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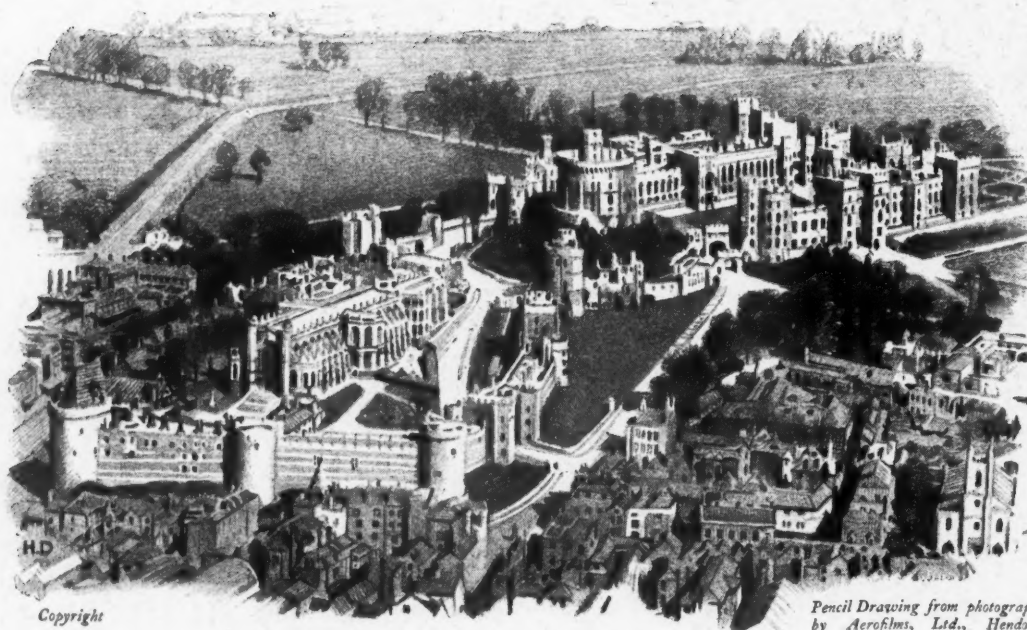
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Vol. LXIX

April 1931

No. 413



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DUKE WILLIAM OF NORMANDY chose the site of Windlesora for his Citadel home amidst beautifully wooded and well watered country. The "Citadel," now known as Windsor Castle—with its towers and battlements, its sloping banks washed by the ever-flowing Thames, is linked with centuries of historical association.

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The facing page. Plate I. S. GIORGIO FROM THE DOGANA: EARLY MORNING. Turner's first Venetian water-colour.

Sir Mervyn Macartney

Editor of

The Architectural Review

1906-1920.

By W. G. Newton.

THE retirement of Sir Mervyn Macartney from the position of architect to the Dean and Chapter of St. Paul's Cathedral, cannot be allowed to take place without some tribute in these pages to the great debt which THE ARCHITECTURAL REVIEW owes him for his services to it as Editor during the fourteen years from 1906 to 1920. When the REVIEW was launched in the late nineties of last century, one of its primary objects was to publish illustrations which would be of service to architects and architecture. It was felt that while the contemporary architectural journals were illustrating quite adequately, the day by day productions of English architecture, there was room for a magazine which should exercise very definite discrimination and confine itself to work, whether new or old, which would be an inspiration to practising architects. With this end in view its editorial policy was at first controlled by a committee of architects of distinction, and when the committee system proved too elaborate and cumbersome a machine, the position of sole editor devolved upon one of its most active and interested members, Mervyn Macartney, who, twenty-five years earlier, had shared the inspiration of Norman Shaw's office with Ernest Newton, Lethaby, Edward Prior, and Gerald Horsley. In the sphere of architectural illustration, we of today are particularly beholden to his abiding enthusiasm for old English work, and especially for the work of that period which shares with Tudor building a character and a flavour peculiarly and gratefully national; the period of Wren and the generation of his immediate successors. It was by no means a generally admired period thirty years ago. Even architects were inclined to depreciate work so sane, straightforward and orderly, and prefer to it the quaintness of

Flanders, as some compensation for the vanished romance of the Gothic Revival. All the greater, therefore, is the honour due to Macartney's judgment and pioneering enthusiasm. The wealth of illustrations in "Belcher and Macartney" reinforced Blomfield's championship of the then disregarded Georgian period.

Anxious that the influence of old work should spread more widely, and reach readers who might not be willing to buy a number of large volumes devoted to architectural illustration, Macartney launched the series which came to be called *The Practical Exemplar of Architecture*, in which, grouped under various headings, examples of ways of doing things—a cupola, a door, a chimneystack, a staircase—were illustrated by admirable measured drawings and also by photographs, a most fruitful source for the serious student of architecture. His idea has gained the flattery of widespread imitation both in this country and in the United States. For its success it needed enthusiasm, a wide knowledge of buildings in all parts of the country, and the ability to inspire a band of youthful draughtsmen with his own ideals of quality and skill. The great value of the series and its far-reaching success are a proof of his prevision and ability.

All his days a student of architecture, he has followed the Shaw tradition of looking upon architecture more as an art than a profession. He has had the happiness of seeing Wren's cathedral thoroughly repaired and made structurally sound during his tenure of the office of surveyor to the fabric. Coming as he does from a long-lived stock, it will be the hope of all his friends, and they are many, that he has before him many years of studious leisure.

Dying Hard.

Architecture and the Public School.

By Lionel Cuffe.

THE vogue of the public-school shocker—that sink of adolescent revelation—has delighted an appreciative public with some of the more obvious horrors of the world of school, but there is one neglected aspect of school life which advertises itself brutally to the eye, and seems to proclaim from and by its own house-tops that school life is what it is alleged by our bright young authors to be; the *architectural* horrors of the world of school have never been sufficiently exploited.

During the nineteenth century the muse of Education was very much the poor relative of her more robust sisters Commerce and Self-Help. At the same time the Victorian idea that children were necessarily limbs of Satan made it seem only right and rational that they should be consigned to buildings which were a cross between a workhouse, an infirmary, and a lunatic asylum. On the education of his children the Victorian parent of the middle classes was always apt to be stingy, and this combined tradition of Puritanism and poverty has left us with an interesting inheritance.

Clearly, the schools fall roughly into three classes. There is the old-established or recently prosperous public school, charging high fees, often with excellent buildings and often surpassing in pretentious atrocity anything else on the market. Then there are the independent feeble imitations of the public school, which are the worst and most consistent exponents of mean and vile architecture. Finally, there are the state-aided schools which, until lately, have been architecturally pretty frightful, but which probably today are architecturally the most progressive. It is with the first two categories that we are here concerned.

The public schools are at present at the parting of the ways. Either they are going to adapt themselves to modern conditions or they will peter out. For the public-school spirit at its worst—and, alas, its most widespread—an evil architectural setting seems appropriate enough. But if Mr. Perrin and Mr. Trail drag out the frowzy tragedy of their lives in settings which are appropriate for them—they are, poor things, at that stage brutalized and don't mind about architecture (if indeed they ever did)—boys are still sensitive, and this aspect of school is etched, as it were, into the young mind with the full bite of its acid atrocity.

At one famous school it was quite seriously taken as a matter of course that, after football (which implies mud), five boys should use the same bath water in turn (there were two baths among fifty or sixty boys and the heating apparatus was inadequate). Further, there were four lavatories between this same number of boys, and a twenty-minutes' interval allowed after breakfast for the use of them. This was simply because the house in question had been run up in the worst days of Victorian jerry-building, and the authorities of the school preferred to spend their money on a pretentious war memorial rather than on ensuring that the elementary decencies of life should be provided for boys whose parents were paying for their education at the rate of something like £400 a year. But this sort of thing, though

it dies hard, is dying in the bigger schools. It is among the imitators of the public schools that there is no hope. The ordinary routine of such a school demands (and gets) the most loathsome architectural setting. The rather dirty tablecloths, the slightly stale bread, the tepid drinking water, and round the table those grubby little hands, those shrill incessant voices, or perhaps—for many of these schools prepare young gentlemen for the army, the universities, and, indeed, commercial life—perhaps the clouded water is gulped, the bread crumbled by the chilblained fingers of adolescence, and the victims are gawky and sit there silent, lost in the day-dreams appropriate to their age.

It may be said that schoolmasters are poor and that small independent ventures have to be conducted on a small scale. This is true, and the answer to it is that such ventures ought not to be made. The law of supply and demand cannot be allowed to operate ruthlessly in the educational field; it produced Squeers and the like and the modern world has no place for them. The big grammar schools give far better value to parents than this sort of school, which, pretentious and inefficient, exists only owing to the snobbery and ignorance of a certain class of parent, and since such parents, surprisingly, often achieve children who are potentially intelligent, it is in the interest of the nation that such schools should be shown up for what they are and the alternatives better advertised. The present Government, which has shown that, in spite of great difficulties, it has the interests of education at heart, might well turn its attention to what is clearly a real evil. These schools exist and multiply in a limbo where they are mercifully obscure. It is almost unbelievable that any parent, however poor and however genteel, could consign without a qualm his or her offspring, however maddening, to such jerry-built architectural abortions. But presumably, since the schools exist in abundance, there are parents—and guardians—who are idiotic or brutal enough to prefer such alternatives to the state-aided secondary school.

It is clear that this sort of school has got to be rationalized. It has got to disappear, and it will disappear. Meanwhile, for the benefit of the children, there must be a vigorous propaganda against it.

We are left, therefore, with the big public school and the state-aided school. Clearly in the future there will be some linking up between the two. Both are on a large scale and are becoming more and more important in the national life. The new conception of education as something cheerful and free, a widening of horizons and an enrichment of character—something, in a word, which is a vigorous adventure—ought to have and will have its appropriate architectural expression. It is indeed quite clear that, next to the scrapping of most of the existing scholastic personnel, the most important step towards rationalizing our educational system is the rationalization of the buildings which house it. If business can rationalize its buildings, why cannot education do the same? Strange as it may seem, education is, after all, rather important.



c. 1767.

King: George III.

FIG. 586.—The marble hall at Kedleston Hall, Derbyshire. An illustration of Adam's work in the grand manner combined with that "light and graceful" decoration which he affected.

A History of The English House

By Nathaniel Lloyd.

XXVII.¹—Later Eighteenth Century: Early Nineteenth Century: Revivals.

Kings:

GEORGE III .. 1760-1820. GEORGE IV .. 1820-1830. WILLIAM IV .. 1830-1837

IN later eighteenth-century plans we find some of the larger houses still designed with central blocks having two or four smaller blocks connected by corridors, as at Kedleston (Fig. 523). The provision, in large houses, of halls and galleries for the display of works of art continued. Nash's own house in Lower Regent Street had extensive "galleries of painting and of architecture." Considerations of sites upon which houses were to stand naturally influenced the designs of town houses more than those in the country. The brothers Adam refer to this²:

The smallness of the sites upon which most houses in London are built, obliges the artists in this country to arrange the apartments of the Ladies and Gentlemen in two floors . . . we can only introduce both these upon the principal floor in our country houses, where our space is unconfined.

The plans of No. 20 St. James's Square (Fig. 530) show that Adam arranged Sir Watkin Wynn's rooms on the ground floor, whilst Lady Wynn's were on the first or "principal floor." At Kedleston, Lord and Lady Scarsdale's bedrooms and dressing-rooms were placed on the principal floor of the north-west wing, but Lady Scarsdale's rooms faced due north.

The most conspicuous change is in apartments having other than rectangular plans. Sometimes these were octagonal, as in Fig. 536, from Plaw's *Rural Residences*, and in Fig. 530 of the Adam house at No. 20 St. James's Square.

¹The previous articles were published in the issues of THE ARCHITECTURAL REVIEW for January—July, October, November 1928; January—May, October—December 1929; January—April, June, July, October—December 1930; and February 1931.

²The Works of Architecture of Robert and James Adam, 1777. Preface.



1769.

FIG. 587.—Chandos House, London.
Robert Adam, Architect.

King: George III. 1769.

FIG. 588.—No. 3 The Terrace, Richmond Hill,
Surrey.

FIG. 587.—The paintings in the ceiling of the first drawing-room are by Angelica Kauffman. The fillings of the panels have now disappeared, but they may, originally, have contained paintings similar to those at Osterley Park by Zucchi. Or they may have been furnished with stucco ornament, like the panels in the eating-room at Osterley, which also contains smaller panels filled with paintings. Although the panel moulds in the first drawing-room

ceiling at Chandos House are large, the detail is not coarse. FIG. 588.—The practice of coving the angle of the wall and ceiling was sometimes extended to the rounding of other angles. In this room it has also been carried out in the door architrave and windows. FIG. 589.—The dining-room ceiling and walls show the slight and graceful decoration of the period, but it differs from the Adam designs in its free treatment and naturalistic motifs, which may be compared with FIGS. 587, 592. The colouring of the ceiling ornament is original. The framing of the sunk wall panels has a reeded moulding, with crossed ribbon ornament at intervals. Some panels contain pictures, whilst others have delicate ornament in character with that of the ceiling. The panel over the fireplace has a figure emblematic of Music. The mantelpiece, doorcase, and sideboard are contemporary; indeed, except for the Venetian chandelier, the decoration of the room is unusually complete.



c. 1770.

FIG. 589.
Drayton House,
Northamptonshire.

King: George III.

In each of these plans we find, also, rooms with curved ends; sometimes semicircular, sometimes segmental, as employed, also, by Sir John Soane at Tooting (Figs. 549, 550). The circular salon affected by Palladian architects, as at Mereworth (Fig. 442), was used by their successors, who also planned rooms which were perfect ellipses. It happened sometimes that provincial designers were unsuccessful in imitation of these, or realized the difficulties of fitting furniture against curved walls and so broke the curve of the ellipse by making a short length of wall straight. The greater architects, like Adam, overcame the difficulty by designing furniture to fit the curve. A favourite practice was to form a semicircular end in a dining-room and design the sideboard to fit this. Wood's semicircular end for a staircase well at Queen Square, Bath, 1729 (Fig. 450), became a favourite feature in the late eighteenth century, and Soane seems to have been particularly attached to this treatment, as at Tooting (Fig. 449) and at Buckingham House.

The plan from Nicholson (Fig. 560), c. 1823, shows plan crystallization into the form which was adopted with little variation for middle-class houses and villas during the first fifty years of the Victorian period.

In the examples given, plans have been chosen of houses which are typical, each of its period, because these are less confused than plans of buildings to which additions and alterations have been made from time to time, as, naturally,



c. 1770. King: George III. 1772.
FIG. 590.—Harewood House, near Leeds.
Robert Adam, Architect.



King: George III.
FIG. 591.—The music-room at No. 20 St. James's Square, London.
Robert Adam, Architect.

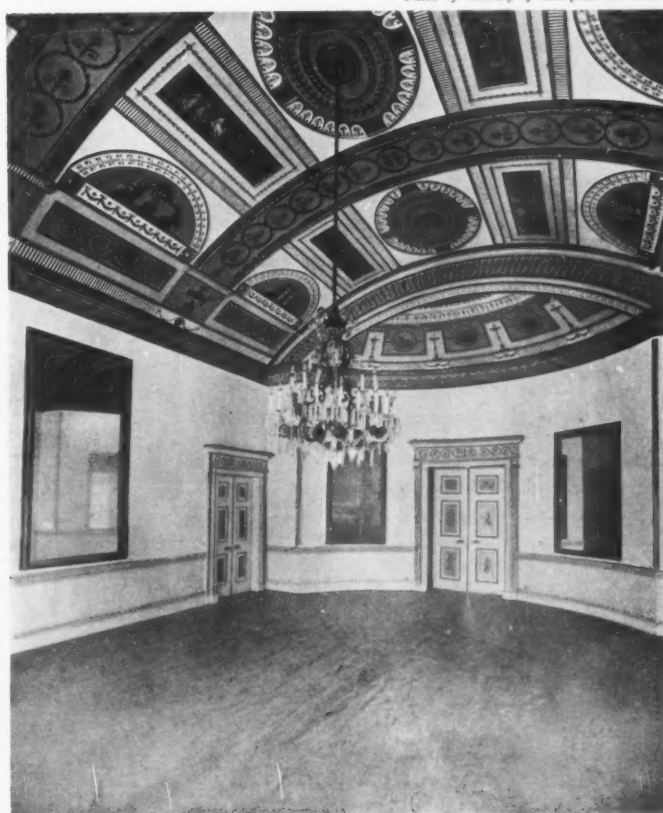
FIG. 590.—The ceiling design of the gallery includes painted pictorial panels by Rebecca or Rebecchi, and the stucco work is by Rose. In this ceiling Adam's treatment is far superior to that at Moor Park, which is heavy in appearance. The furniture was designed for the house and supplied by Chippendale. FIG. 591.—A very complete example of Adam ceiling and wall decoration in his lightest manner. For the shape of the room see plan, Fig. 530. FIG. 592.—The tendency towards curves is carried, in the large drawing-room, to a segmental or barrel ceiling, in addition to the segmental end of the room. Circles and ellipses are also conspicuous in the design of the ceiling ornament.

bore more decoration than in the first half of the century, and frequently so much so as to be conspicuous, as in Adam work (Fig. 526). Sir John Soane showed more structural ingenuity. He affected horizontal sky-lines and his handling of masses, often devoid of decoration or trimmings of any description, anticipated our most recent

has happened to many houses, in some of which the changes may be traced more easily than in others. Fig. 533 shows the development of a farmhouse in Lincolnshire.¹ First the typical "two-down and two-up" East Anglian cottage, probably roofed with reed and in its ground plan recalling the earlier hall-house. About 1780 agricultural prosperity warrants a trim Georgian addition and rearrangement, which result in a good farmhouse. After the Napoleonic wars a more grandiose addition is made, built as an independent building against the last house front. The last stage of all is the recent division into cottages for occupation by smallholders, by closing up the communicating doors and the addition of a staircase in the kitchen. A house front having a plan similar to that of the third stage is shown in Fig. 535, but this is an eighteenth-century front.

Architects of the second half of the eighteenth century had every variety of classic design of the preceding 200 years upon which to draw for inspiration or imitation. Their elevations comprised each type—roofs with eaves, roofs hidden or partially hidden by parapets, division of fronts into three or five or more principal divisions, narrow fronts having a triangular pediment across the whole width, wider buildings with pediment over the centre division only, or pediments supported by pilasters or columns. On the whole, fronts

¹ The drawings and description by courtesy of Edwin Gunn, from *The Architect and Building News*, March 2, 1928, p. 331.



1772.
FIG. 592.—The large drawing-room at No. 20 St. James's Square, London.
Robert Adam, Architect.

THE ENGLISH HOUSE.

Photo by courtesy of Hampton and Sons.

FIG. 593.—In the library, hexagonal panels predominate over circles, and although the recess at the end of the room is curved in plan, straight lines govern the design. The mouldings of the ceiling panels are in slight relief and may be compared with those at Moor Park, which reflect earlier influences. FIG. 594.—The entrance hall, showing the niche opposite the staircase. See also plan, FIG. 530. FIG. 595.—This perspective drawing from *The Works of Architecture* of Robert and James Adam, Esquires, published 1777, shows the third drawing-room of Lord Derby's house. The heavy and gloomy character of the illustration is very different from the light and dainty nature of the Adam decoration, but is interesting because the room is represented complete with its decorative accessories.

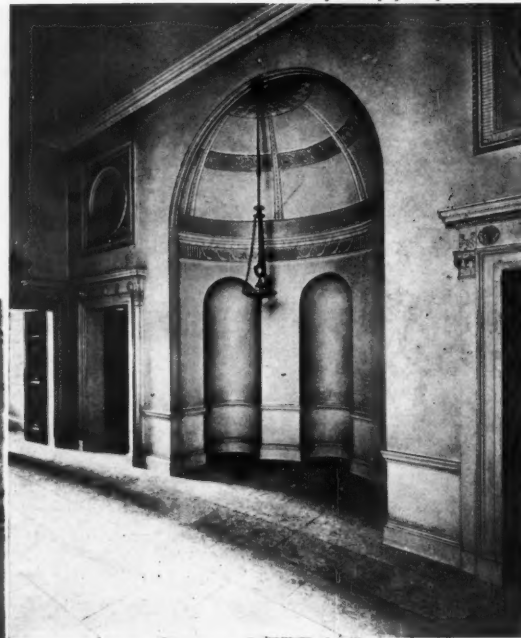
Photo by courtesy of Hampton and Sons.



1772. King: George III.
FIG. 593.—The library at No. 20 St. James's Square, London.
Robert Adam, Architect.

modern practice. After him the deterioration of design was rapid and complete. Roman and Greek classic features were used, but proportion ignored. Elevations were attenuated or clumsy, as also were doorway, window, and all other details. Design, like the people of the Victorian age, was commonplace, utilitarian, uninstructed, and devoid of taste. The art patron gave way before the *nouveau riche*, who now called the tune.

One charming feature of later eighteenth- and early nineteenth-century houses was the use of ironwork for balconies and verandahs (Figs. 578, 579), which served practical purposes and harmonized well with front designs. Most of the ironwork was wrought, but later examples were cast. Provision of iron railings round areas and to steps leading to doorways, continued and, particularly for town houses,

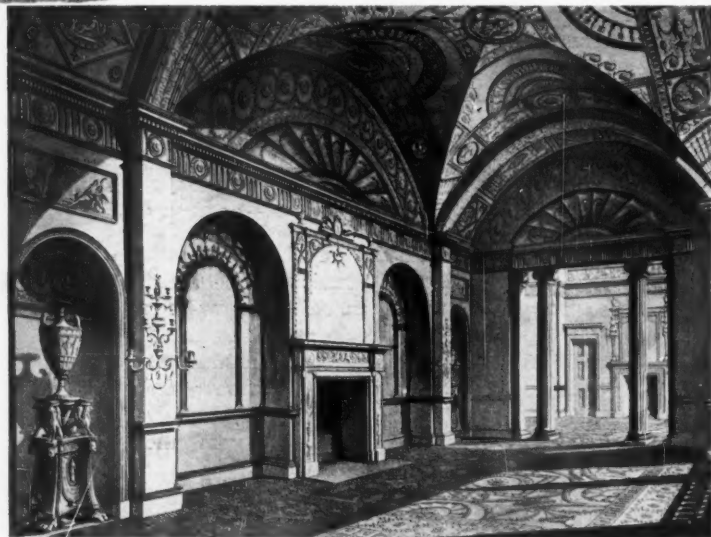


1772.
FIG. 594.—The entrance hall at No. 20 St. James's Square.
Robert Adam, Architect.

lamp-holders with or without link extinguishers were contrived as decorative adjuncts (Figs. 570, 571).

The adaptations of classic details introduced into England by the Adam brothers revolutionized interior decorations. The authors acknowledged one source of inspiration in the preface to the second volume of their book, already cited:

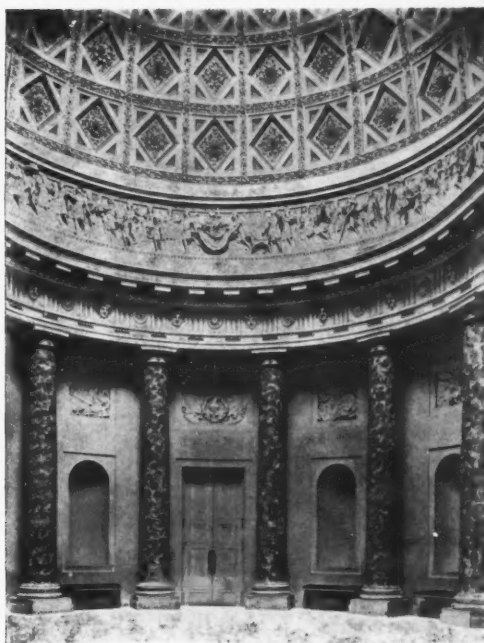
Although the style of the ornament and the colouring of the Countess of Derby's dressing-room are both evidently imitated from the vases and urns of the Etruscans, yet we have not been able to discover, either in our researches into antiquity, or in the works of modern artists, any idea of applying this taste to the decoration of apartments.



c. 1773

King: George III.
FIG. 595.—No. 26 Grosvenor Square, London
(since destroyed).

FIG. 596.—The sculpture round the central hall represents a Roman triumphal procession. FIG. 597.—The walls in this house were hung with damask silks. FIG. 598.—The detail of the flat ceiling is in the manner of the Henry VII chapel at Westminster. The mantelpiece, and the gates to the bookcases, are of bronze. The room was designed to house a collection of Saxon MSS. belonging to the Duke of Buckingham. On the whole, the pre-Ruskin Gothic detail (taken direct from English examples) is better than later work.



c. 1777. King: George III.
FIG. 596.—The central hall at Stowe,
Buckinghamshire.
Signor Borra, Architect.

Of another room in the same house they say:

The ornaments are all in stucco: and the grounds, both of the ceiling and the side-walls, are all picked in with different tints of green, which has a simple and elegant effect.

Of the second withdrawing-room:

The ornaments of the pilasters, arches and the pannels of the doors, are beautifully painted by Zucchi

Of the great withdrawing-room:

The ornaments of the ceiling and entablature are chiefly of stucco, gilt, with a mixture of paintings. The grounds are coloured with various tints. The frames for glasses, the pedestals and vases in the niches and the girandoles on the piers, are of wood, gilt. This room is hung with satin, and is undoubtedly one of the most elegant in Europe, whether we consider the variety or the richness of its decoration.

The effects of the gradual industrialization of England have been described by an historian as applied to changes in habits of living:

In the industrial world, members of the new middle class ceased to live over the workshop, and built

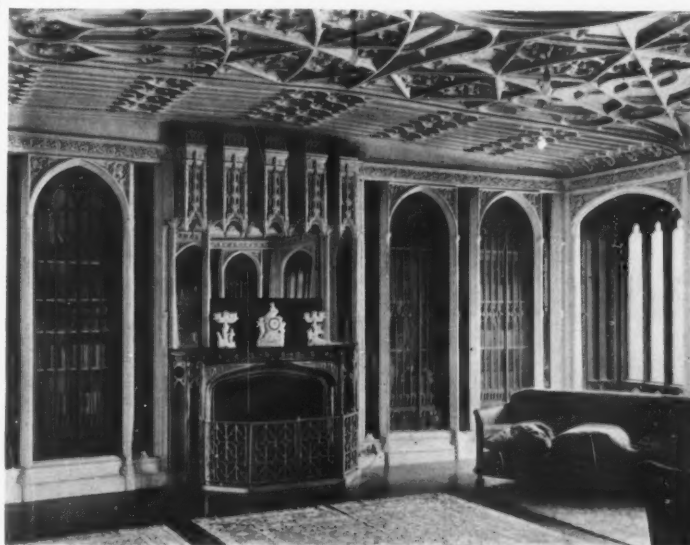


1780. King: George III.
FIG. 597.—The back drawing-room at No. 13
Devonshire Place, London.

themselves separate villas and mansions in imitation of the life of the gentry. They no longer formed one household with their apprentices and journeymen. The landed gentry, for their part, were enlarging the manorhouse for the heir and the parsonage for the younger son, and too often replacing a tumble of gabled roofs that had grown up piecemeal in the last three hundred years, by a gorgeous "gentleman's seat" in the neo-Palladian style.¹

This prosperity was reflected in the profuseness of internal decoration. Ceilings and walls were panelled, stuccoed, painted with floral, formal, landscape and legendary subjects. Walls were hung with damasks, figured silks, wallpapers from China, flock

¹ *History of England*, by G. M. Trevelyan, 1926, "The Reign of George III," p. 612.



1805-6. King: George III.
FIG. 598.—The library at Stowe,
Buckinghamshire.
Sir John Soane, Architect.

THE ENGLISH HOUSE.

Reproduced by courtesy of the Curator, The Soane Museum

FIG. 599.—The dining-room ceiling is divided into compartments in which are paintings by Henry Howard, R.A. The furniture, except the earlier chair at the far end of the table, is contemporary. FIG. 600.—A view of the library and the dining-room beyond. The furniture is as it was in 1812. The fireplace and grate are designed in the severe rectilinear manner of Soane.

papers in imitation of cut velvets, velvets strained or pleated, and magnificent tapestries. The most ordinary villa had walls stuccoed with flowing designs interspersed with tablets in higher relief bearing groups of classic figures, all usually in white, with a background of pale blue, green, or other tint, which produced light, graceful, but somewhat cold effects.

Care was taken correctly to proportion rooms and details. A dining-room, measuring 30 ft. by 20 ft. by 15 ft., was described as :

intended to be hung with damask or paper. The order is preserved in the several parts of the walls.¹

The space to be hung with damask or to be papered, was that between the dado (pedestal) and the frieze, viz., that space which, had the walls been decorated with an Order, instead of only being proportioned to one, would represent the height of the column or pilaster.

Another dining-room, all four sides of which are illustrated in one of the carpenter-architect's books,² measured

¹ *The Builder's Magazine*, 1774, p. 1, plate ii.

² *The Practical House Carpenter*, by William Pain, 7th edition, published 1805, but the plates (Nos. 117-24) are dated 1791.

Reproduced by courtesy of the Curator, The Soane Museum.



1812.

King : George III.

FIG. 599.—No. 13 Lincoln's Inn Fields, London.
Sir John Soane, Architect.



1812.

King : George III.

FIG. 600.—No. 13 Lincoln's Inn Fields, London.
Sir John Soane, Architect.

42 ft. by 30 ft. by 16 ft. It has a recess at one end, the full width of the room, from which it was divided by Corinthian columns, which, like the wall divisions, were carefully proportioned. Large profiles are given of the mouldings, those of the panels being similar to those at Chandos House (Fig. 587). In the same volume, and for the same house, illustrations are given for a library, entirely lined with bookshelves, and measuring 26½ ft. by 17½ ft. by 16 ft.

Sir William Chambers,¹ writing in 1795, of the proportions of rooms, gives the height of an oblong room as equal to its width—additional height to be allowed for coved rooms. He recognizes the difficulty of varying heights of rooms on the same floor, which must generally be the same, and says :

The usual method in buildings where beauty and magnificence are preferred to economy, is to raise the hall, salons and galleries, higher than the other rooms, by making them occupy two stories; to make the drawing-rooms, or other largest rooms, with flat ceilings; to cove the middle-sized ones a third, a quarter, or a fifth of their height, according as it is more or less excessive; and in the smallest apartments, where even the highest coves are not sufficient to render the proportion tolerable, it is usual to contrive mezzanines over them, which afford servants' lodging rooms, baths, powdering rooms, wardrobes and the like; so much the more convenient, as they are near the state apartments, and of private access . . . Holkham is a masterpiece in this respect . . . and does great credit to the memory of Mr. Kent.

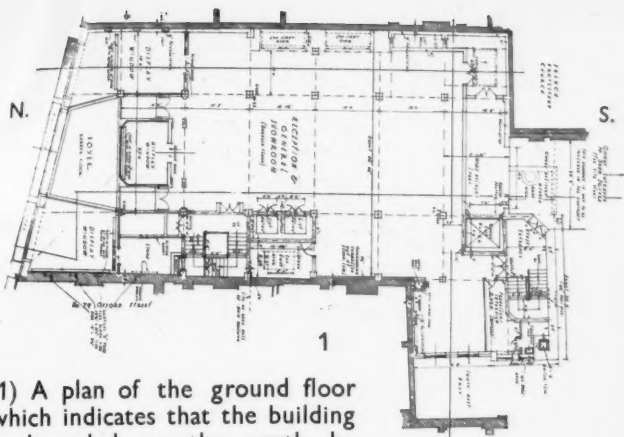
In his Lectures, delivered to students of the Royal Academy, 1809-36,² Sir John Soane said :

If in fixing the proper Heights of Rooms Convenience were the only object to be attended to, ten or twelve feet in rooms of moderate dimensions would be sufficient for every useful purpose, but when Elegance and Magnificence are consulted, the Height of a square room with a flat ceiling is usually not less than four-fifths of its breadth, nor more than five-sixths. If the ceiling of such a room be coved the Height should be equal to one side of the square. In a room, the Length of which exceeds its Breadth, the Height should be equal to the latter dimension, and, if the room be one-third or one-half more than its width, the two dimensions should be added together, and half the total allowed for the Height. If the Room be coved, one-fourth or one-fifth more must be allowed.

(To be concluded)

¹ *Civil Architecture*, Gwilt, ed. 1825, pp. 390-1.

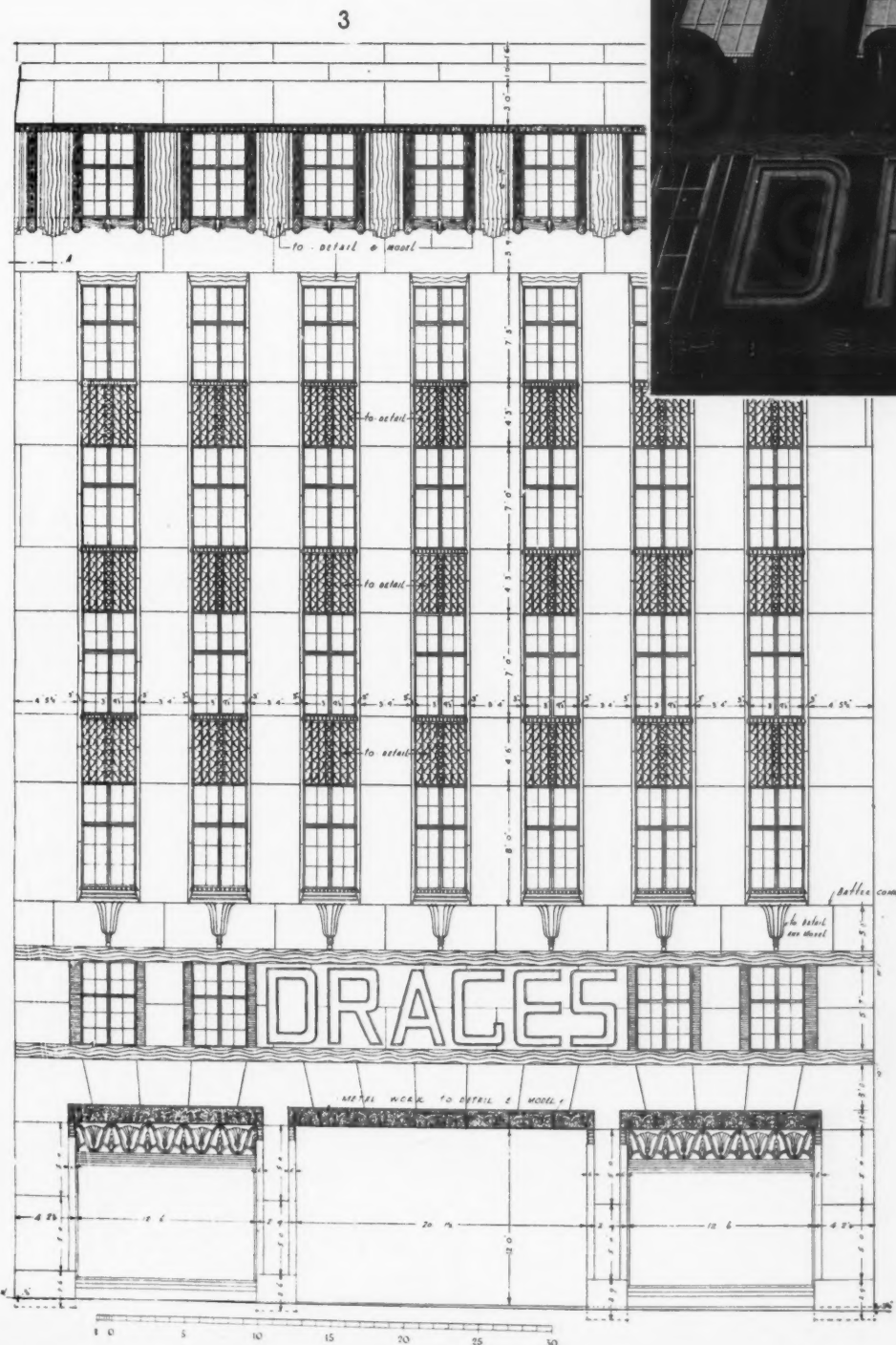
² *Lectures on Architecture*, by Sir John Soane, edited by Arthur T. Bolton, London, 1929, pp. 122-3.



(1) A plan of the ground floor which indicates that the building is bounded on the north by Oxford Street and on the south by Soho Square. The upper floors are similar in plan, save that the general showrooms are slightly reduced in size to make room for offices. (2) The Oxford Street front, executed in a silver-coloured metal and polished granite.



2



NOS. 73-77 OXFORD STREET, LONDON. Gordon Jeeves and Herbert A. Welch, *Associated Architects*. (3) A working drawing of the Oxford Street elevation. (4) The Oxford Street front. Both these illustrations show the skilful harmonizing of the shopfront with the buildings above it and the appropriate lettering. (5) The general showroom on the ground floor from the staircase doorway and looking towards the Oxford Street entrances. The whole interior decoration was carried out by the architects in collaboration with Messrs. Marc Henri and Laverdet.



The facing page. THE HEART OF A GREAT STORE. Few who look at the stately building on this page will realize what goes on in its bowels, which are illustrated opposite. The bank of pneumatic steel tubes in the upper picture spreads through the whole store for over twenty miles. Except in the cash-room, in the lower illustration, these tubes are invisible. Through them bills fly at thirty miles an hour, are changed, and sent along on a belt to the girl in the lower picture, whose sole duty is to place them in one of the tubes, whence they are sucked back again at thirty miles an hour to the departments from which they came.



GAMAGE'S West End Store, in Hereford Gardens, Messrs. Joseph, in association with Sir Edwin Lutyens, Architects, is executed in 2-in. red bricks with stone dressings to harmonize with the other new buildings on the Grosvenor Estate. The north-east corner of the building, where Park Street meets Oxford Street (1), shows fine masses of brickwork and the unpierced surfaces rising in Lutyens's blocks to the sky.

2

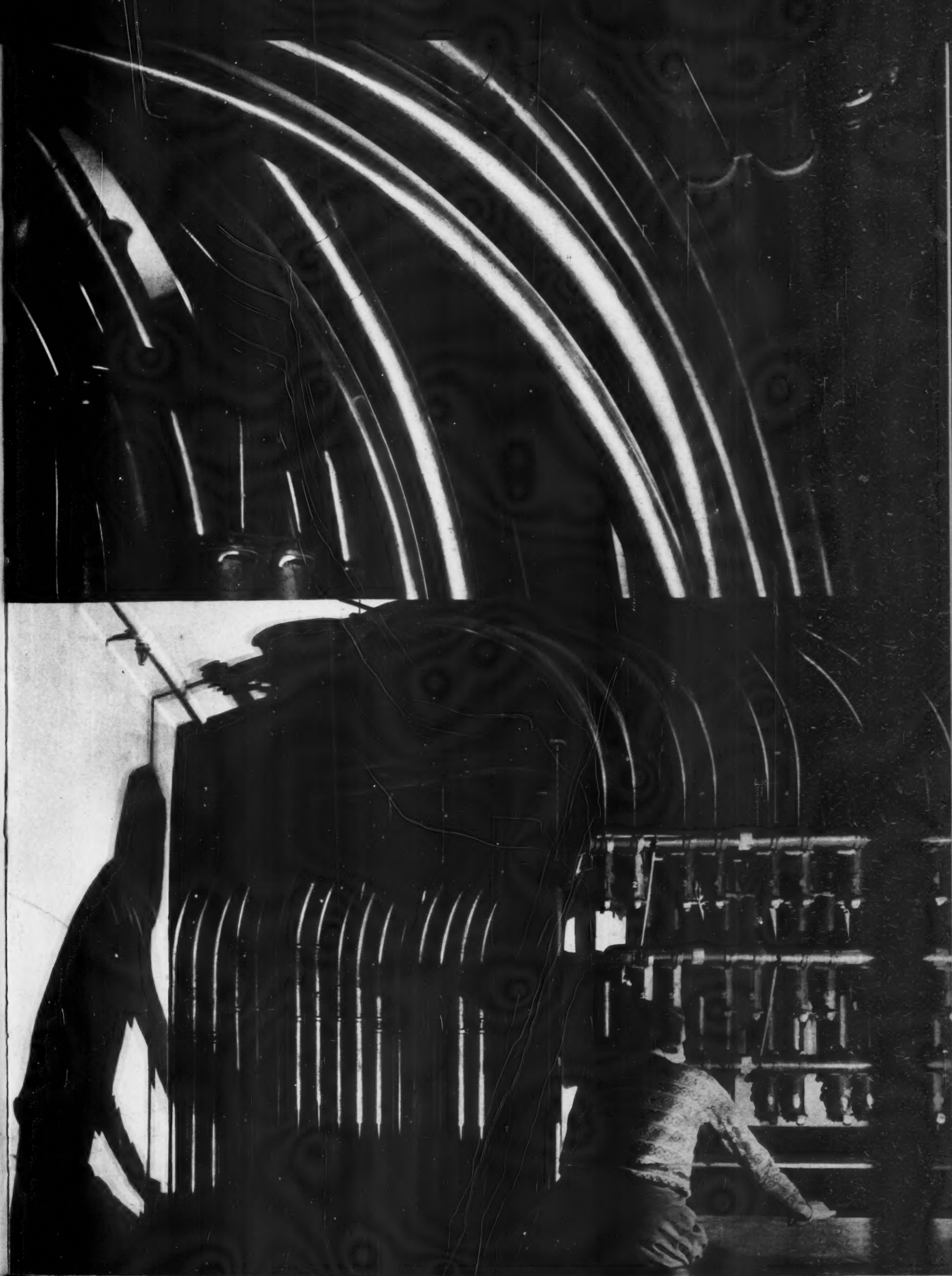


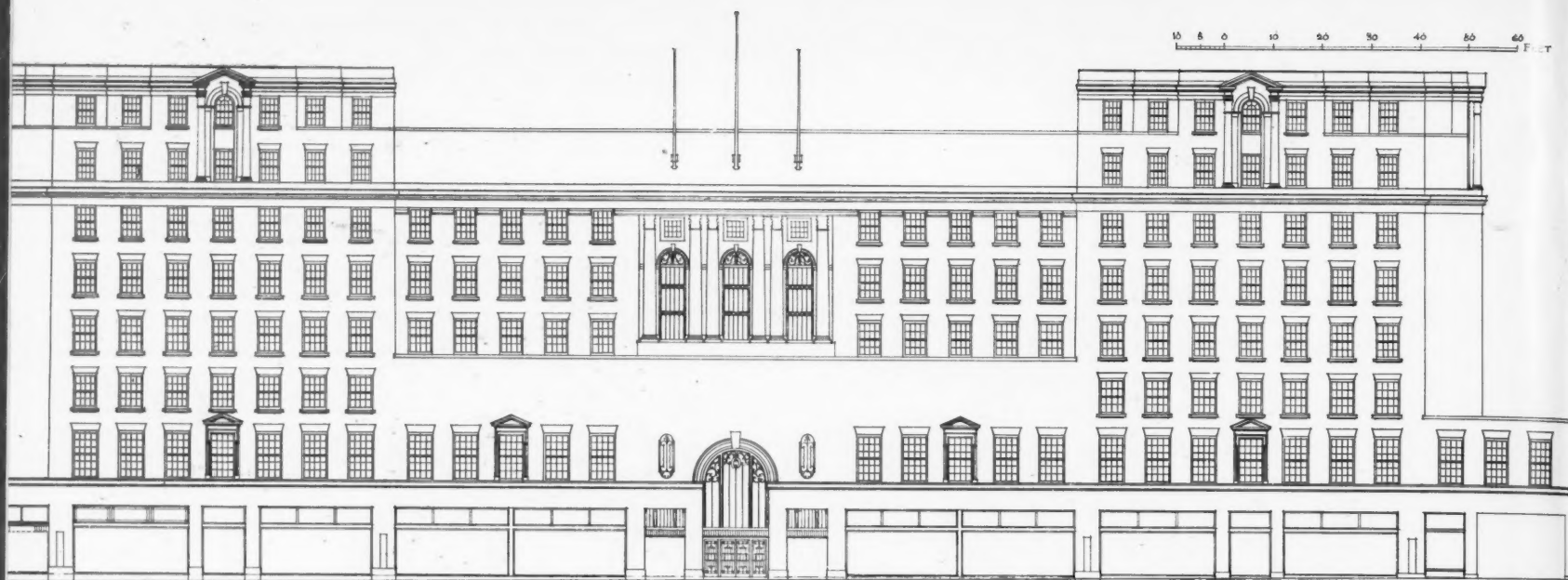
From the north-west corner the Oxford Street front (3) displays restraint, especially in the plain space above the central entrance. (2) Mr. Frank Emanuel's drawing of Hereford Gardens in the possession of Mr. Joseph, shows the site only about a year ago before they started building.



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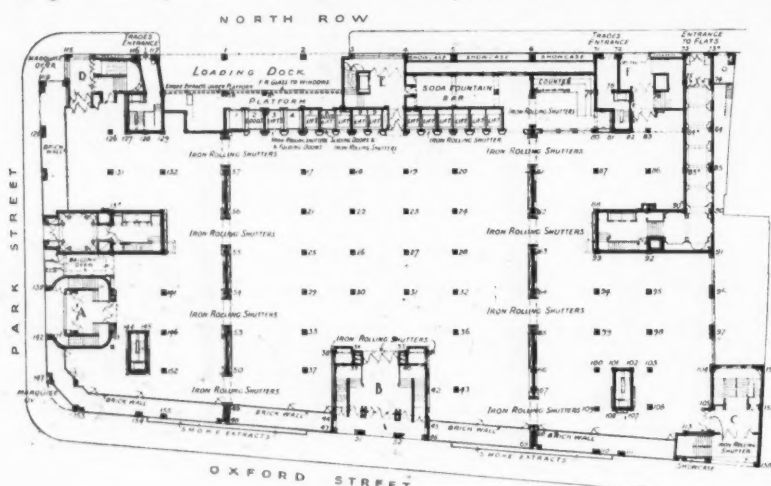


1

The planning of the building was a difficult problem ingeniously solved, for besides being a store it was to be filled with flats with separate entrances and a different name—Hereford House. The building is therefore divided into three blocks running parallel with Oxford Street (1) and North Row (4), thus containing two large areas open on the second storey to North Row. The

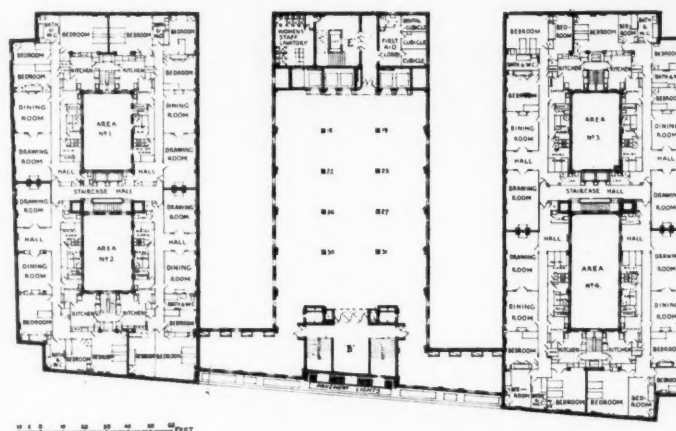
Oxford Street front is unbroken by the area as far as the seventh storey, thus preserving the harmony of the ground-floor windows with those above.

The store occupies all the centre block and the whole of the first floor, ground floor (2), basement, and sub-basement. The flats are arranged above the first floors of the east and west blocks, as



2

shown in the plan of the third floor (3). They have separate entrances, the west block being approached through a spacious corridor from North Row and the east block from the centre of the Park Street front. This involved two lifts and staircases at each entrance to Hereford House.



3

In Gamage's the lifts are fifteen in number and all in a row, where they form a pleasant decorative feature. The well-designed burr-walnut fittings and showcases, and the severity of architectural detail, are a good example for other more flamboyant stores.



4



1

UPTON HOUSE, WARWICKSHIRE

The House of the Rt. Hon. Viscount Bearsted.

The north front of Upton House is seen from the road at the end of a noble fir avenue (1) and the avenue itself is entered by the new entrance gates (4) whose stone curbs were intended to contain strong planting, for this entry needs a greater sense of enclosure to connect it with the great avenue. Mr. Morley Horder, who remodelled the house, suggested some animal sculpture, possibly by Mr. Heseltine, as a suitable ornament for his stone piers. Lord Bearsted's property extends as far as Radway village, and Radway Grange (3) was the house of the scholarly Sanderson Miller who is said to have altered Upton in 1730. There is no trace of his alterations in the house, but to judge from his only notable classical work, Warwick Town Hall, it seems likely that he designed the temple (2) as a fit termination to the Temple Lake in Upton grounds.

"At Dr. Duffield's in Chelsea, Sanderson Miller, Esq., of Radway, near Edgehill, in Warwickshire. He was possessed of an estate of £2,000 per annum, and was very intimate with the Lords Temple, Lyttleton, and Mr. Shenstone, for whom he planned several buildings which they erected, having had an exquisite taste in architecture."

So runs the obituary in the *Gentlemen's Magazine*.

Sanderson Miller has been described as an amateur architect, but when it is recalled off-hand that he was responsible for the restoration of Kilkeny Cathedral, Hagley, the Great Hall of Lacock Abbey, the Shire Hall at Warwick, alterations to Bishop's Palace, Durham, work at Belhus for Lord Dacre, and a multitude of smaller works, such a description

2

Remodelled by
P. Morley Horder.

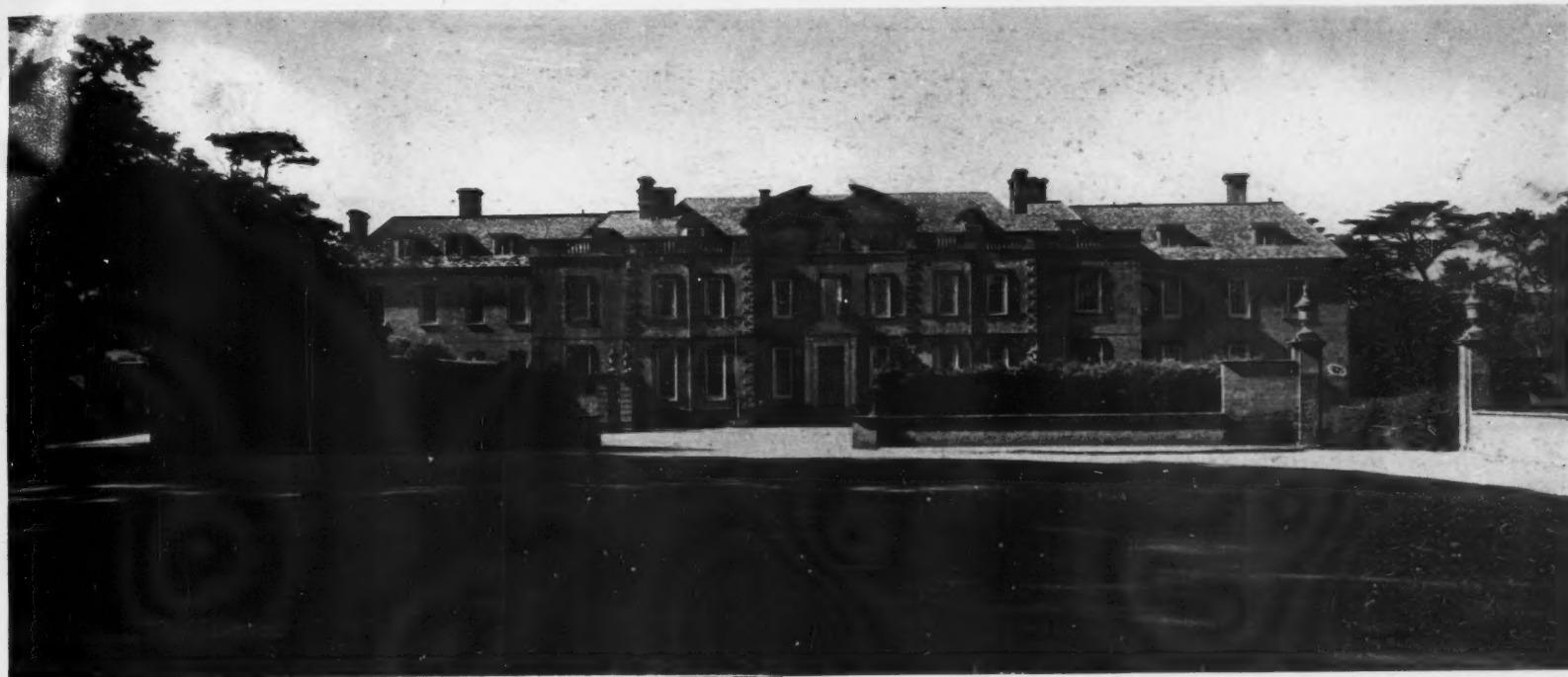


3



4





can only be accounted for by the entirely different relationship between the architect and his work since the eighteenth century. The responsibility of the architect for the stability of his designs was apparently negligible in those days, as Miller's tower of Wroxton Church collapsed, and yet Lord North continued to employ him. Horace Walpole's comment on this incident is amusing:—

"The Tower is a good plain Gothic style, and was once, they told you, still more beautiful: but Mr. Miller, who designed it, unluckily once in his life happened to think rather of beauty than the water-tables and so it fell down the first winter."
 "The downfall of Rockstone Tower, my dear Miller," writes Lord Deerhurst, "would have drawn an earlier condolence from me had I come to the knowledge of it sooner than I did. I am glad it was delayed so long, as I can now assure you that your fame for architecture is by no means diminished by it."

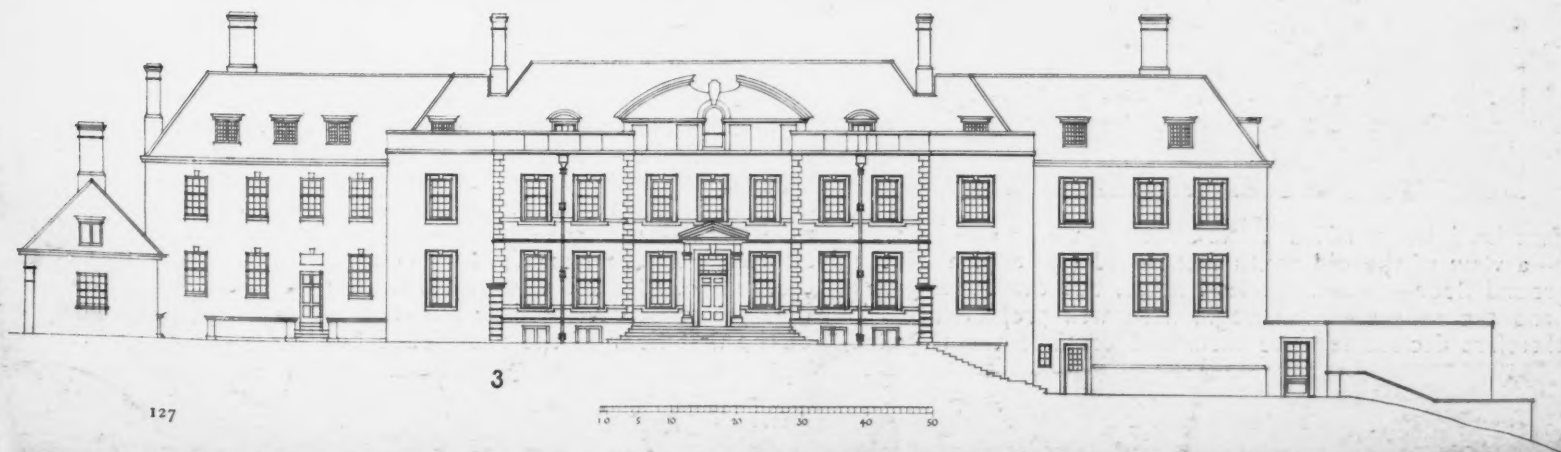
The additions to his own house at Radway (the ancestral and characteristically gabled Tudor home of the Washingtons) were in the pseudo-Gothic manner with which Miller's name is associated. His reputation as a builder suffers sadly when one compares the excellence of the stone

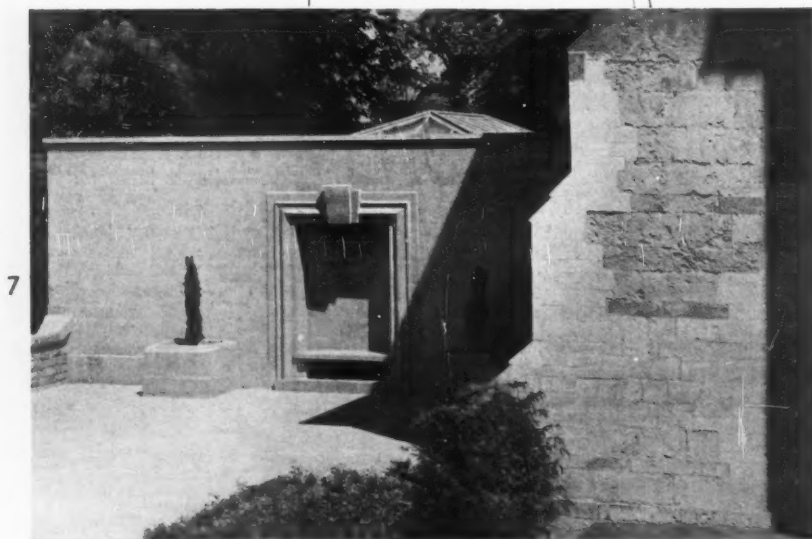
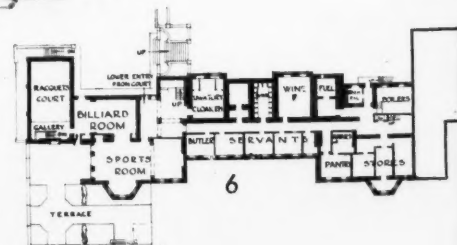
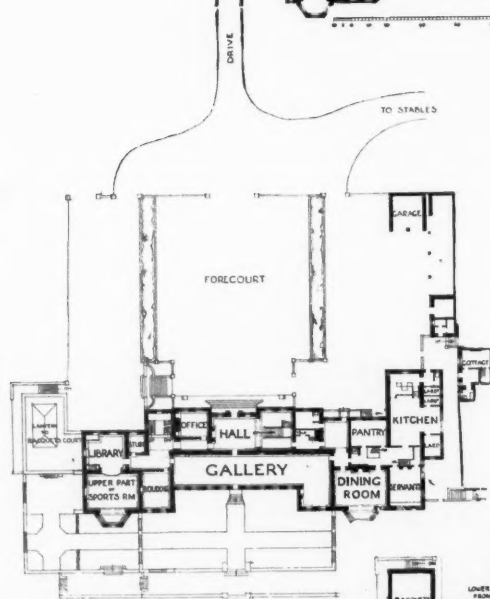
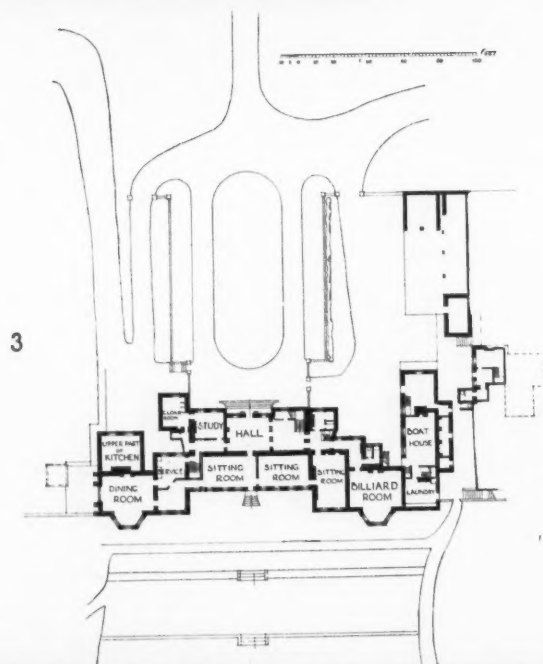
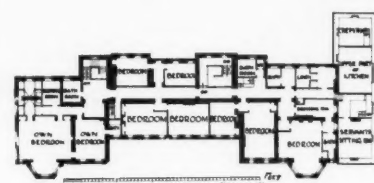
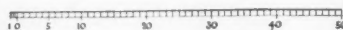
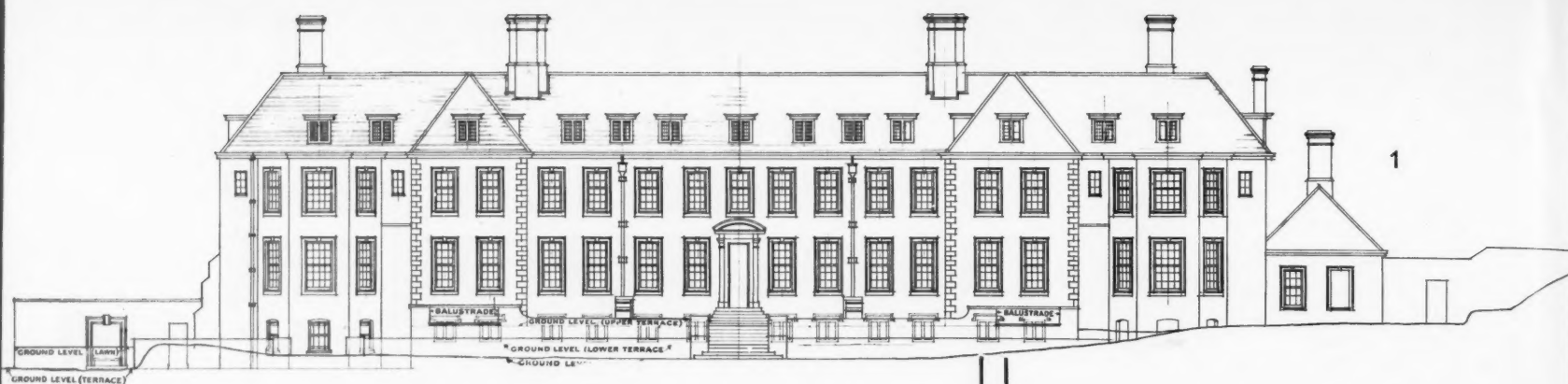
work of the earlier house and the decayed condition of poor Miller's trimmings through lack of technical knowledge. However fantastic his embattled tower and drawbridge, which he built on the spot where the battle of Edgehill was fought, they were at least part of the intellectual diversions of a theatrical age—an age when standards of building could be discussed with an informed interest and excitement.

Sanderson Miller enjoyed the friendship of the great men of his day and certainly justified a reference in the Dictionary of National Biography on this account alone. Upton House has a lower entrance court which leads to the basement storey and by a flight of steps up to the central door of the north front. This lower entrance court is approached between the stone piers on the right of the north front (1).

What a deal of reconstruction was carried out is shown in the illustration of the old north front (2).

Of the old house little is known; the central portion was built in the time of Charles I, but there is evidence in the basement of fifteenth-century work and two Gothic doorways, while stew-ponds in the lower garden indicate monastic associations. In 1757, Child the banker bought the house, and the following story is well known and authenticated. "The Earl of Westmorland fell in love with Child's daughter, and the lover asked the father what he would do if he loved a girl and she him, and the father would not consent. 'Why, run away with her, of course,' said Mr. Child. No sooner said than done, and the lovers were married at Gretna Green. But the father was obdurate, and left all his money to his daughter's second child, who became Countess of Jersey." Lord Jersey sold the house to Mr. Motion, Chairman of the Cannon Brewery, who lived there until Lord Bearsted purchased the property in 1927 and made the very considerable alterations shown in the illustrations (1 and 3). Besides the enlarging of the wings, the regrouping of the chimneys should be noticed.





The first Lord Jersey added Victorian wings which can be seen in (2)—a view of the old south front—and (3)—a plan of the old ground floor—to the Charles I house, but the building was good and the rooms, oddly enough, were well proportioned. It was therefore decided to raise them and continue the ridgeline

which defined the old house between the two original hips. The parapets of the Victorian wings have been changed for eaves and a cornice (1). In re-planning the main alterations were on the ground floor (5); the kitchen was removed from the western to the eastern side, and advantage was taken of the levels of the old kitchen to form a large room running up from the basement (6) to the ground floor (5). This is known as the sports-room and gives wall space to Lord Bearsted's large and important Reynolds's and Gainsborough's. From the sports-room a rackets court has been built out so that it can be reached both from the room itself and from without at the lower level below the court. The recessed seats on the lower terrace (6, 7 & 1) in the wall which masks the rackets court command a fine view of the lower gardens and trees which have yet to be developed by the landscape artist. (4) is a plan of the first floor of the remodelled house.

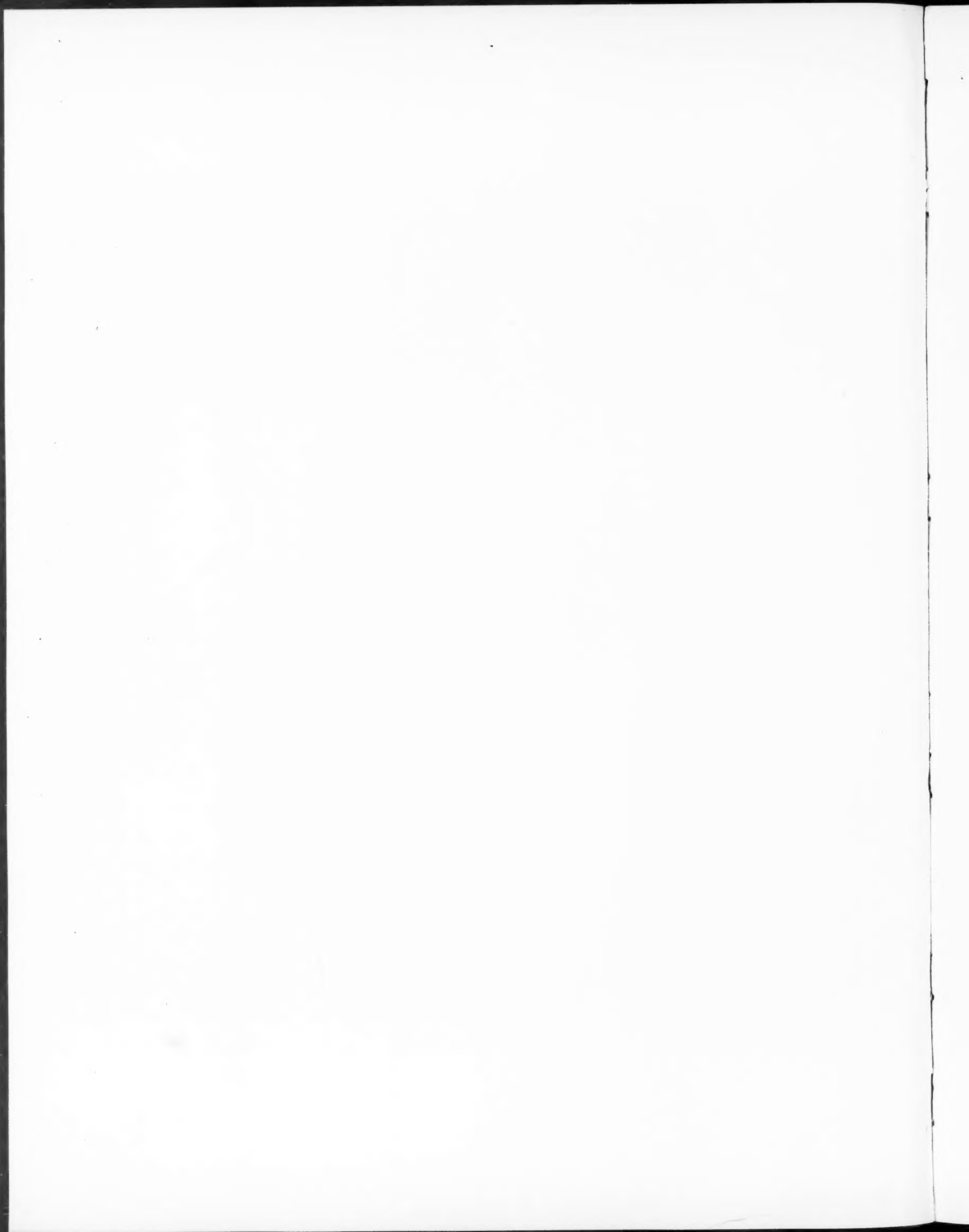


The re-grouping of the chimneys along the south front of Upton House, shown in these illustrations, is particularly noticeable in the upper of the two. The east end of the terrace, underneath the trees, has yet to be completed.

PLATE II. April 1931.

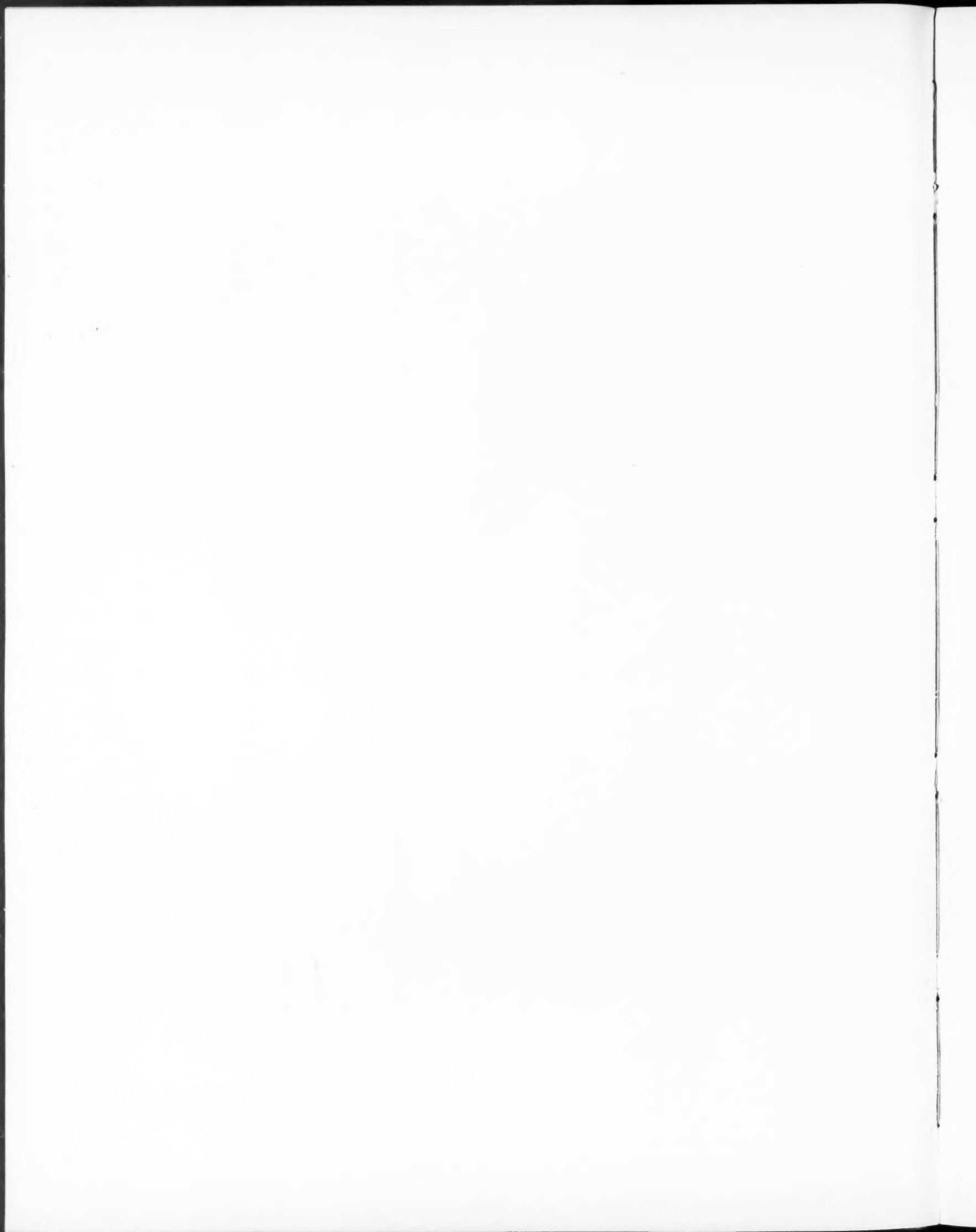
VOL. LXIX—N.







The view of the terrace from the air (1), from the eastern bay of the house, towards the west, over the only completed piece of garden, enables one to realize more clearly the possibilities of opening up vistas among the trees, and of planting groups of them to conform with the hills beyond. (2) The detail of the house itself is shown in the view of the garden or south front. A measured drawing of the entrance doorway is given on page 136.





1



2

The windows in the picture (2) look out across the lawn to the hill shown in (1), while from the edge of the lawn which runs out from the garden before these windows, on the south front, can also be seen the Temple Lake. The terraced gardens below the lawn are unfortunately not seen from the house, and various proposals for treating the edge of the lawn to suggest a terraced vista below have been put forward; at present the edge reads on to the distant slopes in an unfortunate

PLATE IV. April 1931.

way, and the satisfactory solution of the problem is an interesting one. Meanwhile, the proposal to block out every other window in the gallery, illustrated below, has been abandoned, partly because of the view and possible vistas, and partly because of the light. The gallery, as a result of this, loses its architectural unity, for the original proposal was to have cases formed in the suppressed windows to match those on the opposite side, and to fill them with Lord Bearsted's collection of rare china.







1



2



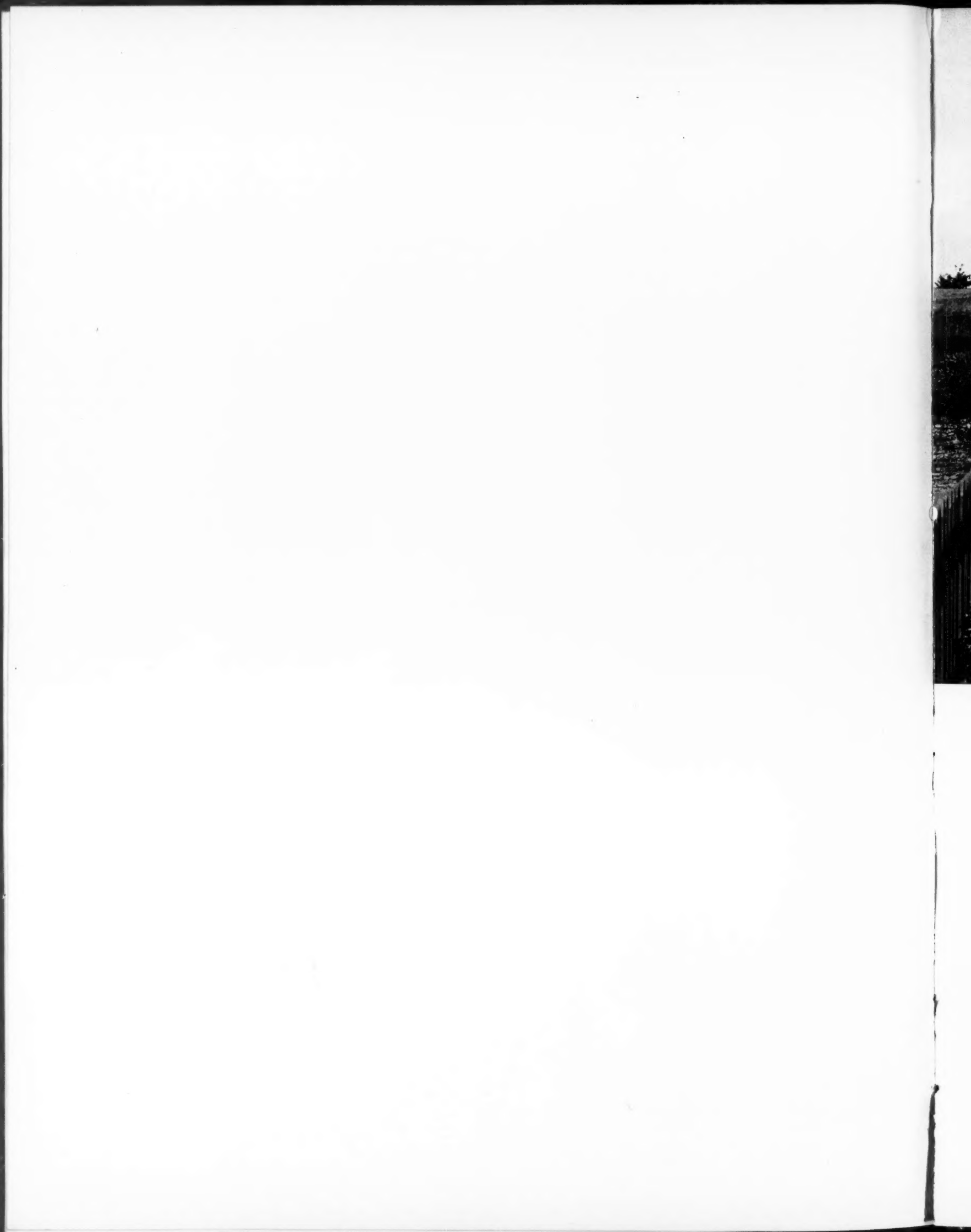
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(1) Shows the secondary staircase, which is built of oak. The main oak staircase, seen in the foreground of (2), has been entirely remodelled, but the old materials have been used again. The entrance hall, from which this staircase starts, is carried out in stone ashlar. The sports room is a double decker, and the library, which

is immediately above the billiard room, acts as a gallery (3) to the sports room. The bay windows of the sports room are those from the old Victorian wings of the house, but have been remodelled. The racquets court, on the basement level, is reached through the billiard room.

PLATE V. April 1931.





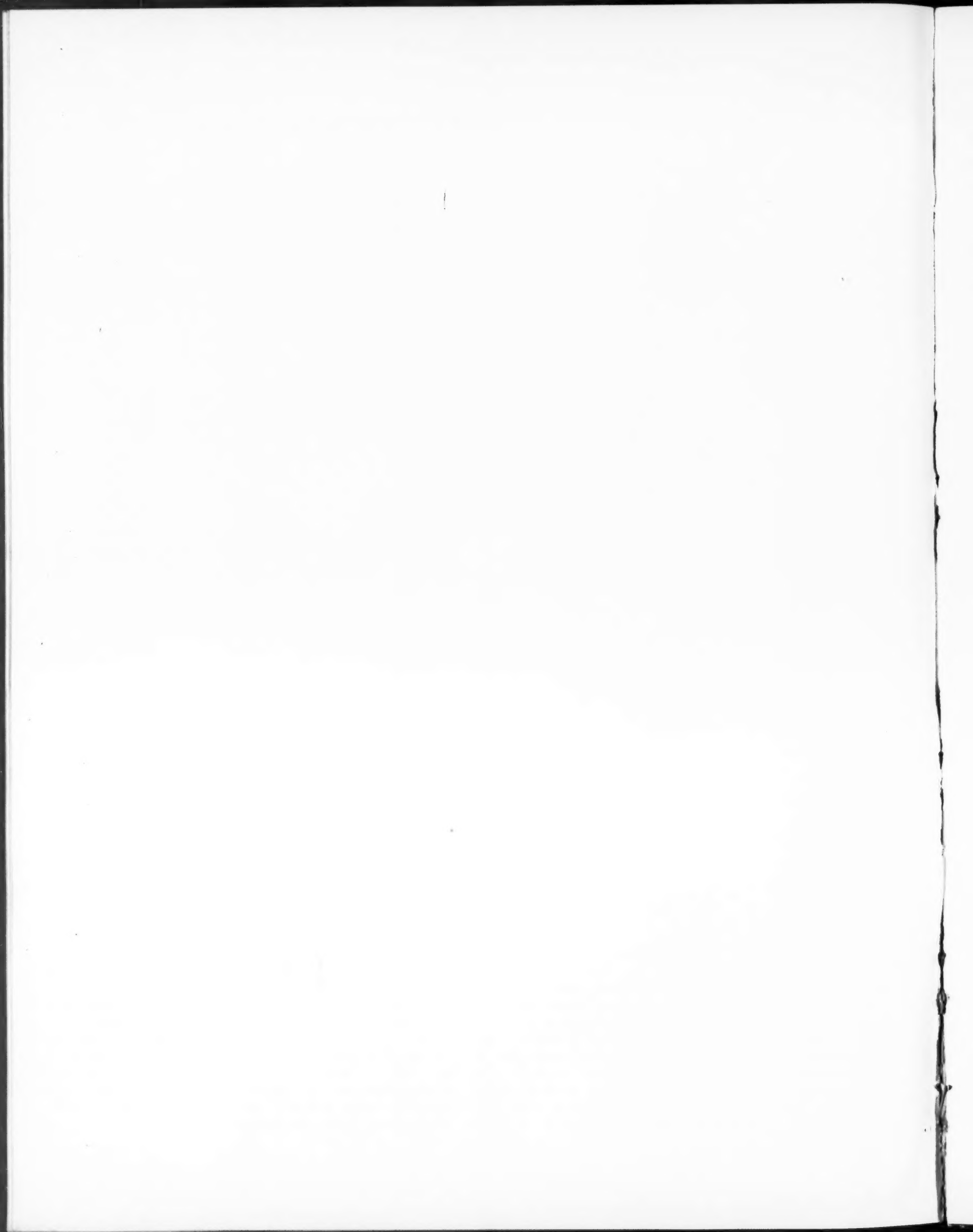


TARRANT HINTON, DORSET. So unused are people to seeing a village as deserted as shown in this first picture, that the "brightened" one underneath it strikes them as neither ugly nor unusual. In fact, to many people the picture underneath will appear more "homely," and certainly more convenient for the motorist. Many will still be alive to the ludicrous in it. "Cornish Teas" so frequently advertised in other counties, the tautology of "Ye Olde Cottage," the unimpressive realism of the bicycle sign, certainly either disgust or incite to anger. But on the telegraph poles, hotel advertisements, and aerals there is less comment to make.

PLATE VI. *April 1931.*

They are regarded now as necessities to any "civilized" village where a bright young person can bring himself to recuperate. The ears, too, are becoming used to other notes. Men can distinguish the louder noises of engine trouble long before they can even hear, let alone name, the songs of birds.

Only a few like to wear "hosen and shoon" and be accused of a garden city; yet many decided opponents of the "back to nature" movement will admit that without modern amenities, this village is the more beautiful. On the other hand, ordinary people today would be much happier among the telegraph poles.





THE FOUR GEORGES EXHIBITION.

At the Four Georges Exhibition the collection of pictures, which included the best Gainsboroughs to be seen outside the Dulwich Art Gallery and the largest display of them, as well as a uniquely interesting Reynolds, were worth having an exhibition for on their own account. Particularly worthy of notice was the beautiful "Portrait of a Lady," by the Reverend Matthew

Peters from the collection of Sir Philip Sassoon.

"Chinoiserie," in the manner of Sir William Chambers and also of Chippendale, was a prominent feature, yet the element of preciousness was dispelled by the variety of objects. It seems a great pity that so small an exhibition, as this was bound to be, should be compelled to deal with such a vast subject. It would have been more interesting to see an exhibition of the works of art of a much shorter period. For the most part, the objects here were entirely of the eighteenth century. Among the lovely

chairs which exhibited many phases of Chippendale, one looked in vain for the restrained note of the Regency and for the delightful chairs and tables of Soane. Indeed, objects of the reign of George the Fourth were very few—one or two little boxes and some miniatures by Cosway.

The cases containing porcelain and enamel of the mid- and late-eighteenth century were perhaps the most interesting, especially Mrs. Ionides' magnificent collection of Battersea enamel, some specimens of which are reproduced here. The Battersea works came into being about 1750.

The facing page. Plate VIII. A MUSIC ROOM IN MUNICH, decorated in the early nineteenth century. Reproduced from a painting by F. Bayerlein, in *Historic Interiors in Colour*.



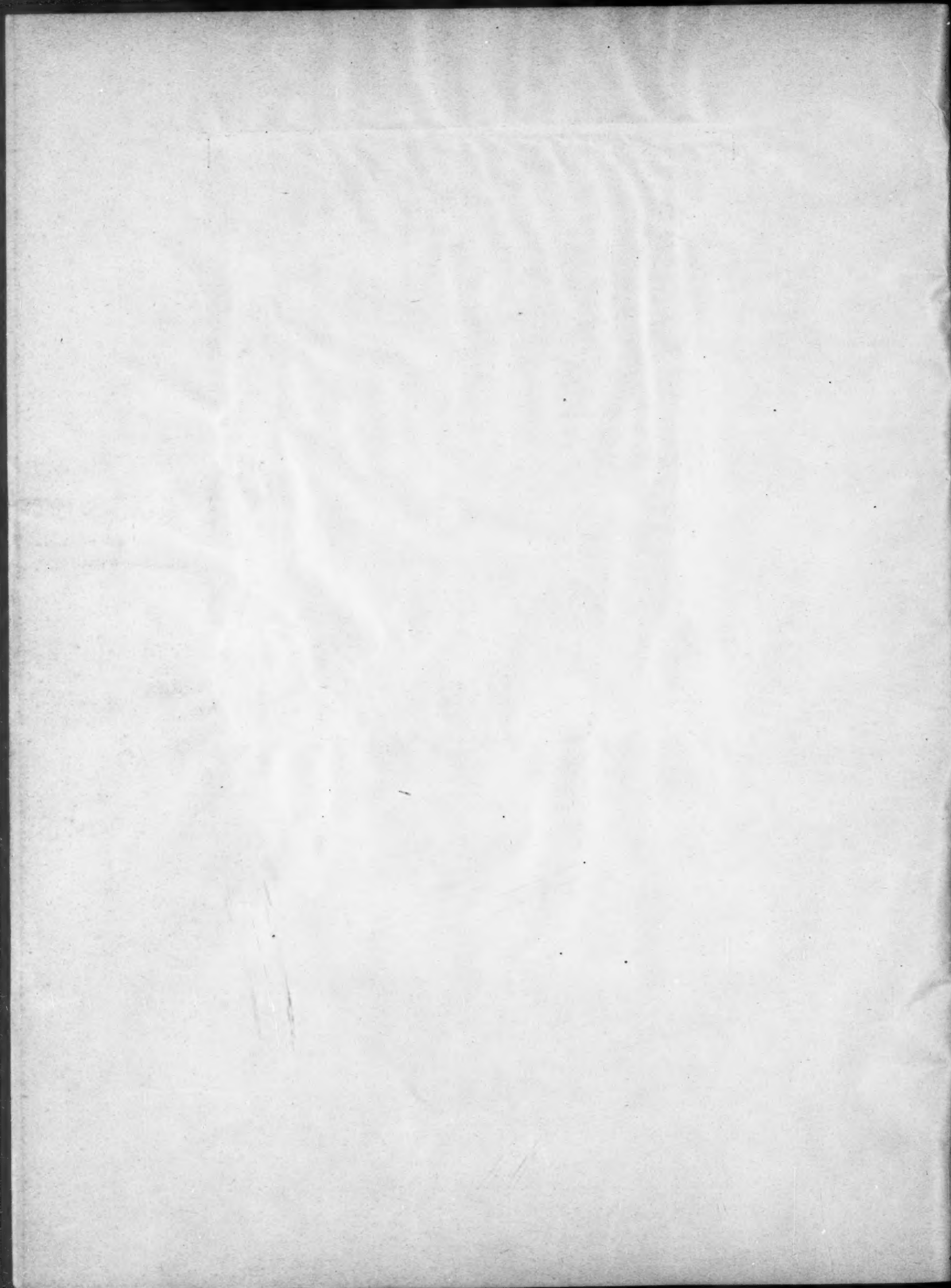




PLATE IX.
April 1931.

A MUSIC-ROOM *designed by W. WINKELMANN.*
From Modern Interiors in Colour.



THE BOOK OF THE
MONTH.

Byzantine and El Greco.

By E. K. Waterhouse



A detail from *THE RAISING OF LAZARUS* in the Pantanassa, Mistra. From *The Birth of Western Painting*.

The earlier Macedonian School was dull in colour and derived much of its inspiration from the harsh ecclesiastical tradition of the monastic illustrators. This painting, the finest example of later Byzantine art in existence, shows a return to the humanism and sympathy of Constantinople in the twelfth century. The brilliance of colour and lighting foreshadows that of the sixteenth-century Cretan School, while reviving the gorgeous effects of the earlier mosaics.

The Birth of Western Painting. A History of Colour, Form, and Iconography, illustrated from the Paintings of Mistra and Mount Athos, of Giotto and Duccio, and of El Greco. By Robert Byron and David Talbot Rice. London: Routledge. Price £2 2s. net.

IN *The Birth of Western Painting* Mr. Robert Byron (in conjunction with Mr. David Rice) has written what is probably his best, and is certainly, in spite of a few quasi-Meredithian opening paragraphs, his most readable book. It will, it is true, occasionally—but only occasionally—annoy the specialist, but it should give nothing but pleasure to the more innocent and less querulous. Indeed, in an age when most serious works of art-criticism are written in a style which disregards even the rudimentary amenities of the English language, a book which can be read with pleasure, even in its descriptions of the colour of wall-paintings, has something of the grandeur of an elephant in the desert.

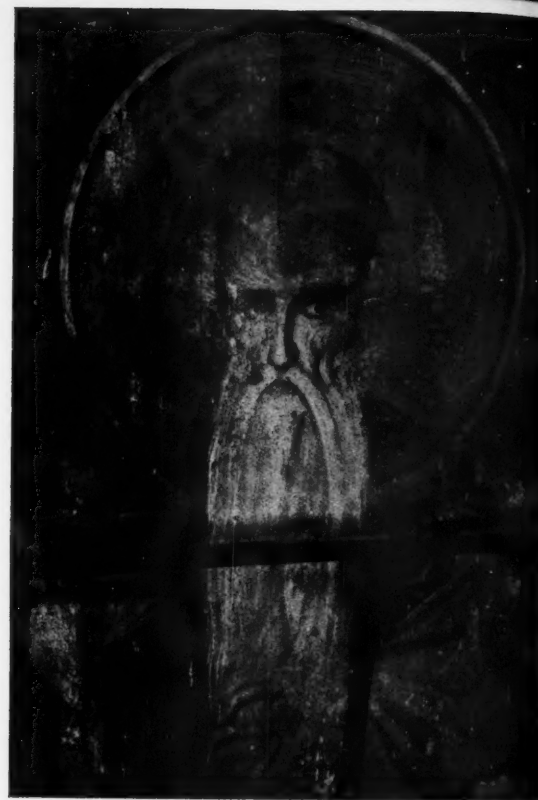
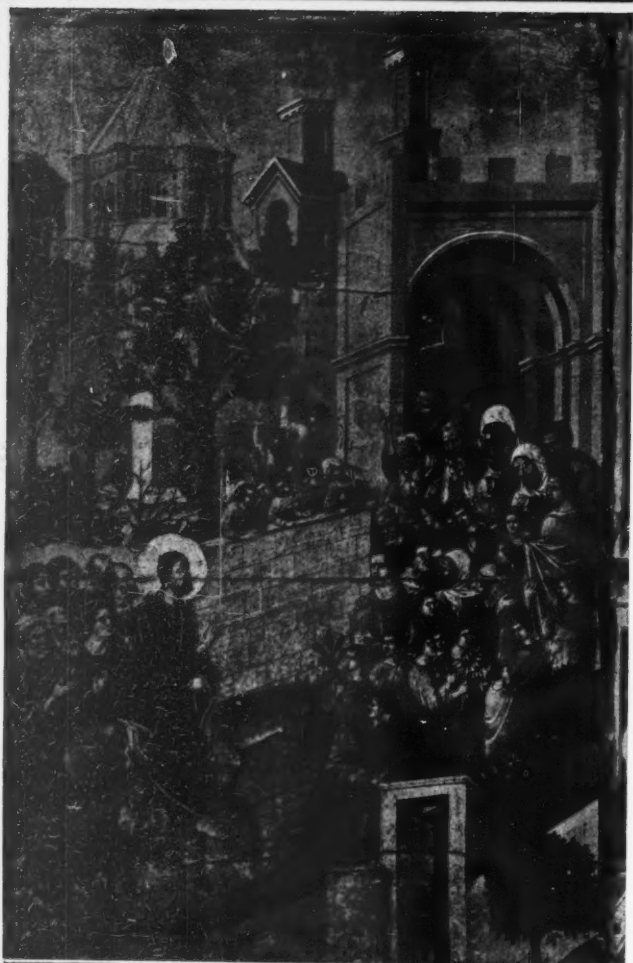
The book has a twofold theme. First, a survey of the more important Byzantine wall-paintings at Mount Athos and Mistra, which, unhappily, does not extend to those in Serbia or Russia (where the frescoes in the churches of the Transfiguration at Novgorod, and of the Assumption at Vólotovo are perhaps, finer than anything extant in Greek lands); second, an attempted answer to the question: *How was El Greco Byzantine?*

The first subject is illustrated with a full series of most admirable plates, and is preceded by a very interesting account of the iconoclastic tendency in several lands and an analysis of its origins and importance in the history of art—perhaps the most original undecorative part of the book. The account of the actual frescoes could hardly be improved

upon (save for a more kindly feeling towards the British School at Athens, whose “impropriety” is hardly as positive as it is painted), but, being largely descriptive, does not admit of a summary. It will remain, for a long time, the prime source of reference in English for these very important and rather neglected monuments (hardly, perhaps, as neglected as the authors would have us believe). Mr. Rice deserves every praise for his excellent and discriminating photographs.

The part which deals with Greco, perhaps because less full and, as the authors say, not intended to be exhaustive, is less satisfactory. El Greco has, in recent years, been the victim of “artbooks”—the most unduly expensive (Mayer) and the most dropsical (Willumsen), to say nothing of Miss Hersch’s egregious novel, *Bird of God*—and it is most valuable that he should have been approached, as has been done by Mr. Byron, from the Byzantine standpoint, instead of being referred vaguely and helplessly to a Byzantine background. But Mr. Byron has only given half the answer to the question which he very justly maintains is still outstanding: In what does Greco’s Byzantinism lie? His answer is in the *colour*, and his analysis on that point will be considered as final, but Greco is no less Byzantine in his, almost childish, mathematical principles of composition. These have been fully analysed by Mr. Jere Abbot, and his work—due, I hope, soon to appear from the press of one or other of the greater transatlantic Universities—will prove a valuable and necessary supplement to Mr. Byron’s studies.

One other point should have been raised: there is, in the account given, no answer to the curious fact that, in his



5

(1) *ENTRY INTO JERUSALEM*, by Duccio, 1308-11.

(2) *ENTRY INTO JERUSALEM*: Vatopedi, Mount Athos, Macedonian School.

The second of these pictures, which is almost life-size, is the work of the earliest of the later Byzantine schools, the Macedonian. The tree in the background foreshadows Van Gogh. The second reveals how closely Duccio derived from the contemporary models of the East, and how, without them, Italian painting, as we know it, would never have been born.

(3) *THE MARYS AT THE TOMB*: Peribleptos, Mistra. Late fourteenth or early fifteenth century.

(4) *THE MARYS AND SALOME AT THE TOMB*, by Duccio, 1308-11.

Here again Duccio's debt is made plain. Mistra, one of the last outposts of Byzantine independence, was the capital of the Peloponnese, and developed an active cultural life of its own.

(5) *ST. EUTHYMIUS*: Protaton, Mount Athos. Early fourteenth century.

From

The Birth of Western Painting.



6

(6) ST. JEROME, by El Greco, 1566 (?).

The striking resemblance between these two heads, separated in time by more than two centuries, illustrates how faithfully Greco followed the Byzantine ecclesiastical models and how great was their power of influence and survival.

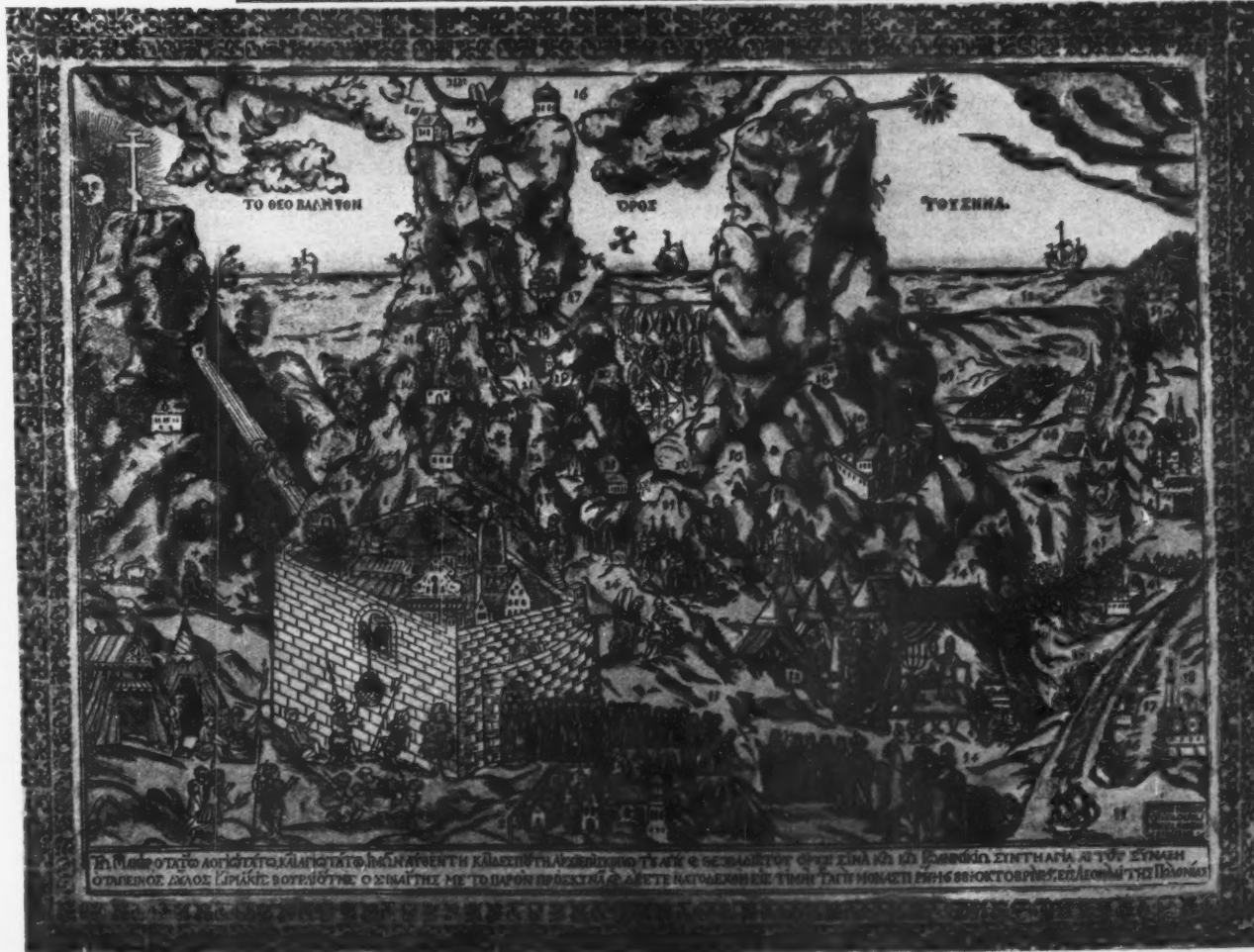
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(7) MOUNT SINAI, by El Greco, 1565 (?).

(8) MOUNT SINAI: A woodcut done at Lvov, 1688. Greco's derivation from the cultural tradition of his ancestors would be sufficiently obvious from many of Mr. Rice's plates and Mr. Byron's analyses of his and the Byzantine colouring. But here is actual proof that he not only derived inspiration from, but actually copied, the Byzantine formulas. This print was found in the monastery library at Mount Sinai; and, though later in date than Greco's picture, it represents one of those traditional landscapes of the holy places of the Orthodox Church which have circulated throughout Russia and the Levant since the fourth and fifth centuries.

8



From

The Birth of Western Painting.

Italian period, Greco's works are, not only for the most part bad, but almost wholly un-Byzantine, except for the earliest of all, the *View of Mount Sinai*.¹ While in Italy he seems really to have tried (and failed) to be a Western artist, and it was only after he had been a year or two in Spain, after the *Espolio* of 1579, which, in spite of a few Byzantine traits, is really a consummation of the Venetian "grand manner," that he redeveloped into a Byzantine artist, out of nostalgia. The absence of the authentic Greek product in Spain made this an entirely intellectual process, and perhaps we owe a part of Greco's greatness to this fact.

I have only noted one serious error of fact in the book: plate 46, described as being Greco's own magnificent picture in Toledo Cathedral, is, in reality, the horrid little daub in the Prado, signed by his son, Jorge Manoel. It might also be added that the *S. Maurice*, far from being always (as it apparently is in winter) one of the most invisible pictures in Europe, can be seen surprisingly well on any afternoon from August to the end of October (and possibly also during other months).

Yesterday and Today.

Historic Interiors in Colour. A series of 80 coloured views from Castles and Private Houses in Germany, Austria, and France. With an Introduction by ADOLF FEULNER. London: B. T. Batsford, Ltd. Price £2 net.

Modern Interiors in Colour. Being the English edition of "Farbige Raumkunst," Volume V. One hundred designs in colour. London: B. T. Batsford, Ltd. Price 38s. net.

AFTER looking through the two books of Julius Hoffmann—*Historic Interiors in Colour* and *Modern Interiors in Colour*—one is immediately pleasantly gratified in seeing very carefully selected and very beautifully reproduced plates in both cases. On closer examination the second book becomes obviously the more interesting.

A reviewer should presumably beware of comparison, but may be allowed to make an obvious comment, as the books arrived simultaneously.

The historic record is compiled of impressions by other artists after the event and are purely pictorial representations of setting, groups, and various individual pieces, which are presumably the work of many brains and tastes. This fact does not detract from their value or beauty, but it suggests a certain difficulty in arriving at the exact approach intended by the compilers. They have possibly a value for a student of history, but none for the architectural student.

On the other hand, the collection of modern interiors is, in the majority of cases, a set of reproductions of complete individual conceptions—the working drawings of the various designers represented. The fact that they are taken from the work of almost exclusively German and Austrian sources, which is not the case in the first book, is significant.

Can it be that the intelligent selectors saw nothing worth while in France, which may be a pointed omission, or in England?

The historic plates are, with few exceptions, as the foreword tells us, "all taken from the residences of secular and ecclesiastical princes." Effects, in fact, produced by the rich and rare, the decorative and precious, with very personal furnishings and collectors' pieces.

The value of the modern interiors reproduced for the student cannot be exaggerated, with the exception of some Viennese work shown, which is the nearest to the traditional English.

The bulk of the schemes are solutions of problems of today—solutions for the "man in the street," just an ordinary fellow who wants more light and conveniences in his small house or flat.

The effects are carefully based on fitness of purpose and are obtained by the simplest means of volumes, contours, and refreshing colour.

¹ I suppose this is a Greco, though its identification with Orsini's picture is not certain. It is presumed to have turned up in Rome, as it was for a time in the hands of a Roman dealer. Baron Hatvany, however, bought it in Venice.

Noticeable is the lack of decoration as such. Schemes please as a whole and not through any particular individual component.

They are representative of the modern man's home—but on the Continent. No doubt a grateful sigh will escape from many in England on that account. If, however, there is anything essentially unliveable, unhomelike, in these interiors, it is not apparent in the reproductions: notably in plates 6, 23, 29, 32, 35, 67 and 82, to quote a few.

Conversely, a great many of the Viennese, and a smaller number of German interiors, show a definite desire to be novel and different.

The results are purely bizarre—unnecessary complications of construction contradicting the very spirit of modernism.

In spite of the things shown in this book which one may condemn, it is questionable if so many successes could have been produced among an equivalent number of English works of this type—pure modern thought without recourse to travesties of tradition.

Unfortunately here in England, there is to be seen daily the mutilation of classic forms in the name of modernism.

There exists here the blind belief in the omniscience of the French school in the realm of the modern, with the consequent unrestrained importation of pressed glass fig-leaves, apparently to render more decent the Victorian obesity; the ever-present snobbism and cult of the patron; the perpetual flow to supplant the unattainable genuine antique among the moderately well-to-do, with the Tudobethan and other nightmare spuriousness.

Good wood can be seen everywhere groaning beneath enrichment which still stinks of barbola and all its kindred horrors.

Modern work in England is so tainted with raw amateurishness or Curtain Road frightfulness that any sensible propaganda is invaluable.

Knowledge of the existence of sane art is required so much here that one must feel that Messrs. Batsford are to be congratulated in bringing such a book within the reach of both the lover and the student of creative art generally, and of interior architecture in particular.

S. CHERMAYEFF.

St. Winifrid's, or the World of School.



A woodcut by E. J. Tavener.

Paton's List of Schools and Tutors. An aid to Parents in the Selection of Schools. London: J. and J. Paton. Price 5s. net.

THIS is a comprehensive volume of some thousand odd pages, and admirably fulfils what is of course the first object of every commercial undertaking, to give good service to its clients. Parents turning to it for help as to the education of their children, whether destined for scholarship or Empire-building, for art or professional football, will be almost overwhelmed with advice. There are articles on careers ranging from architecture to the Merchant Navy. These are written in an attractive style, and are calculated to appeal to the young careerist. Thus it is stated that (p. 304)—

Of all the careers open to boys, there are few that appeal so



SOME ILLUSTRATIONS from Paton's *List of Schools and Tutors*.

strongly as the sea. Indeed, it would be strange if, from our insular position and occupying the place we do upon the surface of the globe, it were not so. But, apart from this, there is the glamour and adventure of a roving career, which appeals to the heart and mind of the young Briton. True it is that, with the disappearance of the sailing ship, much of the romance has gone. But there is always a large percentage of youths who love the sea, and in whom the instinct of the hardy Norseman is strong.

The lists of schools, which occupy most of the space, are divided into sections. The Boys' Preparatory Schools section is profusely illustrated with photographs, sometimes of eleven specimens of clean-limbed young English manhood or of the playing-fields, but more often of the buildings. These appear generally to be well situated on sea-front terraces, or at least to be built in that style which tends most forcibly to eradicate dangerous deviations from the normal or original ideas. A boy entering one of these schools would surely emerge with no nonsense about him and with the foundations laid for becoming a Good Citizen. The avowed aims of the schools are various; one is "essentially not a scholarship school," while others "hold successful records in the preparation of scholarship candidates." In some "health is the first consideration," or "all boys are taught to shoot." The sanitary arrangements are often made a special feature. The fastidious parent should have little difficulty in finding some school to meet her ideals and in thus settling the first step in her son's education.

The Boys' Schools section covers a very wide area, but contains fewer illustrations. This seems a pity, as one of Messrs. Paton's pictures would, without doubt, have served to direct more attention to the page devoted to, say, Eton or Winchester. In this, more than in the previous section, emphasis is laid on the conditions governing entry and on the preparation for various careers.

The section on Girls' Schools and Colleges is the longest in the book, and is at first sight indistinguishable from that on Boys' Preparatory Schools. There are again many photographs of houses, most of which are essentially "normal," and the aims of the schools are just as varied. There is, however, more often the provision of happy home surroundings, which does not, as a rule, appear to be necessary for boys.

There are also shorter sections for special establishments such as Schools in Scotland (which are naturally fewer than schools in England), Agricultural Colleges, Nursery Training Colleges, etc. An interesting feature is a map included in the volume, giving such valuable information as Steamer Tracks and Canals, in case these means should be chosen for sending children to school. It should be remembered that the book will only be useful to the small class of people who can afford the so-called luxury of a Public School education for their children. For these, however, Messrs. Paton have produced a very valuable book, and one which must also have been very costly to produce.

ALBERT MACMILLAN.

Swedish Industrial Art.

Modern Swedish Decorative Art. By DR. NILS G. WOLLIN. London: The Architectural Press. Price 42s. net.

AS Lord Burnham said in the last issue of THE ARCHITECTURAL REVIEW, the artist in Sweden is not regarded as an impractical dreamer. It is interesting to see in this book a detailed and orderly exposition of the fact in the work of such people as Edward Hald, Simon Gate, and Elsa Gulberg.

The high level of industrial art in Sweden today is the outcome of a movement amongst the people themselves who have made a deliberate and organized endeavour to introduce art into the common surroundings of everyday life, and to bring beauty to the age of mass production in which we are now living by estab-



LOT AND HIS DAUGHTERS.

Intarsiatura work by Ewald Dahlskog.

From *Modern Swedish Decorative Art*.

lishing collaboration between the artist and the producer. A number of highly gifted and educated artists have placed their talents at the disposal of the manufacturer, who has thereby been enabled to produce, at an inexpensive price, beautifully designed

articles of everyday use. In this field Sweden may be regarded as a forerunner and a model for the rest of the world. The object of this book is to present an adequate picture of modern Swedish achievement in the decorative industrial arts, and no more competent author could have been found for the task than Dr. Nils Wollin, who, as Assistant Director of the Arts and Crafts Association of Sweden, has been intimately associated for many years with both the technical and the æsthetic sides of his subject. For this book he has been successful in gathering together a really representative collection of examples, which he prefaces with an admirable and informative introduction.

Interior decoration, furniture, ironwork, glass, china, pottery, embroidery, sculpture, carpets, fabrics, gold and silver ware, woodwork, and the like are all represented by the finest examples designed by famous artists, and the book forms the most distinguished and authoritative record of modern Swedish Arts and Crafts which has yet been compiled.

The humour and dexterity with which the Swedes design the most commonplace articles, and the beautiful colours—illustrated in this book—in which rugs and textiles are carried out, should inspire English manufacturers with a desire not merely to copy Swedish designs, but to remove from the neglect they have suffered for so long, all household utensils.



THE PRINCE'S GALLERY in the Town Hall, Stockholm.

From *Modern Swedish Decorative Art*.

Ragnar Östberg, Architect.

PAINTING.

(1) "FEMME NUE." From a lithograph by André Derain. This is a free interpretation in pictorial terms of the artist's impressions of his model. He has used, **A CONTRAST IN LITHOGRAPHS.** within the limits of what he considers the sort of line it gives him; and the greasy manner in which the chalk slips uninterruptedly over the surface is evidently very agreeable. The artist has employed light and shade only where necessary to balance his spaces and give variety and interest to what might otherwise be monotonous; exact gradations are not attempted, so there is an undegraded opposition of various separated shades against white paper, broadly put in with the chalk held sideways, and sharpened by various tilts of the chalk where the occasion has demanded clearer definition; but shade is indicated only in those parts where it would be most telling, and is not put in just because it happens to be there. The directional lines of the features are all carefully observed, and where exaggeration was necessary to accentuate character, those portions are enlarged and thus brought more definitely to our notice. From a little distance the jagged spots on the background are assimilated by the eye as a half-tone, and in their actual process of mixing with the white paper, give vitality and movement—something like the moving shapes in a kaleidoscope. This results in a different texture to the shade used on the forms, with which they are, therefore, not confused. Because the outline is not mechanically right, there appears to be a continuous shifting of the forms inside it to adjust themselves to the outline; they can, in a manner, be said to breathe. The lithograph was shown at a recent exhibition of etchings and lithographs by contemporary French artists at Messrs. Arthur Tooth and Sons, 155 New Bond Street, London.



1

(2) "RECLINING GIRL."

From a lithograph by Gwendolen Raverat. This study has quite a different aim to Derain's; it is naturalistic. The drawing follows, as exactly as the skill of the artist will allow, the lines of the model. The light has been accepted as it fell upon the shapes and defined them; the thought of the artist being concerned with its truthful rendering rather than on its studied use as a medium. The model has been taken literally, and the fore-shortened parts have been carefully drawn under the laws of perspective. Whereas—say, the nose in the drawing by Derain, to get its full value, has been put in more or less as it would be seen in profile, the rest is from three-quarter face. This drawing is very neat and self-contained; Derain's spreads and expands. Gwendolen Raverat has obtained variety by smudging, scraping, and other devices; she has used all the means she could think of to differentiate textures. Line and form and the beautiful qualities of the lithographic process have not been used as a complete means of expression, but as servants to the careful rendering of realistic effects, and to show off, as it appeared to the artist, the particular beauty of the type portrayed. This drawing is from the St. George's Gallery, 32A George Street, Hanover Square, London.



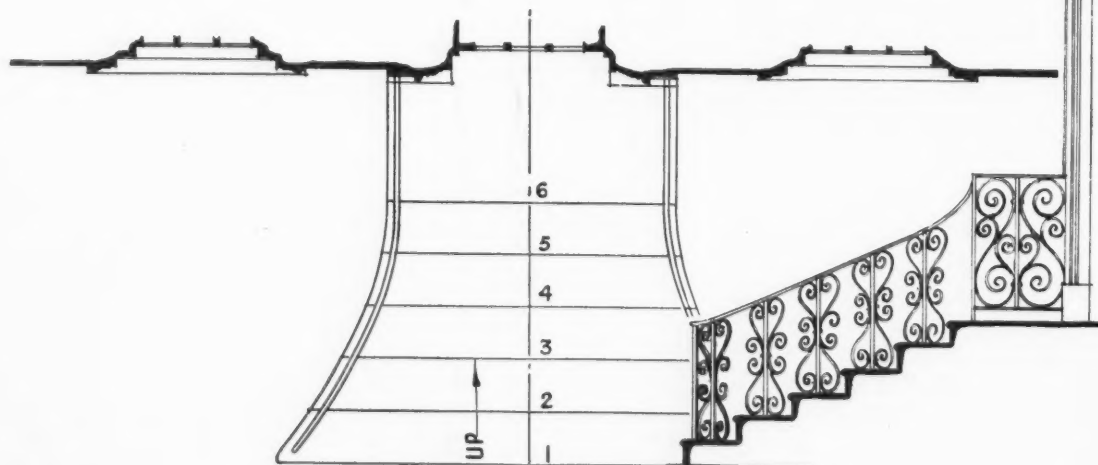
2

RAYMOND MCINTYRE.



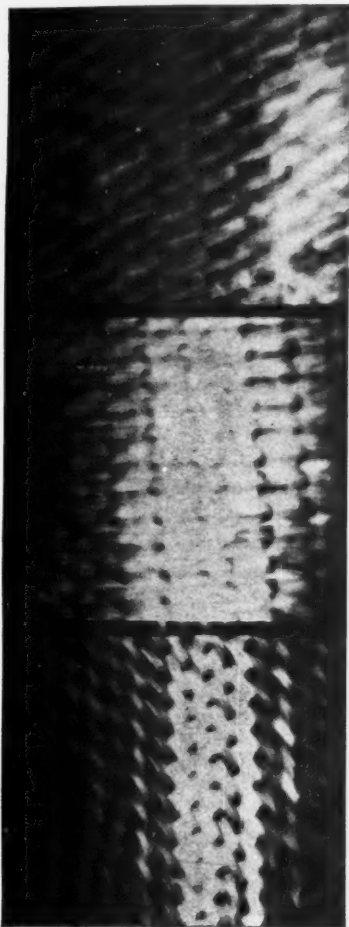
A measured drawing of the elevation, section and plan of the *ENTRANCE DOORWAY* on the south front of Upton House, near Banbury, Warwickshire. Remodelled by P. Morley Horder.

SCALE: INS. 12 6 0 1 2 3 4 5 6 7 8 9 FT.



THE FILMS.

THE FILM AND FINAL STATEMENTS.



A.

Is kino-eye as important as kino-brain ?

The realist school is content with representational images in ordered sequence. Images themselves are not a process of thought; they are merely the raw material snatched from life with elementary orientations of the journalistic camera lens. Images are not made, built; for the juxtaposition of celluloid strips in measured relationship is the only imaginative planning and controlling indulged in by the numerous partisans of the back-to-life movement. (Thematic interest touching the everyday life of the proletarian; epics of the soil; sweat !!!) It is all very admirable but cinema is capable of more ; it can, for example, present a final statement.

With kino-eye the screen is used as a retina. Supposing, now, the screen were used as an ultimate nerve end ? Instead of representational images the direct emotion induced by the images. Cinema a battery, an emotion machine discharging shocks into the audience ? Attempts have been made by the avant-garde, and the commercial cinema has had its moments especially when the character old man has taken a glass too much. But the commercial cinema is so tied-up with itself that an experimental approach can only be found in the new possibility of the advertising film. Indeed, the advertising film provides an economic basis for all pioneer work at the moment.

Take the case of illustration A. This is an actual enlargement from the film. Light is in motion over metal netting which is, also, in violent motion. The relative speeds of light and reflector may be judged from the change of focus and light area in the three consecutive images. The spectator receives no representational impression. He is not conscious of netting. He is, as it were, visually attacked. In other words, these three pictures are cut from a filmic translation of the brain command, STOP !

Illustration B is a more gentle example of kino-brain. It is purely non-representational, quite unlike anything seen in life ; and it serves as a further example of the way the advertising film can be used as a laboratory of cinema.

Illustrations C and D show the sensation, BRIGHTNESS. This is radiated by means of rods of light. Illustration D is absolute abstraction, while illustration C shows the early stages of the introduction of a more personal note.

Kino-brain suggests the way cinema will link up with television. Already the television experts are analysing the electrical disturbances in the human body when dominated by a special emotion. Soon we shall tune in to joy or sorrow as our psycho-analyst dictates.

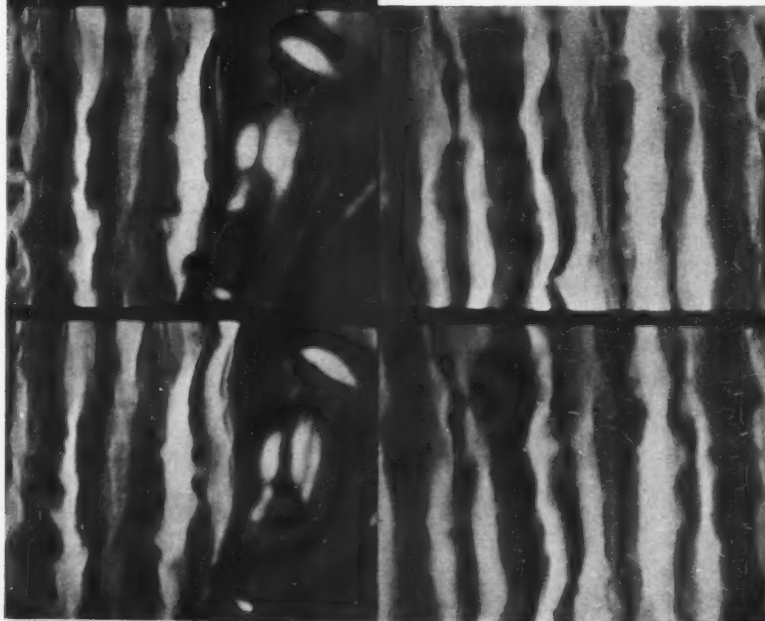
OSWELL BLAKESTON.



B. (A), (B), (C) and (D). *Illustrations from Advertising Films.* By Francis Brugière and Oswald Blakeston.



C. An advertising film is a film which never attempts entertainment as an end in itself. It is mainly designed to create a selling demand for a commodity or to give publicity to groups of people or individuals.



D.

A Free Commentary.

By Junius.

THE extension of automatic traffic-control by coloured light signals inevitably raises the old problem of colour-blindness. It so happens (it would!) that red and green are the two colours most readily confused by the colour-blind. In traffic-control by specialists, such as on railways and steamship routes, the responsible men can be selected, and free from this defect. But with the general public we must take the colour-blind with the normal.

It would seem, then, that some simple visual supplementary device not depending upon colour should be added to the colour code. A horizontal bar across the red, a vertical bar across the white, and an unbarred green would readily indicate "stop," "get ready," "go ahead." But it will take a few decades, no doubt, to get such a simple modification incorporated in the system.

Harassed Englishmen resident in Rome have been writing to *The Times* complaining of the appalling clamour in the Eternal City which makes work and sleep impossible. Let them wait; we shall soon have a London that will be able to compete with Rome. And we shall have no such ready means of remedying the trouble. When the thing becomes intolerable to Italian ears, which can by nature stand a good deal more than English ears, the Duce will rise up with his stern brow and decree that anybody making unnecessary noise is to be starkly cudgelled and flung into the Tiber. In democratic countries the problem is more difficult.

New York has taken a forward step by the formation of a Noise Abatement Commission. It opened its work a little more than a year ago with the circulation, through the city newspapers, of a questionnaire. Citizens' complaints were analysed with the result that traffic noises easily head the list with 36.28; transportation and radio noises follow with 16.29 and 16.24 respectively; collection and deliveries (9.25); whistles and bells (8.28); construction (7.40)—this seems an unscientific item, for construction, even in New York, must be a localized rather than a general source of noise; vocal (7.27); and others 2.89 complete the survey.

A noise-measuring apparatus—on lines suggested to deaf ears some twelve years ago by the enlightened *Junius*—was furnished by the Bell Telephone Laboratories. The Police Department, Sanitary Department, and Transit Commission were allotted their special functions in this survey.

A special test was made of motor horns with the not unexpected result that many horns in use were found to be more suitable for the waking of the dead at the General Resurrection than for mere warning. American horn manufacturers are going to unite (or so 'tis said) in the making of horns to fulfil the requirements of the authorities.

Most important—a Committee on the Effect of Noise on Human Beings set to work on laboratory tests. Sudden noises, such as the explosion of an inflated bun bag "raised the intercranial pressure to four times the normal for seven seconds. If a second explosion followed the first before its effect had subsided, a new peak in the intercranial pressure curve was evident."

Nitro-glycerine and morphine are two drugs which raise the pressure of the brain more than any other. But the paper bag beats them hollow. What, then, of the klaxon? Of course, we knew all this instinctively, but it is comforting to have it all set down with such explicitness by scientific or pseudo-scientific gentlemen. The experiments further prove that noise has a disastrous effect on brain workers, students, expectant mothers, the sick, and all children. Concentration on work is made

extremely difficult and the strain of work intensified. Nineteen per cent. more energy is expended in work in a noisy than in a comparatively quiet environment—the "nineteen" is too explicit here, surely. The effort made in trying to ignore noise definitely strains the nervous system and leads to "neurasthenic and psychosthenic states." The normal development of infants and children is seriously interfered with by constant loud noise, and so forth, and so on.

The Commission's report indicates that hitherto noise in New York has, in fact, been allowed to have its own way more freely than in London. But the point is that London is catching up and that if we adopt our ordinary attitude towards it (as we shall) the incubus will be upon us for ever.

If we had paid attention to our alarmed doctors and neurologists a score of years ago, or if alternatively they had asserted themselves more emphatically, and not lost heart so easily, we should not, perhaps, have let matters come to their present pass.

And how deplorably easy it is to slip back into apathy in this long battle against the decivilizing factors in our complex life. A worthy body, The Smoke Abatement Society, active some twenty years ago (and now apparently defunct), made its case against the smoke evil as a blotter out of the sun, a killer of vegetation, an aggravating constituent of fog, a destroyer of human life and of buildings, a monstrous increaser of laundry and decorators' bills—in fact, a general and damnable nuisance. The Society's experts proved, moreover, that the mere process of black smoke production, an effect of incomplete combustion, was in itself a positive, egregious, and absolute waste of fuel. Ground has recently been lost, say our health authorities and observation stations, even though heating by gas and electric fires has so much increased. The Fuel Research Department at Greenwich—one supposes this to be the official successor of the amateur and voluntary association—issues its warning. Of all peoples the rachitic English should be vitally concerned to prevent this bad business of carelessly casting away the gifts of the sun-god source of all our life and health. But are they?

We are told that our open domestic fires are now the principal offenders; not, as hitherto, the industrialists' furnaces over which control is now exercised. The industrialists, besides, have learnt by experience the economy of perfect combustion. The sale of raw coal for domestic fires will one day inevitably be made illegal; and the sooner the better. We shall lose something of the life and cheeriness of our home fires. But we pay too heavy a price for that comfort.

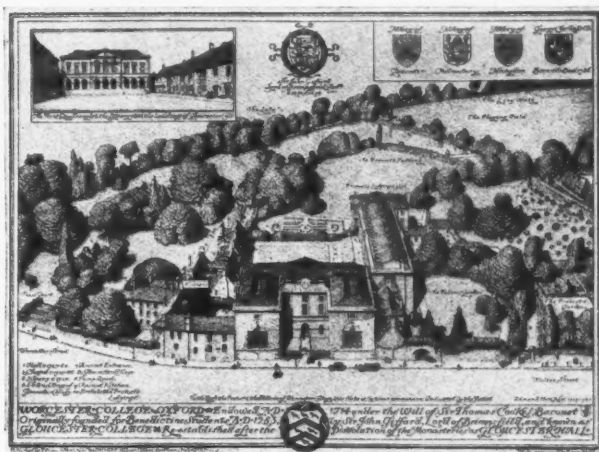
Meanwhile there are rumours of a sane co-operation of the various borough authorities of London in their disposal of refuse—a pooling of their barges, a common site and plant for incineration, and a saving of actual pounds, shillings, and pence in heat generated and by-products formed in the process. It may well be that the distresses which we are now suffering may force us to economies which are at the same time forward steps in civilization. The free-born Englishman never does much save under compulsion of authority—or close impending disaster.

And meanwhile the unwary citizen or visitor may any night trip over the dustbins on the pavements of the otherwise enlightened borough of Marylebone.

And Sir Francis Goodenough, commenting on our British methods of discouraging buyers when we have attracted them to our great Fair, quotes from a memorandum submitted to him by a more than ordinarily alert seller who had been taking notes: "The absence or irregular presence of men who can give definite statements and prices is remarkable. . . . No attempt is made to use a telephone to headquarters; and if such a course is suggested by the interpreter, the salesman gives the impression that he would be dismissed at once if he dared to do such a thing." Good old England!

WORCESTER COLLEGE, OXFORD. A miniature reproduction from a pen drawing by Edmund Hort New.—The spectator must imagine himself high above Beaumont Street, looking down on the front of the college and the junction of Worcester Street and Walton Street. In the centre is the entrance to the College, set back between the Hall on the left and the Chapel on the right. Over the Hall a Reading Room, connected with the Library, has recently been constructed, lighted mainly by sky-lights. The west side of this central block consists of the Library, beneath which is an arcaded loggia. This is shown in the inset view, above the main picture, and here, too, can be seen the Camera of the Benedictine students of pre-Reformation days, which form the south side of the principal quadrangle. The north range of buildings, to which an extra storey has recently been added, is terminated at the west end by the stately Provost's Lodgings. The low, gabled buildings, continuing this line to the street, belong to the Benedictine foundation, and adjoining them is the medieval entrance to Gloucester College. The walled garden into which this gateway leads belongs to the Fellows: to the west of it are the Provost's stables, yard, and Coachman's house. The Provost's Garden, Orchard and Paddock encircle the College from north to west. Beyond the Paddock is the Lake, and to the north of this are the extensive Playing Fields, now surrounded by a garden walk. The Canal bounds the precincts on the west, but it is hidden by the belt of tall trees that runs right across the picture. The street front is continued southwards by the old buildings of Pump Quad in which the covered way connecting the Hall and Kitchen can be clearly seen. Adjoining Pump Quad, on the south, is a further block of rooms. Near this, against Worcester Street, is the old Fives Court. The celebrated Garden occupies the southern part of the College grounds.

Above the picture, in the centre of the design, are the arms of the Founder of Gloucester College, and to the right are those of the three Abbeys most closely connected with the Benedictine foundation, namely, Gloucester, Malmesbury, and St. Albans. The row ends with the arms of Dr. George Clarke to whom Worcester College owes more than to any other benefactor. The arms of Sir Thomas Cookes through a vague bequest from whom, which was ultimately adjudicated to Gloucester Hall, the present College came into being, occupies the centre of the inscription at the foot of the engraving. It shows the form now adopted by the authorities, and is thus described: Argent, two Chevrons between six Martlets, three, two, and one, Gules.



The Architectural Review Supplement

April 1931

Decoration & Craftsmanship

OVERLEAF: AT CLOSE RANGE.

BAROQUE IN EXCELSIS—The famous Porcelain Room at the Palace of Schönbrunn in Vienna is, perhaps, the most sumptuous of all the Imperial Apartments, and was designed for the Empress Maria-Theresa, the greatest and most magnificent of all the Hapsburgs. The panelling of this dazzling chamber is in intricate little inlays of beautifully-figured woods. The room takes its name from the hundreds of small, irregularly-shaped plaques of Dresden porcelain which encrust the walls and coved ceiling. These are framed in gilt bronze wrought into the most fantastically extravagant and elaborately opulent designs that show a marked Oriental influence. The predominant tones are mahogany, gold, and royal blue. The furniture, though of the same period, does not somehow appear to have been specially designed for this scintillating saloon. If in the Porcelain Room baroque assumes an artificial luxuriance and a perverse complexity of form unequalled elsewhere, these riotous convolutions at least represent a conscious attempt to express the spirit of an age which, whatever its faults and shortcomings, was always animated by a sovereign disdain for the timid petit-bourgeois servility of taste that is known today as "period reproduction."

[P. MORTON SHAND.]



Colour in Interior Decoration.

I.—Colour Relationship in Pigments.

By John M. Holmes.

INTRODUCTION.

THERE is probably no more controversial subject than that of colour. The decision as to whether any given colour scheme is "good" or otherwise, is so much a matter of individual reaction that it is not uncommon to find all colour theories regarded with suspicion. Such doubt is often founded on the vague idea that a theory promises to produce good colour irrespective of the colourist's abilities. Such a claim on behalf of theory in any subject is clearly untenable. Genius creates without theory that which the mere theorist can never attain. Nevertheless the inventor of colour schemes, whether he be architect, painter, decorator, or just some one choosing a carpet to "go with" other colours in a room, is often at a loss to make a decision, or, having made

one, to account for unsuccessful colour. It is in such cases that knowledge of colour theory is invaluable.

There is, so far as the writer knows, no source of information devoted to the analysis of colour in interior decoration, in spite of the conditions—very different from those involved in the painting of pictures or the designing of textiles—which are encountered by the decorator. The present article records experiments with pigments, the colour in light and the effect of colour on the eye, and briefly presents information which has led to the relationship of colours as shown in Plates X and XI.

Later articles will seek to develop the theory and show its particular application to interior decoration.

DEFINITION OF TERMS.

IT is first necessary to analyse pigmentary colour relationship without consideration of texture or of proportionate areas, and analysis involves definition of the terms to be used. Such definition is all the more important because the same terms are so often used with different meanings, and in many cases a special meaning is here intended. It will be of assistance if such terms are, in the first place, associated with those commonly encountered in textbooks dealing with light.

When the constituent colours of daylight are isolated by being passed through a prism of glass, the solar spectrum colours so produced are usually classified by their Wave Length, Luminosity, and Purity, though the names for these three different qualities are by no means standardized.

We shall here identify Wave Length in light with chromatic or Colour property in pigment, and the word Colour will be used in its everyday sense, the colour of a pigment meaning whether it is approximately green, blue, or red, etc.

The quality of Luminosity in spectrum colours will

be identified as Tone in pigment. It is the achromatic quality of any given colour patch.

Any pigment may thus be said to be light or dark in relation to all other pigments, irrespective of its colour, having a degree of darkness approaching that of blackness or a degree of lightness approaching that of whiteness. It may, in other words, reflect much or little light, have more or less Luminosity, be light or dark in tone.

Purity in spectrum colours will be identified in pigment as absence of greyness or neutralization. A pigment will have maximum available purity of colour if it has not been neutralized by mixture with other coloured pigments. It may be greyed or pure irrespective of its colour, or whether it is light or dark in tone.

Any one patch of pigment chosen from the various sections of Diagram 1, Plate X, may thus be classified in three different ways: by Colour, by Tone, and by degree of Purity. For example, the patch of pigment B is in Colour orange, in Tone darker than A and lighter than C; and has greater Purity than the greyed orange patch shown immediately below it.

COLOUR IN INTERIOR DECORATION.

TONE RELATIONSHIP OF PIGMENTARY COLOURS.

We may now consider how and why the twelve colours in Diagram I came to be selected from the many coloured pigments available. If we surround ourselves with all available examples of green or greenish pigments, it will be possible to select one of them which is *greener* than all the others. It will be the *greenest* pigment because it will be neither *grey green*, *pale green*, nor *dark green*, neither *blue green* nor *yellow green*. In the same way we may by selection arrive at a pigment of *violet* colour to which we can add nothing which will make it more *violet*. It becomes less *violet* if *red* or *blue* be added (or in fact any other colour). It becomes less *violet* also if *black* or *white* be added.

If such experimental selection be made of twelve pigments as different from each other as possible, it will be found that each pigment has a certain *tone* value relative to all others, and if these twelve colours of maximum difference and purity be arranged according to their tones, it will be found that they appear in a graduated "Tone Order" as shown in the *outer circle*, Diagram I. In this diagram, the *yellow* is the lightest toned colour, and the *violet* is the darkest toned colour, while the tone becomes increasingly dark on either side from the upper part of the circle to the lower. The tone value of colours may best be compared by half closing the eyes, for tone value depends on the amount of light reflected to the eye rather than the quality of the light. The number of colours here chosen (twelve) is arbitrary, although it is considered to be a minimum for practical purposes if a comprehensive range of mixtures is to be attained.

It is clear that the question of tone value is of great importance, for any change in the tone of one of these colours made, for instance, by the addition of *black* or *white*, cannot but rob it of brilliance, and entirely change its relationship to other colours. To mix *black* with any one colour is to suggest to the eye that it is not receiving the same amount of illumination as the colours around it. To mix *white* with any one colour is to suggest that it is receiving more light.

It might seem obvious that any theory of pigmentary colours must take the solar spectrum colours at their relative Tones, and Purity as a basis. It is nevertheless true that certain colours, *blue greens*, *purples*, etc., appear as complex reflections from certain pigments and are yet not found in the solar spectrum.

While we may approximately reproduce the seven colours of the solar spectrum by carefully chosen and mixed pigments, yet these are not the purest and most saturated pigmentary colours, nor are they necessarily of the same wave length or constituency as the spectrum colours reproduced. The tones of the colours in the outer circle, Diagram I, are therefore not necessarily the same as the tones of any similar colours in the solar spectrum.

CONTRAST RELATIONSHIP OF PIGMENTARY COLOURS.

Experiment with the twelve pigments already selected will show that they have a further colour relationship in so much as certain pairs of pigments, when mixed together, will produce *neutral grey*; that is to say a *grey* colour similar to a mixture of *black* and *white*, which cannot be said to be more like any one colour in the circle than another. If any one colour (*yellow green*—M in Diagram I—for example) be in turn mixed separately with each of the other colours in the circle, it will be found that the only one which will completely neutralize it and produce *neutral grey* will be the *purple* (F).

This relationship is important as it distinguishes pairs of pigments which have maximum colour difference from one another. In Diagram I, each colour is so placed as to occur diametrically opposite the colour which possesses this maximum difference and with which it will produce *neutral grey* by mixture. Such pairs of colours are said to be *contrasted colours*.

LIGHT AND PIGMENT.

It has already been suggested that the colours produced as the result of the breaking up of *white* light are not necessarily the basic colours of pigments.

White light may be resolved into its elements; a series of different colours—*red*, *orange*, *yellow*, *green*, *green blue*, and *blue violet*—merging into one another in subtle gradations. Further "colours" exist, the *ultra-violet* and *infra-red* rays, but these are commonly accepted as invisible.¹ Colour is dependent upon wave length, but wave length is no guide to a colour's relative tone.

The three Primary colours of light are *green*, *blue*, and *red*, and colours in light are said to be *contrasted* when they will produce *white* light by mixture. By mixing light Primaries in pairs, other colours called *Secondary* colours are produced, and nearly all colours in the spectrum may be obtained by different mixtures of *red*, *blue*, and *green* light. This fact has led in the past to a search for three coloured pigments which, when similarly mixed, will produce all other colours, and the choice has always fallen upon *red*, *blue*, and *yellow*. These were therefore called the Pigmentary Primaries, mixing together to form the Pigmentary Secondaries, *purple*, *orange*, and *green*, which in turn were mixed together to form the Pigmentary Tertiaries, *russet*, *olive*, and *citron*. Such theory is of little practical use.

Owing to the very complex nature of pigments which enables them to absorb some coloured "rays" and reflect other coloured "rays" in complicated fashion, it is true that some *yellow* pigments when mixed with some *blue* pigments will reflect *green*. On the other hand, other *yellow* and *blue* pigments when mixed together will not produce a satisfactory *green*. No *yellow* or *blue* pigments of any kind when mixed together, will produce a *green* as fully saturated or unneutralized as available *green* pigments.

The theory of three Primaries, three Secondaries, and three Tertiaries, is therefore inadequately based on the theory of colour in light, and the colourist in practice needs more than three "first" colours or Primaries. The mixture of light is a matter of simple addition; that of pigments is of very complicated subtraction.

Red, *yellow*, and *blue* pigments when mixed, will produce a limited number of other colours (this is true of any group of three colours) but the limitation is a very severe one. The inevitable neutralization which takes place when pigments are mixed, as compared with similar mixture of coloured light, was clearly shown in the experiments of *Rood*. In the three-colour printing process the printer naturally reserves the right to choose any three colours, and is not limited to a given *red*, *yellow*, and *blue* in reproducing any given colour.

¹ It should be realized that to speak of "colour" in the "light" is to use non-scientific terms. Not only does a colour not exist on the surface of an object, but, also, it does not exist in the light. Colour is, in fact, a sensation resulting from waves of different lengths which are registered as colour by certain living creatures equipped with a "machine" called an eye. The cat, which sees no colour, and the bee, which sees only in tones of yellow and blue, are exceptions. A man who is totally colour blind can only distinguish colours by their different tones.

The colourist is thus limited unless he possesses approximately twelve pigments such as those in Diagram I, each as Pure as possible, and each, therefore, in the approximate Tone Relationship there shown. It is often necessary or desirable to limit the number of colours used for æsthetic or other reasons, but to teach such limitation as a basis of pigmentary colour theory, is misleading and cannot be substantiated in practice.

The twelve colours A to M in Diagram I are therefore defined as Primaries. They are of maximum available purity, but they do not pretend to set a standard of purity, for the colours shown are reproductions of pigments purposely selected from the ordinary merchant's stock and taken straight from the tubes.

In the case of light, experiment will show that *white* light may be produced by mixing contrast colours, but that pigments of contrasted colour when likewise mixed together, will produce *neutral grey*. The theory of coloured light mixture has thus only a limited application to painting with a mixture of pigments.

The colour absorbed from *white* light by a painted object may be said to be the contrasted colour of that reflected by the paint. *White* light consists of *blue*, *green*, and *red* light, so that if a *red* object is absorbing all *blue green* rays from the *white* light and we place it against another object painted *blue green* which is absorbing all *red* light, we are relating two colours which, if mixed as light together would approximately produce *white* light. Some luminosity is inevitably lost, for it would be exceedingly difficult to find *red* and *blue green* pigments of so completely selective a purity as suggested, but it is clear that the two colours together are likely to give a sensation of colour "completeness" to the eye. The keen visual recognition of Contrast as an important relationship of colours is thus at least partly explained.

PHYSIOLOGICAL COLOUR REACTIONS OF THE EYE.

We have seen that analogous experiments with coloured pigments and with light will establish a relationship called Contrast between certain pairs of colours.

But there is further evidence of the importance of Contrast as a basis for colour theory. In all experiments the Eye of the observer has played an important part and it is now necessary to cite certain cases in which this organ of itself establishes Contrast relationship.

If on a background of *neutral grey*, most easily produced by mixing *black* and *white* pigments, a number of patches of Primary colours are painted, it will be found that a *crimson* patch makes the surrounding *grey* look *greenish*, and that a *yellow green* patch makes the surrounding *grey* look *purplish*.

If the experiment be repeated with many colours, it will be found that the *grey* appears in each case to take on some of the colour previously identified as a contrast of the particular Primary.

That the eye has a physiological desire for this relation of Contrast of colour may be still more convincingly shown in the following way. In a dark room an illuminated electric bulb is coloured with *blue green* pigment. The eye is focused upon it for several minutes and then closed. An "after image" of the bulb is almost immediately followed by a "negative image" in which the shape of the bulb remains, but its colour has now changed to *scarlet*, the contrast colour previously identified. If the bulb be then coloured a more *yellow green*, the "after image" will appear a more *purple red*. In each case the colour induced on the retina of the eye appears to be the colour which,

when mixed with the original colour of the bulb, would produce *grey* in the case of mixed pigments.

It is thus clear that the eye automatically induces the contrast colour of any given colour. The physiological explanation of this, and in fact all other colour sensations, is still a matter of hypothesis. At least sixty different theories of colour sensation have been put forward at different times.¹

If the eye has such a strong physiological desire for contrast colours, then we may use Contrast as a basis of colour theory in pigment with still greater confidence than would be warranted by our previous observations in connection with pigment and light.

THE PRIMARY CIRCLE.

In Diagram I the results of the foregoing experiments with Pigments, Light, and the Eye, are set down in the form of a chart, in which twelve selected Primary colours are shown. Each colour has a particular tone relationship to all other colours. The twelve colours are placed in the outer circle in such a way that each colour is diametrically opposite from its Contrast colour—thus A is the contrast of G, B of H, C of J, etc. The pigmentary test for Contrast colours is that they should, when mixed together, produce *neutral grey*. Opposite colours in the diagram are thus proved to be contrasted, for they produce by mixture an entirely *neutral grey* shown in the centre. For example, *crimson* is added in increasing proportions to *green*, the *green* gradually changes through a series of *greyer greens* until it becomes *neutral grey* in the centre of the diagram, again changing through a series of *crimson greys* as more *crimson* is added. Although one patch of *neutral grey*, placed in the centre of the diagram, must here represent all contrast colours, yet it should be realized that this does not mean that such *grey* is necessarily produced by mixing equal quantities of any two contrast colours, or that the *grey* produced by mixture will be of the same tone for all pairs of contrast colours. The outer circle in Diagram I is hereinafter called the Primary Circle, and all colours in it are said to have Primary Tone Relationship.

An infinite number of colour circles may be produced by adding equal amounts of *white* or *black* to each colour, while the Primary Tone Relationship (the *yellow* colour lightest, and the *violet* colour darkest, etc.) is still maintained. Such circles would vary in Key. Key is definable as the general tone of all colours in a scheme. A colour circle as a whole may thus be in a light Key, each colour having received *white*, or in a dark Key, each colour having received *black*. Each colour would be equally robbed of purity, but this would not upset the Primary Tone Relationship unless a colour of Primary Purity were introduced.

DIAGRAM Ia.

When two colours impinge or occur in juxtaposition, each affects the colour value of the other. In Diagram Ia (Plate X), it may be observed that the colours appear to induce their contrast colours in *neutral grey* surroundings. If the first example (N) be viewed through a small aperture so as to shut off the surrounding *white* paper, it will be seen that the *neutral grey* takes on a *crimson* colour which is the contrast of the *green*. Whereas in the fourth example (Q) the *neutral grey* appears to be tinged with *scarlet*. The other colours in a like manner appear to induce their contrasts in *neutral grey*. But it is not only in *neutral grey* that the contrast colour is induced. A colour induces its contrast in any colour placed against it, and hence where actual

¹ C. Ladd-Franklin—*Colour and Colour Theories*.

COLOUR IN INTERIOR DECORATION.

contrasts are placed in proximity, both colours appear more pure and intense.

The Tones of colours are also affected by such proximity. If a dark-toned colour be placed against a light-toned colour the difference in Tone is intensified. The dark colour appears darker in Tone, and the light colour appears lighter.

COLOUR INCONGRUITY.

Colours shown in Diagram I and in similar circles which might be made by adding the same proportion of *white* or *black* to each of the colours, are said to be in Primary Tone Order.

When this tone order is observed the colours used will have equal importance and brilliance, but if, for instance, sufficient *black* pigment be added to the *yellow* to make it as dark in tone as the *yellow green*, it is out of "Key" and the two colours when adjacent will deteriorate accordingly. This deterioration of colour effect will be still more obvious if the *yellow*, which is the lightest toned colour, receives a great deal of *black*, and the *violet*, its contrast colour, which is normally the darkest toned colour, receives a great deal of *white*. Such colour combinations were noted as unfavourable by Chevreul,¹ and the effect of deterioration has been called "Discord" by Mr. H. B. Carpenter.² It is not necessarily unpleasant, for it can be used advantageously, as in music when expression calls for it.

In Diagram II (Plate XI) three circles of colours having incongruous relationship are shown. In the *outer* circle the maximum discordant relationship is produced by entirely reversing the tone order of the same colours as shown in Diagram I. In the other two circles more subtle discord is obtained by making every colour equal in tone, in the first case by adding different proportions of *white* to produce a light-keyed Discord Circle, and in the second case by adding both *white* and *black* where necessary to produce a Discord Circle of dark key.

Discord colours apparently attempt to induce their contrast colours of the right tone value in each other. There is a constant

vibration of light in extreme cases from one to the other, which intrigues and puzzles the eye.

If the discord colours in Diagram II, which are opposite one another, are placed together, the vibration is most intense, for the colours are contrasted; but the tones are such that light-toned colour is attempting to make the dark-toned colour lighter and vice versa. More subtle discord is obtained by using adjacent colours from these circles. They may be called Harmonious Discords to distinguish them from Contrasted Discords.

The *blue green* and *scarlet* are exceptions in all three circles in Diagram II, because although they are discordant with all other colours in these circles, they are not discordant with one another. This is because their tone remains approximately equal in each case as in the Primary Circle. Two discords of these colours, the first (R) in which the *red* is lighter in tone than the *blue green*, and the second (S) in which the *blue green* is lighter in tone than the *red*, are therefore shown in Diagram II A.

The unpleasant effect of *blue* on *black*, noted by Owen Jones, is probably due to the induction of the contrast *orange* in the *black*. As the *orange* naturally appears in very low tone, the two colours tend to provide a maximum Discord relationship. This is illustrated in Diagram II B, where both *blue* and *violet* appear to make the *black* unpleasantly *brown* in the patches T and U.

The vibration produced by discord attracts the eye, but tires it. For this reason it is usually best to reserve the discord relationship for the climax of a colour scheme, and to use the discord colour in small areas only. The centre of the circles, Diagram II, has been filled with a very light-toned *violet*. This colour is perhaps the most difficult of all colours to use in large areas, because any other colour which is not lighter in tone is discordant with it. It is taken from a circle of such high Key that it is almost impossible to get other colours sufficiently light in tone to maintain Primary Tone Relationship. It would be necessary, for instance, in using *yellow* with very light-toned *violet* to add so much *white* to the *yellow* that it would cease to convey any sensation of *yellow*.

(To be continued.)

¹ M. E. Chevreul—*The Laws of Contrast of Colour*. Routledge.

² H. B. Carpenter—*Colour*. Batsford.



"We are making a new world."

From a painting by Paul Nash.

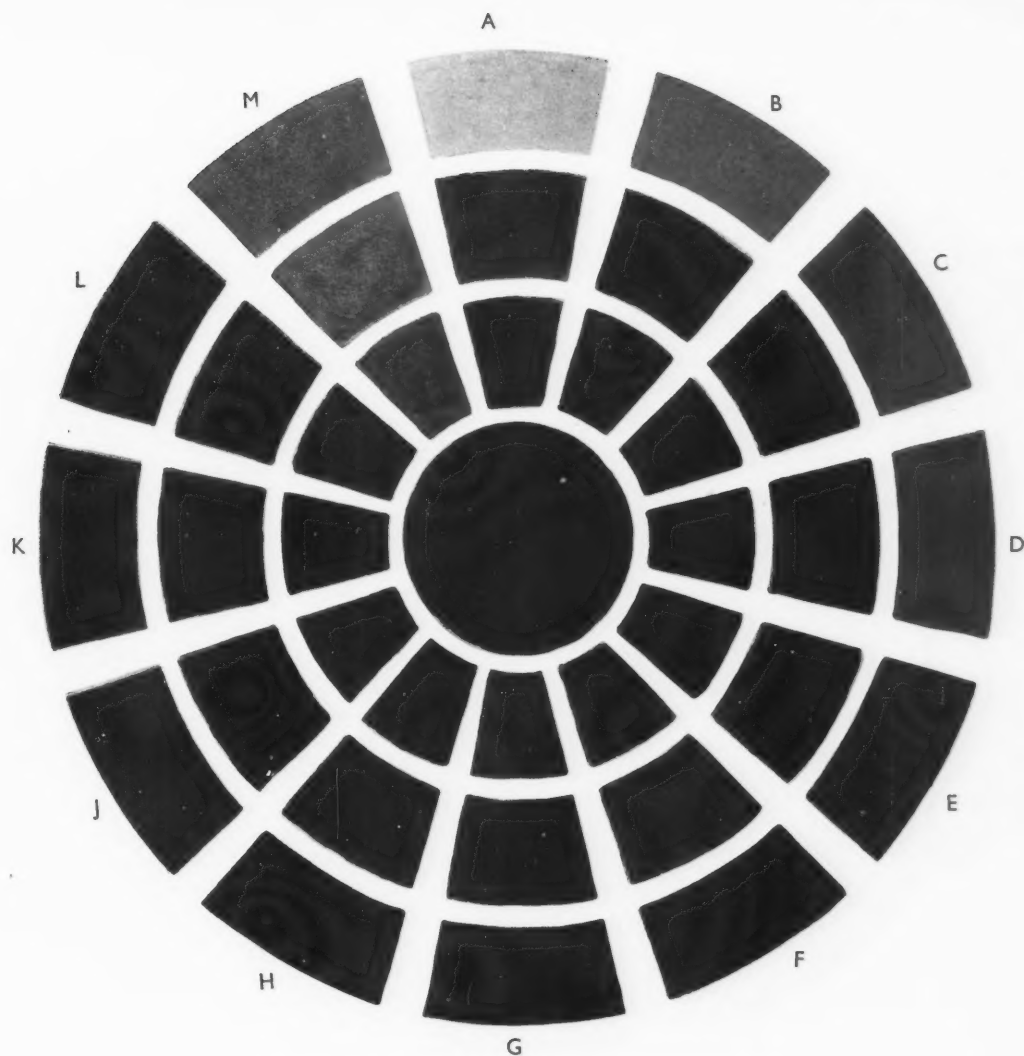
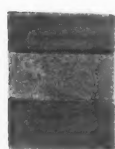
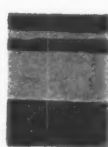


DIAGRAM I. *PRIMARY TONE ORDER.*

A. YELLOW. B. ORANGE. C. RED. D. SCARLET. E. CRIMSON. F. PURPLE.
G. VIOLET. H. BLUE VIOLET. J. BLUE. K. BLUE GREEN. L. GREEN. M. YELLOW GREEN.



N



O



P

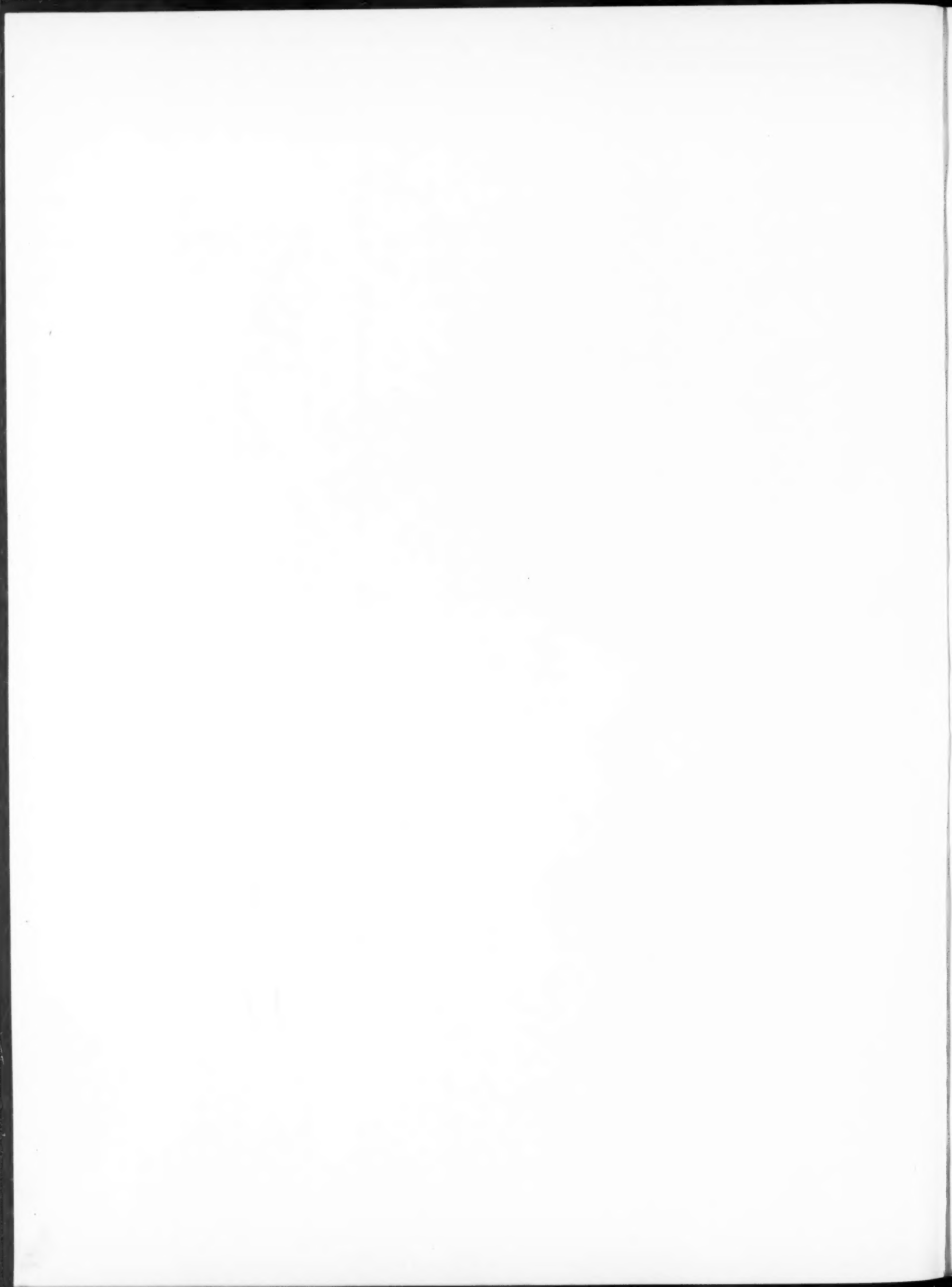


Q

DIAGRAM Ia.

CONTRAST COLOURS INDUCED IN NEUTRAL GREY.

PLATE X.
April 1931.



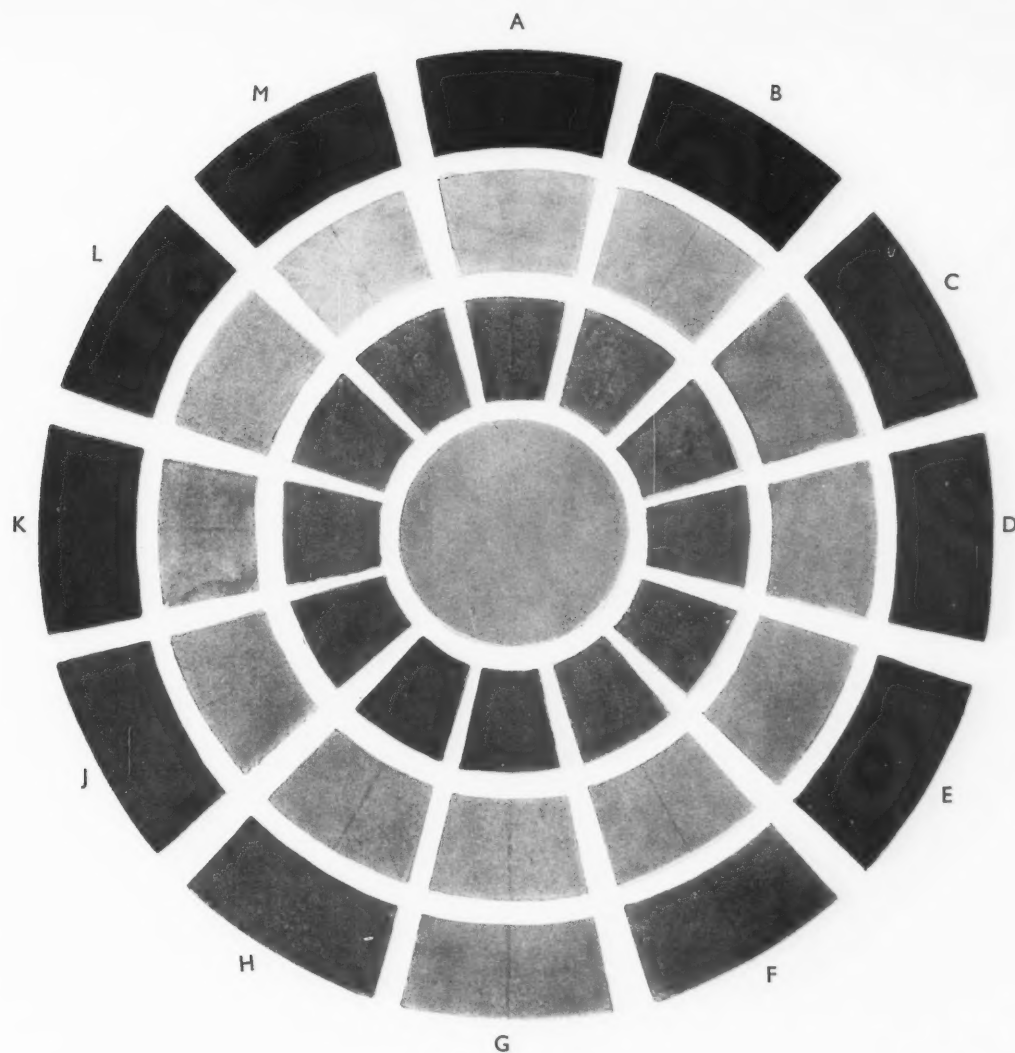
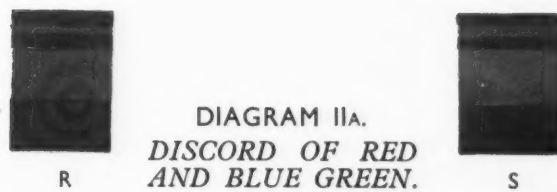
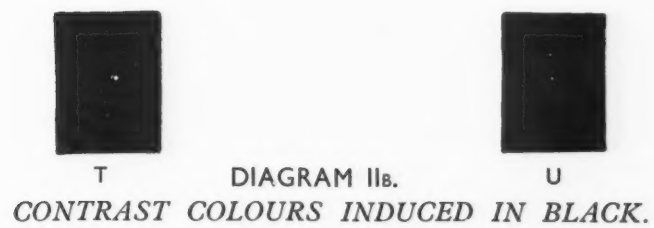
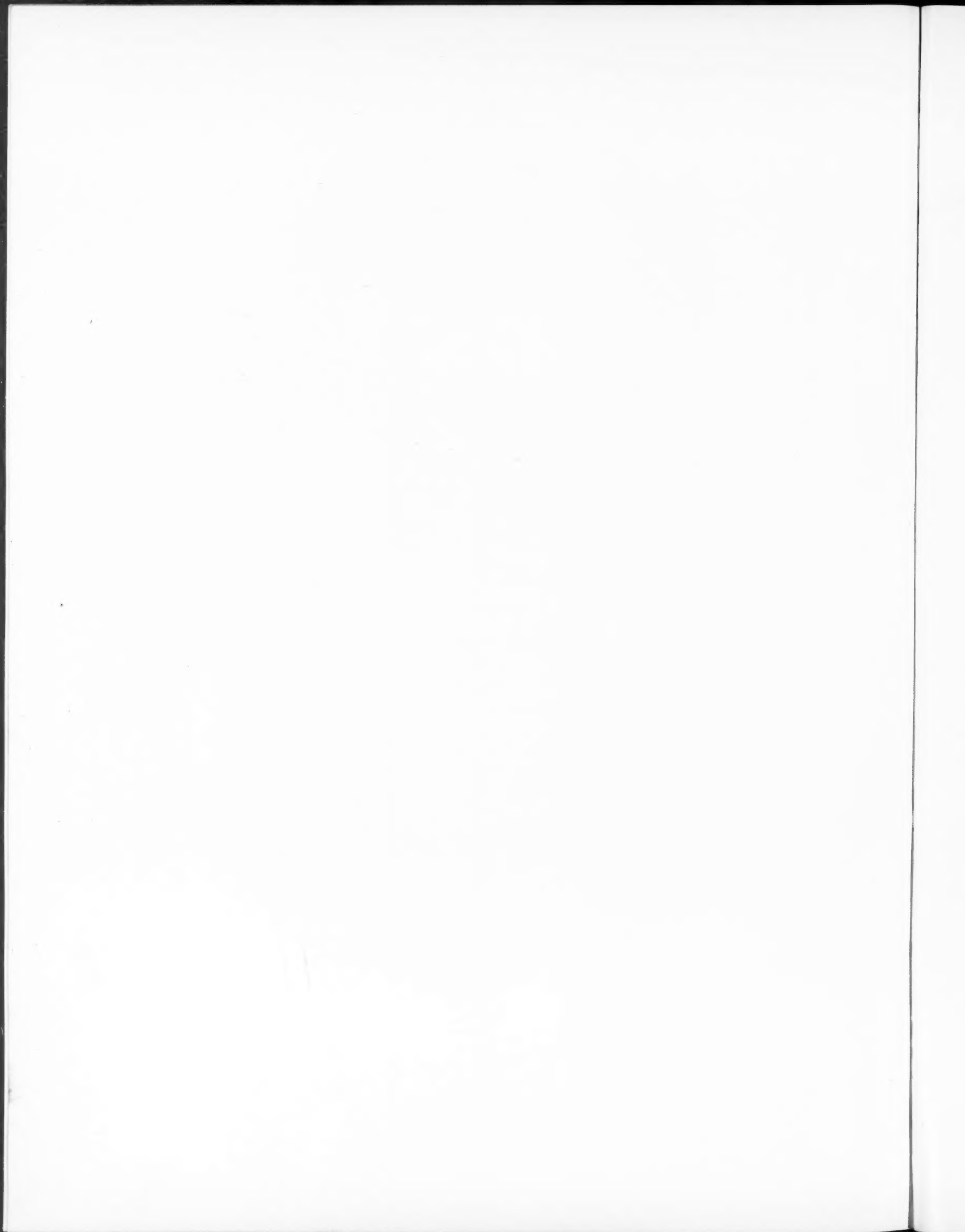


DIAGRAM II.
DISCORDANT TONE ORDER.

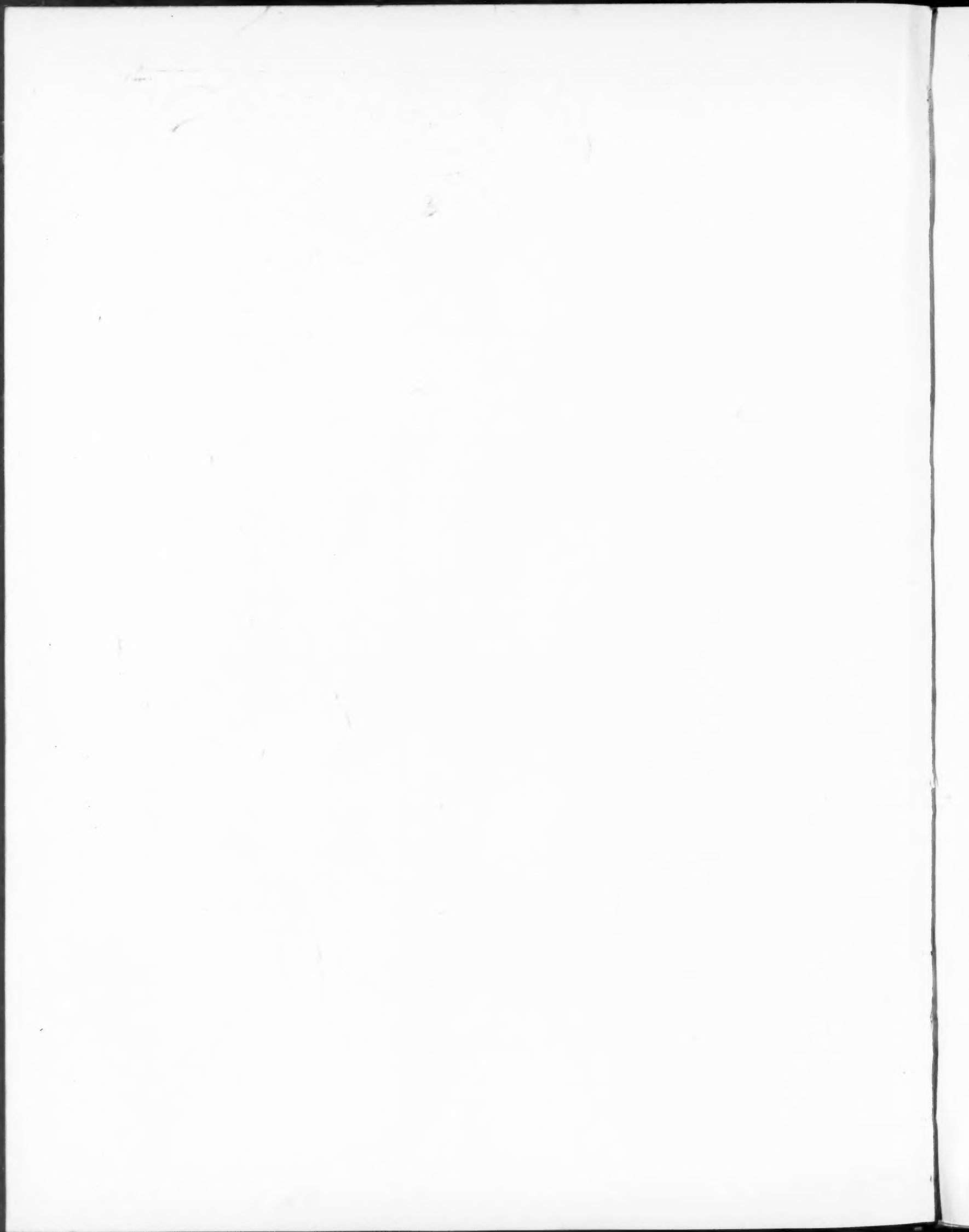






No. 15 Chelsea Court, London, the flat of Mrs. Lance Pitman, decorated by EDWARD CROGHAN in association with GODFREY GILES. (1) The dining-room end of the long room. The dining-table at this end of the living-room is of golden onyx marble on a silvered wrought-iron stand. A slab of plate glass on silvered wrought-iron supports takes the place of the conventional sideboard, and the built-in cupboards flanking the chimney-breast afford the storage place usually supplied by that cumbersome piece of furniture. The chairs are of a

natural walnut, upholstered in green damask of a modern design. (2) Bookcases in the long room. The built-in bookcases and writing-tables are painted a very pale straw colour to match the walls and their tops are covered with plate glass. The writing-tables are set in front of the windows, which have a view across the river to Battersea Park. The curtains, of silk of a slightly deeper shade than the walls, are lighted up at night by lamps of glass and crystal. The photographs are by M. O. Dell and H. L. Wainwright, the official photographers of THE ARCHITECTURAL REVIEW.





1



2



3

(1) The dressing-table in Mrs. Pitman's bedroom is a shaped slab of clear glass supported on silvered wrought-iron brackets, and is fixed across the front of the large mirror which covers the wall-space between the windows. The ceiling, walls, curtains, and carpet are a very pale shade

of blue-green, and the silvered wood stool is covered in silver satin. (2) Another view of Mrs. Pitman's bedroom. The mirror is rose-tinted and the chair is covered with gold satin, silver plated. The side-table is painted to match the walls and carpet. (3) The sitting-room end of the long room. The walls and built-in fittings in the flat are painted a pale straw shade, which is an excellent foil for the brilliantly-coloured metal flower groups made by the owner. The niches above the inset electric fires are silvered and illuminated by concealed lights. One of the built-in fittings contains a cocktail cabinet, with a bar which slides out of sight when not in use.

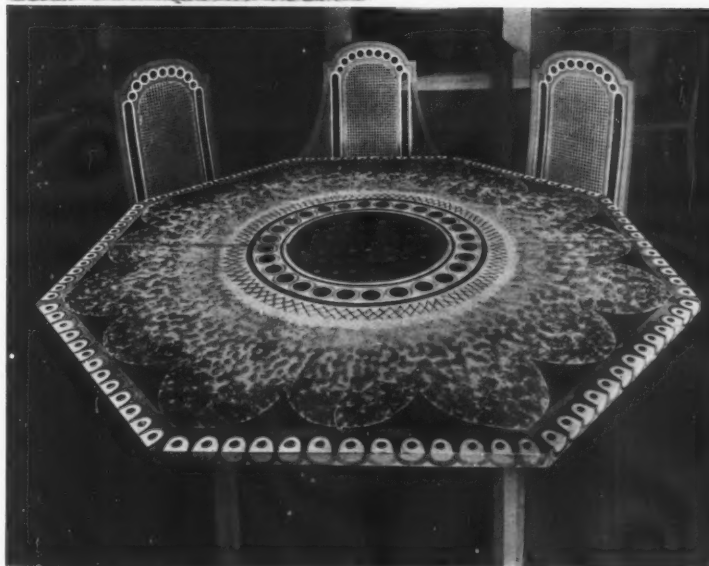


1



2

(1) A chromium-plated steel *WRITING TABLE* with plate-glass top and under-shelves. The *CHAIR* is also chromium-plated steel, with polished black leather seat and back. The writing table and chair were *designed* and *made* by Heal. (2) A dining-room *CHAIR* in French walnut, inlaid with sycamore and macassar ebony, *designed* by C. A. Richter and *made* by Bath Artcraft. (3) A dining-room *TABLE* in deep blue, browns, and green, finished with a cellulose varnish, *designed* and *painted* by Duncan Grant, and *made* by Mathias Kallenborn. The table has a leaf in the centre which is removable. (4) A walnut *WRITING DESK* with a rounded side and fitted shelves. The door fronts and the door are cherrywood, with rosewood handles. The top is black cowhide. The table was *designed* and *made* by Gordon Russell. (5) A lined oak *BUFFET SIDEBOARD*, fitted with black-and-white composition handles, *designed* by C. A. Richter and *made* by Bath Artcraft.



3

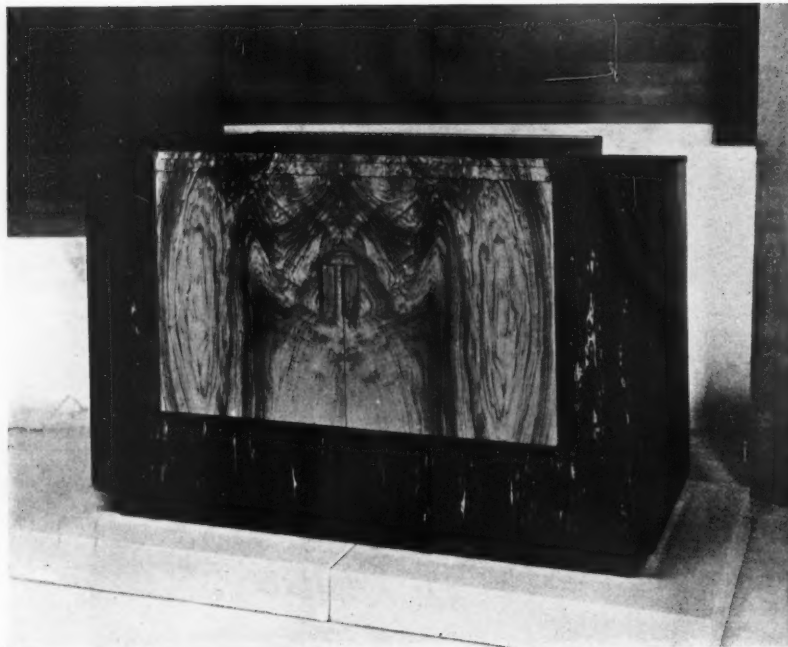


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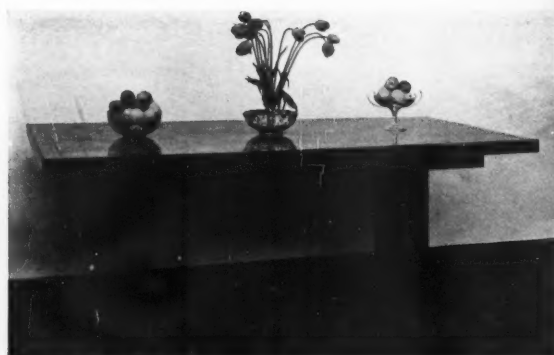
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8



10

9



(6 and 7) Closed and open views of a dining-room *SIDEBOARD* in walnut and coromandel. The centre portion has a large removable tray for glasses. The smaller side trays are equally removable for cutlery, and so, too, are the metal-lined trays for warming or cooling wines. The drawers underneath are for table linen. The sideboard was *designed* by S. Chermayeff and *made* by Waring and Gillow. (8) A *COCKTAIL*

TABLE. The top and pedestal panels are of stainless metal, and the framework and pedestals are ebonized wood. The table was *designed* and *made* by Heal. (9) An *OFFICE TABLE* and *CHAIRS* in oak, also *designed* and *made* by Heal. The *CARPET* was *designed* by C. Garforth. (10) A draperie mahogany *DINING TABLE* inlaid with ebony, *designed* by C. A. Richter and *made* by Bath Artcraft.

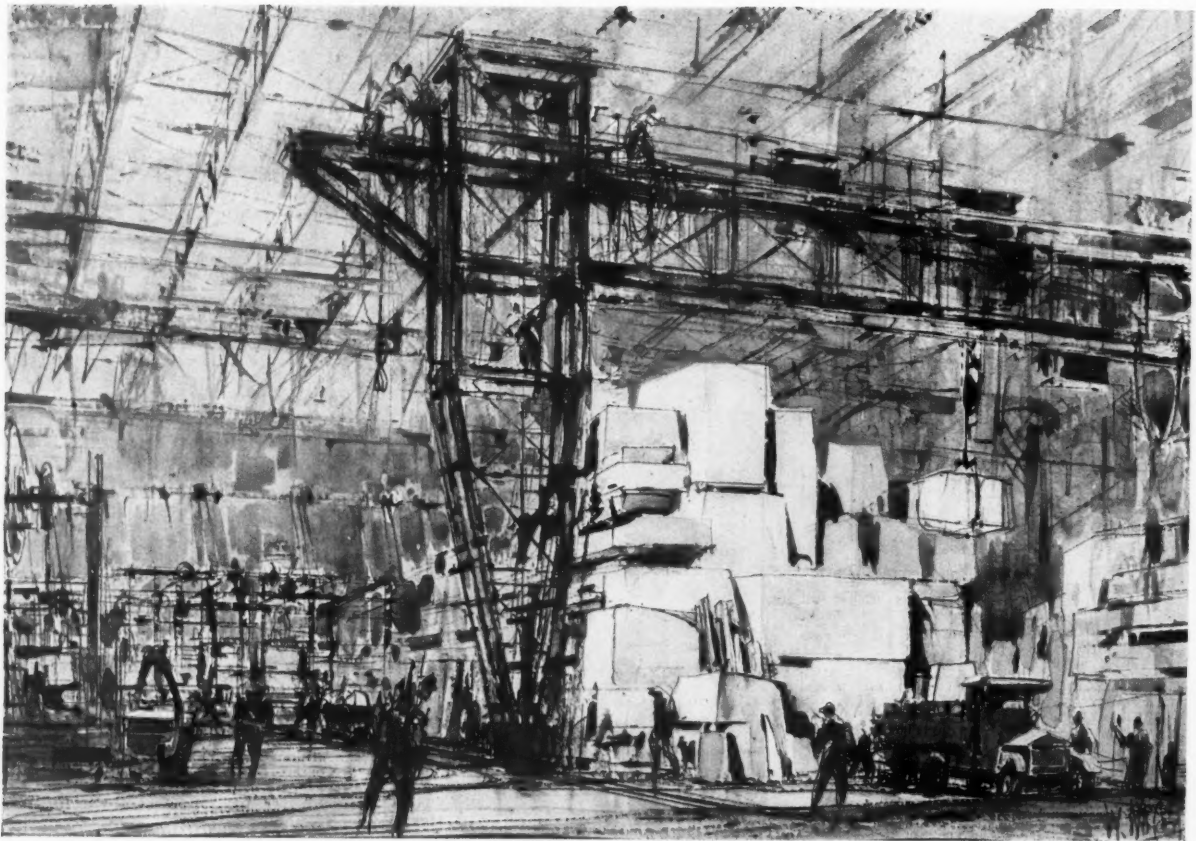


In some of the finest and most elaborate buildings that well-considered and artistic design and clever craftsmanship have produced during the past twenty years, floor and stair surfaces have been made safe for foot-traffic. No stair which is to give access to a balcony, as illustrated above, should be a dangerous stair. A slip and a fall may result in an injury that is irreparable. Such an accident cannot justly be laid to carelessness. It should not be necessary for the user of a stairway designed and provided for the use of the public to be continually on his or her guard for fear of encountering a dangerously slippery surface. Marble terrazzo is one of the finest combinations of practical value and permanently attractive appearance for stair treads or landings that modern ingenuity has devised. Marble terrazzo can be made safe—non-slip without question—without its beauty being in any degree impaired. Crushed "Alundum" aggregate in colours is provided to that end. Write for particulars of colours and costs. We definitely specify how "Alundum" aggregates must be employed to obtain the desired results.

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London, W.1.

The Adamite Co. Ltd.

Marble



The Mills and Great Crane at Whitehead's Works, Kennington.

From a watercolour by W. Walcot.



J. Whitehead & Sons Ltd.
Marble Experts, Imperial Works
Kennington Oval, London, S.E. 11

Anthology.

Royal Patronage.

It is to be feared that the system of working by other people's hands and wits is not now wholly abandoned; but there is a meanness in the practice which cannot be too much reprobated, and he is unworthy the name of a conscientious architect who condescends to such surreptitious proceedings. This remark does not apply to those who, in the conception and execution of large works, find it necessary to have their ideas carried out by secondary agency, subordinate to their own direction, but to the system of those who are in the habit of throwing upon others the labour and study of design, and then unworthily claim the merit of the performance. His first employment, independent of his father, seems to have been given to young Pugin by the celebrated goldsmiths, Messrs. Rundell and Bridge. One of their firm, while engaged in an examination of some ancient designs for plate in the Print Room of the British Museum, chanced to notice that he was employed in copying the prints of Albert Durer and Israel Silvester. Struck by his skill in drawing, the goldsmith accosted him, and soon found that he possessed just the genius his firm was seeking. His complete knowledge of mediæval art fitted him admirably for designing plate in the old manner; his services were immediately secured, and much beautiful plate was executed by them from Pugin's designs. This introduction very soon led to another commission of a still more important character.

The great works which had been for some years in progress at Windsor Castle, under the professional direction of Sir Jeffrey Wyattville, were now drawing to a close, and the important question of fitting the apartments with furniture of suitable design was under consideration. The King took a lively interest in this matter, and resolved that those portions of the interior which retained a mediæval character should be furnished with objects designed in a corresponding style.

The personal interest which George the Fourth took in the progress of the additions to the Castle is well known, and his constant interference was a matter of much annoyance to the architect. Wyattville was

not by habit a courtier, or disposed to give up his own well-grounded opinions to meet at all times the King's fancies; he was plain and honest in his remarks, but the independence with which he insisted upon his own views never offended the King. When Sir Jeffrey was about to begin the erection of the corridor or long gallery on the south and east sides of the court of the upper ward, about 500 feet in length, in order to form a handsome feature in the interior, as well as a commodious access to all the private apartments on the principal storey, he proposed that it should be 15 feet wide, but the King would not listen to its being made more than 10 feet for fear of spoiling the effect of the court. As soon as the parapet was finished the King came to see it, and was so surprised at finding that instead of injuring, the corridor actually added greatly to the effect of the court, that he expressed to Wyattville his regret that he did not allow him to make it 15 feet wide instead of 10; on which Wyattville replied that he had presumed to anticipate His Majesty's feeling on the subject, and had actually built it 15 feet wide.

Probably but one opinion prevails now as to the questionable taste shown by George the Fourth in connection with public works executed by his command, yet the credit of encouraging art according to the best of his knowledge must not be denied him. That his taste was not pure is to be regretted, but he was nevertheless a real patron of art, in spite of the obloquy heaped upon his memory by eminent popular writers of the present day. The erection of the Pavilion in so singular a style, and the placing of artificial ruins about Virginia Waters, do not show sound judgment, yet the King sought to impart artistic effect wherever he thought it possible; he even sent Monsieur Vilmet, his chef de cuisine, to the elder Pugin, that he might instruct him in the art of drawing and design—wishing his table to be decked with taste, and the confectionery, &c., built up in artistic forms.

From

RECOLLECTIONS OF A. N. WELBY PUGIN.

By BENJAMIN FERREY, F.R.I.B.A.

Marginalia.

LORD RADNOR AND MR. AUGUSTUS PUGIN.

While Pugin was residing at Salisbury, Lord Radnor came to call on him. On his first visit, finding the house in an unfinished state, excepting the room which Pugin used as his study, Lord Radnor, omitting to remove his hat, at once entered into conversation; the only reply he met with was a look of astonishment. Pugin rang the bell and ordered his hat; placing it on his head, he said, "Now, my Lord, I am ready."

* * *

Mr. Pugin was in the habit of wearing a sailor's jacket, loose pilot trousers, jack boots, and a wideawake hat. In such a costume, landing on one occasion from the Calais boat, he entered, as was his custom, a first-class railway carriage and was accosted with a "Hallo, my man, you have mistaken, I think, your carriage." "By Jove," was his reply, "I think you are right; I thought I was in the company of gentlemen."

MARGINALIA.

THE SWEDISH EXHIBITION.

Dorland House, Lower Regent Street.

March 17—April 22.

While England is holding a Tudor Exhibition in the Argentine Republic, Sweden is holding an exhibition in our own country. Foreign countries are visiting one another. England is beginning to understand Swedish Art, and the co-operation of artist with manufacturer. There is a simplicity about the pewter, silver, and furniture at the Swedish Exhibition which will act as an incentive to British craftsmen. Meanwhile, in Buenos Aires, who knows how many Argentines may not be spurred on to copy the example of the British Exhibition there, and build up on the old city a new Stratford-on-Avon?

In England, at any rate, we hope that manufacturers will be inspired by Sweden's example. A dull London interior in monumental Queen Anne has been transformed simply by coats of paint and the arrangement of cases displaying articles, many of which can be purchased at low prices. Such a transformation has taken place, that it is difficult to believe that the exhibition is being held in the new Regent Street.

* * *

ANOTHER BRITISH EXHIBITION ABROAD at Amelie les Bains in France.



* * *

SOANE.

Asplund, the designer of Stockholm Public Library and the Exhibition in that city, said to an English visitor to Sweden: "Why do you want to come here when you have your Soane in England?" It is interesting to notice that the architecture of the first quarter of the last century in England, still viewed through the bottle-glass spectacles of the Gothic and Queen Anne Revivalists over here, is regarded in Sweden as the high-water mark and example of all modern architecture. The Stockholm Public Library is in the Soanian manner; the chairs in the present exhibition in London are but a development of those in the Soane Museum. Yet when we hold an exhibition of the decorative arts of the Four Georges the name of Soane is not even mentioned in the catalogue, and while Sweden, an acknowledged leader in European art, regards him as the greatest architect, we in England are pulling down his treasured Bank of England.

* * *

The Architectural Review, April 1931.

VENESTA STAND COMPETITION.

Report of the Assessors.

The competition has proved a most successful one. No less than 175 entries were received. Obviously competitors had studied the conditions closely and applied themselves to the production of serious designs.

Selection has been difficult owing to the high standard, not only of those designs clearly in the running for prizes, but of the work of competitors generally.

Almost all competitors showed good appreciation of the requirements for an exhibition stand. The conditions urged the necessity for a convenient and attractive plan. At the same time the "pictorial effect" had to be obtained by simple, yet striking, means—means which emphasized the uses and design possibilities of the firm's products.

The winning design under the pseudonym of ISOPLAN—Mr. Wells Coates—fulfils the conditions, though his method of presentation is a little unusual. His plan is remarkably good, ensuring a circulation, allowing samples to be seen and handled, while the office accommodation is well arranged. Many of the designs, though otherwise good, look best when seen from some way off. It was felt that ISOPLAN'S design was one that definitely invited the visitor on to the stand.

The four designs selected to receive a prize of £10 each were (in alphabetical order):—

BINGHAM	—	Mr. R. Parkinson.
LUMBER	—	Mr. E. Wamsley Lewis.
MAX	—	Mr. S. Chermayeff.
PLY	—	Mr. E. Maxwell Fry.

Mr. Parkinson's plan allows for an inner and outer circulation, but not too easily, so that the public would not be attracted to the interior of the stand. The design is, however, good, though the lettering is not too well handled.

The design submitted by Mr. E. Wamsley Lewis, though on the lines of the conventional exhibition stand, is original and interesting in treatment; he has observed the special requirements carefully.

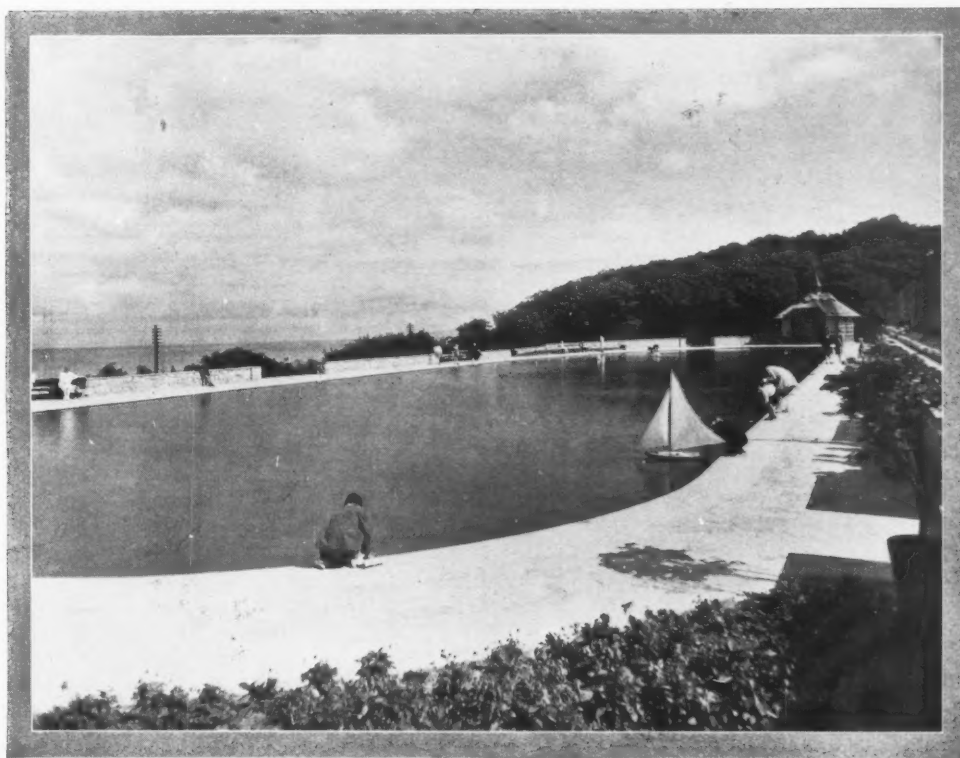
The outstanding characteristic of Mr. Chermayeff's design is its inviting quality, the public being led to the central space through three openings. The stand is designed so that the samples are part of the structure: the unbroken side elevation, in which the legend "VENESTA" forms part of the glazing, is admirable.

Mr. Maxwell Fry's design is attractive and suited to a corner site; a simple quadrant form dominates. The placing of the office and interviewing room at the back of the stand rather confuses the circulation. The design has the merit of elegance and command, but the jury felt that it would look better as part of a long range; isolated, it seems rather indefinite. The material is well displayed as a wall surface.

The jury of assessors suggests that the leading designs should be exhibited, not so much for the benefit of architects, as for manufacturers. The quality of stand design is not high in building exhibitions; the advantages of employing a competent designer should be brought home to manufacturers.

CHRISTIAN BARMAN.
H. de C. HASTINGS.
A. E. RICHARDSON.
HENRY RUTHERFORD.
W. L. WOOD.

* * *



W. J. Dunning, M.Inst.C.E., M.I.Mech.E., Engineer.

R. Hughes & Co., Contractors.

THE MODEL YACHT POND, COLWYN BAY

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The Russell Union Mill, Cranbrook.
From *English Windmills*.

S.O.S.

The Ancient Bridges of the South of England. By E. Jervoise, A.M.Inst.C.E., on behalf of the Society for the Protection of Ancient Buildings. London: The Architectural Press. Price 5s. 6d. net.

English Windmills (Vol. I): Kent, Surrey, and Sussex. By M. I. Batten, on behalf of the Society for the Protection of Ancient Buildings. London: The Architectural Press. Price 5s. 6d. net.

NOT until very recently has any notice been taken of the ancient bridges of England. Borough and rural councils have surreptitiously removed them to make way for wider ones, or else the nineteenth century has restored them out of recognition. Nevertheless, next to parish churches, those old bridges that remain are among our greatest architectural heritages, though few but fishermen can ever notice them.

The granite slabs which cross moorland streams, the thirteenth-century single arches, the more elaborate late Gothic bridges with their parapets recessed to conform with the cutwaters below, and finally the stately Palladian bridges of the eighteenth century, are all that is best in English architecture.

The Ancient Bridges of the South of England comprise all those south of the Thames except the bridges in Devon and Cornwall, which have been dealt with in separate books. The survey is thorough and the layout easy to understand, being divided into the Thames and its tributaries, the Bristol Avon, while minor rivers are classified under the counties through which they run. There are numerous illustrations which show Dorset and Sussex as the most notable counties for stately bridges, although no county is uninteresting.

English Windmills (Vol. I) is uniform with the book on bridges, and surveys Kent, Surrey, and Sussex, which have more windmills than any other county in the South of England. There is an interesting chapter on the history of windmills and another on their design and development. Thereafter follow the three counties with maps and the mills alphabetically arranged in each. A glance at the photographs alone makes one read the book and, indeed, it is good, though sad reading; for milling has been declining for over a hundred years. The white and stately Russell Union Mill at Cranbrook, in Kent, is an instance. "This mill works hard all the year round grinding flour and pig grist, but in spite of its good trade the owner, Mr. John Russell, says that when all expenses are paid he only makes a profit of a few shillings a year. This is a typical example of the present economic state of the windmill, for although this mill has plenty of work, the cost of wages and upkeep is so large in comparison with the money earned that when any big repairs become necessary there will be insufficient money to meet them." Thus this book is a most important record, for in another thirty years there will be hardly a recognizable windmill in England, and already some of those illustrated have disappeared.

JOHN BETJEMAN.

Turner's Sketches of Venice.

In Venice with Turner. By A. J. Finberg. London: The Colnwood Gallery. Price £4 4s. net.

WHEN Turner paid his first visit to Venice in 1819, he produced what were, perhaps, his most beautiful sketches. These, notably "St. Mark's from the Piazzetta," are well reproduced in Mr. Finberg's volume. The second and last visits produced the best oils and watercolours, where his feeling for architecture is best exemplified. Among the many illustrations of these visits, the watercolour in the Fitzwilliam at Cambridge, of "Venice from the Lagoon," shows how in a few lines he can convey the style, colour, and mass of a building. His familiarity with the buildings had by now enabled him to leave out details. This sumptuous book deals fully with all three visits, and the pictures have been chosen with discrimination.

The Reference Book for Architects.

Specification, 1931. For Architects, Surveyors, Civil Engineers, and for all interested in Building. Edited by Frederick Chatterton. London: The Architectural Press. Price 10s. 6d. net.

IMUST confess that I had always considered *Specification* to be one of those tomes which only dryasdust, uninteresting architects read. Having actually had a copy thrust upon me, however, with a request for 300 words thereon in three days' time, I have had to study the volume at close quarters. I say at once that *Specification, 1931*, is tremendously interesting. It is great fun to run across descriptions of how to do those "little" things that look so easy until we get on to the drawing board details. An architect's mind is apt to be a mass of varied, but ill-defined information. He is always picking up odd information, but generally finds it difficult to get such scraps clearly and concisely set out. This book is just what the architect wants. Here is a fund of information attractively written, which forms a basis on which the architect can sort out and tabulate his own varied bits of experience. It will teach a great many architects a great many things they ought to know, but what is equally important is that even to those who know, *Specification* performs a very valuable service in that it forms an index of facts which their own individual experience can enrich. Architects' offices must become more and more methodical. Information about the ever-increasing variety of building materials and methods must be tabulated. Architects must be able concisely to convey to assistants good practice without undue worry or elaborate instructions and sketches. *Specification* cannot entirely be perfect in every detail, but it does carefully cover all modern points of construction. If the assistant or the architect refer to it they will be starting to solve their particular problem on the right basis. This being half the battle, the architect's job will be made the more easy and his office run all the more smoothly. The architect's outlook will be broadened (a very necessary thing) if he will sit down and acquaint himself well with the contents of this book, particularly an excellent article on "Speed in Building," and then add it to his library for future detailed reference.

ALISTER G. MACDONALD.



New Bridge, near Corston.

From *Ancient Bridges*.



CURIOSITIES

OF ARCHITECTURE—VI.

Here taste and art and tile and wood combin'd
 Delight the eye and stimulate the mind;
 Now Jacobean and now slightly Swiss,
 See on the roof-line foreign countries kiss;
 And lower down the "bijou" and grotesque
 Blend gravely in Baroque and Romanesque.
 O Proud Palermo! Proud indeed to own
 An Esperanto story told in stone.

* * *

Mr. B - s - s - m h s b - - g h t G - n - s - s.

* * *

To the Editor of THE ARCHITECTURAL REVIEW.
 "ANOTHER BROKEN ROMANCE?"

Sir,—In your issue of March, I referred to Mr. Gloag's interesting suggestion that the Royal Society of Arts and the Design and Industries Association might act together as liaisons between art and industry as "A long-standing Engagement." I fear this is not making material progress, in so far as I now observe that the Society of Industrial Artists appears to be linking its fate with the Architectural Association, even to the extent of sharing their establishment in Bedford Square. The Hon. Secretary of the Society of Industrial Artists addressed the Architectural Association on January 26, and discussed in a very interesting manner the work of the various societies associated with the Arts and Crafts. By some mischance, however, he omitted to mention the Royal Society of Arts. Perhaps its age (it was founded in 1754, specifically for the "Encouragement of the Arts, Manufactures and Commerce of the Country") caused it to be overlooked, as Youth is so much to the fore in these days! He also made the curious suggestion that the Prince Consort (our first Royal President) in his patronage of the Great Exhibition, first fanned the flame of ambition in the designers in many departments, and goes on to say that he, personally, cannot conceive the designer in any pronounced sense as existing much before then. He then introduced the Adam Brothers (who were so closely associated with the Society) into his remarks as combining the departments of architect, builder, and craftsman in one. I would like to know what, when it comes to real facts, is the actual difference between a designer and an architect?

Yours faithfully,
 A Fellow of the Society of Arts
 and for a year a Vice-President.



Villa V. Florio, Palermo. 1900.

Trade and Craft.

As has already been mentioned in the *Marginalia* for this month, one of the most interesting effects in the Swedish Exhibition was the clever transformation of the interior of Dorland House, Lower Regent Street. The architect, Mr. Hakon Ahlberg, was responsible for the lighting and proportions produced in two not too well-lit or proportioned storeys. In a few weeks the interior became completely changed from the usual London office and showroom.

The rearrangement was made possible by the use of Treetex Insulating Wallboard, which was used on all walls, partitions and stands, as well as on several ceilings. In addition to its ease of application, the decorative possibilities of the board reduced the construction time considerably. The room which contains the Crown Prince's furniture was fitted with windows converted to conform with the prevailing style, and was built in Treetex.

This modern insulating building board is also being used throughout the "Hush Hush" House, designed by Mr. A. Trystan Edwards, at the Ideal Home Exhibition, as well as in the "Stanmore" House and Lovell's Maplescombe House.



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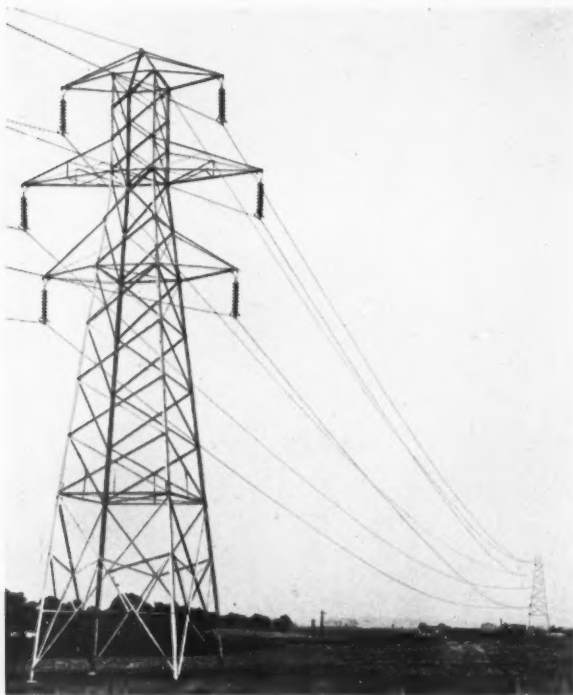
J S & S Studio

FROM BOULDERS
TO BLOCKS.

TRADE AND CRAFT.

The British Aluminium Company, which is one of the largest of aluminium concerns, has published a booklet on this comparative juvenile among the world's metals. A hundred years ago aluminium was no more than a recent scientific discovery whose possibilities were strictly limited, and whose almost endless applicabilities unimagined. The booklet gives brief descriptions

of its production, its properties, and enlarges on its many uses with illustrated examples. These examples range from aluminium paint to the framework of the R 100. It is all extremely interesting reading and the illustrations show a refreshing originality. The example illustrated on this page is of aluminium as used for an electric conductor.



* * *

To the Editor of THE ARCHITECTURAL REVIEW.

SIR,—Talking recently with an architect, I found him very keen on using British steel for all the reinforcement bars in ferro-concrete contracts under his control. He was not only desirous of using British steel because of a patriotic feeling, but he was also thoroughly *au fait* with the known shortcomings of the cheap foreign bars, usually of steel made by a process which is definitely "barred" from very many important engineering and other specifications.

So intense was his feeling on the subject, that I had scarcely the heart to point out to him that he was at that moment using on one of his important ferro-concrete contracts large quantities of a steel which was certainly of Continental origin!

When at last I had convinced him of the matter, he was highly enraged (being a man of decided and outspoken views) and declared his immediate intention of taking it up with the supplier, as his specification had clearly mentioned "bars of British manufacture." I was able to show him that he had by no means made his requirements watertight, and that very many suppliers had no scruple in offering as "of British manufacture" ferro-concrete bar which was only "of British manufacture" as far as the final rolling process was concerned, the steel actually being made on the Continent, rolled into billets there, and imported in the billet form. It is obvious that such steel has neither the excellent quality of British steel, nor does it give employment to British labour in anything but a minor degree.

Architects who want British ferro-concrete bar, with its higher tests and dependable qualities, should make perfectly certain that the material supplied against their specification



Designed by Vibe Lindstrand

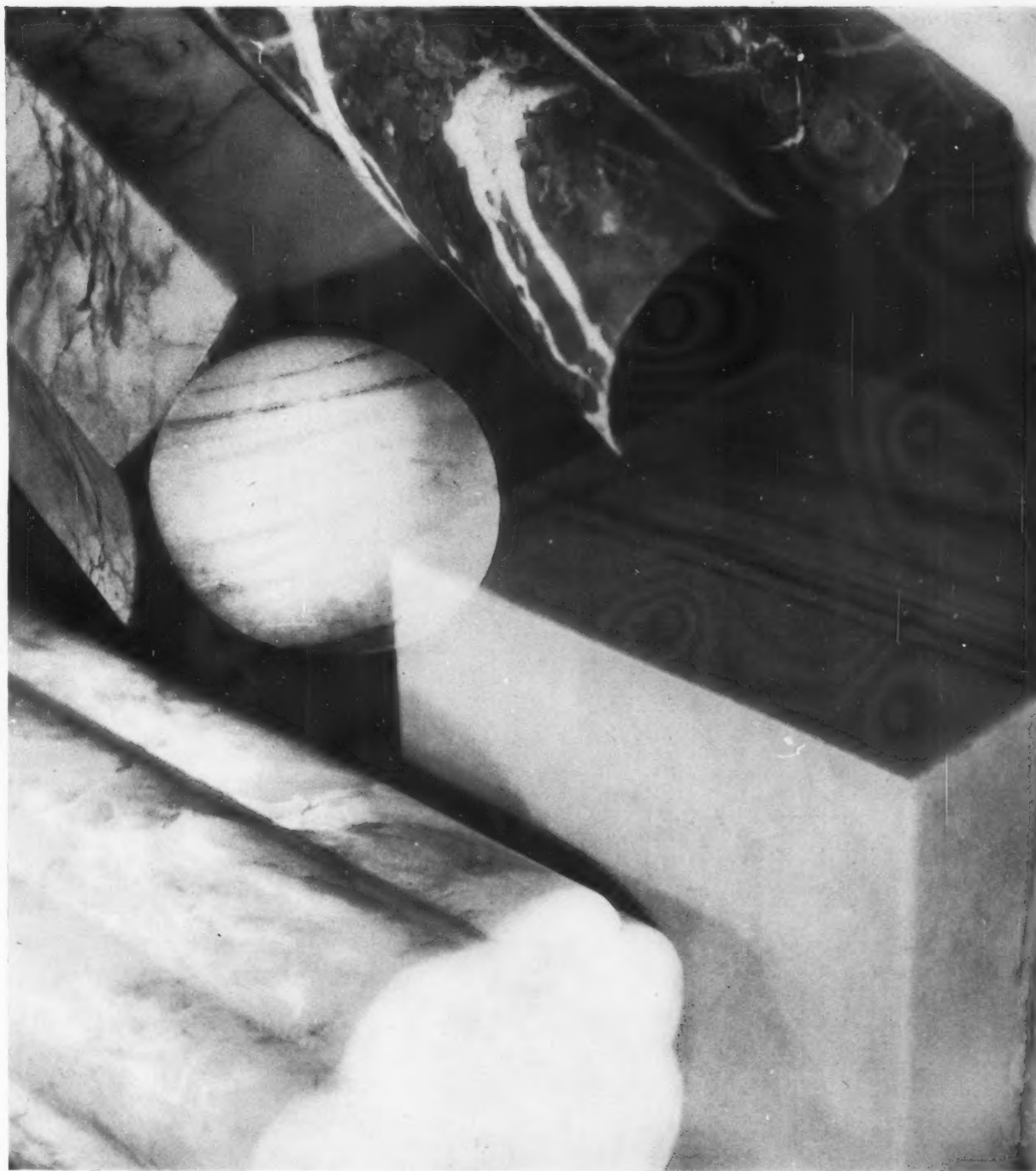
ORREFORS GLASSWARE

We illustrate one of the many unique pieces of Orrefors Glassware to be seen at the Swedish Exhibition of Industrial Arts and Crafts, where examples of the finest decorative glass of the day are on view.

The Exhibition is being held at Dorland House, 14 Lower Regent Street, W.1, daily from March 17 to April 22 inclusive, 10 a.m. to 7 p.m., Sundays excepted.

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THE ARCHITECTURAL REVIEW, April 1931.



FENNING
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is not just "of British manufacture" or "British rolled," but is actually steel "wholly made, melted and rolled in Britain."

I have before me as I write a collection of stock lists, circulars, etc., from various quarters offering undoubted Continental material under the guise of "British."

It is not ethical that architects and contractors who (thinking of the 120,000 more British workmen who would be given employment if all steel sold in this country were made here) conscientiously specify "British," and believe that they are getting wholly British material, should be fobbed off in this way with Continental steel.

The evil does not exist to the same degree with engineering and other firms whose chemists are able to detect and reject the imposition; architects and contractors for building purposes who are rarely in a position to test each batch of material received, are by that degree the easier victims.

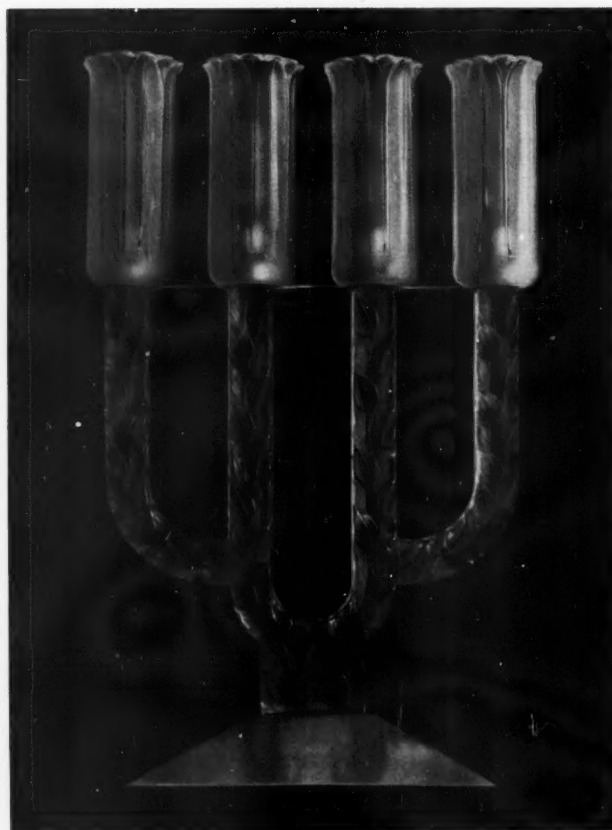
The remedy is in their own hands—will not architects and contractors look to their specifications, and amend them to prevent such unethical practices?

Yours faithfully,

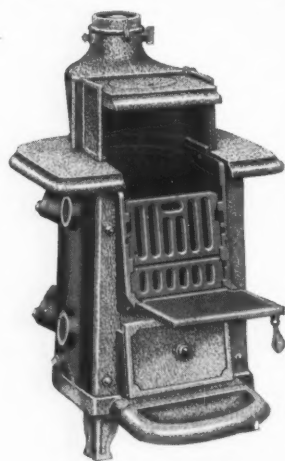
5 Den Bank Avenue,
Sandygate, Sheffield.
March 6, 1931.

F. ROWLINSON.

One of the stands which are worth while visiting at the Ideal Home Exhibition is that of Breves Galleries. The galleries in Basil Street are well known to admirers of Lalique Glass, but there will be many people at the exhibition who have only seen isolated examples in shops devoted to other types of glass. These examples, strangely enough, are seldom among the best of Lalique's designs, but whether the choice is determined by a proven popularity or by want of discernment on the part of the buyer, is not evident. But the Breves Galleries stand at Olympia gives some idea of the many uses of glass and of the wide range of design which the prolific brain of René Lalique has devised, and not merely variety of design, but of surprisingly differing types of design. There is certainly always something to be found



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Architects: Messrs. Joseph.

Hadans were also entrusted with the Heating and Electrical installation at Upton House. Architect: P. Morley Horder, Esq.

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TRADE AND CRAFT.

to excite interest and pleasure. The illustration on the previous page is of a table light, based, as so many of Lalique's designs are, on a plant motif. Lalique's light fittings, however, are not perhaps among his happiest results.

The Britannic Tube Co., Ltd., Birmingham; are the manufacturers of steel tubes, cased steel tubes and steel channels and sections, and these are all made exclusively in Firth Staybrite Steel. The firm has published a catalogue showing the various kinds of tubes, sections, etc., with details of measurement and prices. The catalogue will be gladly sent to anyone interested who applies for it.

The general contractor for Drage's new premises, was Horace V. Clogg. Among the artists, craftsmen, and sub-contractors were the following: Norris & Co. (guardrailing and parapets); Cashmore Art Workers (balustrading to main staircase); A. Sauvee & Co. (dust shoot); Luxfer, Ltd. (lantern lights and patent glazing); Sturtevant Engineering Co., Ltd. (vacuum plant); Marc Henri and Laverdet (decorative plaster); Independent Sprinklers, Ltd. (sprinklers); Carter & Co. (wall tiling); Val de Travers Asphalte Co. (asphalt); Bradford & Co. (staircases in reinforced concrete); Fenning & Co. (stone); A. D. Dawney and Sons, Ltd. (structural steel); Caxton Floors, Ltd. (floors); Cecil Cooper & Co. (electric wirings); British Central Electrical Co. (electric light fixtures); Davis Bennett & Co. (sanitary fittings); N. F. Ramsey, Ltd. (door furniture and cloakroom fittings); W. James & Co. (casements); E. Pollard & Co. (rolling shutters, metalwork, and shopfronts); W. Hitchins & Co. (laminated doors); Art Pavements and Decorations, Ltd. (marble); Express Lift Co., Ltd. (lifts).

The general contractors for Gamage's, Oxford Street, were Higgs and Hill, Ltd., and among the artists, craftsmen, and sub-contractors were the following: Dorman, Long & Co., Ltd. (steelwork); South Western Stone Co., Ltd. (stonework); Rippers, Ltd. (joinery); G. N. Haden and Sons, Ltd. (heating); Rheocrete Pumice Stone Slab Co., Ltd. (partition slabs); A.

The Architectural Review, April 1931.

Goldstein & Co. (glazing); Portland Cement Selling and Distributing Co., Ltd. ("Holborough" Cement); F. Braby & Co., Ltd. ("Eclipse" steel staircases); Plastering, Ltd. (plastering); Lamson Pneumatic Tube Co., Ltd. (cash and despatch tube); Carter & Co. (glazed tiling); J. Starkie Gardner, Ltd., Morris Singer Co., Ltd., W. H. Gaze and Sons, Ltd., and Birmingham Guild, Ltd. (decorative metalwork); Fenning & Co., Ltd. (polished granite work); Art Pavements and Decorations, Ltd., H. T. Jenkins and Son, Ltd., and J. Whitehead and Son (marble work); E. Pollard & Co., Ltd., Harris and Sheldon, Ltd., George Parnall & Co., and Frederick Sage & Co., Ltd. (store fittings); Morris Singer Co., Ltd. (iron balustrading and metal windows); Higgins and Griffiths, Ltd. (electrical installations); Shaw's Glazed Brick Co., Ltd. (interior faience); London Brick Co. and Forders, Ltd. ("Phorpres" Bricks); Express Lift Co., Ltd. (lifts); Caxton Floors, Ltd. (floors); Ragusa Asphalte Paving Co., Ltd. (asphalt); W. H. Gaze and Son (decorations); Walter Gilbert (pressed glass); Birmingham Guild, Ltd. (marqueses, bronze doors); General Electric Co., Ltd. (electrical fittings); J. A. King & Co. (roof lights and pavement lights); John Bolding and Sons, Ltd. and W. N. Froy and Son, Ltd. (sanitary fittings); Bratt, Colbran & Co. (fireplaces); Parker, Winder and Achurch (door furniture); Edison Swan Electrical Co. (refrigerators); and Benham and Sons, Ltd. (cooking apparatus).

Obituary.

We regret to announce the death of Mr. Sidney Flavel, Chairman of Messrs. Sidney Flavel & Co., on March 16, 1931. Mr. Flavel, aged 84, was the great-grandson of the founder. Mr. Flavel, who devoted a great portion of his life to public affairs, was Mayor six times, appointed Justice of the Peace in 1876, of Leamington, and also Justice of the Peace in 1896 and Alderman in 1889 of the County of Warwick. He also interested himself in many charities and was Churchwarden of Leamington for over 40 years.



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