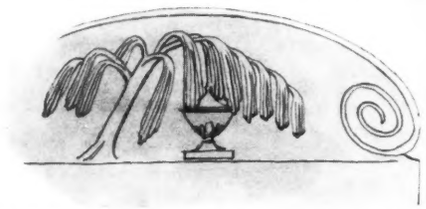
separating the two sides of the drooping boughs is a recurrent detail. Does it symbolize the trinity?

In few cases can the masons' names be discovered. Signatures are cut at the base of the stone, now

23, *BURTON*, 1849. *Mason: W. Fry.*

commonly below the earth level. Three, including (23), bear the inscription 'W. Fry'; two, simply 'Chambers.'

Though the weeping willow is a common tree in New Orleans, which it is not in this part of England,



24, *BRIDPORT*, 1843(?).

it is unlikely that the Dorset form was derived from America: evidence of style and, more emphatically, of date precludes this. A reverse derivation is possible or perhaps a common derivation from some third place of origin.

Yours, etc.,

EDWARD RUDGLEY.

ACKNOWLEDGMENTS

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CONTRACTORS etc

General Post Office & Telephone Exchange. *General contractors:* Ash & Watson (Trinidad). *Structural engineers:* Cargo Fleet Iron Co. *Lifts:* Marryatt & Scott Ltd. *Metal windows and wrought iron grilles:* Crittall Manufacturing Co. *Plumbing and air-conditioning:* Arthur Scull & Son Ltd.

Department Store (Sandbach Parker). *Consulting engineers:* L. G. Mouchel & Partners. *General contractors:* John Mowlem & Co. *Piling:* Estacas Franki Ltda. *Metal windows:* Crittall Manufacturing Co. *Clocks:* Gillett & Johnston Ltd. *Shop fronts and fittings:* Fredk. Sage & Co. *Plumbing and air-conditioning:* Arthur Scull & Son Ltd. *Electrical installation:* Barlow & Young Ltd.

Department Store (Booker Bros., McConnell). *Consulting engineers:* L. G. Mouchel & Partners. *General contractors:* John Mowlem & Co. *Piling:* Estacas Franki Ltda. *Metal windows:* Williams & Williams Ltd. *Shop fronts and fittings:* Fredk. Sage & Co. *Lifts:* J. & E. Hall Ltd. *Plumbing and air-conditioning:* Arthur Scull & Son Ltd. *Electrical installation:* Barlow & Young Ltd.

Department Store (Wm. Fogarty). The subcontractors were as follows: *Concrete piles:* Franki Compressed Pile Co., Brazil. *Metal windows:* W. James & Co. *Lifts:* J. & E. Hall Ltd. *Sanitary fittings:* The General Iron Foundry Co. *Shop fronts and showcases:* Courtney, Pope Ltd. *Electrical installation:* Barlow & Young Ltd. *Blinds:* J. Dean Ltd. *Strong room door:* John Tann Ltd. *Ironmongery:* Stedall & Co.

Appointments