THE ARCHITECTURAL REVIEW

A Magazine of Architecture & Decoration

Liverpool Cathedral.
Designed by Sir Giles Gilbert Scott, R.A.

Two Shillings & Sixpence Net.

27-29 Tothill Street, Westminster, S.W.1.

Vol. LVI August 1924 No. 333

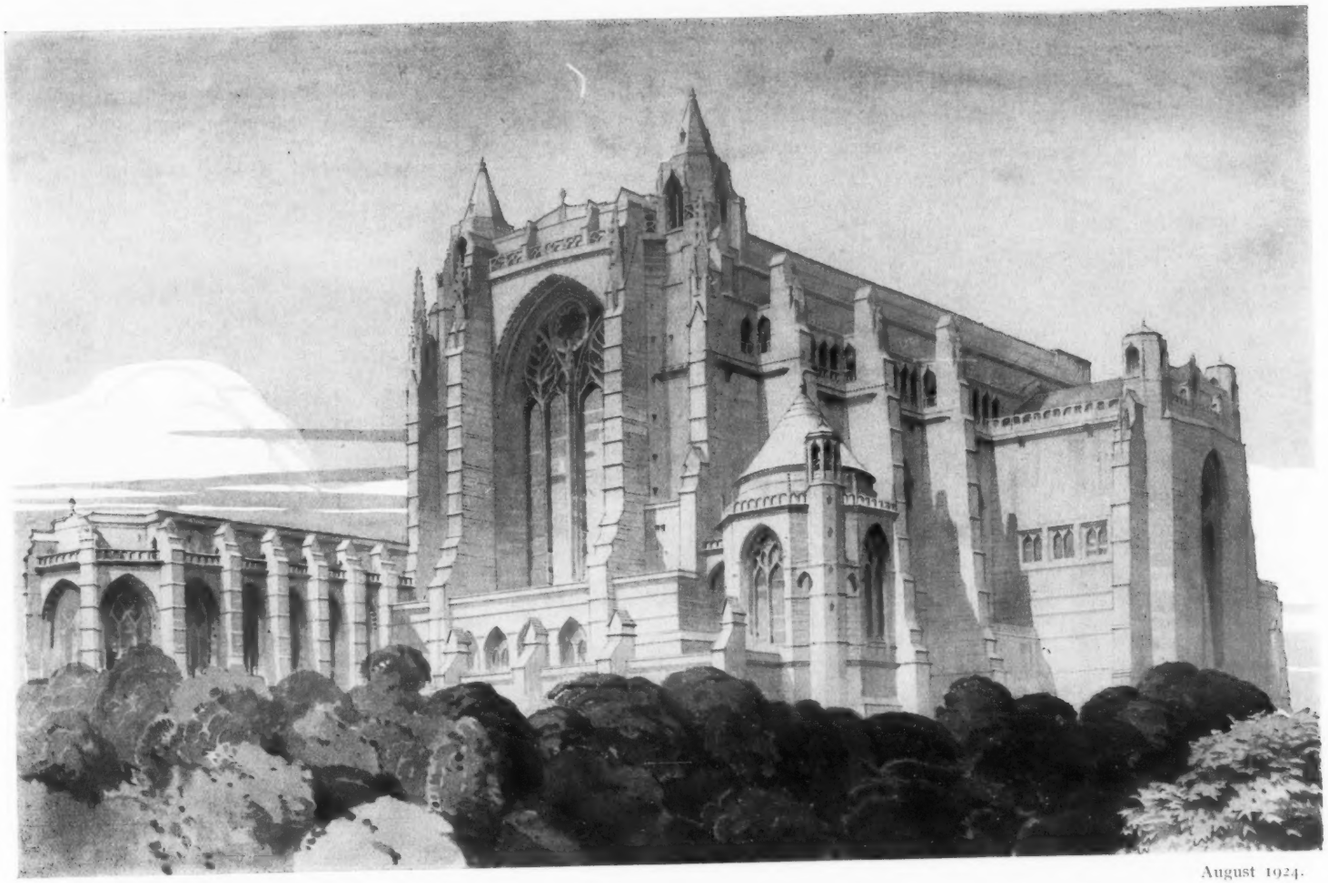


Plate I

LIVERPOOL CATHEDRAL.

Sir Giles Gilbert Scott, R.A., Architect.

From a Drawing by Norman Howard.

The Alhambra To-Day.

We are indebted to the Spanish Ambassador for the following contribution by a famous Spanish critic and author. The article was written by Luis Seco de Lucena in Spanish, and has been translated for him by Wynne Apperley.

I

THE æsthetic emotion which the Alhambra produces is unlike anything we may experience whilst visiting other monuments. We are amazed at the splendid ornamentation, the slimness and grace of the architecture; but at the same time there seems to invade us the fascination of the mysterious and supernatural, the memory of historic tragedy, the instinct of voluptuousness and pleasure, and the sweet sentiments which the beauty of Nature inspires, resulting from this medley of sensations and psychological stimulants, a certain indefinable impression of well-being and unrest, of repose and uneasiness, of sadness and joy, and fear and confidence, of yearnings to live and revel in an enchantment of light, of beautiful women and flowers, and fear of being lost for ever in subterranean darkness peopled by gnomes and ghosts who guard untold treasure and secret formulæ, generators of good and evil; these contradictory impressions subjugate us, intoxicate us, making us lose control of our thoughts, and surrender us helpless to the slavery of phantasy.

1. CHARACTERISTIC GRANADA DETAIL.
A Cubic Capital.

No other monument in the world has power to produce the multiple and varied impressions which we feel in the presence of the Alhambra.

The Alhambra is not, as some believe before knowing it, merely a singular and exotic architectural monument. In order to comprehend the full meaning I wish to convey it will suffice to imagine it robbed of all historic memories and traditions, and situated in the Champ de Mars in Paris, in the steppes of Mongolia, or in the African desert. In any such surroundings, without its vistas, its panoramas, its woods and gardens, stripped of its legends and stories, the Alhambra would lose its character and its power to engender the illusions that it evokes in us. The majesty of the Sierra with its hues of blue and pink, its peaks covered with snow, its deep and gloomy precipices, and the mystery of its solitude; the smiling Vega fertile with its crystal streams and sweet-smelling plantations, its harmonious olive-groves and shady avenues, and its picturesque villages; and the horizon, now marking the dividing line of earth and sky, now formed by the distant silhouette of the mountains or lost in the mist that rises from the ground—these are the component parts of the panorama that is one of the essential parts of the beauty of the Alhambra.

The woods, with the green masses, moving and rhythmic, of their verdure, the song of the nightingale, the murmur of running water; the gardens with the plash of fountains and the perfume of their flowers, ivy, honeysuckle, and roses clinging lovingly to the ancient walls—all this wealth of vegetation forms an attraction which is no less essential an element in the charm of the picture.

The historic memories of Alhamar, triumphant, founder of the last Empire of the Spanish Mohammedans, friend of the Castilian kings, whose flags flew side by side with those of Ferdinand in the siege of Seville, and who died fraternally assisted by the Infante Don Felipe; of Abdul-Walio-Ismail after the victory of Martos, sustaining, fainting, in his triumphal car the beautiful captive in whose love he found his death; of Yusuf, devoted to the arts and letters and to the splendour, culture, and prosperity of his people, who gave up his life to the dagger of a maniac in the mosque of the Alhambra; of that dark night when Prince Ismail and Abu-Said scaled the bastions of the Alcazaba, thus seizing and taking by surprise the palace and throne of Mohammed V; the tragic expedition of King Bermejo to the dominions of the cruel monarch of Castile, who, deaf to the claims of hospitality, assassinated his guest in the plains of Tablada; of Yusuf II, poisoned by the lethal perfume of the royal vestments which the King of Fez offered him as a token of royal friendship; of the thrilling captivity of Yusuf III in the Castle of Salobreña; of the romantic passion of Muley-Hassan for Isabel de Solis; of the savage jealousy of the Sultana Fatima; of the despairing accents with which the sweet Moraima received tidings of the disaster of Lucena; of the supreme effort and faith by which Ferdinand and Isabella achieved the conquest of Granada; of the perfidious irony of the emperor, who forced tribute on the Moors in exchange for respecting the terms of the treaty made at the surrender; of the luxury and ostentation that were the order of the day when Philip IV and Philip V established their court in the palace of the Moors, and of the thousand episodes, idyllic or dramatic, but always full of epic grandeur, with which history has ennobled the Alhambra constitute something fundamental which forms an integral part of the essence of the whole monument.

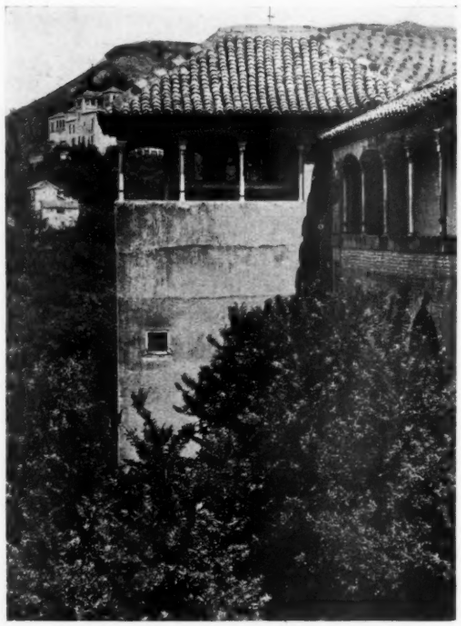
And the fantastic web of anecdotes and legends with which the imagination and the genius of poets throughout the ages have made a garland for the brow, as it were, of the Alhambra, is also a vital element of her enchantment.

By all of which we wish to convey that the Alhambra is composed not only of its castle, its walls, its palaces and ruins, but also of the panoramas and of the luxuriant vegetation bestowed on it by Nature with a lavish hand, of the dramatic memories with which history has endowed it, and of the stories and traditions that poetry and folk-lore have woven round it, all of which forms with it a unique and homogeneous whole.

II

From the artistic and archæological point of view the value of the Alhambra is incalculable, because it is the first and only original creation of the Mohammedan race, and because its Alcazars, among the numerous royal palaces which the Arabs constructed in the Middle Ages, are the only ones that have come down to us in a state of preservation that enables us to contemplate their beauties and the characteristics of their architecture.

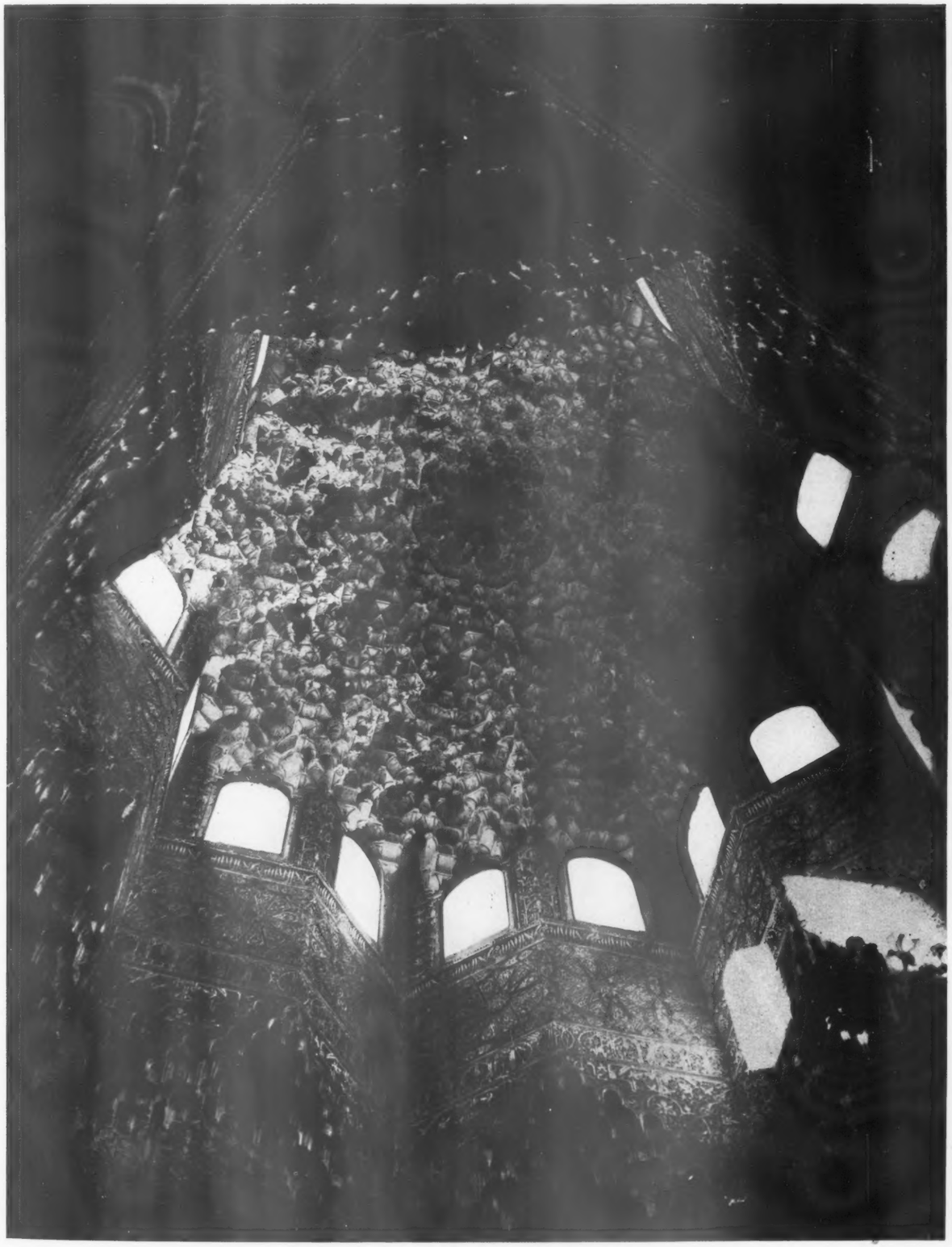
History and tradition tell us of the Ruzafa, which Haroun al-Raschid built at Rakka, and of the palaces that beautified the City of Samarra; of that which Al-Motassen gave as a present to his favourite, Ischnachi, at Thinars; of those which Djafar-el-Barmeki and Bedr-ed-Din constructed at Aschik and Mosul respectively; of those destroyed by the Turcomans at Ispahan, Persepolis, and Susa; of those erected by Amarut II at Brussa and Adrianopolis; of that which Ibn-Tutum raised up in Cairo, whose throne-room was adorned with bas reliefs in wood representing the most prominent figures of his court, with their turbans bespangled with precious stones and robes of gold brocade; of the mansion of the ancient Caliphs of Egypt, with porticoes and columns of marble, gilded roofs, and ponds of crystal water; of the House of Gold, built by Abd-el-Azis, the son of Moawia; of the Alcazars of Bechtuk, Yachbok, and Mendjak; of that which Almanzor-el-Dzehebi possessed at Marrakés, wherein abounded marble, silver, and gold, paintings and tiles of dazzling colours, parks and gardens with lakes and fountains of alabaster; of that which the Emir Almanzor-ben-Nasser constructed in the famous Cala with the name of Dar-el-Bahr or house by the sea, and of the "Pearl of Bugia," wherein were glittering mosaics in colour and "celosias" (Spanish for "moucharabiehs") incrusted in mother-of-pearl, ebony, and ivory; of that of Sedrata, in whose ruins, recently discovered, have come to light walls with inscriptions and stucco arabesques; of that which was called "La Victoria" at Mansurah, near Tlemcen; of that which the Sultan Hafsida-al-Mostanser built at Tunis, with its immense cupola, kiosks, aqueducts, bridges, lakes, pavilions, its walls covered with mosaics, marble and plaster designs of marvellous decorative quality; of those of Jalesa, Al-Azziza, and Almanzuriya, which, according to the poet, Ibn-Jubair, transformed Palermo into a "lovely maiden, her throat adorned with a splendid rope of pearls"; of Medina-az-Zahra, Alamiriya, Zubair, La Ruzafa, and El Persa, which embellished the immediate outskirts of Cordoba; of that of the Caliphs in the same city; of Az-Zahir, Almubarac, Al-Tadech, Al-Wahid, Az-Zoraya, which the Almoravides and Almohades held in Seville and its environs; of the Dar-as-Sorur and the Aljaferia of Zaragoza; of that of Ibn-abd-ul-Azis in Valencia; of those of Almotazin at Almeria and Almamun at Toledo; but of these palaces which oriental phantasy describes for us in such glowing colours, some have disappeared, and of the others there remain only crumbling ruins, which can convey no idea of their erstwhile magnificence; only the Alhambra remains standing to testify to the extraordinary culture and refinement with which Islam illumined the dark world of the Middle Ages.



2. THE QUEEN'S DRESSING-ROOM IN THE ALHAMBRA.

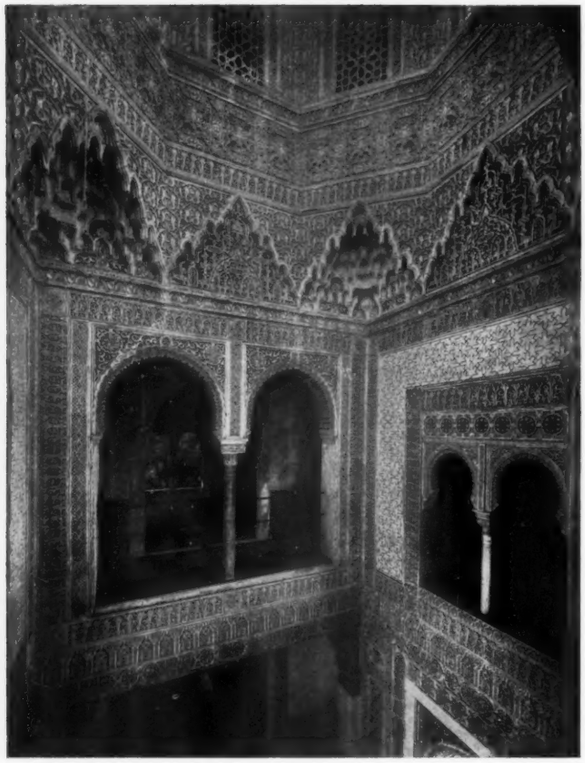
A close study of the constructions of a religious character which the Arabs made between the eighth and fourteenth centuries, coupled with what remains of the civil edifices which have not yet totally vanished, compared with the Alhambra, demonstrates without a shadow of doubt that if the Mohammedan conquerors imposed their yoke socially and politically on the vanquished peoples, they were, in their turn, subjugated by the art and architecture of those they dominated in war, and they failed to create until, towards the middle of the thirteenth century, they built the Alhambra, an architecture with original characteristics of its own. The mosques, Kut b-Minar, Negra, Dorada, and of Niza-Mudin, which they constructed in Delhi, and that of Veramin, called "the Blue Mosque," of Tabriz; that of Choda-ben-Dachan in Sultanich; those of Buchara and Asbistan; those of Schech-Bayazid in Bostan; that of the Pearls at Agra; that of Tchouchouk-Bika at Samarkand, and that of Marand, are reflections of Indian and Persian architecture; those of Omar and Al-Aksa at Jerusalem, that of Ibn-Tutum at Cairo, and that of Cordoba, among others, can be said to be entirely Byzantine; that of Amru is in part derived from the Christian Basilicas, and in part from the Temple Halls of ancient Egypt; in that of El-Azhar the pointing of the arcades begins to assert itself, while, in that of Ibn-Kalaun, the Gothic style comes unmistakably and definitely to light, identical, according to Ebers, with the edifices of the thirteenth century in France, Germany, and North Italy. The mosques which they built in the Moghreb are almost without exception imitations of the Roman or Byzantine seen through the local prism, witness that of Sidi-Okba in Kairuan; that of Sidi-bu-Medina at Tlemcen; those of Muley-el-Edris and El-Karum at Fez; that of Muley Abdállah of Marrakés; that of "the Olive" at Tunis; and the great mosques of Tripoli and Algiers.

But with the appearance of the Alhambra in the thirteenth century we are confronted with architectural and decorative elements entirely unknown before that date, demonstrating indisputably an original art—the cubic capital (Fig. 1), with its elegant throat of interlacing bands or palm leaves, and its sides richly clothed with "ataurique," little shields, and "ajaracas"; the column slender, almost cylindrical, with its bands of inscriptions, characteristic groups of embracing rings and simple base with its concave moulding; the type of dome marvellous, fantastic, which we contemplate in ecstasies of admiration in the hall of Abencerrajes (Fig. 3), and in that of the Two Sisters, offering us an entirely new

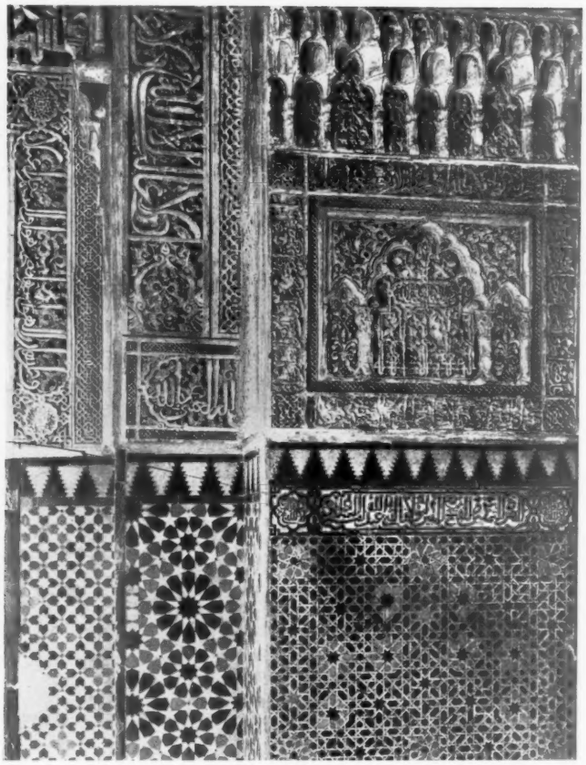


3. THE VAULT OF STALACTITES IN THE ABENCERRAJES HALL.

Characteristic Granada work—the true Arab Style.



4. THE INTERIOR OF THE TOWER OF THE INFANTAS.



5. MOSAICS OF ENAMELLED CERAMICA IN THE MIRADOR A LINDARAXA.

method of covering spaces of square flooring with roofing of spheric or octagonal shape; the tiling, which appeared simultaneously in Anatolia and Armenia, and which the craftsmen of Granada raised to such a pitch of perfection and elegance that their mosaics constitute to-day the most priceless treasure of this branch of decorative art which the world possesses (Fig. 5); and the stucco arabesques which, although previously employed, never approached, in the constructions of Africa, Asia, and Sicily, the splendour of composition which, like some regal tapestry, covers the walls of the Alhambra (Fig. 4).

Thus the architecture, so redolent of the poetry and perfume of the Orient, which rises up triumphant in the palaces of Alhamar, signals the apparition of a new art, never previously realized by the Arabs in such conditions of originality and beauty.

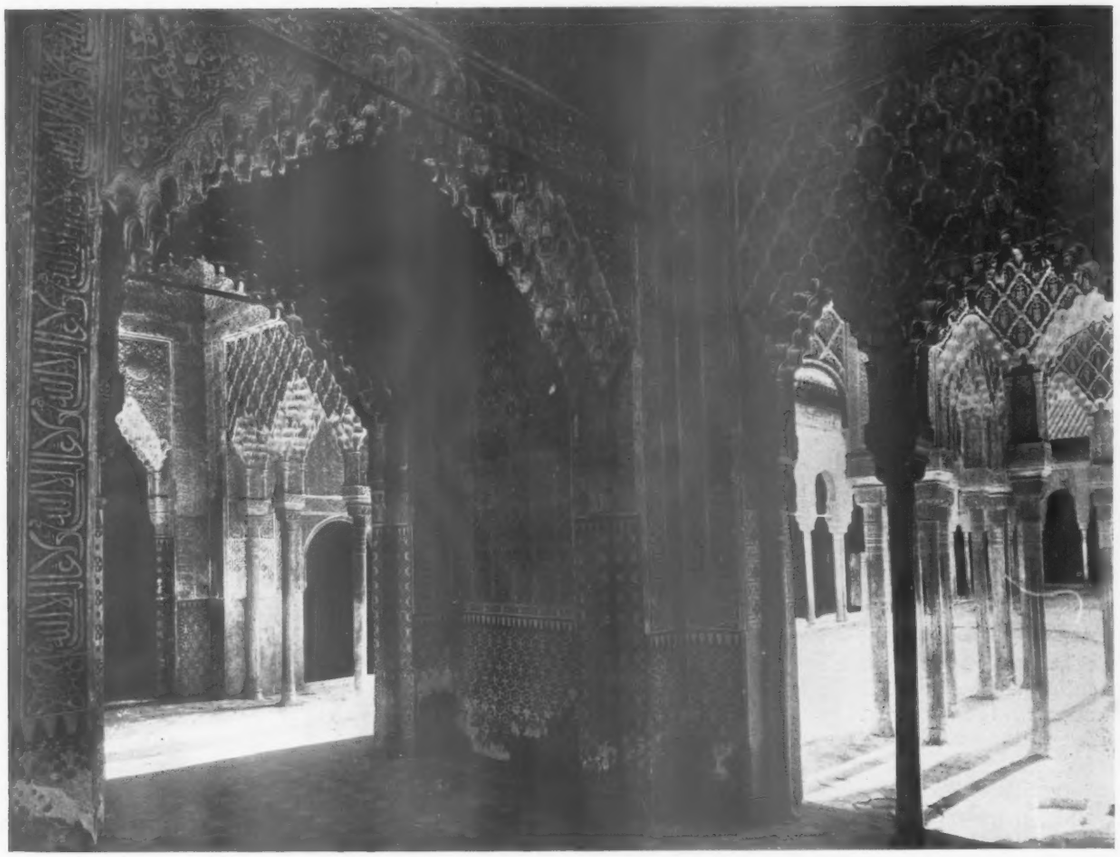
III

He who for the first time visits the Alhambra will find it difficult to contain his admiration before the enchanted world which suddenly bursts upon his gaze. However many drawings and pictures he may have seen, these can give but little idea of the thousand and one details which go to make up the harmonious whole. Nor can one formulate in the imagination the innumerable characteristic details which make the Alhambra unique in the world—its situation, among precipitous cliffs in the midst of a smiling landscape; its balconies suspended over shady ravines, from whose depths rises the murmur of mountain streams and the aroma of green woods; and the vista, now of glistening snow-clad peaks, now of green cultivated land, for which the fascinating "ajimeces" form a unique frame. Add to this the enchanting perspective of halls and arcades, the marvellous and ever-changing play of light and shade whereby the open patios are bathed in dazzling radiance by the southern sun, whose glory filters also into the enclosed chambers through the tracery of their cupolas; the slender grace of columns and arches that seem as though a breath of air might bring them toppling to earth, yet sustain roofs of stalactites; and lastly, the plash of fountains and the gentle breeze laden with the aroma of rose and myrtle.

This ideal architecture produces in all who are fortunate enough to contemplate it that rare emotion, partly poetic and partly voluptuous, that only real loveliness and pure art can call forth.

"Those women of the thousand and one nights," says Rusiñol, "clothed in floating draperies and transformed into columns by a magic spell; those lamps of gold that hang from ceilings inlaid with mother-of-pearl in the centre of mysterious chambers; those birds perched in aromatic palms; those fountains gushing forth in jets of silver in alabaster basins; those Caliphs reclining in the shade of laurels and dreaming of the paradise of Mohammed; all that fantastic conception of a people imaginative, poetic and fatalist in one, seems as though it were a fabric of dreams, dreamt in the shadow of the Alhambra."

Another artist-writer, Martinez-Sierra, exclaims: "Behold the marvel of human artifice! This palace in which a science, sure of itself, has savoured the delight of making itself insensate; here is the labyrinth, the web, the honey-



6. THE HALL OF THE KINGS, AND, THROUGH THE ARCADE, THE COURT OF THE LIONS.

comb with its swarm of bees; here is the play of water poetically disposed for the voice of silence; here is the voluptuousness of cool and hidden nooks beneath a sky of southern fire; here are verses written on the walls in ornamental characters, so that the mind may receive its sustenance unconsciously and without effort; here is the grace of slender columns and the daring of fragile arches; here is the diamond of a thousand facets with all the rainbow within; here the unexpected garden encrusted like an emerald in the very heart of the maze; here the fountain that speaks not only by means of its waters, but also through the inscription of its marble cup singing its praises and those of its lord."

"This architecture," says Edmond de Amicis, "expresses power, glory, greatness; expresses love and voluptuousness —love with its mysteries, its caprices, its effervescences, and its impulses to recognition of God—voluptuousness with its melancholy and its silences."

The French novelist, Max Daireaux, proclaimed that the perfume of the flowers of Granada pursues and intoxicates the traveller to the extent that "should one come across one of them by chance in the bottom of a casket its lingering perfume, though it be withered and dead, will evoke the enchantments of the Alhambra."

A visit to the Alhambra on a spring afternoon in which the golden light produces in the spirit a sensation as though we offered up our thoughts on the altar of Mohammed; the sight of its gardens, its columns, and its coloured tiles sparkling in the rays of the sun; the sound of the plashing fountains, causes in us the illusion of being in some Persian city to such an extent that a citizen of Damascus who contemplates the Vega of Granada from the balconies of the Hall of Comarex might well believe himself transported back to his native land—to the valley watered by the Tigris and Euphrates, wherein, according to Hebrew tradition, paradise may be found.

The orientalist, Gustave le Bon, although by no means a lover of hyperbole, recognizes that if paradise exists on earth it is here in the Alhambra.

And since these opinions and those which have been formulated about this priceless monument by Washington Irving, Zorrilla, Macaulay, Gautier, Alarcon, Fortuny, Castelar, Amicis, General Grant, Sarasate, Hartzenbusch, Nuñez de Arce, Canovas del Castillo, Edison, and a thousand other writers and celebrities who have seen it, are but pallid reflections of the indescribable and wonderful reality, it happens that poets, sages, the princes of culture, and the slaves of ignorance, spurned by the illusion which actuates indiscriminately in the human spirit, come from all quarters of the globe to place on the altars of the Alhambra the offering of their enthusiasm.

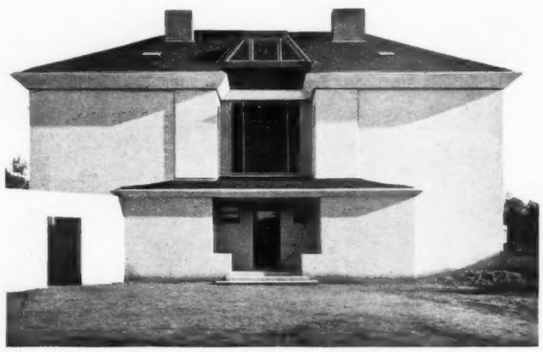
LUIS SECO DE LUCENA.

The Work of Walter Gropius.

This is the fourth of a series of four articles on the most important modern German architects. The three earlier dealt with Bruno Taut, Erich Mendelsohn, and Hans Poelzig respectively, and were published in the Architectural Review for December 1922, May 1923, and October 1923.

WALTER GROPIUS is the leader of the most revolutionary arts and handicrafts school in the world, the Staatliche Bauhaus at Weimar. This well-organized, fruitful, and heretical institution has been established upon ancient and venerable foundations—those of the former Royal Saxon Academy of Arts and Crafts—and upon many new and dynamic theories in the arts and the teaching of them. The Staatliche Bauhaus is the enemy and antithesis of the academic. It is a great institution with a well-selected staff of "form-masters," and many "apprentices" and "journeymen." It has workshops and garden-colonies, and is, in effect, a modern abbey in which the acolytes of the arts are trained to priesthood according to a curriculum which seeks to amalgamate all the virtues of the old guild system with modern means, methods, and necessities. Thus, mass-fabrication is calmly faced as an inevitable phase of modern economic conditions, and efforts are made to refine and ennoble it to the service of art. Among the teachers of the Staatliche Bauhaus are some of the most distinguished European creators and exponents of the new—such as Vassily Kandinsky, Lyonel Feininger, Johannes Itten, Adolf Meyer, and Walter Gropius himself. The motto of the Bauhaus reads, prosaically enough :—

"To train artistically-gifted man so that he may become creatively-productive, as an artisan, a sculptor, a painter, or an architect."



1. A HOUSE AT ZEHLENDORF-BERLIN.

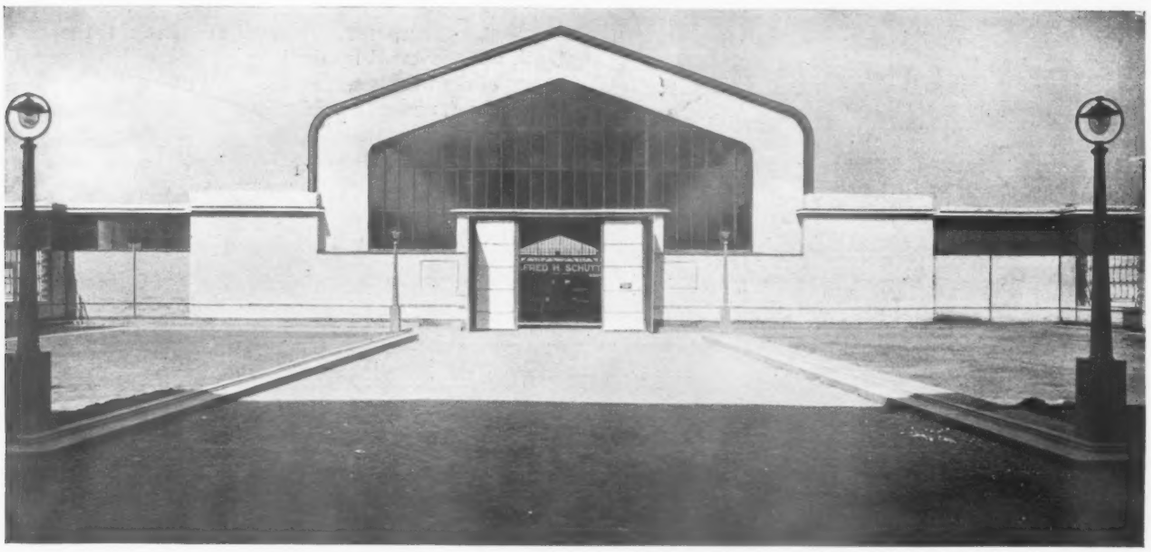
For Dr. Otte.

Walter Gropius belongs to that group of younger German architects to whom the war and its accompanying cultural, social, and political phenomena meant a deep, never-to-be-closed cleavage with the past. The seeds and spores of the impending change that came finally in the shape of a cataclysm instead of a gradual evolution were already active in him before the war. As a creative artist of quick and responsive sensibilities the di cord and the separatism, the fatal dualism of the modern age, were palpable to him long before the whole structure was shaken and riven to its centre. He *knew*, as every true architect must indeed instinctively *feel*, that the world-spirit of an epoch crystallizes itself most clearly in its edifices, that its spiritual and material capacities find in them a simultaneous and visible expression. We thus have an infallible mirror for discerning the features, the harmony or cacophony of an epoch. A vital architectural spirit, rooted in and fed by the entire life of a people, must embrace all domains of human endeavour, all arts and all technics. Gropius felt the great, painful discrepancy, and became vividly aware of the fatal fact that the architecture of to-day had degenerated from the great art, inclusive of arts, to a mere study and routine. The lamentable confusion to be seen everywhere was but a reflection of an old, dismembered world and of the lack of cohesion and co-operation between creators.

The art of great building or of architecture in the grand style is conditioned not only by material considerations of immense scope, but also by the ability of large groups to possess themselves of, or be possessed by, a new inspiration—a new artistic dispensation arising from sublimated knowledge, insight, and experience—and the capacity to act in unison. The art of great architecture is, therefore, a multiple, a communal art. True architecture, in contradistinction to other individualized manifestations of art, is of an orchestral nature—the precipitate of a whole.

Walter Gropius began his revolt against the anæmia of the academic with the example of Morris, Ruskin, Vandevelde, Olbrich, and Behrens, and later, the splendid work of the "Deutsche Werkbund" before his eyes. His artistic nature is of an earnest and brooding cast, and the dualism between the world of art and the world of reality affected him deeply. He saw architecture, bound with the swaddling-cloths of mummified traditions, delivered up to the cold conceptions, the scant imaginations of engineers and merchants. His recoil from the conventional and from outworn forms first threw him into the arena of the scientific, into a struggle with the new materials, such as steel and concrete, and into a compromise with the utilitarian. The stripping process became one with the creative or formative. He began a passionate search for the naked form, the primal form that would also serve as the ultimate. Instinctively he felt that a *tabula rasa* was necessary. Upon this clean slate or cleared ground, new life, expressed by chastened bulk and transfigured line, was to arise. Every architect had the duty of becoming an ascetic, of preparing himself and his work for the message his age was to write, the symbols, forms, and ornament it was to create.

This period of combat with technical demands, this debate and compromise with new materials, this search for fresh solutions is visible in such structures of Walter Gropius



2. A FRONT VIEW OF THE MACHINERY HALL, WERKBUND EXPOSITION, COLOGNE.
A straightforward solution in terms of concrete, steel, and glass of the technical demands of an industrial building.

3. THE MACHINERY HALL AND TOWER, WERKBUND EXPOSITION, COLOGNE.
Designed by Walter Gropius for the Deutz Motor Co.

4. THE FRONT OF THE MUNICIPAL THEATRE AT JENA.
By Walter Gropius.

as the office building at the Werkbund Exhibition at Cologne in 1914 (Figs. 8 and 9). Here we have the spectral, translucent encroachment upon and envelopment of brick, stone, and wood. We become conscious of a new audacity. The walls vanish. Staircases, skeletonized as by an architectonic X-ray, sweep their suspended helices through the air. The corner towers become transparent and seem to mock at all traditions of permanence. The corbelled-out pilasters on the front throng one another so closely as to leave mere slits, and echo the massiveness of Assyrian façades. We have the wide, insolent rake of tin roof cornices floating on clerestorys of glass. The supporting pilasters of a longitudinal wall are masked by a free wall of glass. Brick enters into a new law of marriage with other brick and with sculpture—as in the entrance portal of this horizontally-attuned edifice that glistened and smouldered with a new message upon the raw grounds of this exposition—like a bubble before the cannon-blast of the impending war.

The same influence, but expressed in less restless and more monumental terms, is visible in the machinery exhibition hall of the Deutz Motor Company, and the remarkable octagonal tower that adjoined it (Figs. 2 and 3). Here the round and the triangular are also invoked, as well as colour, striking and living colour that gave the whole complex an additional rhythm and vibration. The effect of the whole was grandiose —a lay temple of symphonic symmetry, a hall in which the machine and the building, the one wholly, the other in part, of metal, celebrated a new reconciliation. Here utilitarian architecture, aided by the element of spectacular display, takes on a dignity and beauty through its own high and fearless honesty, the frank, graceful avowal of its purpose.

It is a pity that this element was not preserved in the shoe factory shown in Fig. 7. Here we have an expression of naked use and an unabashed confession of the purely expedient. One of the oldest optical-material principles of architecture is defied and even repudiated by the glass ends of this factory, enclosing the staircase hall, and supporting the heavy, super-incumbent angle of the brick fascia on fragile glass and spidery muntins. Here the hunger or itch for independence may have resulted in an unnecessary, even disturbing *tour de force*, yet one which undeniably demanded courage. A fine balance and harmony of walls and fenestration is also visible in his factory of agricultural machinery, clear-cut masses, without cornices, save in the central tract, and traversed by the long, white-mullioned parallelograms of the windows.

The sheer, uncompromising barrenness, the stern, absolute negation of all extraneous decorative elements which mark Gropius's industrial buildings are not retained in his domestic designs. An example is the remarkable solid timber-frame house which Gropius, in association with Adolf Meyer, built for Herr Adolf Sommerfeld at Dahlem-Berlin. The framework is of solid beams or dressed logs, cross-mortised into one another—round-faced on the ground-floor wall and peak-faced on the upper story. This house is built with a set will and tenacity that convert it into something original and organic, within and without. Externally it is devoid of all ornament, save that of the expressionistically carved door, the beam dentils, and the oiled and varnished grain and pattern of the logs themselves. Within, apart from the patterns of the boarding and the symbolical carvings of the staircase buttresses, we encounter the same nudity which goes so far as to banish such impedimenta as pictures (Fig. 6). But the material itself once more comes into its own. The old love for a beautiful, warm, and friendly material—wood—which has been lost to us so long, and which survives only in parts of Scandinavia, Russia, and Bavaria, has been recovered and accentuated here.

5. THE MUNICIPAL THEATRE, JENA: THE AUDITORIUM.

The walls are of salmon-red, the friezes, balcony-fronts, and proscenium walls are a dull grey, and the wooden wainscot and doors a greyish-yellow. The doors are armoured with discs of copper, and the curtain is brilliant ultramarine.

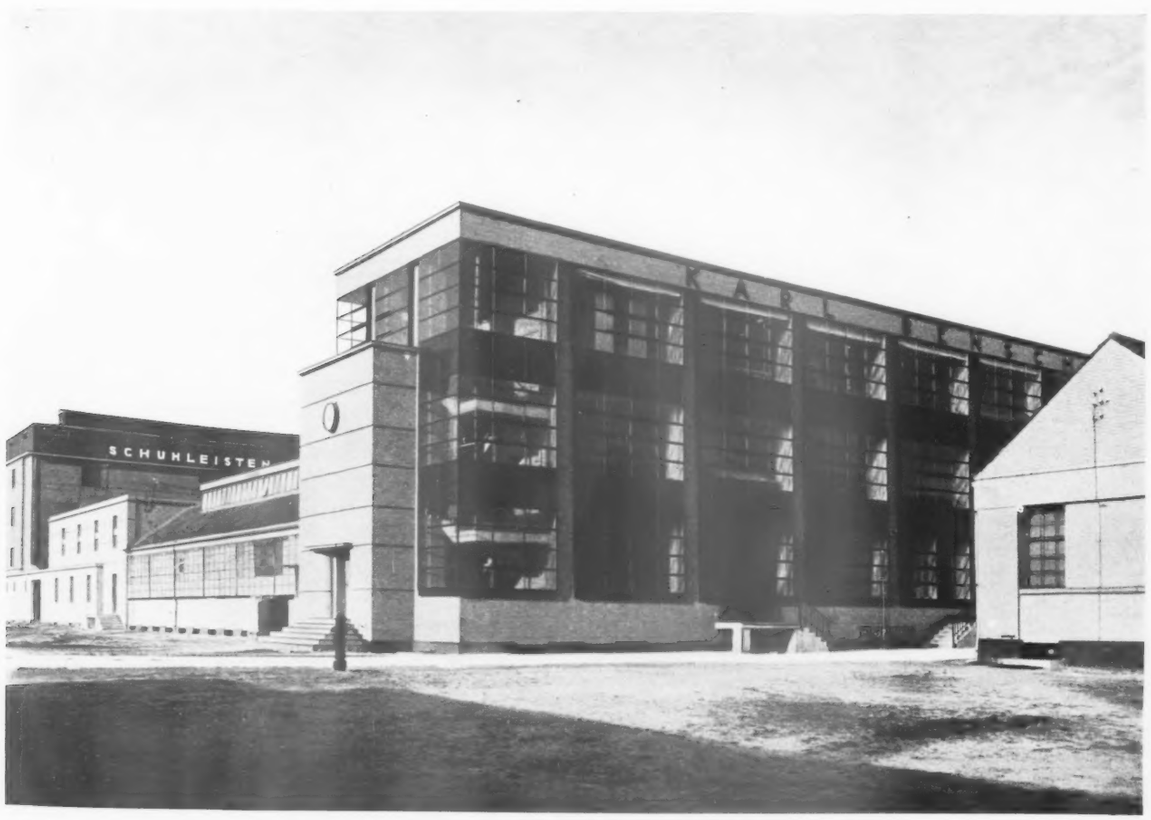
6. THE STAIRCASE HALL IN THE HOUSE OF A. SOMMERFELD, DAHLEM-BERLIN.

By Walter Gropius.

Another dwelling, recently completed at Zehlendorf-Berlin, and built massively of concrete, confronts us with a front that is practically windowless, except for the deeply recessed opening on the second floor (Fig. 1). Here we have heavy and naked severity, redeemed by a certain shadow-play, bizarreness of line and balance of parts. The abrupt bifurcation of the front is remarkable; the elevation, however, is held together by the cornice and roof over the entrance.

Gropius is one of those German architects who have been influenced by the cold, sober objectivity of American commercial architecture as expressed in the work of Frank Lloyd Wright. Applying this alien American element to their own problems, they have, to a certain extent, rarefied and even ennobled it, as may be seen in countless designs for projected *turmhäuser*, as the Germans have categorically christened the skyscraper. But in the application of this American element to American problems, they have over-americanized it under the false assumption that the American was purely utilitarian. This accounts for the lifeless desolation, the schematic abstraction of most of the German designs submitted in the competition for the "Chicago Tribune" office building—among them one by Walter Gropius, a sheer, bleak problem of acrobatic engineering and geometric planes.

In the Municipal Theatre at Jena (Jena Stadt-theater), Gropius, again in association with Adolf Meyer, has tried to give us the absolute theatre, the theatre stripped, as it were, for action (Fig. 4). He has created a blank, polished, chromatic shell for the medium of the drama. Here his aversion to even the simplest survivals of "Byzantinism," has forced him to fight for the achievement of the pure, unadorned, essential playhouse—the bones and soul of the theatre. This fabric, built up of cubistic masses within and without, and held together in a strange harmony by blocks and



7. A SHOE FACTORY: THE ENTRANCE AND OFFICES.

The building is composed almost entirely of glass like most modern factories, but here the architect has gone a step further. He has eliminated the brick angle-treatment and has carried the glass round the corners of the building.

8. AN OFFICE BUILDING AT THE WERKBUND EXPOSITION, COLOGNE: A SIDE VIEW.

By Walter Gropius.

expanses of pure and direct colour, is something which first offends, then overwhelms, then fascinates by its very starkness, and by its rude, almost brutal repudiation of all attempts to conciliate by means of concessions to the conventional. The photographs, unfortunately, give only the dead bulk, the light and shadow, without the vibration and movement that result from the relationship between the static and the dynamic masses.

The front of the theatre is a snow-white wall with parallel wings and bevelled corners, the whole elevated upon a long plinth. The treatment of the central and side entrances, the hoods and illuminating bodies, in form and colour—different greys, viridian green and brass—as well as in delicate symmetry, is full of subtle refinements, such as the flat, entasis-like curve of the line of the front fire-wall. The door and window openings have the appearance of being cut directly out of the smooth, external skin of the building. The entrance lobby is steeped in a sunny vibrant yellow. Two thick square columns are capped with light-boxes of matt glass and surrounded with seats of silver-grey plush. The floor is set with large Roman tiles of brilliant red.

The auditorium at once seizes and submerges us by its walls of vivid salmon-red (Fig. 5). The "friezes," balcony fronts, and proscenium walls are a dull grey, the wooden wainscot and doors a greyish-yellow, the doors themselves armoured with great discs of copper. The heavy, optically even top-heavy projections which step off the angle between wall and ceiling oppress one at first sight, as well as the ponderous light-boxes. The square, blunt forehead of the gallery front is supported on huge lintels, reminiscent of Stonehenge or of Aztec motifs. The stage itself opens, without any preliminary transition, abruptly from the wall, and is closed by a curtain of brilliant ultramarine. The stage settings themselves are so built as to continue and extend the architecture of the auditorium into the realm of the footlights and to bring about a new harmony with the scenery. Once adjusted to the play and interplay of these cubicular and geometric forms, and to the static and active forces dwelling in these masses, one succumbs to their power and to the spell exercised by the huge facets of courageous colour.

There can be no doubt that there is a new music or at least a new rhythm in this architecture of Spartan simplicity. It may be the architecture or at least the step towards an architecture of a new transition, the cleared field for the growth of wonders to be, or the adumbration on a small scale and in terms of concrete, steel, and stucco, of the cyclopean architecture of the future. The clear, stark, masculine note of this architectural challenge, must, despite its asperities, be recognized and honoured. It may or may not be a plinth for a new renaissance, but it is at least a wall built against reaction, possibly a forest clearing for the planting of something sublime.

The work of Walter Gropius may also be summed up, like the simple, yet in the best sense of the word sensational, monument he designed at Weimar for the dead in the March revolution—an immense stone lightning-bolt darting from an irregular plinth into the heavens—as a challenge of earth to the obtuse, blundering gods. The gesture is the gesture of Ajax, and it is the attitude of Ajax that impresses us in the architecture of Walter Gropius—however much this attitude, contrary to that of the Greek warrior, is the result, not of a tempestuous temperament, but of a deliberate programme, growing out of a philosophy.

HERMAN GEORGE SCHEFFAUER.

9. THE FRONT OF THE OFFICE BUILDING AT THE WERKBUND EXPOSITION.

By Walter Gropius.

The façade is of brick and the staircases at either end of the building are encased in glass.

A Californian Ranch Estate.

Designed by Roy Seldon Price.

DIAS DORADOS, the Home of Thomas H. Ince, Esq.

THE ENTRANCE LOGGIA.

WHEN I decided to create "Dias Dorados" in the spirit of an early Californian ranch estate, I tried to obtain an old effect—not primarily to imitate old work, but to avoid flatness of colour and perfectly machined surfaces.

The old missions of California were coloured throughout the years by dust, rain, and sunshine, and I have found it possible to get something of the right tone by painting new, white plaster with a thin adobe mud and sponging it off after a few days.

Another charm of the old work lies in the use of rock. I do not know why in Los Angeles, the possibilities of all the wonderful local rock are so overlooked. When I first inquired as to where I could procure rock, especially flagstone, no one seemed to know.

Flagstone was being imitated in cement. I took my car, searched in the folds of the hills and found interesting quarries—real limestone shale lags in every shade and colour—tufa and lava rock. Sandstone I quarried right on the Ince property.

I have used a great variety of coloured rock in the Ince buildings. This feature, I believe, has given rise to an extravagant report that "millions" were spent on the construction of "Diaz Dorados." The truth is that beautiful rock, in any colour or texture desired, can be bought for about the same price as plastered concrete construction. Some of these big rocks, built into the walls, retaining their native moss and lichen, are far more lovely to me than polished marbles.

When I started to build, I found that roofing tile was all machine-made, thin and quite inferior in colour and texture to that with which the early Californians worked. I used some of this tile.

Later, I imported a family from Mexico. They pitched their tents on the grounds, built their adobe kilns, and made for me tile, thick and hand-moulded, like the Indians made for the padres. Then they made for me floor tile—wonderful in texture, like the old ranch house floors.

With a potter's wheel they fashioned to their own peculiar fancy, ojas, jugs, and interesting plaques. All this ware cost no more than the machine-made product on the market. I had grilles wrought by an iron worker from Quadlajara for as cheap a price as they could have been bought in the usual way.

Beams, gates, rafters, and heavy woodwork were carved at small expense by Mexican labour. It is surprising to find, among the rank and file of our Mexican day labourers, that the majority display a greater inherent sense of design, more imagination and charm in decoration by far, than our high-priced, educated, skilled labour.

Most architects find, in their experience, that it is necessary in almost every instance to make very clear, detailed drawings of ideas they wish to execute.

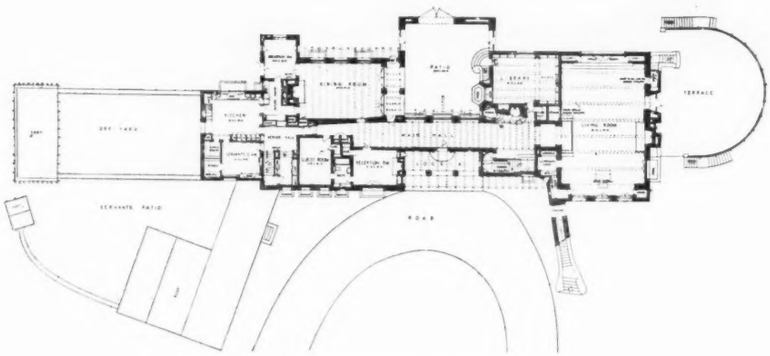
In some work, however, where one wishes to establish a quaint, almost primitive spirit in design, much better results can be obtained by leaving something to the workman, allowing him to express himself.

The front elevation of the house still needs badly the play of light and shade on the simple plaster. As soon as the weather permits, I shall plant large sycamores in the foreground.

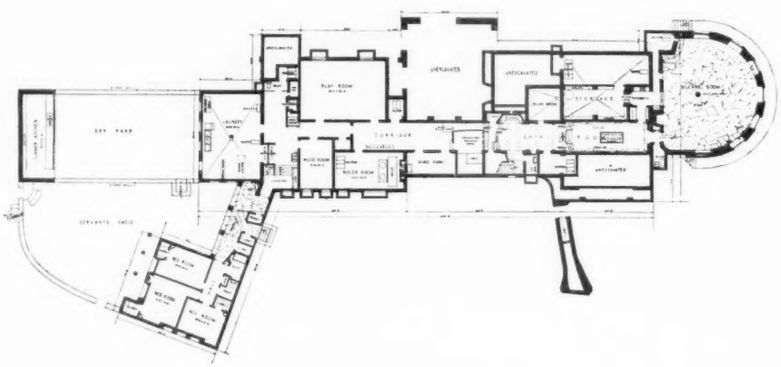
ROY SELDON PRICE.

THE DINING-ROOM.

THE FRONT OF THE HOUSE.



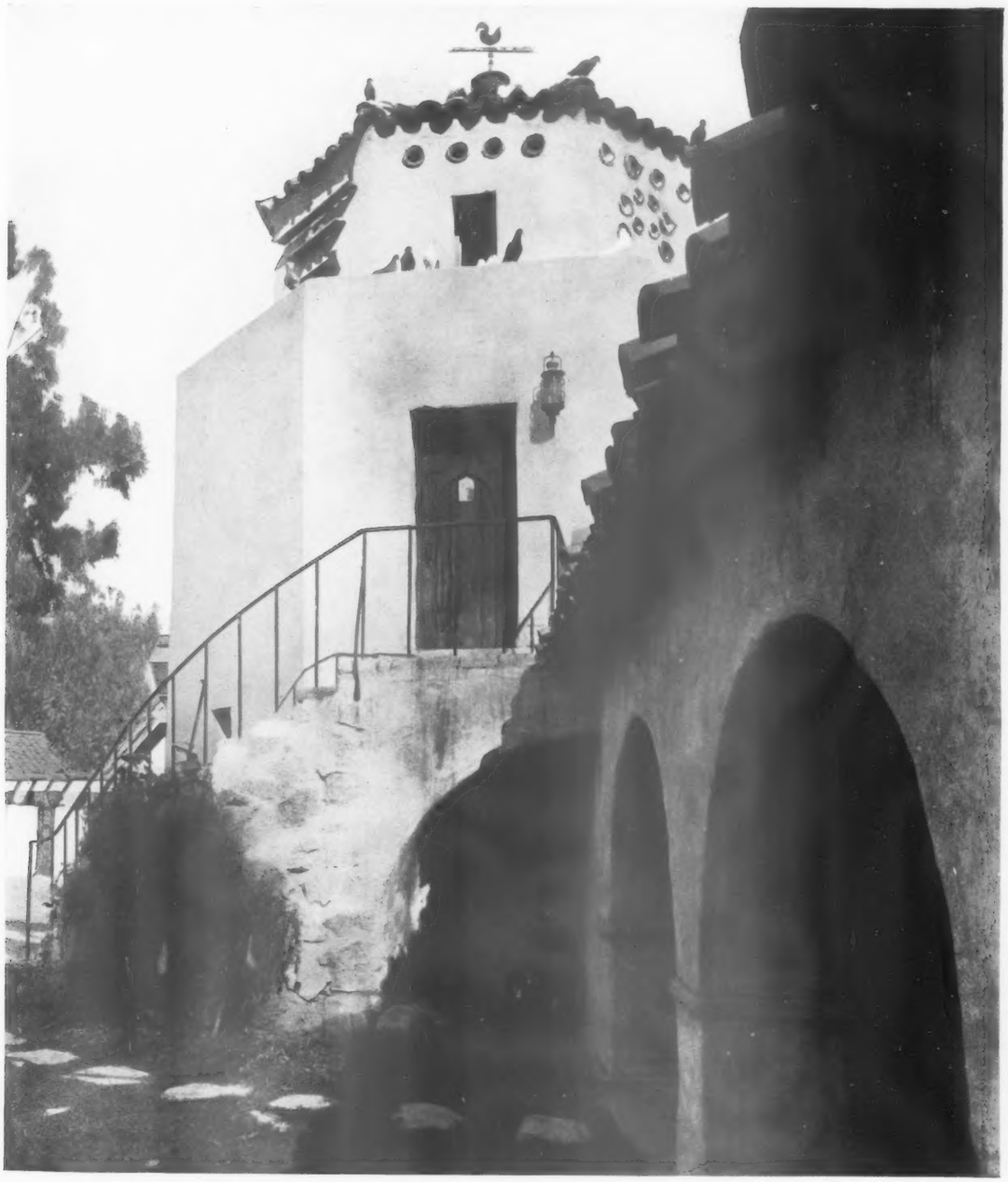
THE GROUND FLOOR.

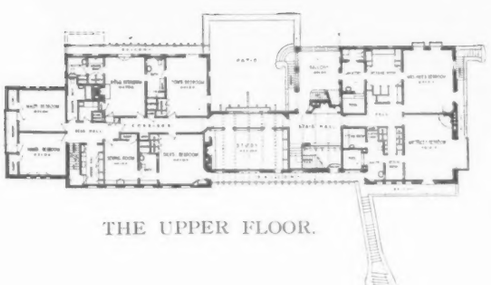


THE LOWER GROUND FLOOR.

DIAS DORADOS.

Below the main ground floor lies a lower floor, which contains the Ship Room, designed as a ship's deck, with a pilot house on a bridge, and sails and a painted sea and sky. This room is arranged to hold cinema displays.





THE UPPER FLOOR.

THE PIGEON TOWER.

Besides the Pigeon Tower, the grounds contain tennis courts, a bowling green, a swimming pool, a trout stream, an orchard of 300 avocado trees, a walnut grove, and a vegetable garden. The Plan on the left shows the upper floor of the house.

THE FRONT DOOR.

A FIREPLACE TREATMENT.

The interior carries on the Spanish character of the house. Nearly every detail has been specially made for its particular position. Every door handle, lock, and key is hand wrought. For the roof ordinary tiles were found to be of inferior texture. A family was therefore brought over from Mexico, who built their kilns on the estate, and moulded by hand thick tile equal to that made long ago. With a potter's wheel these Mexicans also fashioned jugs, placques, and decorative tile of vivid colour and primitive design. Other native craftsmen carved beams, gates, rafters, and heavy woodwork for the interior.

A VIEW INTO THE LIVING ROOM, FROM THE ENTRANCE HALL.

The entrance hall extends across the greater part of the house. At one end it connects with the servants' quarters, and at the other with the living room shown through the archway in the above illustration. The living room is divided from the hall by an iron grille of three circles intricately wrought, and measures twenty-seven by forty-seven feet.

Lizards' Houses.

OFFICIALLY, the new excavations at Pompeii are not yet open to the public. In practice, a limited number of people are allowed in on three mornings a week; and if you worry the man on the third floor of the Naples museum in good time you can get a *permesso*. Personally, I did nothing about it. I merely made a friend on the train who had an order for two, but that was a piece of luck that would not happen every day. At present you may not sketch or photograph. But by next year, if all goes well, the work may be public.

What the excavators are trying to restore is a continuation of the street which in the old Baedeker map is labelled the Street of Abundance. It ran east and west from the forum to the Porta del Sarno—the river gate. I suppose you might call it their Bond Street. It was closed to traffic by the pillars at the forum end; and you can see by the grooves for sliding shutters, on the thresholds, how many of the houses had shops on the ground floor. In the earlier excavations it leads past the fullers' guildhall and the baths. It was in the business district, close to the theatres and the fashionable Isis temple. It goes down towards the amphitheatre in the untouched south-east quarter of the city, so that when finished, it will link up that isolated excavation with the earlier work.

A note about methods. The volcanic showers that buried Pompeii left alternate layers of fine ash and loose beds of pumice. In the earlier excavations the labourers worked by driving tunnels into this mass; and continual falls of it brought down the charred beams of the upper stories, and buried and broke the furnishings of the rooms. Little remains in the quarters first discovered, beyond stone walls and bare courts, stripped of their frescoes and statues for the benefit of the Naples museum. Now the work is done on a different plan. The débris is shored up and the houses cleared gradually. Charred wood is replaced, beam by beam, or left in position and surrounded by iron supports. The labourer clears to within a couple of inches of each wall, then leaves the expert to rub off the final layer of earth, and to wash and varnish the wall-paintings. Casts are taken wherever the hardened ashes have kept the form of something decayed—a carved door-post, a corpse, the root of a tree. The statues are left in the gardens, the mosaics on the floors, the metal couches in the sleeping-rooms.

The street looks as modern as many in Naples. The upper stories, with their brown-tiled roofs, project a little; one or two have a loggia up there, or a corner balcony roofed by a trellis and a vine. The walls have election propaganda daubed up in red paint, and at the crossing is a horse-trough full of water running in the original lead pipes. The first house you visit has the orthodox ground-plan of a Roman villa. From the elegant forecourt, with its shallow rainwater pool, you go through the living-room into the pillared garden-court. In this bright and lonely corner the southern spring has brought out flowers already, and the fountain is talking to itself. The owner of the house—who seems to have employed a good architect—had a summer dining-room open to this court, with a sloping marble dais round three sides, where his guests could lie and look out at his roses. In the winter they dined in a closed room on the other side, next to the kitchen and the wine cellar—an admirable arrangement. The family slept in the red and black frescoed rooms round the front court, and the servants upstairs. I suppose because it was stuffy under the tiles.

Next door to this house was a cook-shop of some kind. It has the usual Pompeiian shop-counter, faced with broken pieces of marble, and fitted with sunk jars for oil and wine. At one end are the bronze scales and weights; at the other a charcoal fire built under the counter, and a covered cauldron over the hole on top. There was liquid in it still when they cleared away the ashes last year, something that never boiled, I suppose, or was left to boil over, when the man ran out of his shop, nearly nineteen hundred years ago.

Over the way was a laundry, with the troughs for washing the clothes downstairs and the two galleries upstairs, one for drying woollen togas in the shade without shrinking, the other for bleaching in the sun. This place had a kitchen with a thoroughly up-to-date equipment, two open hearths and a bread-oven, a number of cauldrons and spits, a grid-iron, and a perfectly good frying-pan hanging on a nail.

The last house reached is one, which must have been an old-fashioned building, left behind in the business neighbourhood. It is built in the Samnian way, on an irregular plan, with lofty rooms, and an orchard replaces the garden court. It occupies a whole block, and has shops at the corners. As these communicate with the house it is supposed that they were not let off separately, but were used by the owner for selling the produce from his country farms. In the entrance passage he had laid a replica of the "cave canem" mosaic from the House of the Tragic Poet, so that I suppose he employed the same fashionable decorator to do up his house. He had some good mosaics in his dining-hall, too; but it is curious how dark and dreary this tall room is after the low, sunny, open courts of the villa across the road. The charm of this house is the garden. You step out on to a terrace with a pergola, leading right across the back of the house, and looking south over the orchard. At the east end is a garden house, with an altar to the family gods, and a wall-fountain. From it, the water runs in a foot-wide channel of stone under the pergola, flanked by a double row of small marble statues, a life-sized, life-like rabbit, a cupid, a goose, and the like, set among lavender bushes. At the mid-point of the terrace the water drips through to a marble basin hollowed out of the south face of the wall, brims over again down a flight of marble steps, and ends in the fishpond. This is a canal which runs the length of the orchard, and sends off side-channels among the flower-beds. On each side were fruit trees in double rows; the casts of their roots in the ground show where they were planted. And up across the terrace is the room where the skeletons of the children of the house lie on their sides, their knees drawn up, asleep among a mass of charred cushions. We sat on the hot stones of the terrace, and someone remarked on the boldness of the lizards darting about among the shadows of the young vine leaves. "Yes," said our guide, "those are the owners of Pompeii."

H. R. ASHTON.

Liverpool Cathedral.

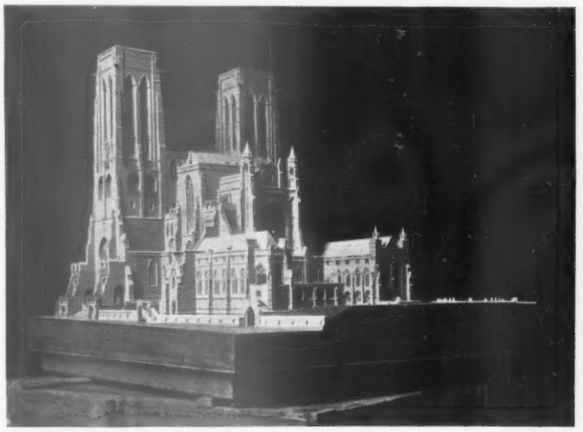
Designed by Sir Giles Gilbert Scott, R.A.

WHEN building began again after the chaos of the Dark Ages, and the monastic institutions of the Benedictines, with a definite policy and purpose in view, built their fortresses of culture amid the barbarism of north-west Europe, it was natural enough, and is evident both from documents and remains, that they should get a large part of their inspiration from that old world of imperial order and peace, of which the prestige had not entirely died away, and endeavour to build "more Romano," in the old Roman manner. There is, indeed, more than a hint of Rome in Durham or St. Albans. Their massive walls recall the labour conscription of imperialism, the heavy columns closely spaced are like the legions marching, though their strange twisting "Polynesian" ornament tells of other influences at work. But in imitating the Roman builders Norman work is like the great body of the Renaissance. It saw the flesh but forgot the bones. With arch and column and masonry surface it was well enough acquainted to do something on similar lines. But the vault, the prime contribution of Rome to building, it had not the resources to attempt, save in a timid and half-hearted way. Even their sheer wall masses, impressive as they are, lose some of their effect in churches from the triple division of arcade, triforium and clerestory. Of these, the triforium perhaps owed its origin to a tradition of the women's galleries in eastern churches. It was, anyhow, useful for watching processions and all the pageantry connected with worship in mediæval times, and, moreover, allowed access to the timber roof above the aisles. The clerestory was necessary for light, as the main windows, lighting across the low aisles, were insufficient, and were sometimes blocked by cloisters and other buildings beyond the main walls. But the sense, both inside and out, of a great room is impaired by this series of horizontal stories. This triple division persisted to the fifteenth century in England. The last Gothic builders were aiming at getting rid of it, when their art died in their hands. In the revival of the Gothic work in the last century the so-called Perpendicular was out of favour, except oddly enough with its earliest champion, Pugin, and its latest, Bodley. So in the works with which the wealth of the nineteenth century covered our land, this triple division of church walls persisted. It is one of Giles Scott's great achievements at Liverpool to have broken away from it.

The Normans, then, aiming at Rome, produce an effect of mass in their walls but neglect the vault. Their successors, the great French architects of the thirteenth century in particular, raise soaring vaults, as at Bourges, Amiens, Beauvais, but in a manner directly contrary to the Roman, a vault carried on ribs and legs of stone and abutted by a nice balance of raking shores and pinnacles in masonry, with a screen wall of painted glass between the supporting piers, the whole elegant, exciting, wonderful, and most exposed to decay where decay was most dangerous. They have turned full circle from the Normans and wish to do away with the wall altogether.

Out of this mingling of past motives the architect of Liverpool Cathedral has, consciously or unconsciously, selected the strength of each, the wall mass of the Norman, and the Norman plan scheme courageously modified for congregational use, the towering vault of the thirteenth century, the sheer lines and engagingly moulded surfaces of the fifteenth. He has done more than this. By abandoning the triple division he has avoided the major fault of mediæval exterior design, its failure to emphasize externally the single room, which is essentially, in spite of aisles and side chapels and transepts, the dominating idea of the plan. At Liverpool the crown of the arches of the arcade are some 75 ft. above the pavement level. The great windows light across the aisles into the nave or the choir, and are big enough outside and in to seem the windows of a great hall of assembly and worship. Above these windows externally is a sheer wall, with a little arcaded gallery running across it, hewn out of its 7 ft. of thickness as it were, and above this again, where the wall thins down, as the section shows (Fig. 7), little square windows light the upper aisle passage, which runs round upon the top of the aisle vault. On the inside this upper passage peers through the lofty darkness of the main vault, with two arcades for every bay of the main church. Up there in the gloom they seem small enough, but each arch is 30 ft. from base to crown. So the clerestory has gone, and the triforium is a passage walking mysteriously behind the vaulting.

But Scott has gone farther than this, and here we come to the bones of the building. He has been more Roman than the Normans and has borrowed from the great vaulting systems of the imperial Thermæ the device of abutting his main nave vault by a series of great walls at right angles to the axis of the nave. Through them the aisle passage is pierced. The effect of this is that the great windows lighting



1. A MODEL OF THE CATHEDRAL.

This model shows part of the original design, which has been entirely modified.

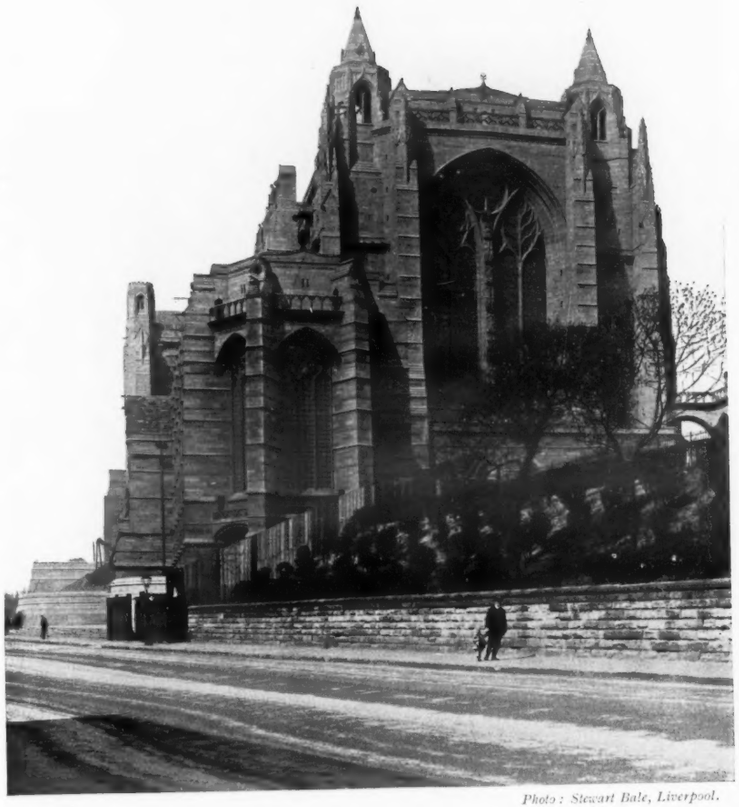


Photo: Stewart Bale, Liverpool.

2. THE CATHEDRAL FROM THE ROAD.

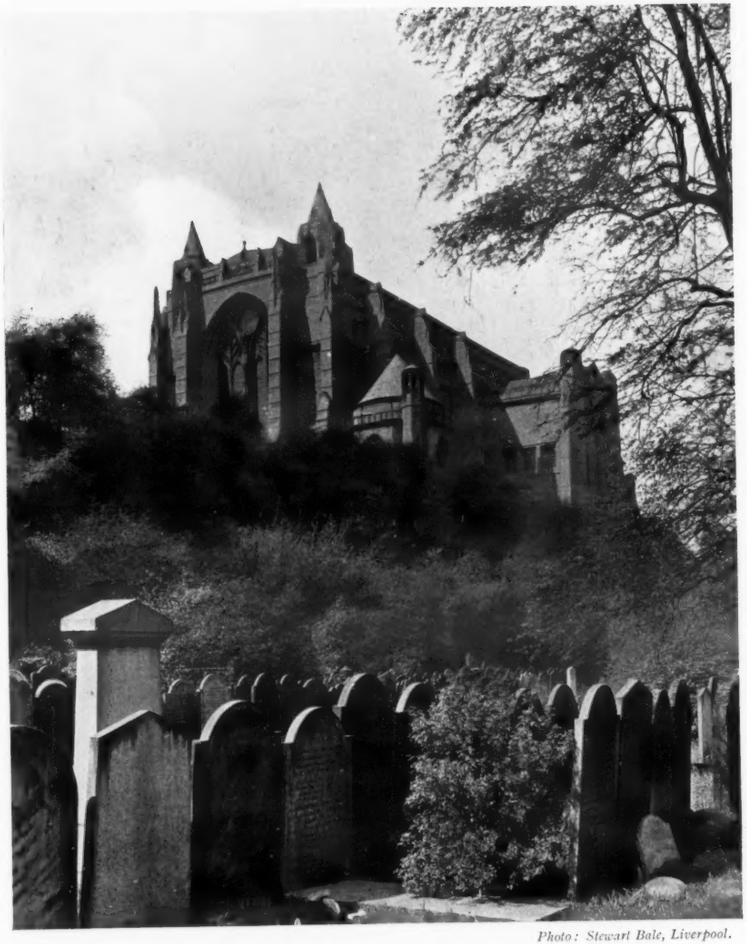


Photo: Stewart Bale, Liverpool.

3. THE CATHEDRAL FROM ST. JAMES'S CEMETERY.

Both photographs show the East End of the Cathedral, with the Great East Window. The Cathedral is flanked on the south by the road which overlooks Liverpool, and on the north by St. James's Cemetery, a large dyke, covered in trees, that greatly adds to the magnificence of the site.

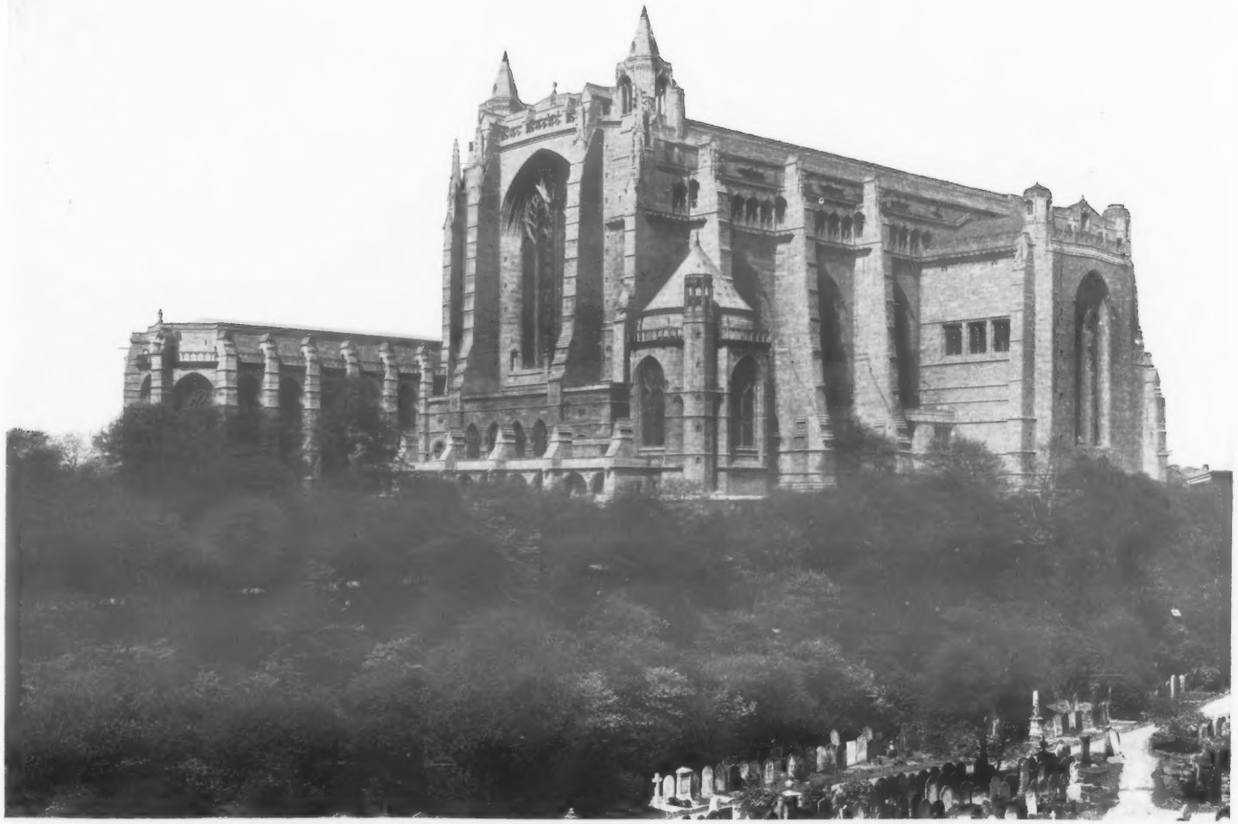


Photo: Stewart Bale, Liverpool.

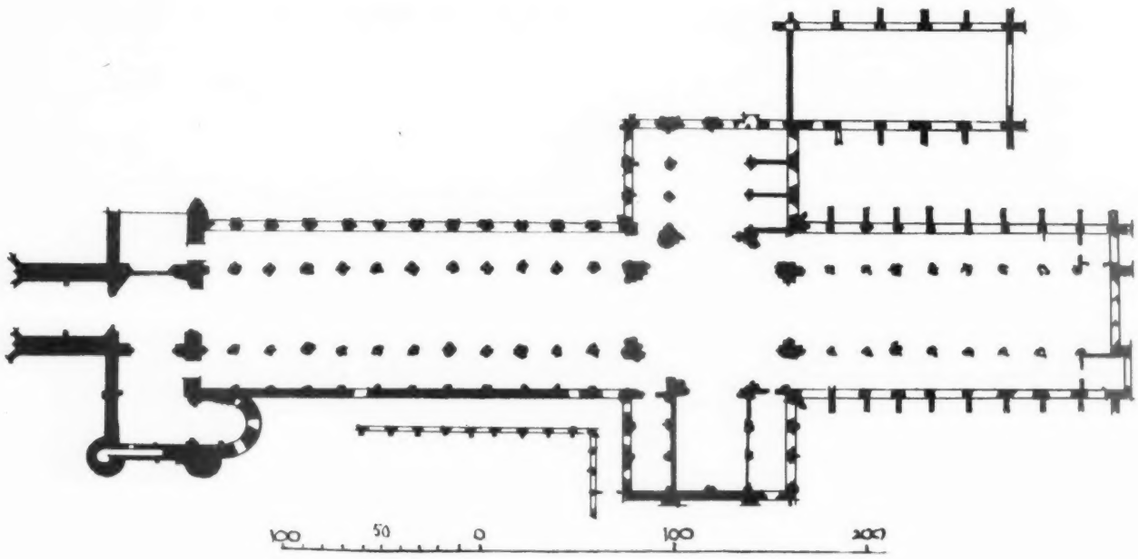
Plate II. August 1924.

A VIEW ACROSS THE GRAVEYARD.

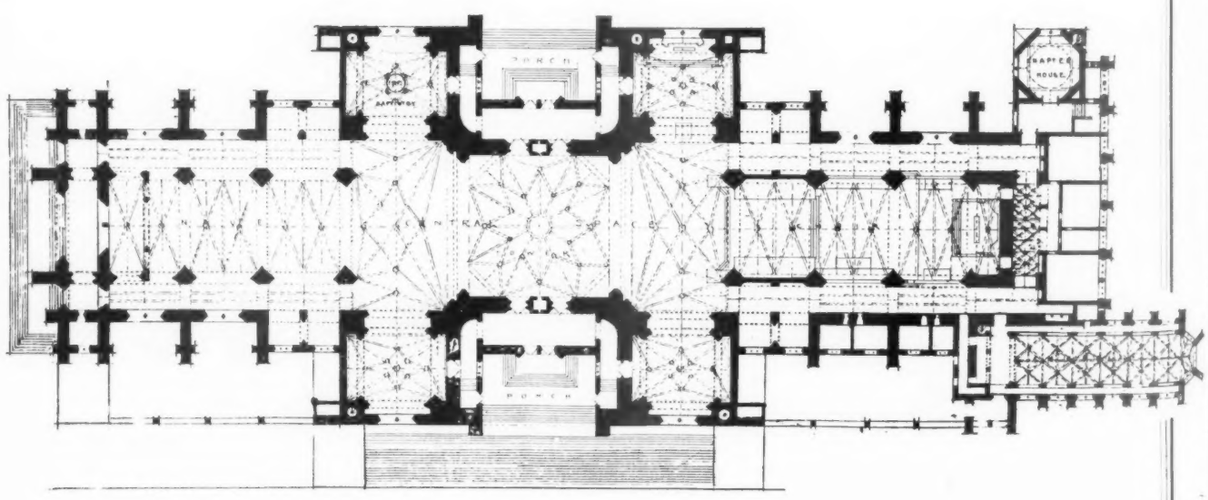
Sir Giles Gilbert Scott, R.A., architect.

The Cathedral is not yet half finished. The Lady Chapel (on the left) and East End can be seen above. On the right hand, or western extremity, the Great Tower will be added, and beyond that again the body of the building will be prolonged to correspond with the portion above. The complete scheme is shown in the drawing on p. 65.

4. AN EARLY DRAWING, BY SIR G. GILBERT SCOTT, OF THE GREAT TWIN TOWERS AT LIVERPOOL.
The early design shown in the above drawing has been greatly modified. Amongst other things the twin towers have given place to one great tower, as can be seen in the latest drawing on p. 65.



A PLAN OF ELY CATHEDRAL.



A PLAN OF LIVERPOOL CATHEDRAL.

5. PLANS OF ELY AND LIVERPOOL DRAWN TO THE SAME SCALE.

Photo: Stewart Bale, Liverpool.

6. LIVERPOOL CATHEDRAL: THE COMPLETE DESIGN.

A drawing of the complete design by Charles Gascoyne. The design for the Tower has since been modified.

the body of the church seem set in deep reveals, as if a wall 20 ft. thick had been caverned out to get at the sun. These abutting walls set at right angles, and themselves linked together by their own vaults, and linked above once again by the double vault of the triforium passage, are buttresses within the circuit of the main walls, and take the place of the exposed stone shores of mediæval tradition. Only the splendid tower-like counterforts, angel-crowned, stand beyond the main wall of the building, throwing their shadows and speaking, to those that can understand, of the great vault within, its dim crown 116 ft. above the paved floor.

This great conception has been slow of growth. Gradually the idea has been developing, always it would seem towards a sense of simplicity and unity—great masses, great shadows, surfaces gently rippling into mouldings, light concentrated at the southward sanctuary end, reredos and choir-stalls and bishop's throne flowering as part of the structure, rather than as furniture brought in. Earlier schemes, one of which we illustrate by a photograph of a model and a drawing by the architect of the twin towers (Figs. 1 and 4), show indeed stateliness and strength, but the many motives compete with one another. The twin towers are fine and sheer, but are not an advance on Pearson. The repeating transepts saddling the nave would have been a little disquieting, and their two storeys of window a misfortune. We have only to compare the great transept as it has been built with the model of the earlier scheme, to see how the whole conception has been lifted on to a new plane (Fig. 8). Perhaps there is no more impressive piece of building in England than this precipitous face of masonry with its magnificent and simple windows looking out over the city and its shipping below. It was the greatest good fortune that the unity and grandeur of the building was not fatally compromised as it well might have been in its early years by the co-operation, which is but rarely propitious, of youth and age. Out of different points of view and the clash of minds it often happens that the best results in architecture are attained; but the conflict must not be unduly prolonged nor the conception which emerges victorious be afterwards hampered. Certainly, if we are to judge by the way the work is spoken of in Liverpool, Scott has been fortunate in the sympathy and enthusiasm of those for whom and with whom he has worked.

From the river and the docks the ground rises to St. James's Mount. All about this slope were built the squares and reticent streets of the days of early prosperity. Now learning or poverty have occupied what commerce built, and the steep cobbled ways are the haunt of bare-legged urchins and professors. Sheer above these roofs rises the cathedral. Beyond it is a rocky ravine, an old stone quarry, now shaded by thorn and sycamore and mountain ash, half hiding old

7. A SECTION THROUGH THE NAVE.

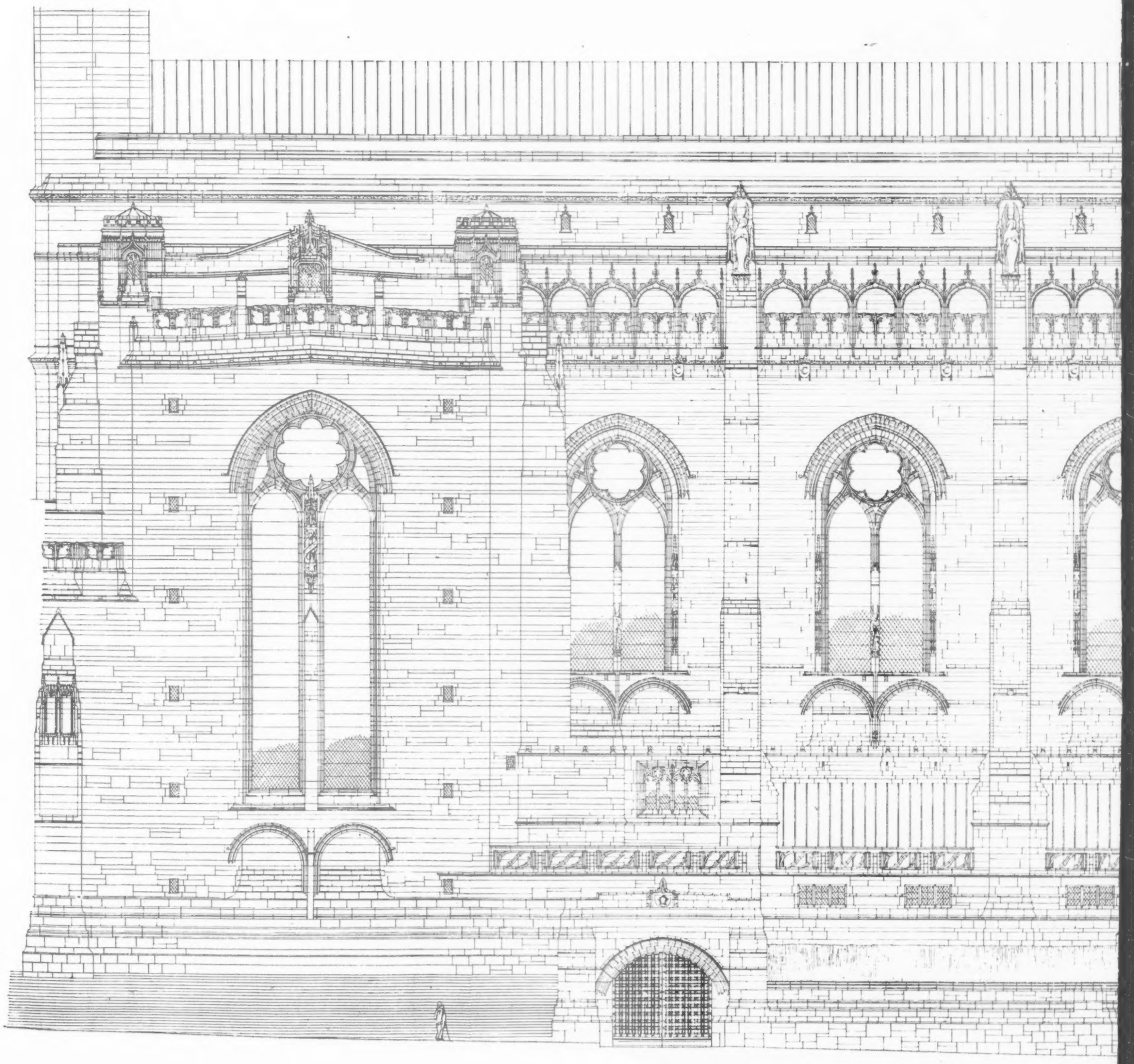
Showing the Reredos in its relation to the East Window, and the Exterior of the Cathedral.

LIVERPOOL CA

Eastern Portio

Scale of Feet

G. Gilbert Scott R.A. Archt
7 Gordon Sqr. London W.C.

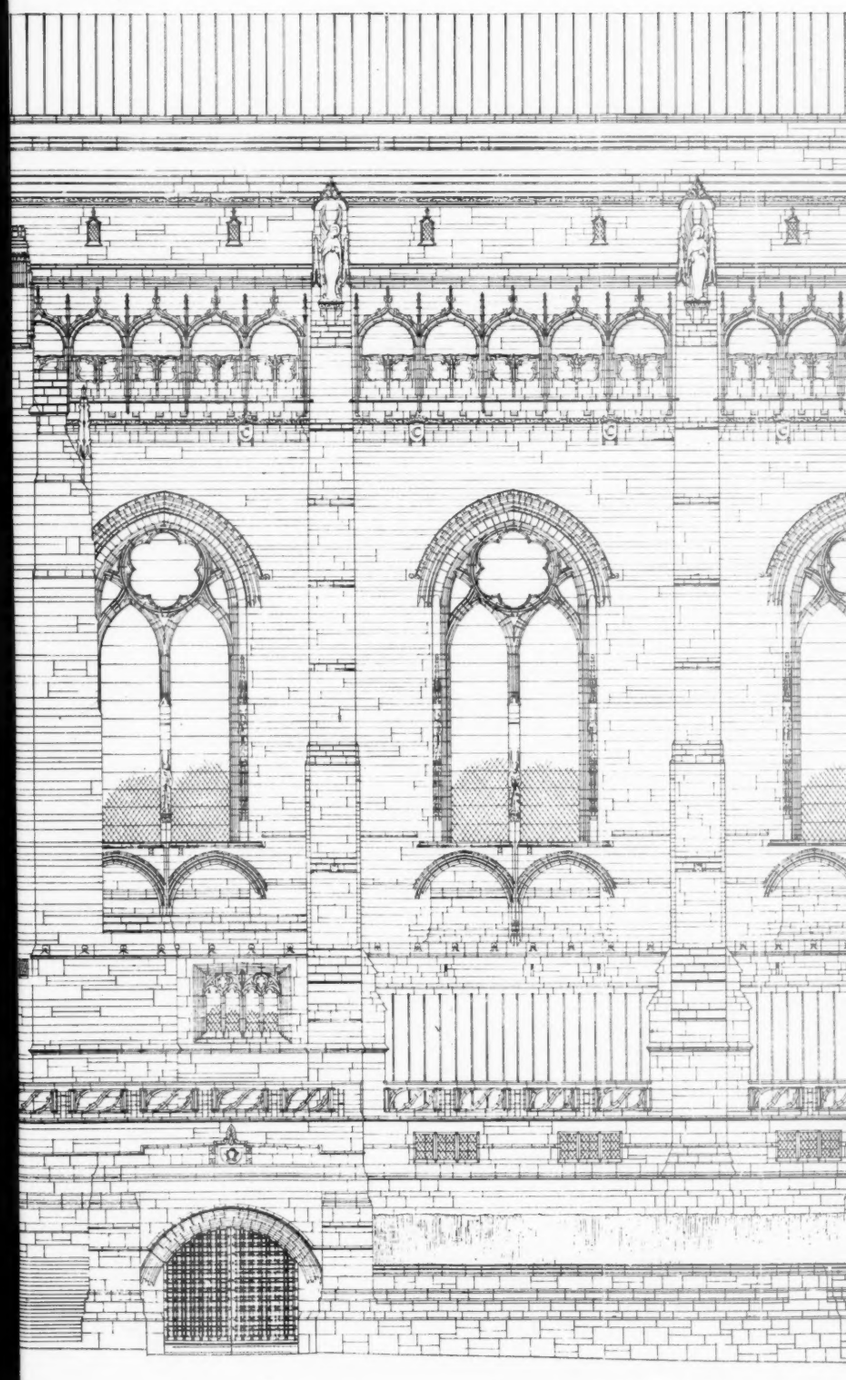


LIVERPOOL CA

Eastern Portio

SCALE OF FEET

G. GILBERT SCOTT, R.A. ARCHT.
7 GROSVENOR SQUARE, LONDON W.



CATHEDRAL.

Portion.

Feet

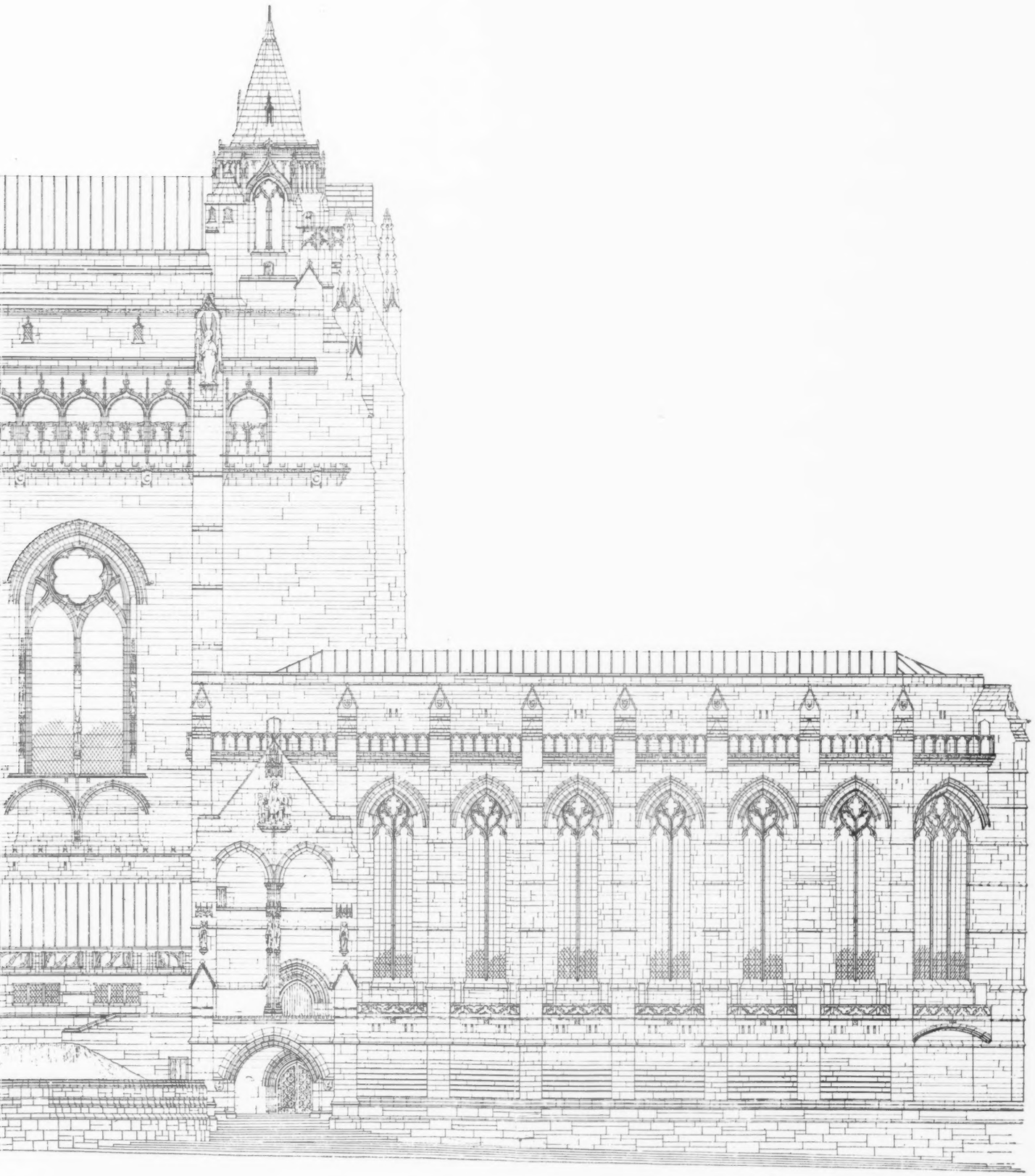


Photo: Stewart Bale, Liverpool.

8. THE SOUTH-EAST TRANSEPT.

This photograph should be compared with the model on p. 61 and the drawing on p. 63.

Photo: Stewart Bale, Liverpool.

9. THE CHOIR, LOOKING EAST.

Photo: Stewart Bale, Liverpool.

10. THE NORTH SIDE OF THE CHOIR.

Photo: Stewart Bale, Liverpool.

11. THE SOUTH SIDE OF THE CHOIR.

tombstones and faded elegant memorial shrines that lie below. On the edge, above the waving trees, stands the cathedral. From each side it is dominant, but it has no air of striving for dominance. With its great walls and windows and straight line against the sky it looks self-contained, and, if a little too grim to be called serene, a quiet stronghold of man's aspirations. The red sandstone from the Woolton quarries is a somewhat harsh material, but the architect has conquered it. The wide creamy lines of the jointing temper its hue, and excellently emphasize every wave and subtlety of moulding. With very little carving the whole building inside and out gives perhaps more intensely than any other that sense of a moulded rather than a built mass which Professor Prior has called one of the essentials of Gothic building. There is everywhere a sense of the dramatic, which is yet never theatrical, though mainly achieved by contrast. The wall mass of the transept window suddenly flowers into a delicacy of little lines on the buttress pier: the roll of the masonry at the window-jamb ends in a ripple of mouldings. The sanctuary window from within seems to mingle with the reredos of carved work below till the whole flickers like a great sheet of kindly flame: the main windows on either side that lead up to it only throw a quiet reminder of coloured light on their deep reveals. The bishop's throne, delicately modelled and full of little charges of light and shade, has an outline that is severe and straight. Indeed, this avoidance of the spike and pinnacle is most marked in Scott's work. His richness is a richness of surface moulding, dark spots against a great wall, little pleated lines to crown a turret, but the silhouette, whether of gable or tabernacle work or tower, is blunt, crouched for a spring it almost seems. Internally the effect of light is now difficult to judge, owing to the windows in the temporary wall. But no doubt the blaze of light and colour at the sanctuary end will be answered by another form of contrast, the lifted up windows of the vast central space, which will give a sense of internal height, just as the great tower (newly re-designed) gives the same note outside.

If you ask for adverse criticisms, here and there perhaps are details which personally I feel less attractive than all the rest; some of the external pierced parapets I feel are a little hard and lean; and I would have liked the great steps across from transept to transept to have deeper risers; and the bleaching of the oak-work in the choir stalls I wonder a little about, and the red St. John window. Yet these are but as the dust on the chariot wheels. A critic, to establish his credit, must put some item on the debit side. For in truth we have here a new vision of Gothic. Its joy in masonry structure has been made a triumphant reason for sheer wall and counter-wall, vaults lost in gloom, and craggy buttresses. All the jargon of the mediæval pedant, with which we have so long been entangled to our undoing, is swept away. The critic, with his pocketful of mouldings and precedents, is non-suited. Here were two prime needs—a great congregation to be housed, the religious aspiration of sixty generations of mankind to be given, as far as was humanly possible, form and substance. If we put the material need first it is only because, as in all architecture, it was, and must be, the starting point. To solve a material need in such a way as to satisfy the spirit is what architecture is. Through the slowly maturing changes of twenty years Sir Giles Gilbert Scott has brought the first part of his work to a great conclusion.

W. G. N.

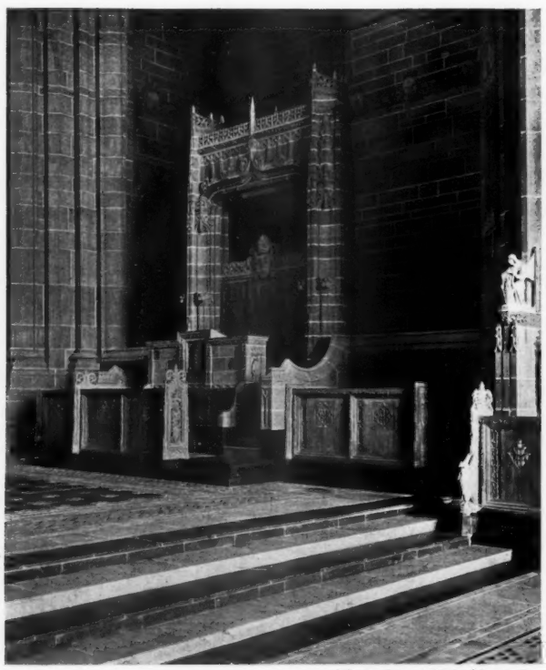


Photo: Stewart Bale, Liverpool.

12. THE BISHOP'S THRONE.

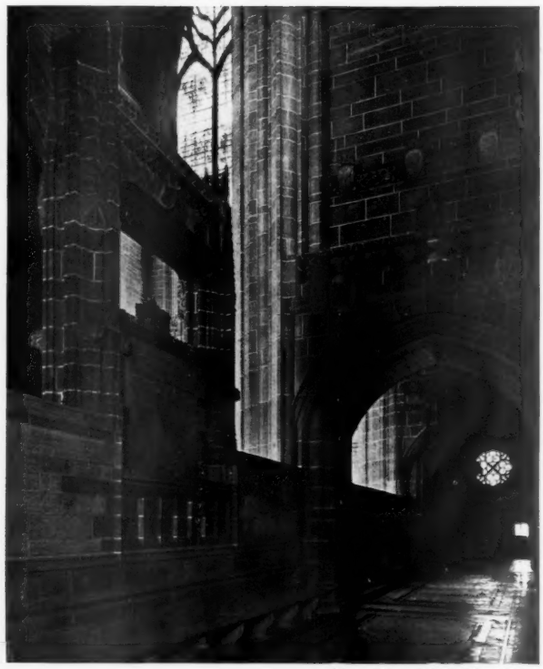


Photo: Stewart Bale, Liverpool.

13. THE SOUTH CHOIR AISLE, LOOKING EAST.

Photo: Stewart Bale, Liverpool.

14. THE CHOIR STALLS.

Photo: Stewart Bale, Liverpool.

15. A VIEW ACROSS THE TRANSEPTS.

Looking towards the War Memorial Transept.

Photo: Stewart Bale, Liverpool.

17. THE CHAPTER HOUSE DOORWAY.

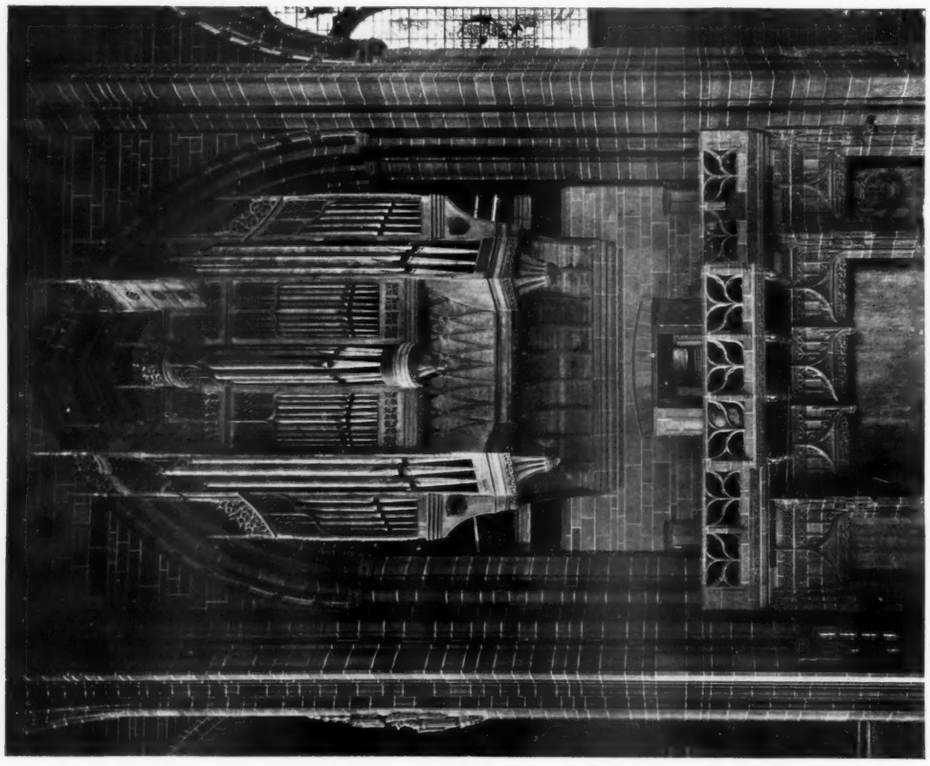


Photo: Stewart Bale, Liverpool.

16. THE ORGAN CASE.

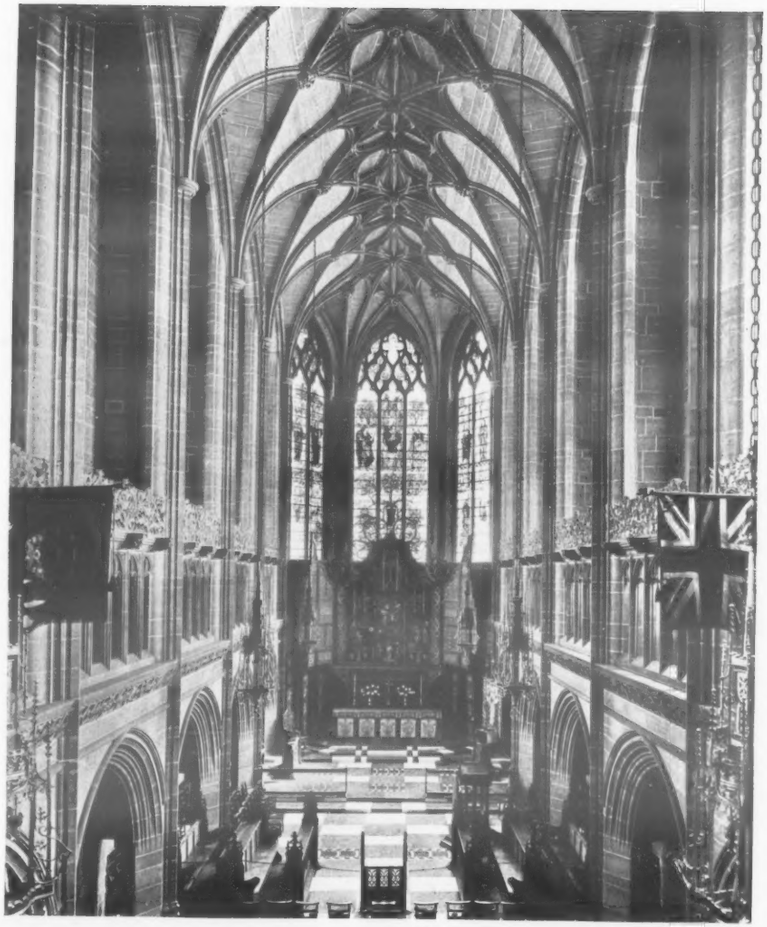


Photo: Stewart Bale, Liverpool.

18. THE LADY CHAPEL, LOOKING EAST.

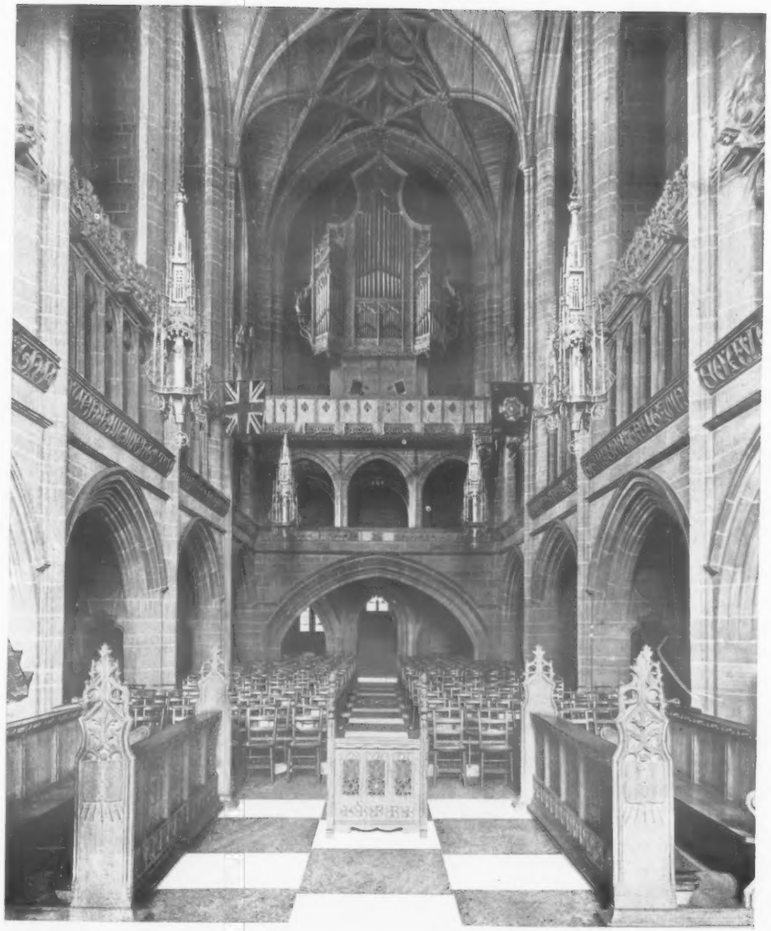


Photo: Stewart Bale, Liverpool.

19. THE LADY CHAPEL, LOOKING WEST.

The Lady Chapel was consecrated in June, 1910.

The Great Reredos of Liverpool Cathedral.

THE reredos of a Gothic cathedral competes with the frieze of a classic temple as the ideal situation for architectural sculpture. Inevitably they must be composite works, for no one artist could have accomplished the great examples unaided. Such a work presents opportunities for the exercise of at least four faculties: architectural, plastic, glyptic, and structural. It is possible in the case of the Liverpool reredos to apportion the work while assessing its value. The satisfying design, its setting and arrangement, and its organic incorporation in the main structure of the cathedral, is the work of the architect, Sir Giles Gilbert Scott, R.A.; the conception and composition of the figure sculpture is due to Walter Gilbert, obsessed by the idea that sculpture is living thought expressed with simple dignity on a basis of well-defined and governed purpose; the modelling of the figures has been accomplished by Gilbert's colleague, Louis Weingartner. The two have worked in close and constant relation for twenty-four years, and the plastic activities of the latter have allowed of the former's concentration on the imaginative side, not only of the sculpture itself, but what is of the utmost importance, its masonic structure. In the modelling Gilbert and Weingartner were actuated by the spirit of the Gothic plastic artists, and this spirit has been retained in the cutting in Wooler sandstone by Arthur Turner of H. H. Martyn and Son, Cheltenham, and his staff, under the direct supervision and control of Walter Gilbert.

1. *THE WORD.*

A small figure over *The Last Supper.*

The architect in his desire for a tone effect used a lighter Wooler stone than the Runcorn and Woolton stone of the general structure. The effect is excellent, and the unification complete, helping even more clearly to emphasize that Gothic is a matter of co-operative craft and not the outcome of the studio. This is the principle on which the success of this considerable modern example depends. The deep subtleties of the studio were not desired, but rather the unsophisticated outlook and craftsmanship of the artist who works for the joy of the thought and feeling he can impart to matter in order to make it live, and not for the indulgence of a complicated, often artificial, and sometimes perverted, technique.

A valuable and unique opportunity was afforded by this reredos for demonstrating the true mission of architecturally-applied sculpture. Even when the sculptor is concerned with architectural work he most frequently expresses himself as of his studio rather than of the building he is supposed to be helping to create, thinking in clay and wax, with interior lighting, instead of in stone with the planes of light and shade, the keyboard upon which architecture tunes its notes to the vibrating sunlight. This occasions a certain variance between sculptor and architect, resulting in the absence of a sympathetic and desirably humble co-operation. It is the fabric that has to be thought of as a whole; not only its structure, but its mentality, its significance. The sculptor must make his key the same as the architect's—the same tone and feeling for flat planes and convex and concave surfaces; the same rigidity of perpendicular or horizontal line; the same spacing of feature, so as to achieve the satisfying balance; the consummation of the desired rhythm. These things have been thought of by the fabricators of this fine reredos, and have been very largely realized. It is a homogeneous and satisfying whole, for its makers have worked as one spirit to make it so.

The reredos was four or five years in the making; it rises some 65 ft. from the floor, and is 48 ft. wide. Two piers of the full height with double pinnacles bear three figures each of Abraham, Isaiah, Melchizedek, David, Jeremiah, and Aaron. The artists have succeeded in carrying the architect's structural expression through the sculpture, and the perpendicular lines of the mouldings are carried into the draperies of the figures, which are placed under canopies in niches, and supported by corbels surmounted by two pinnacles, each with rich decoration. The entire interest is concentrated round the heads of the figures, which are about life-size, in full sympathy in shape and intention with the canopies. The poses of Abraham and David, the two highest figures, are essentials in the scheme of the artists, as directing the eye to the main feature, the resignation of the Crucified, and all the figures emphasize the designer's intention in setting out the proportions of the spaces.

These great piers are flanked left and right on their outer sides by superimposed arches supporting two tabernacles as wings with panels 4 ft. square of the Nativity and Resurrection. In the former the artist has depicted childlike joy and interest in the life just opening, and in the latter the most mysterious and wonderful silence when Christ passes through the door in a hushed world, which makes the completion of his scheme—enclosing it on either side—the beginning and the end.

Within the piers are the massed sculptures; at the base is the altar, and from the table-level a wide arch rises, enclosing the longitudinal panel, 14 ft. by 7 ft., of the Last Supper. Christ stands in the midst of eleven of the apostles, the living factor and abiding interest of the Church to-day. Portraying the scene as he imagines it might have been 2,000 years ago, the artist has set down the living emotion as it affects the modern temperament, not as it was treated by Da Vinci, as a great dramatic incident, rendered with unerring and mighty art. It is a more analytical method, with a more intimate touch. Christ, after the second supper (the paten is in the cup), is about to leave them until He calls, and when He refuses their plea that they might accompany Him, the awe and solemnity of the occasion dawn on them, and they feel something of the pain and a forecast of the martyrdom the future holds for them, and the sadness and sublimity of it all overwhelm them. This is the living spirit of the Church to-day, and so that nothing shall distract the emotion of the communicant at the altar, the artist has left the stool of Judas vacant; the seeker after material advantage has gone.

The arch over this large relief supports the vertical panel of the Crucifixion, 12 ft. by 6 ft., above. This imposing relief is flanked by four panels, 4 ft. square, of the Trans-

Photo: Stewart Bale, Liverpool

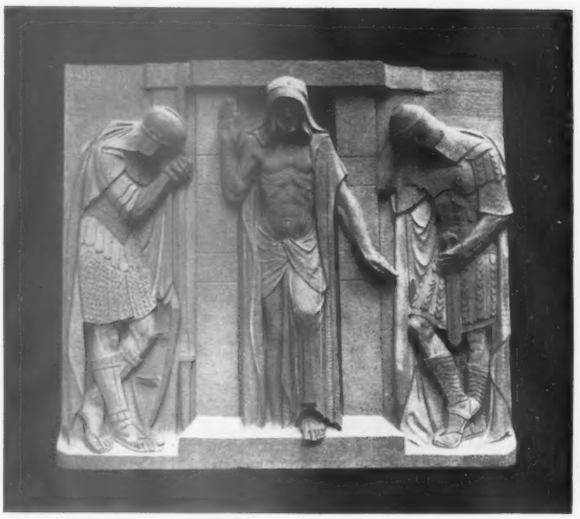
Plate III. August 1924.

THE REREDOS, LIVERPOOL CATHEDRAL.

Sir Giles Gilbert Scott, R.A., Architect. Walter Gilbert and Louis Weingartner, Sculptors.

The Sculpture Group on the extreme left is *The Nativity*, and that on the extreme right *The Resurrection*. In the centre of the Reredos *The Crucifixion* dominates the design, flanked on the left by *The Transfiguration* and *The Taking Down from the Cross*, and on the right by *The Agony in the Garden* and *The Path to Calvary*. Below is *The Last Supper*. The Reredos is flanked by life-size single figures of Abraham, Isaiah, Melchizedek, Aaron, Jeremiah, and David.

2. *THE NATIVITY.*



3. *THE RESURRECTION.*

The Nativity and *The Resurrection* flanking the Reredos on either side represent the first and the last action of Christ's life. The panel of *The Resurrection* is designed to give the emotion of great and mysterious silence.

figuration, the Agony in the Garden, the Path to Calvary and the Descent from the Cross, each with a richly-carved canopy. The Christ hangs on the cross, His face marked by suffering and resignation; and neither the head, the body, nor the limbs display contortion. This is the central feature of the sculpture, as it is of the Christian belief, the great enduring symbol. To many sculptors the use of perspective in relief is an abhorrence. The artist in this case was in a difficulty, for the stipulation laid upon him was that a real representation of the scene should be given, and not a doctrinaire one. With reverence for the thoughts of Blake, the artist assayed to solve the difficulty, and two great shrouded figures with hands extended shut out the light of the Countenance of the Almighty—for darkness came over the city—the figures behind the Corpus being only partly shrouded, to indicate the tearing of the Veil of the Temple, embodying both fact and symbol. The illustration is of the first conception in the modelling clay, and many little additions were made during the completion of the work in the stone. The winged figures of the panel are shaped in

4. *THE LAST SUPPER.*

This work is fifteen feet wide. The scene is described by the sculptor as follows:—"Just before they go out into the Garden, Christ tells the Apostles that He is about to leave them, and an awful loneliness dawns upon them as they feel subconsciously the pains and martyrdom in store for them. This period is chosen so that nothing should disturb the emotion of the communicant, for Judas by this time had left, and his absence is suggested by the vacant stool."

5. *THE ROAD TO CALVARY.*

6. *THE TAKING DOWN FROM THE CROSS.*

7. *THE VIIth AND Xth COMMANDMENTS.*

The VIIth Commandment, "Thou shalt not commit adultery," shows the left-hand figure tightening the girdle of chastity, and rebuking the temptation of darkness as represented by the serpent, the apple, and the stars. The Xth Commandment, "Thou shalt not covet," shows the right-hand figure repudiating covetousness.

8. *THE VIIIth AND IXth COMMANDMENTS.*

The VIIIth Commandment, "Thou shalt not steal," shows the right-hand figure rejecting what does not belong to it. The IXth Commandment, "Thou shalt not bear false witness," etc., shows the left-hand figure guarding the mouth, and drawing her skirt away from scandal, "as strong as a castle and as devastating as a dragon's breath."

subtle concave forms, linking up the broad flat planes of the architecture, and, to strengthen the whole, the main feature of the group assumes a convex shape.

In order to emphasize the value attached by the architect to the masonic structure of the reredos, the sculpture of the four panels on either side of the Crucifixion relief —the main feature of the reredos—is developed in a flat but unobtrusive plane, and the decision in the composition obtained by cutting deeply into the stone to complete the sense of structure. These panels are in more than one respect the most striking plastic features of the whole reredos, and their workmanship is admirable. They add greatly to the epic character of the conception, and the artists, recognizing that something more than technical skill and clever arrangement of form is required for complete æsthetic satisfaction, tried throughout to arrive at the simplest form of poetic expression without false archaism or any manner or fashion of a past age or affectation of the present, and in this they have been completely successful.

Other carved stone figures of the reredos are the winged angel with the handkerchief of St. Veronica, 4 ft. 10 in. high, and its companion with the pillar and cords symbolizing the Passion; the Little Messengers of the Gospel, with pilgrim's hat, 3 ft. 2 in. high, and slightly larger, two figures holding wheat and grapes respectively, on either side of the Last Supper, and above, a little figure of The Word.

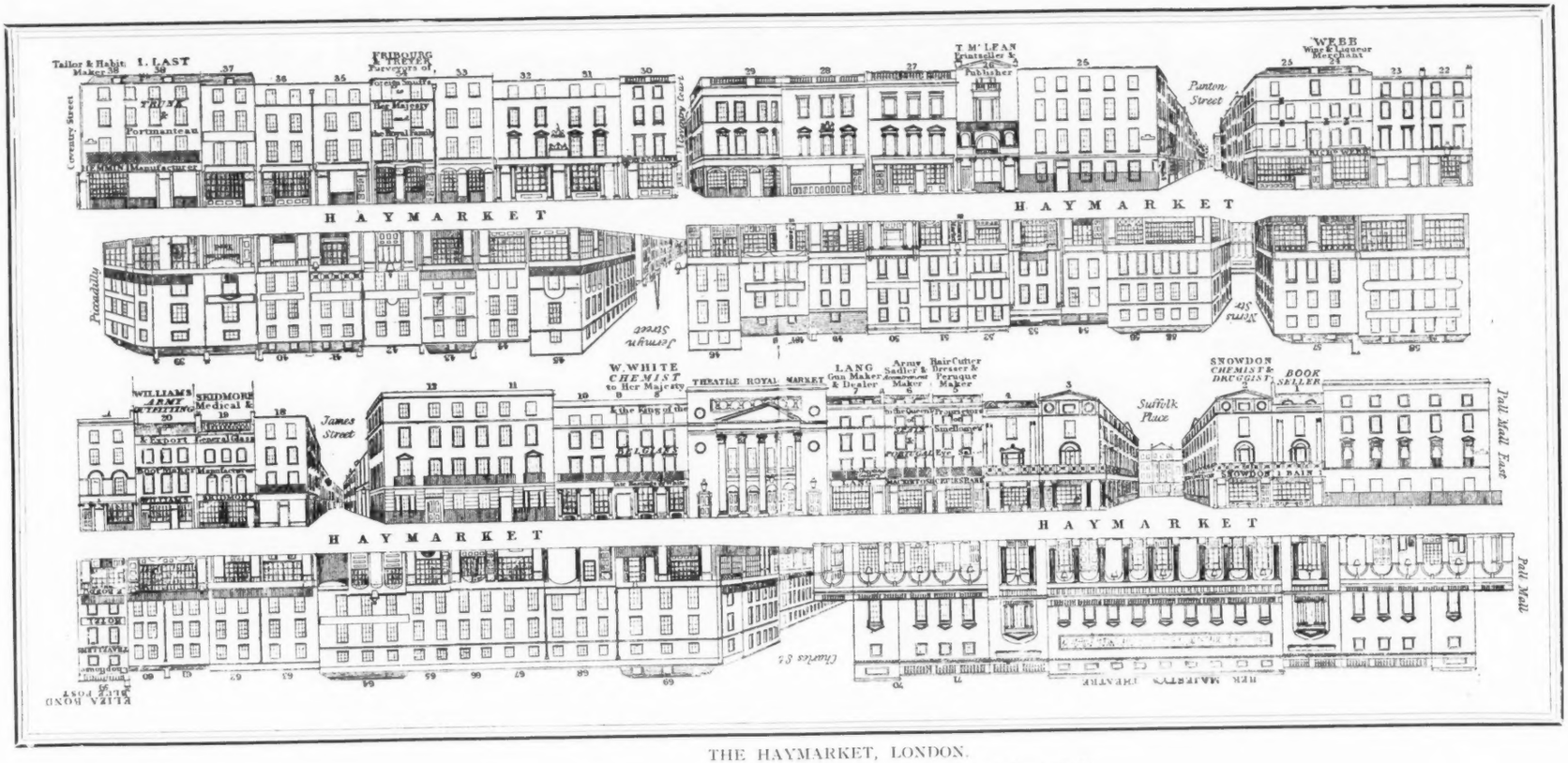
Forming an adjunct to the reredos is the altar rail, designed by the architect, the subject and figures left to Walter Gilbert and Louis Weingartner. It is a beautiful work, cast in bronze at Martyn's foundry. There are figures of the Commandments, 14 in. high, each representing a draped female, with appropriate gestures and emblems. They are gently modelled and treated with a lighter touch than the sculptures of the reredos, such as the old Gothic masters sometimes indulged in; the great spiritual epic of the reredos stills all but the most profound emotion, but the Commandments, as treated here, are a reminder of the continuing human story. The figures are essentially naturalistic, but with a distinct decorative value in the draperies and accessories. The rail itself is dignified in its simplicity, and is consonant with the reredos, to which it gives support.

9. *THE CRUCIFIXION.*

This panel is 12 ft. by 6 ft. in size. The great messengers of the Almighty (veiled because no man has seen them) shut out the light of the countenance of the Almighty from the city, for darkness came over it. The figure behind the Corpus is partly veiled to represent an event which was seen—the rending of the Veil in the Temple. The figures are composed to carry the eye through to the centre figure of Christ.

The aspects from which such a work of modern architectural sculpture are to be viewed are numerous: the religious, to state again the Christian faith and renew reverence and veneration for its tenets; the pictorial, to fix the attention of the worshipper; the symbolistic, to supply food for meditation and conjecture; the naturalistic, to bring together the sacred secret, and the commonplaces of life. On the other side, the artistic: the point of view of design, of decoration, of craft-work, of inspiration. Finally, the spirituality of the whole, without which any work of art of the kind must fail. I think that architect, artists, and craftsmen have not failed in reaching to some considerable degree of success in all these directions, and that this new reredos at Liverpool is a great monument, of fine proportions, true nobility of statement, and honest craftsmanship.

KINETON PARKES



THE HAYMARKET, LONDON.

(No. 22 in "Tallis's London Street Views." Published about 1838.)

"The Haymarket," says Tallis, "is a broad street of handsome houses. In the reign of Charles II, the Haymarket and Hedge Row had names, but they were literally lanes, bounded by hedges, and all beyond to the north-east and west was entirely country. In the year 1658 a plan of London was published in which there appears to have been no houses in this quarter, except a gaming-house mentioned in a former number. . . . The Theatre Royal, Haymarket, is opened during the summer months. The patent by which it is held was formerly granted to Samuel Foote, Esq., denominated the Aristophanes of his day, by which it was purchased of George Coleman, Esq., and held by his son, both dramatic writers, jointly with other proprietors. . . . James Street is a street conducting to Whitcombe Street, in which is the Royal Tennis Court. The Queen's Theatre, better known as the Opera House, is situated at the south end of the Haymarket. In consequence of the unequal management of theatrical performances at the commencement of the eighteenth century, Sir John Vanbrugh was induced to procure subscriptions for erecting a new and magnificent playhouse in the Haymarket, calculated to do honour to the architect, and to the nation, and at the same time produce wealth to those who were concerned in it. The sum of £3,000 was immediately raised and the building begun under Sir John's direction. In the year 1704 Mr. Betterton, having surrendered to Sir John all his right and interest in the licence, which had been granted to him, the latter associated himself with Mr. Congreve, and from the abilities of two such excellent writers great expectations were formed. On the 9th of April, 1705, the theatre was opened with an Italian opera, which did not meet its expected success. It was also found that the architect was much better qualified to produce excellent pieces, than to construct the place for their performance. The edifice was a vast triumphal piece of architecture, wholly unfit for every purpose of convenience; the vast columns, the gilded cornices, and lofty roofs availed very little, as scarcely one word in ten could be distinctly heard. 'At the first opening of it,' says Mr. Cibber, 'the flat ceiling which is now over the orchestra was then a semi-oval arch, which sprung 15 ft. high from above the cornice; the ceiling over the pit, too, was still more raised. This extraordinary and superfluous space occasioned such an undulation from the voice of every actor, that generally what they said resembled the voices of so many people in the lofty aisles of a cathedral. The tone of a trumpet, it is true, might be sweetened by it, but the articulate sounds of a speaking voice were drowned by the hollow reverberations of one word under another. It had not at that time the benefit of a large city, which has since been built in its neighbourhood, and it was too remote from the then frequenters of the theatre to be much attended by them; all these circumstances united together afforded so little prospect of profit or success that in a few months Mr. Congreve gave up his share and interest wholly to Sir John Vanbrugh, who, at the end of the second season, either finding the gains which arose from the management too few, or the trouble arising from his attendance on it too much, grew also disgusted with his situation, and wished to be relieved from it, but of so little value was the theatre considered at that juncture that no person thought it of consequence enough to apply for it.'"

Tallis's *London Street Views.*

VII—The Haymarket.

THE LONDON CLOTH ESTABLISHMENT,
16 COVENTRY STREET.

APART from the intrinsic value of all the street-views produced by Tallis, that section dealing with the Haymarket possesses two special features of particular interest, for it shows us one great London theatre—His Majesty's—as it was before it was rebuilt, and another—The Haymarket—which is one of the few older playhouses which remains, at least outwardly, as it was. Beyond these two notable landmarks, there have been so many alterations in this thoroughfare that without them it would hardly be recognized from what it was at the beginning of the reign of Queen Victoria. The name of the street sufficiently explains its former character, and it was in 1664 that it was enacted that "a market for all sorts of cattle was to be held every Monday and Wednesday" in the Haymarket; the days for selling hay there being Tuesday, Thursday, and Saturday. Various other statutes dealt with the matter, and one, dated 1607, is interesting in that it declares that the hay market "shall be construed to extend in length from the old Toll Post at the upper end of the Haymarket, over against a house lately called Coventry House, to the Phœnix Inn at the lower end of the said Haymarket, and the house over against it, and the breadth from the kennel running by the houses on the east side to the kennel running by the houses on the west side." By this Act also the Haymarket was paved, the cost being defrayed by a tax of 3d. on each cartload of hay, and 1d. on each cartload of straw.

Besides the "Phœnix" there have been several old-established hostelries in the street, notably the "Black Horse," at No. 46, as shown by Tallis; and the "Blue Posts," recorded so early as 1688. To-day there is one famous shop there—that of Messrs. Fribourg's—which shares with Messrs. Birch's in Cornhill, and Messrs. Lock's in St. James's Street, the reputation of possessing one of the most picturesque old fronts in London. The street is one of many memories, but perhaps its most notable one is that connected with Addison, for here, in an upper room over a small shop, he wrote his "Campaign," a fact pointed out, on a much recorded occasion, by Pope to Harte, the actor. Other famous former residents include Nance Oldfield, who lived at one time at the seventh house from the Piccadilly end; though on which side is not known. The first Duke of Dorset also resided here, and here, Morland, the painter, was born.

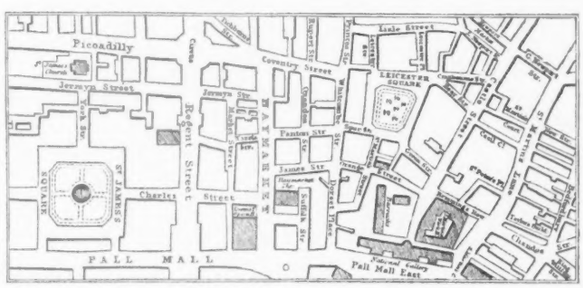
The Haymarket has had its tragedies, too, for it was at the bottom of the thoroughfare that Thomas Thynne was shot, at the instigation of Koningsmarck; while it was in this street that Baretti stabbed a man, for which he was tried for murder, but acquitted, Johnson, Burke, Garrick, and Reynolds, *inter alios*, testifying to his good character.

In the days when Tallis made his survey, the Haymarket possessed much of that architectural character which it has since lost. This will be observed at its very beginning, where Nos. 1–4 indicate evidence of the Adam convention in their façades. It will be seen that the well-known bookseller, Bain, was then at No. 1. Between Nos. 7 and 8 is the Haymarket Theatre, whose front is practically unaltered, and still seems to breathe the influence of Macklin, Foote, and Coleman. The original theatre was built in 1721, and was known as the Little Theatre, to distinguish it from the larger house opposite. Just a hundred years later the present house was designed by Nash, on ground adjoining that on which the older one stood; and in our own day it was reconstructed by the Bancrofts, who here achieved a series of triumphs. Schnebbelie has left us a fine view of the then just completed playhouse, with the ruins of the little old one next door on the north side. Beyond the theatre, at No. 9, was the Café de l'Europe, mentioned by Dickens in "The Mudfog Papers." Farther on was one of the two "Blue Posts," at No. 22 (the other was on the opposite side of the street); while the famous print shop of Thomas M'Lean, at No. 26, is shown as being housed in a building of quite distinctive architecture; and the charming old semicircular windows of Messrs. Fribourg and Treyer, at No. 34, are almost the only remains of the street as it was in Tallis's day and for many a long year before, when Queen Charlotte and the Regent purchased their snuff there, and Mr. Brummell went off to Calais characteristically in its debt. Mr. George Evans, a member of this historic firm, not long since wrote an admirable little book on its history, and the old house—once having the sign of the "Rasp and Crown,"—in which it has been for so long and honourably established.

On the other side of the Haymarket, beginning at the Piccadilly end, I would draw attention to Lemon Tree Yard, between Nos. 39 and 40. No. 41 was then the Hope coffee-house, and No. 42 the "Crown and Thistle" tavern; while the entrance to St. James's market is shown at No. 48½, where the market I have referred to already was held; where Richard Baxter preached, and Hannah Lightfoot, George III's fair quakeress, lived. The street was, no doubt on account of this market, plentifully supplied with taverns and eating-houses, and in addition to those mentioned, we find the "Black Horse" at No. 46; Poncon's Hotel, at No. 48; "The Grapes," kept by one Osborne, at No. 52; Mrs. Bond's Blue Post Chop-house at No. 59; and next door, Dubourg's Hotel and Restaurant, *inter alia*. The last, I think must have been "the French House" patronized by "Gentleman" Turveydrop, although he speaks of it as being in the opera colonnade; certainly, however, it was the Durognon's mentioned by Thackeray in "The Partie Fine."

There is hardly space to say anything of the Queen's Theatre or the Opera House, as it was called in Tallis's day. Its predecessor was built by Vanbrugh, and opened in 1705; it was destroyed by fire in 1789, but was immediately rebuilt as we knew it, till, as it seems only the other day, when the present splendid structure took its place. Of the tributary streets shown by Tallis, James Street was once notable for its Royal tennis court, and Suffolk Street for its art gallery (as it is to-day); while Panton Street perpetuates the name of the famous gamester, Colonel Thomas Panton, who once owned the land here and developed it in the time of Charles II. It seems almost impossible, in view of what the Haymarket is to-day, that Dickens could write in his "Uncommercial Traveller" that it was then "the worst kept part of London."

E. BERESFORD CHANCELLOR.



Selected Examples of Decoration.

IN CONTINUATION OF
"THE PRACTICAL EXEMPLAR OF ARCHITECTURE."

The Gate, Wrencote, Croydon, Surrey.

THE GATE, WRENCOTE, CROYDON.

A Measured Drawing of this House was published in the July issue of the Architectural Review.

THE GATE, WRENCOTE, CROYDON.

Measured and Drawn by Christopher J. Woodbridge.

Exhibitions.

ROYAL INSTITUTE GALLERIES.—The fourth exhibition of the Society of Graphic Art was held in these galleries.

It says on the front page of the catalogue, quoting W. M. Hunt: "Draw firm, and be jolly!" Well, why don't they and why aren't they? For in some respects this is the saddest show I have visited for a long while. I would advise the members—until they feel jollier—to suppress this motto of theirs, for the contrasts conjured up by the actual achievements fall so pitifully short of this gay exhortation, as to make the gloom seem almost denser than it really is, for there are some artists here who do show an approach to this attitude of mind.

Mr. Steven Spurrier, in his little charcoal and wash drawing, "Landscape Study" (234), shows a genuine search after an artistic mode of expression; it is not very original—what is? But it is happily free from the dreary processes of graphic art (and *how* dreary they can be!) which exhibitors here seem to parade in their work. This little drawing is distinctly decorative; it is not just an attempt to depict a "rather foolish sunset" or other aspect of Nature, but springs from an inward impulse to express a state of mind, and thus is happy and aloof from the laboriously conscientious work so much in evidence upon the walls of these galleries. This artist's little wood-cut (214) is also interesting for the sake of its pattern.

Miss Nora Wright shows some interesting work too; very much under the influence of Indian art, but on the whole convincingly re-stated under the colour of her own mentality. "Paddy Fields" (213) is the most distinctly realized; there is a pleasant feeling of inconsequence about the way cows and things are scattered around in order to convey a sense of decoration; she has not hampered herself by thinking that she must necessarily stick to the probabilities. Throughout her other works, too, there is this scattering about of objects which are only held in relationship to each other by their value as decorations, and not for some tedious necessity to render them as they probably would be in Nature.

Among other work in this show which I found interesting was that of Mr. John Copley (who must be careful that he does not acquire mannerisms somewhat similar to those associated with certain "Punch" illustrators), and Miss Ethel Gabain, who shows a very genuine little etching done loosely, and with humility and feeling somewhat in the manner of Rembrandt, "The Zouave Jacket" (158) and a little freely drawn head in charcoal, by Miss Elsie M. Henderson (237). Miss Madeline Green, in her "The Park Railings" (57), shows a certain unrestrained freedom, which really might have been better held in check, for somehow one does not feel that she has yet earned her freedom.

There is something sound about the etching by Mr. Frank L. Emanuel called "A Man of Sorrows" (107); it is in the Leonardo manner; but there is something wrong about the eyes, one appears to be open while the other is shut. As this etching is attempted in a more or less severe and classical style, this artist should have used consistent treatment, but he has in parts of the face rather confused the forms with the shadows; he should have definitely made it a drawing and not attempted to give the correct relationships of tones as well. If parts about the nostrils had been kept clean and concise and the left cheek had been as clearly observed as parts of the forehead and not just slurred over with a few trite lines, this etching would have been much more impressive. As it is these weaknesses prevent it from maintaining any sustained interest.

THE FRENCH GALLERY.—Imagining that I had a rather sneaking admiration for the paintings by Mr. de László, I went along to the French Gallery fully intending to defend him from the attacks of the highbrows, but alas! after looking at them my supposed admiration faded away: for I found that I could no longer be deceived by a series of pretty faces, for it now appeared that this is what my previous attraction towards them amounted to. Mr. de László is undoubtedly a very brilliant and clever man, and I can imagine the emotional swirls and twirls of his dexterous manipulations of very fluid and rather slippery paint being reproduced in a very attractive manner upon the pages of, say, "Harper's Magazine."

As for the portraits themselves, the one of Sir Roger Keyes (12) seemed to me the best of the men. There is an eager and alert expression on the face, and the drawing of the hands is extraordinarily good: there is a characteristically nervous and muscular grip about them which is admirably expressed. The portrait of Viscount Devonport (33) tightly gripping a gun looks very determinedly able to fight to the last ditch: it should have been called "Portrait of a Diehard."

"The Drawing Lesson" (30), a quiet little interior with a child, shows this artist in an unexpected mood: the pervading light which quietly catches the polished surfaces of various objects in the room is very skilfully managed, and there is perhaps a greater sense of freedom and joy expressed in this little picture than in any of the portraits.

The many portraits of beautiful women are no doubt very satisfactory to the sitters themselves, and are what they expect, and that is why they go to Mr. de László, because they know exactly what they will get, and so their ambitions are realized—and who would grudge them this satisfaction? If this exhibition was a beauty competition I would certainly give the first prize to number twenty-six.

THE BEAUX ARTS GALLERY.—Mr. Keith Henderson's work is very carefully considered from a decorative point of view, at least rather, perhaps, his point of view is always instinctively a decorative one. In the work shown in this gallery, which was recently done in Egypt, he has recorded his impressions in quite a personal way, and—for this he deserves our gratitude—has not tried to interpret Egyptian things from a supposed point of view of an antique Egyptian, but from his own. I usually have qualms when I hear an artist has been to Egypt, but in this case they were needless.

The various decorative schemes which Mr. Henderson has used for the frames of his pictures add considerable liveliness to the general effect, though in some cases the brightness of the colour surrounding them makes the pictures of almost secondary importance. Amongst the paintings particularly to be noticed are "Luxor: Sanctuary of the God Ammon" (7), in which all the parts are harmoniously held together by the use of a well-considered half-tone. "Luxor: the Mosque in the Court of Rameses II" (5) is a carefully-balanced design, the voluminous clouds, supporting and balancing the rest of the objects introduced into the picture, are all set down with certainty and conviction.

THE ARLINGTON GALLERY.—The memorial exhibition of the works of the late George C. Haité was instructive for this reason: that it showed very clearly the difference of outlook between the modern artist, and the period in which this painter lived and worked. The difference is this: picture-making is nowadays more of a science, more intelligence is now apparent, and less sway is allowed to emotional and sensuous impressions. In every way at the present time painters have become more logical in their outlook, and it is now necessary for them to be able to give a reason for the faith that is in them.

Mr. Haité's best things were the small sketches, which were done under the direct stimulus of direct observation, and not those which were laboured at afterwards in the studio.

RAYMOND MC INTYRE.

Recent Books.

Roman Villas.

The Villas of Pliny the Younger. By HELEN H. TANZER. Columbia University Press. New York, 1924. $2.50 net.

This slender volume, the result of careful research, will save all architectural students, dilettanti, and scholars a vast amount of trouble, and to them all it may be warmly recommended.

It has the merit of being clear and fairly thorough; it also escapes the adverse criticism occasionally penned against American compilations of this kind, when dulled by the weight of too much data. The data is, here, very much in evidence, but a slight gloss of running commentaries provides the sparkle without which such a work proves tedious to readers.

The fifty-six plates very well illustrate the text gathered under three headings, to wit:—

Part I.—Pliny's villas, text and translation.

Part II.—The Roman villa before Pliny's time.

Part III.—Reconstructions.

Then follow the "Bibliography," "Notes," and "Glossary," all witnesses to considerable knowledge, though minor lacunæ can be pointed out. For instance, F. de Mazois' "Le Palais de Scaurus" (1819) is not mentioned under "Bibliography," yet it created no inconsiderable stir in its day, following on the heels of "Les Ruines de Pompeï," by the same author. The perusal of these two books would have prevented the slip committed on p. 60, where the author, referring to Marquez' plan (for the Laurentine villa), says that "Marquez executed this plan when so little was known about archæology that Bouchet, writing in 1852, thought it was hardly worth while to have attempted it." As a matter of fact, even before Mazois made his own considerable headway, the Academy of Naples had undertaken serious excavations and, what is more to the point, had partly published their results, so that a good deal of knowledge on the planning of villas must have been available in 1796, when Marquez made his "Reconstruction." While referring to "Le Palais de Scaurus," the inclusion of its published plan would have also helped, because, though not specifically illustrating any of Pliny's villas, it was nevertheless based very largely on his descriptions, and its comparison with the designs sent in for the "Prix d'Emulation" of 1818 by Macquet and Normand (the conditions governing them owed as much to Félibien as to Pliny) would have proved interesting, and for this reason: all three elicit a broad architectural treatment not to be found, if we except Castell, in former essays.

Again, standard works being also mentioned, it would not have been amiss to give Sandy's "Companion to Latin Studies" (Cambridge University Press, 1910), a compendium replete with cognate information on the Roman life and world of that superb period,* or J. Wight Duff's "A Literary History of Rome" (Fisher Unwin, 1909). Even August Mau's "Pompeï," in Leben und Kunst (a translation by Kelsey was published in New York, 1902), obsolete as it is in many ways, is still useful and might have been added.

Lastly, the "Reconstruction of the Laurentine" stops short with Kladivko's (1919) and the author's own plan (1921). Since then, the Laurentine has received further attention, and we would refer Miss Tanzer to the "prizes" of the Royal Institute of British Architects for 1921.

We may also saddle the author with a mistake of judgment or, at any rate, a weakness of omission. The chapter dealing with "The Roman Villa before Pliny's Time" would have stood amplification. The barren skeleton of rules provided by Vitruvius and Columella is not enough. We crave for the flesh that covered it, for the breadth of life that made it live, and for the garments it bore so becomingly. After all, Pliny the Second wrote in the first century A.D., and ever since the invasion of Hellenism—a period spanning the years 240 to 70 B.C.—Romans were sensible to the call of refinements and luxury. The middle class (*equites*) was in comfortable circumstances. A strong group of capitalists had thriven on the monopolies secured to them without risk of rivalry, thanks to the aristocratic disdain for trade. Large estates (*latifundia*) grew bigger and bigger; the standard of living, due to the ubiquitous inpouring of wealth, was heightened. Unmistakable signs were the rise in prices and rents, a greater complexity in the architecture of houses, more elaborate furnishings, increase of silver-plate and plate delicacies, increase of slaves and extravagant purchases of town and country residences. The writings of Polybius and Diodorus testify to all that, and Cato, surely, did not fulminate without reason. No, Roman domestic architecture had matured long before Pliny, and this chapter should have set out the main evidence to be culled from Varro, *diligentissimus investigator antiquitatis*, as Cicero calls him, to the secondary, but observant, writers of the Silver Age.

And now, to the book itself. The two villas studied by Miss Tanzer are, of course, the Laurentine and the Tuscan. Pliny, we know, had others at Como, where he was born, and the surrounding districts; but architectural interest rightly fastens around the two first-named. Throughout, the former has received more attention, perhaps on account of the possibilities afforded by its position on the sea coast and within a comparatively short distance of Rome. The Tuscan was away in the hills, and framed by high mountains. Schinkel made a very winsome and able reconstruction of it and one deserving to be more generally known.

The most noteworthy features, although not touched upon in this book, were the quality of the site, the varied prospects of sea and land to be obtained, and the remarkable extent and completeness of arrangements. Yet Pliny terms either *villa usibus capax, non sumptuosa tutela*. The gardens were arranged in terraces, stiff and formal, after the manner of most Roman gardens, but—it seems a little odd to us, modern—were deficient in variety of flowers and trees.†

The Romans were deliberate and wary in the choice of a proper site for their country houses. To take a famous example: the site of Hadrian's villa, at Tibur, is not only very pleasant, it is also extremely healthy, at that time the highest merit of a country house. The Roman plain did not, in those days, resemble the desert and cemetery which it became after centuries of neglect, but it was still unhealthy enough to cause wills to be opened, as Horace puts it. So that Pliny, too, chose a suitable site, where the winds cleanse and invigorate, and away from the noise and excitement of Rome, then so intense that Romans, during and after the Augustan reign, were obliged to seek health and rest in what Juvenal calls "a lizard hole," somewhere between the Alps and the gulf of Baiæ.

There is little doubt that both the Laurentine and the Tuscan villas were laid on lines distinctly architectural, with a meed of care bestowed upon effects of grouping buildings and landscape features (*criptaporticus, xystus,* and *hippodromus*), and therein lay some of their pristine appeal; but, somehow, it is the remaining aspect which chiefly attracts modern architects, namely, the treatment of internal arrangements, the decoration and the furnishing appointments, for, it must be remembered, Pliny's villas were merely the property of a well-to-do Roman, not of a very wealthy one, like Lucullus, or of an exalted personage, like Hadrian. They were, therefore, not designed on a scale ambitious enough to have set in motion the great variety of planning principles which we see applied to Hadrian's villas, and, consequently, cannot cause the architect of some new hypothetical Rothschild or Vanderbilt to match the magnificent sequence of vistas, contrasts, and anti-climaxes seen at Tibur by studying those principles. Pliny is, for the purpose, inadequate. But in matters of decoration and the like the Roman-Pompeian achievements are capable of application, and it is here that the Plinian type of villa, whether at Pompeï or Herculaneum, or at some yet undiscovered spot, comes in. There is a limited but unmistakable demand for it, and it is in connection with this aspect of the problem that a standard work is needed. The book under review is properly confined to the general lay-out of grounds and gardens, and the planning of the main building. We now await its com-

* For the sake of those students not overfamiliar with the niceties of French, it may be added that Gaston Boissier's "Promenades Archéologiques," mentioned in "Bibliography," can be read in a good translation, under the title "Rome and Pompeii: Archæological Rambles" (Fisher Unwin, London, 1896).

† Much information on the customs and peculiarities of town or country life of the period—and that which followed—can be gleaned from Dill's "Roman Society from Nero to Marcus Aurelius" (omitted in "Bibliography").

panion on the decoration and internal arrangements—a vast undertaking, indeed; it will mean not only a thorough collation of facts and illustrations still scattered about in a hundred different volumes written in a score of different languages, but that such collation shall be under the control of a synthetical and deductive mind able to trace the influence on the slow Roman mind which the Etruscan sense of sombre effects or the Greek polity and æstheticism brought in the wake of their subtle infiltration. Mayhap Miss Tanzer will turn her unquestioned gifts in that direction?

GORDON HOLT.

Sculpture.

Sculpture. An essay on stone-cutting, with a preface about God, by ERIC GILL, T.O.S.D. At Saint Dominic's Press, Ditchling, Sussex. Sm. 4to, pp. iv + 42 + woodcuts 3. Linen. 5s.

Emy Roeder. By ALFRED KUHN. (*Junge Kunst* series.) Leipzig: Klinkhardt and Biermann. 8vo, pp. 16 + illus. 33.

Eric Gill indulges in a good deal of delightful theology of his own making; some precious æsthetic, and a little self-revelation. He makes a consistent and attractive whole of it all and prints it in beautiful fashion on hand-made paper. The productions of Saint Dominic's Press are being collected: now is the time to procure a characteristic example.

Eric Gill says if you take care of truth and goodness, beauty will take care of itself, just as God is chiefly known by His works. Now if all His works were known by all His creatures to be true and good, how beautiful the world would be! But it so happens that there are bad and baneful works in the world, and it also appears that there are beautiful things that are not good, morally. There is a god of the Christians and a god of the Pagans, and these gods have been the producers of both good and evil, just as all men have been. Eric Gill therefore has made unto himself an unseen god after his own imagining, and he is able to endow his deity with the thoughts that crowd his mind, the emotions that touch his heart, and the sensations that give satisfaction to his body.

"The nature of man is likeness to God," he tells us: it is the primitive need he feels; the need which the negro felt when impelled to make an image of his deity. It is an instinct hallowed by thousands of years of usage that has, on the whole, made for the good. So it is more an ethnological matter than religious. We know that Eric Gill inherits the instincts of the primitive artist; we know that this inhibits any tendency to take his place among the artists of his time. Even among the few who are with him so far as physical processes are concerned, he finds no corresponding spirituality. It is this he wants; it is this he must express, and so, as sculpture is not so universally understood as language needs must be, express some of his ideas in an address to his god, by which I take it he thoroughly means, the satisfaction of realizing his spiritual needs. So far as sculpture may, he himself satisfies himself by working at it with his hands: his compulsion is to create and to make every manifestation for himself by himself. It is self-love and the exposition of it is imperative to an artist of his feeling.

There is no doubt of the importance of the glyptic message conveyed in the essay on Sculpture, which succeeds to the preface to God. There are too few artists who embody principles in their plastic practice; too few who mean something by how they do as well as by what they do; too few who think at all. In Eric Gill's gospel, however, there is much more implied than merely physical processes and a technique, and the whole outlook and practice of the artist are subjected in it to a drastic examination and a searching review. The overhauling results in a falling back on the primitives as the source of truth and sincerity. In the work of the primitives was no modelling, but only cutting; nothing between the artist and his material; nothing which can prevent the interaction of the two and the bringing forth by the one from the other of the spirituality which is the basis of all sincere art.

It is the divine force of creation that Eric Gill sets out to express in this Preface and in this Essay, and when his works, both Pagan and Christian, are examined they are found to be cogent arguments for their author's contention, even more so than when that contention is expressed in written terms.

There is a distinct and lively group of German sculptors comprising Herbert Garbe, Bernhard Hoetger, Edwin Scharff, and the subject of this book, Emy Roeder, who are prepared to undertake any excursion in unknown plastic regions, even as far as the pole of cubism. No form, nor method, nor technique deters them. They work in stone and wood, terra-cotta, and plaster, and in bronze: in any material in point of fact that yields to plastic treatment. It is form, however, with which they are mainly concerned. Starting with a basis in naturalism they search the ways which lead via expressionism to decadence. Emy Roeder's work is an example. As set forth in the illustrations of this book, and as explained by Alfred Kuhn, the clever critic and author of the useful history of nineteenth-century sculpture entitled "Die Neuere Plastik," it offers a record of astonishing artistic activity exercised throughout the whole period of the war. Beginning in 1914, there are certain portrait busts naturalistically treated and showing a strong plastic individuality of treatment, in limestone and sandstone; a fine torso follows and has promises of aberration from the normal; a series of groups in terra-cotta of 1916, show a passing preoccupation with primitive work; the earlier individualism crops up again in the busts and statuettes of 1918, in which year a modified cubism seizes hold of the artist, and strange inhuman human studies follow each other to the exclusion of any of the earlier naturalistic forms; a cubism, however, of technique only, not of expression. The real expression is one of nervelessness: it indicates that the artist has desperately tried the unnatural when Nature failed her and has succeeded in capturing hopelessness only. The whole process is a repetition of the case of Bernhard Hoetger: exceptional powers exercised of late on inadequate expressionism.

KINETON PARKES.

Architecture and Decoration.

Deutsche Kunst und Dekoration. Edited by ALEXANDER KOCH. Darmstadt: Verlagsanstalt Alexander Koch. Volumes 51 & 52. 1923. 4to, pp. 378+368. Plates in colour and photogravure and illustrations in half-tone.

These two large volumes afford a comprehensive view of German architecture and decoration and fine arts. The architecture and decoration are mostly modern, the fine arts portions deal with modern painting, sculpture, and drawing, and with various old masters as well. The illustrations, which are invariably excellently produced, are many, occupying almost all the type pages in part, but many more consisting of page-size plates, many of them printed on one side only. The colour and photogravure plates are admirable, and the letterpress is invariably well-informed, and in many cases authoritative.

Among the architectural subjects are country houses by Heinrich Straumer, and Bruno Paul of Berlin, garden sculpture and interiors by August Brenhaus of Bonn, cubist interior decoration by Leo Nachlicht, wooden houses by Richard Riemerschmid and A. Niemeyer, country bungalows by Heinz Stoffregen of Bremen, furniture and room decoration by K. J. Mossner and Eduard Pfeiffer of Munich, and a very striking and handsome brick-built chapel with original exterior structure and interior decoration. A highly intriguing vision of a magnificent river city is contributed by Fritz Schumacher, of Cologne, the illustrations to which show a good deal of imaginative force. Of architecture combined with sculpture, the most significant contribution to these volumes is that concerning the work of Ivan Mestrovic. This great artist's astonishing mortuary chapel just completed at Ragusa is illustrated in every detail by forty views, and his recent sculptural works, including wood-carvings by twenty more, with well-written commentaries by Heinrich Ritter and Josef Strzygowski, which make an adequate and satisfying exposition of a single artist's work. Decorative wood-carving by Otto Hitzberger and naturalistic wood-sculpture by Ernst Barlach are illustrated, as also the animal sculpture of Renée Sintenis, the clever young woman-sculptor of Berlin. A good deal of modelling for terra-cotta and ceramic is displayed, including a number of animal pieces in porcelain by the distinguished animalier, August Gaul, recently dead. There are a number of important articles on modern painters, mostly French and German, and the crafts of bookbinding, stitchery, ironwork, silversmithery, pottery, and others are adequately represented and illustrated. The two volumes are essential to any modern library of design and the fine arts.

Books of the Month.

OLD DOMESTIC ARCHITECTURE OF HOLLAND. Edited by F. R. YERBURY. London: The Architectural Press. Price 25s. net.

CATALOGUE OF THE JONES COLLECTION. Part II. Ceramics, Ormolu, Goldsmiths' work, Enamels, Sculpture, Tapestry, Books, and Prints. London: Victoria and Albert Museum. Price 5s. net.

TIMBER AND TIMBER PRODUCTS. Edited by S. J. DULY, M.A. London: Ernest Benn, Ltd. Price 21s. net.

THE ART OF HENRI FANTIN-LATOUR. By FRANK GIBSON. London: Drane's, Ltd. Price 21s. net.

SURVEY OF LONDON. Vol. IX, ST. HELEN, BISHOPSGATE (Part I). London: B. T. Batsford, Ltd. (for the London County Council). Price 42s. net.

NATIONAL HOUSING. By MAJOR HARRY BARNES. London: Ernest Benn, Ltd. Price 2s. 6d. net.

THE PLEASURES OF ARCHITECTURE. By C. and A. WILLIAMS-ELLIS. London: Jonathan Cape, Ltd. Price 10s. 6d. net.

THE ARCHITECT IN PRACTICE. By MAJOR HARRY BARNES. London: Ernest Benn, Ltd. Price 7s. 6d. net.

REGIONAL ARCHITECTURE OF THE WEST OF ENGLAND. By A. E. RICHARDSON and C. LOVETT GILL. London: Ernest Benn, Ltd. Price 45s. net.

The Safety of Salisbury Cathedral.

At a recent gathering in the Chapter House of Salisbury Cathedral, Mr. W. A. Forsyth, F.R.I.B.A., the consulting architect, reviewed the architectural history of the cathedral from its foundation in 1220, and mentioned that the tower and spires as they stand to-day, were an afterthought of the second quarter of the fourteenth century. He also referred to the steps which were then taken to enable the centre part of the original church, constructed for a low lantern tower only, to support the enormous weight which was superimposed. To enable his audience to judge how great was the weight, Mr. Forsyth said that the height of the tower and spire, including the foundations, was only 30 ft. less than the full length (449 ft.) of the interior of the cathedral. The estimated weight was 4,600 tons. An interesting feature not found in other cathedrals, although it was in some parish churches, was that the original scaffolding remained in the spire, and even the fourteenth-century windlass, used for hoisting the materials, is still in use.

Mr. Forsyth dealt in some detail with Sir Christopher Wren's report upon the cathedral, when called in by Bishop Seth Ward in 1668, by Francis Price in the middle of the next century, and to the precautionary work of Scott, Blomfield, and other later architects.

The most reassuring part of Mr. Forsyth's statement referred to the foundations of the cathedral, which he described as "the best possible foundations you can have." A description followed of devices to detect any movement in, or fractures of, the masonry, by a system of cement tell-tales. Another interesting statement made was that Price estimated that 2,600 tons of oak were used for the roofs.

A New Village Hall at Sidbury.

Sidbury Iron Hall, which has done excellent service as a club-room and village hall for about half a century, has been demolished, and a new hall is to be erected on its site from plans prepared by Mr. Walter Cave, F.R.I.B.A. The new building will be of brick, with tiled roof, and windows with leaded lights, and will contain a hall, 57 ft. by 22 ft., with a stage 11 ft. by 22 ft. At the end of the hall opposite the stage will be a gallery for operating a limelight apparatus during entertainments. There will also be cloakrooms, artistes' rooms, a committee room, kitchen, store, and lavatory accommodation. The hall will be fitted with central heating and electric lighting. Mr. G. A. Northcote, of Sidmouth, has been entrusted with the work of erection, and the entire cost, some £3,000, will be borne by the lord of the manor, Sir C. H. Cave, who has also given the site.

Reopening of Haceby Church.

The Bishop of Lincoln recently re-opened the ancient Norman church of Haceby, near Folkingham, after restoration. The church, which is one of the oldest in Lincolnshire, has been in a dilapidated state for many years. Under plans prepared by the architect, Mr. Wilfred Bond, F.R.I.B.A., of Grantham, Messrs. E. Bowman and Sons, of Stamford, have carried out the restoration.

Victoria and Albert Museum.

Department of Woodwork.

The Victoria and Albert Museum has recently purchased, with the assistance of a grant from the National Art-Collections Fund, a writing cabinet, signed "Samuel Bennett, London Fecit." This is an important example of English furniture of the time of Queen Anne, made of walnut wood, with marquetry decoration of arabesque ornament in light wood. The upper part, closed by a door inset with a mirror, framed with fluted pilasters and panels of inlaid ornament, contains a cupboard and shelves, in which the architectural motive suggested in the decoration of the exterior is cleverly repeated. The lower part, with slope front and drawers, is fitted with a central cupboard flanked by drawers and pigeon-holes. The whole is surmounted by a pediment with carved scrolls and shield. The cabinet is at present exhibited in the west hall of the Museum, near the main entrance.

The Society of Architects.

Victory Scholarship Competition, 1924.

The number of entries received this year for the Victory Scholarship amounted to thirty-six altogether. Thirty-three designs were received from competitors sitting at Aberdeen, Bristol, Glasgow, Liverpool, and London, on Saturday, 7 June, from 10 a.m. to 10 p.m. The Programme, which was handed to each competitor upon arrival, consisted of a Reception Pavilion in an Exhibition. The Jury of Assessors, after long and careful deliberation, submitted the following report :—

> We, the undersigned, being the Jury of Assessors in the Society of Architects' Victory Scholarship Competition, have to-day selected nine drawings bearing the following Index Numbers for the Final Competition: 153, 159, 161, 166, 172, 173, 176, 177, and 187. Signed: ARTHUR J. DAVIS, A. E. RICHARDSON, HOWARD ROBERTSON, LIONEL B. BUDDEN, G. D. GORDON HAKE.—24 June 1924.

The authors of these designs were then declared to be as follows :—

R. H. Brentnall, of Bristol, 153; A. C. Todd, of Liverpool, 159; A. C. Townsend, of Liverpool, 161; Joseph Addison, of London, 166; A. E. Cameron, of London, 172; Miss A. M. Hargroves, of London, 173; C. H. Short, of London, 176; S. Thomson, of London, 177; G. A. Butling, of Liverpool, 187.

The Final Competition will be held on Saturday, 9 August, the title of the Programme for which will be disclosed to the competitors seven days beforehand.

The British School at Rome.

The Rome Scholarships.

The following awards are announced :—

Faculty of Engraving.—Mr. W. E. C. Morgan (Slade School) has been awarded the Rome Scholarship in Engraving for 1924.

Faculty of Architecture.—Mr. M. A. Sisson, B.A. (London University), has been awarded the Henry Jarvis Studentship of the Royal Institute of British Architects for 1924. No appointment will be made to the Rome Scholarship in Architecture for 1924.

A Correction.

Mr. W. Moorcroft, of the Moorcroft Potteries, Burslem, Stoke-on-Trent, has pointed out an error in the description of Moorcroft Pottery appearing on page 265 of the June (British Empire Exhibition) issue of THE ARCHITECTURAL REVIEW. On this page the statement is made that "Moorcroft Pottery also stands out, for *Mr. Moore* has evolved, not only a good style and perfect finish, but a wonderful blood-red colour." There is no Mr. Moore connected with the work, and the reference should be to Mr. W. Moorcroft, who is entirely responsible for the pottery.

An interesting feature of the Moorcroft Pottery is its wonderful colouring, which, it is claimed, will be as good in 10,000 years' time as it is to-day. The colour is in the paste, or body, of the pottery, and it is to this fact that the everlasting nature of its colouring is due.

The Wallace Collection.

Appointment of a New Keeper.

Mr. D. S. MacColl is retiring from the Keepership of the Wallace Collection on September 30. The trustees, with the approval of the First Lord of the Treasury, have appointed in his place Mr. Samuel James Camp, F.S.A., at present assistant to the Keeper and Inspector of the Armouries.

Mr. MacColl, who is a native of Glasgow, the son of the Rev. Dugald MacColl, received his early education at Glasgow Academy and then at University College School and University College, London, whence he proceeded to Lincoln College, Oxford, where he was a scholar and Newdigate prizeman. He studied art at the Westminster School of Art and the Slade School, and became a painter and designer. He was art critic of the "Spectator" and "Saturday Review," and editor of THE ARCHITECTURAL REVIEW, and several notable articles from his pen appeared in this magazine. Of late years, his contributions to the Press have been fewer, though the restarting of his critical articles in the "Saturday Review" a year or so back aroused much interest. Mr. MacColl was a lecturer on the history of art at University College, and took the initiative in the foundation of the National Art Collections Fund and the Contemporary Art Society. From 1906 to 1911 he was Keeper of the National Gallery of British Art (Tate Gallery), and in the latter year he was appointed to succeed Sir Claude Phillips as Keeper of the Wallace Collection.

Mr. Camp has held the office of assistant since the foundation of the Gallery, and succeeded to the post of Inspector of the Armouries on the death of Sir Guy Laking in 1919. He has given devoted service to the administration and conservation of the collection, and his new edition of the Arms and Armour Catalogue, now in process of publication, has won for him a high place among students of that subject.

Reconstruction Scheme for Scarborough.

The Scarborough Town Council have recently approved a scheme for the reconstruction of a portion of the old part of the town, which, together with the building of a number of houses elsewhere, is to cost £131,000.

Waterloo Bridge.

The last report by the chief engineer on Waterloo Bridge to the Improvements Committee of the London County Council, dated July 3, concludes:

The position now is that Pier No. 4 and the two adjoining arches (temporarily supported) are in such a crippled condition that they must be taken down and rebuilt on a new foundation. . . . There is also abundant evidence that this state of affairs, especially as regards the footings, exists in a more or less pronounced degree at other piers. . . .

Taking down the bridge, although a difficult task, is considered to present less risk and greater safeguard against failure than to attempt to interfere with the foundation piling overloaded as it is. A temporary bridge commenced at once should be built in from nine to twelve months, and its completion would ensure uninterrupted passage ways for both river and road traffic.

It is reasonable to assume, although it cannot be guaranteed, that during the whole period occupied by building of the temporary bridge, subject to possible interruptions, the work which has already been done to Pier No. 4 and the adjoining arches will enable vessels to continue to use the waterways now available, and vehicles of limited weight to cross the existing bridge.

Books for Students.

The Royal Institute of British Architects has published a list of books recommended to students. Copies of the list may be obtained free on application to the Royal Institute, 9 Conduit Street, Hanover Square, London, W.1.

Chichester Cathedral.

The restoration of the chapels in Chichester Cathedral continues, and St. Catherine's Chapel is now in process of renovation. The designs for the work are in the hands of Mr. J. N. Comper, and the expense is to be borne by Sir Hubert Miller.

The Restoration of an Historic Church.

A sum of £10,000 has been given by Lord Forteviot towards the restoration of the historic church of St. John the Baptist, Perth. The church is being restored as a war memorial for the city and the county.

A New Thames Tunnel.

The Government has authorized the appointment of an engineer to make an official survey and to prepare plans and estimates for the construction of a road tunnel under the Thames between Gravesend and Tilbury. The tunnel will involve a large scheme of road construction and will connect a great new east and west highway north of London (crossing all the main roads from the north) with the new highways in Kent. It will therefore bring the whole of Kent in direct communication with the north and west without the necessity of traffic passing through the metropolitan area. The engineer appointed to carry out the survey is Sir Maurice Fitzmaurice, who was engaged on the Blackwall Tunnel and was engineer of the Rotherhithe Tunnel and the tramways subway under Kingsway.

A New Concert Hall for Weymouth.

At a cost of £12,000, a modern concert hall has been erected in the Alexandra Gardens. The hall is a light and airy structure of glass, resting on girders, supported by brick pillars. The seating accommodation is for 1,600, but the stage can be thrown open to outside audiences on the lawns.

The Prices of Building Materials.

The Inter-Departmental Committee of the Ministry of Health appointed to survey the prices of building materials have published their Report for the month of April 1924, and include the market prices for 1914 and 1923 for purposes of comparison. Copies of the Report are obtainable from H.M. Stationery Office.

Brighton's New Aquarium.

The scheme for rebuilding Brighton Aquarium has been passed by the General Purposes Committee, who recommend it to the Town Council. The cost of this elaborate reconstruction scheme is estimated at £120,000. There will be a sunken bandstand, surrounded by terraced seats to accommodate 800 people, with additional room in a covered colonnade. A fountain court and an entertainment hall to seat 1,500 are also provided for. In addition provision is made for refreshments and a number of shops.

Wakeman's House at Ripon.

The official opening of the Wakeman's House at Ripon took place on July 16. The building, which stands in the market-place, dates from the sixteenth century and is specially interesting as being the home of the last Wakeman and first Mayor of Ripon —Hugh Ripley. Owing largely to its dilapidated condition, the corporation purchased the property with a view to its restoration and preservation as being of historical value. It has now been restored to the appearance it is believed to have presented originally, and is furnished with articles of the period to which it belongs, including many valuable treasures of antiquity.

Preston War Memorial.

At a recent meeting of the Preston War Memorial Sub-Committee, the Mayor reported that the military authorities had expressed their approval of the site of the South African War Memorial, opposite the post office, being made available, and the latter memorial being re-erected on a site in Avenham Park.

The sub-committee also considered the design of Sir G. Gilbert Scott, R.A., for the Great War memorial to be erected on the site opposite the general post office. It was resolved that the design and site be adopted, and that the Council be recommended to approve the site and also the suggested new site in Avenham Park for the South African War Memorial.

Sir Gilbert Scott has traditional associations with Preston, as his famous grandfather designed the present town hall.

TRADE AND CRAFT.

Uppingham.

The general contractors for the new hall and classrooms were Benfield and Loxley, Oxford, and the sub-contractors were as follows: Wenham and Fowler, Croydon (heating and electric light); Crittall Manufacturing Co., Braintree (glazing for the hall); Acme Flooring Co., London (oak flooring); Barrowclough and Sanders, Lancaster (glazing for the classrooms); Bell's United Asbestos Co., London ("Decolite" flooring); Charles W. L. Lambert, Ltd., London (indiarubber flooring). The fireproof flooring was designed by Oscar Faber, Esq., D.Sc.

An illustrated article on Uppingham appeared in the July issue of THE ARCHITECTURAL REVIEW.

Liverpool Cathedral.

The general contractors for the building and foundations were Morrison and Sons, Ltd., Liverpool, and the sub-contractors were as follows: G. N. Haden and Sons, Ltd., Trowbridge (heating, ventilating, and fire protection); John Stubbs and Sons, Liverpool (marble flooring and terrazzo work); Farmer and Brindley, Ltd., London (marble work other than flooring); John Hunter & Co., Liverpool (electric lighting installation). Sub-contractors to Messrs. Hunter & Co. were the British Thomson Houston Company and F. and C. Osler, Ltd., London and Birmingham; The Limmer and Trinidad Lake Asphalt Co., Ltd., London (asphalting). The general contractors, Messrs. Morrison and Sons, Ltd., were responsible for all woodwork except the choir stalls. These were made to the order of the donor by Waring and Gillow, Ltd., Liverpool; Henry Willis and Sons and Lewis & Co., Ltd., London (organ builders); Mears and Stainbank, London (bell founders); James Powell and Sons (Whitefriars), Ltd., London (the whole of the stained glass in the choir, transepts, aisles, and lady chapel); Morris & Co., London (chapter house windows); Burlison and Grylls, London (ambulatory windows); C. E. Kempe & Co., Ltd., London (chapter house staircase windows); Bromsgrove Guild, Worcester (bronze choir gates and reading desk on lectern); Walter Gilbert, Birmingham (communion rails and bronze work on memorial reredos and cenotaph); W. Bainbridge Reynolds, Ltd., London (silver ornaments, door furniture, bronze grilles, and electric light fittings to the lady chapel); Watts & Co., Ltd., London (embroidery mounting); G. Tosi, London (gilding and decorating).

A Conduit Catalogue.

Conduits are unromantic things at the best of times, and the tendency has hitherto been for manufacturers to catalogue them in a more or less perfunctory way as necessary evils.

The conduit list of the General Electric Co., Ltd., of Magnet House, Kingsway, however, has made the best of this rather unpromising material: they have always included valuable statistical data which engineers and contractors have found of service.

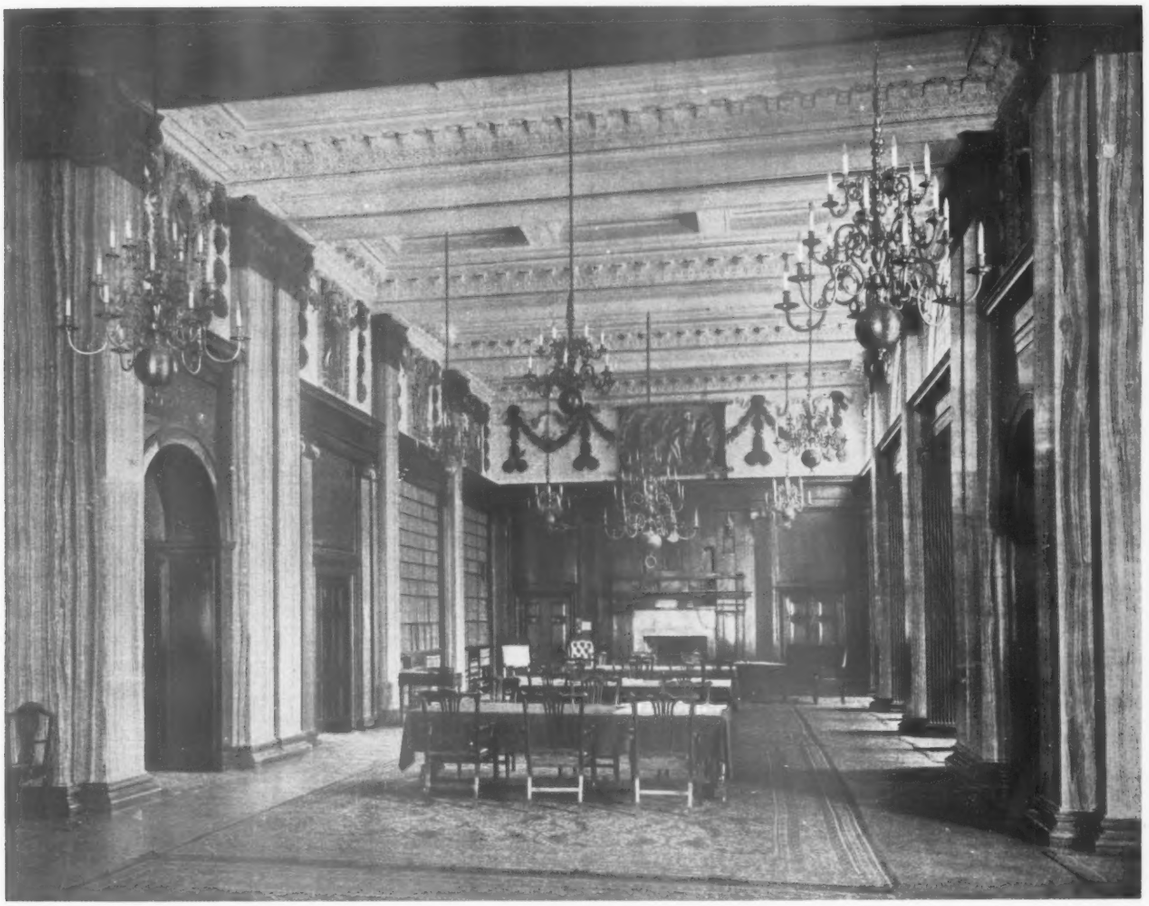
The G.E.C. have issued a new edition of their catalogue of "Geekoduct" Conduit and Conduit Fittings (section "C" of complete catalogue, sixteenth edition), a copy of which we have received. This list, we should imagine, is the most comprehensive and complete conduit catalogue ever issued in this country. It is copiously illustrated by half-tone illustrations, and arranged in a logical sequence with dimensions, catalogue numbers, and prices clearly set out so that there can be no difficulty in referring to any item required.

In addition to the usual light gauge and heavy gauge conduit, and the various standard conduit fittings, complete ranges of switch and ceiling rose-boxes, wall-plug boxes, and other outlets are given, together with earthing devices, connectors, and a very useful selection of various tools.

Particulars are also given of the company's "Pin Grip," "Demon Grip," and "Witton Grip" systems of continuity fittings, each of which has its own particular advantages.

The introductory section contains a very full specification and technical description of all the various types of "Geekoduct" conduits and fittings, illustrated by clearly drawn line illustrations and augmented by statistical data of value to the contractor.

At the end of the book the British Engineering Standards Association specification for steel conduit fittings is printed in tabular form for easy reference.



The Incorporated Law Society, London — *Architects: Messrs. Adams & Holden*

An inspection of the Queen's Dolls' House at Wembley suggested the following reflection—

If we could take away the façades of our clubs and institutions should we find a sense of comfort and pleasing colour within?

The impression that the above illustration gives is that, however severe the exterior, the privileged members who use the rooms are surrounded with a cheerful atmosphere created by the decoration and fittings.

Decorative Metalwork.

The Birmingham Guild have published an attractive booklet on their decorative metalwork, illustrated by some examples, which convey an excellent idea of the work of the Guild.

The Romantic Side of the Gas Industry.

Just twelve years ago the centenary of gas as an illuminant was celebrated. Before 1812 were what might be called the Dark Days—the days when our forebears were compelled to resort to the chafing of flint and steel for the lighting of their rushlights and candles; when the introduction of matches was hailed as the invention of the devil, and the name of "Lucifer" was conferred on them as an indication of their infernal origin; when there was a fiery crusade by the clergy against the burning of gas as being "profane and contrary to God's law."

Since then radiant heat and radiant light in the form of gas have been given to the world by harnessing the sun to the needs of man. From the dusky bosom of coal the imprisoned sunshine is now extracted and we have "The Spirit of Coal"—gas.

Than its one thousand six hundred gas undertakings Great Britain probably has no greater asset.

The Thermostove.

Messrs. Hartley and Sugden, Ltd., of Halifax, have published a brochure describing and illustrating various models and accessories of the "Thermostove," which are now on the market. The "Thermostove" has been invented to replace the kitchen range, and claims to ensure a continuous and abundant supply of hot water day and night. It also cooks, bakes, or roasts any food, and boils pans, all from one fire which burns coke, anthracite, or any solid fuel. In addition Messrs. Hartley and Sugden claim that a modern "Thermostove" installation means a total efficiency of almost 75 per cent. obtained by burning coke, not as in the open range by extravagant consumption of coal.

Southern Railway Electrification.

Messrs. W. T. Henley's Telegraph Works Co., Ltd., have received an order from the Southern Railway Company for the electrification of their south-western suburban lines between Raynes Park, Epsom, Leatherhead, Effingham Junction, Clandon, Guildford, Dorking, Hampton Court, and Oxshott.

The total length of cable involved amounts to more than sixty miles, and the cables are ·2″, ·15″, ·1″, and ·06″ extra high tension three-core, paper insulated, lead covered, and single wire armoured for a working pressure of 11,000 volts.

Other important contracts which this company has carried out in connection with railway electrification are the London and North-Western Railway (now London Midland and Scottish Railway), the Central Argentine Railway, the Buenos Ayres Western Railway, and the Lancashire and Yorkshire Railway (now London Midland and Scottish Railway).

The Relay Automatic Telephone System.

We have received from the Relay Automatic Telephone Co., Ltd., Marconi House, Strand, a copy of their illustrated souvenir entitled "The Nerves of the Exhibition," which forms an interesting account of the work of this company in constructing the system of telephone communication at the British Empire Exhibition. The many branches of the Exhibition administration, the pavilions of the Indian Empire, the Dominions and Colonies, and many large exhibitors in the great industrial palaces and buildings are all linked together by what is claimed to be the most perfect automatic telephone system yet devised.

A Tender for Lamps.

The London and North-Eastern Railway Company (Southern Scottish Area) have accepted the tender submitted by Messrs. Siemens and English Electric Light Company, Ltd., for the supply of Siemens Standard Vacuum, Gasfilled, and Traction Type Lamps, and also Carbon Filament Lamps, for twelve months.

Card Plan of the British Empire Exhibition, Wembley.

It is typical of the wholehearted energy and enterprise which the General Electric Co., Ltd., have shown in the preparation of their exhibit—the Pavilion of Electricity in the Palace of Engineering—at the British Empire Exhibition, that they should be distributing on a very lavish basis a card upon which is printed on one side a complete plan of the Exhibition, with the position of the Palace of Engineering and the G.E.C. Pavilion clearly shown thereon.

The reverse of this card contains a cordial invitation from the G.E.C. to visit the Pavilion of Electricity, and also the exhibit of Fraser and Chalmers Engineering Works in the south-east block of the Palace of Engineering.

The British Empire Exhibition.

1924 Hall and Dining-room.

Messrs. W. H. Gaze and Sons, Ltd., of Kingston-on-Thames, who erected 210 stands for exhibitors at the Exhibition, were also responsible for the 1924 hall and dining-room, illustrating period rooms, in the Palace of Arts.

These two rooms are full of interest, and show in a marked degree the present-day tendency to create something which is hall-marked with the stamp of our own time.

The architects, Lord Gerald Wellesley and Mr. Trenwith Wills, have not only designed the decoration of the walls of the rooms, but also the furniture, carpets, curtains, etc.

In the dining-room the walls and ceiling are in flat plaster, painted yellow, the pilasters are green. The hangings and carpets are in ultramarine and rose-madder, while the specially designed chairs and table are painted green in keeping with the general colour-scheme. There is a chandelier of carved wood painted green and gold, the lights being contained in six inverted yellow glass bowls. The doors are green.

The hall is carried out in stone and plaster, with three small top-lit domes. The electric light fittings for this room are yellow glass "star" lights.

Ideal Hospital Radiators.

A new Ideal Hospital Radiator has been put upon the market by the National Radiator Company, of Hull, embodying all the advantages of earlier types, and, in addition, containing a valuable new feature in the reduction of floor space occupied for a given heating surface over that taken by their other radiators. The new radiators are also supplied with "Astro" hinge fittings to enable them to be swung from the wall.

38 South Street.

Messrs. J. Starkie Gardner, Ltd., draw our attention to the fact that in the list of contractors for this building, published in the May issue of THE ARCHITECTURAL REVIEW, the manufacture of the balcony railings to loggia, gates, railings, handrails, balusters, etc., was incorrectly attributed to another firm. They state that all the metal work decorations in the hall were carried out by Mr. J. Starkie Gardner to the instructions of the architect, Mr. Harold Peto. In addition, Messrs. J. Starkie Gardner, Ltd., were the sub-contractors for supplying the polished wrought-iron stair balustrade and handrail, the silver-bronze capitals to the black marble piers, the silver-bronze inlay of floor, the polished wrought-iron and repoussé lift grille, the alabaster hanging lamps with silver-bronze fittings, and the whole of the door furniture inside and outside the doors in the rooms of the ground floor.

We understand that Messrs. J. W. Singer and Sons, Ltd., were responsible for two small balconies to the loggia.

The West India Agricultural College, Trinidad.

Messrs. Thomas Faldo & Co., Ltd., of London, who are the sub-contractors for the asphalting connected with the whole of the flat roofs and paving of external galleries, have used genuine Seyssel asphalt for the work. The building is being erected in reinforced concrete, and the general contractors are Messrs. Foster and Dicksee, of Rugby. Major Hubert C. Corlette, O.B.E., F.S.A., F.R.I.B.A., is the architect.

VITROLITE Regd.
"Better than Marble"

Hairdressing Saloon,
Messrs. John Walsh, Ltd., Sheffield.

Shop Fitters: Messrs. Fredk. Sage & Co., Ltd.

SHOPS and STORES.

AN attractive interior is becoming more and more a dominating factor in the success of a shop or a store, and nowhere is this more important than where cleanliness and the strictest hygiene are expected, such as in Hairdressing Saloons, Fish, Game and Poultry Shops, Dairies, and Buffet Counters, and especially in the Lavatory accommodation provided for customers. In Vitrolite architects have a material ideally suitable for Wall Linings, Partitions, Shelves, Counters, Table Tops, &c., which will satisfy all requirements, both hygienically and artistically. It is as hard as crystal and made in sheets—snow-white (free from any yellowish or bluish tinge) and jet black. The fact that its highly polished surface cannot be stained or discoloured is one of its great advantages.

Vitrolite is supplied in sheets up to 10 ft. by 3 ft., $\frac{1}{4}$ in., $\frac{5}{16}$ in., $\frac{7}{16}$ in., $\frac{3}{4}$ in., and 1 in. thick. It is fixed to walls and ceilings by mastic, so that exposed metal can be avoided, and the large sheets make it possible to reduce the number of joints to a minimum. Vitrolite can be cut, bent to avoid sharp angles, drilled with holes to take fittings, and its edges bevelled and polished.

If desired Vitrolite can be etched with any design in any colour to harmonise with a scheme of decoration. Its brilliantly polished surface gives a bright, evenly diffused, light reflection.

Architects are warned that materials closely resembling Vitrolite in appearance are on the market, but are in no way suited to take the place of Vitrolite in the special structural work in which the Vitrolite Company specialises. They should satisfy themselves in all cases that what is used is really Vitrolite.

VITROLITE CONSTRUCTION CO. (Europe), Ltd.

1 Victoria Street, Westminster, London, S.W.1.

Telephone—Victoria 9777.

Gas in the Textile Industry.

Few people other than those actually engaged in the manufacture of cotton and other materials are aware of the very important part which gas plays in their production. It will probably be news to most readers that one Yorkshire mill engaged in the manufacture of silks, velvets, and plushes is a customer of the local gas undertaking to the extent of nearly 12 million cubic feet of gas per annum. The demand for gas by textile mills in such important centres of the industry as Accrington, Blackburn, Bolton, Burnley, Oldham, and Stockport is a very large one and has a material effect upon the total output of gas used for industrial purposes in those areas.

The current issue of "A Thousand and One Uses for Gas" (No. 124) deals with the applications of gas to meet the varied needs of the textile industry, and describes with a number of very interesting photographs three of the main processes in connexion with which gas is used extensively—namely, gassing, singeing, and calendering. The publication should prove of practical value to all those interested in this great industry. Copies can be obtained from the secretary of the British Commercial Gas Association, 30 Grosvenor Gardens, S.W.1.

Columbian Pine Doors.

The Woco Door Company, of Dashwood House, 9 New Broad Street, London, E.C.2, have sent us an illustrated folder and a descriptive circular concerning their Woco Columbian pine doors. Introduced into England in 1907, these doors are made of highly-seasoned timber by a special process, and are guaranteed not to shrink, warp, twist, or otherwise get out of shape. If by chance any such defect should develop through faulty manufacture, any door purchased will be replaced free of charge. It is stated that during the past three years the doors have been specified and used by architects and surveyors throughout the country in a great many private and public buildings, including county council, urban, and municipal building schemes. An illustrated catalogue and price list can be obtained on application to the company at the above address.

The "Ruston" Oil Engine.

Messrs. Ruston and Hornsby, Ltd., of Lincoln, engineers, have recently issued a new edition of their horizontal cold starting oil engine catalogue (publication 4630), from which we observe that one or two additional sizes of engines have been placed on the market. Some of the principal advantages claimed for the "Ruston" cold-starting oil engine are briefly as follows: No skilled labour is necessary for working the engine; no high pressure air blast for injecting the fuel; and no hot bulb, electrical or other external heating device is necessary for starting or working. The engine will start instantaneously from cold, and it is designed to use the lowest grade fuel oil, i.e., ·95 sp.g. furnace oil, and it has a low fuel consumption—·48 lb. per b.h.p. hour in the smallest, to ·42 lb. per b.h.p. hour in the largest sizes. Among the authorities who have adopted "Ruston" cold-starting oil engines are the Admiralty, the General Post Office, the India Office, Bexhill Corporation, Bristol Waterworks, British Empire Exhibition, Douglas Corporation, Durham County Water Board, Glasgow University, Liverpool Corporation, Maidenhead Corporation, Manchester Corporation, Metropolitan Water Board, Nottingham University College, Southend Waterworks, York Waterworks. The engine has also been supplied to numerous important authorities overseas.

Electric Bells and Bell Material.

The General Electric Co., Ltd., have recently issued the twenty-first edition of their catalogue, section L(1) dealing with electric bells and bell material. The list is extremely comprehensive, and contains full details, illustrations, and prices of every accessory necessary for the installation of bell systems, burglar alarms, and lightning conductors, etc.

The contents of this catalogue have been thoroughly revised to include not only all standard apparatus, but also several new and competitive lines, and in nearly every instance substantial reductions in price have been made.