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The RESIDENCE OF A.L. GARFORD, Esq. OAK KNOLL, PASADENA, CAL.

Marston & Van Pelt, Architects



By CHARLES OVER CORNELIUS

N the history of patronage, the cultivated taste of the patron is accorded degree of recognition almost equaling that which is given to the creative work of the artist, and not without reason. Appreciation of an artist's work and of his point of view in doing what he does, has such a positive effect upon his accomplishment that it is difficult at times to assign justly the original source of the impulses which determined a given artistic result. Folk art of all kinds is built upon this sympathetic interrelation of the creative and appreciative points of view, and folk art is not so far removed from the great art of a people as many would have us suppose.

It is in this circumstance that we find the explanation of the quick development and gratifying results in the design of country and suburban house architecture in the United States. As in no other branch of architecture, the client and the professional man meet upon a nearly equal plane; and an entente cordiale of real spontaneity is created due to a mutual respect for each other's opinion, an association which, when multiplied by the number of its frequent occurrences, has led the more optimistic critics to feel that in this branch of the art will be found to lie America's most genuine contribution to architecture.

In the design of the dwelling house, the development shows a remarkable and rapid response to the varying and changing needs of society, a definite approximation to the individual family groups. Here are reflected the esthetic tastes of the more cultivated element of the country, the presence or absence of formality and ceremony in the relations of every-

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day life, the relative pleasure derived from the outdoors, in beautiful gardens and magnificent views, or from indoor life with its drawing-rooms, music-rooms and libraries. It is this aspect of the subject of house planning which gives it its very unusual interest; in its development can be traced the social history of a people for any given time.

The house of A. L. Garford, Esq., in Pasadena, Marston & Van Pelt, architects, is particularly interesting because of its plan. In a land of such unrivaled and individual beauty as that in which this house is placed, a predominant consideration was the site, in relation to the view which may be enjoyed from it and to the design of the house. The location of the house, on the crest of a small hill, has permitted a certain regularity of roof line and irregularity of plan which is a natural response to the ground levels. Its main axis gives a clear vista over the tree tops to the sunny country beyond them, and the terraces, porches, and belvidere all concentrate upon this aspect.

The plan of the house itself follows the natural land grades, and in its somewhat irregular form satisfies the necessity of a desirable façade toward the street from which it is entered, as well as toward the view to the north and east.

The group is composed of two entirely self-contained dwellings, served with equal convenience by one driveway, and united by a long porch and porte-cochère. The smaller house is not unusual in its arrangement and meets all the requirements of a house of its size, its chief interest lying in the treatment which makes it an integral part of the whole plan.

In the larger house a more formal arrangement is adopted with a cruciform plan as its key. The entrance on the main axis for the vista is directly opposite the long doors to the terrace. To right and left open library and living-room, well proportioned in themselves and of good relation to each other, whose fireplaces respond invitingly. The transition to the wing, at an oblique angle, is simply made, with no waste of space and with a distinct feeling for the forms of the rooms. The service wing is compactly arranged

and is connected by a covered way with the garage beyond it. The whole plan presents an open-minded approach to the problem, which has been solved with the greatest economy of space consistent with dignified effect.

The exterior presents an adapted use of Spanish baroque detail, sparingly used upon a building whose mass, quite individual in form, is a direct expression of its plan. The porch which connects the two units of the group is the chief, one may say the only, unifying element. The entrance bay of the main house forms the dominant motif upon the south elevation, while its corresponding face upon the north side forms here the most strongly marked element, both in design and decoration. This bay suffers somewhat from an over-emphasis upon verticality, which would have been avoided by a closer horizontal tie to the right as well as to the left. The wings of the house reach out at either side with a fenestration which appears to be less studied than casual.

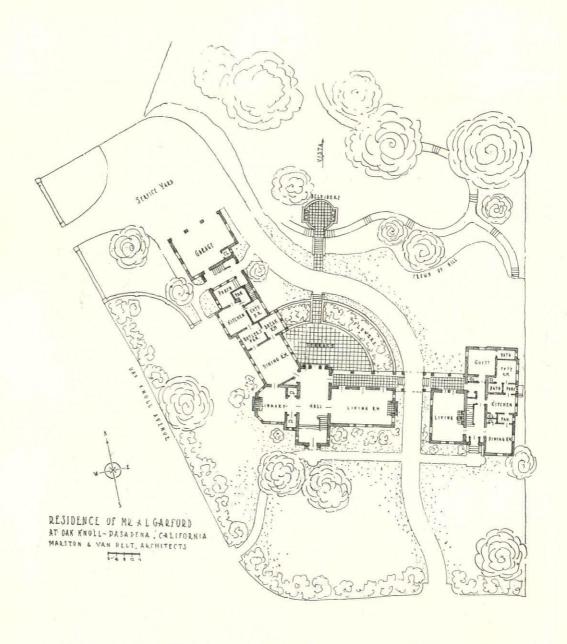
There is a certain lack of unity in the design of the exterior, and a disregard of any subtlety of composition or study of effects of light and shade, both so important in work of this type. Of the exterior details, the entrance doorway comes nearest to a successful treatment. here, too, the verticals are too insistent in the absence of any balance of horizontals. This bay, which is repeated in a different form on the north side, would have gained in effect by a different roof treatment, something which would break up the general uniformity of the roof-line and give a more special quality to the bay itself.

The treatment of the walls surrounding the service yard is unqualifiedly successful. The flat white surfaces surmounted by the molded coping are straightforward and a pleasing background for any planting which is anticipated, and the smaller gateway is charming in its form.

The choice of the adapted Spanish style demands a very considerable skill on the part of the designer. The training of American designers as applied to decoration is by no means so great as in



ENTRANCE TO SMALL HOUSE—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL. MARSTON & VAN PELT, ARCHITECTS.

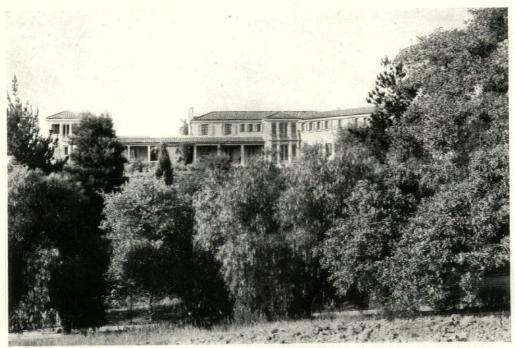


BLOCK PLAN—RESIDENCE OF A. L. GAR-FORD, ESQ., OAK KNOLL, PASADENA, CAL. MARSTON & VAN PELT, ARCHITECTS.



FRONT ELEVATION—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.

Marston & Van Pelt, Architects.



NORTH ELEVATION—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL. Marston & Van Pelt, Architects.



NORTH ELEVATION—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL. Marston & Van Pelt, Architects.



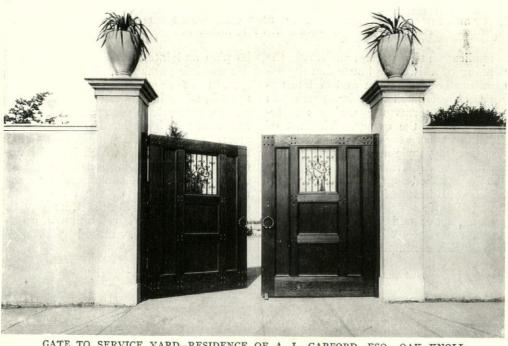
DETAIL OF NORTH ELEVATION—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.

Marston & Van Pelt, Architects.

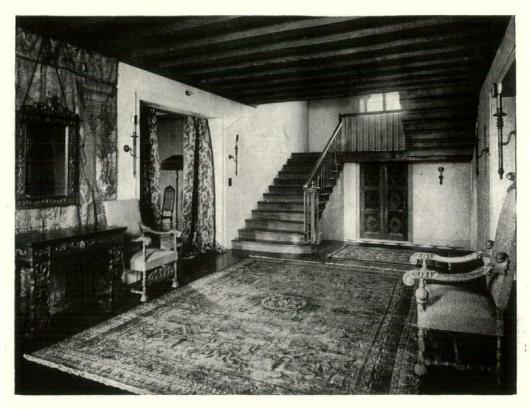


GATE TO SERVICE COURT-RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.

Marston & Van Pelt, Architects.



GATE TO SERVICE YARD—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL,
PASADENA, CAL.
Marston & Van Pelt, Architects.



STAIR HALL—RESIDENCE OF A. L. GARFORD, ESQ., OAK KNOLL, PASADENA, CAL.

Marston & Van Pelt, Architects.

its application to planning, and it is in the planning of a dwelling house that the cooperation between client and architect is closest, the trained man interpreting in his technical terms the wishes and requirements of the owner. This art of planning comes very close to expressing the life of a people and in its range morning all the way from the so-called folk art to a dignified expression which makes full claim to beauty for its own sake and surrounds life's daily activities with a meaning above and beyond its merely routine motions. A house which fails to register this accomplishment of unifying

its plan and interior treatment with the life which is passing within it, fails to respond to the most important demand laid upon it, while its success in this regard is an ever new reason for approbation. The residence which we have just considered presents a truly gratifying success in the treatment of its plan, which is clever and unusual in its combination of use and comfort with a just consideration of the relative importance of the units in the design, and, in addition, furnishes a most individual interpretation of a house for two families, united yet each distinct.

HILGARD HALL ~ University of California ~

John Galen Howard, Architect

By Richard F. Bach

THE buildings of our larger universities are representative of the steady advance of American architecture. No other type of building reflects so promptly the trend of thought in a land of democratic thinking. Out of the universities come the guiding ideals of our life as a nation and as individuals. In the molding of character architectural environment has inspirational and incentive value, and this is particularly true with respect to colleges and universities.

In America we are still building our collegiate institutions; their traditions are still green and their architecture therefore is not so well seasoned and tried as are the old quads in England or the moldy walls of Continental universities that date their beginnings before the Renaissance. Yet we have certain advantages because of our youth. There is the matter of group planning, and the matter of safety for numbers, there is the matter of scientific perfection of equipment for buildings in which science is to be taught. Of these the group plan has the most to offer to the imagination.

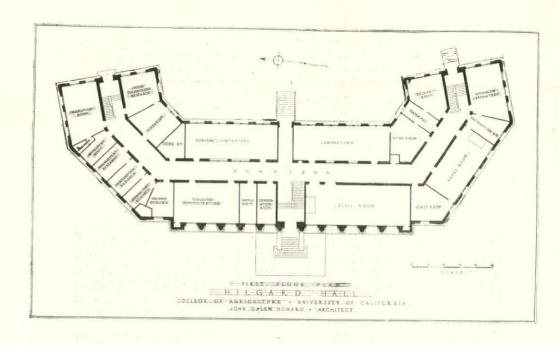
Not the least interesting feature of the newer plans is the factor of local color. There are projects in pure Collegiate Gothic reflecting Oxford and Cambridge, there are other Gothic derivatives, there are projects in pure Italian Renaissance of the municipal type, and there are still others that have responded more faithfully to the demands of their own soil, and while harking back to Italian or other motives nevertheless seem to have struck a decidedly individual track expressive of their own environment and future. Of

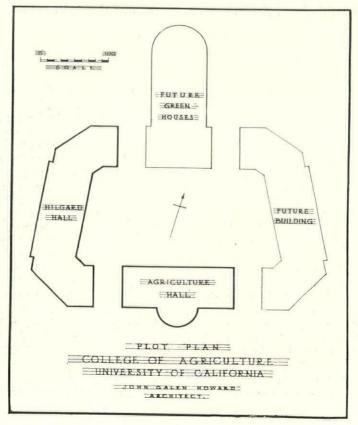
these the University of California is one.

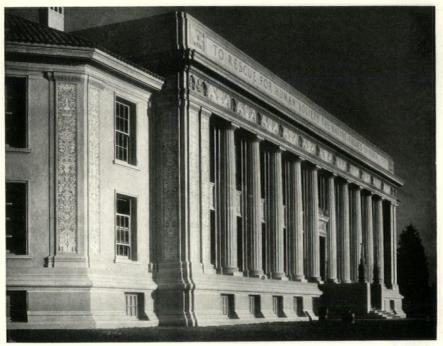
At California the rule of sunlight and color has been obeyed. There are seen in all the buildings refreshing plain areas not tortured by conflicting shadows, and there is ample evidence of regard for the possibilities of color in American buildings.

Hilgard Hall is one of four units ultimately to constitute the group of buildings to be devoted to agriculture. Agriculture Hall, already in place, was the first of the units to be completed. As is seen in the block plan, Hilgard Hall flanks this first building and forms the second side of the trapezoid that will in the end be the agriculture quadrangle. The quadrangle will, however, not be so severely hemmed in by buildings as is usually the case, first because the halls are all no more than two stories in height, second because the fourth side of the quad will consist of greenhouses.

Hilgard Hall is on plan in the form of a shallow letter U. Its important exterior face presents an engaged Doric order, set upon a high base, itself broken by window openings and by a stairway approach occupying the central intercolumniation. The order embraces two stories, the floor level being indicated by decorative panels between the shafts. The entablature presents a series of delicately treated moldings, in keeping with the decoration of the frieze, which is worked out in a combination of relief skull motives, or bucrania, and sgraffito plaster ornament in several colors. Sgraffito likewise appears at several other points of vantage, notably the pilasters







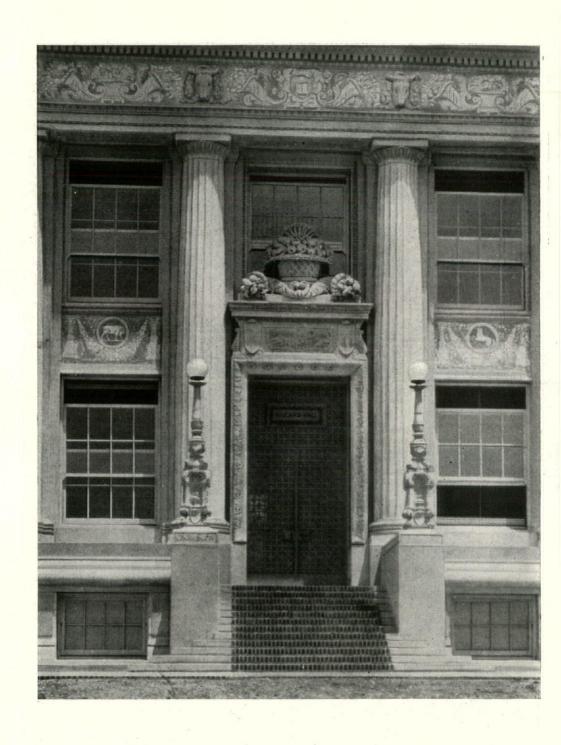
HILGARD HALL, UNIVERSITY OF CALIFORNIA.

John Galen Howard, Architect.

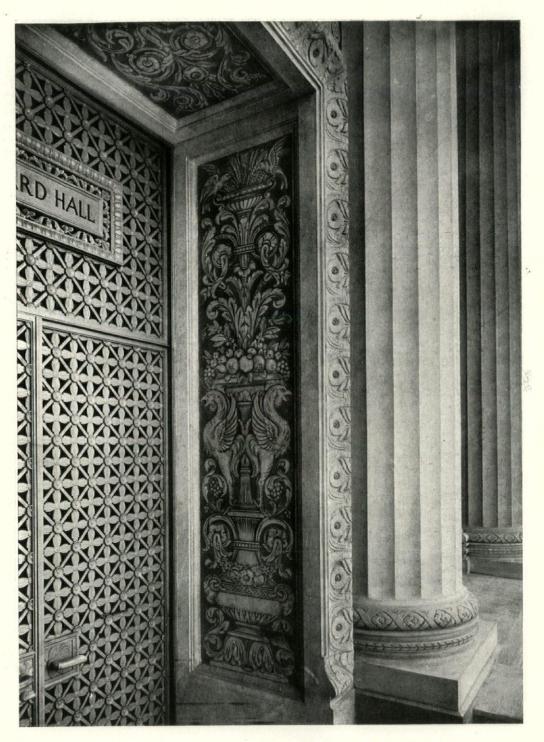


HILGARD HALL, UNIVERSITY OF CALIFORNIA.

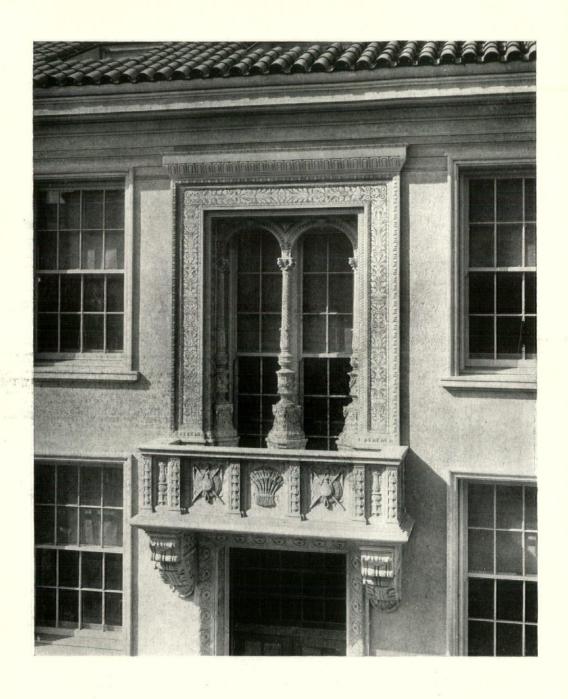
John Galen Howard, Architect.



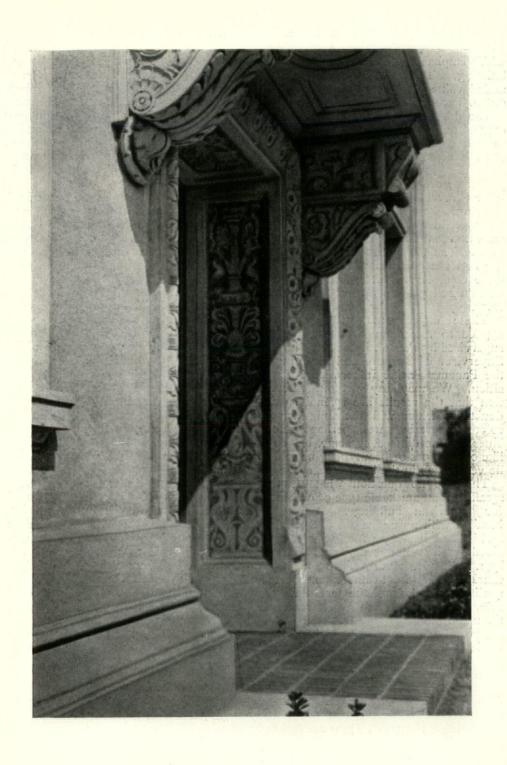
HILGARD HALL, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.



HILGARD HALL, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.



HILGARD HALL, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.



HILGARD HALL, UNIVERSITY OF CALIFORNIA. JOHN GALEN HOWARD, ARCHITECT.

which emphasize all vertical angles of the building. These features achieve an added value because of the pale gray stucco background offered by the walls.

The design of the sgraffito has been carried out on a variegated system of ground colors, against which the ornament is relieved in white. In the doorways the ground color is a pale neutral vellow or cream color; the same is true of all reveals and soffits. The main pilasters, borders and friezes executed in a Tuscan red ground color with a cream face color for the ornament. The ten symbolic panels appearing between columns were developed in three colors, gray interposed between a Tuscan red ground and a creamy face color.

These experiments in sgraffito as applied to American architecture were supervised by Paul E. Denivelle, who was Supervisor of Texture and Modeling at the Panama Pacific International Expo-We may say without reservation that the results are splendid. doubtedly critics will demand stronger colors in certain parts, perhaps strong blues will be desired by some, but color like other types of beauty may be said to. lie very much in the beholder's eye.

There is no question whatever that sgraffito is an amenable type of ornament for American buildings. It can be handled with no undue amount of effort and it has advantages for flat color combined with relief semblances equaled by no other medium. Above all it is characterized by firmness and mural quality derived from the fact that the color is an integral body color mixed in

the material used.

Several other experiments have been made in this direction; in New York we have in mind the Alexander shoe shop on Fifth Avenue, the building erected as the Astor Market on Broadway at Ninetyfifth street, a phonograph establishment on Forty-second street and the Booth and Shubert theatres. These are isolated

examples of a technique fraught with many possibilities. During the Renaissance in Italy this method of plaster decoration, consisting in effect of nothing more than the overlaying of thin coats of plaster of differing colors and of scratching through these coats to the desired depth to bring out the color wanted in a given place, found frequent application. Narrow streets, wall areas of considerable extent due to reduction of window space made necessary in the southern climate, all coupled with the Italian's inborn desire for movement and color, found a ready servant in the lively and responsive medium of sgraffito. Notable examples are the Palazzo Ricci and the Palazzo Torrigiano, both in Rome.

Other notable features in the ornament used in Hilgard Hall are seen especially in the treatment of the main doorway, where the symbolic use of floral and fruit forms blends well with the conventionalized motives used in the door frame. consoles and metal gates. Other entrances are surmounted by balconies and decorative window treatments reminding

one of the Certosa at Pavia.

Gilman Hall is likewise of stucco Both of these buildings differ from the others at the University of California, most of which are of marble. In Gilman Hall there is less opportunity for the skilful use of color; an Ionic order of Greek chastity is used. This building forms one short side of a minor group plan, which is to take the stereotyped square-sided figure eight shape, with two courtyards.

John Galen Howard, architect of the buildings of the University of California, is director of the College of Architecture at that institution. In the buildings with which they are constantly associated his students have inspiring examples to emulate, and in the high caliber and restrained processes of thought which these buildings illustrate they have unfailing guides to leadership in the architectural profes-

sion.

SUGGESTIONS & MODELS FOR ARCHITECTURAL RENDERING

The LITHOGRAPHIC WORK OF DAVID ROBERTS, 1796-1864

LEON V. SOLON

THE manner in which an architectural drawing is to be to use the professional term, "rendered" for the client's consideration involves a problem of increasing importance to the architect, one worthy of unbiased analytical study. Judgment and experience are unanimous in proclaiming analysis an inflexible process; candor, therefore, is an elementary necessity in stating a premise. Accuracy in the statement of our case compels us to admit reluctantly that professional interest in "rendering" proceeds from a commercial motive rather than from a disinterested desire for progress. A frank recognition of this fact calls for no apology; the time is surely ripe for discarding the foolish custom whereby the work of art is of necessity enveloped in a web of fictitious romance. Is it not also time to abolish the illogical prejudice that assumes art degraded by any association with methods practiced by the trader? This fallacy has been maintained in the face of direct contradictions recorded in the lives of many of the most famous masters, until it assumes almost the status of an article of faith.

Main Defects in the Average Rendering.

For a considerable period a mechanical type of rendering has prevailed; many well-conceived designs have suffered a heavy discount of appreciation through grossness of pictorial technique, and an intensely "bourgeois" treatment in composition. If a number of the average type be examined, they will reveal certain common defects, the most serious being the absence of any apparent intent to compose the subject, lack of

appreciation of the value of line-quality as an element in atmospheric effect and complete obliviousness to one of the most powerful resources available for conveying a pictorial or decorative impression—chiaroscuro.

THE COMMERCIAL VALUE OF RENDERING.

The "rendered" drawing might be likened to the prism; it is the instrument through which the fixed professional angle of the architect's perception is diverted to one appreciable by his client. Pictorial quality, existing independently of realism, is the most natural and direct agent for the transmission of an architectural conception to the lay mind, unaccustomed to think in terms of plan and elevation. The extent to which the client may be influenced by a skillful rendering is illustrated in the following incident. A prominent banker decided to erect new banking premises of considerable pretension. When the contract was awarded, a clause figured therein to the effect that if either architect or contractor submitted a perspective before the building had reached the second floor, such action would render the agreement with either void. The banker explained that in previous enterprises he had been unduly influenced by clever, colored perspectives, for which reason he excluded them as prejudicial to a free exercise of his judgment.

THE QUEST FOR MODELS OF TECHNIQUE.

Models are necessary for the guidance of those who desire to leave the beaten rut of mediocrity; the author consequently has explored many unfrequented paths in pictorial art in which the architectural subject constituted the motif, either by reason of its intrinsic beauty or because, through the picturesqueness of its surroundings, it became a source of pictorial inspiration.

In seeking a new fund of influence it is necessary to direct our attention to schools that had aims identical with or corresponding to our needs, or that possess those qualities we aspire to emulate.

The elementary basis of the "school" in the arts lies in specialization; this specialization concentrates on certain qualities, pre-eminently sensed. One group of painters, for instance, recognized as a school, indulges an intense affection for minute and precise statement; another cultivates breadth at the expense of detail; a third loves sensuousness of form more than voluptuousness of color; the next, sumptuousness of tone to the elimination of extreme refinement of form; and so on, through the range of qualities and beauties, intellectural and technical.

It is necessary, therefore, to designate those qualities that are, for the moment, essential to the "rendering," and find the school which possesses the greatest number in the most sympathetic form. If these essential qualities are technique in draughtsmanship, versatility in composition, and a command of the subtle and dramatic resources of chiaroscuro, applied to architectural subjects, certain members of the British school of painters and lithographers of the late eighteenth century and early nineteenth century stand forth pre-eminently endowed with what we seek.

Though many eloquent phrases have been written regarding the leaders of this school by writers as eminent as Ruskin, we are unable to accept their judgment concerning the relative values of each, for the reason that conclusions were arrived at through weighing other qualities than those we consider.

A long period of neglect has elapsed since Ruskin lauded their beauties, and it is not proposed here to give the endorsement of this master of prose as a credential of value. In the immature days of the author's studentship of painting, when youthful enthusiasm could not recognize merit apart from vogue, this particular school embodied all the opposites to the favorite creeds; it is interesting now to discover so many beauties in works formerly discriminated against.

For our present purpose we must commence by transferring the laurels of leadership, placed by his contemporaries on the brow of Prout, to that of David Roberts, whose works exhibit in the greatest degree that combination of qualities which our students of architectural technique and pictorial composition are most deficient in. It has frequently happened that a later generation, with corresponding sympathies and selective prejudices, reverses the arrangement of contemporary esthetic valuation.

Any object meriting the title of "work of art" is an aggregate of diverse intellectual elements; such works are generically classified according to the predominance of distinctive qualities or characteristics, imaginative or technical. creators of works so grouped were attracted to their common points of view, through an abnormal susceptibility to specific esthetic qualities, which controlled their instinct in selection. magnetic force, the genesis of the school, is only generated in individuals of strong personality, and is reacted to in their work after their various manners; the prevailing cachet of thought of their day adding yet another distinctive imprint to its character.

It is precisely the change of these prevailing modes of thought, reflecting social conditions, which causes a later generation to rearrange the order of precedence determined by contemporaries. Though the esthetic aspirations of the generation reviving a point of view may coincide with those of the generation creating it, the appraisal of relative values is often as much influenced by extraneous considerations as by intrinsic merit, all these indeterminate and unstable qualities giving varying totals in their combination.

The main argument for placing Roberts in the foremost place is that he most successfully combines those contrasting qualities so essential to our idea of an adequate architectural rendering—precision in the general statement of

raggedness is affected, with the object of augmenting romance by exaggerating decay. This was a reflection of the intellectual attitude of his day, which preferred to consider in an architectural masterpiece the hoariness of its age



GATEWAY AT CORDOVA.

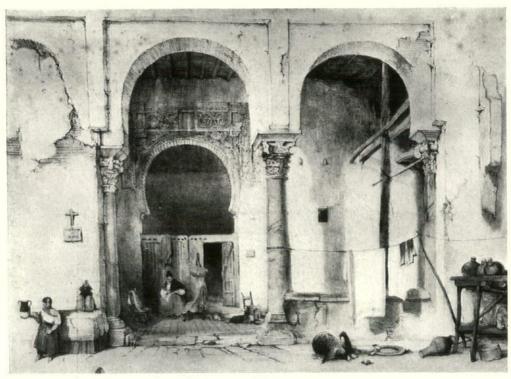
form and mass, and freedom in its graphic transcription.

The foible of our day is for poetic versions of mathematical calculations, any license being welcome that leaves our facts intact. Our predilection for accurate information impels us to reject the Prout technique. In Prout's treatment of architectural detail a conventional

rather than the indestructibility of its beauty; for Prout antiquity appears to be synonymous with disintegration.

DAVID ROBERTS' WORK IN LITHOG-RAPHY.

Incidents in the life of David Roberts, such as his record as an exhibitor, admission to various art societies, his successes, and his travels, must perforce be eliminated from a brief appreciation of peculiar qualities in his work, which aims to stimulate interest in his technique rather than curiosity concerning his personality. He was born in Stockbridge, undue extent as a means to that end. An anecdote is handed down at his expense, which recounts that on one occasion Roberts was expatiating on the merits of this favorite pigment, saying: "It is the finest color out; it will stand damp,



LOGGIA.

Edinburgh, in 1796, and died in the year 1864. His father was a shoemaker, and apprenticed him to a housedecorator and painter for seven years. In 1822 he went to London, where he worked as a scene-painter while pursuing his career as a landscape painter. As a painter he acquired considerable reputation, being finally elected Royal Academician. The record of prices paid for his work at exhibitions proves that esthetic appreciation was supplemented by financial success.

As a painter he was much influenced by Turner and other members of that school in their endeavor to realize atmospheric quality in landscape, causing him occasionally to make use of cobalt to an gas, or cleaning; there's nothing like it." C. R. Leslie, the painter, who was one of the group present, retorted: "I will tell you one thing it won't stand—it won't stand looking at."

P. G. Hamerton, the British art critic, was evidently not a believer in the recurrence of esthetic influences as a general rule. He wrote of Roberts in

the "Portfolio" in 1887:

"As an artist David Roberts shone rather by the quality than by the extent of his powers. He composed well. His sense of architectural detail was fine and his drawing of detail suggestive. At the present moment Roberts is out of fashion, and it is not likely he will ever come in again. But the sterling quality

of his work will always preserve his name from oblivion."

There is practically no direct information concerning his lithographic work, or of himself as a lithographer. Louis Haghe made the lithographs from his ner, but was quite content to translate it all into "Haghe."

In the lithographs of Roberts' sketches in Spain, we find the Roberts manner and technique in its full force, delicacy and distinction, the antithesis of the



CHURCH OF SAN JACO.

studies and drawings in the Holy Land and Syria. Haghe's work can be identified in innumerable proofs; it is untemperamental in the extreme, and his proofs savor of transcription devoid of sympathy. He made no attempt apparently to reproduce or reflect the pecul- with the manner in which his drawings

Haghe formula. Signatures on such works are superfluous; his personality shines out of every tint and line. The only reference to his work in stone is recorded in connection with this work. It states that Roberts was so disgusted iarities of his model's technique or man- had been done on stone that he remade

the work himself, a fact needing no corroboration outside the work itself.

In these admirable impressions, the richness and delicacy of tone bespeak the painter, and a wonderful range in flexibility of touch reveals the habit of one

publication of his lithographic drawings entitled "Sketches in Spain." Black ink is used to print the key-plate of all. The impressions are taken upon a smooth, heavy paper. A preparatory ground of yellow other is printed to enable Roberts



THE GATE OF ALCAIA, MADRID.

skilled in the passage of light in pigment. No trace is to be found of the conventional manner of Haghe and his contemporary workers on stone, whose ponderous technique so often reduces graphic poems in light and tone to uniform statements in lithographic formula.

His departure from contemporary convention shows us work in which ignorance of mechanical methods is compensated for by a breadth of view and skill of hand acquired in higher walks of art. We feel that he commanded a "vista" denied his brother craftsmen in lithography, and that he possessed a temperament of such pliability that unfamiliarity with a medium could not dwarf his sense of space and scale.

Ingredients of Effect Adopted by David Roberts.

Our illustrations are all taken from a

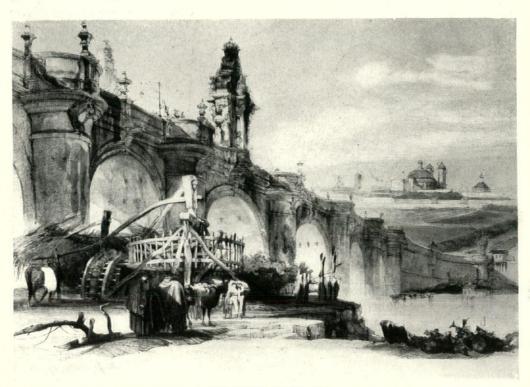
to make use of white; this he employs to focus interest in a characteristic manner. Touches of other colors are sparingly used to enrich secondary detail and accessories.

GATEWAY AT CORDOVA.

An excellent example of the manner in which he manipulates light, shade and tone to attain an imaginary or artificial pictorial result is the rendering of the gateway at Cordova. The focal point, or centre of composition, is placed on the left of the picture, comprising the near columns and the adjoining small house. The entire scheme converges on this centre of interest, accentuated by the use of white. Tone adjustment is deliberately contrived, with a calculation which might be open to the imputation of theatrical intention. The deep tone enveloping the near entablature has no other reason for

its presence than to serve as a foil to the focal point, regardless of realistic aims. His figures are so skillfully scattered that their function of bridging over lapses in architectural interest is not apparent at first sight.

to their translucency. A comparison of a number of Roberts' compositions reveals his antipathy to an unbroken base line in foreground buildings. The figures, animals and household accessories are so arranged that the curved



THE BRIDGE AT TOLEDO.

Loggia.

This example reveals Roberts' keen architectural sense by the manner in which structural detail is rendered and suggested. The carving over the Moorish arch, the caps and bases are interpreted with the greatest freedom, but with such understanding and truthful effect that it is possible to recognize and identify the minutest detail. He evidently considered the masses of shadow in the building itself awkwardly placed; he consequently carried the deep tone of the shadows through the picture by introducing the sombrely clad child on the left, and the group of dark earthen vessels on the right. The granular texture of the cast shadows adds much

line on which they are grouped breaks the horizontal base line, which might otherwise have tended to separate the subject from the immediate foreground.

CHURCH OF SAN JACO.

The white color which is used to focus interest is more apparent in this cut than in the original, the ochre yellow on which it is applied in the lithograph being in less violent contrast than the gray halftone. The manner in which it has been used and its purpose are worthy of study and note. Many recent renderings of Gothic façades defeat their object by a mechanically uniform distribution of interest; to concentrate, Roberts chose to draw the eye with his "spot-light" method to a comparatively limited area, correspond-



MARKET PLACE, CARMONA.

ing to the radius which would be covered by the eye in one phase of attention or observation, were we studying the building itself. While the remainder of his subject is subordinate, it is executed with conscience, much suggestion and data being conveyed with the freest of line.

THE BRIDGE AT TOLEDO.

We might suspect Roberts in this drawing of seeking difficulties to exhibit his versatility in overcoming them. He has chosen a top-heavy subject, and stabilized it by the picturesque grouping and powerful lighting of the foreground These also mask the lack of indetails. terest around the pier bases. His use of reflected lights from the river softens and breaks up the massive slanting silhouette of the bridge overhead. Great liberities have apparently been taken with nature's habit of reflecting light on planes at given angles; he missed no opportunity of demonstrating one of his strong convictions—that nature should act as

the servant of the artist, not as his master.

THE GATE OF ALCAIA, MADRID.

The great shadow projected across the left of the arch is a typical example of a license he claimed to attain pictorial advantage. Recourse to this particular means was popular with his contemporaries. Prout in his instructions on landscape painting enlarges upon its advantages and justifies the use of shadows for the concentration of interest in any part of the composition, on the ground that a passing cloud before the sun might account for any shadow mass the artist could desire. Here again we find the base intersection concealed by serried masses of cattle and human beings. The distant town seen through the arches is rendered with great delicacy.

MARKET PLACE, CARMONA.

Color figures here to a greater extent than usual in his lithographs, but there is no attempt at a solid treatment, and no pretense to convey any realism; it is pure illumination. Roofs are tinted to a light reddish tone; delicate and minute touches of brilliant color enliven costumes and trappings. The figures are indicated with great spirit.

THE FORTRESS OF THE ALHAMBRA.

Were this lithograph better known, it might be awarded a place among masterpieces. An incredible sense of vastness is conveyed by subtlety of tone, though, curiously enough, it is deficient in that atmospheric quality which we associate with remote horizons. The proofs possess qualities which are not transmissible in any medium but lithography, and which no process of mechan-

ical reproduction can retail to us; the photograph and the halftone are totally. inadequate and very disappointing to one who has studied the originals at the New York or the Avery library, where excellent impressions may be seen. In this great composition, realism has paid handsome tribute to pictorial effect; a dramatic moment of nature is recorded in its velvety tones. The power of this work should shake the faith of those who regard nature as the final court of appeal. It is the poet's conception of a grandiose subject, through which the painter scatters rays of sunlight like jewels, with lavish hand.



THE FORTRESS OF THE ALHAMBRA.



FIREPLACE WITH OVERMANTEL IN HALL—EXETER COLLEGE, OXFORD. MODERN JACOBEAN.

English Architectural Decoration Text and Measured Drawings by Albert E. Bullock

Part X.-Overmantels and Mirrors

AVING dealt with various types of chimneypieces in the last two articles, some account and description of overmantels and mirrors will

doubtless prove of interest.

The transition between late seventeenth and early eighteenth century mantels appears to be exemplified in the illustration of an example from an old house at Hertford, which will be noticed to have a heavily molded architrave; the frieze is ornamented at the extreme ends and in the centre, and the cornice has carved acanthus leaf similar to the bed molds of the main cornices to rooms

of the preceding era.

In Jacobean times the overmantel was designed with and formed part of the chimneypiece, which was invariably made the full height of the room when paneled, or to the frieze level when plastered above the capping. These fireplaces were frequently of two orders, superincumbent, having single, double or triple columns supporting the entablature to the overmantel or upper portion, with one exception, viz., the Jerusalem Chamber, Westminster Abbey, which has three orders in the tier, the whole chimneypiece being carved in cedar, a very exceptional wood to use at this time when oak, stone and marble were the most usual materials in vogue. At Hatfield House, marble is the chief medium, having polished insets of precious marbles in jewel formation, while instances exist of stone architraves, lintels and friezes combined with oak carved overmantels, as at the old Palace of Bromley-by-Bow.

During the reign of Charles I this principle of combining the overmantel with the fire mantel still obtained, as at Wilton and many other edifices designed by Inigo Jones. John Webb seems to have adopted the lower order in several

instances, while in the Wren period panels and carved frames were often resorted to with the object of providing space for oil paintings.

Mirrors were not adopted to any extent until the end of the seventeenth cen-

tent until the end of the seventeenth century, the beveled crown glass being distinct from the modern British rolled plate in two particulars—namely, the obtuse angle of the level in old examples and the irregularity of the thickness of the

sheet due to spinning.

The illustrations given show a Chippendale period room from Sudbury, Suffolk; a small pier mirror of the Chippendale era compared with a walnut and gilt mirror of late William and Mary or Queen Anne period and an Italian type of mirror. The negligé character of the two smaller mirrors compare favorably with the stateliness of the gilt walnut example, which at this early date (post 1700) exhibits the French influence in the carved border members. This originated with Jean Baptiste Pineau (1652-1715) who, with Boffrand and de Cotte, created the style Régence at Versailles. The style is sumptuously shown in the beautiful wood carving of the Petit Salon at the Château de Rambouillet. Had the English Joiners, in following this style, not been satisfied with the few details they represented ad nauseum, they could have developed a much more lasting style with a flow of invention as generous as is exhibited at the Salon de la Princesse Soubèse.

Very bold carving obtained during the reign of Charles II and until the middle of the eighteenth century when the Chippendale era flourished, after which a quieter tone prevailed with the Adam Brothers, for whom the younger Chippendale worked in conjunction with Pergolesi, C. Richardson, the designer, and

various marble and stucco workers, including Rose, Spang and Van Gelder.

The mirrors of the late seventeenth century were not always beveled, although beveling of clear glass for windows was adopted both at Hampton Court Palace and Chatsworth.

Owing to the early glass being spun and not cast or rolled, as at present, irregularities of the surface are more patent by which it can be detected, being a criterion for its originality, but the silvering, suffering from age and damp, will frequently be found to have been renewed.

Many of the early frame carvings were intended for oil paintings, but were converted into mirrors subsequently, the transformation of the inset enhancing the value of the carving. A variety of treatments were attempted besides gilding. Tortoise shell and mahogany; walnut with gilt moldings; dark carved oak; ornamental glass framing of Venetian type, and, in the Adam era, the convex circular mirrors invariably had an ebony hued inner molding edging the mirror to throw up the large gilt molding forming the frame.

Large sizes in glass not always being obtainable, the joiner had recourse to the subterfuge of subdividing the horizonal mirrors or putting an openwork edging and glazing around the main glass in smaller pieces. This naturally led to the introduction of colored glass at the edges in some instances, which, however, was of short life.

The process of inlaying the overmantel panels in geometrical designs and star patterns occurred in the latter half of the seventeenth century and is a feature of some of Watson's work at Chatsworth. The carvings upon the surround were thus subservient to the ornamental flush interior treatment of the panel surface.

The method of giving a texture to a plain surface in wood was of Jacobean origin and is to be seen in the panels of the Sizergh Castle Room from Westmoreland, where several different veneer hardwoods are employed in the inlay. Even the columns to chimneypiece overmantels of this period occasionally exhibit

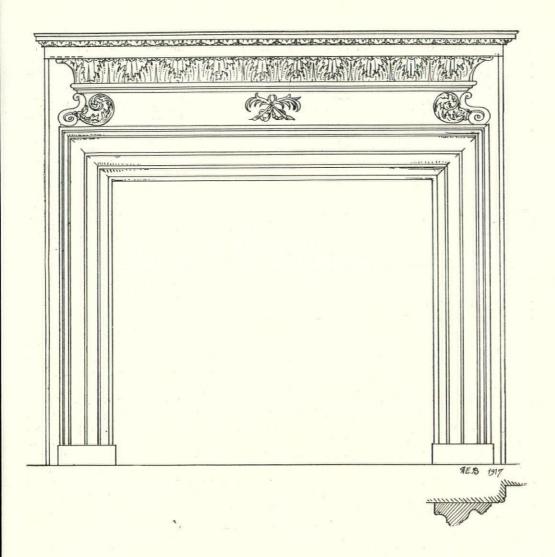
spiral designs, being made up of closely compressed hard wood shavings, which when polished are very effective.

With James Gibbs a high grade of carving developed for interiors and considerable skill was displayed in the disposition of ornament to mantels, over doors, etc., with carved cartouches of the character of the Rysbrack sculpture.

Most of the architects of the eighteenth century designed mural tablets and cenotaphs for various churches and cathedrals, of which Westminster Abbey is the happy possessor of some of the most famous examples. William Kent designed the framing for Scheemaker's "Shakespeare" in 1740; James Gibbs designed the monument to Katharine Bovey, which was probably carved by Rysbrack, the sculptor of the tomb to Matthew Prior in the Poets' Corner of Westminster Abbey. Read carved monuments for Robert Adam, whose style was followed by Richard Hayward, Bacon, Eckstein and others of contemporary date. Cheere favored the French motifs of Chippendale's time, which are not a little florid for a sacred edifice.

The principal architects of the century, in addition to those above mentioned, were Edward Tufnell, Hawksmoor, Ripley, Payne, Sir John Vanbrugh, Colin Campbell, Sir William Chambers and Sir John Soane, with many of the lesser lights who flourished in the provinces working upon the principles in vogue in their eras.

The artisans employed are not often recorded except where the accounts were kept of the more monumental buildings, as Chatsworth, Hampton Court Palace, etc. A joiner by the name of Gibbons was employed by Inigo Jones and Webb on staircases. Samuel Watson and his son spent forty years at Chatsworth with several assistants, working to the designs of William Talman, who had previously been associated with Sir Christopher Wren at Hampton Court Palace, where the fine work of Grinling Gibbons and his assistants, Selden and others, are so much in evidence. James Gibbs employed a carpenter and joiner named John Phillips at the Radcliffe Library.



Oxford, the two Townsends, Lionel and William Smith of Warwick, as masons and carvers, with the Italian plasterer Artari and the famous sculptor Michael Rysbrack, who had previously worked for William Kent.

By the middle of the century joinery became a prominent and artistic business, which increased in power and notoriety with each succeeding decade. We have at any rate more detailed information of the ability of the artisans from articles which remain and the published works of current practice, with some records of the personality of many of the more famous joiners who based their work upon the fine walnut type of the William and Mary period.

The influence of the work of Sir John Vanbrugh had a very definite result, as had the building of Montagu House, which was decorated by Monnoyer and Rousseau under the direction of de la Fosse. The publication of designs by Daniel Marot, who had worked with Bérain for André Charles Boule, the work of the Caffieri family, the Adam family and many others of Louis XIV's time, all tended to inculcate fresh ideas

to the art of the age.

Chippendale was naturally influenced by the Continental movement, as well as by the publications of the many volumes of designs and ornament by Cauvet, Marot and several English works, which induced him to publish the "Gentleman and Cabinet Makers' Director," when Edwards and Darley brought out their "Chipaga Daginer" in 1754

"Chinese Designs" in 1754.

The severity of the style adopted during the reign of George II did not appeal to Chippendale, who wanted freedom for his chisel, and saw his opportunity in a combination of Chinese with Louis XIV detail. The type of carving and design which will always be associated with him is exemplified by a drawing I have made from a rough sketch of a mirror from Highgate and the photograph of a fine mirror from Aston Hall, Birmingham. Were it not for the brackets and certain French elements I would place this latter example as pre-Chippendale, it has almost a William and Mary touch. Com-

pare this with the carved mahogany frame from the Woodwork Section of the Victoria and Albert Museum, and it will be noticed that the example is of a much bolder nature, and, being in mahogany, would be later, since walnut was the chief medium of Chippendale. There is another example of fine carved scroll work recently in my possession, which is, I believe, in oak, but of very dark hue, almost black in appearance. It is difficult to date, but is somewhat characteristic of the late Wren period.

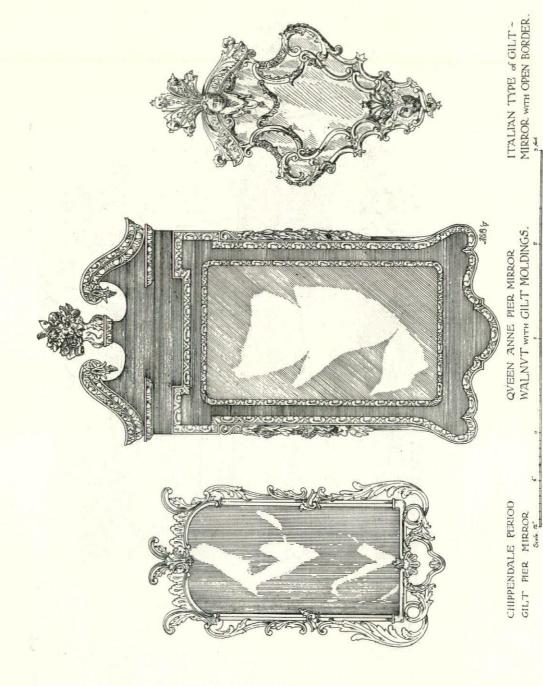
With the Adam work, as has already been indicated, mirrors took various forms, and the modern copyists are legion, because with slight modification they are very adaptable to light drawing room decorations, being circular with convex mirror, oval and rectangular, some of the latter shape having glazed paneled borders. The tops are usually ornamented with carving of Grecian or Egyptian period ornament, of which the favorite motifs were sphinxes, lions, eagles and rams' heads, these being easily

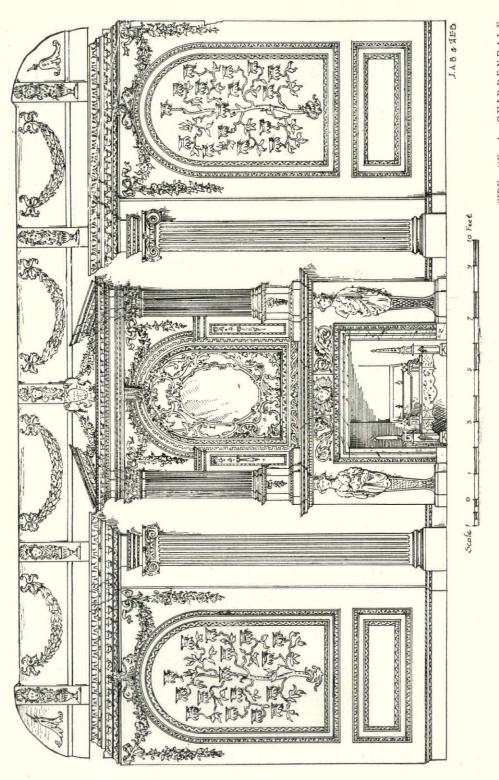
stereotyped. Modern copies of triple oval form joined together by festoons of beads or husk ornament, the centre oval being the largest of the three, are not uncommon. Early Tudor examples were small, with a glass hardly exceeding a foot by nine inches, with wide needlework bordered surround in a narrow tortoiseshell frame. The Georgian examples were usually gilt, with pilasters and pediments-that is to say of George II's time. Between this period and the Chippendale era there were variations of oblong mirrors subdivided into three or more panels, sometimes having a painting in the top half with the subdivided beveled mirrors below, the frame being of gilt wood with angles broken and mitered to take rosettes at the corners. In these examples the scallop shell was not an unusual feature and the top was frequently treated with carved ornament.

With Adam examples the addition of bracket candle holders became a common practice where sconces were not used, the light being reflected by the mirror. These were very tastefully designed, but often

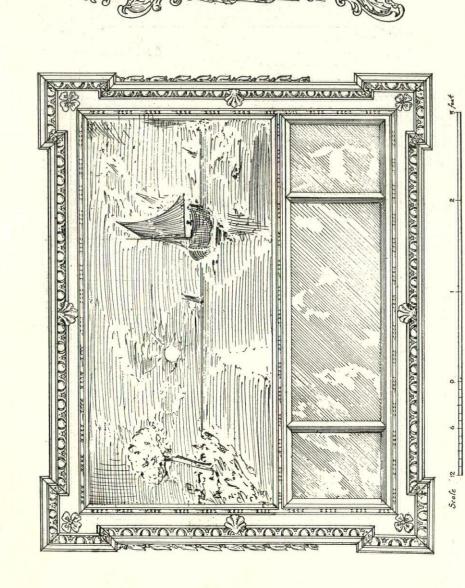


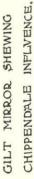
GILT CHIPPENDALE MIRROR (HIGHGATE), SIX FEET SIX INCHES BY FOUR FEET THREE INCHES OVER ALL. ABOUT 1750.





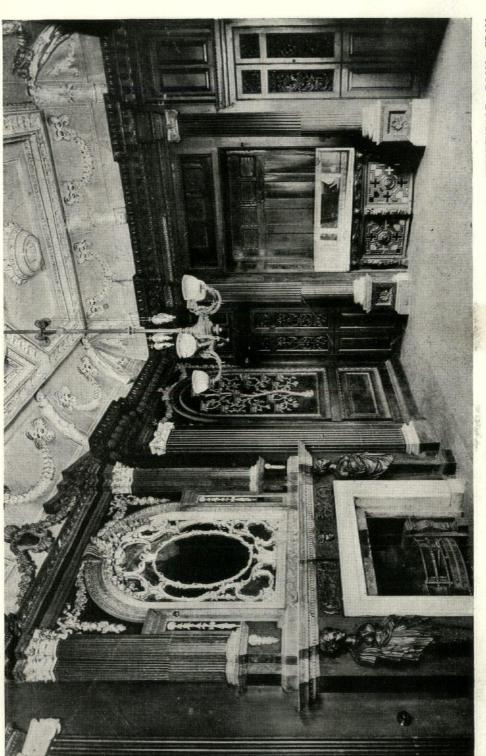
SIDE OF A CHIPPENDALE ROOM FROM SUDBURY, SUFFOLK.



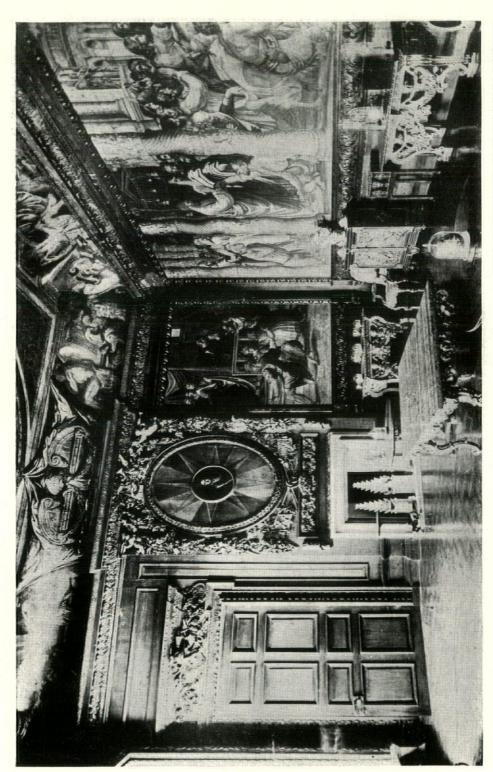


MID - GEORGIAN CARVED & GILT

WOOD COMBINATION MIRROR



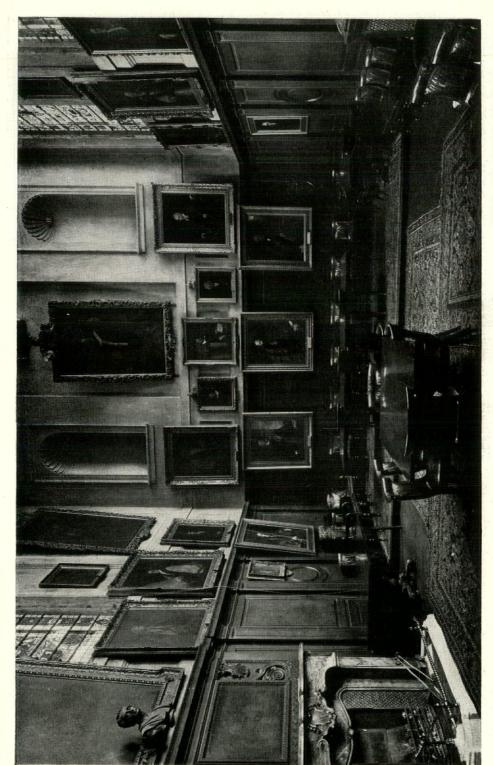
CHIPPENDALE ROOM FROM SUDBURY. NOW IN AMERICA.



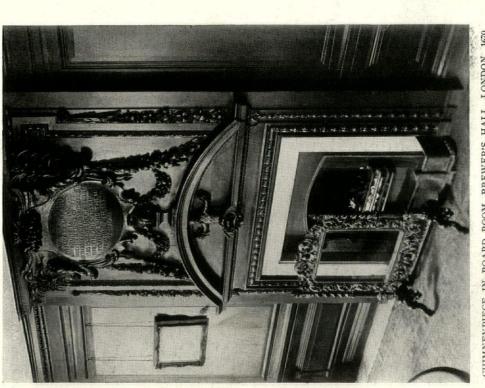
OVAL OVERMANTEL IN STATE ROOM AT CHATS-WORTH, SEAT OF THE DUKE OF DEVONSHIRE.



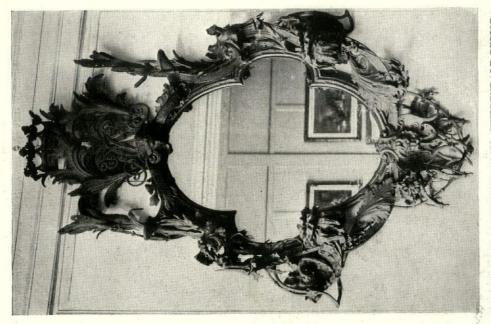
MID-EIGHTEENTH CENTURY PINE ROOM, SHOWING GEORGIAN MIRROR WITH CONVENTIONAL PRINCE OF WALES FEATHERS AS CREST, QUEEN ANNE PERIOD INFLUENCE.



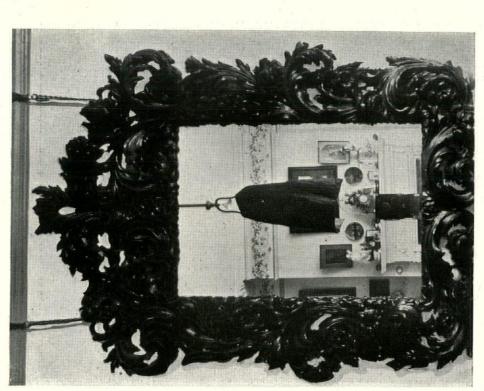
HALL-ALL SOULS COLLEGE, OXFORD, SHOWING CARVED PICTURE FRAMES



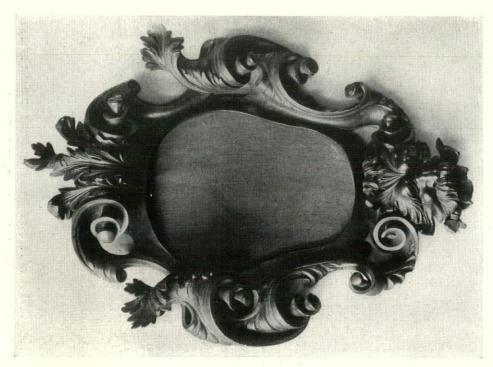
CHIMNEYPIECE IN BOARD ROOM-BREWER'S HALL, LONDON, 1670



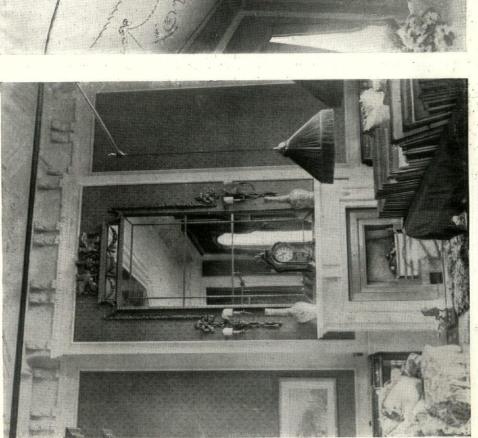
MIRROR IN DR. JOHNSON'S ROOM, CHIPPENDALE PERIOD—ASTON HALL, BIRMINGHAM.



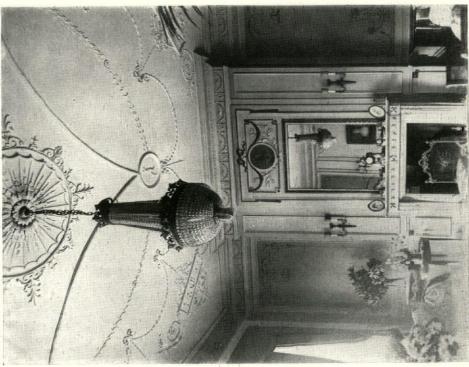
CARVED OAK MIRROR OF WREN TYPE. RECENTLY IN MR. BULLOCK'S POSSESSION.



CARVED MAHOGANY FRAME IN VICTORIA AND ALBERT MUSEUM. Photo by C. Ford Glover.



TYPE OF ADAM PERIOD MIRROR. Photo lent by Mr. I. Goodison.



MODERN ANGLO-FRENCH TYPE OF DECORATION.

of too delicate construction to be permanent. The designers of the period spent much time and ingenuity in the development and manufacture of brass and silver plated candlesticks or ornamental sconces and candelabra of wood and metal, the former frequently being painted in green and gold tints or colors. For these lights the tallow chandlers cast ornamental wax candles in special molds, which must have been very effective, even if the light was dim as compared with modern usage.

The modeling of Pergolesi was less formal than the sterner Grecian manner of pure Adam work, although the main lines followed the general theme of this period. He was more lavish with his floral embellishments, which possess a naturalistic character in the leafage attached to the scroll work, the effect being both graceful and decorative.

During the reign of Charles II until the advent of James II carving was free and bold, of designs frequently descriptive of definite objects concerned with the building or room so treated. This is especially noticeable in the halls and board rooms of the Livery Companies of London. For instance, in the Brewers' Hall, Addle Street, in the City of London, the hall screen is surmounted by amorini astride beer barrels, while in the

board room the chimneypiece and over-

mantel have hops, wheat and sheaves in-

troduced into the detail of the carved or-

nament. The carving of the fire screen is seen in the photograph to be of bold character and of tasteful design.

A similar idea is exhibited in the Weavers' Hall at Exeter, where the various tools and instruments used in the processes are carved in the oak paneling. This principle has an historical value quite apart from the archeological interest it gives, and forms an original basis of operation for the designer.

Fire screens were occasionally included within the purview of the joiners providing the wainscoting, in which case some very fine examples are to be seen.

Where mirrors and frames were not provided plaster relief plaques were usual and were employed by the Adam Brothers, Richardson and others. They were not necessarily connected to the mantelpiece, but were frequently part of the general decorative scheme of the room.

Tastefully designed mirrors, whether placed centrally over the fireplace, used as pier glasses, or embodied in the framing of a door to obtain vistas through a series of rooms, rarely fail to enhance the general effect of an apartment, adding a lustre and brightness befitting a well designed interior. They reflect the pattern of the ceiling, the furniture and walls, and by their peculiar virtue reduce the scale to a proportionate value that is coincident with the dimensions of the room.

The ARTISTIC TREATMENT OF CONCRETE SURFACES*

By

H VANDERVOORT WALSH

ONCRETE is coming into its own as an all around building material. Its progress to this point has been slow, for it was considered to be a purely structural material, too ugly to leave uncovered. Since the days of the Romans it has been used for mass work. but under cover of some other material that hid its grey, monotonous surface. Far more attention has been given to the development of the structural strength of concrete than to its artistic surface treatment, because it was taken for granted that it was hopelessly ugly. The engineer has devoted much time to reinforced concrete, but the architect has not given the same attention to its possible finishes.

It is not difficult to see why this indifference has been shown towards the development of the artistic use of concrete, for the average concrete wall that remains uncovered presents a surface without texture or color. When the forms are removed from concrete, the surface bears their imprint, and if they were made of rough boards, the concrete has the appearance of a poorly constructed fence, painted with a dull grey, mudlike paint. On the other hand, if the surface has been troweled smooth, there is no texture or sparkle. It has in both cases a dull, pasty, dead surface. In time this develops hair-cracks into which the dirt of the air lodges, giving the realistic effect of dead skin. Often the surface is seen to peal away in thin scales as if it were suffering from some disease, and after each rain storm a very dark water stain develops as if it were bruised, although it may not have absorbed as much moisture as the ordinary wall of

brick or stone. Nor does it mellow with age, but crackles under the heat of time.

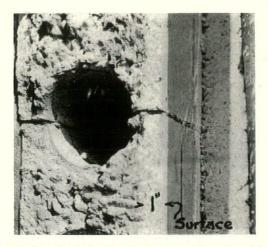
To the observing person this is no exaggeration. Particularly ugly have been the concrete blocks, manufactured by machines to resemble stones with quarry cut faces.

However, in recent years artificial stone makers have developed notably satisfactory methods of surfacing concrete. Under many commercial names concrete is now manufactured into building units of beauty, possessing much of the charm and appeal of our natural building stones; and the designer is in a position to obtain concrete surfaces as interesting as any, provided the principles back of the art are known.

W.

These principles may be classified into three distinct groups which are however intimately linked together. First of all, some mechanical means must be used to produce variety of texture, either by making a surface which is pitted to give valley shadows and peaks of high-lights, or by securing the same effect with a peppering of light and dark aggregates. Secondly, the color must avoid the dead greys by using whites, creams or rich warm tones, eliminating all colors which give a dry, thirsty appearance to the Thirdly, the surface must be damp-proof or colored in such a way that rain water will not make large patches of dark, damp stains.

The mechanical operations necessary are varied, but certain well tried processes can be followed for securing original effects. The earliest and best known treatments for producing surface texture are those which have been developed as applied coatings. The concrete is molded



Economy Is Secured by Casting the Surface Material As an Integral Part of the Block.

in the usual way, and then a stucco is spread over the top of it in which texture is developed by pitting, casting and dashing. Many beautiful effects are possible with these treatments, but they are not the true solutions. The right method is in its infancy, and consists in securing texture and color by exposing the beauty of the aggregate with which the concrete has been made by removing the surface skin deposited from the forms.

The first class of surface treatments includes stippling, sand-floating, sand-spraying, rough-casting, pebble-dashing and mosaic inlaying. All of these secure texture by application of stucco over the surface left by the forms and may be called the "over-coat" methods. The first four secure texture by some means

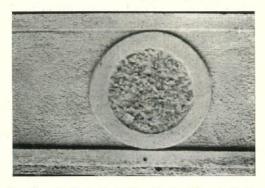


An Over-Coat Finish Called Sand-Sprayed. It Gives a Finer Texture Than Rough-Casting.

of roughening the surface into pits and peaks. The last two secure texture by impressing aggregates into the surface or by peppering the same with dark and light aggregates.

The stippled surface is made by applying a coat of stucco to the concrete and then roughening it with pats from a brush of broom straw. The texture secured is but a slight improvement over the smooth, trowelled one, and is very monotonous when viewed from a distance, especially when gray cement is used. White cement and white sand improve the appearance greatly, since the shadows of the rough pits and the highlights of the projections are in more contrast.

The sand-float finish is not much better, but it is another mechanical method of securing a fine texture which appears best



Interior of Circle Is Pebble Dash; Rim of Circle Troweled and Body Surface Sand-Floated.

when light stucco is used. The applied stucco is rubbed with a wooden float in a circular motion, and sand is spattered under it to give a roughening action.

The sand-sprayed finish is the thinnest treatment. Over the surface of the concrete, which should be green from the molds, is spattered, with a whisk broom, a creamy mixture of cement and white sand. This should be mixed fresh every thirty minutes and kept well stirred. However, even this may develop a monotonous appearance, since a thin film of cement covers the sand particles and hides any sparkle from them.

The rough-coat surfacing is the most rugged of all, and presents a great vari-

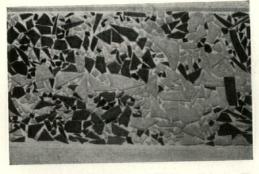


An Over-Coat Finish Called Rough-Casting, Which Gives the Coarsest Texture.

ety of heavy spots of shade and light. This can bear the use of grey cement the best, but the effect is enhanced by the use of white cement. A mixture of one part of cement to two parts of sand is thrown on by hand against the wall. If great care is not observed, a patchy appearance may result by having certain areas very rough and others compara-

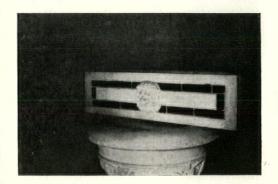
tively smooth.

The pebble dash finish secures variety of color with variety of texture, and is the most pleasing of the "over-coat" methods of concrete surfacing. Pebbles or chipped aggregate varying in size from one-quarter to one-half inch are wetted and thrown forcibly against the troweled coating of stucco. It makes possible the use of great varieties of colored aggregate. Those which have sparkling quartz particles or broken bits of crystalline marble or black pieces of slag or other brilliant materials produce the most pleas-



Mosaic Inlay With Glass of Various Colors. The Surface Is Plane, White Cement Filling the Crevices Between the Pieces of Glass.

ing results. Such aggregates reflect the sunshine in sparkling points of light and give that life to the surface which we admire so much in nature's products, especially in the granites and marbles. The use in this country of a base coat of cement and sand into which the pebbles are thrown is not nearly so satisfactory as the use of a base of neat white cement. This is the English practice and when the aggregate is thrown into this pure cement it will stick as long as the wall stands, while the use of a sand mortar as a base does not offer the same power of adhesion, resulting in patchy work. Some workmen pat the pebbles with a wooden paddle into the base, after they have been thrown on. This gives the most durable surface. However, this finish requires



Tile Mosaic Inlay.

skill, for the average workman will not spread the pebbles evenly over the surface.

The mosaic-inlay is practically the same, only the materials impressed into the cement base are arranged with individual care. It is best suited to some design or panel decoration. Colored tile, broken colored glass, glass beads and materials of this character are used to great effect. It is surprising what beautiful effects broken bottle glass will produce, if it is handled with taste. Children's colored beads, when imbedded to a flush surface, make a wonderfully intricate texture. The great secret of success lies in keeping the surface absolutely plane, with all crevices between particles filled in flush with white cement,

However, the most effective results in concrete surfacing are obtained by the second class of treatments in which the skin of the surface is removed mechanical some means, exposing the texture of the aggregates of which the concrete is When the forms made. are removed from concrete, the surface is covered with a thin film of cement, and if there are any sparkling aggregates used in its make-up, they will be invisible under this skin. It is this film which

gives the dull, gray, lifeless effect to concrete, and it is also in this skin that the ugly hair-cracks develop. When it is removed the true beauty the concrete is exposed. mixing selected aggregates, as marbles, granites, pebbles and glass in the concrete, they can be exposed to the surface by scrubbing, spraying, cutting with stone cutting tools and machines. concrete may be made of the usual grey cement and cheap aggregate, but in the casting the selected mixture of surfacing material may be spread over the exterior in a thin layer of one inch. However,

this is more a point of economy than one of sur-

facing.

To finish by scrubbing, the concrete sould be allowed to set for at least twenty-four hours. Then with water and a stiff brush, the film of cement can be scrubbed off, exposing the aggregate in all its beauty. If the cement in any one part is too hard, it can be removed by a solution of one part muriatic acid and four parts water, provided that this is carefully washed afterwards.



Surface Background Consists of Children's Beads Imbedded Flush With the Surface.

this class, but it has many advantages. the aggregate is to clean the concrete with a fine spray such as the fruit growers use. This should be done immediately after removing the forms, but it requires skill to prevent

> However, the best effects are obtained when some type of stone cutting tool is used. The concrete is cast in the

treatment is the crudest of

Another way to expose

the softening of the sur-

face by too much water. A very beautiful mottled

effect is secured in this

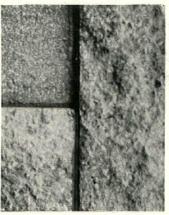
usual way, and when it is removed from the molds the skin is removed by finishing it with the tools that are employed

by the stone cutter.

One of the most beautiful effects obtainable is to cast white cement with white marble aggregate into blocks and then, when these are still in the green state, pitch off the face exactly as is done in giving a quarry face to a natural The split of the concrete will follow the most sparkling lines of the imbedded aggregate and an appearance rivaling the best stone is produced.

Another surface great charm is secured by the pointer. With a pneumatic hammer behind this tool, the surface can be gone over quickly. results are quite beyond description in photographs, for there are few stones which present a finer appearance, if the aggregate has been carefully selected.

The use of the tooth chisel, the bush chisel and the cross chisel operated in the pneumatic hammer make other varieties of surfaces



Corner Blocks Are Finished in the Same Way That Stones Are Quarry Faced. The Others Are Finished With the Pointer.

which have their own characteristics. Concrete can also be treated with revolving drums of carborundum to wear off the surface skin.

With the right kind of hard crystalline aggregate, concrete can be polished by the methods used for stones. When this is done, no colors should be used. for they darken too much under the action of the polisher.

In all of these treatments the operation of cutting the surface is comparatively simple, since it is done before the concrete has become entirely hardened.

although the harder it is, the more brilliant will be the surface produced by the cutting tools. Another great advantage lies in the fact that if any corner or part is broken off, the use of a patch will mend it without weakening its durability. Economy of modeling is another feature, for designs which ordinarily must be cut from blocks of stone are easily cast in concrete. and the only tooling required is for

the surface. Designs of extreme cost for cut stone, such as perforated balustrades, can be produced at comparatively

low cost in concrete.

Next to texture comes the coloring of concrete. Nature has provided us with great varieties of colored granites, marbles, sandstones and gravel which make excellent aggregate for coloring. In fact the coloring of the concrete by aggregates is the most durable method. Beautiful pink, red, yellow and dark green granites can be had from the waste products of the granite quarries. Marble waste can be secured in vellow, green, red, pink, white and multi-colors. Sandstones can be had in buffs and reds. Gravels run in blacks, yellows and whites. By a careful combination of white marble, black slag and grey cement a very perfect imitation of granite can be made, in fact such a granite is made by one firm selling its products all over the United

However, mineral colors can be secured which will offer resistance to time. They must be of the highest degree of purity. True mineral colors will stand the acid washing and action of cement and time. No colors should be used which leave water permanently tinted

when shaken up with it. It is best to use a mere trace of coloring matter, not only for durability but for appearance. White cement makes the best base for them. A limiting proportion, not exceeding six pounds of color to one hundred pounds of cement.

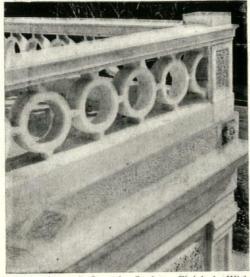
some aniline color.

is best. Another method of securing color is by absorption. After the cement has had several days to set, it may be stained with

sulphate of copper or iron. A penetration of one thirty-second of an inch to one eighth of an inch is quite sufficient. A great number of experimental methods of color absorption have been made. One of the cleverest is to rub green grass over the cement to stain it to a time worn bit of antiquity.

Of course, there are opaque dampproof cement paints which can be applied, but these are bound to give the uninteresting texture which is to be avoided, since they add a skin and cover the life of the aggregate.

To prevent the usual staining of the surface by rain water, the concrete should be made very compact by carefully grad-

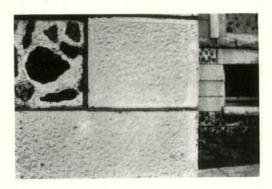


Combination of Smooth Surface Finished With Carborundum Blocks, Pointed Surface, Pebble Dash and Simple Casting Details.

THE ARCHITECTURAL RECORD.

ing the sand and aggregate. Some proprietary waterproofing compound may be added, or hydrated lime used, but all of these are of doubtful value. The very dry, porous mixtures used in the manufacture of concrete blocks, are more apt to show moisture than wetter mixtures. White cement, mixed with light colored

aggregates and tooled will not show any disagreeable water mark. On the other hand, grey concrete will appear darker when badly wet with rain. In sections of the country where little rain is prevalent the question of how to avoid staining from moisture is not of great importance.



An Excellent and a Poor Example of Concrete Finish.
The Corner Stones Are Finished With the Pointer
and Appear Well. The other Stones Have Aggregate
of Too Large Size Impressed Into Surface.

WORKINGMEN'S HOUSES IN ITALY



By Alfredo Melani

PART II

I N Rome there are two notable institutions which build workingmen's houses, namely, the Institute for Popular Homes and the Roman Real Estate Institute. The two differ greatly. The first belongs to that class of institutions created exclusively for the provision of workingmen's homes, while the Roman Real Estate Institute is interested in dwellings for the more prosperous elements of the population as well as in workingmen's houses. I shall not go into detail as to the better class of houses because they lie outside the scope of this study.

THE TESTACCIO QUARTER

Act 116, passed April 6, 1908, authorized the Cassa dei Depositi e Prestiti to make to the municipality of Rome a loan of ten million lire to be allocated to the Institute for Popular Homes. With that loan it was possible to begin the construction of houses in the Testaccio Quarter, which is not too far from the center of the city and is united to it by a tramway line.

The land belonged to the Italian Society for Real Estate Dealings, which sold it to the Institute for 10.80 lire per square meter. Construction was begun under the architect Giulio Magni.

Eleven large plots were sold to the Institute for a total of 6,363,212 lire. Each apartment consists of a hall, of one, two, three, or four rooms, and of a kitchen and a water closet. The houses contained 913 apartments, divided in the following manner:

| Apartments of | | | | | | | | N | Vumber | Per Ct. |
|---------------|-------|--|--|--|--|--|-----|---|--------|---------|
| 5 | rooms | | | | | | .*: | | 24 | 2.63 |
| | rooms | | | | | | | | | 36.56 |
| 3 | rooms | | | | | | | | 499 | 54.65 |
| 2 | rooms | | | | | | | | 58 | 6.36 |
| | | | | | | | | | | |

The two-room and three-room apartments, the ones most in demand, comprised 91.01 per cent. of the total number. The building area was utilized as follows:

Entrances, halls and water closets.

| | 92.00 sq. m. | 11.22% |
|-----------|---------------|---------|
| Stairways | | 6.41% |
| Rooms | 491.78 sq. m. | 59.95% |
| Walls | 184 72 sa m | 22 420% |

In "La Construction Moderne" of Paris, some years ago, I wrote in detail on the subject of the early constructions in the Testaccio Quarter. I shall speak now of the more recent constructions, Blocks 30, 32, 33, and 34, which show the best work done in Rome in workingmen's homes.

In planning these newer groups of houses, the cooperation of architects Pirani and Bellucci was obtained. The buildings, being varied as to both height and exterior design, avoid the monotony so common in long rows of workingmen's houses. The open spaces give plenty of air and light, the courtyards, with their green foliage, being large and well distributed.

The decoration is very simple. We realized that the people appreciate beauty. It is necessary, however, that art adapt itself to the needs of the people. I have often suggested in my books the abandoning of historic traditions in art to suit new and actual conditions. Other-

wise it will be impossible to have popular art. A home which, besides being convenient, offers a beautiful appearance is, of course, to be preferred; and it must also be remembered that an artistic house receives greater care from the tenant.

In the new buildings more thought has been given to the decoration than was given in the earlier ones, without however spending more; in fact, the expense is sometimes less, since the decoration is structural, embodied in the masonry of stone and brick.

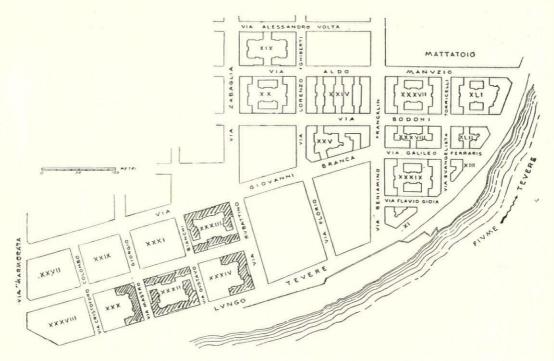
The cost of the decoration, including the travertine, terra cotta, brick, etc., amounts to 7.63 lire per square meter of the street façades and 2.24 lire on the other elevations.

In the buildings of Block 34, constructed in 1913, for which we used stucco decoration, the cost was 6.72 lire per square meter in the external perspectives, and 3.36 lire per square meter in the others.

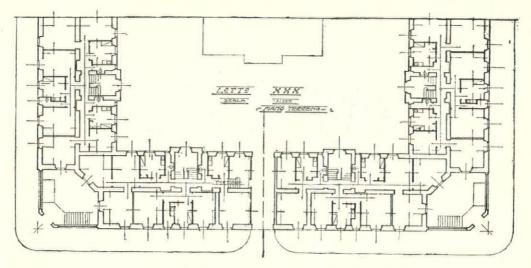
Every apartment has an independent entrance, with convenient, airy and well lighted stairways; each room has at least one window on the street. The outside windows are furnished with awnings. The kitchens and water closets have been much improved over those in the earlier houses. The kitchen chimney, made of cement and iron, does not take up much room and accommodates coal and gas stoves. The sinks are of red granite and cement, deep and surrounded by sheets of the same material; shelves in the wall serve as receptacles for dishes. Each apartment has running water and electric light.

There are many apartments of only two rooms and kitchen and some of only one room and kitchen. There are 395 apartments, of which ninety-nine have two rooms; 234, three rooms; fifty-eight, four rooms, and four, five rooms.

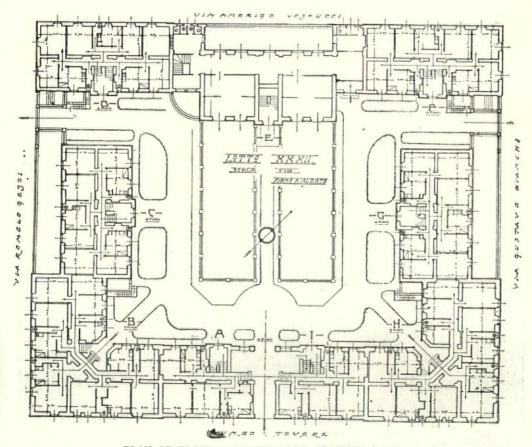
The depth of the foundations necessitated by the nature of the walls, induced us to excavate sufficiently to obtain basement rooms. These are high, well aired and well lighted, with street entrances independent of the apartments, and are



HOUSING DEVELOPMENT OF THE INSTITUTE FOR POPULAR HOMES IN THE TESTACCIO QUARTER, ROME, SHOWING RECENT CONSTRUCTIONS (BLOCKS 30, 32, 33 AND 34).



PLAN OF BLOCK 30 IN TESTACCIO QUARTER, ROME.

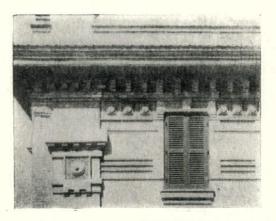


PLAN OF BLOCK 32 IN TESTACCIO QUARTER, ROME.





RECENT TENEMENTS IN TESTACCIO QUARTER, ROME, BUILT BY THE INSTITUTE FOR POPULAR HOMES.





rented as stores, shops, etc.

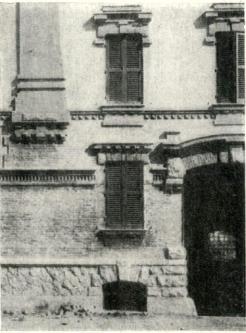
Laundry rooms are found on each floor, one for each stairway, and each tenant may use once a week two wash tubs. The drying rooms are on the adjacent roof and are convenient to the tenants. Children's rooms are on the ground floor, together with a school of domestic economy.

The walls and stairways represent twenty-eight per cent. of the covered area and the construction is economically perfect.

THE SAN SABA QUARTER.

This quarter is situated on a hill where stands the small, but interesting, Church of S. Saba, erected on the ruins of the house and, later, Oratory of S. Saba, mother of Gregory the Great. The institute, helped by the municipality, which sold the ground on very satisfactory terms, has built a Garden City, with beautiful, economical and convenient houses.

Difficulties were met with while excavating. At eight meters were found



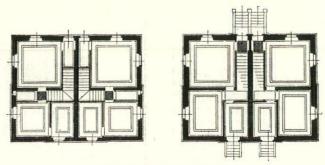
DECORATIVE DETAILS OF TENEMENTS IN TESTACCIO QUARTER.

large galleries of tufa, which caused an unexpected increase in the cost o f construction. The idea of twostory houses had to be abandoned. because the expense of the foundations was out of proportion with the income to be derived from a two-floor house. The floors were therefore increased to three and four in number.

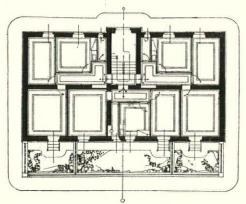
This quarter, planned and begun by the Technical Office of the Institute, was continued and finished by architects Pirani and Bellucci, di-

rectors of the Co-operativa Aventino.

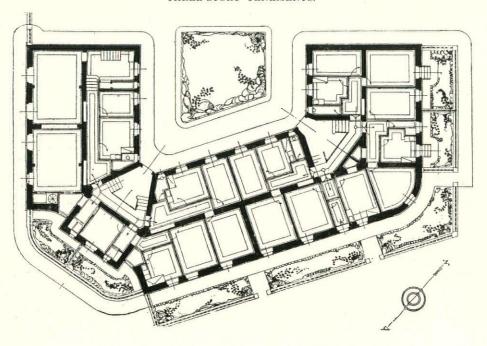
There are 100 houses, eighty-seven with two floors, seven with three floors, and six with four floors; that is, 330 apartments with 1200 rooms, besides stores, schools, and facilities for various activities of a social character. The apartments are divided in this way: Seventy-two of one room and kitchen, 123 of two rooms and kitchen, sixty-one of three rooms and kitchen, thirteen of four rooms and kitchen, fifty-one of five rooms and kitchen, according to



TWO-STORY TENEMENTS.



THREE-STORY TENEMENTS.



FOUR-STORY TENEMENTS IN SAN SABA QUARTER, ROME.



TWO-STORY AND FOUR-STORY TENEMENTS IN SAN SABA QUARTER, ROME.

the Roman custom, is never included in the count of "rooms."

The apartments in the two-floor buildings have a separate entrance and a garden, and contain four, five or six rooms.

In the three-floor buildings, the apartments are always separated by a hall and by various stairways. Each apartment has a water closet with running water and wash tubs.

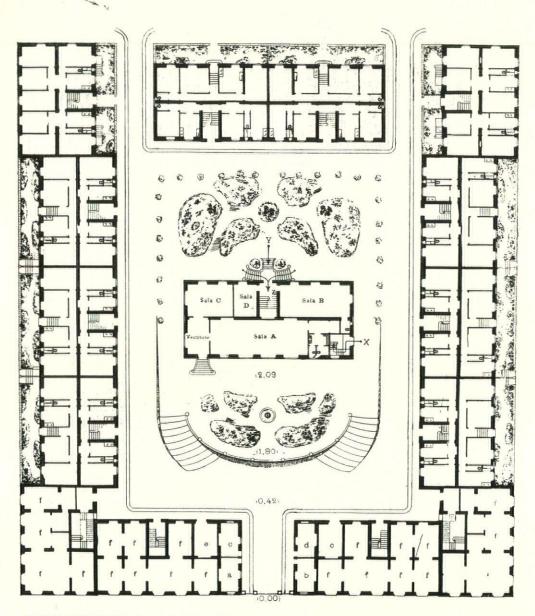
SAN LORENZO QUARTER.

The Roman Real Estate Institute has improved and transformed the San Lorenzo Quarter, the poorest and at one time the most ill-famed in the capital. It was built between 1884 and 1888, when

the speculative building mania invaded Rome, and has all the faults of that period. It was there that the avidity of gain, the leasing and subleasing was carried farthest, causing overcrowding, promiscuity, immorality and crime. By demolishing some of the old buildings and remodeling the rest, the San Lorenzo Quarter was freed from overcrowding, was purified and humanized. Twelve old buildings were transformed, being grouped in four great units, which cover a total area of 6,484 square meters, and in which 300 families live with their children, who attend the school built for them. The occupancy is reduced to only



THREE-STORY AND FOUR-STORY TENEMENTS IN SAN SABA QUARTER, ROME. BUILT BY THE INSTITUTE FOR POPULAR HOMES.



BLOCK REMODELED BY THE ROMAN REAL ESTATE INSTITUTE IN SAN LORENZO QUARTER, ROME. (SALA A, NURSERY; B, PLAYROOM; C, SEWING MACHINE ROOM; D, DISPENSARY.)

two people for each room. The subleasing, through which formerly four people crowded into a room, has now almost disappeared. For every 100 persons living in a building there used to be seventy-seven boarders or renters, now there are only five per 100.

I cannot speak of other important cities, Turin, Genoa, Florence, Naples and Bologna; but I feel sure that the movement toward better workingmen's homes is daily gaining in our country and that, the war being over, the movement will be greatly accelerated.





WEST FRONT—RESIDENCE OF MRS. FRED-ERICK PACKARD, CHESTNUT HILL, PHILA-DELPHIA. PA. WILLING & SIMS, ARCHITECTS.



GATE AND GARDEN—RESIDENCE OF MRS. FREDERICK PACKARD, CHESTNUT HILL, PHILADELPHIA, PA. WILLING & SIMS, ARCHITECTS.



HOUSE DOOR—RESIDENCE OF MRS. FRED-ERICK PACKARD, CHESTNUT HILL, PHILA-DELPHIA, PA. WILLING & SIMS, ARCHITECTS.



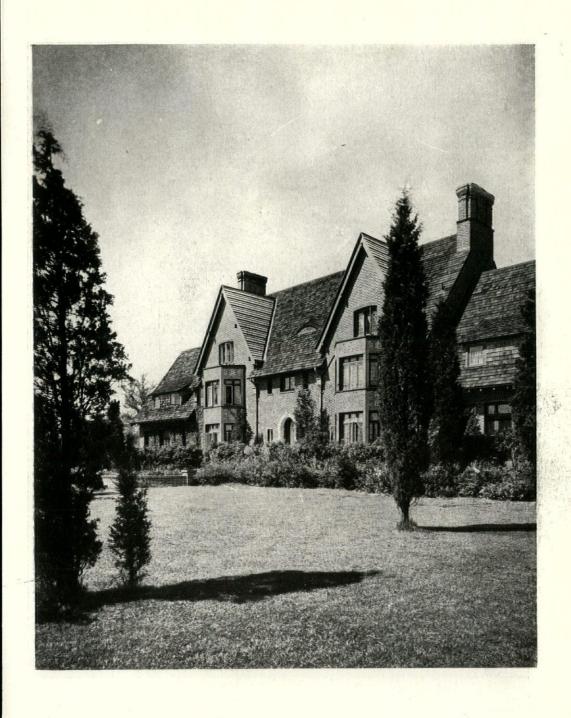
LIVING ROOM—RESIDENCE OF MRS. FRED-ERICK PACKARD, CHESTNUT HILL, PHILA-DELPHIA, PA. WILLING & SIMS, ARCHITECTS.



HALL AND DINING ROOM—RESIDENCE OF MRS. FREDERICK PACKARD, CHESTNUT HILL, PHILA-DELPHIA, PA. WILLING & SIMS, ARCHITECTS. (For plan of first floor, see page 277.)



RESIDENCE OF G. G. DOMINICK, ESQ., STAMFORD, CONN. DESIGNED BY ARTHUR LOOMIS HARMON, ARCHITECT, FOR WILLIAM H. REID, ESQ., THE ORIGINAL OWNER.



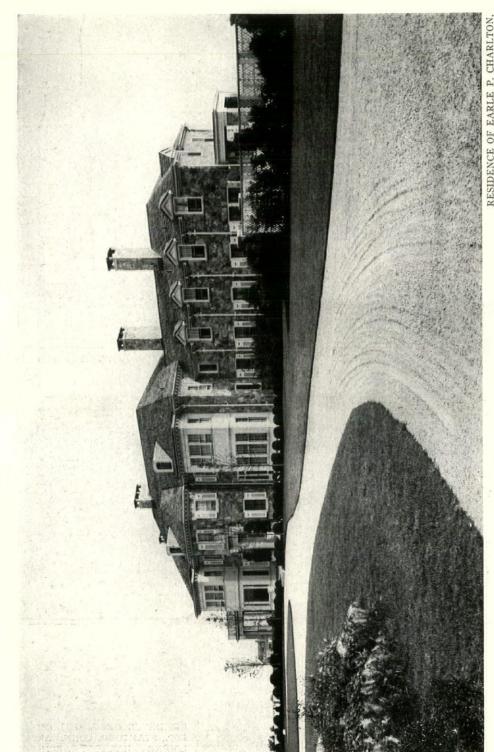
RESIDENCE OF G. G. DOMINICK, ESQ., STAMFORD, CONN. ARTHUR LOOMIS HARMON, ARCHITECT.



RESIDENCE OF G. G. DOMINICK, ESQ., STAMFORD, CONN. ARTHUR LOOMIS HARMON, ARCHITECT.



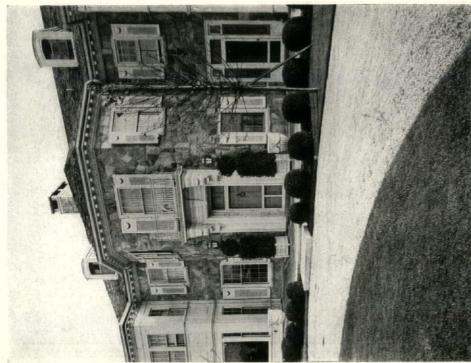
RESIDENCE OF G. G. DOMINICK, ESQ., STAMFORD, CONN. ARTHUR LOOMIS HARMON, ARCHITECT.



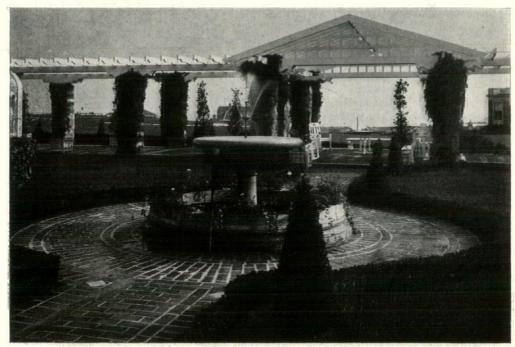
RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS. FARLEY & HOOPER, ARCHITECTS.



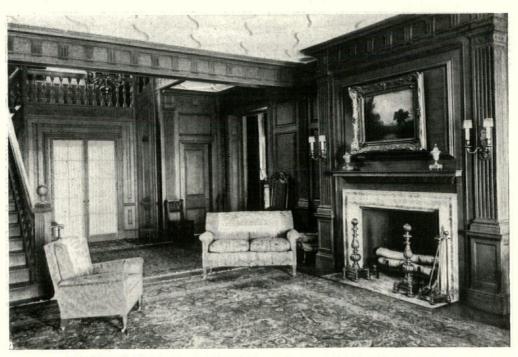
RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS. Farley & Hooper, Architects.



RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS, Farley & Hooper, Architects.



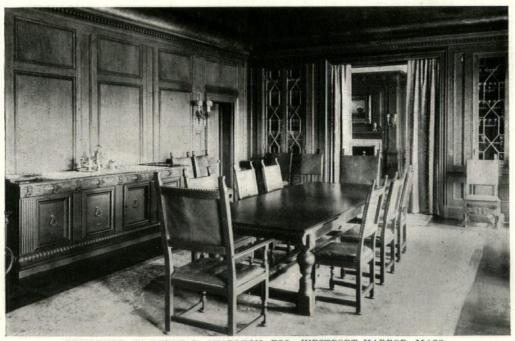
RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS. Farley & Hooper, Architects.



RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS. Farley & Hooper, Architects.



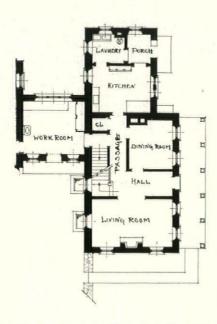
RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS. Farley & Hooper, Architects.



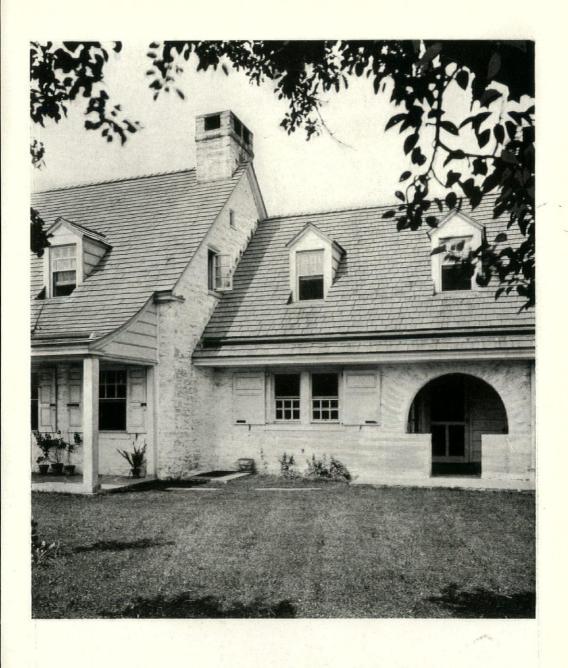
RESIDENCE OF EARLE P. CHARLTON, ESQ., WESTPORT HARBOR, MASS. Farley & Hooper, Architects.



SOUTH FRONT-HOUSE AT LAVEROCK, PA.
John Graham, Jr., Architect.

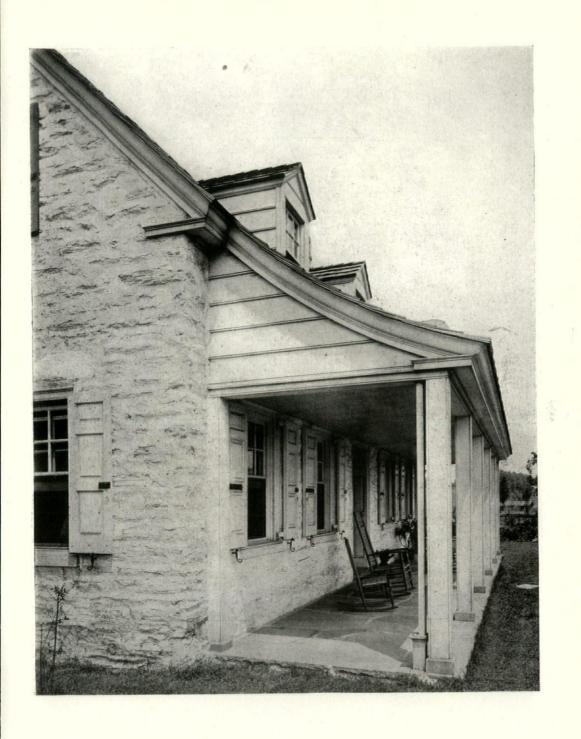


FIRST FLOOR PLAN-HOUSE AT LAVEROCK, PA. John Graham, Jr., Architect.





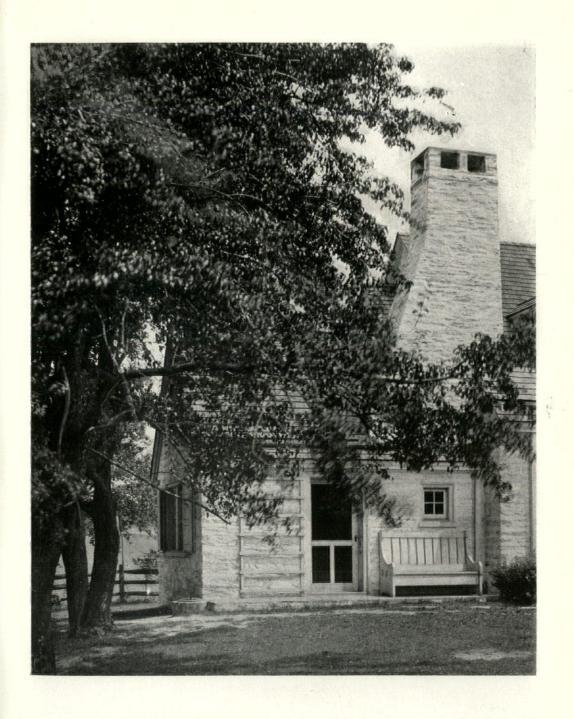
WESTERN END-HOUSE AT LAVEROCK, PA. JOHN GRAHAM, Jr., ARCHITECT.



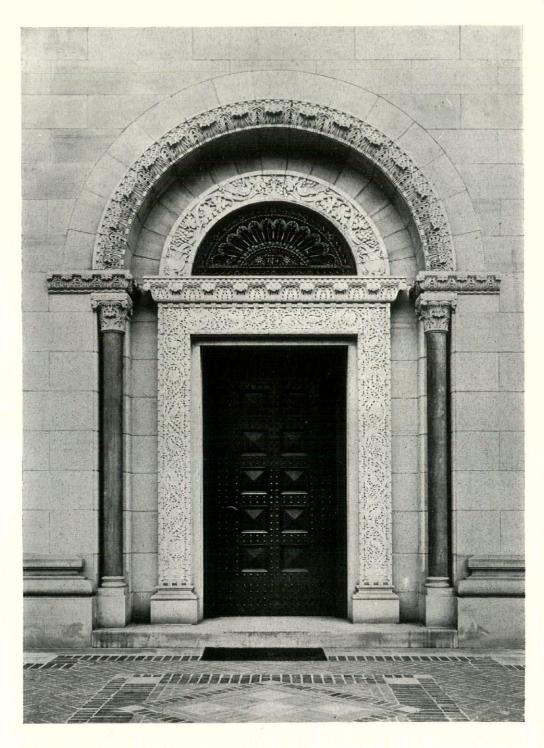
PORCH DETAIL—HOUSE AT LAVEROCK, PA. JOHN GRAHAM, Jr., ARCHITECT.



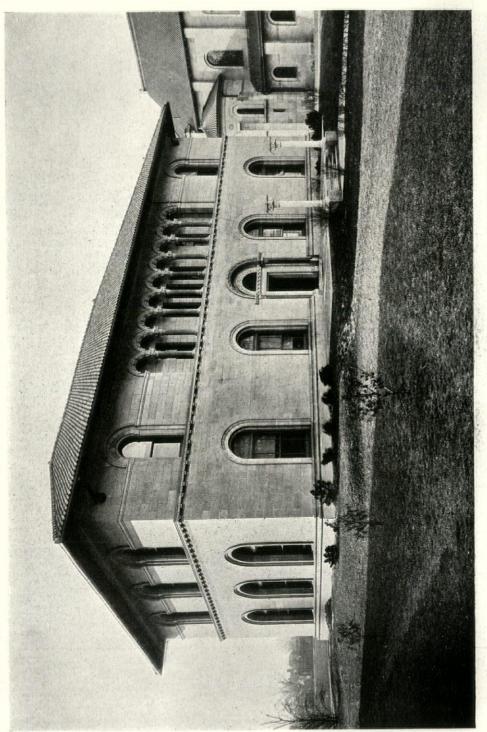
NORTH SIDE—HOUSE AT LAVEROCK, PA. JOHN GRAHAM, Jr., ARCHITECT.



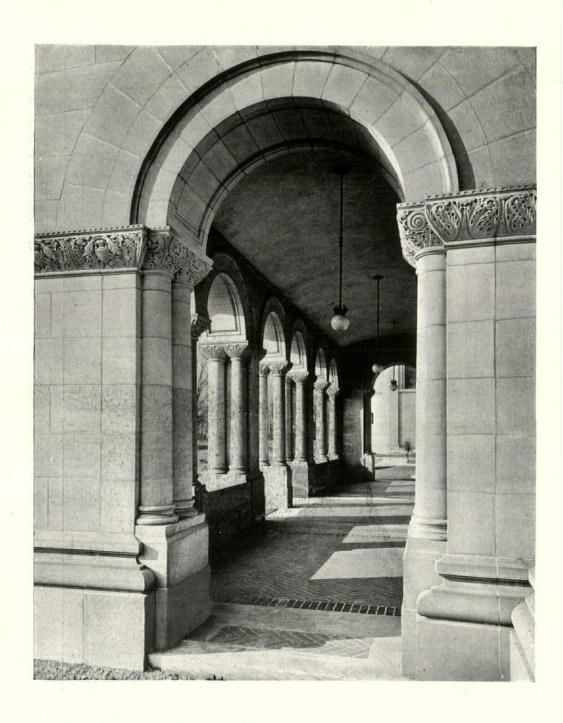
REAR—HOUSE AT LAVEROCK, PA. JOHN GRAHAM, Jr., ARCHITECT.



MAIN ENTRANCE—ADMINISTRATION BUILDING, OBERLIN COLLEGE. CASS GILBERT, ARCHITECT.



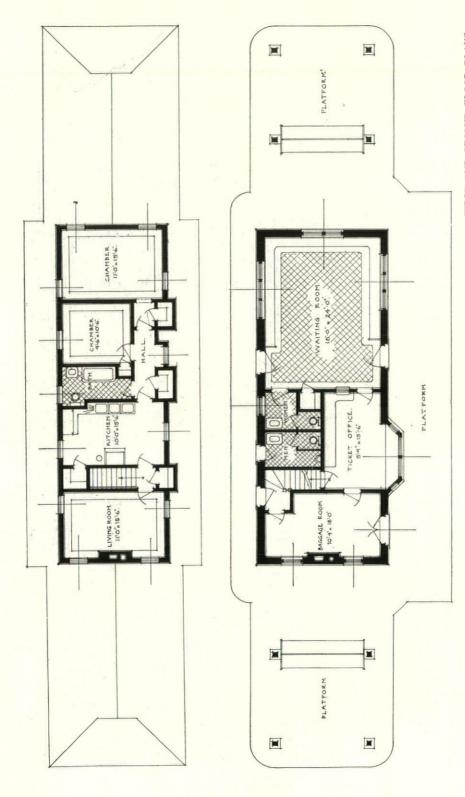
ADMINISTRATION BUILDING-OBERLIN COLLEGE. CASS GILBERT, ARCHITECT,



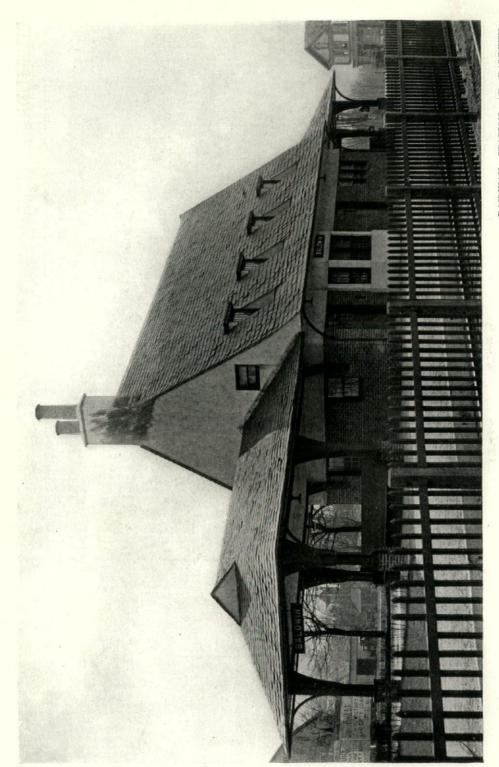
LOGGIA—ADMINISTRATION BUILDING, OBER-LIN COLLEGE. CASS GILBERT, ARCHITECT.



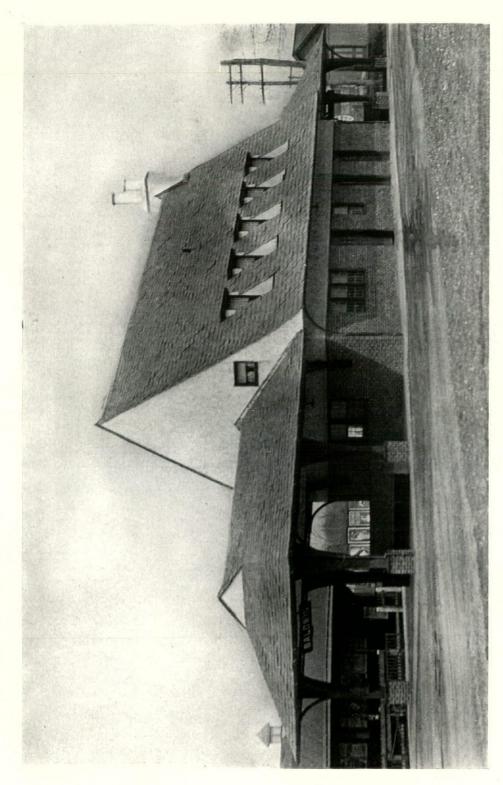
FINNEY MEMORIAL CHAPEL, OBERLIN COLLEGE. CASS GILBERT, ARCHITECT.



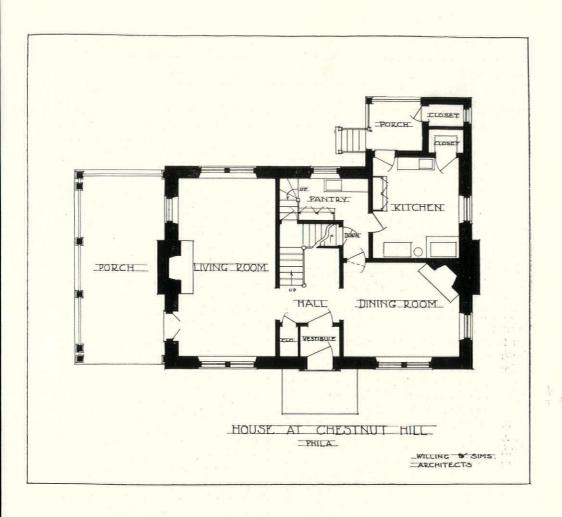
FIRST AND SECOND FLOOR PLANS—RAILWAY STATION AT BALDWIN, L. I. FRANK J. FORSTER, ARCHITECT.



RAILWAY STATION AT BALDWIN, L. I. FRANK J. FORSTER, ARCHITECT,



RAILWAY STATION AT BALDWIN, L. I. FRANK J. FORSTER, ARCHITECT,



FIRST FLOOR PLAN—RESIDENCE OF MRS. FRED-ERICK PACKARD, CHESTNUT HILL, PHILADEL-PHIA, PA. WILLING & SIMS, ARCHITECTS. (For photographic views of this house, see pages 251 to 255.)

A WAR MEMORIAL BIBLIOGRAPHY*

By FRANK WEITENKAMPF

When some people began to be concerned about the memorials which it was likely to produce. Lawrence Weaver issued his book on "Memorials and Monuments" in London as early as 1915 in the hope that it might be "useful to people considering memorials and * * * lead them to the artist rather than to the trader." The warning was necessary in the light of past experience, and its timeliness and need was proven by designs appearing in some architectural periodicals within the following year.

The libraries, those good old uncles of so many inquirers, would have been well put to it to give help at the time, because the available pictures of soldiers' and sailors' monuments of earlier date so frequently embodied just those characteristics and elements which one was advised to avoid. But within the past year or two there has appeared a swarm of articles, pamphlets, resolutions, interviews on the subject. Much of this is propaganda literature in favor of one form or another of memorial. But much of it, also, was prompted by the desire to save us from post-war horrors and to combat the influence of the metal founder's stock patterns.

Many things have been suggested beside the traditional monument, arch or statue—bridges, fountains, community houses, library buildings, shrines, flagpole bases, trees. Perhaps the best suggestion made is that we wait a while before putting up any monumental memorials—ten years or so. (Did not France resolve to do that?)

In the belief that this printed material might be suggestive and helpful, the following list was prepared for the New York Public Library. (In the Art Division of the library than the state of the library than the st

Division of the library there has also been started a collection of clippings on the subject—text and pictures.) It will be seen that many of the titles are quite fully annotated or summarized, thus offering practical help and making this bibliography an instrument for immediate use

The list covers only memorials having "structural embodiment," as some one has put it. That excludes medals, for instance. Nor have there been included descriptions and pictures of memorials of other days, so often the products of patriotism unrestrained by ideas of taste and fitness. It is the present time, with its ideals and problems and activities that is to be served. Of course, in the discussion of this question, consideration of the basic principles underlying sculpture and monumental structures has its important place and will properly refer to the great achievements of past ages. In fact, it is precisely general principles that are to be defined and established, rather than individual examples to be set up as patterns to be copied more or less blindly. In that way the best help is offered for choosing the appropriate memorial for the particular locality. Even if many specific patterns existed, the danger of the cut-and-dried would be present. Between that and the excursion into the odd, lies the golden mean.

The following list, then, is to be considered a guide-post pointing the way:

GENERAL WORKS.

American Academy of Arts and Letters, and the matter of memorials. (American architect, Feb. 5, 1919, p. 202.) MQA

"An appeal that all memorials . . . be of the highest artistic merit. Reference is made to the National Commission of Fine Arts, and the admirable effect that this commission has had upon the character of national memorials. Similar commissions in states and municipalities have been doing good work, but it is necessary that supervision of memorials everywhere be by equally competent authority."

American Civic Association. Civic comment. No. 2. July 16, 1919. Clipping Collection, Room 229.

Trees, rose-gardens, university halls, parks, highways, are suggested.

American Federation of Arts. Second cir-

^{*}Reprinted, by permission, from advance proofs of the Bulletin of the New York Public Library for August.

cular, Feb. 24, 1919: War memorials. 4p. 8°. MAAD

- Suggestions to those who are considering erection of war memorials. (Art and archaeology, v. 8, March, 1919, p.

See also Evening Post (N. Y.), May 17, 1919, and Y. Y. Times, May 18, 1919, on the A. F. A.'s activity.

War memorials. (American magazine of art, v. 10, pp. 180-183.)

List of Advisory Committee of American Federation of Arts, the committee to advise organizations intending to erect war memorials how to secure work "having artistic merit." "Pains should be taken to make organizations understand that the Committee is not interested in any particular form of memorial or in any particular artists." The following principles adopted: Memorials may take many forms, varying with the nature of the site, the amount of money available, the desires and needs of the community. Among many types may be mentioned: flag staff with memorial base, fountain, bridge, building devoted to high purposes, symbolic groups, portrait statues, medals, stained glass windows, village green. Professional advisers necessary. List of Advisory Committee of American Federavisers necessary.

This committee of the A. F. A. is referred to also in the American Architect, March 26, 1919, p. 461.

- War memorials. (Architect and Engineer, June, 1919, pp. 92-94.)

Mainly a reprint of the principles adopted by the General Committee of the American Federation of Arts, "substantially the same as the ones laid down by the National Commission of Fine Arts and approved by the National Academy of Arts and

American Magazine of Art. May, 1919. MAA War memorial number.

War memorial number. MAA

"Memorials of the great war," Charles Moore;
"The permanent memorial," Arnold W. Brunner;
"War's teachings," R. C. Sturgis; "Typical Memorials," I. F. W. MacMonnies; II, P. W. Bartlett; III, H. A. MacNeil; "Essentials in memorial art," H. Saint-Gaudens; "Six good memorials," H. Bacon; "The memorial tablet," A. Adams; "Fine monuments," I, E. C. Tarbell; II, F. F. Mather, Jr.:
"How a war memorial was planned," S. Baxter;
"The spirit of war memorials," C. Beaux; "Memorials in painting," V. Oakley; "Appropriateness in memorials," Mrs. S. Van Rensselaer.

"It may well be doubted," says Charles Moore, "whether the time has come to express the ideas and ideals of the Great War... There is, however, one class of memorials clearly called for. There is no community so remote, so small, that it has not sent some of its sons and daughters into the Great War... Somewhere, in some manner, the name of every man and woman who had an active part in war work should find due and fitting record in the community... in simple, straightforward manner. The favorite memorial will be the tablet... A certain firm of American bronze-tablet makers has... applied to sculptors to prepare designs that could be reproduced indefinite. tain firm of American bronze-tablet makers has . . . applied to sculptors to prepare designs that could be reproduced indefinitely. To an artist, indefinite reproduction of a single design, irrespective of location, lighting, or expression of individual character, is distasteful. . . Eminently fitting is a flagstaff. The bridge . . . fountains . . . the village green, gateways to parks, stained glass windows portrait statues [are acceptable]."

Benson, A. C. Lest we forget: a word on war memorials. (Cornhill magazine, London, new series, v. 41, Sept., 1916, pp. 295-301.)

"We must have a plan and a purpose, and not be in too great a hurry. . . . Let us commemorate by a memorial which arrests the eye, is gratefully remembered, and by an inscription which touches the heart. . . We are always weak in allegorical representation. . . . We ought to fight shy of elaborate designs. What we need is simplicity of statement with perhaps a touch of emblem. . . . I hope that we shall not accumulate resources on one national monument, to astonish tourists and feed national monument, to astonish tourists and feed our vanity; but that as many places as possible should have a record."

Brockway, A. L. Observations on types of memorials. (American architect, April 9, 1919, pp. 511-514.)

April 9, 1919, pp. 511-514.) MQA

"In order promptly to celebrate . . . it has been necessary to do a good deal of work of a temporary character . . . which will soon disappear. Anything done to commemorate participation in this World War should be carefully considered. . . . The Triumphal Arch invariably commemorated . . . wars of aggression and conquest. . . I cannot see the appropriateness of the Triumphal Arch or monument symbols of ancient times commemorating events of fundamentally different character. The monuments which we erect should be expressive of our lives, . . . of a type and kind which would keep before our eyes those great principles and thoughts of the government upon which the United States was founded."

Budden, Lionel B. The regional and civic commemoration of the war. (Town planning review, Liverpool, vol. 7, March, 1918, pp. 183-194.)

"All projects for commemorating the war can be placed in one of two categories—those which involve structural embodiment and those which do not. It will be the object of this article to submit a programme in reference to the former.

"Four main classes are comprised within it: I. Monuments. II, Works of public utility. III, Institutions with an educative, philanthropic or other social purpose. IV. Functional structures of Types II. and III. monumentally treated.

"Any memorial [must] be appropriate to the sub-

social purpose. IV. Functional structures of Types II. and III. monumentally treated.

"Any memorial [must] be appropriate to the subject which has inspired it... In democratic countries memorials having a practical purpose will be preferred to those which simply record or are symbolical... The present war is... unexampled... and requires to be commemorated in a manner not less exalted... If minor and particular monuments are inadequate, and Titanic conceptions of a non-utilitarian kind impracticable, one alternative remains—a programme of Regional and Civic Design. Constructive work which will benefit the community must be justifiable on economic grounds... only Regional and Civic Design are capable of satisfying these requirements of achieving at the same time a noble and permanent expression of our same time a noble and permanent expression of our ideals."

The article, written from the British standpoint, suggests legislation, a commission, and grouping of

regions.
N. Y. Times, Aug. 4, 1918, has a note on this "extensive program of regional and civic design."

Civic Arts Association. Competition for war memorials. Illus. (Architectural review, London, Aug., 1916, pp. 35-39.)

Clark, Somers. War memorials. (Architect and contract reporter, London, vol. 96, July 14, 1916, pp. 22-23.)

Introduction to thirty-ninth annual report of Committee of Society for the Protection of Ancient Buildings. "Concerned . . with ill-considered memorials both within and around our venerable and beautiful old churches . . the congruity of the memorial with its surroundings. . As a specimen of hopeless incongruity, the Tennyson memorial outside Lincoln Minster. . . It is a common thing

for sculptors to be invited to send in their schemes when the situation of the memorial has not yet been decided upon. . . The nave of Winchester Cathedral . . is sadly defaced by specimens of brass. . . One of our noblest buildings defaced by the glassmakers—Westminster Abbey."

Danger in "war memorials." (Minnesota municipalities, v. 4, April, 1919, p. 62.)

Gillies, J. W. The effect of war upon architecture. (Arts and Decoration. May, 1919, pp. 7-9, 38-42.)

"Great memorials will spring up all over the country. They will be monumental... Let us hope they will be in stone."

A great variety of war memorials. (N. Y. Public Library.) Municipal reference notes, April 2, 1919, p. 266.

"A National Committee on Memorial Buildings (261 Broadway) has been formed, which has issued two bulletins." See under NATIONAL, in section "Community Houses."

Kansas. Legislature. Hero memorials for the cities and counties of Kansas, April 8, 1919, 4p. (House Bill No. 690.)

This bill was approved March 22, 1919.

Memorials and monuments; competition and exhibition of the Civic Arts Association. (Country life, London, vol. 39, May 13, 1916, pp. 2*-6*.) †MVA

The classes include monument, wall tablets, mural painting, fountain, "inexpensive memorials for the home.

Memorials of war.—I. Ancient; II. Renaissance; III. Napoleonic; IV. Modern British; V. Modern French; VI. Modern Italian; VII. American; VIII. German. By R. R. P. and A. E. R. Pl. and (Architectural review, London, 1915, Feb.-May, July-Oct., Dec.; 1916, Nov.)

Monod, Sir Alfred. War memorials: plea for erection of ideal schemes. (Royal Institute of British Architects. Journal, v. 25, 1918, pp. 247-248.) MOA

Appeared also in American Magazine of Art, vol. 10, 1919, p. 99-100, and in Pall Mall Gazette, Aug. 26, 1918.

"The tendency to confuse philanthropy, utility,

Aug. 26, 1918.

"The tendency to confuse philanthropy, utility, and art is often disastrous. . . Wings of hospitals, baths, libraries, etc., all excellent civic objects, do not for that reason become memorials of a great historic event. War memorials [must] make plain what they commemorate. Locality, surroundings and local associations must be carefully regarded. It might be possible to have some central idea on It might be possible to have some central idea on the lines, perhaps, of beautiful market crosses, to attempt . . a united scheme emblematic in stereotyped form. . . Of course the Imperial War Museum . . and the other museums . . will naturally be permanent records of the great endeavor of the nation While not themselves symbolic monuments of the war . . the buildings will lend themselves naturally to combinations of a sculptural character." sculptural character.

Monuments and reason. (Builder, London, v. 110, Feb. 4, 1916, p. 99.) †MOA

"Practical demands on the Nation's depleted resources will be so enormous that it is unlikely that any great war memorials will be carried out any great war memorials will be deade of the termination of the war. Small personal memorials will no doubt be erected in numbers. . . . The delivery of the first of Prof. a decade of the termination of the war. Small personal memorials will no doubt be erected in numbers. . . . The delivery of the first of Prof. Adshead's lectures on 'War Memorials: their significance and treatment,' on the 26th ult., was followed by a meeting on the 28th . . . at which the Civic Arts Association was inaugurated. . . Monumental art has never been well understood in this country. . . We believe . . [in] the precept festina lente. . . Prof. Adshead stated that monuments to commemorate the present war must be conceived on a gigantic scale. . . Although we appreciate a very able exposition of the subject, we feel that such schemes are alien to the national character. . . A bridge over the Thames, a Memorial Chapel at Westminster, or a southern embankment along the river are more likely to be the type of memorial schemes which will find support. . . While we wish to see the cause of the architectural and sculptured arts furthered . . . we feel that the process of education must be a very feel that the process of education must be a very gradual one. .

Municipal Art Society of New York City. Bulletin, No. 17, 1919: War memorials, 22 p. illus.

"When the project of the War Memorial comes up . . . three questions arise: the form . . . possible within the appropriation; its character; whether it shall be entrusted to a professional artist or a business firm. This Bulletin discusses these questions, illustrating some existing forms of American memorials and suggesting others."

Suggestions are: Arch, beacon, bridge, clock tower, colonnade, community house, embarkade, tower, gateway, library monumental electrolier, museum or hall, open air theatre, roster column, rostrum, equestrian statue, figure or group, fountain, pylon, cliff sculpture, doors, flag pole and base,

tain, pylon, cliff sculpture, doors, flag pole and base, avenue, grotto, park, arrangement of war trophies, mosaic or mural painting, stained glass window. tablet.

tablet.

The Municipal Reference Library Notes, N. Y. Public Library, April 21, 1919, p. 266, calls this "one of the most exhaustive studies of the subject yet received." Evening Post (N. Y.), Feb. 1, 1919, and March 29, 1919, and Evening Sun, April 2, 1919, also reviewed this Bulletin, and Arts and Decoration, May, 1919, p. 18-19, had a summary: "War Memorials, what the Municipal Art Society of New York City is doing about them."

Plates representing war memorials in Great Britain. (Builder, London, May, 1919.) †MQA

Protecting America from the atrocities of art. Illus. (Current opinion, N. Y., v. 66, March, 1919, pp. 187-188.)

Resumé of the appeals of the American Federation of Arts and the Municipal Art Society.

Quinton, Cornelia B. Sage. War memorials. (Academy notes, published by the Buffalo Fine Arts Academy, v. 14, July-Sept., 1919, pp. 100-101.) 3MAA

"We cannot create adequate war memorials at present because we are as yet too close to the war. We are still struggling for ideals for which we have only lately ceased to fight. . . The memorial is erected to honor patriotism and devotion to civilization, [to] commemorate the spirit of the nation as a whole . . . war of a whole nation doing batzation, [to] commemorate the spirit of the nation as a whole, . . war of a whole nation doing battle for its weal. The most impressive monument is one which appeals to the imagination alone . . devoid of practical utility. . . Display of wealth and over-elaborateness are . . vulgar. If the utilitarian structure shall be used, it is of first importance that it shall impress by beauty of design . . and fitness of setting. . . Bridge . . fountains, buildings devoted to purposes educational or humanitarian . . . , whether large or small, . . . should be an inspiration. . . This work should not be hurried. We must learn the lesson of patience."

Report on Victory Memorial [for Portland], by the Oregon Chapter of Architects. (Architect and engineer of California, v. 57, 1919, pp. 97-100.) MQA

"The scheme contemplates a monumental treatment of the park blocks which become an approach to the great shaft of victory—the Memorial Park, Memorial Hospital, and Victory Highway to the State Capitol."

War memorials. (American Institute of Architects. Journal, v. 7, 1919, pp. 30-32.) MQA

"Expert services are needed before any suitable memorial can take form, but what is needed more is a national consciousness seeking to memorialize a spiritual experience. . . It is too much to hope that the memorials will utterly fail to glorify war and victory, and while paying homage to heroism, also point to a . . . humanity and brotherhood which will refuse ever again to adopt war as a means of settling any issue? To that end, is it not import and to consider forms of memorials where men and women and children may meet . . for work and play? Let us bring men together and not leave them cold with the frigidity of monuments that lose their power to influence. Let us . . build something democratic. . . . Our men died for more and better life . . —that must be our memorial to their sacrifice."

A number of communications and notes follow: One asks "why arches?" A Philadelphia conference resolved that the designing be entrusted only to artists "of the highest standing." Port Chester, N. Y., is developing a park as a memorial, community houses are considered, and a flag-staff base is suggested.

——(Architect, London, v. 96, Aug. 18, 1916, pp. 98-99.) †MQA

By E. F. C. Reprinted from Manchester Guardian. "The Greeks . . preferred the direct expression of feeling to any historical delineation.

The eighteenth century is almost wholly allegorical. . . Much greater individuality of character is found in Renaissance monuments. . . [In] recent work, few are the examples we would wish studied. . . . Of recent private or corporate memorials I cannot call to mind a single eminent success."

——(Bellman, v. 26, March 15, 1919, p. 288.) †*DA

"A new idea is taking root. Most of the plans... have embodied the principle of beautified utility. The thought of the American public has turned from the purely sculptural to that of architectural expressions. There are proposals of bridges, viaducts, halls, embankments, boulevards, railway terminals, parks, and buildings suited to various public uses."

——(Spectator, London, v. 116, Feb. 5, 1916, pp. 183-184.)
*DA

pp. 185-184.)

The Civic Arts Associations thus describes its aims: "Countless memorials will be in demand, and unless steps are taken to provide direction and advice. . . these will generally be of the usual trivial or commonplace type. The committee of the Association is devoting considerable attention to those . . possible to people of small means as well as to the more costly civic kinds, to relatively humble private memorials, as well as those of a public character. . . In small towns the best form is often some useful little building such as a school, or public room, or small local museum . . . the guiding principle should be "appropriateness." . . We must not fall into the error of thinking that only

battle scenes . . . would provide appropriate picture memorials. One can imagine a very appropriate series of pictures in which there was not a single trace of the . . . tramplings of the battlefield. . . ."

Weaver, Lawrence. Exhibition of war memorial designs. Illus. (Country Life, London, July 22, 1916, pp. 2*-8*.) ††MVA

A review of the exhibition of designs submitted in the Civic Arts Association competition.

Williams-Ellis, Clough. War memorials. (Spectator, Feb. 19, 1916, pp. 249-250.) *DA

"There are endless possibilities in the way of memorials to which the term 'monument' could scarcely be applied. A hospital wing . ., endowed cot . ., village halls, bridges, groves with stone seats, avenues, walks, terraces, gardens, tablet, fountains, clocks, gates, sundials, temples, obelisks . . . "

MONUMENTS-SCULPTURE.

Adams, A. War memorials in sculpture. (Scribner's magazine, v. 65, March, 1919, pp. 381-384.) *DA

"Until expert opinion in art is valued in our democracy our best efforts in art may at times suffer delays and contempts. But our hopes in art are more than our handicaps."

Adshead, S. D. Monumental memorials and town planning. (Architect and contract reporter, London, v. 97, 1917, pp. 105-107, 123-125.) †MQA

"Monumental memorials may be described as the juvels of a monumental town plan. . . The finest type of [war] memorial is that which, while arousing the best sort of patriotism . . ., holds no sting. . . The monument that is fundamentally architectural can alone evoke the deepest sentiments of a great people. But the most intimate emotions can only be aroused by sculpture." Author then considers relation of proposed monument to site, and to the whole city plan. Prof. Adshead's lectures on "War memorials, their significance and treatment," were reviewed in the Builder, Feb. 4, 1916, p. 99.

Arch of thanksgiving and welcome. illus. (Literary digest, v. 59, Dec. 14, 1918, pp. 26-27.) *DA

Boston Chamber of Commerce. War memorial: Chamber offers several plans... illus. (Current affairs, Boston, v. 1, Feb. 10, 1919, pp. 12-15.)

"Suggestions for a monumental structure in the Public Gardens, to stand at head of most comprehensive system of street improvements undertaken in Boston. . . Memorial arch proposed in addition. . . The memorial should foster the idea of education."

Brock, A. Clutton. On war memorials. (Country Life, London, v. 39, Feb. 5, 1916, pp. 188-189.) †MVA

"A good inscription is one that says exactly what it means simply and finely. . . . Consider what in the past we have done with inscriptions, in our desire to invest them with that vague something which we call art. . . When the lettering was not Gothic it was often fantastic in some other way, or clse as dull as a handbill. . . Like the lettering, the language should be neither shoppy nor precious."

In the Feb. 12 issue of Country Life, p. 222,

appears a letter from Lawrence Weaver, in which he says "the main purpose of the Civic Arts Association is to see that the tablets on which Mr. Clutton Brock shall write for us, may take an architectural or sculptural form worthy of his epigraphic skill and reticence."

Eggers, O. R., and E. H. Rosengarten.

Description of suggested design for a
victory memorial. (American architect, v. 114, Dec., 1918, p. 671). MQA

Proposed site at Riverside Drive and 110th Street,
New York City.

Frankl, P. Kriegergrabmal und Kriegerdenkmal. (Deutsche Kunst und Dekoration, 1916, Jahrg. 19, pp. 431-432.)
†MAA

Soldiers' monuments.

French monument to Americans. (Current history magazine of the New York Times, v. 9, part 2, March, 1919, pp. 477-478.)

Monument dedicated Nov. 3, 1918, at Nancy.

Gateway of the nation. (American architect, April 20, 1919, pp. 603-606. plans.)
MQA

Describes a plan for a memorial to be located in Battery Park, New York City.

A German cemetery in France. [Four plates of drawings by S. J. Wearing, with text on p. 426.] (Builder, London, May 2, 1919.) †MQA

Great Britain. Royal graves commission. (Fortnightly, v. 111, Jan., 1919, pp. 136-138.) *DA

Communications from "A Soldier's Mother" speaks of the commission's intention to erect uniform headstones and a central monument, and makes a plea for flowering plants.

Haendcke, B. Weltkrieg und Bildnisplastik. illus. (Kunst für Alle, 1915, Jahrg. 31, pp. 73-76.) †MAA Soldiers' monuments.

Hastings, Thomas. New York's arch of victory. (Architecture, N. Y., April, 1919, pp. 87-88. illus.) †MQA

Jessen, Peter. Kriegergrabmal-Entwürfe der Wiesbadener Gesellschaft für Grabmalkunst. Illus. (Deutsche Kunst and Dekoration, Jahrg. 18, 1915, pp. 267-276.) †MAA

Koch, David. Das Kriegergrabmal. 6 pl. (Plastik, München, 1915, pp. 41-44.) †MGA

La Sizeranne, Robert de. Héros et statues. (L'Art et les artistes, Feb., 1919, pp. 1-3.) MAA
Commented on in Evening Post (N. Y.), June

Lindner, Werner. Denkmäler für unsere Krieger. München: G. D. W. Callwey [1915], 22 p., 1 l., 8 pl. 8°. (Duererbund. Flugschrift, [no.] 139.) EAA Martyr memorialized; London's Edith Cavell memorial. illus. (Literary digest, v. 57, June 1, 1918, p. 4.) *DA

Memorials of the past and of to-day. illus. (Literary digest, v. 57, June 8, 1918, p. 27.) *DA

Montizambert, G. Our portion at Versailles...graves of Canadian heroes. illus. (Canadian magazine, Feb., 1916, pp. 317-320.) *DA

National peace monument. illus. (Art world, v. 9, Oct., 1918, pp. 308-312.) MAA

Proposal to erect in the Pantheon a monument in honor of the French soldier. (New France, v. 3, March, 1919, pp. 418-419.) †DA

Richardson, A. E. Campo Santo on the banks of the Marne. [Design for suggested memorial to British soldiers who fell in the Battle of the Marne.] Plate, with text. (Builder, London, v. 110, Feb. 4, 1916, p. 106.) †MQA

Soldatengräber und Kriegsdenkmale. illus. (Kunst und Kunsthandwerk, Wien, Jahrg. 18, 1915, pp. 279-296.) †MNA

Soldaten-Gräber, Krieger-Denkmäler, Erinnerungszeichen. Entwürfe und Vorschläge hrsg. vom Bayerischen Kunstgewerbe-Verein, München. illus. (Kunst und Handwerk, Wien, 1916, pp. 65-175.) †MNA

Steinlein, S. Unsere Arbeit fürs Ganze. Kriegergräber und Denkmale. 12 pl. illus. (Plastik, München, 1915, pp. 1-8, 17-28.) †MGA

Studniczka, Franz. Die griechische Kunst an Kriegergräbern: Vortrag, 6 Feb. 1915. (Neue Jahrbücher für das klassiche Altertum. . . Berlin, Bd. 35, 1915, pp. 285-311, 24 pl. illus.) NAA

Victory arch in New York. [Editorial.] (American architect, v. 114, Dec. 4, 1918, pp. 673-674.) MQA

War memorials and rural life. (Veteran, v. 2, Dec., 1918, pp. 47-49.)

War monuments. (Builder, London, v. 108, Jan., 1915, pp. 101-102.) †MQA

"The monuments in English cathedrals and parish churhces . . . for the most part are in excellent taste . . ., but few men desire to see further additions made to the gigantic stone crop, itner in Westminster Abbey or St. Paul's Cathedral. . . The finest monuments in this country commemorate fires and peace achievements rather than the fighting qualities of our ancestors. When we review the number of harbor works . . . at Kingstown, Plymouth, and other ports, it is strange that these works of national importance were not dedicated to the memory of the heroes whose courage . . . made such undertakings possible . . . No longer must we have inflicted indiscriminate groups of marble and

bronze. . . . There must be a controlling agency. . . Two or three ideas occur to us. . . . In France battles are seldom commemorated by monuments on the battlefield. Their battle monuments are on the battlefield. Their battle monuments are placed in the centres of towns. . . Another suggestion is that the deans of cathedrals and rectors parish churches use authority regarding wall tablets.

Weaver, Lawrence. Memorials and monuments, old and new: two hundred subjects chosen from seven centuries. London: Country life, 1915. 8°.

"The purpose of this book is . . . to focus attention on good examples, old and new. That is not to say that old forms should be copied exactly . . . but they give valuable guidance as to proportion, use of they give valuable guidance as to proportion, use of materials, spacing of lettering and the like. . . The national conscience is stirred to its depths . . and it is to be hoped that the memorials will be worthy of . . the occasion. The book is published in the hope that it may . . lead to the artist rather than to the trader."

to the trader."
From review in the Burlington Magazine, January, 1916: "The most important part of the volume is that which defines the proper relation of the sculptor's and the architect's functions in this form of art. . . Mr. Weaver pleads for simple memorials . . . and purposely says little of more ambitious monuments, involving groups of statuary."

World-War monuments. (Art world and arts and decoration, v. 10, 1919, pp. 121-128.)

"We are heartily in favor of the . . . community house, but, in addition, a monument of a purely ideal character should be placed near such utilitarian building. . . There should be absolutely nothing utilitarian about the soldier monuments." utilitarian about the soldier monuments.

COMMUNITY HOUSES.

Art and war memorials. (Advocate of peace, v. 81, Feb., 1919, pp. 38-39.) †YFXC

"The American Academy of Arts and Letters appealed to the American people to conserve beauty... in choice of war memorials. Fortunately in the national capitol a Commission of Fine Arts exists national capitol a Commission of Fine Arts exists with advisory power. . . There are a few of the states and cities with similar advisory commissions . . but taking the country by and large there will be no such expert guidance. . . Protection from . . . such 'atrocities' as followed the Civil War will be by town officials and citizens who must insist that . . . monuments be erected only after conference with authorities in the realm of art. . . 'Arches of triumph,' realistic portrayals of war and portrait busts and statues are not going to satisfy the standard of many art patrons and artists. . . These lovers of art are also lovers of civics. . . Hence they rather favor the community house, the civic forum, and citizens' town-home as their type of war memorial. To such a structure, the town planner, landscape architect, architect, painter, sculptor, interior decorator, artisan, draftsman, and social service expert all may contribute."

all may contribute.'

Bard, A. S. Community buildings as war memorials. (National municipal review, Baltimore, March, 1919, pp. 129-SERA

135.) Reprinted in Bulletin 4 of the National Committee on Memorial Buildings.

Brunner, E. D. Soldier memorials in country towns. (American city, town and county edition, v. 20, April, 1919, pp. 345-346.)

Candler, Martha. Community houses as soldiers' memorials. illus. (National magazine, Boston, v. 48, April, 1919, *DA pp. 111-113.)

Discusses opportunities for development of civic encouragement of music and drama, architecture community kitchen, etc.

Chamber starts campaign for liberty memorial building... (Bridgeport Chamber of Commerce, Bridgeport progress, v. 3, Jan. 1, 1919, p. 1.)

Cheney, Charles H. The war memorialshall we make it something worth while? illus. (Architect and engineer of California. v. 55, 1918, pp. 39-46.)

Community buildings as soldier memorials. (School life, Washington, v. 2, Jan. 16, Room 111 1919, p. 1.)

Community houses instead of monuments, as soldiers' memorials. (American city, town and county edition, v. 19, Sept., SERA 1918, p. 173.)

Crane, Frank. Liberty buildings. (American city, town and county edition, v. 19, Nov., 1918, p. 347.) SERA

Cravath, Paul D. Liberty buildings are the real memorials for the new democracy. illus. (Touchstone, N. Y., vol. 5, July, 1919, pp. 294-302, 336.)

"There is one feature which would seem to belong in any building of memorial character. That is a Hall of Fame wherein should be inscribed the names of those local soldiers, sailors, and marines who participated in the war. . . There is no standard type of Community House. Let us hope there never will be. . . Music, the drama, painting, and sculpture . . must find their home in the building on a friendly footing with other activities. . . The native arts of our foreign elements we may well use for the enhancement of any community program." for the enhancement of any community program.

Franklin, M. S. A civic type of war memorial proposed for the city of Boston. (American architect, Feb. 19, 1919, pp. MQA 259-268. plan, diagr.)

"The large city must have many 'community centers'. . . The up-to-date American city, however, requires some large central structure . . , the educational, recreational and social headquarters for city and state."

The plan, by Frank Chouteau Brown, lays "emphasis upon the auditorium features." See also Current Affairs, Boston. Feb. 17, 1919, p. 7.

Greeley, W. R. Erecting memorials to our soldiers and sailors. plans. (House beautiful, Chicago, v. 45, Jan., 1919, pp. †MLA

Harriman, L. B. Your home town first, the community building as a popular memorial. illus. (Delineator, v. 94, May, 1919, p. 20.)

How to work for community theatres as soldiers' memorials. (Drama League Monthly, v. 3, Jan., 1919, pp. 10-14.) NBLA

- Inspiring memorial buildings proposed or under way. (American city, v. 20, April, 1919, pp. 324-325.)
- The "Liberty Building" idea. (American city, city edition, v. 19, pp. 255-266.) SERA

"The erection of more monuments or statues . . . would be an inadequate tribute to a glorious sacrifice. To help the living while commemorating the dead is the purpose of the . . . Liberty Building."

- "Liberty Buildings" as soldiers' memorials. (New Jersey municipalities, v. 2, Oct., 1918, pp. 241-242.)
- Liberty buildings as victory monuments. (American city, v. 19, Dec., 1918, pp. 471-473.) SERA
- Memorial buildings: their place in the community. "Liberty" should be part of their title, one writer says. (Toledo city journal, v. 4, Jan. 4, 1919, SERA

"To honor the living equally with the dead, such a community center affording meeting place for fraternal and recreation organizations, women's clubs, boy scouts [etc.]. So broad a plan would not be desired in Toledo, because it would duplicate many activities already organized, but in many maller cities the belilier of the control of the smaller cities the building could play a most im-portant part."

- Municipal, community, and memorial buildings. (Municipality. Madison, Wis., March, 1919, pp. 49-52.) SERA
- Nation-wide movement for liberty buildings. (Birmingham. Chamber of Commerce. v. 1, Feb., 1919, p. 5.) Room 111
- National Committee on Memorial Buildings. Bulletins. New York, 1919. CI PING COLLECTION, ROOM 229. CLIP-
- 1. Community houses as soldiers' and sailors' memorials, by E. R. Shippen. Provision for art, music, and drama in liberty buildings, by C. W. Stevenson. Memorial building movement has already gained nation-wide interest. Reports from cities.

2. A living memorial.
[3.] The memorial community house. What it

[3.] The memorial community house. What it should be, and who should manage it.
4. Community houses as war memorials. [By A. S. Bard. Reprinted from National Municipal Review, March, 1919.]
This National Committee is now the Bureau of Memorial Buildings of the War Camp Community Service, 124 E. 28th Street, New York City. See below, under War Camp Community.

- Proposed liberty memorial square and civic center for Berkeley, California. illus. (American city, city edition, v. 20, May, 1919, pp. 428-429.)
- Rigaumont, V. A. Liberty building proposed for the city of Johnstown, Pa. (American city, city edition, March, 1919, pp. 222-223.) SERA
- Shippen, E. R. Community houses as soldiers' and sailors' memorials. illus. plans. (American city, v. 20, Jan., 1919, pp. 27-31.) SERA

- Some cities which have taken definite steps toward securing community houses or liberty buildings as victory memorials. (American city, v. 20, Jan., 1919, pp. 36-37.)
- Stevenson, Christine W. Provision for art, music and drama in liberty buildings. (American city, v. 20, Jan., 1919, pp. 32-35.) SERA
- "liberty buildings." Suggests (Harlem magazine, v. 7, Dec., 1918, p. 8.) TLA
- War camp community service backs memorial building movement. National Committee on Memorial Buildings unites with War Camp Community Service. (American city, city edition, v. 21, July, 1919, p. 30.) See also, above, under NATIONAL COMMITTEE.

TREES.

- Faxon, R. B. Roadside planting as a memorial to our soldiers and sailors. illus. (Modern city, Baltimore, v. 4, March, 1919, pp. 10-13.) †SERA
- Memorial trees planted for soldiers and sailors. (American forestry, March, 1919, pp. 913-917. illus.)

Shorter notes have appeared in this magazine, e. g.: "Washington's first memorial tree," illus., April, 1919, p. 484; "Enthusiasm for memorial trees," February, 1919, p. 863; "Memorial trees for our soldier dead," December, 1918, p. 728.

Monuments with a meaning, illus, (American forestry, May, 1919, pp. 1045-1049.) VQN

"The memorials of this war are not going to be the 'meaningless mausoleums and monuments' which the meaningless mausoleums and monuments which Col. Roosevelt condemned, but they will typify service and sacrifice . . . through parks, community centers, memorial drives and roadways, and similar city, town, and county betterments. Tree planting is a feature of most of the memorials." [Numerous instances given] instances given.]

- Pack, C. L. Trees as memorials to the country's soldiers and sailors. illus. (National service, N. Y., v. 5, Feb., 1919, pp. 74-77.)
- Ridsdale, P. S. Tree planting an important part of city reconstruction programme. (American city, v. 20, Feb., 1919, pp. 189-191.)
- Secrest, E. Tree memorials for fallen heroes. illus. (Ohio Agricultural Experiment Station. Monthly bulletin, v. 4, Feb., 1919, pp. 52-54.) VPG
- Tabor, G. Memorial trees. illus. (New country life, N. Y., v. 36, May, 1919, pp. 33-35.) †MVA
- Trees and forests as war memorials. (New York Times, June 1, 1919, magazine *A section.)

Trees for memorials. illus. (American forestry, Jan., 1919, pp. 779-781.) VQN "It is the aim of the American Forestry Associa-tion to register all such trees planted."

Trees to keep green the memory of our heroic dead. (Literary digest, v. 59, Dec. 28, 1918, p. 32.)

MISCELLANEOUS.

Anderson, O. W. D. Memorial playground. (Parks & recreation, v. 2, Jan., 1919, ROOM 111. pp. 51-52.)

Bookman, N. Y., May, 1919, p. 374.

"The suggestion of a public library as a memorial to local soldiers and sailors who lost their lives in the great war has been taken up with enthusiasm in some twenty or more cities, particularly in the

Charing Cross Bridge. (Builder, v. 110, June 23, 1916, pp. 449-450, 455.)

Deals with improvement scheme by D. Barclay Niven and T. Raffles Davison, with war memorial chapel suggested by C. Lewis Hind. "An improve-ment urgently needed for practical purposes; at the same time a better memorial than anything else."

Commemoration of great (Architect, London, v. 101, 1919, pp. 197-199.)

"The greatest of war monuments in London is Waterloo Bridge... A new bridge at Charing Cross would most fittingly form London's commemoration of the end of this war... The bridge is needed... In most of our cities and towns there is a similar need which might find worthy expression... We canot agree with those who contend that a true memorial should commemorate or express abstractions of thought, and should not serve a practical purpose."

[Communication from the president of the University of Utah, concerning a proposed memorial building to be erected on the campus.] Utah Senate, Jan. 17, 1919, pp. 6-8.

Connoisseur, Aug., 1918, suggests tapes-†MAA

Cram, Ralph Adams. War memorials. (Architectural Record, v. 45, 1919, pp. 116-117.)

"The best and most significant memorial is the votive church; but what is the use of talking of this now? . . No, the monuments must be secular. . I sometimes think the best thing would be to recreate some one of the destroyed monuments of France or Belgium or Italy."

Douglas, O. W. Playgrounds and recreation centers as memorials. (American SERA city, Feb., 1919, p. 187.)

The proposed Telegraph Ellis, A. Leo. Hill memorial, San Francisco, Cal. (American architect, v. 114, 1918, p. MOA

"The memorial . . . embodies a wireless telephone and telegraph station."

Garden of the Allies: an eternal garland for graves of the brave. illus. (Touchstone, N. Y., v. 4, March, 1919, pp.

"'I would like to see,' said Sir John Fraser, 'the flowers of America growing over where lie so many of our gallant sons.' . . . Surely no more fitting memorial could be given our fallen heroes than to strew the fields of battle with the flowers they loved, and to plant over the scarred wastes forests of trees. . " A similar plea for flowering plants is preced in Exercicial to the course of the same made in Fortnightly, January, 1919.

Leighton, H. B. A parish hall and institute as a war memorial. (Builder, London, v. 116, 1919. p. 373.) †MQA

Leslie, Shane. Lest we forget. (Tablet, London, v. 125, April 24, 1915, p. 522.)

Proposal for fitting up a side chapel of the Catholic cathedral in memory of Catholics who have fallen in the war.

Mullgardt, Louis C. Proposed soldiers' memorial for San Francisco. (Architect and engineer of California, Feb., 1919, pp. 82-83.)

"The memorial should possess five principal elements—a Library of War Records, a Hall of War Illustrations, an Art Gallery of War Paintings, an Assembly Hall for display of War Motion Pictures and for War Lectures. These four will give true expression of the unjustifiable horrors of war . . the utter futility of human conflict. The fifth element should be an Inner Court. In this garden court an audience may be entertained with orchestral music or other forms of aesthetic entertainments expressive of the higher life."

Proposed victory building at Springfield, Mass. (American architect, March 26, MQA 1919, p. 454.)

Building to house post office, custom house, district court, etc.

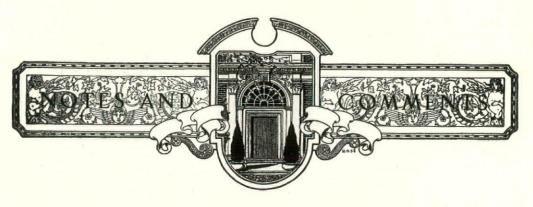
The "Via Sacra" or memorial road. (Spectator, London, v. 116, April 1, 1919, pp. *DA 428-429.)

"We propose that a wide Memorial Road be laid it in No-Man's-Land . . . from the sea to the lps, with monuments to the fallen and to deeds of out in

War memorial advisory committees; memorial playground, by O. W. Douglas. (New Jersey municipalities, v. 3, Jan., SERA 1919, p. 12.)

War memorial proposed by Chamber [of Commerce]. (Current affairs, Boston, Feb. 17, 1919, p. 7. illus.)

View of suggested war memorial building in the Public Gardens.



Wallace Clement Sabine. Seldom has the professional contribution of one man equaled that of Wallace Clement Sabine, of Harvard University. In architectural acoustics he was pre-eminent; and his life work

lies at the basis of what is to be further accomplished in this most important line of scientific research.

In the construction of buildings the element of chance has always entered where rooms for the purpose of spoken or musical performance have formed an important part of the scheme. Great theatres and opera houses, auditoriums and concert halls have been built with much less of a feeling of certainty with regard to their success acoustically than in respect to their beauty of design, practical planning and permanent construction. Professor Sabine, by his experiments of a definitely practical nature, has made it possible for architects to avoid certain roads which lead to failure; and with respect to materials of construction he established many facts whose existence had not been realized.

The immensity of the task he undertook is hard to grasp; its difficulty of execution is so great and the mere establishment of the method of approach to it so full of imagination that not the least remarkable point of consideration is that one lifetime, and that a lifetime prematurely ended, should leave as its record both a well laid out scheme for an exhaustive investigation and a goodly part of its accomplishment.

One phase merely of the question is the coefficient of absorption of the various materials which go into the construction of auditoriums. There occur the myriad combinations arising from the coefficients of absorption of various materials for the

various sounds of every pitch. Five years alone were devoted to the determination of the coefficients of absorption for sounds having a single pitch, that of Violin C. Some idea of the intricacy of the work is given by the statement that such an investigation must, for all practical purposes, cover the whole range in pitch of the speaking voice and musical scale related to the various materials of construction.

In detail were taken up the various materials which form the walls and ceilings of large rooms-brick and cement, wood, plaster and tile in combinations usually met with in practice. It was discovered that the absorption of sound by walls was structural and not superficial, thus exploding the theory of a roughened wall as an acoustic corrective, and establishing the fact that the fundamental process of sound absorption is the yielding of the walls. The investigation next determined the absorbing quality of the chairs and audiences, and next that of the various fabrics which could be used in correcting already existing faults. Felt was found to have the greatest powers of absorption for the lower register and its use has been widespread. In co-operation with one of our most enlightened manufacturers, Prof. Sabine's experiments were successful in leading to the evolution of an absorbent tile, widely used now in vaulted churches and auditoriums, whose absorbing power is ten times that of any existing masonry construction and one-third of the absorbing power of the best known felt.

For a correct placing of all this absorbent material an accurate knowledge was necessary of the action of the sound, its direction and points of greatest intensity. Often its direction has to be controlled and definite rules of proportion for great rooms have been established.

To mention only two rooms, corrected of acoustic defects by Prof. Sabine, the lecture hall of the Metropolitan Museum of Art and the auditorium of the Century Theatre are both accessible to the public.

Professor Sabine's authority in his chosen work was recognized abroad. In 1916-17 he was exchange professor at the University of Paris, at which time he was invited to lecture at the Ecole des Beaux Arts and before the Society of Architects, the latter presenting him with a medal in recognition of his work. In England, during a visit there, he was put on a committee to inquire into the acoustic conditions in the House of Commons.

A laboratory, designed by him for the study of a number of specific problems which he had been unable to take up through lack of adequate facilities, was built for him by his friend, Col. George Fabyan, and ideas which he left in his notes and unpublished papers will form the basis of continued experiment in this laboratory.

CHARLES OVER CORNELIUS.

A War Rendering of Ypres. The great Canadian War Memorial Exhibition, on view at the Anderson Galleries, possesses interest not merely as a collection of virile work, but as a concrete record of the psy-

chological reaction of war on esthetic expression.

It introduces us to the most recent forms of European interpretation, in which the shadow of death and hideous recollection supplant the equable mental poise which our prejudice has hitherto regarded as prerequisite to beauty.

No other war exhibition yet shown in New York has revealed so fully the capacity of art to give a moral reflection of a colossal disaster; the prevailing state of mind of these artists, which controlled their manner of statement, shows this even more clearly than the horror of the incidents depicted.

An architect wandering through the gal-



Copyright, 1919, by Canadian War Memorial Exhibition.

A WAR RENDERING OF YPRES PAINTED IN OILS BY MAJOR J. KERR LAWSON. EXHIBITED AT THE CANADIAN WAR MEMORIAL EXHIBITION.

leries will note with satisfaction that when the eye of the artist has rested on the beauties of ancient structures, however battered by shell, his brain, for the moment, has been capable of normal conception. Fragments of Ypres stand serene in warm sunshine against a beautiful sky.

Major J. Kerr Lawson has treated this subject under the influence of the day with strength and skill, free from the prevailing morbidity; his rendering of detail has great scenic value, and the excellent planning of masses of light and shade should be of particular interest to American architects, who at the present moment show little capacity in that direction.

The directness and frankness of his statement indicates the mental process of the modern soldier-truth without elaboration -a relief from the theatrical swashbuck-

ling typified in Detaille.

Destruction, in this picture, sounds a new note, bearing no kin to the romantic decay so inspiring to Prout and his school, or to the ruins favored by Henri Robert as scenic accessories to paddling nymphs.

The distinguished British author, critic and connoisseur, Mr. Paul G. Konody, was deputed by his Government to commission the artists and direct their work, to form this national collection for Canada. Heis to be complimented on the admirable manner in which he has arranged the show. LEON V. SOLON.

voungest of

It is usually supposed that the Massachusetts The oldest and Institute of Technology was the first institution American Schools to establish professional of Architecture. instruction in architec-In ture. continuous maintenance of such in-

struction it has indeed seniority, but it yields to several other institutions in priority of establishing architectural instruction. A first, abortive attempt was that of Quesnay de Beaurepaire, in his Académie des Sciences et Beaux-Arts, instituted at Richmond, as a bond of Franco-American union, in 1789. Although the French Revolution stifled it barely at its inception, that was not before Quesnay had sent to America-as Mr. Wells Bennett has shown-the first highly trained French professional, Stephen Hallet. In

1814, Jefferson, in the outline which formed the basis of instruction at the University of Virginia, proposed as the first of the professional schools a department of fine arts, embracing civil architecture, gardening, painting, sculpture, and the theory of music. When the charter was adopted in 1819. architecture appeared, strangely though it might seem to us, among the subjects to be taught by the professor of mathematics! This was not merely because statics and descriptive geometry fell in the field, but because in that day classicism was at its height, and exactness of proportion was held to be the capital merit, while architecture was considered within the scope of every highly cultivated intelligence. Sir Christopher Wrenn himself had come to architecture as a professor of mathematics. The first incumbents of the chair at Virginia. Thomas Hewett Key and Charles Bonnycastle were men of wide culture. That they sought to inculcate some knowledge of basic architectural principle, by precept as well as by the example of the classic buildings of the University, may go far to explain the persistence of good architecture in the antebellum mansions of the South.

The Confederate War and increasing specialization brought an end to this, and transferred the leadership for the time, to the victorious North. Now, however, an alumnus of the University of Virginia, Mr. Paul G. McIntire, of New York, has provided a generous endowment for the re-establishment there of the school of art, architecture and music. Professional instruction in architecture will begin in the fall, in charge of Prof. Fiske Kimball, formerly of the University of Michigan. The pavilions of the original classic group of buildings will once more serve, as Jefferson wrote, "as specimens for the architectural lecturer." The splendid new buildings by Stanford White, the sculptures of Houdon, Bitter, Borglum, Shrady, Keck, and Aitken, which make without question the most harmonious ensemble in America, will come into their own as a background for instruction in the five arts. Thus the University may bring to the new South as to the old, the knowledge, love and patronage of the best in

classic and modern art.