THE HARMONIE CLUB-HOUSE—Illustrated ........................................ 237  
Herbert D. Croly

THE WORK OF WOOD, CONN & DEMING, Washington, G. C.—Ills. 245  
Leila Mechlin

TWO NEW ARMORIES—Illustrated ........................................ 259  
Montgomery Schuyler

THE BUILDING OF A GREAT MERCANTILE PLANT—Illustrated ........ 265  
Theodore Starrett

FORTRESS-MONASTERIES OF THE HOLY LAND—Illustrated ........... 275  
William G. Fitz Gerald

THE ARCHITECT AND THE CRITIC ........................................ 279  
H. W. Desmond

EXAMPLES OF GEORGIAN WORK IN CHARLESTON, S. C.—Ills. ....... 283  
J. Robie Kennedy, Jr.

TWO HOUSES BY ROBERT SPENCER, Jr.—Illustrated .................... 295

NOTES AND COMMENTS—Illustrated ...................................... 308  


TECHNICAL DEPARTMENT—
Glazed and Colored Terra-Cotta—Illustrated ............................ 313
The Routine Paint Specification .......................................... 325

C. W. Sweet, Publisher  H. W. Desmond, Editor
R. W. Reinhold, Business Mgr.  H. D. Croly, Associate Editor

Subscription (Yearly), $3.00  Published Monthly
10 East 60th Street, New York. McKim, Mead & White, Architects.
The Harmonie Club House

No firm of architects in this country have had anything like the experience which McKim, Mead & White have had in designing club houses; and many of their most conspicuous successes have been made in this class of building. The first club house they designed was that of the Freundschaft in New York City. Then came in quick succession the Algonquin Club in Boston, the Deutzer Verein, the Riding and Driving Club in Brooklyn and the new building for the Century Club. In this house they were most happy in maintaining in its rooms a strong suggestion of the old New York interiors, and no atmosphere could have been more appropriate for the apartments of a club with the traditions of the century. About the same time they did over the Players, which house remains to this day the most comfortable and charming club house in New York City. The Metropolitan Club House followed soon thereafter; then came the building for the Harvard Club, and then for some years there was a lull, which was succeeded by a fresh burst of activity. The splendid new building of the University Club was the first fruits of the revival, and it must still be counted the finest thing of the kind in New York City. Then there followed in quick succession the Brook, the new Lambs, the new Harvard and the Harmonie, while in another year the building of the Woman's Athletic Club on Madison Ave. will have been added to the list.

That so many commissions of this kind should have been bestowed upon the above-mentioned firm should not be considered as the accidental result of their general popularity. Other prominent firms of architects have been almost as popular in respect to their classes of work, but McKim, Mead & White have no competitors at all, so far as the designing of club houses is concerned; and the reason, doubtless, is that the characteristic merits of their treatment, particularly in relation to interiors, appear at their best when it is a matter of designing club houses. They have a way of making rooms, designed in general along academic lines, very interesting and comfortable places in which to sit; and it is of their ability to give atmosphere, character and warmth to the big, impersonal lounging and dining-rooms of a club house, which makes their work so highly appreciated by club men. The few modern New York club houses, which have been designed by other architects rarely possess the same quality—a quality which, as is well known, McKim, Mead & White manage to impart to almost all the living-rooms they design—even to those rooms which are most splendid and magnificent in their scheme of decoration. The University Club House, for instance, has been built and decorated on a scale of magnificence, more appropriate, perhaps, for a hotel than a club, but for all that the chief rooms in the building are as far as possible from being examples merely of barren and depressing splendor. Not only are they designed with the utmost skill, but they are distinctly agreeable living and
ENTRANCE TO THE HARMONIE CLUB.

10 East 60th Street, New York. McKim, Mead & White, Architects.
eating rooms, in which a man may feel himself as much at home as in any apartments of similar size and architectural pretensions. McKim, Mead & White do not turn the rooms of a house which they are designing over to outside decorators. The rooms are made in the firm's own office, and bear the unmistakeable stamp of its methods, purposes and taste.

The building of the Harmonie Club on East 60th St., in New York City, is a worthy successor of the long line of similar buildings which have preceded it. It does not, indeed, possess the peculiar distinction of a number of the previous club houses, such as that of the Century, the Players, the University or the Harvard, but that is doubtless because the club itself does not possess any distinguishing characteristics which would naturally suggest some individual and interesting building. The club house is enclosed both on the east and west by apartment houses of more considerable height, and in order to hold its own against such neighbors it had to be somewhat showy both in design and in material. The street front, consequently, is constructed of marble, and the design is more pretentious than usual. The entrance porch is carried up through two stories, and immediately above there is a recess on the face of the facade large enough to contain six windows in two different stories, and embellished by two engaged Ionic columns. The third, fourth and fifth stories are tied together by four pairs of pilaster, between each pair of which the long and somewhat narrow openings look rather "spotty." On the whole it is a fair criticism of this facade that its scheme of architectural design and
10 East 60th Street, New York.

LOBBY ON THE MAIN FLOOR, HARMONIE CLUB.

McKim, Mead & White, Architects.
10 East 60th Street, New York.

GRILL ROOM, HARMONIE CLUB.

McKim, Mead & White, Architects.
The Harmonie Club House.

Decoration has not been very successfully combined with the necessary conditions imposed by the plan of the building and the purposes for which it is used.

The interiors, on the other hand, while not as interesting as many which McKim, Mead & White have designed, possess, nevertheless, the characteristic good qualities of their work. They are simply, broadly and appropriately treated, and the scheme of decoration is much adapted to the dimensions of the various rooms and the purposes to which they are put. What could be better for its purpose, for instance, than the treatment of the lobby, the severity of which is relieved by the handsome marble columns, and the whole appearance of which is centred by the copy of Cellini's Perseus in the middle of the floor? In the lounging-room the wall space is cut up by a large number of windows, but the ceiling is effectively managed, and the wall painting over the mantelpiece forms an effective terminal feature for that end of the room. The grill-room looks small for a club of this size, and compares amusingly in its size with the dining-hall of the Harvard Club. Evidently the members of the Harmonie Club eat their meals at home much more generally than do the Harvard graduates domiciled in New York. In the Harmonie Club House even the card-room seems to be more spacious than the grill-room.

Herbert D. Croly.

Gunston School.

Washington, D. C.

Wood, Donn & Deming, Architects.
CENTRAL TOWER OF PROVIDENCE HOSPITAL.

Washington, D. C.

W. I. Deming, Engineer.
The Work of Wood, Donn & Deming, Washington, D. C.

Washington, the capital of the nation, offers to architects unusual opportunities for artistic expression. Its wide streets and stately avenues furnish not only long vistas but dignified settings; its ample stretches of unbroken sky, its abundant foliage and universal parking, lend it color and picturesqueness, and its village veneered in places with urban sophistry. It is essentially Southern and yet thoroughly non-partisan—neither conservative nor progressive. For these reasons it affords, architecturally, uncommonly wide latitude, and suffers proportionately from a multiplicity of styles. Its public buildings are for the most part

![Image of Providence Hospital]

Washington, D. C.

W. I. Deming, Engineer.

official function gives it both individuality and distinction. It is a peculiar city, thoroughly cosmopolitan and yet at the same time provincial. In spite of the fact that it is the seat of the Federal Government and that its population is drawn from every State in the Union, as well as the world at large, it is in truth neither more nor less than an overgrown classic in type, but its private residences and business structures conform neither to rule nor tradition. When a Federal legislator wishes to inaugurate in his own State some radical measure he habitually tries it first upon the unoffending District of Columbia, and, reviewing critically the architecture of Washington, one might be led to believe that
the same course had been pursued by the architects. There is undoubtedly virtue in variety, but at the same time there is in the mass of experimental production comparatively little, unfortunately, which bespeaks original thought or an appreciation of existing possibilities. That is, until very recently.

At the time the city was laid out good taste as well as critical judgment prevailed. The public buildings which were then erected are counted to-day of exceptional worth, and some of the private residences built during that same era are still considered exemplary. From the early fifties to the late eighties there was a period of darkness, a reign of architectural terror, which produced many aberrations and left on some of the city’s principal thoroughfares monuments to the ignorance and indifference of their designers. About the time of the Columbian Exposition there was a change for the better, not directly attributable, however, to the beneficent influence of that great World’s Fair. The wave of improved standards which crested at that point passed over the entire Northeast and skirted in its progress the National Capital. In 1893

Washington, D. C.

MAIN ENTRANCE, PROVIDENCE HOSPITAL.

W. I. Deming, Engineer.

the Tarsney Act became a law; in 1897 the reorganization of the Supervising Architect’s office was begun, and the year 1901 saw the appointment of the now famous Park Commission. Meanwhile there was development along other lines. Certain young men were coming from the local backwoods and from abroad with new ideas and good training—men who were destined to give
fresh impetus to architectural production and to make in the field of American architecture not unworthy contributions. They were distinctly the product of their age. They comprehended, perhaps intuitively, the conditions with which they had to cope, and they brought to bear upon their work not only strong personality, enthusiasm and high ideals, but also in most cases good schooling and sound judgment.

couraged by the slowness of his progress and the diminished distance of his goal, he left it after a few weeks, and, with the temerity of inexperience, started out for himself. At the Library of Congress he obtained and studied the standard works on architecture, and from his associates he gleaned what practical information he required. Going to original sources for his inspiration and frankly acknowledging his mistakes, he brought

RESIDENCE OF MR. C. A. DOUGLAS.

Washington, D. C.

Wood, Donn & Deming, Architects.

Among these men of the later generation may be numbered all three members of the firm of Wood, Donn & Deming, a firm which since its formation has done much toward the improvement of local conditions. Mr. Waddy B. Wood, the senior member, came to the city from a Virginia farm after three years' employment on a railroad survey. Determining to become an architect, he entered, after the usual manner, a local office, but, dis-
tail, the perfection of plan. The third member, Mr. William I. Deming, is a structural engineer, with a degree from the Columbian, now George Washington, University. He is a man of executive ability, excellent critical faculties and clear intelligence—the business manager to whom in reckoning success credit is always due.

The personnel of a firm is, it is true, of small significance in comparison to its work, but it sometimes serves as an index to the latter. What a man produces depends largely upon what he is, his personality as well as his equipment, and in due ratio the output of a firm must be proportionate to the strength and relative merits of its members. In the present instance the component parts admirably complement each other and thus collectively, without wasted force, form a successful working unit.

From point of priority as well as on account of distinguishing characteristics, it will be well in reviewing the work of these architects to turn to the Providence Hospital Building first. It is, as one will see at a glance, an adaptation of the Spanish mission style and was a problem in partial reconstruction. When Mr. Wood and Mr. Deming were called upon for a plan for this building (Mr. Donn was then a designer in the Super-

**GENERAL C. L. FITZHUGH'S RESIDENCE.**

Washington, D. C.

Wood, Donn & Deming, Architects.
would have been of small moment minus the external form in which it was set forth. Because it was a Roman Catholic institution the architect saw fit to fashion his design in the spirit of that style introduced into America by the Spanish priests. The form of the walls was undisturbed, the original openings virtually accepted, but the severity was tempered by a coating of pebble-dash, the monotonous broken by the judicious introduction of bays and insertion of loggias. The entrance and the tower, which were both new, lent it dignity and appropriate importance. In combination of materials it is interesting. The steps and enclosing wall are of red unfinished brick, the entrance and adjoining porches Indiana limestone, the wall face buff stucco of a rather coarse texture, the window frames and trimmings wood, painted a gray-green, and the roof, which is upheld by wooden rafters, of red Spanish tiles. At a glance it is the color scheme which attracts the eye and gratifies the esthetic sensibilities; and color as an element of architecture is the one thing which for some reason until very lately has been most widely disregarded or overlooked. In a painting it is color which primarily declares itself, which directly and continually appeals to the senses, and which is chiefly accountable for what is termed "decorative effect." Color charms the eye; line and proportion address themselves to the intellect. The Greeks, we know, appreciated this fact, and Nature on every side demonstrates it. It is an axiom, moreover, no less applicable to architecture than to painting. There is indeed less difference between the calling of a painter and an architect than many suppose. The one is merely obliged to produce pictures with brushes and pigments, the other with wood, brick or stone. The painter's aim is, or should be, to interpret Nature; the architect's to adapt Nature to the needs of man, for just as surely as the one works irrespective of his fellow beings, the other is required to labor in consideration for them. Architecture cannot be divorced from man; it was called forth by human necessity and has developed and existed in accordance with

RESIDENCE OF MRS. PHIL. SHERIDAN.
Washington, D. C.

Wood, Donn & Deming, Architects.

timely demand. It is essentially a useful art, but it is for that reason none the less beautiful. An artist paints a picture on a flat canvas and places it in a house or gallery; an architect builds that structure and through his design contributes to the making of a larger picture called a city. He is obliged to work not only with material, but with environment and to consider utility together with beauty and fitness.

This in the Providence Hospital building Mr. Wood has done. Primarily it is picturesque; its color scheme is more than ordinarily harmonious; its expression dignified and significant; its façade is pleasantly broken and yet sin-
cerely a unit; its well proportioned tower cuts strongly against the sky, and its roof, with its warm color and varied surfaces, not only gives to the building an air of brooding protection, but lends a grateful note to the city itself.

It has been said that the exterior of a building should, to the initiated, be literally transparent—that it should, in other words, definitely, indicate the impellent. Every detail has been carried out in accordance with the doctrine of advanced science and the arrangement of the operating rooms is most complete. Each corridor is lighted by a window at its extremity, and for the benefit of convalescent patients sunny loggias and a roof garden have been provided.

The mission style commends itself both to the climate and the purse of Washington. The winters are short and comparatively mild; the majority of the residents only moderately wealthy. Stucco is not cheap, but it is less costly than stone and presumably more imposing than brick. Messrs. Wood, Donn & Deming have just completed in this material and style an apartment house and a private residence which are individually worthy of consideration. The former is

ROW OF RESIDENCES ON HARVARD STREET.

Washington, D. C.

situated on a singular, bow-shaped lot formed by the junction at an obtuse angle of Twentieth street and Florida avenue. It measures from end to end 336 feet, is three stories in height and shows a red-tiled roof and green trimmings. Its notable features are its general picturesqueness, its roof garden and its plan. Three tiers of apartments, some one and some two stories in height, radiate from a main front hall and are approached by and since the erection of the pergola it may be questioned whether or not the central member has sufficient elevation for the purpose of emphasis and poise. But these are the incidents, not the substance, of the design, and, though they mitigate the value of its objective form, they do not trespass upon its intrinsic merit.

Of the residence built, on Columbia Road, for Mr. C. A. Douglas, one can

ROW OF RESIDENCES ON NINETEENTH STREET.

Washington, D. C.
Wood, Donn & Deming, Architects.

a single staircase. All the rooms open either on the street or on triangular, unenclosed courts, and are light and airy. The building is clever and interesting, but less studied and more open to adverse criticism than much of the firm's work. The gables are, for example, rather light, in proportion to the façade, and distinctly choked by the clasp of the overhanging cornice; the left wing does not terminate entirely satisfactorily, speak with more unqualified appreciation. Likewise fashioned after the Spanish type, it is particularly well adapted to present needs. It faces east and is elevated from the roadway by a five-foot terrace. In height it is but two stories and an attic; in width two rooms and a hall. The façade, warm gray stucco of a fine texture, is dignified and simple; the entrance notably hospitable and impressive. The unique feature of the de-
sign is the patio on the south, which forms a secluded retreat for social use on summer evenings and affords light and a vista to all the principal rooms. On its cloisters the drawing room, square middle hall and dining room open through French windows, and to it the formal driveway leads. It adds stateliness to the building and yet at the same time an air of informality. It suggests family life and those luxuries which usual perhaps and yet certainly more scholarly, is the residence designed about two years ago for General C. L. Fitzhugh. Built of brick on a limestone base, with stone trimmings, tiled roof and stucco facing, it occupies a commanding position on Sheridan Circle, and can for the present boast as a background unbroken stretches of woods and sky. Its proportions are excellent, and its arrangement of openings leaves little to be

**RECEPTION HALL IN MR. WOOD'S HOUSE.**

Washington, D. C.

are merely the external expression of culture and refinement. The interior is well in keeping with the general design—well arranged, homelike, not lavish in ornamentation, but rich; commodious but eminently livable. The treatment of the chimneys, the way in which they terminate the gables and are thus knit into the design, is interesting, and the fact that it is an all-around house, with the traditional rear, is worthy of mention.

On an entirely different style, more desired. There is something very neat in the design, in the well-modulated coloring and clear-cut, positive lines. The details are admirably fashioned. Note, for instance, the wall panels and the moldings, but they have been adroitly subordinated to the general effect. The roof, which in the illustration appears rather thin, is in reality of satisfactory weight, has an agreeably wide overhang, and is supported by wooden brackets carved and stained. There is no sug-
gestion of modern hurry in this house, no semblance of artificiality or self-conscious pretension. It is serious, studied and substantial, and it manifests, together with the personality of the owner, the strength and scholarly attainments of its designers.

Not more than a stone's throw from this stands the house of Mrs. Phil. Sheridan, a less costly structure, but equally as intelligent and dignified a design. It

however, of heavy tint, and the general design formed by the lines of mortar, while definite, is not insistent. Punctiliously correct, severely formal, it derives a sparkle and vivacity from its color scheme—an effect of latent vitality held in modest reserve, which probably could have been realized through no other channel.

The impressionists discovered that to produce the effect of air and sunshine shows an exceptional skilful use of material, and for this reason is specially commended to attention. The base, trimmings and cornice are limestone, the façade red brick, and the roof gray-green slate. The bricks are laid in alternate courses of Flemish bond and stretchers, with wide joints, and are so placed as to form a repeated, geometric pattern.

Five shades of bricks are used, none, they must reverse the practice of the spectroscope and compose their pictures of color spots—red, blue, yellow, purple, orange and green—placed in exactly the right proportion in juxtaposition. They carried their theory to extravagant excess, but beneath its surface was more than the proverbial grain of truth. Nothing in Nature is a solid color, that is, no extended mass; or, if it is, it will be found unappealing. The blue of the...
sea is broken by its reflections or its waves; the green of the lawn, varied by its countless shadows and minutely uneven lines. It may be, indeed it often is desirable to erect a building of a single material, but, even so, it must be wisely modified in color as well as tone by the careful introduction of varied surfaces and by skilful manipulation of the problems of light and shade. And this in turn make its identity self-evident and its character undisguised. They use frequently, as in the Sheridan house, several shades, and lay them almost always with wide joints. To texture they pay special attention, breaking the evenness of the surface or lending it finish by the judicious use of rough or smooth joints, as the material and occasion may dictate. Thus they differentiate between a painted

---

ST. PATRICK'S PAROCHIAL BUILDINGS.

Washington, D. C.

Wood, Donn & Deming, Architects.

leads us not only to a consideration of color, but of texture.

There is no material more adaptable to decorative purposes than brick, none with larger possibilities, and yet none probably which has been more frequently misused and abused. With this material Messrs. Wood, Donn & Deming have made some interesting experiments and achieved some excellent results. They treat brick with the utmost frankness, wall and one of brick; between a stable, a shop and a residence. The styles which are to-day held as exemplary were produced largely by the needs of their own times and by the limitations of available material, and if we are to develop in this era a style worthy of remembrance it must be through a conscious effort in this same direction.

Since its incorporation the present firm of Wood, Donn & Deming has stood
for sincerity and protested against sham. It has discomfited the use of tinstone trimmings, galvanized iron ornamentations, shallow facings and the like, and has utilized in their stead cheap but honest materials. This attribute will best be comprehended by an examination of the three rows of moderate-priced dwellings shown in the accompanying illustrations.

The homes of the "comfortably poor" have been less kindly dealt with by those of the architectural profession than the residences of their more prosperous brethren. They afford, without doubt, smaller opportunities and offer less generous reward, but in the makeup of a city and in the life of a nation they are undoubtedly of the more profound importance. The house a man lives in is bound to affect his ethics, and there are, it must be remembered, more men who work than princes, even on this side of the Atlantic. That to be artistic and architecturally worthy a house need not be costly, these rows of residences amply testify. The Harvard street row is probably the most usual in general aspect, and yet, through purity of design, the most noteworthy; the Columbia Road row is chiefly remarkable for its adaptation of space, individuality and attractive roof treatment; while that on Nineteenth street stands as an example of unique design and peculiarly felicitous arrangement. An additional word should be said in connection with the last. As will be seen from the plan, the effort was to throw as many rooms as possible to the front, which faces east, and at the same time increase the normal feasibility for comfort and convenience. They are frankly homes, and their design is of sufficient latitude to be adaptable to various personalities. Externally they are most picturesque—odd, but not eccentric. The material is hydraulic brick of a cream color, laid with wide, rough joints; the roofs are of red tiles; the window frames, etc., wood, painted sage green. The parking gives them privacy and, with the foliage, appropriate setting.

In the matter of plan and interior fin

ENTRANCE TO CARROLL INSTITUTE.
St. Patrick's Parochial Buildings.
Washington, D. C.
Wood, Donn & Deming, Architects.

ish the house which Mr. Wood owns and occupies is in a measure typical. On a lot with a frontage of forty-five feet, he and Mr. Deming built for themselves twin houses, American basements, with flat façades and a light court opening on the street. Mr. Wood has treated his reception hall after Pompeian design and has handled it with exceptional cleverness. The second story staircase is screened by columns which are less imposing and more in keeping with the pretensions of the residence than they appear in the photograph. His drawing room is formal, but hospitable; his dining room of genial proportions and good design. The scheme of color throughout is green, the woodwork light gray. The details are well thought out, simple and not over-emphasized, the wall spaces well arranged for the purpose of convenient furnishing. There is a reticence in both the plan and design which is commendable; a fidelity to accepted types which puts all fadism to shame.

On an entirely different line, display-
"THE BACHELOR" APARTMENT HOUSE.

Washington, D. C.  
Wood, Donn & Deming, Architects.
ing versatility as well as skill. are the St. Patrick's School and parochial build-
ings, which this firm designed almost at
the outset of its organization and which
still stand among its chief accomplish-
ments. St. Patrick's Roman Catholic
Church is in the heart of the business
section and, though built many years, is
not yet completed. To suggest a scheme
for its completion and to design in ac-
cordance with that scheme the parochial
house and school for immediate erection
was the task given to these architects.
The style chosen, it will be noted, was
the English Gothic, and the manner of
rendering will be found to conform well
with tradition. A description of the gen-
eral aspect of these buildings with the
photographs before us would be gratui-
tous, but attention may be directed with
propriety to the strength and heaviness
of the design—to the way in which the
various purposes of the two buildings
have been indicated by the arrangement
of openings and the increased or dimin-
ished formality of expression. Unfor-
unately the roof lines of these structures
cut against the unpicturesque rear walls
of adjoining office buildings and are
thereby dwarfed and made less effective.
To this is due a squat appearance, which
is obviously objectionable, but in making
any criticism it must be remembered that
the scheme is still incomplete and that
when a spire is added to the church and
other alterations made they will prob-
ably, in spite of their surroundings, build
up to the greater height in a way which
will remove this impression. The detail
in these buildings (for which it is under-
stood Mr. Donn is chiefly responsible) is
particularly interesting, the architects' vernacular from first to last manifestly
intelligent and good.

The Gunston School, a young girls' seminary, is in still another vein. It
shows Colonial derivation and exhibits
in its plan conformance to modern util-
ity. Its façade is logical, its expression sincere; the openings are well propor-
tioned and nicely placed, the lines vigorous and significant. For the purpose of
effect, however, it needs elevation from
the level of the street, and to complete its
symmetry should have balconies added to
its second-story windows as well as weight to its porch.

As truly Colonial, though less archaeo-
logical is the residence built for Dr.
Gallaudet. At a glance this house is
sympathetically Georgian, but upon sec-
ond thought it betrays a modern French
tendency. It has an element of both;
ought of the one to give it solidity, su-
sicient of the other to assure it grace.
The wrought-iron railing which passes
across the façade on a line with the draw-
ning room windows is an unusual feature, in-
telligently introduced. In its design
it is individually attractive, and as an ele-
ment of the general composition it suc-
cessfully bridges over the transition from
stone to brick.

The Bachelor Apartment House, which
is but just completed, is perhaps more
notable as a product of the age than for
its architectural pretension. It presents
an orderly façade of selected brick and
stone and shows on its roof a garden of
attractive size and design. Within it is
admirably planned and almost brilliantly
adapted for its purpose, but its chief
value lies in the fact that it meets adequately the requirements of local conditions.

A few words at least should be said of the plans and design made by these architects for the new Masonic Temple, which is to be erected in Washington in the near future, not only because it is, up to the present time, one of the most ambitious of their accomplishments, but also because it proves them capable of handling large problems as well as small, and demonstrates the fact that they are not restricted to a single formula. This building will be erected on a wedge-shaped lot, bounded by two streets and an avenue. In conformity with the great public buildings, it will be Classic in type; unmistakably a temple, but so modified that it will suit the changed conditions of our time and age. The three façades, by their several parts, will convey to the mind the uses to which each section is put—the public part by large openings architecturally framed, and the secret by small openings and large, simple wall surfaces. The peculiar shape of the site made it possible to impress on the shortest and most important façade (that of which an elevation is given), the character of the temple, and to permit in the long sides the continuance of the same motive, with sufficient variation to preserve the type and yet lay extra emphasis upon its mystic character.

Some one once remarked that in the present age the best that could be said of any architect’s work was that “it is not bad,” but in this instance, which is not isolated, it would seem that we might be justified in going a step farther and pronounce it at least worthy. The members of this firm have not, it is true, always turned out good work—they are not infallible—but they realize their own limitations and have not yet attained maturity. They have, however, already made distinct contributions along certain lines. They have developed the pictorial; they have demonstrated the value of color and texture; they have put old materials to some good new uses and have met, in a measure at least, the needs and requirements of a peculiar place and time. Their buildings are not all faultless, but they are sincere; they do not grimace nor chatter, but are simple, dignified and of fair proportions. Their work is perhaps less brilliant commonly than the French, but it is more virile and it possesses what is rarer, a genuine spark of originality. For these reasons it has been thought worthy of discussion and will be found to merit even more careful scrutiny. In such work, we believe, tomorrow’s promise is to be found.

Leila Mechlin
Two New Armories

The architecture of armories, meaning meeting places which are combined drill-rooms and club-rooms for our citizen soldiery, under our peculiar conditions, is a very special American architectural problem. One might almost say that it is a special problem of the State of New York, seeing how very urgent and liberal this commonwealth has shown itself in questions pertaining to its defence against "treason domestic" and "foreign levy."

We have by no means, even in the State of New York, and after so many expensive experiments, arrived at anything that may fairly be called a type of this kind of structure, which is entitled to impose itself upon subsequent designers. We have spent a great deal of money. To think of the number of armories that have been erected for the accommodation of the N. G. S. N. Y. within the last twenty years, and to recall the edifices upon which the money has been spent is to be assured that if the commonwealth is not well defended, it is not for want of money spent upon its defence. It is likewise to have recalled to one a number of edifices of an agreeable architectural impression. The phrase "military architecture" may conjure up, to the architect or to the layman, a number of architectural devices no longer practically relevant to the art of war, "crenelles," for example, through the crevices of which nobody would now think of shooting arrows, or even of aiming small calibre rifles, and "machicolis," for example, down which nobody would any longer think of pouring molten metal, even against an embattled and striking front of linotypers, though, no doubt, as a repartee, that mode of defence would be pertinent. Most of our armories show some such concession as we have indicated to past modes of warfare by way partly of acknowledging their impotence architecturally to cope with actual modes of warfare. In the main they suggest warfare of the bow and arrow period, or at most of the ballista and catapult period. One should not be too hard upon the designers, all the same, for their harking back to obsolete but partly on that account, picturesque precedents. Their architecture may be "Aberglaube," but Aberglaube, according to Goethe, is "the poetry of life."

But there are even now, and quite practically, certain requirements of an armory, or, let us say, certain absences of requirement about an armory which make it an extremely attractive architectural problem. It shares with the storage warehouse the relaxation of the commercial requisition that a building shall be composed of a minimum of wall and a maximum of window. The architect is at least not compelled to make a sash frame. Which is to say that an armory gives legitimate scope for the massiveness and expanse of wall for which any architect with a "feeling of his business" must especially yearn by way of relief from the customary exercises of his profession. Every armory is, in fact, an opportunity. The proof is that, of the works of those architects who have built armories and built something else, their success with their armories is very apt to be more signal than their success with the something else. Witness, especially, the late J. R. Thomas. He had built something else in fairly abundant measure, commercial buildings, domestic buildings, public buildings, including the new Hall of Records, and particularly churches. Yet the amateur of architecture who should be called upon to reckon up Mr. Thomas's contributions to that art would have to put in the very first rank that armory, compounded of the headquarters of the Eighth Regiment and the headquarters of Squadron A, of which the round blind towers in good red brickwork, recalling to more than one traveled observer the Castle of
SEVENTY-FIRST REGIMENT ARMORY.
34th Street and Park Avenue, New York.  Clinton & Russell, Architects.

San Angelo, form one of the most noteworthy objects in the region of upper Central Park.

With the armory of the Seventy-first, at Park Avenue and Thirty-fourth St., he was not so successful. The material was costlier and more pretentious, being rough masonry with rather a profuse use of wrought work. But the design was not so good. The impression of the finished building had the fatal defect of thinness. Curiously, the fire that burned out the shell of the building revealed that this thinness was a structural as well as an architectural defect. The walls the fire left standing were of a painful precariousness to the view. Many persons would regret the destruc-

tion of the armory at the top of Park Avenue. But nobody has been overheard to lament the destruction of the armory at its base. It would have had to be a pretty bad successor which should inspire that emotion.

As a matter of fact, the actual successor is a particularly good thing. One who has occasion to pass and repass it ought to be grateful to the designers who have given him something to look at. And one who has habitual occasion only to see its crowning tower, "above the purple crowd of humbler roofs," must also, if of a sensitive constitution, be moved to gratitude. The traditions one finds in full force, all the conventions of the mediaeval warfare to
which distance lends romantic enchantment, contrariwise to the actual and prosaic art of murder. The parapets are crenellated, though nobody is expected to shoot between the crenelles. The cornices are machicolated, though nobody expects to pour hot lead from the machicolés. But the composition, with its flanking round towers on each side of the entrance which we are supposed to accept as a "sally port," especially in the deep segmental recesses of the main entrance, with the fewness and smallness of the openings, and the thickness of wall indicated by their reveals, the effective bonding of the rough brick walls with rough light stone,—all these things are of an undeniable attractiveness. The stark brick tower, with its Florentine reminiscence, or even without its Florentine reminiscence, is an oasis in our architecture, a distinct addition to our Manhattanesque "tiara of proud towers," of which so many of the most conspicuous are not towers at all, but mere protrusions into the shrinking empyrean of parallelopipeds without shape or comeliness. The enforced author of so
many of these is, one may suppose, the relieved and enjoying author of this. It must relieve him to have it in his power to make thus much of amends. And, if I am not wrong in thinking that one of his early works was the armory of the Seventh Regiment, some mile and a half north of this, and on the same avenue, he is entitled to congratulate himself upon his growth in artistic grace in the interval. Not that his present work is impeccable by any means. Seen close at hand, one cannot help seeing that the use of the American flag as an architectural decoration by the crude device of merely pasting it flat on a wall, is trivial and banal. A mosaic of the shield would have been much more to the purpose. Also, and in a distant view, the finial which culminates the tower is a baleful superfluity. The silhouette was.

much more impressive when the structure consisted, like its prototype, only of the two, stark shafts beetling into their crenellated and machicolated cornices at the top. The exigencies of the camera, which prevented our photograph from showing that trivial and belittling umbrella did the architect a service. But we should be sincerely obliged to him all the same.

The other armory, that of the Sixty-ninth, at Lexington Avenue and Twenty-sixth, is of an entirely different inspiration from the preceding, or, in fact, from any of its predecessors. It seems even to be a protest and token of revolt against them. It is noteworthy by the absence of the conventions of military architecture, by its lack of “aberglaube.” Your regular thing, the architect seems to say, is not at all founded on fact.
Your crenelles and machicoulis are anomalies in “the present state of the art.” Go to. Let us build a modern armory on modern lines. The requirements being of a great assembly room suitable for battalion drill, and of an administration building thereto, let us express them in a building “without any bigoddl nonsense about it” (Dickens). This is a conceivable mental state, and the architect of the Sixty-ninth has maintained it. But one wonders how an Irish regiment, of all human organizations, can afford to get on without sentiment and to stick to the facts! For, one sees, this practical conception of an armory is with difficulty distinguishable from that of a railroad station, with its “head house,” answering to the administration, and its “train shed” answering to the drill room. Which conception, one has to own, is very thoroughly carried through, and if not exactly in an artistic, which in a way the author denied himself at the outset, at least “in a workmanlike manner.” The smallness of the openings and the massiveness of the walls denote that he is free from the conditions which would cramp him in a station. Possibly the eyries which are the features of the front are meant to have military significance. One perceives that a few guardsmen stationed in them might make themselves very annoying, by means of an enfilading fire, to a mob in the street below. And without doubt they are picturesque excrescences. That peculiarity in the design which must at
once arrest everybody's attention is the carrying of the trusses which support the great roof outside, instead of hiding them within its equable convexity. The advantage thus gained by the increase of unbroken floor space is obvious and incontestable. There are animals, crustacean animals, which carry their skeletons outside, and one can imagine a roof very effectively treated in the manner of a carapace. But one cannot call the present treatment effective. Merely to sheathe your externalized skeleton in sheet metal is not to express it. And when you go on to carry along your roof the line of the main cornice of your terminal buildings, with an entablature more irrelevant to it, architecturally and practically, than would be any of the conventions of military architecture which you have renounced, you have added something at once superfluous and ugly, and, what is worse, given away your case. The building might commend itself to a scientific soldier, say, of the German General Staff. But, surely it is not so attractive as the other, as a visual object merely. It does not denote its purpose any more accurately. One is impelled to call the fundamental conception a mistake. But it is an interesting mistake, and the masses and the details are undoubtedly "handled." One does not, however, consider that it will have much influence in inducing future designers of armories to refrain from reverting to their traditional "Aberglaube," or, in the vernacular, "bigood nonsense."  

Montgomery Schuyler.
The Building of a Great Mercantile Plant

Have you ever read some stirring tale of heroic action, some story of a battle, for instance, and with bated breath and beating heart followed in your imagination a bloody charge like that of the Six Hundred at Balaklava—half a league, half a league, half a league, onward, on through the valley of death? And have you ever sighed as you finished the story and thought of the good days and the brave days when money-getting had not become the modern fetish, and deeds of derring-do were not a memory or a fable?

If you did, let me tell you you were wrong. These heroes still live. The race has not died out, and in these glorious days of hypocrites exposed and rascals cleaned out perhaps their fame may be heralded as in the days when war with its horrors was the only theatre of heroic action.

The public is used to talk about the captains of industry who have succeeded the captains of war, but the trouble is that all the captains of industry seem to be graduated from the quartermaster’s department. The field officers—the fighters—who take their lives in their hands, and, mayhap, lose them, are often unknown to fame—if not unwept and unhonored, yet certainly unsung.

The temperament of the fighting leader is well illustrated by this story of Alexander the Great related in the words of Lord Bacon: When Alexander passed into Asia he gave large donations to his captains and other principal men of virtue; insomuch as Parmenio asked him, “Sire, what do you keep for yourself?” He answered, “Hope.”

Well, let the sutlers and camp followers have the money, but for goodness’ sake give at least some of the glory to the fighters. The quartermaster’s department has been stealing other people’s thunder, and it is high time that honors should be bestowed where they belong.

Who are the modern heroes, the real captains of industry? And where are they to-day? Within the walls of some packing house? A dozen thousand men are employed in one pig-sticking establishment, and the pork barons who pay their wages are the captains of a very profitable industry. There is bloodshed there, but glory—hardly.

Or perhaps it is the army of clerks who present arms behind the counters of some merchant prince, a captain of industry from the quartermaster’s department in very truth.

Or perhaps it is the army engaged in manufacturing. That is too easy. A big army, it is true, but engaged in a stationary and more or less stable business with steady employment for the common soldiers year in and year out. What trouble is there about running such an army?
Chicago, III.

MERCHANDISE BUILDING—SEARS, ROEBUCK & CO.

Thompson-Starrett Co. Building Construction.

Nimmons & Fellows, Architects.
Railroading has its devotees, but the railroader will have to be his own chronicler.

No, the industry that it takes a real captain to run is the building industry. There you have work for the leader of men. There you have an army that it takes an Alexander to handle—the freest product of our free civilization—a host of trade unionists protected in their freedom, let me not say license, by something which the law has not as yet been able to curb—more master than servant—not to be driven, yet in their very freedom susceptible to leadership—dare-devils who will steal a ride on a girder as it is lifted by a single strand of cable dangling from the end of a boom derrick to some dizzy height where the piece of steel is to be riveted in place to form a rib of that great thing of life, the modern skyscraper.

He who would command an army of such men must be a captain indeed, captain of a nomadic host, to-day at work on some great building operation where thousands are engaged, to-morrow divided or perhaps entirely disbanded. The kaleidoscope-changes, the corps of different trades, each corps marching to do its own particular part of the work—a procession of craftsmen drilled and trained in the face of conditions that would be regarded as impossible in other industries, yet drilled and trained, nevertheless—gathered from nowhere, and after each corps has done its work scattered again to the four winds—these things pass before the mind and, mayhap, in their very difficulty appeal to the
ADMINISTRATION BUILDING. PRINTING BUILDING—SEARS, ROEBUCK & CO.
Chicago, Ill.
Nimmons & Fellows, Architects.
imagination of the captain of the building industry—a man unknown to fame.

Here is the man who does things. And I sometimes think that his doing is the more glorious because he is not spurred on to his work by the loud acclaim of popular applause. There are no laurels to adorn his brow, no poet to immortalize his fame. I often wonder what it is that keeps the great building hustler up to the mark, for few of the really great ones are known outside the circle of their intimate friends. It is something divine, I think, like the spark that makes the poet. The pure joy of hustling, the satisfaction of the thing accomplished is his principal reward of his arduous labors—for of money he gets but little.

The Sears-Roebuck buildings in Chicago, out on the west side, are said in their entirety to form the largest mercantile plant in the world. When George M. Pullman built the industrial town which bears his name in what is now the south side of Chicago, the operation was the talk of the entire civilized world. All kinds of stories were written about it, and its wonders in the way of bigness were on every tongue.

The great Corliss engine which was the star attraction of the centennial exhibition at Philadelphia, and which was supposed to be too big for practical purposes, was moved to Pullman and there found a suitable work in running the power plant of the Pullman Company. That engine, I remember well, had twenty-five hundred horse power.

In the Sears-Roebuck establishment the power plant is not engaged in manufacturing, unless printing be called such, and yet it is necessary to have seven thousand horse power to do the work of heating, lighting and ventilating the building. I believe it would be found that you could bundle the entire Pullman plant, including not only the factories but the workingmen’s houses, the town market and the theatre, into the single Merchandise Building of Sears, Roebuck & Company and still not fill it.

Think of an establishment whose mail exceeds in volume that of the city of Milwaukee, a town of 300,000 inhabitants, for, as I understand, in the first, third and fourth classes the mail of Sears, Roebuck & Company actually does exceed that of the city mentioned.

And this concern has a printing establishment housed in its own four-story building whose finished daily product weighs 80,000 lbs., or forty tons, for here are printed every day in the year, except Sundays and holidays, 20,000 copies of a 1,200 page catalogue, each copy weighing when finished and trimmed four pounds.

And they have their own private fire-proof office building, about two-thirds larger than the Broadway Chambers in New York City—not a skyscraper, of course, but making up in length and breadth what it lacks in height. And this office building, or Administration Building as it is called, has marble floors and wainscoting and fine cabinet work, and, what to me is most remarkable, a heating and ventilating system for the benefit of all the clerks, mind you, so perfect as to remind one of the special luxuries that heretofore have only been at the disposal of Croesus.

All these buildings are connected by tunnels large enough to allow the passage of a two-horse wagon. These tunnels, 4,312 feet of them, are primarily intended for pipe galleries, but are so arranged that passage from one building to another may be made regardless of weather.

The foundations for the entire series of buildings are what are called caisson foundations; that is, they are carried clear through the clay to the underlying rock. There are 1,563 of these caissons and they run in depth from forty to ninety feet.

The buildings are good looking, too; not common brick factories, if you please, but so well studied and so tastefully decorated that I think the critics will congratulate the architects on their work.

An interesting book might be written about the buildings, but I will leave that task for others.

And the entire establishment was constructed, from the starting of the excavating until its complete occupancy by the owners, counting strikes and all, in less than twelve months. The exact
(1) Administration Building.  (2) Court, with Machinery Building on left.

Administration Building—on right—Sears, Roebuck & Co.

Chicago, Ill.

Nimmons & Fellows, Architects.
dates are, start January 24, 1905; turned over to the owners January 15, 1906; occupied fully by the owners January 22, 1906.

But even that does not tell the story, for the Merchandise Building, with its 14,000,000 cubic feet and over, was built and occupied in six days less than eight months from the time the first spadefull of earth was thrown.

In building these buildings, 23,000,000 bricks were used, being laid in six months' time—because not all the time was taken with the bricklaying. There was one day when the gang laid 353,000 bricks in eight hours, and there was one week in which 2,350,000 bricks were laid. I know of one or two respectable little skyscrapers with no more bricks in them than were laid in two days on this work.

Two of the buildings are mill construction, and the amount of lumber used is almost appalling. Long leaf yellow pine was specified because it is of slow combustion, and for this class of structure is said to be given preference by the insurance underwriters over steel construction. The order for the yellow pine timber was placed on January 11, 1905, and is said to be the largest individual contract ever given out in the history of the trade. A delivery of 12,000,000 feet within 125 days was called for. To secure this quantity of lumber in the time specified it was necessary to call into use seventy-five mills located in the States of Alabama, Mississippi, Louisiana and Texas, as the rainy season was just beginning in the South and the trees were growing in the virgin forests, for every piece of timber had to be cut specially to order and dressed to meet the requirement. The exact quantity of yellow pine lumber used was 13,545,576 feet, board measure. At one time there was a stock of 7,000,000 feet piled at the site. A saw mill was specially built to shape this material, and one of the sights of the job...
CONSTRUCTION OF THE POWER HOUSE—SEARS, ROEBUCK & CO.

Chicago, Ill.

Nimmons & Fellows, Architects.
was this mill in action. The timbers were run in at one end, rolled under the machine, clamped in place, a lever was pulled and down came a great jaw which shaped and trued the ends and bored the holes in the twiningk of an eye; then the jaw was raised and the timber was pushed out at the other end of the mill, to be taken thence to its place in the structure.

The lumber used for boxing the concrete foundations, tunnel forms and for miscellaneous jobbing around the work was 4,159,264 feet. One little item was 4,300 surveyor’s stakes.

The order for maple flooring on this job was 2,800,000 feet.

Four foundries made the castings for the work.

During the rush a day’s consumption sometimes ran as high as 30 cars of brick, 20 cars of lumber, 10 cars of sand, cement, crushed stone and miscellaneous material.

Imagine a train of 60 cars to unload each morning, and after unloading to be enwrought in a building before night, for that was the daily task. On the morrow 60 more cars would be waiting to be unloaded, and the day’s work must be done. Some pretty good management is required here, I assure you, for while on the one hand there was the task of setting all these materials in their final resting places in wall or floor, on the other hand new material for the next day’s work must be on the way ready to arrive at the right time, not too early, for that means loss through demurrage; not too late, for that is something worse still—stoppage of the work, loss of some of your army, perhaps demoralization and defeat, for not all these campaigns are victorious.

No resting here! No sleeping at the switch! It’s up and at it, boys, or somebody will be swamped.

To the eye of the enthusiast there’s a romance about it all, and the men who take part in the game, this modern tournament—for that is how they seem to regard it—are just as much heroes as any you ever read about.

They have some very expressive language, too. A great phrase was, “Go to it,” with accent on the middle word. It meant go to your work instead of letting it come to you. “Beat him to it” meant to get there ahead of the other fellow, and was the favorite word of the Major General who commanded in this particular campaign to some lieutenant who had come to him with a tale of some railroad crew that was slow, or when some particular stunt was to be done so as to be ready for the morning.
The enthusiasms of the army that is engaged in a work like this building of the Sears-Roebuck buildings is something thrilling. It is like the ardor of battle. The whole organization is like a troop of cavalry in a charge under a good leader. They do not care what is ahead of them. The watchword is "Get there," and get there they do even if they are killed in the act.

I have a photograph of the leading men on the work taken on the occasion of the raising of the last timber of the Merchandise Building. This work was done in the rain. Some inglorious Milton has written on the picture:

"We raised the last post with many a shout,
As the rain in torrents fell,
And though our backs were soaking wet
Our breasts with pride did swell."

Nothing was allowed to stop the work. The sides of gondola cars were ripped off and thrown in the rubbish pile in order to get flat cars for use by the excavators (I wonder how some railroad men would like to read this). Once when they were nearly running out of material they confiscated an engine and ran without orders some fifteen miles to the transfer point where the cars of brick were waiting. Once a flat car ran off the track where a wall was to go, and the railroad crew delayed about removing it. The "officer" in charge asked if he should not brick it in. "Go to it" were the orders, and this was actually begun, but the subsequent arrival of the wrecking crew prevented the car becoming a part of the building.

The labor agitator had to get in his work, too. When they were digging the caissons a job in the heart of the city was paying five cents an hour more than the union rate, and a delegation of agitators demanded that the Sears-Roebuck rate should be raised. This was refused. Four of the leaders, who were the regulation toughs, went through the building and made the others quit. This before it was realized what they were doing. The agitators were driven out of the building, but they adjourned to a neighboring tavern and drank beer for about four days. They were warned that they would have to keep away from the job, as they were intimidating the men who wanted to work. This they refused to do, so they were arrested and fined $100 and costs, which meant 90 days in the Bridewell. And all served their time, as the tavern-keeper had got all their money.

At one time an army of 7,000 artisans and laborers were at work on these buildings. This army has vanished. It is succeeded by an army of gay young women and serious faced young men—but they belong to the quartermaster's department.

Theodore Starrett.
Fortress-Monasteries of the Holy Land

I have yet to come across a traveler to Jerusalem and Palestine who will not admit disappointment in many respects as a result of his visit to the Holy Land. All are agreed, however, that the ancient fortress-monasteries and hospices in the wilderness are not only a great boon on the practical side, but are marvels of savage mediaeval picturesque-ness and wild strength, dating, as many of them do, from the time of the Crusades, when in many instances they had to do duty as fortresses.

As every traveler in Palestine knows, the Holy Land is an exceedingly exhausting country for the voyager on mule or camel-back; the water is indifferent, and hotels practically unknown. What is usually done is to take a letter of recommendation and introduction from the Russian Archimandrite or other Patriarch in Jerusalem, and then, provided one brings one's own provisions, one may count upon some kind of shelter in these strange fortress-monasteries, which are usually built upon impregnable pinnacles of rock, or else nestle close up against some mighty arid precipice upon which the Syrian sun beats pitilessly.

At any rate, shelter here is better than the impossible khan or caravansaries, which are occupied mainly by mule and camel drivers and animals, and, moreover, fairly swarm with still more undesirable companions. The Latin monks

CONVENT OF MAR-SABA.
In the Desert, three hours from Jerusalem.
will be found gentle, obliging and unselfish; but although no ostensible charge is made, the traveler always pays a fair fee.

Very striking is the situation of the Greek Monastery of St. George, a forbidding and almost prison-like structure, which one passes on the six-hours' journey from Jerusalem to Jericho, by way of Bethany and the Tomb of Lazarus.

Just before the dark blue waters of the Dead Sea come into sight, and the great plain of the Jordan opens before us, we strike the deep gorge of the Wady el-Kelt, which one passes on the six-hours' journey from Jerusalem to Jericho, by way of Bethany and the Tomb of Lazarus.

The Dead Sea to Jerusalem, a terribly trying journey of some eight or nine hours.

I well remember turning my back upon that dreary and desolate Sea, and entering the wilderness of the Kidron Valley. We there dismounted from our mules and climbed a trail consisting of rocky steps, finally arriving at an ancient watch-tower, whence we beheld our goal in the fantastic pile of buttressed buildings below us. Near the outer gate of the Monastery rose a second ancient tower, wherein we found a Christian watchman, who told us he was posted to scan the mountains and valley to see whether any Bedouin robbers or other dangerous visitors threatened to descend upon the Monastery.

I have never beheld so wild and fantastic a series of buildings. Viewed from the great terrace, whence one looks down into the valley, one sees the rocks on which the Monastery is built falling away so perpendicularly that lofty flying
THE GREEK CONVENT OF ST. GEORGE.

In the Wilderness above the Brook Cherith.
butresses have had to be constructed to shore up the enormously massive walls. I also visited several ancient hermitages on the barren heights beyond the valley, but found them in utter ruins and now occupied only by birds and jackals.

From the terrace of the Monastery to the bottom of the ravine is no less than 590 feet. Terrace after terrace of buildings rise, to culminate in a dome-covered structure whose interior is decorated with great richness and contains the empty tomb of St. Sabas, for whom the Monastery is named. The monks asked whether I would like to see their garden. I was indeed astonished, thinking it impossible that any green thing could live in this stony and burning wilderness.

Nevertheless, every available sheltered level spot had been cultivated by the monks, and I am assured that figs ripen here much earlier than they do in Jerusalem. We had no difficulty in getting quarters inside the Monastery after we had thundcred and knocked on the tiny barred entrance and presented our letter of introduction. No ladies are admitted, it seems, under any circumstances; and if they are in the party they must pass the night in a tower outside the Monastery walls.

On entering one goes down about fifty steps to a second door, whence a second staircase leads to a paved court. Indeed, one might well lose one’s self in these intricate galleries and stairways. A third stairway leads from the court to the guest-chamber, where bread and wine are provided; and there is also a kitchen for the use of the traveller and his servants. The Monastery at present seems to be used as a settlement for the most rigorously ascetic kind of Greek priests.

On inspecting the enormously massive masonry, which is yet crumbling from sheer age, one is not surprised to learn that the Monastery dates from the Fifth Century, St. Sabas having been born in Cappadocia about 439. As to its being a “fortress,” this is not to be surprised at, considering the place was plundered by the Persians as early as the Seventh Century. One of the monks usually takes one around the place and shows the rock-cut grotto church of St. Nicholas, containing mysterious skulls behind a grating said to be those of martyred monks slain centuries ago by the Persian hordes.

At the back of this church are the chambers set aside for Greek pilgrims, and here also will be found the cells of the monks. These excellent but somewhat fanatical men eat nothing but bread and vegetables and fast with rigor and frequency. They are said to have a wonderful library; but I marveled how the unfortunate men could possibly endure such a living death. Their only amusement, so far as I could see, was feeding the wild pigeons and some other queer little black birds of the country. It is no wonder that the fifty or sixty monks in the Monastery of Mar Saba have in their charge a few lunatic brethren.

William G. Fitz Gerald.
The Architect and the Critic

I have been troubled always by the utter lack of rational explanation as to why, to-day, so great a distance separates the artist from the critic in matters architectural. Certainly we expect difference wherever taste is concerned. Who is not ready to meet, even to welcome, in all artistical discussions the charming obliquities of the Personal Equation and the infinite variety of the kalidescopic Point of View? But the "artistic variable" in any one of its multitudinous manifestations should not legitimately account in our judgments for more than for distinctions, discriminations, modifications — divergencies which, no matter how extreme they may be, still stop this side of fundamental differences. All that falls further over, as it were, on the other side of this line, and therefore really is contradictory or antithetical surely should not be regarded as coming fairly within the operation of the rule of De Gustibus or anything of the kind. Rather should too wide a divergence of opinion create instantly a fair presumption that all parties to the difference stand in immediate need, not of further argumentation, but of a searching examination of their fundamental principles. So I take it, there must be somewhere a false element or (to switch the simile) an undigested particle in the complete opposition that exists between contemporary architectural practice and contemporary architectural criticism.

"Architecture," the critic pronounces, "is dead. It is not any more a living art. It is a sort of man millinery—little better. The Ladies' Home Journal' tells my women-folk that skirts will be cut full this spring, or after the pompadour manner, and can I not see by the common practice that cornices are heavier this year and worn lower; the colossal order is in vogue and so forth. Do not tell me that the modiste and the architect do not meet on a common ground. Architecture is defunct." This may be so. On consideration, however, I ask how can I be sure of it, for the practice of architecture or the attempt to practice it continues. Indeed, with the critic's speech, and the tone of it ringing in my ears, I can almost with greater certainty bring myself to the belief that the defunct one is criticism. Yet, I know that conclusion is not true either. The very bitterness of the reproach against modern architecture indicates reaction. The dead do not indict the dead. But the phenomena remains—the architects on one side, the critics on the other. And the separation itself is not the deplorable aspect of the situation. The dark side of the opposition is the indifference, the real indifference, of the critic to all the architect does, or tries to do. And, on the other hand, we have to lament the complete apathy of the architect towards well-nigh everything the critic can conceivably say—except praise, and that he may lay on with a trowel. Apparently the architect has completely departed from the intellectual highway whereon (to transmute old Hooker's phrase) "the general and perpetual voice of man is as the sentence of God Himself," and the critic has retired from the Present and cloistered himself somewhere in the Past, making of architecture wholly a spectacle, an historical panorama, not (be the result artistically excellent or otherwise) a real and continuing element of social and aesthetic evolution.

Of course, the present condition of the architect's mind is disclosed best by his buildings. Very few members of the profession are at all able to "explain themselves." If any individual succeeds in formulating himself, or even some of his factors, and understanding his own practice, the resultant theory, description or explanation is wonderfully vague, and usually is so tenuous that it cannot be resolved into useful concrete
THE ARCHITECTURAL RECORD.

terms that may be passed, like a working tool, from hand to hand. Yes! If we would know the architect we must confine ourselves strictly to the building. But the critic! He is harder to get at. He may be "a terror for his size," but the race is not numerous. Are there a score of competent exponents of the theoretical side of architecture in the country? I don't know why I put the number at a "score" instead of a dozen or less, unless it be that one would be careful to eject the element of the ungracious from even a rough calculation. But, really, apart from a few names that we all know, who are our critics? No doubt much writing is done for architectural journals. There are also "papers" delivered before Society meetings. But, I think, we all agree these utterances are, in the mass, pretty poor stuff—straw with little grain. Perhaps we find an explanation for this barren state of affairs in the statement recently made to the head of a publishing firm by one of our busiest (should I not say, therefore, one of our greatest?) architects: "We've no time to read. All we need is pictures just to see what the 'other fellow' is up to." The man who spoke thus was not entirely fair, even to himself, but the fact remains that the critical body with us is so small, so withdrawn, so utterly "in opposition," it is impossible to produce sufficient testimony from American sources to establish indubitably the exact whereabouts of the "critical position" in regard to the mass of contemporary architecture. Lacking "domestic" evidence, 10 good American will object if we invite witnesses from France. It is somewhat of a boast with us to-day that we are near neighbors artistically to Paris. Even those who deplore the fundamental folly of the Greek Revival, the Gothic Revival, the revivals Romanesque, Queen Anne, and Classical, assure us that there is a special virtue in going to France for our Architecture, for they say Modern Architecture is really to be found there as a living thing. In that happy capital the art is taught and practised. To this belief is due the fact that after many "revivals" we have new instead an "importation," which is not only supposed to be a very vital addition to our artistic possessions, but something so essentially different from our attempted ripacimenti of the past that the claims made for the Gothic acquisition pass over, in a sense, into the critical field itself. The critic who said there was nothing fundamental in the Gothic or any other of our "revivals" that would be permanent was scorned by the passionate revivalist, and then justified by the fate of the revival. When he speaks likewise now regarding the French importation he is supposed to be dumbfounded by the appeal to Caesar... It is French! And the French, you know, is the living modern form of architecture.

In order, therefore, to reform, assert and establish the "Critical Position" upon a broader basis than the United States alone affords, let us call in some alien witnesses. There is much discussion of architecture in French literature to-day, and let it be said at once, much of current French criticism has the same antagonism to current architecture, possesses the same pessimistic note that one observes in American criticism. De Baudot says: "Architecture is dead; our architects have killed it." H. Fierens-Gevaert applauds and adds: "We know passably how to compose a Roman palace, but we do not know how to create a house." Maquet, J. K. Huysmans and others express the same opinion. Henry Provensal assures the world that we can put in comparison with the great works of art only "pastiches médiocres." Pastiche! Banal! Mediocrity!—these are the words of judgment sown up and down the pages of current French criticism in regard to current French architecture. The critics across the water seem to be quite convinced that the modern architect proceeds in his work after the manner of the good stylist "who made a phrase and then sought something to put into it." The architect's case is diagnosed with painful unanimity to be one of brain atrophied by lack of effort, by a love for mere style devoted too exclusively to the work of past epochs. Vic-
tor Hugo said, but with another sense. "the book has killed the building." The Latin language is not a living speech, and we are told the architect, if he would work greatly must——. Well! Here is the quick of the subject, and it would be wiser for me to let the French authorities continue to speak themselves: "Architecture must discover the rational use of modern materials—iron, concrete, the glazed and enamelled brick, for example—and achieve a harmonious union of these new elements with the traditional elements—stone, brick, wood. This 'mis-en-œuvre' and these combinations will transform the repertoire of forms, lines, colors, and revivify the art of building. The Architect has before all to pre-occupy himself with the plastic qualities of his materials; he should feel, dominate those resources of construction and draw from them expressive results. It is by rebecoming constructor that the architect will rebecome artist." Undoubtedly this is the modern critical attitude towards modern architecture. Yet the architect is deaf. If he is artist at all he is repulsed by this wholesome, may I say? materialistic doctrine of progress. His attitude is rather that of Ingres towards music: "What seduces me is the design, the line." If he does not adopt quite so "intense" an incorporeal attitude he is likely to say with Taine: "Really to change any conception of a thing so general as form, what a change must be effected in the human brain." No doubt! And the critic would rejoin: "I am only pointing the direction that change must take if it is to be fruitful. Nature does not abandon Tradition or the Past; nevertheless she does not reproduce the extinct Aepiornis. Some adhesion to precedent is necessary, and means no more than an assertion of the validity of some experience. Greek and Gothic may be the settled precedents of good architecture, but let them be no more to us than 'points de repère.' American architecture depends too much upon a factitious inspiration. There is no mordant in our designs which have not bitten into the material. What, indeed, shall we say of an architecture that has never been established or conditioned by necessity. In recognizing what it is we also recognize that it might have been almost anything else. Thus, I fancy, the critic would, if he could, bring the architect to the Vicar of Wakefield's frame of mind: "To say the truth, I was tired of being always wise," and to Goethe's notion that no artist should say that reality lacks poetical interest, for he proves his vocation by winning from a common subject an interesting side. And by winning this interesting side from modern materials and modern necessities, the modern architect will be working as artists in other great epochs have worked, and having by these means established modern architecture in a vital form, he will come by and by to laugh at the archæological-architect, the maker of paste, the copyist, and sing with Holmes:

I know it is a sin
For me to sit and grin
At him here.
But the old three-cornered hat,
And the breeches and all that
Are so queer.

H. W. Desmond.
Examples of Georgian Work in Charleston
South Carolina

Charleston was founded in 1680 by English colonists under the leadership of Col. William Sayle, and during its early days was called New Charlestown. The city's geographical position is quite similar to that of Manhattan Island of New York City as it is bounded on each side by wide rivers, the Cooper on the east and the Ashley on the west, while the city itself faces the harbor to the southeast. The part of Charleston as laid out in 1680 extended from the sea on the south to what was a small creek on the north. On the east it was bounded by Cooper River and extended west to Meeting Street, and at the extreme limit stood a public market and the Church of St. Philip—the first English church in South Carolina. This site is now occupied by St. Michael's.

From the point which is now the corner of Meeting and Broad streets down to the Battery, eight streets intersected each other, namely, Tradd, Elliott, Broad and Queen running east and west, and Bay, State, Church, and Meeting streets running north and south. On Tradd street perhaps are found more Georgian houses than on any other thoroughfare in this old city. It is now a quaint, narrow and silent one and suggests strongly America of a century ago. On the-

GATEHOUSE OF THE MANICault PLACE.
Meeting and Hudson Streets, Charleston, S. C.
north side of this old thoroughfare between Church and East Bay streets stands what was in Colonial days the leading hotel of the city—the Carolina Coffee House. Here the Governor and his staff were guests and their receptions and banquets were given, for Tradd was a most prominent street in Colonial days. Any one interested in the architectural characteristics of Charleston should enter this historic old roadway at the Battery from which it takes its narrow and winding course past old iron gateways and high brick walls, overgrown with cypress vine and Virginia creepers; under the projecting hoods of doorways, toward the heart of the city, crossing at intervals streets and alleys quaint and curious. Looking down Longitude Lane and St. Michael’s Alley one could almost imagine one’s self in old Havana, while down Tradd or Queen streets toward East Bay, there are features which suggest the French Quarter of New Orleans.

In studying the old houses of Charleston we can readily place them in two classes. The one which is most peculiar to Charleston is San Domingo type—that is the three and four storied structures only one room deep, with their many storied verandas stretching the entire length of the house. They turn their plain fronts or in reality their sides to the street and the public, while the real front faces the walled-in garden. The other type of house in Charleston faces the street as we would naturally expect, and is usually set back therefrom and surrounded on three sides by the ever-present brick wall ten to twelve feet high, while to the rear of the house is the quaint old garden. To all old Charleston homes, as we find in all Southern towns, is a collection of numerous out-buildings—the servant quarters, the coach house and stable, the kitchen and several rubbish store rooms—all forming quite an establishment which in ante-bellum and Colonial days...
(1) MILES BREWTON HOUSE (1765).
Charleston, S. C.

(2) HORRY HOUSE (1790).
teemed with their retinue of many negro servants. The San Domingo house came naturally enough to Charleston for among its English and Huguenot immigrants were many derived from the West Indies; and since the climate they found in Charleston was not totally unlike that in Jamaica or Nassau or San Domingo itself, they naturally preferred the houses to which they were familiar. The San Domingo house, once transplanted to Charleston, developed and grew to be the fashionable house of the city during the latter half of the 18th century and up to the outbreak of the Civil War, although during the period of 1810-40 the white pillared houses of the Greek Revival gave promise to be a dangerous rival. In these San Domingo structures the entrance doorway did not lead into the house proper but to the veranda, as may be plainly seen in the illustration of the Edmonson house of Légare Street.

The arrangement of the rooms in these Charleston houses is much like that of the average English house, in that the drawing rooms, parlor and dining room are all on the second floor, the library suite and breakfast room on the ground floor, and the bed chambers in the third and fourth stories. This custom of having the bel étage at the second floor was probably for several reasons, because it was the custom in England—Charleston was a veritable English city in its early days—and again because it was necessary to have the women and children of the family as high as possible above the morning mist and malarious atmosphere. This point gives the houses of this part of the far South an air different from those in Virginia and Maryland and we must add that the latter suggests hospitality of a more generous type. It is much easier to step down a few steps from the ground floor to meet your guest than to run down a whole flight of stairs and toil up again, so we are tempted to believe that the greeting of South Carolina was somewhat different from that of Virginia—the latter a more cordial and informal one while the former smacked more of state and dignity. But we are quite sure that the guest was quite as welcome to the one as to the other, and it is difficult to decide which out-distanced the other in hospitality and lavish entertainment.

Undoubtedly the best piece of Georgian work south of Virginia is the Miles Brewton or what is now the Bull-Pringle house in Charleston, situated on lower King Street. It suggests strongly "Shirley" and some other Virginia houses, which are of this two-story porch treatment of the Georgian. The elaborately designed entablatures of both the upper and lower stories and all the woodwork of the interior are very much on the order of Northern Colonial work. The house was built by Miles Brewton in 1765 and was occupied by him for many years. After his death the place descended to his three sisters, one of whom was Mrs. Rebecca Brewton Motte, the famous heroine of the Revolution. She was occupying the house
during the war, when it was seized by Sir Henry Clayton to be used as English headquarters, and afterwards turned over to Lord Rawdon. This fact of its being used as headquarters by the British perhaps saved it from the destruction to which so many other Charleston houses fell victims. During the Civil War it was again used as headquarters by the invading army and once more saved from pillage and from the torch. Mrs. Motte was also the occupant and owner of two other houses of historic interest. One was on the Congaree and was taken during the Revolution by the British and called Fort Motte, and it was Mrs. Motte herself who fired it to compel the enemy to evacuate. The other residence of Mrs. Motte was "El Dorado" on the South Santee which only a few years ago was destroyed by fire. The Miles Brewton house is now occupied by the Pringle family who are descendants of Mrs. Motte. The house fronts on King Street and the grounds at the front, which are somewhat limited in area, are protected on the sides by brick walls fifteen feet in height while at the front is a wrought iron fence with spikes of quaint mediaeval design. The Brewton slave quarters are to the right of the house and are rather peculiar in design, having pronounced Gothic motives. At the rear of the house is the garden set with flower beds and rare old shrubs resplendent in the color which we always find in a semi-tropical climate. It has been kept wonderfully intact although the area has been reduced somewhat—for even today can be found here the old-fashioned tulips, jonquils, daffodils and peonies.
which bloom out perennially in their verdancy and luxuriousness. The wistaria has climbed rampant over the branches of the immense oaks with its weighty leafage and deep blue tassels. The interior of the Brewton house is most elaborate and dignified in design; the drawing room on the second floor has been pronounced by many authorities on Georgian work as the most beautiful Colonial room in America. The room is of a long rectangular shape with rich dado, panelled walls, a coved ceiling and well designed cornice, the color of walls and woodwork all being white.

One of the interesting old places in the vicinity of Charleston is “Mulberry Castle” on the Cooper River. It was dubbed its peculiar name on account of the many mulberry trees planted on the grounds as an experiment in the silk culture, which was for a time considered a success because silk of a very superior grade is said to have been produced. The bricks used in the house are unusually good and in all probability were brought from England. They are varied in shade, the darker and overburned ones being used at the corners and openings as quoins. Parts of the roofs have been covered in recent times with metal shingles, the only original cypress shingles being on the upper roofs to the corner towers. Seen at a distance from the low-lying rice fields “Mulberry Castle” with its quaint corners, pavilions or towers, presents quite the appearance of being the seat of some feudal lord. The weather vanes surmounting these towers are stamped with the date of 1714 and it is safe to presume that this is the date of erection of the structure. The first

Charleston, S. C.  PLAN OF “MULBERRY CASTLE.”
EXAMPLES OF GEORGIAN WORK.

Charleston, S. C

PLAN OF HORRY HOUSE.

lord of the estate was a staunch churchman and at the same time was a man of military characteristics. Many tales are told of the fights and skirmishes which have happened around this old place both during the early Indian troubles and during the Revolution.

"Drayton Hall," like "Mulberry Castle," is one of the few old country seats in the vicinity of Charleston which escaped the torch and pillaging hand of Federal troops during the Civil War. It is situated on the Ashley River and was built in 1742 by John Drayton, the eldest son of one Thomas Drayton, who came to South Carolina from the Barbadoes, and himself the father of William Henry Drayton, who distinguished himself so gallantly during the Revolution. The house is said to have cost $100,000 and is built of brick and marble brought from England. The columns to front portico are of this white marble, and the work is most excellent in detail. The interior woodwork is chiefly of mahogany, richly carved and panelled. The rooms are teeming with family portraits, and family heraldic devices are worked into designs in the woodwork. Drayton Hall was the scene of many brilliant events of the early times of South Carolina. Its occupants being of good birth and people of refinement and culture, their dinners and balls are said to have been the most brilliant of that time. Great stories are told of Drayton Hall on such occasions—the light of myriad tapers, the tapis laid from its entrance door to the gateway to protect the dainty slippers of my lady when she should alight from the carriage and to keep spotless the airy lace and silk of her gown.

A peculiar version of the San Domingo house is found in the Ancrum house in Charleston, the two-storied porch being set at the sidewalk line and facing the street. The family entrance is at the end of the veranda floor level, while the servants' entrance is a doorway leading under the veranda floor directly from the sidewalk. The overhanging alcoves or bay windows were undoubtedly added some years after the house proper was built and are to be deplored. To the left of the house is a garden with high wall, a glimpse of which the passerby can only get except through the surmounting balustrade. Creeping in and out the balus-
WITTE HOUSE (1810).

DRAWING ROOM OF THE WITTE HOUSE.

Charleston, S. C.
ters are rich green festoons and hanging masses of woodbine, giving a quaint look to the weather-beaten and weather-stained stucco of the wall.

The lines of portico to the Bull house can hardly be distinguished because of its covering of vines and climbing creepers, which have roamed without restraint around the columns and up over the cornices. The house is without a tenant and

![Plan of Witte House](image)

is poorly kept, its stucco is fast peeling off, the marble steps are weather-beaten — and while admiring the good detail and the motives and the delicacy of their moldings, one's pity and indignation are aroused at the deplorable ruin to which the place seems destined.

Flynn's Presbyterian Church (now Second Presbyterian) was built in 1810-11, and fronts on Wragg Street. It is late Georgian in many of its characteristics and yet possesses many features suggesting the Greek Revival—a style which from 1815 became the accepted standard for so many buildings in the far South.

Perhaps the best of the Greek Revival houses in Charleston is the Witte house on Rutledge Avenue, built in 1810, and evidently planned for elaborate entertainment. While including this building in the Classic Revival we see many motives which are survivors of the Georgian, such as the Scamozzi Ionic order. The way in which the entrance doorway forms the portico floor in the second story is also a Georgian motive. The place is situated at the end of a street and the house built far back from the street amid its oaks and magnolias of most luxurious foliage.

In the Witte house we find a plan much
on the order of the other Charleston houses—the library and breakfast room being on the ground-floor, the drawing rooms, parlors, dining-room and ball-room on the second floor, and the bed chambers on the third. The drawing rooms with their vaulted ceilings are perhaps the most ornate rooms in the house. They are divided by an elliptical arch the ends of which are supported by detached columns whose capitals are Byzantine in effect. From one of the drawing rooms one may wander into the little alcove through a doorway with the wide panelled jamb. The treatment of these drawing rooms is undoubtedly Georgian. The mantel with its short stubby Ionic columns is of richly colored Sienna marble. To the right of the hall-way are the parlors and further to the rear the dining room, while still further back is the large ball-room. A unique feature of this Witte house is the oval stairway. It is self-supporting from each floor to the one above, and is built entirely independent of the walls, thus saving space and giving the rear hall a roomy effect. These oval and circular stairways in Charleston must have served as models for the many others in Savannah of a much later date as well as many more we find over the South in the white-pillared Classic Revival houses.

At the corner of Meeting and Tradd streets is one of the former homes of Mrs. Daniel Horry of French Santee, who was an intimate friend of General Francis Marion, famous in Revolutionary War history. Mrs. Horry's country home was "Hampton" on the South Santee, which was occupied by her during the summer months. The Horry house in Charleston was built between 1780 and 1790. As can be seen in the plan the house is entered from the front portico, which occupies part of the sidewalk. It is divided by a long hallway extending to the court in the rear, and at the back of this hall is the stairway of two flights leading to the ornately designed hallway of the second story. All the drawing rooms are on this floor and have well designed cornices and doorways with sur-mounding pediments. The outbuildings around the old paved courtyard consist of the kitchens, the laundry, stables and coach house, along with the servant quarters—all kept private from the public by the surrounding masonry wall. One of the peculiar and interesting features of many of these old Charleston houses was the custom of having attic wine-closets. Here the noted "Jockey Club" and "Belvedere," along with many other madeiras were aged. It is said that the heat from the roof, and the slight tremble to the house caused the desired fermentation. Most of the wine, however, has disappeared, but in some of the cellars of the oldest and richest families a few dozen bottles can be found to-day, which are "more valuable than fine gold" as they have become family heirlooms.

J. Robie Kennedy, Jr.
Two Houses by
Robert Spencer, Jr.
ARCHITECT

Adams House,
Indianapolis, Ind.

House of Dr. Percy,
Galesburg, Ill.
Indianapolis, Ind.

THE ADAMS HOUSE.

Robert Spencer, Jr., Architect.
TWO HOUSES BY ROBERT SPENCER, JR.

Indianapolis, Ind.

THE ADAMS HOUSE—ANOTHER VIEW.

Robert Spencer, Jr., Architect.
THE HALL OF THE ADAMS HOUSE, FROM AND TOWARDS THE LIVING ROOM.

Indianapolis, Ind. Robert Spencer, Jr., Architect.
THE LIBRARY AND DETAIL OF FIREPLACE. ADAMS HOUSE.
Indianapolis, Ind.
Robert Spencer, Jr., Architect
OTHER INTERIOR VIEWS OF THE ADAMS HOUSE.

Indianapolis, Ind.

Robert Spencer, Jr., Architect.
TWO VIEWS OF THE DINING ROOM, DR. PERCY'S HOUSE.
Galesburg, Ill.

Robert Spencer, Jr., Architect.
(1) STUDY, (2) BILLIARD ROOM IN THE BASEMENT, DR. PERCY'S HOUSE.
Galesburg, Ill.

Robert Spencer, Jr., Architect.
SIDEBOARD AND CHINA CLOSET IN DINING ROOM, DR. PERCY'S HOUSE.
Galesburg, Ill.

Robert Spencer, Jr., Architect.
TWO HOUSES BY ROBERT SPENCER, JR.

FIREPLACE IN DINING ROOM, DR. PERCY'S HOUSE.
Galesburg, Ill.

Robert Spencer, Jr., Architect.
The opening of the Town Room in Boston is an event as significant and interesting as its name is quaintly simple and altogether apt. It is the New England version of that idea which in Chicago found successful expression a year ago in the opening of the Municipal Museum. The Massachusetts Civic League, with a view to acting as a central office for the assistance of the thousand or more organizations in the State which, independent of the churches and schools, exist to improve the physical and social conditions of their environment, has established and has undertaken to maintain this room. But to say this is to name, as doubtless he would wish, an organization—his organization—for that individual, Joseph Lee, whose idea the Town Room mainly was and who personally compassed its realization. The purpose is to collect here material illustrative of and likely to be helpful to villages and towns, and necessarily to some extent of cities. The subjects to be illustrated include out-door art, public buildings and those many activities that come under the general head of civic improvements. All this material is made quickly and comfortably accessible, and it is designed that the Town Room shall be a meeting place for conferences and an intellectually stimulating sort of club where the members of village improvement societies who chance to be in the city can drop in, feel at home, and, incidentally, get practical assistance and suggestion. Interesting as is the idea, the physical preparations for its carrying out have been not less thorough and charming. The Room is in the house next to the new home of the Twentieth Century Club, on Joy street, that has been bought by Mr. Lee, and that, suitably fitted up and served by the same elevator, is practically an annex of the club. Situated on the top floor, with the rafters showing, with a big fireplace; wholly homelike and quaint in its construction, with cozy alcoves lined with shelves; with artistic furniture at once practical and comfortable—all of it apparently from arts and crafts societies; with its decoration, such that photographs are not put out of countenance, the room soothes as its contents stimulate, and it makes its appeal to one as an individual and not (after the nature of museums) as an irresponsibly small section of the public. Hence it is the more likely to be effective.

Is it too late to say that "the restoration" of the Parthenon, proposed by the International Congress of Archaeologists at its recent meeting in Athens, does not mean the kind of restoring that is given to English cathedrals? The suggestion is not to replace missing bits of marble by new ones, but merely to put back in place, as far as practicable, the fragments that now lie scattered on the ground, making vertical that which time and accident have laid horizontal. Certainly there ought to be no hue and cry against this. A member of the Congress, in a letter to the "Transcript," of Boston, points out the essential but absurd incongruity of the scene upon which the ancient Parthenon looked down, when "up the southern flank of the sacred hill in the burning sunshine toiled the savants, elegantly and inappropriately garbed in black, with shiny silk hats upon which the eternal dust of Athens spread." He adds that at 2 o'clock, the hour appointed for the opening ceremony—which one might liken to a sacrifice to the Parthenon—"the temple was well nigh blotted out by the cosmopolitan crowd of its adorers. Every portion of the ruin which could afford a perch was sat upon, and fringes of dangling legs showed against the background of ancient marble." When the delegation descended the Acropolis it was replaced by "an eager Athenian mob, bent upon snatching the remnants of the feast they were satisfied must have attracted the Congress to the scorching top of
th¢ rock. It may be that a subtle element of truth underlies this picnic theory of the main object of conventions. It deserves consideration. The mob probably reasoned, with a more acute if more instinctive knowledge, that the Congress would restore itself before it restored the Parthenon.” This irreverent picture of the awesome gathering is worth a note for its undoubted realism.

OLD MURAL PAINTINGS RESTORED

An event of artistic interest that has somehow escaped much notice is the reconstruction, or restoration, of the Neffen frieze, in Huntington Hall, Boston. The original decoration, put on by Paul Neffen in 1871, was probably the earliest mural painting of considerable size in the country, antedating La Farge’s Trinity Church decorations by some five years and Hunt’s Albany decorations by seven years. But it was executed in water colors, became much stained and discolored, and in 1898 was painted out. Twelve subscribers to the original work gave the impulse to the movement for its restoration, these twelve including, among others, Professor William R. Ware, F. L. Olmsted, Mrs. James P. Munroe and Dean Burton. The famous free lectures of the Lowell Institute course are given in this hall, and with the opening of the season of 1905-6 the public had its first view of the restored frieze. In a careful description, published ten years ago in the “Technology Review,” it is said that Neffen’s sketches, though often crude, had much of the spirit and action of the operatives in the different trades illustrated. His methods, too, were quite simple. “It is astonishing,” says the “Transcript,” “to see how he simplified and flattened out a complicated cotton printing machine, so that it is not at all unsuitable for wall decoration.” A historical interest has also come to attach to the paintings, in that many of the methods of work depicted have now become obsolete. The group in the central panel behind the platform shows a blacksmith and sailor and was the original suggestion for the Technology seal. Next were allegorical figures, and beyond, on the right, chemistry and mining, and on the left engineering and architecture. Various Massachusetts manufactures are illustrated in other panels, the artist having visited with his sketch book factories in many cities to obtain material. The rope walk of the Charlestown Navy Yard is a bit of local color.

The visitor fortunate enough to see this wonderful old fortification for the first time on a spring-like day, when the brilliant sunlight brings out distinctively the snow-clad tops of the far-distant Pyrénéés, receives an indelible impression. No description of this picturesque group of buildings, of the two lines of massive gates and rough walls, running irregularly around the top of a hill, punctuated by over fifty towers, enclosing and protecting a fine church, a château and many interesting old houses—no description, no photograph, can give an idea of the reality. It is like one of the fairy tales of the “Golden Age,” which then seemed more real than any tangible castles of later life.

I happened to be there alone on such a glorious morning. The “gardén,” at first reluctant to accompany one lone tourist around the tiresome circuit of the walls, became enthusiastic after a while, dwelling with loving admiration on the good work done by the French Government in rescuing the crumbling old pile from complete ruin, and, with considerable intelligence, pointing out the skillful additions made by M. Viollet-le-Duc, in the course of his restorations. Time is fast blinding the new work into harmony with the original stone, and, as sufficient money accumulates for the purpose, modern improvements are being removed. Just now they are tearing down the little tumble-down houses that, for hundreds of years, have clung like barnacles to the foot of the inner circle of walls. The beautiful architectural atelier of Viollet-le-Duc is kept almost as when he was drawing there. Models in plaster, of gargoyles and finials, hang on the walls and from the rafters of the old round tower; in the deep embrasures of the windows, his benches and board still stand.

“See,” said the custodian, “how he moved his drawings from window to window as the sun followed him around.”

I asked permission to take a photograph of the view from the west window. The man made such haste to throw open the lattice that his clever little “caniche” jumped up on the sill, barking excitedly, nearly falling out when he found me arranging my camera on the drawing board behind him.

Viollet-le-Duc, with his amusing discursiveness, gives a curious account of the siege in 1210 by Trenchavel, quoting a report by the “senechal de Carcassonne, Guillaume des Orrres,” addressed to “La Reine Blanche,”
"THE WALTON."
Southwest Corner 70th Street and Columbus Avenue, New York City.
Israels & Harder, Architects.
regent while St. Louis was away in the Holy Land. Of course, at that time only the visigothic enclosure existed, although later the King and Philippe le Hardi greatly extended the fortifications, regarding this as a fortress of the greatest importance. The letter contains vivid pictures of the attack and siege, of mines commenced by the "Vi-compte et ses complices," frustrated by counter mines as soon as the defenders heard the noise; of the tragic death of "the thirty-three priests and other clergy, who were discovered by 'ces malfaiteurs' the day after their entry into the city," etc., etc. It describes at length their stock of wheat and meat and the ability of the brave defenders to wait, if necessary, for aid from Her Majesty.

Quaint little drawings of men-at-arms, rushing to the rescue of comrades engulfed by a sudden fall of the walls due to unsuspected undermining; massing at a weak point near some great gate to ward off an onslaught of the enemy, or firing from a movable tower, are interspersed with the text.

At Carcassonne the old times return once more; heroes, clad in the splendid armor of seven hundred years ago, march back as we dream of life in the middle ages, and engage in a hand-to-hand combat, that seems more strenuous than our modern battles, although where a hundred died then, hundreds of thousands die now, when with cannon we fight an unseen enemy miles away.

K. C. B.

STREET TRAFFIC IN SAN FRANCISCO

San Francisco recently engaged William Barclay Parsons to make a report that should contain recommendations for a proper handling of street traffic problems in San Francisco. This report, which at once corrects and foresees, has been made public. Mr. Parsons visited the city, studied carefully the local conditions and handed in a report that included recommendations which had not been expected by the association. These embraced an emphatic advocacy of the overhead trolley as distinguished from the transmission of the current by underground conduits. Mr. Parsons begins his report by calling attention to the topographical peculiarities of the city, and finds it a pity that in the original plotting these were disregarded and the streets located without reference to gradients. He thinks the commercial and residential sections of the city definitely fixed, and says that as Market street is, and must remain, the principal artery of travel, the retail district may be expected to follow its general line, spilling over into the streets adjacent on the north so far as the grades are moderate. The only territory within the corporation limits that is still open, in his opinion, to a really great residential development is to the south and southwest, and he points out that if such growth is retarded by paucity of transit communication "the suburbs across the bay will receive an increased stimulus and will serve as dormitories for the future population." Submitting then a quantity of statistics showing the city's recent actual growth in population, the rate and direction of the growth and the varied density in different districts, he supplements these with data on the existing street railway facilities. San Francisco is unique among cities of the United States, he says, in the diversity of the methods of operation that are still in use. On some lines horses are retained, as they are nowhere except in New York; and the cable, discarded elsewhere, is still in use on routes with steep grades. In addition to these methods, both electricity and steam are used. He urges, "as the most radical and fundamentally far-reaching improvement that can be made," the "abolition of all forms of motive power except electricity," and that the system of electrical operation be uniform. A great deal of space is devoted to the argument in favor of the overhead as distinguished from the conduit system, the practicability of thus securing uniformity, the economy of construction and of operation being main positive reasons in its favor, while the easy blocking of the conduit slot provides the negative argument. In regard to the poles, he urges that they be artistically designed, be combined trolley and light poles—so doing away with two sets, and that on Market street they be placed between the tracks in the center of the street. Feed wires should as rapidly as possible, he urges, be placed everywhere in ducts below the surface. Mr. Parsons records himself as opposed to the suggestion of a subway for Market street, but thinks that two should be constructed under Nob Hill, now mounted by heavy grades. These would not only permit a fast service westward, but would permit a radical street improvement. Into this, which consists of regrading street surfaces on the east slope of
THE PROJECTED SINGER BUILDING.
(From the Architect's Drawing.)
Broadway and Liberty Street, New York City.
Ernest Flagg, Architect.
Nob Hill, building terrace walls, constructing winding roadways suitably parked, he goes with some thoroughness, suggesting that one of the streets be made a grand boulevard, 302 feet between buildings. If the treatment is unusual, the conditions, he says, are not to be found in any other city of the same size and promise in the world. With this report and that of Mr. Burnham, San Francisco has much to think of.

The year 1906 in Boston promises to be more than usually important in the matter of bridge building. If there are under way no structures as striking as the new East River bridges in New York, where the necessities of commerce in exalting the bridges emphasize their prominence, the Charles River dam—which is to be bridge as well as dam—will affect the physical aspect of the city more vitally and nearly than do the bridges of New York. And there are four other great structures under way. The completion of the one across the Charles at Cambridge street will be put to the credit of this year. The dam, which might have been almost built out of the reports and articles written about it and the labor put into their preparation, will begin to take visible shape, and the bridge across the Charles at Brookline street will have been well started. In addition to these three river structures there are two big bridges over Fort Point Channel. Of these, the one at Northern avenue is not much more than begun. That at Cove street is already one of the most peculiarly shaped, as it has been one of the most difficult to build, in this country. Crossing the South Station railroad yards, as well as the channel, nearly every one of its seven long spans is at an angle with its neighbors, so that the general shape approaches that of an S. The completion of this bridge will probably go to the credit of 1906, helping to make the year really notable in this department of Boston’s public works.

When the Campanile fell we learned a sad lesson. I say “We,” for does not the whole world have a share in the fortunes of the “Queen of the Adriatic”? Are not her mishaps ours? Returning to Venice after years of absence, the loss of the Campanile reminds us of the number of other buildings apparently in the same dangerous state. We wander around the beautiful old city, counting the towers leaning far out from the perpendicular, noting the bulging walls, the tattered cornices, the scaling brickwork, and weakened arches. Of course, the ruin and decay add greatly to the general picturesqueness—much of the new work is a vile imitation of the old. It is therefore with an anxious eye that we watch those who have undertaken this endless task. The attempt to lift Venice to a wholesome condition seems more difficult than the manufacture of that famous rope of sand.

Some of the finest churches are now filled with scaffolding, where masons are busily working to stop the fast-opening cracks. The great pictures which hung on the walls, concealing the mischief behind, have been carefully removed, placed in the chancel and surrounded by a high wooden paling to protect them from injury. For the first time in three or four hundred years it is possible to see these masterpieces in a good light.

S. S. Giovanni e Paolo is now undergoing such repairs. At the door I was stopped by a man in uniform, who exacted ten cents toward the expenses before he allowed me to enter. After a leisurely inspection of the wonderful old tombs of the Doges and of the splendid paintings, which are, for the first time since leaving the studio, hung near the ground, where one can see them to advantage; after renewing my acquaintance with the church, I asked the courteous old sacristan to show me where the repairs were being made.

“Have I not given fifty centissimi to pay for the restorations? I wish to see that my money is being expended to the best advantage!”

The old man, slyly glancing at me to see whether my unusual request sprang from idle curiosity or real interest, led me up a long plank leading through a window, down and around the transept outside, where the black mud had been dug away to expose the unstable foundation under a brick wall. My eye followed a long, ominous crack in the arch over the great window.

“We are driving piles down to strengthen the wall, which is settling unevenly in this soft mud. It is with infinite labor that we have already put in two hundred logs around the apse.” Then, pointing to a group of a dozen men hauling on a rope attached to a weight which they were about to let fall on the head of the partly-driven pile: “You will see here the way the work has been done in Venice for over a thousand years.”
I watched the picturesque group, thinking of the noisy, ugly machine that in America lowers more logs in a day than these twelve men could in a month.

"Without their song they cannot work," explained my guide, in quaint French, "it is necessary to use their muscles in unison. Listen!"

The men broke out in a plaintive, sweet old chant, the words of which I could not at first distinguish. As I waited they repeated it again and again, each time letting the weight fall, lowering the log an inch or two:

"Beating the piles while we chant,
From the first hour until the last,
At the fortith we will pray to the Virgin
For strength to begin again
And continue till the Ave Maria."

The scene was worthy the brush of a Titian. The fine looking men in well-worn garments of the rich colors that Italians love, the graceful poses taken in hauling 'on the rope, the background of Venetian brickwork, combined with the haunting sweetness of the song, made me reluctant to go. As I turned at last to follow the sacristan into the church one old workman slyly held out his hat, with a roguish twinkle. I threw in some nickels, more, probably, than he had expected, for he called after me in fervent Italian, "You have given enough not for me alone, but for all to drink your health in good wine. Indeed, through your generosity, we can do it in brandy, which will greatly increase our ability to work well to-morrow!"

K. C. B.

COMPETITION FOR WORKMEN'S DWELLINGS

As yet there has been less heard in this country of the "Milan Exhibition, 1906," which finds its excuse in the inauguration of the Simplon tunnel, than the exhibition probably deserves. Milan is so much in the path of American visitors that there is likely to be a large attendance from this side of the sea. The grounds are readily accessible, the plans are on a lavishly attractive scale, and the exhibition's international sections include such interesting divisions as "transportation by land and sea, current and retrospective," aeronautics, decorative art, working industrial arts, public hygiene and "sanitary assistance in transports." One of the features will be an international competition for models of workmen's dwellings, appropriate to conditions in northern Italy. The competition is in three divisions—models of separate houses or blocks, (a) for workmen living in large towns, (b) for those in small towns, (c) for factory hands living with their families at a distance from town. Provision must be made in each case for small as well as for large families—the homes to have from one to four rooms each—and every scheme must be adapted to the lodgment of 700 persons, divided into 200 families. In the first and second division the assumed site is a free rectangular area bounded by four streets; in the third the competitors may design the site to suit themselves; but in the case of both the second and third there must be assumed a possibility of no available sewage accommodation, and competitors will be expected to show a way to meet the difficulty. The awards will be determined by technical, hygienic and economic conditions.

CIVIC CENTERS IN SMALL TOWNS

One of the "press bulletins" of the American Civic Association has pointed out the spread to small towns and cities of the idea of grouping public buildings so as to form "a civic center." At Springfield, Ill., the grounds around the postoffice building are adjacent to the city hall and the new public library, and a movement to develop them artistically has thus the merit of proposing to create a truly civic beauty spot in the center of the city. Even in little "Red Wing," says the bulletin, there is a suggestion that Broadway Park, upon which the auditorium, library and some churches already front, be persistently developed as a civic center, with the idea that its impress will stamp a lovely individuality upon the town. In Columbus, O., one of the features most emphasized by Messrs. Lowrie, Kelsey and Robinson—whose advice the Park Commission recently sought—was the redeeming of the river banks for one block where the stream makes a turn into the very heart of the city. It was pointed out that if this were done the movement would probably not stop there, as there would be a popular demand for the extension of the work up and down the river. There could hardly be a sign-of brighter promise for the betterment of physical conditions in cities than this appearance of a readiness on the part of communities which are still relatively small to make the most of their opportunities—so often excellent.
Glazed and Colored Terra-Cotta

In the series of articles which the Architectural Record has been publishing upon the way in which terra cotta has been, is being, and should be used in American building, our chief purpose has been to associate as closely as possible the use of terra cotta with its characteristic qualities and its peculiar advantages. Each of the several materials which enter into the structure and ornament of modern buildings possesses certain advantages over other materials for certain purposes. Some kinds of stone, for instance, will continue to be used in certain classes of buildings. In the same way, composite materials, with cement as their basis, are steadily forcing their way into more general employment. Artistically, they often suffer from a certain unattractiveness of ap-
pearance, which must be remedied either by the use of some veneer or by faking the material to look like stone. Finally, terra cotta is, also, for certain purposes, beyond competition; and its value for these purposes is the result of its comparative lightness, the possibility of moulding it before hardening, its strength, its ability to resist fire, and, finally, the chance it offers of obtaining an agreeable texture and colored surface. And of all these advantages, those that are most inimitable and most beyond competition are the result of glazing and coloring. Terra cotta, when glazed and colored, serves an aesthetic purpose, which cannot at present be served in any other known way.

That the possibility it offers for textual and colored treatment are the qualities which place terra cotta in a new field will be appreciated after a short consideration of its other less peculiar advantages. That terra cotta is lighter than stone is unquestionably in favor of the material. Mr. Geo. B. Post has
taken advantage of this quality in the buildings for the College of the City of New York, now in course of construction. He has used a cream-colored, sand blasted terra cotta for all window and door trim, mullions, cornices, string courses, ornament and dormer glaze in place of a bright one. The fact that terra cotta can be moulded before being burnt undoubtedly leads to its use for certain kinds of architectural ornament; but here again cut stone is a close follower, and for certain purposes a successful competitor.

windows. This highly resplendent material has, in fact, been used here in such large quantities that the buildings are not agreeable to the eye on a very bright day on account of the great contrast between the terra cotta and the dark field stone of which the walls are built. This defect, if such it be, could easily have been remedied by using a dull color in place of a bright one. But when an architect wishes a lively color to be an integral part of the exterior design of his building, he has no alternative but to use terra cotta. The Italian architects used parti-colored marbles to obtain similar effects; but marble is much more expensive, and its range of color is comparatively limited. To secure an aesthetic polychromatic
effect, there is nothing like glazed and colored terra cotta, and it cannot be doubted that the great future success of terra cotta in this country will be associated with its enlarged and improved use as highly colored material.

It should be added that this is a comparatively novel as well as a peculiarly characteristic employment of architectural terra cotta. In the past terra cotta has been applied to buildings almost exclusively for purposes of figured and patterned ornament, and in the great periods of architectural design in Greece and Italy the opportunity it offered for vigorous modeling made it popular with architectural sculptors. But enameled and highly colored terra cotta was not extensively employed for architectural purposes. The Greeks used to paint their terra cotta ornament, and the Italians were generally satisfied with the admirable texture of the rough material. Of course glazed and highly colored terra cotta was used by the Della Robbias and other Italian sculptors for reliefs, which were frequently applied to the walls of buildings; but their work can hardly be classed as architectural terra cotta, and when the manufacturers of American
architectural terra cotta began to foresee a demand for a glazed and colored product, they were confronted by economic and technical problems of the utmost difficulty. The art of making this kind of terra cotta, which had been carried by the Italians to such a high degree of perfection, was a lost art; and it could not be recovered without long and costly experiments. Furthermore, there was no assurance that, after the art itself had been sufficiently recovered, it would be possible to produce the required kind of terra cotta on a commercial basis. It was practically necessary, because of both the time and the expense involved, that good colors should be obtained from one firing. The range of colors is further limited because lines must be selected which can be produced at one temperature. For a long time it seemed to be impossible to obtain the desired result, except after three firings, which would have made the price of the product prohibitive; but finally the three firings were reduced to one, and it became

MADISON SQUARE PRESBYTERIAN CHURCH.
Madison Avenue and 24th Street, New York City.
Terra Cotta by Perth Amboy Terra Cotta Co.
McKim, Mead & White, Architects.
possible to manufacture glazed and colored terra cotta in such quantities and at such a price that it could be freely used in architectural design of all kinds. Of course, the difficulty of obtaining the desired result after only one firing was far from being the only technical difficulty which was encountered in making glazed and colored terra cotta architecturally available. All sorts of experiments had to be made, and many obstacles overcome before a sufficient variety of good colors could be supplied. Gases generated in the firing were the cause of many failures, and it was a long time before their action could be sufficiently neutralized to make them harmless to the finished product.

The technical methods and processes of manufacture are still susceptible of improvement, which will tend to make the results more certain, the range of the colors wider, the glazes more reliable. At present excellent shades of blue, green, yellow and grey are available, and efforts are being made to secure an acceptable red. Improvements are being made, however, with great rapidity. The gentlemen interested in the manufacture of terra cotta recognize fully that, when the technical process of making glazed and colored terra cotta will have been perfected, the final stage in the development of architectural terra cotta will have been reached, and a future of still wider scope opened up for this industrial art. All honor, consequently, to the gentlemen who have spent so much time and money in experimenting on the process and improving it.

Among some of the larger buildings in which terra cotta is being used, white and cream colored dull enameled material, closely approximating the general texture and surface of marble, is employed.

As recent examples of the use of this dull enameled white terra cotta may be mentioned the Plaza Hotel (59th Street and Fifth Avenue, now in course of construction; H. J. Hardenbergh, architect); the interior of the new Wana-maker Building (Broadway, Fourth Avenue and Eighth Street; D. H. Burnham & Co., architects); the interior of the Hotel Gotham (Fifth Avenue and 55th Street; Hiss & Weekes, architects), in New York; the Hartje Building (Chas. Bickel. architect), and the Nixon Theatre, in Pittsburg; Keith's Theatre (Bruce Price, architect), in Philadelphia; the Buckingham Building, in Waterbury, by McKim, Mead & White, and the Williamson Building, in Cleveland, by Geo. B. Post.

This dull glaze is not made as it used to be, by making a full glaze and sand-blasting it; the new material comes from the kiln with all the hardness and impervious surface, having the effect of a dull finish without the gloss, and without having afterwards to be treated to a sand blast. This process is thought by some to be an improvement over the older method, as the surface of the enamel is left entirely intact.

D. H. Burnham & Co. have successfully used full glazed terra cotta in the Railway, Exchange Building, Chicago (both on the exterior and on the interior); in the Oliver Building, in Pittsburg; also in the interior of the Union Station, at Washington, D. C.; while
Mr. C. L. W. Eidlitz has selected full glazed, sand blasted material for the Times Building, at 42d Street and Broadway, as have also Messrs. Clinton & Russell for an office building on Wall and Pine Streets. Colored glazed terra cotta is used in the Munsey Building at Washington, D. C.; on the stairway of entirely perfected, there can be no doubt that the manufacturers of the material are more successful about making it than the architects are about using it. American architects are, of course, very timid about adopting a material, for the successful employment of which there are no good precedents. They are, of course, fully accustomed to using terra cotta in the ordinary way, and most of them appreciate fully the color values of rough or white glazed terra cotta. But the use of livelier colors is a very different thing, for which, as we have said, there are no obvious precedents. To be sure, all kinds of wooden and stucco

DETAIL FROM GERMAN BANK, BALTIMORE, MD.
Made by Conkling-Armstrong Terra Cotta Co.
Baldwin & Pennington, Architects.

the New Amsterdam Theatre, in 42d Street (Herts & Tallant, architects), and very extensively and in many colors in the West Street Building, now in course of construction, by Mr. Cass Gilbert, architect.

While the process of making glazed and colored terra cotta has not yet been
buildings have been painted, and many of the best qualities of the architecture of Southern Italy and Spain depend upon the use of very positive color effects; but these precedents are not of very much value when an architect is proposing to use colored terra cotta. The American architect is not accustomed to thinking in terms of such a material. It opens up all sorts of new problems of design, in the solution of which his experience and his training afford him comparatively little help. It is not to be supposed that these problems will be satisfactorily solved at an early date or by one man. They must be the result of patient experiment, and of the general adoption by many different architects of the methods whereby success has been obtained in any particular instance.

Difficult, however, as the solution of these problems will be, there can be no doubt that they offer opportunities to the architect which make their successful solution desirable. They offer, in fact, the best of all chances really to popularize good architecture in this country. The ordinary man has no experience or standards which enable him to appreciate a building whose merit consists in effective proportions, in an impressive rela-

"THE GUARDIAN" CLUB HOUSE AND SCHOOL, PEEKSKILL, N. Y.
Terra Cotta by South Amboy Terra Cotta Co.

John E. Kirby, Architect.
proportion and scale. The ordinary man’s taste in colors may not be any better than his taste in architectural forms; but unquestionably lively color, merely as a sensation, is much more instinctively interesting to him than are abstract forms, and the general use of livelier colors in certain classes of buildings will probably result both in attracting popular attention to good design and in a more effective popular education in architecture. This color theory has been put to practice in many of the stations of the New York Subway, where colored, hard burned terra cotta has been introduced in border ornaments, string courses, medallions, and other forms in a very pleasing manner by Messrs. Heins & La Farge, the architects. The result is so successful that it seems a pity that the material wasn’t more extensively used;
it competes successfully with the more expensive faience in all compositions except those in which many colors are required in the same design.

There can be no doubt that the architects themselves will welcome the opportunities which the use of glazed and colored terra cotta will afford them. For years they have been paying an ever-increasing attention to color values in designing the peculiarly modern American types of building, and have been stimulated into doing so by increased varieties and shades of stone, brick and terra cotta which have been offered them. Of course the colors which have been obtained in stone, brick, and ordinary terra cotta have a very different architectural value from those which are bestowed upon glazed terra cotta; but the greater attention which has been paid to the use of color in buildings since the age of brown stone and red brick has already achieved considerable results, to which some reference has already been made in the preceding articles of this series. The extent to which architectural effects in color can be obtained by the use of terra cotta, which has not been glazed, may be inferred from a recent building on 44th Street in New York City, designed by Hill & Stout. The whole building is an elaborate and careful composition in color, the difference being that the colors are soft and subdued, being thereby suited to the texture of the material. Another very successful instance of the use of unglazed colored terra cotta is the Broadway Chambers Building, in New York City. In this case the terra cotta ornament on the upper stories of a skyscraper is colored most effectively both in relation to the brick below and in relation to the way in which it is seen from the street. The coloring is not vivid; but it is positive, and it adds considerably to the attractiveness of the building.

Conditions obtaining in some Western cities, notably Chicago and Pittsburg, hastened the development of the enameled terra cotta industry. On account of the smoke and dirt in the air, all porous materials soon become black and unattractive, so that architects were only too glad to hail the advent of a good building material which would resist the action of the smoke in these cities.

How far terra cotta that is both glazed and colored can be successfully applied to skyscrapers is still a doubtful matter, because no entirely satisfactory experiments have yet been made. Certain instances in which it has been tried are not worthy of unqualified commendation. The upper stories of the Beaver Building, on Beaver Street, in New York City, are decorated with panels of glazed terra cotta in bright colors; and while the brightness of the color is in itself a praiseworthy characteristic rather than the reverse, they do not, in the present instance, harmonize with each other, nor do they constitute a pleasing scheme of decoration for the top stories of a tall building. Everything about such a building should be subordinated to the dominant effect produced by the mass, and the attempt to make any one division interesting by means of a specially vivid color scheme is as undesirable as the attempt to make any one division interesting by means of inflated ornament. The most successful examples of skyscraper architecture remain buildings finished in one solid color, which tends to emphasize the mass of the building instead of diverting attention from it; and, as we have already pointed out, white or light grey glazed terra cotta is the best material in which to treat the surface of such a building. But there can be no doubt also that there would be many different ways of using glazed and colored terra cotta for the surface of such a building which would not serve to diminish the effect of its mass. It might be arranged, for instance, in a not very conspicuous pattern, which delicately emphasizes the effect of the salient vertical lines, or the cue might be taken from the Broadway Chambers Building, and a color scheme provided which would be carefully graded so that a consistent effect would be obtained from a number of carefully blended colors, and so that the colors applied to that part of the structure furthest from the eye would be most vivid.

Skyscrapers are not, however, the only
buildings to which colored and glazed terra cotta can be applied, and the problem of design presented by lower buildings is, of course, entirely different. In houses of an ordinary size the height and mass does not overpower every other character of the building, and well-scaled detail again becomes an essential source of complete architectural effect. Fortunately, a building of this kind, decorated with glazed and colored terra cotta, has just been designed in New York City by McKim, Mead & White, and the use which they have made of the material in this typical instance shows admirably how its possibilities strike a firm of architects who stand at the head of the profession in this country. McKim, Mead & White have, in the course of their long career, contributed enormously to the novel, popular and successful use of terra cotta, but on no occasion have they done it a better service than by adopting colored terra cotta glazed as the material to be used in decorating the new Parkhurst Church on the northeast corner of 24th Street and Madison Square. The building has already attracted a large amount of popular attention, and the central character of its site, combined with the novelty of its design, and the peculiarity of its architectural relation to the buildings of the Metropolitan Insurance Company in its immediate neighborhood, will continue to make it one of the most conspicuous edifices in New York City. The method in which the colored glaze has been used is, consequently, of peculiar interest, and in general it may be said that the object behind its use has evidently been that of giving an additional value to an elaborate scheme of architectural ornament. Of course the coloring of this ornament has been planned in relation to general color effect of the whole building, the basis of which is supplied by the cream brick of which the walls are made. Every part of the building on which decoration was appropriate has been embellished with very delicate and beautiful patterned ornament, and the yellow and green terra cotta has been used to make this shallow ornament additionally interesting. The scale of the detail is, indeed, such that it would not be effective at all, were it not for the tinting which it receives, and the chief question mark which one is inclined to place against the use of colored glazed terra cotta in the design of the building concerns the depth of this tinting. It is frequently asserted that the use of somewhat livelier colors would have been more effective. However that may be, the new Parkhurst Church is an admirable example of one way in which the colored glaze may be applied to buildings whose height does not make their upper stories too remote from the eye; and it will undoubtedly have an influential effect upon the way in which this colored terra cotta will be used by American architects in the near future.

It seems to the writer that the colored glaze ought to become very popular for ornamental use on fireproof country residences. Several prominent houses in Newport and Washington have already been encased in the white glaze; but no colored material was employed, either for ornamental treatment or for the covering of any large surface. On what class of building, however, would the colored glaze be more appropriate than upon private residences, particularly in the country? One's country house, especially when it is a villa rather than a mansion or a palace, should be lively and gay in its effect. The Italians frequently made their stucco villas gay by painting the surface, but by means of the colored glaze much better effects can be obtained in a manner which would be structurally much more sound. It is much to be hoped that the better American architects will soon be using the glazed terra cotta, both white and colored, for country houses.

Herbert D. Croly.
THE NEW YORK CLUB'S PROJECTED BUILDING.
(From the Architect's drawing.)
West 40th Street, near 5th Avenue, New York City. 
H. J. Hardenbergh, Architect.
The Routine Paint Specification

Why is it that architects, who are in the van of progress in the engineering and constructing branches of their profession, are still in the dark ages when it comes to paint? We find architects who are thoroughly up-to-date in the details of steel, concrete, slow combustion, etc., reproducing literally the paint specifications of their predecessors of the seventies. One reason, of course, is that paint is less important than material and form, and that the more important matters demand first attention; but this does not fully explain the practical identity of painting specifications.

An architect to whom I put this question recently shed a bright light on the subject when he said, "They are all the same because they are obtained in the same way. When the young architect leaves his preceptor's office to set up for himself, the one thing he is sure to copy and carry away with him is a set of specifications, including specifications for painting, and some of these specifications may have been handed down in a direct line, for all I know, from the office of Hiram of Tyre."

If anyone will take the trouble to examine the successive specification issued during the past thirty years of any important railway, government department, wagon works, implement works, etc., he will find that practice has kept pace with technical progress, and that specification has gone hand in hand with investigation. But in architectural practice any deviation from the venerable formula beginning "all exterior wood work shall have a priming coat of pure lead and oil," etc., is so exceptional as to be startling.

Supposing, or even asserting, that this practice was the best possible at the time it was instituted, certain changes in materials and conditions have intervened which make it advisable at least to review the subject. The principal structural woods are no longer, as formerly, white pine, oak and hemlock. Yellow pine, cypress, yellow poplar, cottonwood, basswood, white cedar and redwood, owing to the exhaustion of the more desirable timbers, have largely replaced them. It is evident to anyone who gives the subject a thought that white pine and yellow pine will probably require different treatment, as will oak and redwood, or hemlock or cypress. But the average architect copies the old specifications, and relies on the painter to adapt them to the new conditions.

That is not the way the Pennsylvania Railroad, for example, specifies paint. The formula varies with every purpose for which the paint is to be used. Steel coal cars, wooden freight cars, steel bridges, locomotives, water tanks, signal towers and station buildings all require different treatment, and the paint varies accordingly.

The use of house paint along the line of the Pennsylvania is confined to such things as stations, sheds, signal towers, fences, etc., and the variety is limited practically to two shades of drab. It is a significant fact that no specification has yet been issued for such paint, but that the paints used are largely prepared paints, bought, as the Chief Chemist of the road, Dr. C. B. Dudley, has stated, on the general reputation of the manufacturer. Moreover, has Dr. Dudley stated that when the specifications for paints of this class are finally issued they will be—pure lead and oil tinted to shade? By no means, but a formula on the lines of the better grades of ready prepared paints now on the market, with about one-third of the pigment an inert material like gypsum, barytes, silica, alumina, etc., will be used.

The fact is, that outside of the technical chemists and testing engineers, the only class that have intelligently followed the changes in structural materials, the altered conditions of exposure due to the contamination of the air by the increased consumption of coal and gas and the enormous increase and
change in the technics of painting materials, are the paint manufacturers. The physical character of white lead has been diversified during the past fifty years, so that its inventors would not recognize it. There are at least five different kinds of lead on the market, differing as widely as if they were different chemical compounds, yet to the average painter they are all just "pure lead and oil." If through ignorance of their characteristics he fails to get good results from them, he can merely prove their purity and deplore the passing of "the good old lead we used to get." And thus, through the conservatism of the architect and the painter, the modern householder misses all the advantages of the progress in paint-making during the past half century.

Though not the most important part of the architect's duties, the paint end of it is worth more than the casual thought usually given it. Paint can protect or fail to protect materials. It can remain permanently beautiful and protective or it can quickly fail of either or both qualities. How shall the architect secure in paint, as in building materials, the improvements of the past fifty years?

Without attempting directly to answer the question, let us revert once more to the practice of the Pennsylvania Railroad, a consumer whose annual consumption of paint exceeds that of several states. When the technical authorities of the Pennsylvania Railroad, by means of test and experiment, have formulated a specification for any article of consumption, they submit it for criticism to all the manufacturers in that particular line from whom they are accustomed to make purchases, and after collating with their own observations the practical advice of these manufacturers, the formula is perfected and issued. Is there not in this practice a hint available to the architect? Would it not be to the advantage of all concerned if he was to get in touch with the paint manufacturers of his vicinity and see what, if anything, new and available has been developed by paint manufacturing experience since the dark ages when the current specifications originated?

H. B. George.