A New Use of Old Forms.

Two Houses by Mr. John Russell Pope.

The American use of European architectural and decorative forms has passed through a number of phases. There was a time toward the middle of the century when our imitation of the historic styles of European domestic architecture aspired to be faithful, but was too ignorant to succeed. The architect of 1850 or thereabouts, particularly in the vicinity of New York, designed in any style his client pleased, and was as willing to supply a Florentine villa as he was to furnish a Gothic cottage, or a Swiss chalet. He believed, in the depths of his innocence and ignorance, that the houses, with which he spotted the landscape, were the "real thing," and were made authentic by the high sources from which they derived; but as a matter of fact his whimsical copies, in which a frequent ponderousness of construction was combined with restless frivolity of effect, generally bore the same relation to their models as a child's drawings do to the contour of the human face. During this period the only way in which a desire for originality expressed itself, was in the occasional combination of several different "styles" in one miscellaneous and eccentric mass, as in the case of "Armsmear," built by Col. Colt near Hartford. During the next important period of residential construction, which did not occur until the early years of the eighties, the imitative tendency, which still dominated the design of brick and stone, if not of frame houses, was expressed generally in well-informed reproductions of European styles; and these copies, while they had the merit of being scholarly and of familiarizing the American public with authentic historic forms, were designed with a view to stylistic fidelity rather than to the complex and varying requirements of local propriety. This phase, although it was an advance upon its predecessors, proved to be quite as evanescent. American architecture could not be satisfied with the well-informed copy any more than it could with the ignorant one; and at the present time, although both the careless and the careful copyist are still in evidence, the best of the younger American architects are seeking, in domestic, as well as in business buildings, to reach a higher degree of personal expression and local propriety.

It is in the light of this demand both for personal expression and local propriety that the two houses of Mr. John Russell Pope, which are illustrated herewith, can best be understood. Mr. Pope represents both in his training and in his point of view the best equipment of contemporary American architecture. His preparation for his work lacks nothing either in variety or completeness. He has studied in this coun-
A NEW USE OF OLD FORMS.

Roslyn, L. I.

THE SOUTH SIDE OF THE HOUSE OF MR. W. L. STOW.

John Russell Pope, Architect.
ENTRANCE HALL IN THE HOUSE OF MR. W. L. STOW.

Roslyn, L. I.

John Russell Pope, Architect.
try and at the Beaux Arts; he has drunk his share of the wine of Italian travel and residence; he has had the benefit of close personal association with one of the foremost of living American architects. Yet although his training has been thorough-going and his preliminary associations excellent, he is not in the least the victim of his training and his associations. Like a number of the Beaux-Arts graduates his rigorous schooling has not diminished his personal flexibility and initiative. He seeks to combine individual expression with technical precision; and he seeks this individual expression in the right sort of way.

It is important that an architect who seeks individual expression should seek it in the right way, because there are in all the fine arts a good many wrong ways of going about the search. One of the worst of these is the attempt to secure originality by conscious effort. Originality like happiness is well enough, provided it accrues as the inevitable, but, so far as the intention goes, as the accidental fruit of a man's work; but the pursuit of originality is fatal, because it seduces the architect or the artist to make his work primarily different from that of other people. This is, of course, the fallacy and the difficulty which cheapens and sterilizes so much of the "New Art." The only originality worth having is that which issues unconsciously from the frank and well-informed treatment of an artist's special task or material. In the case of an architect this desirable originality must derive from his ability to adapt his design to the conditions, which it is required to meet; and in any particular case this group of conditions includes many different members, some of which are frequently ignored. The design of any particular dwelling, for instance, should be adapted to the personality of its owner and his manner of life; to the site on which the dwelling stands, the character of the neighboring country, and the scale of the surrounding foliage; and finally to what may be called the technical logic of the design itself—meaning thereby the satisfactory composition of the strictly architectural elements of the design simply as a matter of form. A house which really meets all these requirements is certain to be an original individual piece of work, just because it completely satisfies a special set of conditions. Originality is imposed upon an architect who thoroughly masters a particular job.

Such originality is independent of the sources from which the designer derives his favorite architectural forms. The notion that he can create these forms out of his head or by means of the direct inspiration of Heaven must, of course, be at once dismissed. In all the arts there exists a great and living tradition—a high and authoritative convention derived from the best foregoing practice, and an architect even more than a painter cannot hope to do mature and finished work, unless his mind has been steeped in the traditions of his art. This study of architectural history too often furnishes the architect merely with a set or forms, instead of with a sense of form and a set of principles; but a man who has any power of individual architectural thinking will be equal to the task of giving the forms, with which his mind is furnished, that special rendering, which the conditions of a particular design demand. The forms which he prefers will depend partly upon his personal taste and partly upon the scale and the cost of the house.

FORE COURT OF STOW HOUSE.
FORMAL GARDEN OF THE HOUSE OF MR. W. L. STOW.

Roslyn, L. I.  
John Russell Pope, Architect.
VIEW FROM THE STEPS OF THE TERRACE.
(The House of Mr. W. L. Stow.)

Roslyn, L. I.

John Russell Pope, Architect
he is designing; and he will be at liberty to mix styles as much as he pleases, provided he preserves the integrity of his composition and does not violate the logic of any particular style.

The individual expression which Mr. Pope has succeeded in achieving has been achieved in the way described above. The two houses illustrated herewith are intended fully to satisfy the demands of particular owners, who wanted to build upon certain sites; and in meeting these different demands Mr. Pope took his forms from any source which suited his taste or convenience and gave them an individual and a local rendering. The two houses are alike in certain respects, because the owners wanted to put up the same kind of an appearance, and because Mr. Pope's disposition and training has made him prefer particular architectural forms. On the other hand they also differ radically because of certain obvious variations in scale, cost, and situation. The similarities and differences are all significant, and are worth particular attention.

Both of these houses show plainly the result of Mr. Pope's French training, yet both are, also, as far as possible from being merely Beaux-Arts products. The architect has combined suggestions and forms taken both from Italian and French sources. The stucco house with a red tile roof is of course derived from the Italian Rennaissance villa. The detail on the other hand is very largely French. The general effect is neither one nor the other, but is probably more French than Italian. But whether French or Italian, the effect is eminently handsome and striking, and there is even something about it, which can fairly be called American. I am aware that many architectural commentators will be unable to discern anything American in houses, which preserve so much of the traditions of European domestic architecture; but such houses as these undoubtedly possess in a certain degree the quality of local propriety. An American house does not necessarily mean a house which is not European; it means primarily a house which is adapted to the needs and tastes of its American owner. The architect is first of all under obligations to please his clients, and if he designs a house which lacks the propriety of being adapted to its owner, it will be wanting in its chief reason for existence—in the most fundamental propriety it can possibly possess.

The means taken to adapt a house to the tastes of its owner will differ considerably in the cases of different individuals; and they also depend a good deal upon the part of the country in which the individuals live. The demands of the rich western business man differs considerably from those of his eastern prototype. But there can be no doubt that the house of a rich man of the East would as a rule be wholly inappropriate unless it attained, as Mr. Pope's houses do, an eminently striking and handsome effect. Such Americans want to live in buildings which express frankly and fully our youthful self-assurance, our abounding prosperity, and our pleasure in the brave appearances of things. It is the endeavour to satisfy this demand on the part of their clients which has led the architects of expensive houses to make these houses first of all somewhat spectacular in appearance; and in many cases the attempt to be brave and spectacular has degenerated into mere flamboyance. Mr. Pope, however, is in no danger of falling into any such excess. His two houses are, as they are intended to be, smart and gay; but they are, also, careful and in some respects sober pieces of architectural design. They show the result of the most conscientious study in the scale and the composition of the masses, in the proportion of the different members, and in the adaptation of the house to its site. Ornament is sparingly and appropriately used. It is, perhaps, in this respect more than in any other that Mr. Pope shows his independence of the familiar Beaux-Arts convention which disregards simplicity and sobriety of decoration. His ornament is never superfluous. It is always subordinated to the effect, which he seeks by adapting the house to its location and by the proper disposition of its masses and openings.
THE LIVING-ROOM IN THE HOUSE OF MR. W. L. STOW.

Roslyn, L. I.

John Russell Pope, Architect
In the cases of these two houses the characters of the two locations were fundamentally different. The Stow dwelling is situated on the crest of a high hill overlooking a considerable stretch of country. On the other hand the site of Dr. Jacob’s house in Newport is a comparatively small plot, located in semi-urban surroundings. Consequently in the former case the problem was to design a house and its approaches which would cap the hill and command the view, while in the latter case the object of the lay-out was to shut out the surroundings, and to make the enclosed grounds, which amounted only to three and two-thirds acres, look complete within these narrow limits and so far as possible spacious.

The Stow estate consists, as I have said, of a high hill, on the top of which the house was to be situated. The acreage of the hill is very considerable, but its summit is comparatively small. Careful adjustments had to be made in order to arrange for the placing of so large a house on the area provided by the crown of the hill. The great desideratum was to obtain sufficient space on the south front of the house, from which the view was to be seen, and the location of the building was consequently pushed as far north as possible. The consequence is that the fore-court on the north side, to which the main driveway leads, and on which the main entrance opens, looks small compared with the scale of the house; but as long as some sacrifice was necessary it was better to sacrifice the fore-court than the terrace. In this way, and by means of a good deal of grading, Mr. Hope has obtained plenty of space on the south side, where it was most necessary. The object of the whole lay-out was to make the room for a broad terrace, from which the very beautiful and extensive view was to be enjoyed, and by virtue of which the house would really fit the hill and crown its summit. This terrace outlines with a low parapet the level of the hill-top, and overruns by a good many feet the ends of the house. At each end a broad flight of steps leads down to the level of the garden, which is considerably lower than that of the house; and which is enclosed on three sides by the walls of the terrace and of the steps. On the fourth or south side, it is, of course, entirely open; but the formal treatment is continued by another and still more spacious terrace on a slightly lower level. This second terrace is kept entirely green and is bounded by a walk leading around its outer line and by a hedge. The whole arrangement makes excellent use of the space at Mr. Pope’s disposal, and is admirably scaled. The effect, as it is shown in the accompanying illustrations, is not all that it should be, because the rigid lines of the garden architecture are unrelieved by any sufficient planting. The proper disposition of masses of shrubbery would serve to soften and relieve the architecture, so that its white surfaces and straight lines would count very differently in one’s total impression of the place. As this is what Mr. Pope manifestly intended, his work must be judged in the light of such a modification. His treatment is, of course, fundamentally architectural, as it should be—particularly in relation to the location of the house; but the proper planting, after it had obtained its growth, would have subdued this architectural effect more to the tone of its natural surroundings.

The design of the house is as interesting as that of the lay-out. The building consists of a central member with wings projecting on both sides of both ends. The central division is distinguished by heavy engaged columns running through two stories, a plain frieze above, which continues around the whole building, and a parapet. On the south side the engaged columns dominate the length of the façade between the wings; on the north side they frame the entrance doorway and the window of the main hall. The wings are more simply treated, and an excellent effect is obtained by the plain surfaces of the walls, in their relation to the deep reveals of the openings. These reveals are unusually deep on the whole building; but they are particularly deep in the windows of the wings. They help, together with the strong simple
Approach to the House of Dr. Jacobs.

Newport, R. I.

John Russell Pope, Architect.
A NEW USE OF OLD FORMS.

ENTRANCE TO THE HOUSE OF DR. JACOBS.

Newport, R. I.

John Russell Pope, Architect.
Newport, R. I.,

GARDEN SIDE OF THE HOUSE OF DR. JACOBS.

John Russell Pope, Architect,
A NEW USE OF OLD FORMS.

THE GARDEN SIDE OF THE HOUSE OF DR. JACOBS.

Newport, R. I.

John Russell Pope, Architect.
The Garden Belonging to the House of Dr. Jacobs.

Newport, R. I.

John Russell Pope, Architect.
THE GARDEN BELONGING TO THE HOUSE OF DR. JACOBS.

Newport, R. I.  

John Russell Pope, Architect.
lines of the structure, and the sobriety of the ornament to give it a solid dignified appearance. Its dignity of effect would, I think, have been enhanced by the substitution of stone, for stucco, which was the material Mr. Pope would have preferred to use. The color of the plaster has, however, more grey in it than usual, and is in itself both pleasing and appropriate. It should be noticed, also, that the plan of the house enables its oc-

lay out than is usually the case with Newport residences; but this ground did not command any view. It had to be treated exclusively in relation to the house, and with the object in mind of creating a group of self-contained domestic architectural and landscape effects. In composing these effects he had two advantages. The size of the house was not such as entirely to throw it out of scale with the dimensions of the grounds; and the grounds themselves

THE HOUSE OF DR. JACOBS, FROM THE LAWN.

Newport, R. I.

John Russell Pope, Architect.

cupants to obtain full advantage of the lay-out. The living-room and the dining-room both open up on the paved recess between wings on the south side of the house, thus getting full benefit of the exposure and the outlook. The living-room looks larger in the illustration than it is in fact. Its dimensions and proportions are those of a moderate-sized apartment—quite in scale with the life and the occupations of a modern American family.

The place of Dr. Jacobs at Newport is less of an estate that that of Mr. Stow, and more of a country villa. Even in this instance Mr. Pope had more ground in the immediate vicinity of the building to were partly enclosed by a fine growth of trees. The enclosure was, however, by no means complete; and particularly on the south side, a good deal of planting was necessary for the purpose of shutting in the garden and shutting out the neighborhood. Here again the approach is from the north. The road leads straight up to the house, and runs equi-distant between two big spreading oaks which screen the two wings of the house and disclose only the entrance. The entrance is situated in the angle of the wings, and is emphasized by pilasters running up through two stories, and by a parapet which breaks the line of the roof.
The dining-room and living-room are situated on the south side of the house, and are planned so as to be used in connection with the gardens for summer entertainment. The French windows give upon a small terrace, outlined by a parapet. A few steps lead down from this terrace to another terrace on a slightly lower level; and from there another short flight of steps leads to the garden. The garden is very simply treated with comparatively few architectural features. At the end opposite to the house there is a pergola, back and on the sides of which deep masses of cedars have been planted. The effect of this terminal feature, of which the scale is perhaps somewhat small, is extremely charming. The treatment of the garden is very open without much planting; all is rather inconspicuous. The purpose of his arrangement doubtless is to make the available space go as far as possible, and Mr. Pope has succeeded in attaining this object. But the minor features entailed by this arrangement look somewhat episodic and the garden furniture has not in all cases been very happily placed. The green lawn also has the appearance of being cut up too much with white paths. These, however, are minor blemishes. The place is on the whole a very skillful example of a stucco villa, which in its gayety and smartness has not lost the more sober architectural merits.
Indeed the impression which Mr. Pope's work makes upon the writer can best be summed up in the last sentence of the foregoing paragraph. It is expressive of the life which people lead at Roslyn and at Newport, and it attains to this expression without any loss of architectural dignity and propriety. On the contrary Mr. Pope's work is always from a technical point of view sound and competent. He not only knows what he wants, but he knows very well how to get it; and it is this combination which gives his work a thorough consistency. By consistency I do not mean, of course, purity of style. I mean that quality in his work which enables him to introduce a telling unity of
THE DRAWING-ROOM OF THE HOUSE OF DR. JACOBS.

Newport, R. I.

Photo by Alman & Co.

John Russell Popé, Architect.
A NEW USE OF OLD FORMS.

THE DINING-ROOM OF THE HOUSE OF DR. JACOBS.

Newport, R. I.

Photo by Alman & Co.

John Russell Pope, Architect.
SITTING-ROOM IN THE HOUSE OF DR. JACOBS.
Newport, R. I.
Photo by Alman & Co.
John Russell Pope, Architect.
A NEW USE OF OLD FORMS.

effect into the miscellaneous forms he uses, and into all the elements of the design. The fusion of these miscellaneous forms is by no means complete; but it is complete enough to give Mr. Pope’s work a marked individual stamp. In spite of certain resemblances to other handsome American houses, Mr. Pope’s buildings belong in one sense thoroughly to him-

self just as they belong in another sense thoroughly to their owners. The style of these houses differs not only from any specific historic precedent, but from any similar American houses; and this individual stamp has been obtained, not in any arbitrary way, but by the candid and thorough treatment of two special problems of design.

*Herbert Croly.*
A WALL DRINKING-FOUNTAIN OF ROOKWOOD WARE.
Rookwood Pottery.

The name "Rookwood Pottery" is now easily a household word throughout the Art World, and the quaint monogram "RP" is as familiar to the lover of faïence as any of the old marks many times its seniors. As the passing years add their respective flames to the corona encircling the symbolic letters, the charm increases, and we study with growing interest the monograms of the clever artists that come and go, whose remarkable individualities collectively make up the distinctive character of Rookwood ware. And yet the Rookwood of to-day is a very different thing from that of the early days when its fame was first heralded. Then it was only pottery and small articles of faïence. Now, although the pottery ware is still supreme, the workers are developing a comparatively new field, and give fair promise of establishing the work upon the same high plane of excellence as has long been enjoyed by the pottery ware, and the indications are that they will accomplish this in a much less space of time.

The Pottery was founded in 1880 by Mrs. Maria Longworth Storer, who named it "Rookwood" after her father's country estate near Cincinnati. Mrs. Storer was herself the chief worker and artist, but had associated with her a number of ladies, many of whom had made original experiments. This little band of decorative pottery enthusiasts worked hard and continuously, and soon attracted the attention of the people of taste to their new ware, which came as a sort of revelation. It was practically a re-discovery of a lost art. The decorations were made entirely on the moist clay before any firing, the colors being mixed with clay, and becoming part of the ware itself. The pieces after the decoration had been applied, were then fired into biscuit and the various glazes applied in subsequent firings. This method has been employed continuously till the present time, and constitutes the beautiful underglaze, which created such interest at the time of its introduction, and which still is, and will undoubtedly continue to be a constant source of pleasure to all art lovers.

"The clays in use for all purposes are entirely American, and largely from the Ohio valley, and it was the use of these native clays that first inclined the color quality toward yellows, browns and reds, and the decorative medium lent itself to a rather luxuriant style of ornament in rich arrangements of warm color, all of which the transparent glazes merged in deep mellow tones. As the command of material has strengthened, the beauty of the ware has steadily gained in harmony of all the elements which compose it, until form, color, decoration and glaze combine to produce those things of beauty which elude all attempts at imitation, and make Rookwood a distinctive novelty in the world's ceramics."

Much might be said concerning the many rare effects which the genius of the artist has produced, but here we can only refer to some of the more import-
WORK SHOP OF THE ROOKWOOD POTTERY.
ROOKWOOD TILES ON A CHIMNEY BREAST.
ant ones. The early departures from the warm yellows and reds were in the direction of rich greens and blues, which are effectually applied to the dark tones of the former. The "Iris" and "Sea Green" effect are as peculiar to this ware as was the "Tiger Eye," which was one of the early developments, and which proved to be the forerunner of a similar class of effects produced later by other celebrated potteries. In 1896, the variety known as "Mat Glazes" was first produced at Rookwood, and in a few years attained great prominence. In this the special quality is beauty of texture, through a great range and variety of color, and an extensive line of ware was produced, illustrating the endless resources of the artists.

It must be noted that the pottery is conducted not on the prevailing factory system, which multiplies the production of one article or design, until the cost of its manufacture is reduced to the most economical basis. On the contrary the effort is to attain a higher art rather than a cheaper process. A free and liberal spirit prevails, and the workers are surrounded with every opportunity to develop the individual artistic feeling. They come mainly from the student body of the Cincinnati Art School, near by, and many remain a long time in the service of the pottery,
enjoying to the fullest the unusual advantages for study and development. It is only in this way that it is possible to produce really new ideas: by cooperation and free intercourse and discussion. By this path all knowledge is advanced, and it remains only for the individual to plant his own stamp on this or that degree of development. So “Rookwood” has grown and progressed, until now it has entered the great and boundless field of architectural decoration. At first there were timid efforts at the successful production of plain tiles for mantel facings made in solid colors of mat glazes. These tiles were large in size and called for considerable technical skill in firing. This once asquired, it was but a natural step toward decorating the tiles, and from painted decorations the artists were rapidly led to combinations with modeled effects.

It became readily apparent that even in the first efforts, although the field was limited, there were untold possibilities awaiting development at the hands of some capable artist. From mantel facings, it was but a natural step to mantels themselves, and we find some interesting designs, even in the early attempts. They reveal a bold, fearless, free treatment, which thoroughly preserves the character of the material, much more consistently than is the case where the designer is not a clay worker.
This emphasizes the necessity of designers having thorough knowledge of the material in hand; for, without such knowledge, no true work of art can be produced. This is especially true of faïence. A design may be ever so care-
corners are all gently rounded off, and then when the glaze is applied, filling angles and depressions, a beautiful soft effect is imparted, having all the value of the pottery ware, and avoiding that awful cast iron effect, which is so com-

fully drawn on paper, but unless the draftsman has had practical experience in the handling of clay, he must expect his design to undergo serious changes at the hands of the modeler to save it from failure.

In this new Rookwood ware, one of the striking characteristics is the softness of the lines. In fact there is scarcely such a thing as a line. The edges and mon to the ordinary architectural terra cotta. This is well exemplified in the work recently made for, and installed in, the 23rd, 79th, 86th and 91st Street Stations of the New York Subway. Here the decorations consist of a moulded cornice with egg and dart ornamentation. At the bearing of the ceiling beam a heavy console is provided, and at each end of the panel between the beams, a
shield bearing the number of the station. The colors are chiefly soft grays, light blues and yellows with touches of rich reds and greens. Beautiful as this work is, the general design is somewhat at fault, in so far as scale is concerned. Some of the details are too small to be effective at the distance from filled in with rich colored mosaics. The function of this faïence treatment is to form a transition between the mosaic panels and the stone architecture of the design. The columns and tracery of the faïence work are light gray, approximately of the same tone as the stone, but are outlined in red and surrounded which they must be viewed, and consequently the work suffers to this extent.

Another notable example of the new Rookwood wear, is the faïence reredos in the St. Paul's Episcopal Church, Rochester, New York. In this design the faïence work occupies the main body of a large field enclosed within a general design of stone treatment. The design comprises Gothic tracery and columns, the space between which is by a border treatment of rich colors separating them from the stone. In this way a treatment of the entire color scheme is obtained, which binds together the mosaics, the faïence work and the stone into an harmonious whole.

The Pottery has just completed a wall drinking fountain—its own original design; and this again forcibly illustrates the marked difference between the work of the architect and that of the clay working artist. The former employs mould-
ings and stereotyped decorations, the latter disregards all traditional forms and draws his inspiration directly from nature, with the result that his design has an expression of freedom and natural charm, entirely lacking in set architectural schemes. In this case the design is a picture representing a spring coming from a fissure in the rock. The entire piece is about three and one-half feet wide and five and one-half feet high, and a beautiful example of the highest art in ceramics.

The examples above cited, while they represent the results of the most careful thought and production, both from a technical as well as an artistic standpoint, and should rank as true works of art, must yet be regarded as comparative beginnings of a branch of ceramics, which is destined to play an important role in the great field of architectural decoration. Much experimenting has yet to be done, and this too, despite the fact that notably high results have already been achieved. It is with a view of conducting such operations on a proper basis that the Rookwood Pottery management undertook, and have just completed a large addition to their plant for the exclusive purpose of manufacturing the new ware.

The pottery building is of a picturesque, low, rambling, tile-roofed, half-timber design, stretching along the very brow of Mt. Adams, one of the cluster of hills surrounding Cincinnati, that is to say the city proper. It can be seen from many points in the valley, and from a distance looks for all the world like some ancient acropolis. The view in the grounds in front of the building reminds one of some old English wayside inn of olden times. The masonry underpinning is of very rough stone laid up with unpointed joints, thereby heightening the rustic effects. The timber work is slightly stained, and the cement filling is decorated by a bold fan-shaped pattern, modeled in place while the mortar was still fresh. The building was erected in sections at different times, and in this way developed a delightfully picturesque group.

The wing devoted to the manufacture of the architectural faïence contains primarily a large central portion, rising above the rest, and constituting the kiln-room, having an ultimate capacity of six large kilns of various shapes and sizes. This room is surrounded by additional rooms for various purposes. When the clay is first received it is dumped into large bins in the basement. From there it is taken as needed and put through the grinders, where it is finely ground and taken to the clay room, which occupies the entire space along one side of the kiln-room. Here it is worked into a plastic state and moulded or modeled ready for the first firing. It is then placed in a drying chamber, from which it is passed into the kilns. After this first firing the resulting biscuit is stored in a room especially for the purpose, where it remains awaiting its turn to be glazed. The glazing is done in another room, which is placed on
the third side of the kiln-room opposite the clay room. This part of the work requires great skill, as in fact does all the work at the various stages. After the ware is glazed it is again placed in a drying chamber, and from there taken again to the kiln-room for the final firing.

A large studio is arranged on the second floor, and from it a balcony overlooks a room two stories clear height. Here the finished product is laid out on the floor, or erected against the wall, bringing all parts of the design together as a whole as nearly as possible, so that some idea of the finished effect may be had, and the design studied as an entirety. In this way the artist can discover mistakes, and if any such should develop, the work is at once done over again, and this, when required, is unflinchingly undertaken with the one determination to turn out nothing that cannot pass the test of a work of art.

As stated before there is nothing of the factory spirit present. There is only the atmosphere of the artist's studio; no noise, no bustle; quiet and gentleness of manners everywhere. Each of the numerous artists has his own little studio, where he can work out his ideas to his heart's content. The utmost freedom of spirit prevails, and it is the spirit of Bohemia. A most delightful and ideal spot and a Mecca for all art lovers.

A. O. Elzner.

DETAIL IN ROOKWOOD WARE.
A Modern Instance of Colonial Architecture.

The House of Mr. B. W. Arnold at Albany, N. Y.

The comment of the ordinary educated man upon the residence of Mr. B. W. Arnold, at Albany, New York, illustrated herewith, would probably be: "What a handsome 'Colonial' House!" The exclamation would be fully justified. The house, of which Messrs. McKim, Mead & White are the architects, is an extraordinarily finished piece of what is known as "colonial" design. It reproduces admirably the best qualities of one phase of colonial domestic architecture. It is instinct with that spirit of moderation, refinement and good form, which was characteristic of the so-called "colonial" house at its best. Yet this comment, just as it is within limits, would not by any means satisfy a man who possessed a special knowledge of "colonial" architecture. The house embodies the spirit of the so-called colonial house at its best; but there are so many variations from the actual details of the "colonial" type that one is tempted to analyze the source and significance of these variations. What was their object? What is their propriety? What lesson do they teach as to the proper contemporary use of the "colonial" forms?

Of course, the word "colonial" applied to such a house is a misnomer. The American "colonial" was merely an attenuation under very lean economic conditions of the English "Georgian," and the modern "colonial" house at its best always tends to revert in certain respects to the English prototype. The house of Mr. Arnold is distinctly "Georgian," rather than "colonial," yet this further specification by no means covers the peculiarities of its design. It has certain characteristics which are as little "Georgian" as they are "colonial." The ordinary example of the "Georgian" dwelling was, no doubt, in dimension and scale very much the same thing as the Arnold residence. It was built generally for a merchant on a comparatively small plot of ground, bounded by a street. It was the first recognition in English domestic architecture of the rising importance of the business man, as contrasted with the gentry; and these houses had all the quality of being built for people who aspired to social respectability without daring to claim the largest social prominence. The well-to-do English Bourgeois of the 18th century wanted his house to express his intermediate social position. He wanted to be considered a person of good taste and some social distinction; but he wanted it to be clearly understood that he knew the difference between himself and his betters. His house was pervaded by a very modest sense of propriety, which would have been as much outraged by any breadth or self-confidence of manner on the one hand as it would on the other by any obvious vulgarity. Yet, while this was the commoner type of Georgian house, it was by no means the only type. Early in the 18th century certain Renaissance houses, such as the addition to Hampton Court, were built for members of the aristocracy, which escaped the limitations of the sort of house described above; and many American houses which are intended to have the advantages without the limitations of "Georgian" design move in the direction of this early English Renaissance.

The variations from the "Georgian" type contained in the Arnold house, while they also are evidently intended to escape some of the limitations of English "Georgian," look in still another direction. We do not know, for instance, of any "Georgian" house which bulges symmetrically on both sides of the main entrance. This device
THE HOUSE OF MR. B. W. ARNOLD.

Albany, N. Y.  McKim, Mead & White, Architects.

Photo by August Patzig.
A MODERN INSTANCE OF COLONIAL ARCHITECTURE.

ENTRANCE TO THE HOUSE OF MR. B. W. ARNOLD.

Albany, N. Y.

Photo by August Patzig.
for obtaining more interesting lines in the rooms of the interior is, of course, familiar enough. The most conspicuous examples of it, dating from early in the 19th century, are situated on Beacon Street, in Boston, and others may still be seen in the Greenwich district of New York City. But, wherever found, it is a departure from the "Georgian" liking for straight lines and flat methods of treatment, and it is a variation which looks better on a house which is situated very near the street line. The fact that the Arnold house is situated near the street line also has another consequence. "Georgian" houses, as a rule, had sloping roofs, which were an important element in the design, whereas the Arnold house is crowned with a cornice and a parapet. This is as it should be, because a sloping roof with an overhang would not count effectively on a house meant to be seen from a street on which it immediately abutted. Thus, the variations which the architects have introduced into the conventional type have all been made with a purpose. They are the result either of a wish to secure some variety of effect in the interior, or of the peculiar situation of the house. It is just in this way which historic types of design should be used. It is this sort of adaptation which endows them with new meaning and vitality.

There are few houses in this country embodying the Georgian tradition, in which its spirit and details appear to better advantage. The peculiar characteristic of that style is, as we have said, its discretion—its scrupulous avoidance of any suggestion of excess. The
DETAIL OF THE LIVING-ROOM—HOUSE OF MR. B. W. ARNOLD.

Albany, N. Y.  

McKim, Mead & White, Architects.

Photo by August Patzig.
danger which accompanies these qualities is the danger of being prim and stiff and flat—the danger of losing any positive virtue in the effort to escape any obvious excess. The present example is as discreet as a Georgian house must be; but its discretion has not ceased to be a virtue. Every detail has been carefully studied so as to avoid over-simplification, and so as to make the lower line of the top tier of windows, but this modest projection merely breaks the surface of the wall and helps to tie the third row of windows together, without raising lines and shadows which are effective as against the stronger vertical projections. The windows also are studied with the utmost care. Those of the ground floor are not only larger than those above, but they are made to appear still more important by their marble framing. The windows on the second tier are again slightly larger than those on the third, and are capped by a little bit more elaborate stonework. Above, the posts of the balustrade have been carefully situated to complete the motives of the design below, and their profile carefully fashioned into lines, which look well from the street. The same attention to detail may be noticed in the panelling of the chimneys and in

SITTING-ROOM OF THE HOUSE OF MR. B. W. ARNOLD.
Albany, N. Y.

Photo by August Patzig.

McKim, Mead & White, Architects.
A MODERN INSTANCE OF COLONIAL ARCHITECTURE

DINING-ROOM OF THE HOUSE OF MR. B. W. ARNOLD.

Albany, N. Y.

Photo by August Patzig.

McKim, Mead & White, Architects.
their marble caps. No subordinate element in the design has been slurred, and the whole effect of the street frontages, with their contrasts between the marble base and trimmings and the warm red brick, and their combination of fundamental simplicity with great variety of architectural expedient, is as positive as it is discreet.

The entrance porch deserves special examination, because it exhibits on a smaller scale the peculiar qualities of the whole house. Here as elsewhere the architect has preserved what is best about "Colonial" design, while at the same time turning to the utmost account the freer hand, which larger architectural financial resources has enabled him to use. This is a marble and not a wooden porch, and it is designed by a man who is using the classic forms and details with an experienced and instructed knowledge of their values. The stiffness, quaintness and the bareness of the "Colonial" porch disappears and an Ionic order takes its place, which is rich in detail but quiet in effect. And it has something more than good style. Taken together with the delicate and graceful ironwork of the balconies, the door and the railing, and with the judicious use of dark spots of evergreen, the effect is charming as well as distinguished.

When we pass to the interior of Mr. Arnold's house, we find that the architect has departed much more completely from the "Colonial" or Georgian tradition than he has on the outside; and it is natural that he should do so, because it is in connection with the inside of the house that the opportunity for more flexible and freer treatment, and the necessity of it, becomes greater. Even on the interior indeed the architect keeps to the same sort of effect as that which was produced by the rooms of a "Colonial" house. There has been no attempt to obtain a rich and "stunning" impression by the use of magnificent materials, derived from French or Italian sources. The materials of all kinds, whether fabrics, wall coverings, or wood and stone finish, are modern, and these modern materials are treated with the consistent intention of keeping the rooms simple, quiet and comfortable. Simple and comfortable they undoubtedly are; but, owing, doubtless, to the fact that an architect cannot control the interior as completely as he can the exterior of the house, they have not the same distinction as that exhibited in the other parts of the design. It is, of course, only a question of degree. The interior, like the exterior, is carefully designed and appropriate; it is freely and vigorously as well as discreetly treated; there is no obtrusion of domestic millinery; but the general impression is that of a pleasant and refined comfort rather than that of the charm which may come either from very personal rooms or from those which are stylish in a high architectural way.

The hall, as the room which one sees first in passing from the outside to the interior, is naturally the one which preserves a peculiarly "Colonial" character. It is more spacious than the majority of "Colonial" halls, and the openings instead of being closed by mahogany doors, are wider, and are hung with "portières." In the cases of the dining-room and the living-room at the front of the house, a vista between these rooms and across the hall has been preserved. Nevertheless, the plan of the hall running through the house, the white woodwork, the silver-grey wall covering, the stairway with its mahogany railing, and the extreme reticence of the detail—in all these respects the hall is nothing if not "Colonial." In the other rooms, however, the architect has broken away from the limitations of this style. The living-room is a spacious and handsome apartment, with a simple Jacobean ceiling, with a bookcase occupying the free wall space on two sides, with a brown grass-cloth on the walls above the case, and with a somewhat miscellaneous but on the whole a very comfortable equipment of furniture. The dining-room is panelled in mahogany, each individual compartment of the panelling being large in scale and adapted to the ample dimensions of the room. It differs from any "Colonial" precedent in the exclusive use of mahogany on the
DEN IN THE HOUSE OF MR. B. W. ARNOLD.

Albany, N. Y. McKim, Mead & White, Architects.

Photo by August Patzlig.
BILLIARD-ROOM IN THE HOUSE OF MR. B. W. ARNOLD.
Albany, N. Y.

McKim, Mead & White, Architects.

Photo by August Patzig.
walls; but the furniture and the detail of the room all belong to the period. It is interesting to note that the sideboard in particular is apparently a modern reproduction of the forms current at the time when they began in Boston to place swelling fronts on "Colonial" houses. The reception room on the other hand, with its marble mantelpiece, its white panelling, its glass doors, and its French furniture, is as much French as anything else, but not sufficiently French to clash with the atmosphere of the rest of the house. The "den," also, is not a room which can be very definitely labelled, but it is none the less a very interesting and complete bit of interior design—business-like and useful, yet at the same time very attractive.

In fine, the owner of the house is to be congratulated on the possession of a residence which, although carefully designed throughout, has been designed with a view to comfort and propriety as well as to architectural effectiveness. The architects on their side have afforded one more example of the peculiar skill which accounts for the great popularity of their firm. They can take a traditional style, with all its associations and atmosphere, and adapt it to a modern purpose with admirable architectural tact. They can preserve the atmosphere of the style, and renew the effect of its forms, while at the same time making those variations of disposition and detail which the particular case demands. The house figured herewith is only one of many, in which they have adapted the Georgian type to a contemporary American owner and site; but it would be hard to find a better illustration of the way to do it right.

A. C. David.
THE NATIONAL PARK BANK.
(Broadway Façade.)

New York City.  Donn Barber, Architect.
The New National Park Bank.

The development of the skyscraper has had a curious and unforeseen result among many such. It has brought it about that a comparatively low building may on that very account be a comparatively "swell" building. Altitude, throughout the history of architecture has been a mark of pretentiousness. The loftiest buildings have been those reared for the loftiest uses. "The cloud-capt towers," being without practical utility, have been reserved for the proudest pretensions. They have denoted either the public uses of church or state or the utmost extravagance of private builders. Already we have changed all that. No considerate architect will henceforth recommend a lofty spire for a city church, where it is likely to be brought into the utilitarian competition with the secular and utilitarian monuments and grievously to suffer in the same. Certainly no New York architect is likely to do so, having the crucial example before his eyes of Trinity Church, and remembering—it was less than a generation ago—when its final was the tallest erection and the most conspicuous landmark on Manhattan Island, and then beholding its present state, hemmed in, overtopped, concealed and mocked by the Titanic buildings of mere business that have come to jostle one another around it—attracted to the insulting performance by the pious reservation of Trinity churchyard, which offers them abundant and gratuitous light and air for use in their business. It takes a hardened cynic or an invincible optimist to rejoice in the spectacle. Even a Gradgrind must rejoice with trembling. There used in old days to be many Gradgrinds who deplored and denounced the "waste" of the reservation of the churchyard, computing what revenue there would be from the "wasted" space if it were devoted to secular uses. It might, they complained, have been sold for millions of pence and given to the rich. Upon these Gradgrinds the whirligig of time has brought in his revenges. For the reservation has enabled riparian owners to make far more money out of their holdings than if the churchyard had been abandoned to secular uses when they would have had it so. What a fluttering among the dove-cotes of the Gradgrinds, supposing Gradgrinds to maintain dove-cotes, there would be today, if the corporation of Trinity should declare that it had been convinced at last by their arguments that it was not justified in withholding its land longer from profitable secular uses, and that it had accordingly determined to remove Trinity and St. Paul's indefinitely uptown, following the movement of population, and occupying the sites of churches and churchyards with twenty-story skyscrapers for the supply of its temporalities. How much would the threat of such an occupation bring to prevent it, from the owners of the Park Row and the St. Paul's, of the Empire and the Trinity and the Union Trust and the other skyscrapers, in the way of rental for the privileges of air and light which those owners now enjoy rent free. "Cantat vacuus" at the predicament of Gradgrind assessing the value to himself of a continuance of rejecting his advice!

But these reflections are taking us away from our proposition, that, as things are going now, that corporation or institution which can afford to build a structure exclusively for its own use is thereby "sweller" than if it mixes the satisfaction of its own requirements with a "real estate speculation" and becomes one of many tenants of its own erection. The very absence of pretension becomes pretentious, as in the case of that old lady who declined a dazzling price for one of the most eligible sites on the cliffs at Newport, upon the ground that if she should sell it, she would have no place to pasture her cow. The old banking buildings in Wall
street, which occupied a lot each with a single banking-room, gave a sense of greater importance than those which built five-story buildings and lowered themselves to let what they did not require of them. Twenty years ago, there were at least two of these banks left in Wall street, granite fronts with an order, little classic temples "distyle in antis" or so, which would be merely ridiculous and obsolete, if they were standing there still, among the skyscrapers, but which vindicated the importance of their occupancy all the more, because the single story which the order marked was not taller than two of the five of their neighbors. Doubtless the most "swagger" thing that has been done in Wall street in the architectural way for many years, if not ever, has been the acquirement by the City Bank, for its own occupancy, of the masterpiece of old Isaiah Rogers, the building which sixty-five years ago, being by far the costliest building on Manhattan Island, it was thought extravagantly ambitious for the whole guild of merchants to erect for their Exchange. But, of course, the swagger would almost disappear, if the bank which has made the latest purchase of it should erect over its colonnade and attic a skyscraping superstructure for the purpose of dividing the cost of maintenance with its co-tenants. The erection by the New York Herald of a two-story building for its own exclusive accommodation on a very costly plot was an assertion that the occupant was not merely a business concern, but an institution. A firm of private bankers has magnified itself into an institution by a like performance upon the even more costly site in the heart of the financial quarter.

And even more noteworthy and significant than either of these structures is the new building of the National Park Bank. Its old building has lasted just about the full generation which the late James Renwick, with much plausibility, fixed as the lifetime of a building in New York. It had been designed for the bank by the most fashionable architect of the time, the late Griffith Thomas, although it was incidentally an office building, and it is curious now to consider that this five-story edifice, with its white marble front and its mansard was, at the time of its erection, the architectural lion of the day. In the interval, the business of the bank had so outgrown its quarters that it was impossible to accommodate it in them, even by using all the available space of the whole building, and the question arose, as in all such cases it must arise, whether to house the institution by itself, thereby denoting that it was an institution, or to house it in a skyscraper, of which the owner was only one of many occupants, thereby denoting that it was an institution complicated with a real estate speculation. Assuredly, all lovers of architecture have reason to congratulate the bank upon its choice.

The preliminary question being settled, that the bank could afford to own and maintain its own building without assistance, the first problem of the architect was to make sure that a building, which essentially was to consist of a single story and a single room, to which the rest should be strictly subordinate appendages, should yet not be submerged by the skyscraper which already flanked it on one side or between that and the skyscraper which under a hostile or an alien ownership was fairly sure to come to flank it on the other. With the condition that the building was to consist of a single room, this requirement meant that the Broadway front should consist of a single feature. The "order" of the old Wall street banks of which we have been speaking would have fulfilled this requirement, and might have been made to fulfil it with dignity. It was, in fact, the most obvious solution. But an order, by reason of the space it occupies and the projection it involves, is as effective a means as could be devised for depriving of light the front which it signalizes. That, indeed, was the chief solecism of the old Greek revival, so far as it was attempted to apply it to commercial, or for that matter to domestic uses; and the most successful, architecturally, of the works of that revival were those, in which the light for the interior was entirely derived from above and the win-
THE NATIONAL PARK BANK.
(Fulton Street Façade.)

New York City.

Donn Barber, Architect.
dows either omitted altogether, as
in the temples which were the proto-
types, or so subordinated as to leave the
order in effect to constitute the architec-
ture. The compromises between clas-
sicality and utility, of which the Treas-
ury at Washington is a conspicuous ex-
ample, were apt to be failures on both
sides. And besides, an architect may
well take shame to himself for resorting
to the most obvious and the tritest of
all possible expedients for giving dignity
to a front of moderate dimensions and
enabling it to hold its own in the pres-
ence of taller neighbors with lesser
units of design. The fact that every-
body is doing it "ad nauseam" should
not prevent him from doing it also if it
really be the best thing to do. But it
may very well put him on inquiry
whether there be not a more excellent
way.

It will hardly be disputed that the
architect of the Park Bank has found
such a way. There may be, nay, we see
that there are those who maintain that
we cannot have a surfeit of "orders" in
our street architecture. But even such
would not deny that the well-abutted
arch which takes the place of the order
as the feature that architecturally con-
stitutes this front equally serves its pur-
pose as feature, equally by its scale as-
serts itself against its towering neigh-
bors, and equally betokens the interior
arrangement; while they will scarcely
assert that an order which should
serve this purpose as well, could be em-
ployed in this front with so little inter-
ception from the interior of the illumina-
tion which this astylar front affords.

The scale of the arch makes it quite as
imposing as any order that could take
its place. The arch itself, it will be ob-
served, comprises three full stories of
its neighbor on the right, and
nearly two of the doubled stories of
its neighbor on the left. The com-
position seems to us admirable. Large
as the arch is, the abutments reserved
for it are superabundant, and both the
slight batter of the ashlar piers and the
slits of opening enhance their apparent
solidity and sufficiency. The low base-
ment is ample as a base, and in spite of
its lowness affords, with the treatment
adopted to that end, space for a liberal
and even dignified entrance. The sole
modelling of the arch itself is that con-
cave quadrant which is becoming so fre-
quent, and which emphasizes the com-
plaint that the Beaux Arts, of which
this building so visibly bears the stamp,
does not teach or understand the use of
moulding.

Certainly there are those who find
this at once the least effective and the
least expressive mode of modelling an
arch. Doubtless it is "in style," and
doubtless it cuts off a minimum of light
from the interior. But a square arris or
at least a straight chamfer would equally
attain this practical end without
equally enfeebling the arch. On the
other hand, the little colonnaded attic
is excellent in itself and effective in giving
scale to the great arch, while the two
superposed stories, vigorously and
simply treated as they are, are so evi-
dently mere dependencies as not to in-
tereference with the predominance of the
single feature. With the mansarded
story, they bring the altitude of the sin-
gle-storied front up to that of the nine
stories alongside.

The subordinate fronts which pro-
ject beyond the flanking buildings,
on Ann and Fulton Streets, have the
same general treatment with the Broad-
way front, excepting that they omit the
superposed stories, and thus, while un-
mistakably denoting themselves as be-
longing to the front from which they are
separated, suggest themselves as pos-
sible bases for a future superstructure.

One of these spaces at least accrued
during the progress of the work, to the
great benefit of the interior which thus
assumes the form of a nave and tran-
septs without a choir. The wing of the
Fulton Street front, which makes that
front unsymmetrical, has at present the
effect of a rather ungainly superfliuity.
Evidently it would gain both comeliness
and meaning if the corner lot should
hereafter fall in, in which case, consid-
ered as the basement of one of several
bays of a towering building, it might
become very effective.

But it is the interior which is per-
THE BANKING ROOM OF THE NATIONAL PARK BANK.

New York City.  

Donn Barber, Architect.
THE BANKING ROOM OF THE NATIONAL PARK BANK.

New York City.  

Donn Barber, Architect.
THE NEW NATIONAL PARK BANK.

DETAIL OF THE DOME.
(The National Park Bank.)

New York City.

Donn Barber, Architect.
THE BANKING ROOM OF THE NATIONAL PARK BANK.

New York City.

Donn Barber, Architect.
METAL DETAIL IN THE BANKING ROOM.
(The National Park Bank.)

New York City.  Donn Barber, Architect.
haps best calculated both to attract attention from those who have the opportunity of seeing it, and to repay that attention. The single banking-room of which it consists, is worth all the trouble and expense that have been incurred to obtain it. The domed skylight which marks the "crossing," and the coffered tunnel vaults that diverge from it denote an arrangement and an effect which suggest a Renaissance church rather than a modern bank. Equally suggestive in the same direction are the sumptuous fittings of bronze and marble which are integral parts of the strictly architectural effect. Upon the marble the architect is particularly to be congratulated, not only on account of its color, but because its striation is so broad and bold as distinctly to promote the scale of his interior. In spite of the reminiscence it affords, however, this work is of an unmistakable modernity. The ironwork of the arches, latticed on the soffit and of a perforated web on the face, is one of too few examples of what an artist may do with modern engineering construction, and harks no further back than the Tour Eiffel and the Galerie des Machines. The treatment of the central vault is equally admirable and effective in the constructive features of the arches and the rings of the dome, and in the decoration of the pendentives. So much of its effectiveness comes from the evidence it bears of being "the real thing" that it is partly to be expected as well as wholly to be hoped that it may have its influence upon other designers who have contented themselves, in attaining similar forms, with doing the sham thing. It is much to be wished that the architect had seen his way to the same reality in the supports as in the thing supported. The plastered piers are not congruous with the avowed metalwork they carry. One would not ask for the sumptuous marble of the counters. Plain ashlar, or failing that, even an honest brickwork would have carried out the design with more life and spirit than can be attained by the employment of a mere envelope.

But it is most unjust to quarrel because we cannot have everything when we have so much more than we could reasonably have expected. We have even effective mural decoration. Painting was indeed very strongly "indicated" by the expanses of lunette that accrued from the domical treatment of the ceiling. The indication has been followed in one by Mr. Herter's "Agriculture" and is to be followed in the others by corresponding representations of "Commerce" and "Industry." The banking room of the Park Bank is a noble apartment, much in advance of anything for the same purpose we have hitherto had to show, and lovers of art have to thank the directors of the institution, as well as their architect, for a work so important, so effective, and in many respects so exemplary.

Montgomery Schuyler.
Socialism and the Architect.

The industrial machinery of the twentieth century demands of each individual the performance of the task for which he is best equipped. The tendency of the age is towards specialized and co-operative effort. Each department has its definite area of activity, and cooperation itself is obtained through specialists in executive management. Most of the forces of industry are instinctively adjusting themselves to the new conditions. They have selected their own positions in the movement. A few have refused to recognize the tendency; the procession has swept by, and being unable to carry them along has ruthlessly bent them in the direction of progress—where they either remain stationary or are forced into positions for which their workers are ill-equipped and their original destiny perverted.

The complex building trades have responded in the main to this tendency—all but the architect. He is reactionary. Architecture in past ages was an art. Its practitioners were recognized as artists. The architect still proclaims himself an artist, but in a large measure he has become a business man; and the practice of architecture has become a business. A list of the most successful practitioners in the United States would contain the names of an undue proportion of men, who owe their success to their abilities as organizers, promoters, and business men—rather than as designers, as architects.

The architect may deplore the fact; but he is himself responsible. He has not readjusted his work in order to cope successfully with the conditions of the times. He has not specialized in the one field in which his training makes him supreme. He has opposed this specialization. He has been stubborn. Other forces have bent him—and in his own speciality he stands still. His progress has been in directions where others can give better results.

His energies have been so much given to maintaining his business footing that he has neglected his art. Under these conditions the practice of architecture must remain a business, artistically uncreative and stagnant.

The industrial world looks to the architect as the man best fitted technically to assemble the complex materials of a modern structure into a harmonious whole. His success or failure is gauged by the results obtained in his finished product. To be thoroughly successful this product must show the highest efficiency in all its parts and at the same time be aesthetically satisfying. When the architect has arrived at this result he has accomplished his mission.

Under the pressure and specialization of modern practice he is not achieving the results expected of him. His methods are not harmonious. He is not maintaining the proper balance between the component parts of his work. His energies are diverted from their proper channels. He is devoting an undue proportion of his talents to business, engineering and mechanics—and the aesthetic side of his work for which he is best fitted is being neglected.

The architect foolishly believes that this programme is necessary in order to maintain his position as an artist. In reality it is having the directly contrary effect. The only way in which the architect can regain his position in the arts is by recognizing the modern tendency of industry, and by being content to perform only that portion of the work in connection with building for which he is adequately equipped. The best results will be obtained if the architect recognizes this evolution and readjusts his work and his duties accordingly; but with or without his consent the change will come, and architecture will again become an art in spite of him.

It is not our purpose to argue for or against this industrial evolution; but no unprejudiced observer can deny its ten-
dency. Rightly or wrongly all signs point one way. This way is socialistic; but the men who are mainly responsible for the tendency are not "doctrinaires." They are the "Captains of Industry." They would be the last to admit that they are the forerunners of the co-operative commonwealth, and yet to the socialist they are the living proof of his doctrine.

The formation of every trust, every trade and labor union, every society of professional men and every combination of employers tells but one story. These combinations are in turn subdividing, each subdivision working in its own specialty and having its own organization, but maintaining its affiliation with a central body.

The age of individualism is fast becoming a memory. Men are combining not for individual but for co-operative effort. The conduct of the business of architecture follows this socialistic tendency as to organization, but not as to specialization. The work is specialized but within itself. It is co-operative; but the technical and strictly architectural specialty and the executive specialty are both centered in the architect. The executive specialty requires constant and prompt attention. Its demands must be instantly met. Its powers cannot be delegated to others. The architectural specialty needs quiet and tranquility, and under the pressure of modern business it becomes physically impossible for one man to attend to both. The result is obvious. The tranquil state is not reached. The architect devotes his energies to his imperative duties.

The busy architect of to-day does not draw, he does not design; the purely commercial interests of his work occupy all of his time. The client usually demands careful and personal supervision of his finances as paramount to any other consideration, and at most the busy man finds it barely possible to make the roughest kind of sketches which he turns over to his draughtsman for further elucidation. When the design is finished he signs his name as architect—but the individual touch of the artist is usually not there, and, if there, it is only the voice of the architect, but the hand of the draughtsman.

The modern architect's office is one vast machine, in which the work is subdivided into many departments. Architectural firms have grown out of this condition and their formation is generally consequent upon the necessity of making combinations of specialists to the end that the firm may be able to handle the complex problem of modern construction. One man is the designer, the second may be the engineer and the third the business man. Even then they cannot cover the whole field, for their draughtsmen, too, have become specialists. In some cases a draughtsman becomes a managing clerk; others are designers; some simply trace, others attend to construction. A well-organized office has a specification writer, and specialists in heating and electricity, as well as outside superintendents and bookkeepers. In fact the business of a large firm with an extensive practice is as complicated in its machinery as a department store, but with this difference, that the department store has a manager whose sole business it is to manage. The manager has a specialist under him in each department and he makes no pretense to special knowledge except in the executive department. If the architect is satisfied that architecture should remain a business, this method is logical. If he persists in proclaiming himself an artist he should give over the management of this complex machinery to others trained for the purpose.

Under the conditions which obtained in the past the architect could fairly assume that he was competent to grapple with the business problems incident to his work and still maintain the proper relation between his business and his art. His training in the schools still teaches him that he should be considered first and foremost as an artist—and in these schools the proper balance is maintained between the strictly architectural and the business side of his profession. The men responsible for the curriculum realize that an attempt to teach modern business methods would carry it far beyond the domain of aca-
demise training. They assume for the purpose of this training that old conditions still obtain. Under these conditions it was possible for the architect to be the master-builder and to assume that he is an expert in all the building crafts.

To-day the architect cannot honestly assume this position. Construction has become too complicated. His knowledge must be superficial, and in his effort to assume a preponderance of exact information in all of the works over which he presides, he finds that he is outstripped by the experts working under him. If he continues to attempt to hold on to the powers and authority that he has exercised in the past, there is no hope for the architecture of the future.

He cannot produce his work as a commercial commodity and at the same time be an artist. The dealers in this commercial commodity will always need the artist. They realize that beauty has a commercial value and in no other age has the average man been so willing to expend his wealth for the purely beautiful. There have been popes, kings and emperors who have been patrons of the arts in a larger measure than any individual of to-day. But now the people are interested. They may be interested because it pays—but they are interested. The architect cannot satisfy that interest, he cannot give the best he has in him while his time is consumed by the multiplicity of details which modern practice demands of him.

The result of this tenacious holding on to an obsolete programme is visible in much modern work, and particularly in American work, where the strain is greatest. Our nation has made no advance whatever towards the creation of a national style. When we wish to build a beautiful tower we copy a Spanish monument; when we have to erect a modern club house, we enlarge the design of an Italian palace and fit it to the new conditions. Our architects have worked Vignola to death—but they have not solved the modern problem. What encouragement is there to the younger workers when they see the deans of their profession, the men who are accepted as types of successful practitioners, willing to rest their reputations upon good copies of ancient works.

These old and beautiful examples of the art of the past were the results of the application of an artistic spirit to the needs of the time. They were the outgrowth of a system which left the architect time to give his work creative study. They answered the problem. The architecture of to-day under the pressure of our industrial system has degenerated into copying. It is good architecture only as far as the copying is judicious.

On the business side of his work the architect has been trained to believe that he would have a free hand. He actually finds himself bound by hard and fast limitations. He expected to be employed by an individual—his client is more often a firm or corporation. He was to seek the co-operation of many individuals, who in turn would employ the units which would cause his design to become a concrete thing. He actually finds a few corporate interests, with whom he must deal under definite conditions which in turn deal with other combinations of men through trade organizations and labor unions. Circumstances may make it advisable that he should avoid the larger corporations in seeking to have his client’s work performed—but even then he finds his liberty of action hemmed in on all sides by combinations of both employer and employee. He can carry out no work for his client unless he deals with these combinations. Under the simpler constructive methods of the past, the architect dealt with a few trades; he now finds that he must deal with hundreds; and each unit is simply a part of an organization which refuses to do business except under co-operative conditions.

By far the largest number of building operations of importance have as their controlling interests corporations formed for the purposes of building or holding real estate or professional real estate operators who are thoroughly trained in finance. They know to a nice-
mands. They have figured out the rentals and running expenses minutely, and they are perfectly familiar with the commercial value of their product and of all of its component parts. They need the architect to solve successfully the commercial problem on the basis of definite data and to inject into the scheme the utmost amount of beauty consistent with its solution. These corporations cater to the private owner as well as the business firm, and palatial dwellings are now procurable by the home-seeker ready made.

In the past a wealthy client would have carefully considered every detail of the plan of his new home—his entire family would have been consulted at every step. To-day he can find dwellings offered for sale ready for occupancy in fashionable neighborhoods, thoroughly suited to his requirements, constructed with due regard for the most fastidious taste and containing every possible mechanical appliance known to modern construction.

The heads of the corporations who control these large operations have absolutely no need of the architect in the financial management incident to their schemes. Once having the technical data complete in the form of drawings and specifications, these men, skilled in finance, are infinitely better equipped to consummate monetary deals than the architect, provided that no changes in construction or design are made without the architect's approval, where he alone is in a position to judge of the limitations of any portion of the work.

The changes in the methods of building have made these corporations an indispensable part of the modern business system.

In order to meet the commercial demand of the age, time is an essential. One year's loss of rentals frequently means financial disaster. Attempts are made, wherever possible, to construct buildings between rental seasons, and whereas under the older methods it was generally sufficient for the client to engage the architect at a time almost coincident with the construction of his building, in many cases the architect is now called in months before the property upon which the improvement is to be made is even purchased. In fact, the services of the architect are essential at the very inception of the scheme as a business venture. The interested parties must have a definite statement of the possibilities of the land placed before them prior to their decision to proceed.

There are but two ways open in our large centers of population by which a finished building can be produced in a sufficiently economical manner to compete successfully with its rivals. Both of these methods involve using the forces of co-operation to the fullest extent to which they have been carried in practical every-day methods. The economy of one method over the other is purely a question of the importance of time. One is to deal directly with the great building corporations with their complicated machinery well regulated and in running order. The other is to form a temporary corporation for the particular project, which, although saving large sums of money, must necessarily involve slower methods due to lack of experience.

The method having been decided upon, the business problem thus presented to the modern architect can be solved only in one of these two ways. Both centering around the corporation and leading in the same direction, but one starting from a more progressive stage than the other. The old method of calling for competitive bids from four or five contractors, who would in turn farm out the work to many sub-contractors, is no longer an economical success.

There is no middle course between these corporation methods, and the sharp competition of modern industry has brought about a tendency to eliminate a portion of the competitive system itself so as to save the profit of the middleman.

The modern structure has also become specialized like all other products of modern industry. In the preparation of the preliminary scheme for a new project, the architect frequently finds a
large amount of special knowledge necessary for which he must consult other parties. If it is an office building, an apartment, or a hotel, he must familiarize himself thoroughly with local rental conditions, information which can be obtained only from a specialist in the neighborhood, in which the building is to be erected. If a private dwelling, he must know the habits of the family for which he builds, and if a factory or business house, complete familiarity with the methods of the particular business or manufacture is absolutely essential to success. The impossibility of grasping all of this knowledge is recognized in the trend of modern practice. Men have become experts in theatres, apartments, interior decorations, breweries, mills and other lines, and our large cities have architects on their lists who rarely go outside of their particular specialty and who frequently act in a consulting capacity to the decreasing number of general practitioners.

The exacting demands made upon the modern architect are the natural consequences of the complications due to methods of construction. Nowhere is this more apparent than in the Fourteenth Edition of "Kidder's Architects and Builders' Pocket-Book," where, in explanation of the enlarged size of the new volume, the author states that: "At the time the first edition was issued Architectural Engineering had not been used in its present application, and the term 'Structural Engineering,' when used, referred almost exclusively to bridge work."

"To-day, structural and architectural engineers are concerned almost exclusively with building construction, and their work is more closely allied to that of the architect than to that of the civil engineer; hence, the author has had in mind the needs of the structural engineer and draughtsman, as well as those of the architect and builder, and the book should be of nearly equal value to both."

These modern methods of construction need of the architect an amount of exact technical service far in excess of that required of him under former conditions. The corporation must have much more exact preparation than the private client required, as it usually demands that all of the material be prepared, fitted and stored before actual construction is started on the site.

This system has multiplied and concentrated certain services required from the architect many times. Before the first spade of earth is turned he has frequently worked many months in carefully preparing the drawings and specifications in every detail, so that all portions of the work may be started in the various shops at the appointed time.

High taxes and high-priced property demand that each day shall count. Cooperation and specialization have caused the actual output of drawings required from the architect to be increased many fold. Formerly, some four or five sets of scale drawings were prepared and a similar number of general specifications prior to the work being started. All of the details of construction were made as the work proceeded. To-day the architect is expected to reproduce his scale drawings thirty and forty times, and to divide the specifications with the ultimate amount and minutiae, separating them for the various trades, so that some thirty specifications may become necessary, besides the frequent reproduction of all details, prepared far in advance of even the beginning of actual construction. The securing of low tenders to perform the various parts of the work is insured thereby, and the middleman whose habit it was to guess at the cost of some intricate piece of detail finds that he and his guess are not wanted. The manufacturer of the commodity to be supplied is satisfied with nothing but an accurate full-sized drawing.

Wherever these details include the work of several contractors copies must be distributed to the various interested parties as often as the work of each contractor is shown thereon.

The system of dealing with a large number of workers and having the material completely prepared beforehand requires much more accurate and con-
tinuous superintendence than was formerly needed, much more thorough inspection than can be obtained by the occasional visit which the architect is supposed to give. Superintendence as defined in the schedule of the Institute of Architects is totally inadequate. In fact, to secure proper results it must be continuous, and this is so keenly realized that the clerk of the works has become the rule rather than the exception on all large operations.

The architect recognizes the encroachment of his business upon his art; but he has not moved a finger to protect the position which he claims to value. His efforts are purely for business protection.

He recognizes the co-operative tendency in his professional association, but mainly for the purpose of upholding professional fees and regulating practice. In the United States and England the Institute of Architects performs the same function as a trades union. It attempts to level the compensation at least not below the minimum wage, but it is not as altruistic as the trades union, as the schedule provided is for minimum compensation, and its power over its members is not as great. The Institute has set a precedent, but it is not a positive force. In other respects in his professional association the architect refuses to admit that he must change his position and combats all efforts by others to make the change.

The National Convention of the American Institute of Architects, held in Cleveland last year, promulgated the new doctrine that it was unprofessional for an architect to assume to design work without having complete control of its construction. The Institute refused to recognize that under modern methods this supervision should be within limits which would allow the designer to devote the proper proportion of his time to the artistic creation of his design.

Legal enactments in several states requiring the architect to secure a license have recognized the increased technical responsibilities placed upon the modern practitioner, but these acts have been frequently opposed by the leaders in this most influential of professional associations on the ground that architects were artists, and that art could not have its fullest development under legal restrictions. Paradoxically, this same influence has resisted the attempt of the government to remove some of the technical and business burdens, presumably upon the ground that fees would be reduced accordingly.

The logical position would have been to accept the proposition, but to insist that the fees now paid should not be reduced in view of the much larger service required under modern methods.

While the architect is wondering what is to be done—bawling his de-thronement from the position which he formerly occupied in the arts—his status is being fixed by the building corporation, at the head of which is an executive specialist eager to obtain the best results from each one of the component parts of the great machinery under his control. These great corporations—these department stores of the building industry, are fixing the architects' status anew—and although the process may seem harsh to the profession, this tendency will ultimately cause the architect to be again recognized as an artist. The executive specialist knows the intricacies of building. He realizes keenly just where the architect is an indispensable part of his program. He confines the architect to his specialty just as he confines his business and financial managers to theirs. In a supervisory capacity he requires the architect's service only to a limited extent. The executive head of the great corporation is the Commander-in-chief—the architect is the General of Division—the technical and artistic Division, and in this division the architect has his engineering, sanitary and electrical experts, all responsible to the Commander—through the architect. In the details of their specialty they are supreme, provided they do not encroach upon the limitations of the other specialists or interfere with the general scheme.

It is the architect's duty to keep each specialist within his limitations, and the
architect himself must bow to the same inexorable laws. His principal value in the realm of supervision is as an advisor.

In the complicated construction of modern work the professional electrician, the heating and ventilating engineer, and the many other specialists whose work contributes to the finished product must each be left to attend to his own details. The architect cannot be expected to master the intricacies of their work, of which they are the most competent judges if kept within their proper sphere.

The architect is needed to supervise upon his own initiative only as far as the finished product is concerned. The obtaining of estimates, preparation of contracts, the mass of correspondence and other details consequent upon the erection of a great building, together with the vast business interests of the work, are supervised and managed directly by the corporation through its experienced and well-oiled business machinery.

This is the system of the future; in some cases of the present. Under its influence the architect will again be left time to design—to plan—to draw—to give the best results in the specialty for which he is properly equipped—in fact to be an architect. His power will not be as great as under the older system, but he will be an artist and will accomplish his mission.

There is no use in bewailing the conditions which have caused this decadence of the most ancient of the arts. Architecture never created a civilization. Its monuments are the answers to that civilization's needs. Its lasting monuments are its successful answers, created under conditions which allowed of the putting forth of the best efforts of the designers. Other conditions now confront us. From them there is no appeal. They are fixed. They all tend in one direction. How will architecture live as a vital artistic force under the new conditions unless it obeys the industrial law?

—Charles Henry Israels.
Mr. W. R. Lethaby has contributed a book on Mediaeval Art to that series of art-manuals which is published in this country by Charles Scribner's Sons. They are stout volumes of small octavo size, and Mr. Lethaby's book contains 315 pages with 66 full page half-tone plates and more than a hundred text cuts. Now Mr. Lethaby had shown himself before a remarkably keen and also a remarkably affectionate student of early art. He has made Byzantine architecture his peculiar study; but then it could hardly be otherwise, once he had become familiar with its great monuments. Is there on earth an architecture more fascinating than that of the eastern Roman Empire during its flourishing time? Even in much later times, even unto the present day, as it still lingers in Armenia, in Russia, and in the borderlands of the Balkan Peninsula, how interesting it is, how simple, and how receptive of refined ornamentation! The charm has gone out of it now, but some of the old spirit is still breathed around its latest monuments; and as for the buildings of the sixth century and of the four hundred years which followed, they have, for all persons who enjoy the diversified in architecture—the graceful and fascinating, the varied and brilliant in decoration—an attraction which no other style can claim. We can imagine, if we please, a similar gentle charm of design in Greek work of the prime, when color and gold were used with delicately conceived and perfectly modelled sculpture, but we have lost that, and indeed it is to Byzantine art that we, must go to recover some part of the ancient Greek spirit. Gothic art is immeasurably more strenuous, more energetic, more full of daring construction and bold innovation in the way of adornment, but for lasting beauty the Gothic art even of France and of the thirteenth century must be thought inferior to the exquisite art of Byzantium.

Now it is in that way that Mr. Lethaby's studies lead him to speak. Consider Chapter IV. of the book we are studying, the chapter on Romanesque Art in Italy. He begins with the declaration (p. 91), that wherever in Italy we see a school of architecture grow up, we shall find its root in a new impulse from the East; and this he maintains to the exclusion of the assumed Lombardic influence and to the point of ranking much lower than they are usually ranked the native Italian impulses toward noble art, as they existed before and during the eleventh century. Mr. Lethaby bases his opinions firmly upon his own observations, and buttresses them by the opinions of the best recent authorities, Cattaneo, Venturi, Stiehl and Strzygowski. But indeed our immediate purpose has less to do with his examination of the origin of Italian Mediaeval art than with his analysis of that art itself, and the Byzantine art which he thinks gave it birth. The Byzantine art is treated in the earlier chapters, I. to III. Inclusive, and this is the charm of those chapters as of Chapter IV.—that there is so hearty an enthusiasm, so profound a love of beautiful art seen in every phase. This is the key-note of Mr. Lethaby's exposition—he cares for the construction and for the logic of the thing, and enjoys solidity and permanence and the traces of natural evolution; but what he really feels is the beauty of each separate work of art, its hold upon the imagination of him who sees it and him who goes away from it remembering its immeasurable beauty. That feeling of his we see in the selection of his subjects: Plate V. with a fragment of Sancta Sophia at Constantinople, the springing of a vault with the capital and impost which carry it and the shaft below; Plate VIII., with a capital in the same church reproduced in our Fig. 1; Plate XIV., a bit of the great mosque at Damascus with two tiers of windows with three openings in each, an exquisite piece of detail; Plate XV., also reproduced (see Fig. 2), the Ravello pulpit with its Cosmati work, its partial inlay of glass mosaic following the spiral reeding of the shafts and expatiating freely over the flat panels of the pulpit proper; Plate XXIII., the wonderful fountain enclosure at Monreale—such pictures as these are selected because of the impression they have made upon Mr. Lethaby's own mind and because of his conviction
FIG. 1.—A CAPITAL IN THE CHURCH OF SANCTA SOPHIA.
FIG. 2.—THE RAVELLO PULPIT—A SPECIMEN OF COSMATI MOSAIC.
that they are among the loveliest things which the art of decorative building has given us.

Spite of these curves, these slopes, these dimutations replacing for us what we had supposed to be straight lines, accurate horizontals and verticals and equal sections throughout, would form a useful study for the modern man if he would attend to it. It pleases the student to know that even in our own commercial time and city, something of that spirit has been revived, as in the approaches to the central buildings of Columbia University and as in the slowly rising Cathedral of St. John the Divine. Mr. Lethaby would be just the man to take these discoveries at their full value, without exaggerating their importance, and we cannot but hope for speedy opportunity to read his thoughts on the matter.

But in most of the aspects of Mediaeval art we have original as well as enthusiastic discussion, for the author thinks that it was the monks who spread Gothic architecture about Europe (p. 264, foot note), and this in spite of Viollet-le-Duc's dictum on that matter; he tells us of important decorative glass without stone tracery at all and evidently intended to be completed without such tracery, having iron bars arranged in a pattern; as in Canterbury Cathedral (see p. 267), and with a citation of a similar instance named by Viollet-le-Duc in his famous dictionary, a reference which I have followed up to find the description under the term Armature, and relating to the little church of Notre Dame at Dijon. He disputes the theory of Gothic being almost exclusively a constructional art and objects decidedly to Mr. C. H. Moore's resolve denial of the term Gothic to so many noble buildings of the Gothic period; and this protest is based very largely upon his mystical feeling, his desire to find remote associations and subtle refinements of spirit among the Gothic builders. It is to be regretted that these enthusiastic, these loving, these truly critical investigations and thoughts should not be arranged in a way a little more symmetrical; for indeed it is hard to use the book except in the way of straightforward reading through. Now, if there is any one of my readers who finds time to read anything longer than these "Notes and Queries," his experience is different from that of most architectural students of this time and place.

It is in this way that Mediaeval art has a special and unique power of interesting its students. In the light of the experiments of the last forty years—experiments in reviving this and that historical style—it does appear plain that the modern world can hardly turn to the Mediaeval world for direct inspiration in building. The standards are too widely different, the objects pursued are too remote each from the other; Romanesque has been found too rude and unorganized; pointed Gothic art has been found too harsh and violent; Byzantine art has not even been tried seriously, because evidently too quiet and subdued. To use the Romanesque style you must have the simple and obvious ways of building of eleventh century France and Germany; to build in the pointed Gothic style you must desire above all things vast vaulted interiors and you must forget your training in the ways of classical art with its horizontal lines and its gravity; to build in the Byzantine style you must think calmly, design patiently, work slowly; putting in delicate inlays and subtle, refined surface carvings in the adornment of buildings of very massive but also very simple structure with thick walls of brick or concrete and with rounded vaults. None of these things lend themselves at all to the modern business building or hotel, with its multifarious parts, its many storied complexities, its need for complicated systems of elevators and passages, of heating and lighting; of a metallic structure concealed from view by a wholly unrelated shell. None of those ways of designing and building fits the modern dwelling-house with its immeasurably complicated needs, and its scheme which may not be abandoned for a moment without ruining the very elaborate theory which the owners of the house have adopted as to their future home. The church alone lends itself to construction in the Mediaeval style, and the church is no longer our controlling influence. It does not affect the style of our public or private buildings of every day, that the churches of the neighborhood are
THE ARCHITECTURAL RECORD.

TWO STREET FRONTS BY RICHARD E. SCHMIDT

The architect of the Schoenhofen brewery has not been content with the decided success scored by him when that building was completed, but is following up his invention—a style for simple buildings, with which we must reckon. This month we have two photographs from him, taken unfortunately on the axis of the building in either case, so that the awkward effect is produced of that perspective which shows the right hand jamb of the opening at the right and the left hand jamb of the opening at the left, these sloping towards one another. Such a disposition requires the curved perspective line of the straight horizontal string-courses, for without that feature the front looks very artificial and false; it looks like a drawing fresh from the architect’s office. Now in the picture, Fig. 3, this curvature is to be seen, at least, in the corners and the other horizontal lines very near to the top of the building. It will be said that, after all, it is just these conditions that we have to face in the actual street front. Not exactly so! When we see the building itself we are free to turn the head about, to move the person nearer to the front; and we are free to walk the entire length of the building and see it from different points of view. When instead of this we must face an elevation flatly, we are badly off; but still there is the real building behind these photographs, to be seen there if we look sharp.

The picture already mentioned, Fig. 3, shows just such a disposition of square-edged, common hard brick as we find in the Schoenhofen brewery. Very rightly, the architect is trying to work out the problem of the possible effect obtainable from such disposition. At the same time, and referring to the articles in the January and February numbers, it may be said that there still waits for him the further and more interesting problem of using bricks cast to pattern for similar and richer decorative effects. It does not require much argument to prove that the alternation of in-and-out and long-and-short, with square-cornered bricks, is but limited in its application. Mr. Schmidt knows this well enough, as we see from the effective little string-course near the top of the building, where in two separate bands the bricks are set corner-wise, producing that horizontal zig-zag, that alternation of sharp ridges and equally sharp re-entrant angles which is familiar to builders of ornamental brickwork. This is a capital front, however. It is a pity that the sign could not be restrained a lit-

taking a certain shape—are developed in a certain reminiscence of a certain style. We live apart from the church, at least in so far as building is concerned; and we like it so all the better, as recognizing in the architectural separation of the two classes of building something of that change from week-day bustle to Sabbath calm which remains ever the ideal of most of us.

It is for these reasons that we take Mediaeval art as a subject of abstract and yet loving contemplation, of study such as we give to fine Japanese lacquer or to the delicate goldsmith work of the sixteenth century—we do not propose to adopt those arts in our daily practice, we take them as lovely relics of the past. It is so that we accept Florentine painting of the fourteenth century; it is so that we accept the Greek vases with brownish-red figures on a black ground; we have no possible idea of trying to produce anything like them; they are perhaps all the more delightful to us because they are so remote from any possibility of our modern practice. So it is that we take this exquisite art of the Middle Ages. We can understand Ruskin’s glowing enthusiasm as he follows the delicate lines of Venetian sculpture on a tomb, and we trace the significant legends of a virgin martyr through the accounts of the works containing it as we find them explained in Mrs. Jameson and Lord Lindsay. So we find Mr. Lethaby writing with hearty love for the fine, free arcade of Pisa and Lucca, the “tiers of splendid arcades screening the solid wall”—“their sharply defined shadows thrown against the marble walls behind, so that arcades of light are counterchanged against arcades of shadow.” So in dealing with Gothic art we find Mr. Lethaby eager to insist upon its unfamiliar aspect, on its being “a sort of fairy story in stone.” He thinks that “the folk had fallen in love with building and loved that their goldsmiths’ work, and ivories, their seals…...should be like buildings, little tabernacles……. Some of their tombs and shrines must have been conceived as little fairy buildings; they would have liked little angels to hop about them all alive and blow fairy trumpets.”

Indeed it is what I like best in this fascinating book that the author is so ready to explain that he expects no imitation of these ancient times by the men of his own time. He protests earnestly against restoration, he values the serious and thoughtful old work for its very thought; he does not want the men of nowadays to make believe as to having the same thoughts. R. S.
It is the right kind of sign for the place and has evidently been designed to form the horizontal band which it does form in the façade, but it would have been well to have stopped it at either end by a boss or a panel or a raised feature of some kind. The eye is not deceived into supposing it to be a constructional part of the building, and therefore its running from extreme edge to extreme edge of the façade is perhaps unfortunate. As for the building itself, one likes especially the fenestration. Was there ever a better device for giving light to a building which needs all the light there is? Apply that maxim to the fronts of the Carnegie Li-
low. If so raised, there would be plenty of wall between the head of one window and the sill of the window above, and a very noble design may be made on these lines.

The illustration, Fig. 4, is hampered by the segmental arches of the basement story. Is it not a singular thing how very uncommon is a successful treatment of the segmental arch? It has generally been avoided in stately buildings, and indeed one of the

FIG. 3.—A WAREHOUSE IN CHICAGO.


braries given in the March number! Consider, if you will, the suggestions made in the text of that number about those library fronts and their short-comings in the way of practical utility, and then consider why we should not be allowed to follow some such scheme as the one so brilliantly managed by Mr. Schmidt in this bonded warehouse. There is nothing in the world to prevent such windows as these being raised to five or six feet above the floor, this supposing, of course, that the stories are high between beams, for in the bonded warehouse they are very worst faults of the would-be grandiose style of Louis XIV.'s time is the use of it as in the basement of the east front of the Louvre; but there seems to be only one way of handling it aright, and that is to crown the pier between the two windows with a very decided double skewback, the horizontal top bed of which stone must be insisted on. Where the last window on the left and on the right comes, the skewback will be single, but it must form part of a band of solid stone blocks, which runs until it reaches the corner of the building or some
FIG. 4.—A FACTORY IN CHICAGO.

other notable stop. Then indeed the segmental arch seems to have something to butt against, is assumes the appearance of real solidity and of serving a valuable purpose, and then its abstract form is no longer ugly. But the treatment of the segmental arch as in the Franklin building above, with mitring moldings at the starting of the arch, will always be unfortunate. The situation is partly saved in this case by the semi-circular arch at the right. The upper part of this building is logical and intelligently disposed, and if the success is a little less marked than in the building in Fig. 3, it still belongs to the same category of intelligent and comely working fronts—fronst which allow of practical and comfortable buildings behind them.

The dinner, which accompanied the proceedings of the annual convention of the American Institute of Architects, was one of the most successful which that body has ever held. It had the great value of stamping with official approval the professional aims and standards of the Institute. President Roosevelt spoke, and proclaimed his intention of using his influence in favor of the plan of the Washington Park Commission. Mr. Elihu Root, who may be Mr. Roosevelt's successor, delivered an address indicating that he takes more intelligent interest in contemporary American architecture than any man in this country of similar public prominence. Finally, even the Honorable Joseph G. Cannon, who probably takes a less intelligent interest in architecture than any man of similar public prominence in the country—even this Samson of traditional Americanism—consented to grind corn for the Philistines of architectural art. Mr. Cannon was, of course, wary. He said nothing which could be used against him on the floor of the House, when next engaged in the congenial task of abating the arrogance of the architectural specialist. True he admitted that he was totally ignorant of architecture and art, but ignorance is no disqualification for the possession of strong convictions in relation to a subject—on the floor of the House. His very confession of ignorance, however, gives one a better opinion of the man, and should counsel people, who are frequently irritated by his public attitude, to regard him with tolerance. No doubt he is too old to learn. He will continue to take the wrong attitude on all questions relating to the architecture of public buildings; but inasmuch as he will certainly be beaten, architects can afford to be as good-natured as Mr. Cannon himself would like to be. It is becoming more and more plain that in spite of the occasional explosions of Mr. Cannon and his like, the stars in their courses are fighting in favor of the prevalence of high professional standards at Washington. An administration like that of Mr. Roosevelt, which stands for the progressive nationalization of American activity, must stand, also, for those professional standards which are really national—that is, for the standards of the representative national organization; and we imagine that Mr. Roosevelt's administration will not be the last of its kind.

Of all the speeches delivered at the dinner of the American Institute of Architects on the occasion of its annual convention, that of Mr. John La Farge was much the most interesting; but the address of the French Ambassador, M. Jusserand, also had a peculiar interest of its own. Of course that gentleman was present in his official capacity; and he was bound as the French representative to emphasize the close alliance between France and the United States in the matter of art. But in so doing he had the advantage, as many makers of official speeches do not, of speaking by the book. In fact, the writer, who is an American, is willing to go farther than the French ambassador in testifying to the intellectual ties which attach this country to France. Some of them are, of course, sufficiently obvious. That current American practice in painting, sculpture, and architecture is the result in large part of French training is sufficiently obvious; and no American artists more cordially recognize this fact than those who have themselves shaken off the accidents of the attachment—the mere manners of modern French art. But there is good reason to believe that the intimacy of this attachment indicates something more than the immaturity of ignorance on the one side and on the other the fecundity of knowledge and skill. It means, I believe, a similarity of intellectual disposition between French and Americans, which may make their relations even closer in the future than they have been in the past.

Frenchmen have been the only modern people, who possessed the gift of being wholesomely and constructively imitative. On many different occasions since the Renaissance, Englishmen and Germans have tried to imitate what they believed to be the superior
literature and art of some foreign country. The English and the German playwrights of the 18th century made persistent attempts to naturalize the French classic tragedy; but they lacked the intellectual flexibility and sympathy necessary to such a task. They failed absolutely to build up a national drama on the basis of their critical ideals. In the case of painting they had the good sense for the most part not to try any imitation. The English painters of the 18th century did in their landscapes owe something to the Dutchmen; but the amount of borrowing they did required no great effort of sympathetic imagination. In architecture the English adoption of Renaissance, Italian and Palladian forms was more successful than her essays in literary naturalization; but then as now architecture was imitative or nothing; and whereas the French architectural imitations have developed some kind of an authentic tradition, those of England, the country house apart, are still miscellaneous and vacillating. In one conspicuous instance, a German, a man named Goethe, did succeed in perfecting a masterly imitation of the Greek drama as a literary form. Iphigenia is, perhaps, the bravest attempt made by any man of letters to express a modern subject-matter in a classic form. Yet the difference between Iphigenia and the first part of Faust is the difference between a drama which a great man tried to make and a drama which he brought forth without effort from the depths of his own individual and racial genius. For better or for worse the Germans and the English are awkward about imitating alien critical and artistic forms—even those which at the time they thoroughly approve.

In this respect the French are very different. At the end of the Middle Ages they decided to break with their own intellectual and artistic past, and create a new literature and art, which should derive its inspiration from Italy and from Greece. They were fascinated by the memorials of Greek and Latin civilization; and the endeavor to adapt their own national forms of expression to the established forms of Italy and Greece infected not only their art and their literature but their foreign and domestic political policy. Thereafter it became their settled purpose to reform their art and their literature in the light of the models which they believed to be most worthy of imitation; and for more than a century French painting, sculpture and the drama was occupied chiefly in naturalizing these alien forms and methods. From the beginning they modified the models which exercised such a fascination upon them; and the chateaux of the Loire, the reliefs of Jean Goujon, and the punctilious paintings of Poussin are all of them as obviously French in some respects as they are Italian in others—just as the tragedies of Corneille and Racine are Greek only in the use of certain dramatic forms. They imitated with success, with conviction and with persistence: and their imitation so far from destroying their power of original expression, merely gave it a certain direction. It must be admitted that there is an analogous difference between the comedies of Molière and the tragedies of Racine, as there is between Goethe's Faust and his Iphigenia. The borrowed forms were inadequate to express certain peculiarly French varieties of experience. But the process of naturalization was a process, whereby French art in all its forms was made increasingly adequate to French life. A genuine national tradition was wrought out of this mixture of alien forms and domestic materials. Moreover from the very necessities of the process French culture was given an altogether peculiar integrity. Art and literature and criticism became in France intimately and formatively related, instead of being widely sundered as they have been in England. French criticism, so far from sapping the vitality of French art, has helped to keep it alive and moving. The French no longer imitate foreigners to any considerable extent; but they imitate each other very successfully and that, when it comes to the foundation of a national tradition, is the important thing. To be within limits intelligently imitative, is a great assistance to a people who wish to rise to a high expression in the fine arts, and it is quite compatible with fundamental originality. An imitative people may lack initiative, as the French do for instance; but the fact that they are imitative does not necessarily diminish their power of original vision. It all depends upon the use to which the borrowed capital is put.

There seem to be good reasons for believing that we Americans may prove to have something of the French faculty of constructive imitation. The French Ambassador, in the speech mentioned above, states that in a letter received from the Secretary of the Ecole des Beaux Arts, M. Jouin writes of the American pupils at that school in the following terms: "Of all foreigners who come to France to practice the arts of design, the American is the one who penetrates most easily and most deeply the genius of our nation." American art students have certainly learned their lesson in France as
the students of other nations have not. Modern French painting, sculpture and architecture has put forth flourishing offshoots in this country, because American pupils in Paris possess that mixture of mental flexibility and sympathy with a desire for elegance, which lies behind any successful adoption of a foreign artistic method and tradition. Indeed, if Americans did not possess this faculty of constructive imitation, if their creative powers were very much impaired, as is that of the English or the Germans, by the attempt to adapt their art to their critical ideals, American art would have very little chance of becoming consummate. Art forms and traditions are not a matter of inventions neither can they be derived merely from a study of nature. They are a matter of intellectual disposition, tradition and discipline. We have in this country no treasure of early racial and national experience on which to draw for our national forms of expression. We are a composite people, and one whose composition is becoming more rather than less miscellaneous. Just as we are gradually moulding this miscellaneous population into naturalized Americans, so we must mould our forms of expression in conformity with what we believe to be the best available discipline and tradition. Our art, consequently, no matter how little our artists appreciate the fact, is in large measure shaped by definite critical ideals, and, even after certain formative traditions are naturalized, it must continue to be modified by the same conscious intellectual influences. It is, necessarily, a matter of ideas as well as of imagination and training, and it is for this reason that we should welcome the French influence in American intellectual life. It is the French intellectual and artistic discipline and integrity which we need—the ability to think consecutively about materials and methods of artistic expression without any paralysis of spontaneity.

MR. LA FARGE ON USELESS ART

It has been stated above that the speech of John La Farge was much the best of the several speeches delivered at the dinner of the Institute; and it was the best because it was the speech of a man whose thought had ripened his experience of his art into fullness of expression. No paraphrase can do justice to this little address, and it is reproduced herewith without changes or deductions. He said:

"Mr. Chairman and gentlemen, the fate which overtakes me is a frequent one. I was to have spoken earlier, but the gentlemen who have spoken before me have said almost all that I could have wished to say. Therefore I shall take up the affiliation, if I may so say, which our Ambassador from France has hinted at. As he has said, my own affiliations, my own trainings, with those of many of us, have been French. I feel that when allusion is made to the French artist who scraped on the bones of the cave-bear, he was distinctly my ancestor. (Laughter.) Through all these thousands and thousands of years I go back and feel that, after all, the only one who has drawn as distinctly and as well, with that firmness of touch, that far-down feeling of nature, is perhaps derived from such an ancestry, but happens to have been born on the fierce, wave-beaten coast of New England; and the only man who has ever drawn exactly upon the lines of the dwellers with the cave-bear is a great American painter, as great as any in the world—Winslow Homer. (Applause.)

"The artist away back, the painter, hardly existed except in such a form; he was useless then, and to a certain extent he is useless now. That is his great advantage, and that is his great honor. The architect represents in the arts the useful side; his art is that of utility, and all the more honor to him when he blends with that utility the uselessness of the last and the most indefinite of the arts, the one I am called upon to represent, the art of painting, which could be of no use in the far back, except, perhaps, to disguise some man in ambush, who painted his face so as to surprise some one else, or to decorate the dress of some savage lady. The art of painting comes after all the others; it is based, as we now know it, upon the use of the outside world; it is the representation of an idea by an image of the outside world, and consequently it has no end. It has had these vague beginnings, but it has grown with the entire human race. Every acquisition of knowledge, of learning, has gone on with it, and the very last studies of science are used by the painter. The other arts are fine arts, and indeed that is their glory, that they keep a more fixed condition. The architect, therefore, when he calls for help to the painter has less use for him than he would for almost any other form of art. It is merely to recall the fact that there is such a thing as useless beauty, that there is something to elevate you outside of the Ideas of utility, that the painter comes in. He has but few things in connection with the architect. It is true that
FIGURE OF A PURITAN.

F. M. L. TONETTI, Sculptor.
he has always had them. He has the ideas and the representations of space, and of line, and of light and dark and what we call color, and that is all. The rest is entirely outside, and therefore we know that the architect has employed the painter very late; he has so little need of him. On that account, whenever the painter feels that the fundamental art, the great art of usefulness, can employ him, can help him to say what he has to say, he feels at length that the end of civilization has come, and that he represents at length, finally, what civilization, what culture means, the cultivation of the useless, the thing that the Greek called the noblest use of the mind, the thing that the great Saint Thomas called "the place of pure innocence," the thing which takes us away from the usefulness of ordinary life. Therefore, when the time has come that the architects representing the earliest and the foundation art need for their adornment the painters' work, the time has come to say that the orbit of things has revolved, and that a new departure, a new birth is now impending. We have not, perhaps, the right to say that we are beginning an unprecedented era, that in a country where naturally, I should say, every man was from his original tendencies an architect, a constructor of buildings, a manager, something more than that is needed. What we have done in the lines of art has been going on now for over a century, and we have come to a place where we need fear the challenge of no one. We have just been assured of what importance the American has abroad.

We are now at this very moment going to add to our aspirations, to the promise in the future, to the glory of the future, to the future charm of life for the artists of all kinds, a connection with Europe which has been wanting, the placing of the names of our young men in the great city of the past. We are going to be established in Rome, which is apart from all useful matters, upon which I do not care to speak. This is in itself a statement that we, too, are rivals of all that has been done, and intend to rival all that shall be done, and we can then feel that the old cycle is closed, and that a new one has begun.

"The Institute of Architects represents all this; it is to be the guardian and the helper of the more ornamental side of the arts. It must be connected with what I have spoken of, the beauty of this American ambition, this American hope in the very center of Europe, and we artists feel that with the architects of the United States we are now bound and inseparable." (Applause.)

CIVIC CENTRES

One of the most encouraging symptoms of its kind we have encountered presents itself in the form of Bulletin No. 2 of the Municipal Art Society of Hartford, Conn. It is entitled "The Grouping of Public Buildings," and it consists of a series of suggestive essays on various aspects of its theme which have already appeared in various Connecticut newspapers, published in Bridgeport, Hartford, Meriden, Waterbury, and New Haven. Each has some expert character. The collection is made and edited by Mr. Frederick L. Ford, City Engineer of Hartford, and one of the vice-presidents of the society, who contributes to it for his own part the initial paper on "Connecticut's Opportunity." The opportunity, it seems, is to make the state capitol "the centre of a conspicuous group of public buildings." The building already has the advantage of an admirable setting in Bushnell Park, which it seems the state owes rather to the providence of the citizen after whom it is named than to any official foresight, just as New York owes both Gramercy Park and Union Square to Samuel B. Ruggles, the former being a private park reserved from his own estate, which it has repeatedly repaid, but the latter the result of a successful struggle, of an Ephesian character, with the Street Commissioners of 1807, over whom it is quite possible that Mr. Ruggles prevailed only because they did not see their way to extending their Procrustean gridiron over so intractable an area. Bushnell Park, decorated by the Capitol and the effective bridge and Memorial Arch, has on three sides, it appears, the assurance of being fronted with buildings worthy of the situation. But at one corner of it is an unsightly and extensive railroad roundhouse. The President of the New York, New Haven and Hartford, acting quite in the spirit of the president of the Pennsylvania when he agreed to take out of the way the station which was such a manifest and grievous obstacle to the execution of L'Enfant's original plan of Washington, has expressed his willingness to vacate the site of the roundhouse, some twelve acres in extent, and leave it open for some improvement more congruous with its surroundings. Mr. Ford's paper is a plea for the acquirement of this site as the site for a new State armory already authorized, but officially recommended to be built elsewhere and in isolation.

It is to reinforce this plea that he brings together the other articles that make up the pamphlet. It was a work well doing apart
from this specific motive to doing it. Among the articles are one on the advantages of grouping by Mr. J. G. Phelps Stokes, an extract from Mr. Charles Mulford Robinson's "Civic Art," a paper on "Civic Centres," by Mr. Guy Kirkham, of Springfield, giving an account of the interesting work which has been done in the direction of creating such a centre in Springfield; an account, by Mr. George A. Parker, of the situation of Providence in this respect, and of the effort that is making to establish a civic centre there; a description, by the same writer, of the ambitious improvement in Cleveland; finally an exposition by Mr. Glenn Brown of the new old plan of Washington. In addition sufficient descriptions of Paris, Berlin and Vienna to give a notion of the great importance attached in each of them to effective grouping of public buildings. Finally, enough of illustration fairly to elucidate the text.

It is a work admirably worth doing, and nobody interested in the subject into whose hands it may come is likely to let it go out of them. It is especially inspiring as showing that civic pride is taking on a rational and artistic form in the American cities of the second and even the third class. It is familiar that such cities have more civic pride, per capita, than their bigger. They certainly have quite as high an average of intelligence, and manage to bring quite as large a proportion of it to bear on their municipal affairs. What is most needed to secure municipalities worthy of municipal pride is to direct municipal improvements along artistic lines. One way, and the best, at least the most indispensable, is to present object lessons of the result of efforts so directed. The second is to assure the common sense of each community that an orderly, reasonable, artistic arrangement of a city is a good municipal investment. The first of these objects has been attained, for stay-at-home Americans, by means of world's fairs. Whatever may be said about the detail of the Court of Honor at Chicago, it did fix, in the minds of the people of the United States, a higher ideal of aggregated architecture than they had or could have had before. Every municipal improvement that has been projected since, on any important scale and on artistic lines, directly owes its being to that great show. Washington was the only actual town in the country which had in any respect the same attractiveness of pompous architecture. And the attractiveness of Washington had been diminished and effaced by the neglect into which the general plan had been allowed to fall and the excrescences that had been allowed to overgrow it. It is not too much to say that the attempt to rescue and execute the plan of the capital would never have been made if "the White City" of a single summer had never existed. By the nature of its being as a city decreed and determined in advance as a political capital, upon which the money of the whole country was to be spent, and in the development of which it was not necessary to take too much account of the demands of ordinary business for the supply of which other cities have come about of themselves, Washington should be an object lesson to the whole country in the art of city making. With the rehabilitation and extension of the original plan, which Congress has in the main respected as regards the placing of new buildings and monuments, though it has thus far refused formally to adopt it, the capital is in the way to fulfill this function much more completely than it has ever fulfilled it before.

The second requirement is the more difficult of the two to meet. To be convinced what reservations and alterations are needed to convert a city which was partly ill-planned, and has partly grown its own way into a municipal organism one must take long views. For such a conversion costs money and, what is even more to the purpose, it takes time. And, as Paul Bourget has it, your American business man is willing to spend anything but time. It is, in effect, the hard-headed if somewhat narrow-minded business men who are most influential in every American community when they choose to exert their influence, that it is necessary to convince of the value of converting a hodge-podge aggregation of humanity into a municipal organism. For this purpose, and, indeed, for any purpose, it is desirable to lay more stress upon orderly and convenient arrangement and distribution than upon aesthetics, treating beauty rather as incidental, as a by-product of orderliness and convenience, than as the end and aim of improvement. And in fact, this is the normal and proper order. When these notions get possession of the American people who live in cities, it is in cities of the second and third classes that we should expect to see them bear fruit in advance of cities of the first class. In the smaller cities, the cost of Haussmannization does not seem so enormous and prohibitive, not even in proportion to population and wealth. One hopes that Mr. Ford will carry his point in Hartford. In any case, one is obliged to him for assembling such a body of doctrine on the art of city-making.
Notes and Queries.

Denver is another of the cities that have recently fallen in line in an effort to create a civic center by grouping the public buildings. The movement there is somewhat popular in character—an encouraging attribute—and yet it is without that undirected vagueness that usually does more than anything else to make popular efforts ineffective. An art commission has been recently created, and under its auspices and those of the Municipal Art League and of the Artists' League, a public art conference was held. At this there was urged the purchase of the blocks east and west and right and left of the old court house, the erection on one block of a new city hall, on another of a new court house, on the third of a new post office, and on the fourth of an auditorium. Other matters discussed were the construction of a drive along the shady Cherry Creek, the erection of several small ornamental fountains, the removal of overhead wires and of hanging signs. When the latter step was advocated, a remarkable scene ensued. The business men who filled the hall—in this city fast losing those attributes that are called "Western"—shouted from all parts of the room, "We will; we will!" This is the sort of enthusiasm from which come results.

The Massachusetts Civic League, which is somewhat unique among organizations, has recently issued in pamphlet form its report for the year 1904. The interests of the League, with its eight committee divisions, are very wide, though "not wider," it has been well said, "than the legitimate interests of citizenship." Its great purpose is effectively to express public opinion—not always the same thing, it should be noted, as popular opinion—and it seeks to do this by unifying and directing the energies of town improvement societies and by maintaining a salaried legislative counsel to watch matters at the State House. Incidentally it does various other things, in and about Boston—maintaining playgrounds, encouraging school gardens, looking out for newsboys, etc. The year was notable for the League. Dependent before on contributions, it changed its basis during 1904 to that of a paying membership, and it began the employment of a regular secretary, who should give his entire time to its work. These were long forward steps, and with receipts and disbursements of more than fourteen thousand dollars much effective work was done. The Report is quite a model, for it consists of a short statement by the secretary and then of brief reports from the committees. Eight legislative bills were supported by the League, and every one of them became a law. One was that which established a limit of building height in Boston by dividing the city into residential and business districts, and designating the limit for each. In April of 1904 the League, having found in the State 170 village improvement societies, 48 women's clubs, "a part of whose work was along betterment lines," 160 civic and other similar clubs, and a large number of Granges that ought to be interested, arranged a State Conference for Town and Village Betterment. To this delegates came from local societies in all parts of the state, and it was decided to hold the conference annually. The League is preparing for these societies a series of practical leaflets, which include "Public Buildings," by J. Randolph Coolidge, Jr.; "Town and Village Landscape," by Frederick Law Olmsted; "The School that Made a Town," by Walter H. Page, etc. It were well if each state had such an organization to direct and aid the struggling local improvement societies.

A personal letter from the chairman of the Burnt District Commission of Baltimore, Sherlock Swann, Esq., gives an interesting view of the comprehensive improvement plans now courageously confronted in that city and of their financing. The fire of 1904 burnt, he writes, an area of 140 acres on which were about 1,500 buildings. Before the fire was fairly out, plans were afoot for re-planning the district. The mayor called together for advice a large committee of prominent citizens, and the result of their deliberations was the appointment of the Burnt District Commission, of six members, to carry out the recommended system of street and wharf improvements. The city already had on hand $4,600,000 (from the sale of the Western Maryland Railroad) and it authorized a loan of $6,000,000 additional. In addition to these sums, placed at the disposal of the commission for improvements, the people will vote at the spring election on the issuance of a loan of $2,000,000 for the improvement of suburban districts, of $1,000,000 for improvements in the park system (recommended by the recent report of the Olmsted Brothers), and of $10,000,000...
for the construction of sewers. Further than this, the city is planning to ask the legislature for authority to float a $5,000,000 loan for street paving, a loan of $1,000,000 for new school houses, and of $1,000,000 for new fire houses, making, with the amount now on hand, a total of $30,600,000.

As for money returns on this large investment, Mr. Swann writes: "The sewers, when built, will be self supporting. The amount to be expended for the park system will not require any increase in taxation as the receipts from what is known as the 'Park tax,' paid by street railways, will meet the interest and allow for a sinking fund. The loan for suburban improvement will bring into the full rate of taxation hundreds of thousands of dollars' worth of property which now pays a very low rate." He adds that, as respects the street widenings,—which, besides their actual cost, involve the removal from the tax rolls of about 600 pieces of property—the value of the abutting land will be so increased by the improvement as greatly to enhance the assessed valuation for taxable purposes. As an instance, he says: "On a small street of the district there is a piece of property which hung fire in the market for many years. It had a building upon it, and was about 80 feet deep. After the fire, which destroyed the building, we took 20 feet from the depth of the lot to widen the street. An offer of double the price previously asked (with the building on the land) has been now refused."

In regard to the dock development, he says that applications for leases already exceed the space available by "certainly five-fold."

It may properly be added that much of the courage and energy with which Baltimore is now facing the problem of making itself into a truly modern city is due to the present mayor, Hon. E. Clay Timanus. He early declared that politics should have no part in this movement for public improvements, and appointed various committees of business men to consider, and report in detail to him and an executive committee, for further consideration and active inauguration of a remedy, on the various needs of the city. This spring's campaign for the loan will also be pushed by a committee of citizens.

APARTMENT HOUSE ON MADISON SQUARE, NEW YORK CITY.

Howells & Stokes, Architects.
Equally as impossible to tell with any degree of accuracy to what extent rust is eating away the steel columns concealed from sight in a skeleton structure, is it to tell the extent of damage being wrought to the steel columns by electricity. The process of destruction by electricity is a gradual wasting away of the steel, the metal becoming pitted as if with smallpox. The electric pitting gradually weakens the column by the eating through of small, sieve-like holes, and when these holes become sufficiently numerous a sudden shock or jar such as frequently occurs in a building will break the weakened column in two. Unquestionably leaks from electric wires are working destruction to the steel in skeleton structures.

If, then, there are great doubts as to how long the steel frames of skyscrapers will remain intact by reason of moisture, water, steam leaks and electric wire leaks reaching and affecting the metal, there need be no fear on the part of any architect or the owner of any building that the Hecla fireproofing material is durable, and in a fire will remain intact long after all the ordinary material surrounding it has perished.

The brick walls of a building are good fire barriers, as every one will agree. But these walls are punctured full of window and door openings, and in the case of an adjoining fire it is through these openings, unless properly protected by outside fireproof shutters, or by metal frames and metal sash and wired glass, that fire enters. In a conflagration the weak points in otherwise good buildings are the unprotected openings in the outer walls. The desirability of placing outside shutters, or their equivalent, on window openings that are, say, not more than 30 feet distant from openings in other buildings is generally recognized. Thirty or forty feet is a small distance for flames to leap across when impelled by strong winds, and enter another building where the openings are not protected. What is not so generally known is that fire insurance underwriters, in rating a building charge for exposures to a distance of 100 feet. The Baltimore fire taught a lesson that is being heeded, and under the requirements of law protection for openings will be demanded to a far greater extent than ever before; that is to say, that all buildings other than private dwellings and churches will be required to have iron shutters or metal frames and metal sash glazed with wired glass on every exterior window and opening, of the rear, sides and front walls alike, where the distance is less than 100 feet from other buildings. The alternative of using shutters or metal frames and sash glazed with wired glass will probably be the universal rule, except that where the exposure hazard is less than 30 feet the wired glass will be required to be double, with a ventilated air space between the same.

Outside iron shutters are not and never were popular with owners or tenants. Metal frames and sash are not much liked by occupants of buildings, and insurance men do not like metal-covered wood. Owners, for the most part, will not care to use outside shutters on the street fronts, and will naturally decide to use fireproof window frames and sash and wired glass. Hotels and many
other buildings will decide in favor of the fireproof window frames and sash instead of shutters. If shutters are used, the advantage of shutters made of the Helca fireproofing materials has previously been referred to; they will stand fire without warping, shrinking or cracking, and be a fire stop, not merely a fire retardant. If window frames and sash are decided upon instead of shutters, then the Hecla fireproof material offers something superior to and more practical in its workings than metal, and more fireproof and lasting than metal-covered wood. What the Hecla material is has been fully described. One look at the illustration given below will convey to the reader a better understanding of the construction of a window frame and sash than a column of words. No warping, no shrinkage, no cracking, and perfectly noiseless in operation.

"HECLA FIREPROOFING"—PATENTED.
The System of Real Fireproofing.

The Hecla Iron Works, 
Brooklyn, N. Y.