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Detail of terra cotta façade, Emmett Building, Madison Avenue and 29th Street, New York City.
J. Stewart Barney and Stockton B. Colt, Architects.

Terra Cotta
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OFFICE OF DELANO & ALDRICH, NEW YORK CITY
Delano & Aldrich, Architects

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In this country, since the eighteenth century, we have had a succession of loosely related and generally brief phases of design rather than a continuous development. Since our fine but modest Colonial period eclecticism has flourished. Style after style has swept over the country. One influence has rapidly followed another, the classic Neo-Grec revival, the French Empire, the Victorian influence of the fifties, the bastard "Mansard" style, the Romanesque influence, the Louis Philippe influence reflected in the Centennial Exposition, the Modern French of the nineties, the Italian influence. In the work of the majority of our architects, a foreign style has been selected and its characteristics have been imposed on the building rather than the personal idiom of the designer. Underlying all, however, has been a fine classic tradition reflected in a series of state capitols, public buildings and the private houses of a conservative American class. More and more, in our national work, we are developing a sequence and continuity of style.

The work of Delano & Aldrich invites the critic to subordinate the question of style and tradition to that of personality. The forms used have certainly an historic flavor and so carefully have the traditions been studied that many motives are closely related to similar examples of an earlier period, usually of the eighteenth century. There is seen, nevertheless, a distinct and predominating individuality so characteristic that many of their buildings may be as definitely assigned to the work of this firm from a passing view as though they were actually signed. Furthermore, their buildings could not be thought of except as typical of the best traditions of American art. They have enriched our national style and added a new and very fine per-
sonal quality, a touch that unites a restraint and a quiet, liveable quality with distinction and notable simplicity of design.

The characteristics which mark their style are derived more from the principles of the eighteenth century than from the school of Paris where both Mr. Delano and Mr. Aldrich studied. Their plans, which show the careful academic training of this school, are well conceived and carefully arranged, well balanced and proportioned. Both in the plans and the elevations, whether of a façade or the side of a room, one feels a fine relationship of parts. From the point of view of decoration, there is a small amount of ornament, very telling because well placed and brought into strong accent by contrast with simple planes and wide wall spaces. The beautiful, high, narrow proportions of their doors and windows are another note of distinction drawn from the eighteenth century tradition.

It is a great achievement to take our own American style and design a house that conforms to all our best traditions, to fit it perfectly to its setting, to give it the look of belonging so well in its place that it appears to have always been there, and in addition to have it both original and beautiful. I should say that the most difficult thing but at the same time the best thing to do is to follow the idiom of the country where a building is to be placed and to do it in a fresh, new way. The national style in this country is certainly a modification of the old classic style, a modification which shows English influence, Italian Renaissance features and a strong feeling of our early Colonial style.

It is this very thing that Delano & Aldrich have done in the house for Mr. James A. Burden at Westbury, Long Island. The plan is admirably arranged. A great central mass contains the principal rooms of two stories and a high roof, with two lower wings. It is well worth noting that the rooms are finely arranged, all the parts well balanced and proportioned, the doors and windows beautifully spaced.

Mr. Delano’s own house is compact in plan. It has the number of rooms that fits the requirements of an average family, and therefore thousands are done every year of this size, but it shines out totally unlike its mates both in form and design. It is extremely good looking and very original. It is simple and direct in plan, conveniently arranged and well worked out in all its interior arrangements. The salient thing about it is that it has lots of ideas. The exterior and interior design has been carefully thought out. All sides of it are interesting, the front with its low doorway, the rear with its high, straight lines and the side with its gables and steep roof, making a delightful composition. The texture of the walls and the contrast of the brick, wood and stone give a fine impression as one sees it and show well in the photographs. It is a house that I wish a large number of people could actually see, because it is the kind of thing that should be more tried for. There is nothing expensive or elaborate about it, nothing fussy or strained, yet with all its quiet simplicity it is a very strong piece of work. The entrance hall with the unusual stairway, the simple door, so well done, and the fine texture of the walls and floor make a good introduction to the interior of the house. All the elements, the position of the door and the stairway, the size and shape of the hall, are familiar arrangements and show that it does not matter much what is done, it is the way it is done that counts so much.

With the greater knowledge of older styles, has arisen the wish to produce again the old effects. Whether this is a proper wish or not is another matter. The fact remains that to get a picturesque and charming result in a building of informal and irregular design it is essential that the materials be used in a picturesque and informal way. It is difficult to explain how the tiles should be set with a slight irregularity, how the plaster should have a delicate wavy surface and how the mouldings should have a softened profile varying slightly in section in different places. The lines and surfaces should not be perfect, hard and straight, and on the other hand if the
HOUSE AT NEWPORT, RHODE ISLAND
Delano & Aldrich, Architects
HOUSE AT NEWPORT, RHODE ISLAND
Delano & Aldrich, Architects
HOUSE AT NEWPORT, RHODE ISLAND
Delano & Aldrich, Architects
effect looks intentional, studied or overdone, it is even worse. To give this unintentional impression through workmen who have no conception of the reason for it, is a difficulty which has to be overcome.

The house on the Ocean Drive at Newport is a shining example of the way the texture of the house both inside and outside should look. The house as one looks at it gives an effect of mellowness and simplicity, of belonging distinctly to the landscape. One is unconscious of the hard work and the unremitting supervision so necessary to produce this result. In the photographs, however, it is perhaps easier to see the way the materials have been handled, and from the tiles of the roof to the steps of the front door one can note how every surface has had consistent and careful study.

One of the most remarkable things about this house is the perfection with which it is placed in its setting. The long, low lines of the hills across the water, the long, low hill top on which it is built are recalled in the lines and proportions of the house and then interrupted with just the right dash of the projecting wing and gables at the end. Again the line is taken up with the narrow doorway garden extending the greater part of the length of the house. The house is a chef d'œuvre of its type.
According to a popular argument, special work in every field of endeavor is best done and should be handled by experts and specialists. These claims are not only made in finance and business, in the professions of medicine and law, but even in the arts. Certain men do center their attention particularly on a limited type of problem; but, while it may in many ways work out well in commercial lines and even in certain professions, I venture to say that a set and binding point of view can never bring about the best results in painting, sculpture or architecture.

One of the most technical of buildings is a bank, and yet, with a background of general training only, this firm has done one of the best banks in the city—that for Brown Brothers & Company. There is a rare feeling of reserve and dignity in the large executive room which is here illustrated. One gets the impression of substantial and conservative achievement as one passes through the big rooms, which is far more effective than the tons of marble and bronze usually laid out to impress the bank's customers. The walls are paneled in quiet, deep-toned wood, with an interesting cornice, and the feature of the room is a fine portrait group in oils over the fireplace. The bronze chandeliers are unusual and add a decided note of interest and character to the room.

It has been possible to give space only to the more important pieces of work, and the large group of small and intimate houses, which in themselves are equally interesting, has hardly been represented.
CUSHING MEMORIAL ART GALLERY, NEWPORT, R. I.
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Delano & Aldrich, Architects
Drawing by Chester B. Price
RESIDENCE OF OTTO H. KAHN, ESQ., COLD SPRING HARBOR, L. I.
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Garden and Summer House

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POOL

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Delano & Aldrich, Architects
Drawing by Chester B. Price

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HOUSE ON PARK AVENUE, NEW YORK CITY
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LIBRARY—OFFICE OF DELANO & ALDRICH, NEW YORK CITY
Delano & Aldrich, Architects
Plate XI—In Sant' Ambrogio in Milan the granite columns with carved capitals have been placed at the start of a series of arches in the cornice. At the top a granite cap and exposed wood rafters form a support for the tile roof. A very unusual wall ornamentation is this plaster decoration in the Castello Sforzesco in Milan. The center is scratched in design similar to an Italian window grille, while the border is in colored plaster against the white wall.
The great similarity of the results obtained by the use of brick in different countries and in different ages leads one to suppose that study and intercourse between nations must have played a very large part in this result. However, when one finds certain portions of the Great Wall of China with battlements of brick resembling very closely those at Siena in Italy, one almost comes to the conclusion that the material controls the design rather than vice versa.

As Italy in the Byzantine and Romanesque periods furnishes us with so many fine, purely brick compositions, so also do we find the Low Countries, more particularly Holland and the coast sections of Belgium, using brick almost entirely in their residential, ecclesiastical and public buildings. Dutch churches, especially those of this period, made use of the beautiful texture and color of their local brick and these large, plain structures made imposing edifices by their very mass, emphasized by the fact that the surrounding trees and buildings were so low and the country so flat.

An essentially brick town of Belgium of the 13th and 14th centuries is Bruges, where the careful combination of brick and stone in the Halles and Belfry has produced a building of such grandeur and delightful scale that it is in itself a plea for brick and its use. There seems to be a continuation of the building of brick work right through the Gothic period into the Renaissance and in the latter we find by far a more interesting development of brick work in a picturesque and fantastic way than in any other country. In her book “Bruges,” Mary Straton says of brick:

“The secret of the interest and beauty of the architecture of Bruges lies in her craftsmen’s understanding of brick as a building material. For long centuries almost despised in some countries, and looked upon as incapable of fine expression, in the Low Countries it has never been relegated to the background. The home of brick architecture, just as Italy in the Middle Ages was the home of marble and France the home of stone building, the Low Countries not only reared their own towns in this material, but they taught lessons which England, at any rate, was glad to learn. The brickwork in Bruges is many hued, ranging from a deep rich red, which time has softened and mellowed, to the lighter tints of the more modern façades, which serve to set off the intenser qualities of the original walls. With bricks thin and small in size, laid with wide joints, the Bruges builders were not afraid of a plain piece and . . . they do not appear to have used the diaper work which was so favored in this country. Recessing and frequent change of plane gave them all they needed and, considering the large proportion of the area of most façades that was necessarily given up to windows in these town houses, they certainly could not have relied upon any better motif.”

Brick traceries of molded bricks were common practise in Belgium during the Renaissance and the design and molds used varied greatly. In the general design of the houses the stepped, steep gables with large windows and unusual chimneys called upon all the skill and ingenuity of the craftsman to produce a material that would fulfill these demands.
Brick seems to have answered admirably. One of the most picturesque buildings in the Low Countries is the Porte d’Ostende at Bruges with its large circular towers of unornamented brick that served in past centuries as a stronghold against invaders.

The Spanish use of brick in the Medieval as well as in the Renaissance period seems to have been purely decorative, due, no doubt, to the great abundance of stone and marble and to the lack of forests to furnish fuel for the manufacture of brick. In nearly all cases where brick is found the Moorish influence is evident. Brick bonding courses in stone walls seem to be the only attempt made to use it structurally.

In France, especially the southern portion, the limited use of brick is attributable to the same causes as in Spain, and almost the only extensive use of brick is in the early Renaissance when the wall surfaces were often covered with brick, with stone quoins forming panels. This treatment is found in the Castle of Blois in the wing of Louis XII. At Fontainebleau in the Cour Ovale we find pilasters, cornices and belt courses in red brick set against stucco. Brick patterns were also used during this time, generally to relieve blank walls.

As almost all the old world brick buildings and those of our early times in America, were constructed of locally manufactured brick, it seems safe to say that no small part of their charm is due to the fact that they are a part of the ground they occupy. Our transportation facilities have made it possible for us to go to distant places to secure materials that will give unusual effects, and it is these unusual and often unnatural effects that produce the very glaring hardness and crudity which we are devoting our best thought and effort to avoid.
Plate XII—This plate shows various wall treatments of brick, stone, wood, half timber and tile in France and Italy. The use of red mortar at Le Puy is very unusual.
Plate XIII—The gable end of one of the small buildings of the Chateau de Briançon at Criel-sur-Mer illustrates a common use of brick as a coping. The window at Dompierré shows a very successful combination of contrasting materials—that is, white stone bordering a void, forming a crisp edge inside the brick arch. Two shades of red brick are employed.
Plate XIV—The cathedral of La Seo at Zaragoza in Spain has a splendid side wall treatment in brick, tile and stucco called "Mudejar." The small sketch in Plate XIV shows the location of these panels. The cathedral was built about 1375 by the Archbishop of Luna. It is considered one of the finest examples of this type of work.
Plate XV—In the cornice of the hospital of Santa Cruz at Toledo the use of roof tiles over corbels is unusual and solves very well one of the problems of brick cornice designs; that of supporting additional projections of top courses of brick.
One of the most interesting and suggestive of the small houses of the French Court, dating from the early eighteenth century, is Le Pavillon de Madame on the Avenue de Paris, in Versailles. The exterior is exceedingly simple and full of dignity, wherein lies much of its charm. In fact, although the casual impression is agreeable, one has to look twice in order to discern the various little refinements and appreciate their excellence. So far as outward conditions are concerned, one of the chief attractions of this établissement, whither royalty was wont occasionally to withdraw from the too insistent distractions of the Court, consists in the general layout of the estate.

Upon entering the gates there is a small forecourt immediately in front of the house. The north or garden front of the house overlooks a broad tapis vert, surrounded by tall trees which effectually shut out the neighboring estates and also conceal sundry tool houses and the rabbitry, that indispensable adjunct of the French suburban or country residence. Beyond the tapis vert an opening in the trees discloses the potager, geometrically laid out with beds and broad walks converging to a central pool. The beds are filled with a neat array of vegetables and fruit trees and are bordered with flowers which supply abundance of cut blooms for the house. At the far end of the potager is the orangery, against the wall that bounds the estate to the north. The whole arrangement displays a logical orderliness that strikes the visitor as engaging rather than intentionally formal.

The plan of having the salon above-stairs rather than on the ground floor is thoroughly indicative of Gallic tastes in this particular, but the arrangement would hardly appeal to Anglo-Saxon temperament, for the Anglo-Saxon country dweller usually likes to have his living room where he can get directly out of doors without traversing halls and stairs in doing so. Nevertheless, upon careful examination the plans of the house display numerous features deserving of thoughtful consideration.

The boisserie, especially in the hall, dining room, anteroom and salon, is of admirable quality and commands attention. The panelling in the entrance hall is white; the walls of the stairway are marbleized with diverting relief in the shape of polychrome arabesques; the walls of the dining room are a pale green; and in the anteroom and salon the oak panelling is its natural color with the carved enrichments picked out in gold. The exterior of the house is stuccoed and painted a light grey. Lead sheathing encloses the decorative trim of the dormer windows.

Le Pavillon de Madame, Versailles

By Harold Donaldson Eberlein and Leigh Hill French
LE PAVILLON DE MADAME, VERSAILLES

Garden Front—North

July, 1923

The Architectural Record

[80]
Entrance Front—South

LE PAVILLON DE MADAME, VERSAILLES
Plan of First Floor

Plan of Ground Floor

Le Pavillon de Madame
63 Avenue de Paris
Versailles

The Architectural Record
July, 1933
Entrance Hall

LE PAVILLON DE MADAME, VERSAILLES
Staircase

LA PAVILLON DE MADAME, VERSAILLES
Salon.
LE PAVILLON DE MADAME, VERSAILLES

[87]
Doorway of Dining Room.

LE PAVILLON DE MADAME, VERSAILLES
East End of Dining Room

LE PAVILLON DE MADAME, VERSAILLES
LE PAVILLON DE MADAME, VERSAILLES

July, 1923

Dining Room

Salon

The Architectural Record

[90]
Le Pavillon de Madame
63 Avenue de Paris
Versailles
LE PAVILLON DE MADAME, VERSAILLES
IMPRESSIONS
of the
A. I. A. CONVENTION
by
Thomas E. Tallmadge, F. A. I. A.

The temptation to say that the outstanding features of the Fifty-sixth Annual Convention were the rhododendrons—each a burning bush—the cherry-stones at Harvey’s, the lath obelisks on the Avenue, and the sun lassoing the monument with a noose of light, is well nigh irresistible. Even more difficult is it to avoid declaring that the principal business of the convention lay in the inspection of the gorgeous Freer collection, reposing so resplendently in the chaste reliquary of Charles Platt, or in a sage discussion of the high water mark on the Washington Monument. To me one of the most delightful adventures was the co-discovery with Howard Shaw of an unbelievable portrait by Hogarth and a superbly beautiful landscape by Constable sandwiched between skeletons of pterodactyls and models of submarines in the National Museum. The great event, the most beautiful, the most interesting, was, of course, the pageant and the presentation of the medal—but of that later.

Somewhere, however, there may be a reader who actually wishes to know what was done at the Fifty-sixth Annual Convention of the American Institute of Architects. If such there be, he will note that the Convention held its deliberations in the Hemicycle of the Corcoran Art Gallery on mornings, afternoons, and evenings of May the 16th, 17th, and the morning only of the 18th.

The Gallery, along with many other buildings, had had a shave, shine, and shampoo in honor of the city’s guests (the Shriners, who were coming the following week). In marked contrast was the Octagon, apparently not expecting guests, decidedly en deshabille with the hall full of packing cases. But let us return to the Hemicycle with its walls nicely wadded (so that we could hear) by Waddy Wood.

When Mr. McGregor Jenkins of The Atlantic Monthly, in begging us to inform the dear “peepul” what architecture was all about, told us that we were just an ordinary bunch, indistinguishable from the countless other assemblies of Babbits, I decidedly differed with him. My impression was that of a distinguished-looking gathering of men—men who in appearance represented lofty ideals and high standards of intellect and taste, and, what couldn’t have been said of some previous conventions, prosperity as well.

The Directors last year promised us that if we would only come again all routine business would be taken care of by the Board, and that our duties would be confined to enjoying the scenery and the entertainment incident to considering the fine and the near-fine arts. They held so admirably to their purpose that the first morning’s session, aside from the officers’ reports and the doings of the indefatigable Board of Directors, consisted in a demonstration of affection for Mr. William Stanley Parker. The afternoon session of Wednesday, Past-President Clifton Sturgis presiding, gave us the cultural treat we had been promised. Professor George H. Edgell, Dean of the School of Architecture of Harvard, Professor of English Charles Sears Baldwin of Columbia, and Herbert M. Langford, philosopher of Harvard, formed a triptych of real brilliance and fire. The response of Mr. Goudy, when presented
with the Institute's Craftsmanship Medal in Typography, quite won and touched the audience with its charm and simplicity. In the evening, Mr. C. Howard Walker, the handsome, learned and doughty champion of the beautiful, lectured on Tendencies of Modern Architecture. Some of us thought the grand old man of architecture was slipping when he showed us a sky-scraper of the vintage of 1900 with the familiar and functionless treatment of base shaft and cap, and told us it was the logical solution of the high building. Had he forgotten Sullivan, and had he never heard of Saarinen? But he came back in magnificent style the next evening, when he held his audience enthralled in a thrilling and extemporaneous eulogy of Sir Christopher Wren—like the rhododendrons, one of the unforgettable things of the convention.

Thursday morning started us off with a report by Colonel Wood, chairman of the Committee on Credentials. The Colonel told us that there were two hundred and one of us duly accounted for. Nominations for officers indicated that the convention thought it unwise to swap horses even when trotting along a level and smiling road. Mr. Zantzinger, the wise and devoted chairman of the Institute's pet Committee, Education, made his report. He told of the publication of "The Significance of the Fine Arts," and its splendid reception, of the Institute's scholarships, and of the International Convention of Architectural Educators in London in the fall of 1924. Even education elicited no discussion, so Mr. Whittaker reported on the operation of our excellent publication, The Journal of the Institute, and on the profitable publishing business carried on as well. There being nothing to cavil at or even to discuss in Mr. Whittaker's report, a resolution was proposed authorizing the Board to proceed with the restoration and enlargement of the Octagon. It was passed without a peep. Oh, where are the dissenters of yester-year? Mr. Wade, who always bears pleasant tidings, told us of the gift of five thousand dollars from the architects of Southern California for the purpose of furnishing the living-room of the Octagon.

The afternoon of Thursday was given over to the efficiency and engineering pundits. There were addresses on Research by Dr. Stratton, President of M. I. T.; on Standardization by A. W. Whitney; on Specification by Sullivan W. Jones; on Informational Publicity by Lyman Clark. Past-President Moran with appropriate eulogies presented the names of the architects recommended for advancement to fellowships, and the polls were opened at the end of the session.

The evening of Thursday was devoted to the presentation "in absentia" (you wouldn't hear that in an Atlantic City convention) of the Fine Arts Medal for Painting to Mr. A. F. Mathews, of California. Mr. J. Monroe Hewlet, who had hung the rostrum with some stunning fabrics, told us how we could design and manufacture our own hangings and wall decorations, instead of shopping for them and taking what we can get. The evening closed with the brilliant address of Dr. Walker, previously referred to.

The morning of Friday, the last day, opened with flying clouds and a wind from the west. President Faville introduced the ever popular secretary, who spoke at length on Industrial Relations. Knickerbacker Boyd followed with a plea for a more personal contact between the architect and the man with the hod. The necessity and means of increasing the number of apprentices was brought out, and in this connection mention was made of the work of the Guild of Craftsmen in Oregon. Surely nothing here to object to, so we adjourned to the Washington Hotel for the last of the delightful communal luncheons.

Having important business at the Freer collection, your correspondent was late for the afternoon session, and when he arrived he found he was alone! To be alone in a hemicycle makes one feel uncomfortably like Catiline, and, as no reinforcements arrived, a question to the guardian of the hats elicited the information that, as there was no unfinished business and no new business, the convention had adjourned!
"If Lincoln could but see this monument he would find his greatest satisfaction not in the recognition which it typifies of his own services, but in the thought that the nation he loved and saved has brought forth such a proof of lofty aim and capacity for achievement as this memorial shows."—President Harding.

The memory of that wonderful night under the great dome of the old Fine Arts Palace in Chicago will "flash upon the inward eye" as long as life gives us solitude, and now another gorgeous picture has been added to memory's gallery. I shall never forget the thrill of seeing the long line of robed figures with their banners suddenly emerge from gloom into black silhouette and then into light as they defiled and ascended the steps of the Lincoln Memorial. For the moment I was transported back eighteen hundred years. Standing on the roof of the Tabularium I could see Trajan's Dacian legions marching up the Via Sacra, climbing the approach of the Capitoline Hill, and then bursting into light as they ascended the steps of the Temple of the Capitoline Jove. At their head are the victor and his generals, along the sides of the approach are Vestals and the conscript fathers, and, coming forth from the great temple to meet him in his triumph, is the Pontifex Maximus. The comparison, if it were personal, would be ridiculous, of course, but as a spectacle, I am inclined to believe it has much of truth. Surely, the Memorial, which seems to me more Roman than Greek, had no superior in the Eternal City; nor had any temple in those golden days a more magnificent location. Neither is the effect of light and shadow and silhouette less dramatic today than two millenniums ago; nor does dark water throw back the dancing shapes of colored light and faery forms less witchingly. It is certain we were much vouchsafed a wonderful spectacle.

This, however, was the culmination. It had been preceded by a banquet in the great marquee at the east end of the reflecting pool. We had been impressively addressed by President Faville and Royal Cortissoz. We had listened to the famous marine band, and we had watched our distinguished confrère, Henry Bacon, whom we were delighting to honor, and his fellow-laborers, Daniel Chester French and Jules Guerin, embark on the Barge of Honor for their Voyage à Cythere. We had seen the red flare in the dim distance announce the arrival of the President of the United States, and we had followed the barge in solemn procession along the banks of the lagoon.

Some statistician, with nothing better to do, has stated that architects register the smallest coefficient of jealousy of any of the professions. To see one of our number honored with this great pageant, to see him greeted by the Chief Justice of our courts, and presented with a medal by the President of our Republic under the shadow of his own great building, filled our hearts with nothing but pride and joy. All honor to Henry Bacon and his helpers for a great work of art, and thanks to those who made it possible to bestow our appreciation in a manner worthy of the recipient and of the American Institute of Architects!
Decoration of the Modern Renaissance Interior

Of recent years notable progress has been made towards reconstituting the effect of interiors designed after the manner of the Italian Renaissance. However, up to the present, effort in this direction has almost exclusively been spent on the elaboration of the ceiling with polychromy and gold. As the richness and elaboration of the ceilings augment, we are conscious of an accentuated feeling of emptiness in the spaces beneath; a sense of top-heaviness oppresses the observer. This feeling detracts from our enjoyment of the excellently decorated ceilings in the new Detroit Free Library, the banking space and vestibule of the Straus Building, and other similar examples.

There is apparently a prevailing tendency to accept the present condition of the majority of the Italian buildings of the sixteenth century as representing their original state. If a careful examination is made of the paintings and tapestries of the period depicting interiors, a new light is cast upon the subject that should be of vital interest to the architect. They show that the floor was an extremely important item in the scheme of interior effect.

The average student is familiar with the chequer, trellis, diaper and panelled forms of floor treatment in colored stones and marbles which still survive in a number of buildings, and which figure so prominently in the paintings. Another type of treatment used extensively by the Renaissance architect appears to be forgotten or overlooked. I refer to the floors in elaborately decorated majolica tiles. Unfortunately, very few of these survive, owing to the perishable character of the material made in that day, though two may be seen in the Vatican, and scattered examples in certain other palaces.

It is inconceivable that the red quarry tile floors now seen in the beautiful chambers of the Davanzati Palace were part of the original scheme, when the paintings of the period are recalled and when the majolica floor tiles are examined, that were made for precisely such interiors in that day. The red quarries, accepted by so many architects as contemporary with the wall decorations, are without doubt of later date, having replaced worn out majolica floors.

In their effect value, the majolica floors must have balanced the color weight of the ceilings, neutralizing that impression of top-heaviness which results from a solid mass of color up above, unsupported by any corresponding chromatic values on walls or floors. The rarity of these floors today is due to the perishable nature of the product of that time, which was made by the primitive methods of the early potters. The glazes were very tender, with little resistance to friction, being composed mainly of lead or tin, fired at a comparatively low temperature.

A vast number of tile designs painted in brilliant colors are extant in museums and private collections. The shapes of the tiles in these and the character of the patterns show clearly that their decorative purpose was to create bold designs in great panels, with bands, borders and rich fillings. The treatment of the ornamental detail varies considerably with period and locality, but the motifs adopted correspond with those used for the ceiling ornamentation, consisting of shields, dolphins, fabulous animals, amorini, masks, vases and the like, and a profusion of ornamental bands and motifs. The prevailing colors were dark and light blue, mulberry or a brownish purple, ochre and bright yellow, browns, yellow and blue greens; greys, light mulberry, or light blue were the
tones generally used when shading was required. The scale of the detail, the activity of the colors, and the general planning of decorative spaces, have a direct relation to the ceiling decoration.

The color effect of the floor was of a different quality from that of the ceiling, suggesting the polychrome character of architectural decorations of earlier periods rather than the tone characteristics of the tempera used in the ceiling. There was little latitude for modifying the ceramic colors, as they were simple oxide stains, and the chemical knowledge of the potter did not permit of much variation. The painters of the ceilings, on the other hand, could do practically as they wished, and the liberal use of gold achieved that essential difference in color character between the two spaces.

A brief study of the Italian majolica tiles of the sixteenth century will repay those architects who contemplate interior decoration of that period. They cannot fail to appreciate the extent to which the creators of the style considered it necessary to balance the weight of color in the ceiling with a corresponding value on the ground. The tiles possess a virile quality which conforms admirably with the quiet energy of Renaissance expression, and though in an isolated example they may appear a little harsh in color, it must be remembered that when extended over an area, that quality is modified by the varying degrees of light and shade and the perspective of receding patterns. A reproduction of an archaeological or literal character is not recommended, owing to the fact that the original creative impulse is not in exact accord with the decorative sentiment of to-day. In the best stylistic essays of our time actuated by inspiration from historic originals, changes are discernible in scale and distribution of ornamentation which reflect modern ideals and convictions. There is no doubt that were the Italian tiles used as starting points for decorative composition, appropriate adaptations would be made intuitively.

It is almost contradictory to find so highly developed a color sense in the interior decoration of the Renaissance coupled with a systematic avoidance of color in exterior treatment. This calls for some attempt at explanation, as the abandonment of exterior polychromy with the advent of the classic influence must have been due to specific causes. Throughout the history of architecture we find that stylistic changes are
coincident with important social or cultural changes. It is improbable that a single instance of change in treatment can be found which has originated within the art, independently of any external influence. In the first place, the Renaissance movement was aggressively reactionary. Color figured sumptuously on the exteriors of Gothic buildings. This fact alone might have been an inducement, though a negative one, for its omission in a new order of effect values. There are, however, other reasons that carry more weight, because they relate to contemporary epoch-making developments in other branches of art and culture.

The Renaissance movement started in literature, when mediaeval romance gave place to classic mythology as the prevailing stimulant to imagination. A little later, the architects of Italy realized that their art was well furnished with original examples of those periods of the prevailing influences. They also noted that in the classic buildings surrounding them a novel architectural principle was embodied, radically different from that which controlled design in the Byzantine, Romanesque or Gothic. It was an entirely new order of thought in architectural creation which might be described as "organized proportion." A novel system of proportional regulation became a major objective in design. The attainment of the Gothic ideals depended partly upon the capacity to excite interest by ingenuity in structural treatment; no regulation controlled such items as columns and moldings, insofar as dimensions or decoration was concerned, provided they accorded with the aesthetic feeling of the time. With the classic models before them, architects found that the precise width of a shadow cast by a fillet became a matter of considerable importance as a factor in a regulated scheme of inter-related architectural values. With these new preoccupations in composition, and the concentration of the Renaissance architect upon subtle gradations in structural values, it was not likely that color with its aggressive capacity for emphasis would be risked in the new order of things. In fact, that quality of effect-value which polychromy alone can achieve had no place along

Floor—St. Sebastian, Venice.
the path followed by the Renaissance architect in the pursuit of his ideals.

This unaccustomed attitude towards proportional values in detail found its expression in terms of light and shade. It parallels the discovery by Leonardo da Vinci of a new principle controlling effect in the painter's art. He was the first to realize the possibility of using light and shade as elements in the composition of pictorial groups, probably the most far-reaching discovery in the history of art attributable to an individual. His method completely changed all views which had controlled the relationship that should exist between light, detail, and composition in pictorial effect, and laid the foundation for all subsequent schools of painting. This astounding artistic discovery must have had an influence upon architectural thought, as architecture and painting were at that period actually sister arts; many of the greatest architects were great painters, notably, Giotto, Raphael, and Michelangelo.

It is justifiable to assume that, with the consequent concentration of artistic interest upon chiaro-oscuro, a new point of view entered into the imaginative outlook of all arts in which light and shade are factors in the production of effect, as is the case in architecture. When delicate gradations of light and shade were the means of producing specific results, the reason for the omission of polychromy on Renaissance exteriors is obvious. However, in the decoration of interiors where light-values did not control the ultimate issue, polychromy was profusely developed.

A final reason for the absence of color on exteriors is that there was not a sign of it on these buildings which constituted the original classic models. It is improbable that any data was accessible at that period to architects, other than the vague descriptions of a few classic authors.

In any event, those writings would have been as useless to them for any practical purpose of coloring as they are to us.

Leon V. Solon.

The Design of Furniture—An Art or a Trade?

It is an unfortunate fact that in the realm of industrial art we have not so much to say for ourselves as we have in the realm of architecture and what are known as the fine arts. If, for example, a visiting European were to ask "Who are your best known furniture designers in America?" we should be at some loss to give an answer. We could think of several prominent manufacturers, but we should be obliged to realize that the identities of their designers have been submerged in the industrial scheme, and that the individual designer, so far as fame and reputation are concerned, simply doesn't exist.

This is really an unfortunate condition, not only for the designer, but for the manufacturer. The designer is robbed of most of his incentive, and anything like an expression of individuality is not at a premium. The manufacturer, on the other hand, has not the obvious trade advantage of being able to "feature" a designer, or to out-distance his competitors by producing furniture of salient individuality. The same condition holds true in the other industrial arts. We can make no roster of names of great designers of textiles, or wall-papers, of silverware or metal work—not because we lack the designers, or because we do not annually produce a tremendous volume of things which are really well designed and finely made, but because we have not quite reached the point of discovering that it
would actually be "good business" to lift the veil of anonymity from our industrial artists.

The matter of our inability to name any designer of furniture in this country is brought forcibly to mind by the receipt from England of a book called "English Furniture Designs, Percival T. Hildesley." (Benn Brothers, Ltd., 8 Bouverie St., London, E. C. 4, 1923.) This book concerns itself entirely with the work of Mr. Hildesley, and gives illustrations and full-size details of a wide variety of pieces of furniture, as well as complete interiors.

The significant fact here is that Mr. Hildesley is recognized as a designer, just as another may be recognized, here, as an architect or a sculptor. And why not? The identity of a poisoner or a hired assassin could not be more jealously guarded than the identities of our designers in this country, yet they are in every sense entitled to the recognition accorded to creative artists.

The illustrations in "English Furniture Designs" tell us that Mr. Hildesley is an able and resourceful designer, and a brilliant draftsman. Many of his designs, naturally enough, are more in accord with English architecture and interior decoration than they are with ours, but the point is that they are considered, in England, sufficiently worth while to publish, under the designer's name, in a complete book.

In a foreword by H. P. Shapland, A. R. I. B. A., a good, forthright creed is given as Mr. Hildesley's working basis. "He holds (1) that good workmanship should never be sacrificed to ornamentation; (2) that if the artist knows a certain design to be right it is folly to try to improve it in order to gain a reputation for originality; (3) that the cabinetmaker with a score of ideas should not crowd them all into one design; (4) that the designer should himself supervise the choice of the material used in making furniture."

When designers have such ideas as these, and reveal themselves as being capable of intelligent and constructive thought, it seems as though it were time they were allowed to come out in front of the curtain and be seen and known by the American public.

We hear many discussions on "What is the matter with Industrial Art in America"—but the answer is a very simple one: no art can ever become great as long as its creators are anonymous.

We are waiting for a book on an American furniture designer.

Matlack Price.

Two Valuable Books on Lettering

Architects, from the earliest times, have been more concerned than most people with the preservation of pure letter forms, and with the rendering of these in ways adaptable to the times in which they worked. Even when architects have designed bad lettering, as they did consistently during the transitional era of architecture in this country, it was not because they did not know good lettering. Their error was one of weakness in following the unenlightened taste of the moment. During the eighties, certainly, and well through the first half of the nineties, very poor letter forms were used on public buildings, and wherever lettering was used architecturally.

The American Institute of Architects has awarded the Craftsmanship Medal for Typography to Frederick W. Goudy, and the architectural profession should feel distinctly appreciative of the work which Mr. Goudy has done toward preserving and delineating pure letter forms in his two books, "The Alphabet" and "The Elements of Lettering" (Mitchell Kennerley, New York, 1922.) Mr. Goudy, it is true, is a typographer and a designer in the graphic arts, but good letter forms are good letter forms, whether they are utilized for the printed page or for an inscription on a building.

Lettering as an important architectural accessory has never (with the exception of its Egyptian use) played so important a part as it did in the time of Imperial Rome. Mr. Goudy believes that lettering of this time affords the most valuable material for study, and any architect who is concerned with a problem of monumental lettering will find that Mr. Goudy has done no small service in studiously re-drawing the letters from Trajan's Column and presenting them in a complete form at an excellently large scale (three inches high) in "The Alphabet." Of all the Roman letters of antiquity, Mr. Goudy feels that the Trajan letter possesses the greatest purity of form attained by the Romans. This is no letter form for the use of a mechanic; it is full of minor graces and subtleties which demand a high degree of sensitiveness and appreciation for their proper execution. Essentially, it is an architect's letter. Even today there is not always an adequate amount of serious attention and study given to monumental lettering by architects, and such a version of the Trajan letter as Mr. Goudy presents in "The Alphabet" should be in every architect's library.

The plates in "The Alphabet" are inter-
R in the Phoenician was written like the symbol for d (𐤄), the tail being introduced later, although not a universal practice, to avoid confusion with D.
ABDEGNRS
STONE-CUT CAPITALS FROM THE TRAJAN COLUMN [A. D. 114]

The early typographers carefully adapted their forms from existing sources, from old illuminated missals, and from carvings. In later years, type forms degenerated until they were, with few exceptions, utterly inartistic. Gradually, however, the balance dipped the other way. Typographers became more studious, more scholarly and more discriminating and hand-drawn letters became increasingly more inartistic and incorrect. "Freak" lettering abounded, legibility and purity were lost, and the only hope of restoring the balance seems to lie in developing hand-drawn letters from good type forms.

Architects have frequent occasion to design numerals for dates, and here too Mr. Goudy offers the best kind of assistance.

Both books, "The Alphabet" and "The Elements of Lettering," are beautifully made and printed, with hand-set type, fine paper and fine margins, and are, quite apart from their practical usefulness, no mean addition to any library, whether in an architect's office or elsewhere. Alwyn T. Covell.
Architecture in Transition

Chicago is passing through a mushroom growth similar to that which twenty years ago flooded New York with the speculative sins of ignorance. Overnight conceptions built in haste expose their ugliness to a public seeking enlightenment now that the building boom appears to have received a sudden check. This momentary pause no doubt is due primarily to unsettled labor conditions and an unparalleled demand for building materials during a period of large profits. The immediate effect is a curtailment of speculative building; everywhere we see signs of the money lenders checking up on their favorite contractors and, incidentally, viewing with concern the low grade of buildings of recent erection—the result of boom times and easy money.

It seems that the speculative builders themselves have become startled at the obstreperous growth of their own creation, whose huge size, innocent of architectural merit, no longer impresses. With the tightening up of the loan houses and their demand for better architecture and better construction, we are about to enter a period of permanent building calling for architectural skill and ability, instead of configurations thrown together by profiteering promoters.

The day of the contractor impressing the loan houses with his supreme importance as master, with power to employ someone in his coterie to draw up plans at a minimum fee, is setting; for the first time in Chicago even bankers are beginning to realize that architecture is a profession and not a contracting business.

The alarm has been sounded and we find cases where architects are called in to act in an advisory capacity on buildings for which loans have been made. Other buildings under construction have been revised so as to meet more rigid structural requirements and scrutiny. These signs of the times speak well for better buildings and better architecture and a satisfactory answer must come from the architects.

Size alone no longer impresses. Soon we shall enter a new era of monumental building that will more than fill the gap left open by the cessation of speculative building. The architect's great opportunity is at hand, and with the releasing of a country-wide civic building program, we await the sincere expression of architectural ability that must once for all establish architecture in America as a fine art and a worthy profession.

Our frontier barriers are removed. Let us build worthily and in accordance with our resources as a nation foremost in world events.

A. N. Reboli.
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East Front of Library

PHILADELPHIA DIVINITY SCHOOL, PHILADELPHIA, PA.

Zantzinger, Borie & Medary, Architects
The Philadelphia Divinity School, designed by Zantzinger, Borie & Medary, is one of the most significant architectural undertakings now in course of erection in America. Apart from the extent of the scheme laid down, the project is significant for the manner in which the physical conditions of the site have been met, for the completeness with which every feature of the group has been studied and made ready for execution as funds shall become available and, finally, for the character of the design embodied in the various units of the whole composition.

The site, a large city block—bounded east and west by Forty-second and Forty-third streets, north and south by Locust and Spruce streets—is of highly diversified, undulating surface, retaining all its original contours unchanged from the time when it was a suburban estate. From the northeast corner of Forty-second and Locust streets, the highest point of the ground, there is a rapid slope to the southwest with several sharp depressions. Although the street grade at the southwest corner, Forty-third and Spruce streets, is much lower than the street grade at the northeast, the depressions are considerably below the level of the street. It was determined to maintain the natural configuration of the ground and adjust the plan of the buildings to it because the whole site was covered with an exceptional growth of old trees, so fine that both architects and trustees regarded their preservation not only as a priceless accessory of natural setting but also as a sort of public trust for the benefit of the surrounding neighborhood.

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Zantzinger, Borie & Medary, Architects

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The retention of the variant levels—there is a difference of forty-one feet between the highest and lowest points in the finished scheme—and the preservation of the trees, of which only three will be sacrificed, imposed a set of conditions difficult at the outset, but at the same time immensely stimulating to ingenuity. How satisfactorily these conditions have been complied with, the reader may see by examining the model which shows the entire group of buildings—Chapel, Deanery, Library, Commons Hall, Academic Hall, Dormitories, Gate-houses, and separate houses for the faculty, along with a very engaging arrangement of quadrangles and gardens.

The recognition of the natural charms afforded by the setting, and the determination to save them and make the fullest possible use of them as integral factors of the scheme, deserve commendation on the score of sound common-sense and a sensitive perception of values; the preservation of natural beauty as a public trust and obligation sets a notable example that might well be taken seriously to heart by those who have in hand other urban undertakings of comparable magnitude.

Of the group of buildings planned, the Library has been completed and is in use and work is about to begin on the Chapel and Deanery, while the other parts of the plan are still in the future. Although re-studies of a few particulars and sundry minor modifications may prove expedient, when the time comes to erect the remaining structures, nevertheless, every future requirement has been so fully weighed and provided for that the group will eventually take shape in the form indicated by the model. Meanwhile, the existence of a fully organized
and articulated scheme affords a visible goal towards which to work. Every step taken will be so much gained toward fulfillment and will in a way, prove a stimulus toward hastening the end in view.

When examining the Library one must bear in mind that it is not to be considered as a separate structure but in its relation with other buildings that are to abut against it, east and west, as the skewbacks indicate. Otherwise it would seem too short for its height. From the lower or western side, the Library rises to the height of slightly more than seventy-four feet, while the extreme length is only thirty-two feet. With the other buildings erected, this seeming disproportion will vanish and the building fall into its true relation.

But what is of paramount importance and interest for our present consideration is the character of the design embodied in the group. The sympathetic adjustment of plan and site, and the motives influencing this adjustment, command admiration. The far-sighted and deliberate scheme of development, looking well into the future and creating the guiding pattern of a mature ideal for ultimate realization, attests the wisdom of both trustees and architects. The quality of the design, however, is a matter with which the architectural world
and the public at large are more vitally concerned. And the fullest and finest expression of design is found in the Chapel.

The total outside length is one hundred and thirty feet, the height is seventy-four feet, and the interior width is twenty-eight feet. The ecclesiological east end is really at the north, owing to the exigencies of the site. Inside, the triple division of space in the nave provides for an ante-chapel twenty-one feet in depth from the west door—really the south door—to the screen; a choir eighty-three feet in length, with stalls for the Dean and senior members of the faculty returned against the screen; and an additional twenty feet for the sanctuary, thus adhering to the traditional collegiate arrangement. The tall windows are twenty-six feet high, while the width at the glazing surface within the reveal is eight feet, nine inches.

Chestnut Hill stone, mixed with some of the more micaceous and warmer-colored stone of the immediate neighborhood, is being used for the Chapel as well as for the other buildings, while buttress weatherings, copings, window tracery and doorways will be either in limestone or of the tawny composition limestone—all ready used in the Library—which readily lends itself to carving. The inner walls of the Chapel will be thickly dragged or trowelled with mortar so as to give a fairly smooth surface to the rubble masonry, although permitting the stone texture to remain perfectly visible. A light-colored wash will then be applied, completing the suavity of texture, affording a desirable note of reticence and austerity, and making a foil that will vastly enhance the values of the rich-hued windows, the intricate oak tabernacles above the choir stalls, the carved hammer-beams, and the polychromed roof. Additional touches of color of great significance occur in the embroidered dossal which will hang from just beneath the three-light sanctuary window to the altar, and in the painted, triptych-like shutters of the organ case.

It seems fitting to call attention to the height of the Chapel, height great in pro-
portion to the length and breadth, as one commonly sees ecclesiastical buildings designed in this country. Height is the one dimension most frequently ignored or deliberately sinned against, doubtless through ignorance, and yet height is one of the most vitally important factors to be considered. With the height as it is designed, the Chapel has a nobility and dignity that a lower structure of the same length and breadth could not possess. Furthermore, we must bear in mind that the action of height upon acoustics cannot be ignored. It is only when a building is of sufficient height that music will produce all the fine effects reasonably to be expected.

As the plans show, the single transept on the western side is not visible from within but is given over to the organ chamber and sundry vestries. The Deanery adjoins the west wall of the Chapel, and from the Dean's library, a commodious room two floors in height, there is direct ingress into the Chapel from both levels. Every possible requirement of a great collegiate chapel has been carefully studied and ample provision made for sacristies and spacious vestries for faculty, choir, students, and visiting clergy. The Dean's garden—sixty-two by eighty-eight feet in area, with its long pool, is a fascinating bit of intimate composition and, lying in the lee of a twelve-foot wall, is a veritable suntrap despite the northern exposure.

For the benefit of those so constituted mentally that they must needs tag and pigeonhole every piece of architecture according to style, it is easy enough to assign the Deanery, Library and other buildings to the Tudor Gothic category. Not so the Chapel, however. A careful examination of the plans, elevation and sections will show that it is partly English, partly French in inspiration. The proportions are distinctly Norman, and not a few of the details, as well as the arrangement of the south approach, betray strong Gallic affinities. On the other hand, the plan is purely English and so are endless details—it is not necessary to particularize—and in their provenance the details range from Early English to latest Perpendicular. Finally, the entire combination is welded and compacted into a coherent whole by a strong element of highly individual interpretation. Nowhere is there any suggestion of meticulous, pedantic archaeology; everywhere is evidence of the ready spontaneity that comes from saturation with precedent, saturation that begets an instinctive manner of designing rather than a slavish dependence upon specific prototypes. And it is just such instinctive designing that ensures vitality in the result.

Here it is necessary to draw a distinction oftentimes lost sight of, the distinction between style and expression. To take an extreme instance, for the sake of example, the jig-saw fretwork artists of the Centennial period chose to revel in Gothic forms. We cannot deny that the style they affected was Gothic. There is no other single name by which to label it. But heaven forbid that we should accept
their expression of Gothic, or deem it worthy of the name. Style is the corpus vile; expression is what makes or mars it.

The style of the Divinity School Chapel is Gothic, Gothic of several combined phases, which you may pick out and tag with generic names if you please, but the expression is wholly individual, and this individual quality it is that makes the result a vital living organism and justifies its existence.

The cavillers who decry the use of Gothic style for modern buildings, who censure it as a dead thing, who maintain that it is no longer fit to express modern requirements, and that its continuance means simply an ape-like copying of outworn forms, lose sight of a great truth. No style is dead until it has become completely ossified and rigid. So long as it is susceptible of elastic and fresh modes of interpretation it is alive.

Pedants have done their best, or their worst, to mummify the Classic styles by trying to confine their expression within a set of rigid rules and formulae. The Baroque Movement was a rebellion against this narrow attitude, and the Baroque Movement, despite its inherent Romanticism, gave Classicism, or at least Classic styles, a new lease of life. Classicism is certainly not dead, and surely the Gothic modes have still every whit as much life in them as the Classic. They need only sane and sympathetic interpretation. As a matter of fact, the Classic styles have been so badgered and tramelled by pedants and purists that flexibility is well nigh extinct. Gothic modes have not been pitilessly dissected by academic wiseacres to the same extent and their flexibility to understanding treatment has suffered less. In proof whereof, let any fair-minded person bear witness after a careful study of the subject before us.

As to the fitness of employing the Gothic style in this instance, that is purely a matter of preference. Christian architecture has found expression in Byzantine, Romanesque and sundry Classic forms as well as in Gothic, but it has become a matter of custom and tradition in the Gallican and Anglican portion of western Christendom to employ Gothic forms, so that the choice of Gothic for this collegiate group is the most natural thing in the world.

In maturing the plans for so noble a Chapel, the trustees have not only done well by the institution for whose affairs they are the guardians, but they are im-
pressing indelibly on the minds of each successive class of students an ideal of propriety in Christian worship that is bound to bear fruit in countless ways.

The beauty of the conception is self-evident, the fitness is obvious, the vitality is undeniable unless we are prepared to deny vitality to all architectural expression save the painful gaucheries of the ultra-modernists who fling all tradition to the winds. More we cannot ask in reason of any design, and we may await the completion of this group with confident expectation.

North End of Library
PHILADELPHIA DIVINITY SCHOOL, PHILADELPHIA, PA.
Zantzinger, Borie & Medary, Architects
AMERICAN GARDENS may be said to have little or no tradition. The art of garden¬
ing has not “evolved” in this country and, therefore, no type of garden stands forth as a chronological reflection of American conditions or as embodiment of American ideas from Colonial days to the present time. But why decry the fact! A long biography of stages and periods is not essential to garden excellence. Neither is garden character dependent upon a carefully traced genealogy. What opportunity lies before the garden makers of America if, indifferent to the lack of background and unabashed by the garden accomplishment of other countries, they give vent to the springtide of exuberant youth and express in forms of their own creating the garden idea that has been common to all nations.

It would be foolhardy, on the other hand, to suppose that the past in any art may be ignored. A child does not progress the more by refusing to accept the knowledge of his parents. Form, as a means of expression, is subject to universal laws of composition; material acquires meaning through association with what has gone before as much as by adaptation to an immediate end. The garden art of each country has certain general principles shared by all and a common mode of expression irrespective of the emotional trait inspired by the individual artist. Study of the garden development which has taken place through the ages will guide the enthusiast to quicker understanding and inter¬pretation of his emotions than if he places himself en loge immediately he senses a desire for self-expression.

There are those who will see in the term “style gardens” a menace—the naturalists who have not risen above mere beauty of unit material as found already organized by nature; they profess that a part is greater than the whole and essay a collection of units within a garden boundary. There are those who would avoid knowledge of gardens in other countries as certain enshacklement of free expression; they are at heart copyists, uncertain of themselves to the point of adopting blinders. There are others who seek garden enlightenment wherever to be found; it is for such that style gardens will have meaning.

It is profitable to memorize a beautiful poem, to make as part of oneself a splendid literary passage, to reproduce line for line, if one has the ability, the masterpiece of a great artist. The forced attention to every detail, to every finesse, discovers richness of art unrealized by previous observation. To duplicate intact a Le Nôtre garden would be a training-exercise better than an inspection of the life-time works of that great artist. To restore the garden of Villa Madama as it was originally conceived by Raphael would be an enviable apprenticeship.

The building of gardens in the fashion of countries other than one’s own, is not a process of imitation. The modern architect examines classical examples of the past for their significance. He does not reproduce outright, for the very salient reason that he must meet conditions vitally different. Italian gardens find favor in this country largely from a simi¬larity in land contour. Spanish gardens adapt themselves to American localities of similar climate. There are occasional examples of French garden design, but their need of intensive maintenance is a drawback to their popularity. The Amer¬
ican as a rule is not sufficiently patient to await the generations necessary for maturing the green gardens common to England. Japanese gardens, like Japanese art, will always be an importation. But in the analyzing of each garden, in seeking the why and wherefore of each characteristic to determine which type is best suited to a particular site or set of conditions, the American designer absorbs a wealth of training which he eventually will employ in the development of a garden essentially American.

Style gardens are a healthful sign—not to be taken as indication of restlessness or dissatisfaction with native design. It is a presentiment of future garden attainment in this country, a preparatory stage rich with promise. When the styles of other countries shall have been comprehended and the general technique of garden building shall have been mastered, individuality will appear in American gardens. Our designers, conscious of purpose to externalize an emotion from within, will find expression not in garden forms borrowed from other countries but in forms related to the vital processes of daily living, and will produce a style generically American. But it will not be immediately obvious nor startlingly different from what other countries of our same civilization have thus far produced. To quote from that portion of Dr. Oswald
GARDEN OF BENJAMIN Stern, ESQ., ROSLYN, N. Y.

M. du Chêne, Landscape Architect

Treillage is the cachet particulier of the French style. It adapts itself to shelters, backgrounds, and to all sorts of garden conceits.
GARDEN OF BENJAMIN STERN, ESQ., ROSLYN, N. Y.
M. du Chêne, Landscape Architect

Perrons, to mitigate the grade of a path or woodland walk, have become so familiar that they no longer identify French design.
The exèdre did not originate with the French designer and is common to all garden styles.

The allée couverte of French gardens is one in idea with the Italian ilex tunnel and the pleached alley of English gardens.
Spengler’s book on the “Decline and Fall of Western Civilization” which recently appeared in The Living Age: “Styles do not follow each other like waves and pulse beats. They have nothing to do with the personality of individual artists or with human will and intention in any form. On the contrary, style determines the type of the artist himself. Style, like civilization, is a primary phenomenon, whether it be the style of arts, religions, philosophies, or of life.” Our garden art is linked with that of the nations of our own civilization; we share rather than inherit their experience, we shall utilize the same forms, we shall employ the same means of expression, but the message which our gardens convey shall be our own, depending upon our emotions, our intelligence, our inspiration. There will be an American content to the twentieth century garden style.
GARDEN OF W. W. HARPER, ESQ., CHESTNUT HILL, PHILADELPHIA, PA.

Over punctuation of walk intersections is an heritage to be disclaimed in America.
GARDEN OF W. W. HARPER, ESQ., CHESTNUT HILL, PHILADELPHIA, PA.

Intricate topiary work which takes generations to perfect is rarely found in America, even in English type gardens.
There are spots in many gardens that nervously lack style.
The gardens of Japan mirror a civilization distinct from our own. The style will not naturalize in this country.

Exquisite Japanese form-language becomes jargon in America; benign symbols, pretty nothings. One cannot cage the butterfly.
GARDEN OF WILLIAM R. COE, ESQ. OYSTER BAY, L. I.
Olmsted Bros., Landscape Architects

Jubilance in beauty of material is a first evidence of America's desire for gardens
GARDEN OF WILLIAM R. COE, ESQ., OYSTER BAY, L. I.
Olmsted Bros., Landscape Architects

Flower forms are unit beauty and in themselves do not denote garden inspiration.
A garden of Japanese suggestion but essentially American
Plant "collections" convey at best a materialistic message

GARDEN OF LEWIS H. LAPHAM, ESQ., NEW CANAAN, CONN.
Olmsted Bros., Landscape Architects

An impositive style evades emotion and the responsibility of expression
GARDEN OF WALTER SCOTT-FITZ, ESQ., MANCHESTER-BY-THE-SEA, MASS.

A spontaneous type of garden with an American impress

GARDEN OF CHARLES H. SABIN, ESQ., SOUTHAMPTON, L. I.

Marian C. Coffin, Landscape Architect

Interpretation of exotic fragments enrich a garden but contribute nothing to its gems

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GARDEN OF SAMUEL UNTERMYER, ESQ., YONKERS, N. Y.
Welles Bosworth, Consulting Architect
Chas. W. Leavitt, Landscape Engineer

Spanish fountain bowl and canals; Italian doubling of columns; Greek sphinxes;
English wall cresting; French lattice; German plates-bands; The American garden may
comprehend all form-ideas of like civilization but will develop an identity of its own
PRINCETON CLUB, NEW YORK CITY
Aymar Embury II, Architect for Alterations

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PRINCETON CLUB, NEW YORK CITY
Aymar Embury II, Architect
PRINCETON CLUB, NEW YORK CITY
Aymar Embury II, Architect

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PRINCETON CLUB, NEW YORK CITY
Aymar Embury II, Architect
JOHN HANCOCK BUILDING, BOSTON, MASS.

Parker, Thomas & Rice, Architects
JOHN HANCOCK BUILDING, BOSTON, MASS.
Parker, Thomas & Rice, Architects
MUNICIPAL TUBERCULOSIS SANITARIUM, CHICAGO, ILL.
Jarvis Hunt, Architect
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MUNICIPAL TUBERCULOSIS SANITARIUM, CHICAGO, ILL.

Jarvis Hunt, Architect
St. Ansgarius Chapel
CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY
Henry Vaughn, Architect

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St. Ansgarius Chapel
CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY
Henry Vaughn, Architect
St. Ansgarius Chapel
CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY
Henry Vaughn, Architect

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"The Sacrifice"

ST. ANSGARIUS CHAPEL, CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY

Malvina Hoffman, Sculptor
"The Sacrifice"

ST. ANSGARIUS CHAPEL, CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY

Malvina Hoffman, Sculptor
There is a general tendency, even in the denominations whose services savor the least of ritualism, to get away from the meeting-house type of church. This tendency is illustrated by the new Tabernacle Presbyterian Church in Indianapolis, by J. W. C. Corbusier and R. F. Daggett, associated architects, which embodies the essential qualities that give impressiveness to French churches of the fifteenth century.

The nave, proclaiming the dignity of the sermon in the Presbyterian service, departs from medieval precedent in the matter of width, to insure an uninterrupted view of the pulpit from every pew, and the side aisles have been narrowed to mere passageways. To give this broad nave a suitable effect of height, all vertical lines are emphasized and the ceiling of the narthex, through which the nave is entered, is kept very low. The front rails of the galleries occupying the transepts are kept back midway of the piers in order that they may not conflict with the vertical lines so essential to the effect of height in the nave. A double row of lanterns, suspended from the brackets which carry the trusses, gives an added sense of length.

The chancel is made impressive by a succession of features built up one above another, commencing with the baptismal font which terminates the middle aisle. Back of this and raised three steps is the long communion table, with benches behind it for the elders, and a canopied seat for the minister. The pulpit platform, which is five steps higher still, is protected by the high back of the communion seats, and the canopy of the middle seat is developed into the pulpit front. The high wainscot back of the pulpit platform, with the traceried canopy of the minister's stall, form a screen for the choir which occupies the remaining space in the chancel.

The woodwork is of oak richly carved with tracery and ornament in which symbolism plays a considerable part. The vine is used freely, as are verses quoting the words of Christ, and a series of shields on the panels of the communion table bear further Christian symbols. A liberal use of gold and color enhances the value of this enrichment and also relieves the severity of the browns which predominate in woodwork and floor tiles, and the greys of stonework and plaster. Another color note is introduced in the seat cushions, which are blue.

Symbolism has been employed in planning the structure of the church as well as in the ornament; the nave is divided into seven bays, recalling the seven original churches; the windows over the chancel and choir are in five sections, representing Christ and the four Evangelists; the clerestory windows in three divisions refer to the Trinity, and the double windows of the side aisles, to the Old and New Testaments.

The exterior, dignified and churchly, is of smooth faced rubble, the color of which ranges from warm grey to tan. In the near future additional buildings will be erected to house the Sunday School and gymnasium, each department having its own assembly hall, and provision will be made also for the executive offices. All will be designed to form a consistent and harmonious architectural group.
TABERNACLE PRESBYTERIAN CHURCH, INDIANAPOLIS, IND.
J. W. C. Corbusier and R. F. Daggett, Associated Architects
First Floor Plan

TABERNACLE PRESBYTERIAN CHURCH, INDIANAPOLIS, IND.

J. W. C. Corbusier and R. F. Daggett, Associated Architects
TABERNACLE PRESBYTERIAN CHURCH, INDIANAPOLIS, IND.
J. W. C. Corbusier and R. F. Duggett, Associated Architects
In the Villa Trianon at Versailles, close by the borders of the palace park, we find a happy example of the sort of dwelling characteristic of this city that grew up in intimate connection with the complex life of the court. The qualities of intimacy, comfort, and simple elegance are successfully combined in the scheme of domestic existence contemplated.

The gate-keeper’s lodge is the most ancient feature of the estate, and dates from the forepart of the eighteenth century. From the gate a short, straight drive through a pleached avenue of lime trees leads to the long west front of the house, a structure dating, in its present outward form, from the beginning of the nineteenth century. The north wing is a recent addition. The walls are stuccoed and painted grey. Viewed from the garden front, the line of division between the old and new portions of the house is clearly indicated by the variation in the roof treatment.

It was at first intended to add a new south wing, similar to the north wing, but it became apparent that too many desirable considerations would have to be sacrificed in carrying out this plan of fully symmetrical composition, and so the project was abandoned. The veranda, it is hardly necessary to state, is a wholly modern feature. The extra accommodation for guests, which a south wing would have supplied, is partially afforded by an interesting little old guest house, of earlier date than the dwelling, to the west of the forecourt.

Although the garden arrangements are of recent execution—due, in large part, to Miss Elsie de Wolfe, one of the owners—they are thoroughly in keeping with local French tradition, and afford an invaluable object lesson in the creation of gratifying results within a limited urban area. Especially engaging is the trellised music pavilion, with the long pool in front, set in its own enclosure. The treillage-covered walls are a blithesome conceit, in keeping with the character of the structure. The music pavilion and its immediate surroundings were designed by M. Greber, and are worthy of that able French architect’s reputation. The treillage enclosing the water garden in front of the music pavilion, separating it from the rest of the garden area and completing the unity of the composition, presents a fascinating bit of design that will bear close study.

At the far end of the tapis vert, and closing the direct vista from the house, the large treillage screen with niches and figures is a work of Miss de Wolfe’s own devising, and forms a successful and urbane feature of garden embellishment. All the treillage is painted green. A diverting bit of gardening in the ancient manner is the little parterre de broderie immediately in front of the veranda. Here the design is wrought in low box plants, while the background is composed of red and white fragments of stone, separately disposed. The tea arbor and its approach, all in clipped yew, recall in pleasing manner the gardening practice of an earlier day.

Within the house the architectural feature of greatest moment is the exquisite boisserie in the drawing room and the little ante-room to the north of it. This is painted a pale green.
Garden Front
LA VILLA TRIANON, VERSAILLES
Plan of Ground Floor

La Villa Trianon
Boulevard Saint-Antoine
Versailles

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Music Pavilion

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LA VILLA TRIANON, VERSAILLES
The Approach

LA VILLA TRIANON, VERSAILLES

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End of Salon and Antesalon

LA VILLA TRIANON, VERSAILLES

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Dining Room
LA VILLA TRIANON, VERSAILLES

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La Villa Trianon
Boulevard Saint Antoine
Versailles
LA VILLA TRIANON, VERSAILLES

Tea Arbor in Clipped Yew

Garden of Pavilion
"MOONLIGHT, PUEBLO DE TAOS"
Painting by E. Irving Couse, N.A.
When a colony of painters settled at Taos, New Mexico, some twenty-five years ago, few people in the Southwest or elsewhere had any adequate idea of the possibilities of Indian art as a basis for the architecture and decoration of modern buildings. Indeed, a mistaken zeal for progress was "modernizing" beautiful old adobe churches by tearing down the softly modeled belfries and replacing them with ugly, incongruous tin steeples. Tin roofs were ridged above authentic mission walls with absolute disregard for the splendid unity of design which the original structure represented. It was worse than combining ready-made overalls with Indian moccasins and blanket.

Consciously and unconsciously, these painters at Taos, and others who came later to Santa Fe, began to point the distinctive practical values of primitive art as they interpreted Indian life and character in their paintings. And they labored to preserve the ancient churches and pueblos as the Spaniards had left them. In short, they opened the door upon a unique phase of primitive culture. The Pueblo tribes of the Southwest are the only North American Indians who produced architecture. Their isolation made the development a distinct, homogeneous one. The sculptured form of their pueblos is simple and elemental, like their highly conventionalized symbolic drawings.

"The Indians were the first Cubists in this country," observed a Taos painter, pointing out the details of a Pueblo drawing on his studio wall.

The stark simplicity, the crude, direct grasp of essentials in Indian pictorial art is strikingly allied to the less complicated architectural composition. The white painters of Indian subjects naturally came to appreciate these fundamental, native qualities, and in bringing them to the attention of architects have contributed largely to a new art impetus that is influencing New Mexico building.

Such a painting, for instance, as E. Irving Couse's "Moonlight, Pueblo de Taos," reveals the beauty and strength of the Indian community dwelling. It was both a home and a fortress. And the Indian made it an honest expression of the purpose. He didn't try to make it look like anything else, and so he achieved a unique structure, at once massive and intimate. The painting emphasizes the simplicity and restraint of the pueblo together with its sensuous softness of outline and gracious sweep of terraced wall. Many paintings of buildings and other subjects embodied an appreciation of the Indian's direct and sincere mode of expression. They showed his realization of the essential union of beauty and utility in his pottery, basketry and weaving as well as in the rude simplicity of his clay houses.

No merely idle objects of decoration cluttered the severity of the primitive hearth. The interiors of mud-plastered huts were brightened by gaudy baskets, meal bowls and blankets that were in daily domestic use. Altars were adorned with painted feathers and other decorative religious symbols. Even clay ovens were softly modeled details of plaster beside brown adobe doorways. Spanish influence refined and amplified without corrupting this unified simplicity, and under the lead of American painters, American builders and decorators have learned lessons of daring and of restraint. It was a wholesome reversion from certain gingerbread artificialities which had begun to encumber the new wooden bungalow of many western communities and from the rigid conformity of charac-
terless brick business blocks in our cities. Artists made their homes and studios in ancient adobe houses that with very few changes became most satisfactory living quarters. They studied the Indian’s symbolism, his dramatic ceremonial dances, his unmatched vigor and variety of decorative design. They saw the beauty and inherent fitness of his architecture, its striking adaptation to the

SUNMOUNT SANITARIUM, SANTA FE, NEW MEXICO
Rapp & Hendrickson, Architects

desert and mountain environment. The rugged, block-like plan of the pueblo affords excellent balance without uniformity, and it is as inherent a part of the setting as one of the bulking, windsculped mesas. Deep walls and windows shut out desert heat, and cool, shadowy patios are a relief from desert glare.

The Spaniards, like the Indians, were limited by materials, which in this isolated, half-arid region consisted solely of logs, sticks and sun-baked clay. The wood often had to be brought from great distances, and so adobe, or sun-hardened bricks, were used chiefly, plastered over with an adhesive clay found in the desert. The early mission churches here were also largely the work of Indian builders under the direction of Spanish priests, and so the plasticity of the primitive type was easily lifted to a simple, ecclesiastical form, and the missions rose naturally out of native models. Both churches and dwellings kept a distinctive Indian character which Spanish architecture in Cali-
dian's culture, of the freedom and poetry of his communal existence, finally led modern architects to find in his primitive construction a basic elemental form which the Spaniards had intelligently elaborated and which possesses possibilities of further adaptation to specific and complicated needs. It was a kind of new A-B-C of architecture, a form traceable directly to the crude mud cave, and yet presenting a most logically unified progress. Isolated from alien influences, it was a natural, spontaneous expression of the time, the place and the people, and as such an appropriate foundation for continued development.

The painters had delighted in the color and texture of adobe walls which mellow the brilliant New Mexico sunlight and glow pink and golden under the beaming skies. It was found that different varieties of clay produced these varied colors, and that contours were rounded and softened by annual replastering as the adobe wore down in wind and rain. Modern plaster is more durable and does not require the frequent doing over, but modern builders have achieved the effect of Indian hand-modeling by blunting corners and eliminating all rigid rectangular lines. They are also using the pink, buff and blue coloring and the irregular surface finishing which gives quality to the walls.

Once the architect began to look at this distinctive American construction as a harmonious and consistent growth, he found fascinating suggestion and inspiration for a community type of building which is singularly individual and indigenous. He began to see that it was honest, economic and varied, and admirably suited to the climate and landscape of the Southwest. In adapting it to modern use some bad mistakes have been made, but many painstaking and sympathetic developments show the style successfully exemplified in private homes, school houses, office buildings, hotels and railway stations.

Ingenious details of interior decoration have proved as interesting and har-
monious as the more obvious exterior designs. Heavy beams were gouged and the irregular dents painted in crude blues, reds, yellows and greens, with a gorgeous richness of effect. Split aspen twigs were arranged in herring-bone patterns to make soft gray ceilings. Candle niches cut into the walls, corner fireplaces and frescoed borders are features which have been used in modern homes with charming results. The Taos home of E. Irving Couse, which was once a Spanish convent, has the old doorway, the mission bell and open belfry, and a long, cloister-like porch around the central patio. Typical Mexican fireplaces, beamed ceilings and deep wall seats and niches are in the simple and spacious interior. This house, shut away from the street by a stretch of solid wall, presents in its vine-draped patio the sunny, shadowy seclusion which adapts the type to domestic uses.

New homes and studios have been built in the Spanish-Indian style, and the whole town of Taos has been kept a remarkably primitive spot with a fascinating open-air spirit in plaza and patio. The striking individuality of the New Mexico architecture makes it excellently suited to community building and peculiarly inharmonious in combination with other distinctly contrasting types. Its freedom and variety make it remarkably self-sufficient. Its historic flavor carries on the old Spanish-Indian atmosphere which is still a vital influence in the life of the Southwest and which the Taos painters have so consistently interpreted.

Tyrone, Santa Fé and other towns have begun to realize the unique opportunities of this development. And the basic motif of the type has been carried out in such interesting isolated groups as Valley Ranch with the hospitable Apache Inn. A kinship with the Moorish is often felt in the squat bulk and rounded contours, and this has been stressed by builders who have felt strongly the plastic sensuousness of the mode. The State School for the Deaf and Dumb, the Museum of New Mexico, the Santa Fé Water and Light Company office, the Tyrone public school, and hundreds of private dwellings illustrate the dignity, strength and livableness of this modern architecture inspired by models of primitive art.
THE GEORGIAN PERIOD

“The Georgian Period,” (U. P. C. Publishing Co., Inc. New Edition, 1923. Six Parts, Folio. $60.00), whose original publication by the American Architect began in 1898, needs no introduction. Ever since its first appearance it has been regarded as an invaluable storehouse of reliable data concerning the early architecture of America, both domestic and civil. The numerous examples recorded by measured drawings, text cuts, and large half-tone plates afforded a vast store of just such accurate information as the architect most needed, and it is safe to say that no book of its character—none has been nearly so exhaustive in scope—has exercised a more profound, a more enduring or a more wholesome influence.

Other books have appeared from time to time, treating of various portions of the ground covered, but “The Georgian Period” has never been superseded by these subsequent publications, no matter how excellent they might be, nor has its value been lessened. One may say, indeed, that the greater number of more recent books have in the main supplemented “The Georgian Period” by setting forth additional examples drawn from specialized localities.

“The Georgian Period” not only covered the time when dwellings and civil buildings of purely Georgian affinities were being erected throughout the length and breadth of the country, but also gave numerous examples of the earlier and truly Colonial work. It was the pioneer and it blazed a broad trail, awakening a general consciousness of the rich architectural treasures in America and quickening the popular sense of appreciation. Whoever has done any work at all in this field cannot fail to acknowledge the heavy debt of gratitude we owe to this book. Nor, while recording our obligations, should we overlook the fact that therein are contained records of not a few buildings that have since been demolished, perished by accident, or suffered a fate equally deplorable either through alterations or senseless mutilations.

The one drawback to the use of “The Georgian Period” hitherto has been the inconvenient manner of its arrangement and the lack of proper indices and cross references, so that it was often difficult to lay one’s hand on some particular example desired, or to find just what one wanted for purposes of comparison.

In the revised edition just published by the U. P. C. Book Company, Inc., all these shortcomings have been remedied. A complete rearrangement has taken place, the work being now divided into six parts, of which Part I contains indices and text. The other five, in portfolio form, contain the plates and measured drawings, some new material here being added. Furthermore, the plates are now logically arranged in sequence under the headings of Houses, Churches and Public Buildings. Another feature of arrangement that commends itself is the geographical grouping of the several subjects. Thus, for example, Part II contains houses in Maine, New Hampshire and Massachusetts only.

In Part I are now duly and conveniently tabulated the list of contributors; numerical and alphabetical chronological tables; alphabetical, geographical and subject list of plates; table of contents; and an index to the text. No pains have been spared to make the new edition thoroughly usable, and with the improvements in arrangement and the careful and full indexing and cross indexing, the work will enter upon the new era of service.
A VALUABLE ADDITION TO THE
AESTHETICS OF ARCHITECTURE

It is only at rare intervals that the reviewer experiences that combined sensation of pleasure and responsibility which is produced by Professor Rhys Carpenter's book, "The Aesthetic Basis of Greek Art." Originality, tempered with cool judgment, scholarship, and a singular aptness in his mode of expression, are sources of unmixed enjoyment; a sense of responsibility arises when the limits of reviewing space are measured against the wide range traveled by the author, with the difficulty of condensing information which is already reduced to the tersest form of statement. As the title indicates, the subject is vast; the work treats of a multiplicity of aesthetic factors, estimated from unaccustomed points of view; the author draws parallels and makes scientific dissections of impulses and properties in skillfully arranged sequences: our space is inadequate for the suitable consideration of that part which treats of architecture alone. He develops the architectural theme from the most neglected angle—the purely aesthetic: but it is to be hoped that the extremely practical nature of his deduction and speculation will be productive of tangible results in the practice of his readers. A careful perusal of this excellent work will bring home to the architect the fact that in the adaptation of the orders there are vital points of view which do not figure in modern effort; also, that the vagaries of intuition are not the sole means for an ideal adjustment of integral parts in an architectural composition; the Greeks, in the evolution of their masterpieces, adopted forms of regulation which might be revived with considerable benefit.

The generative impulses from which the various phases of Greek artistic activity proceeded are identified with great skill: and knowledge is imparted as to the extent to which logical argument guided structural evolution. The author is in no way overwhelmed by the artistic prestige of the Greeks as architects; with every evidence of keen appreciation of beauty created, his critical faculty compels the uncompromising statement of serious shortcomings, as revealed in their lack of invention in planning; deficiency in imagination, which prevented their visualizing the relation of the structure to its surroundings; and their willingness to copy and recopy a meagre repertory for generations as though it were the sole manner in which to build. He discovers an extremely interesting point of resemblance between their mental processes in philosophic thought, and their conception of the structural problem. In Greek philosophy the concrete visual image was habitually attached to the abstract universal content—not the mass, not the material constitution, not the physical behavior, but the seen appearance was for them the essential: to know what a thing is they must know the look of it. The objects that man made—his implements, his places of shelter, his furniture—these, too, came ranged in species.” This is particularly applicable to the typical forms of the potters to which they adhered, practically without change, for centuries: the work of the architects reveals a similar trait—how could there logically be different temple-plans when there is only one purpose for which temples are used, one identical force of gravitation to combat and master, one rain and sun to oppose?” The Greek architect sought perfection of form in the specific type, not variety and originality in varied expression; when he realized what appeared to be the ideal version, experimentation ceased. The Corinthian capital is regarded by the author as the only important innovation subsequent to their standardization of structural design, which he aptly describes as the “tyranny of canonical form.” His views concerning the aesthetic status of those features in the stone structure which were derived from the wooden structure are well worth considering. He concludes by saying: “By immemorial tradition they survived, and just because logic made no demands for their existence, it made no demands about them at all. They had come into existence and now persisted in their own right as established species.”

In an admirable train of thought he accounts for the Greek tenacity of architectural forms; excerpts from the author's argument convey a very inadequate idea of the numerous theories expounded. In defiance of all precedent, architecture is classed as a representational art: “It has to invent its objects first, before it can use them. And so, by the preference of generations of men, it settles upon those types and patterns which most commend themselves for their grace or expressiveness or utility or simplicity, and these become its world of real objects which it imitates and represents amid those formal relations which physics will permit and good taste commend. The fundamental in such a theory is the assertion that, in spite of appearances to the contrary, architecture tends to become a representational art, and that it imitates and represents a conventional world of its own creation.” Professor Carpenter proceeds to state later that “Greek architecture, indeed, is the outstanding instance of this practice of establishing an artificial language by
convention, in order to communicate architectural emotion."

The influence which the Pythagorean geometric investigation exerted upon the arts is explained: he describes the manner in which the intangible and invisible occurrences in sound, "seemingly unruled by anything but a fortuitous concordance among themselves—suddenly admitted their allegiance to the tyranny of geometric number." The Greeks held ratio and number as the controlling factors in the universe, "in the path of the stars, in the construction of material things." This is described as a cardinal assumption in Greek practice.

"There is a true form for every class of objects, and that such a true form is characterized by its geometric simplicity, by the commensurability of its component members." This principle is applied to the orders by analysis, showing the generative ratio of the Doric to be 2 to 1, and that of the Ionic to be 3 to 1. The architectural refinements are commented upon as follows: "The employment of the Greek 'refinements' would be neither useful nor explicable if these did not constitute appreciable departures from clearly recognizable and already familiar norms. As Greek philosophy might have stated it, the eidos is characterized by mathematical perfection; this perfection is somewhat obscured when the eidos is imprinted in matter; but it is precisely from its minute deviations and irregularities from the standard form that the individual instance derives its individuality and its right to a place in the phenomenal world of sense." This influence of ratio and number upon the proportional adjustment of integral items in the orders is explained in detail in an unusual and convincing manner. The author further states: "It would follow that Greek architecture, in order to make its use of number effective, must have been an architecture of planes rather than of solids. This was precisely the case." He takes the standpoint that Greek architecture is in two dimensions only—"since its appearances all lie in parallel or perpendicular planes, it can only define or bound a solid space, and cannot enclose it."

An extremely interesting argument is developed concerning the influence of climatic or atmospheric conditions upon the evolution of architectural types of two or three dimensions: this is extended to cover the evolution of pattern.

In the space available here it is impossible to do justice to this unusual and scholarly work. The manner in which aesthetic abstractions are reduced to specific terms in scientific form, might be taken as a model for recording research of this character. Architectural criticism of to-day is too frequently merely a record of the personal predilections and prejudices of the writer, and as such has no constructive or historical value. As Professor Carpenter's book is studied, we become more than ever sensible of the high value of the impersonal and scientific quality in architectural criticism. Our only regret is for the way in which the book is printed; the Bryn Mawr Monograph appears to have taken the Mid-Victorian Book of Devotion as a typographical model.

LEON V. SOLON.

SCANDINAVIAN ART
By Carl Laurin, Emil Hannover and Jens Thiiis

Introduction by

Christian Brinton

Substantial merit is so often brazenly assumed for books possessing no really valid raison d'être that when a volume of obvious and unquestionable value appears with a modest prefatory note of justification it forthwith bespeaks a favorable attitude and interested perusal on the part of the reader. A note on the fly-leaf of this work (The American - Scandinavian Foundation, New York, 1922) apprises us that "this series of SCANDINAVIAN MONOGRAPHS is published by the American-Scandinavian Foundation to promote the study of Scandinavian history and culture, in the belief that true knowledge of the North will contribute to the common profit on both sides of the Atlantic."

This announcement not only sets forth clearly the aim of the book, but gently and tactfully administers a rebuke that not a few of us can take to heart—the politely couched insinuation that our acquaintance with the art and culture of Sweden, Norway and Denmark might be far more extensive than it is with distinct advantage to ourselves. The veiled indictment of our ignorance of things Scandinavian, it must be confessed, is well deserved. It loses none of its force by its gentleness. Our knowledge of architecture, painting, sculpture and the other arts in England, France, Italy, Spain, Holland and Belgium, we usually pride ourselves, is fairly full and accurate. It is almost a matter of conscience with us that it should be so; we deem it a necessary part of our education. But we have been singularly indifferent, for the most part, to parallel developments in the Scandinavian countries.

While it is true that the Scandinavian contribution to the sum total of achievement in the arts may not have been comparable in moment and extent to the contributions of the other countries mentioned, nevertheless, we can ill afford to ignore the performances of three peoples, all of them characterized.
by vigor and strong national individuality. Much of their inspiration, to be sure, they have borrowed from other countries—What country is not the debtor of others, in this respect?—but with their borrowings they have blended not a little of their own hardy national expression so that their work bears a markedly individual impress. After all, no matter what the model of style, the bias of interpretation is the illuminating element, whether it be the bias of a whole country or of only one single exponent. And from Scandinavian forms of interpretation we can learn some fresh lessons.

Following Dr. Brinton's scholarly introduction, which is chiefly devoted to a critical discussion of the various schools of painting that have obtained in Scandinavia, comes a tri-partite division of contents, the first section, by Carl G. Laurin, being a survey of Swedish art, the second, by Emil Hannover, Director of the Danish Museum of Industrial Art, presenting Denmark's achievements, and the third, by Jens Thiis, Director of the National Gallery in Christiania, dealing with the art of Norway. The arrangement is all one could wish for the sake of clarity and convenient reference, and the numerous half-tones are well chosen and comprehensive in the field they cover.

In each of the three sections the major portion of the text is given over to the story of painting, and while now and then an entire chapter is accorded to such an eminent master as Eckersberg, Marstrand or Munch, there are so many painters to record that many of them have but a paragraph or two and in some places this necessarily condensed manner suggests a catalogue rather than a critical treatment. Nevertheless, despite the hard reading thus entailed at times, the book supplies an invaluable conspectus of Scandinavian painting and excites a desire to know more of the men and their work.

Sculpture and architecture figure less prominently than painting, but there is an admirable chapter on Sergel, and the three chapters occupied with the history of Swedish architecture and the decorative arts are replete with interest. There is also a good chapter on modern Swedish architectural developments and, in his discussion of modern plastic and decorative art, the author hopefully observes, of the popular attitude in his country, that "in recent times we have come back to a realization of the fact, which is as clear as day, though so often ignored, that beauty should brighten all life, that paintings and statues should be found, not only in museums, but also in offices, in schools, on street corners, in barracks, and first of all in our homes." And while chronicling this reawakened art consciousness he pertinently points out that "during the golden periods of art the relation between art and industrial art has been intimate and fruitful. It was so in Greece, and it was so during the Renaissance, and in the eighteenth century, as it is in Japan. After periods of degeneracy and barbarism in industrial art—brought on by the misconception that machines can do work as artistically, in other words as personally, as human beings—new forces have begun to work. No machine in the world can replace an artist; no loom can weave a Gobelin tapestry as a skilled artisan does; no photographic apparatus can produce so good a portrait as a good painter, any more than a music box can take the place of a musician." Would that more people in this country fully recognized that truth!

The chapter on Danish architecture is short but stimulating, and one cannot help feeling that some of the aspects only alluded to casually invite us to alluring avenues of investigation, especially in those directions, both ancient and modern, where a strongly national trend has distinctly manifested itself. After the illuminating presentations of Swedish and Danish architecture, it is cause for regret that no attention has been paid to Norway in this respect. Notwithstanding the assumed and well-nigh inevitable similarity between Swedish and Norwegian forms, there must be sundry local peculiarities and of these we should like to know something. The fresh, robust tone informing not a little of the Scandinavian work, and its virile individuality, are qualities that commend themselves for profitable study in any of the fields this book traverses so engagingly.

Harold Donaldson Eberlein.

Apologies are due to Mr. Willis Irvin, architect, of Augusta, Ga., whose name was omitted in connection with our mention of the Bon Air Vanderbilt Hotel at Augusta in our May issue. Mr. Willis secured this job and much of the work on the plans was done in his office prior to his association on the undertaking with McKim, Mead and White, of New York. Mr. Irvin informs us that his office is now directing the erection of a $500,000 addition to this hotel.
THE list of notable buildings where CHASE Brass Pipe has been specified and installed reads like a roster of the finest and most up-to-date edifices in America. The advantage of Brass Pipe is acknowledged—the advantage of CHASE Brass Pipe is indicated by its extremely wide use and proved by the extraordinary care taken throughout the entire course of its manufacture. We honestly believe that CHASE Brass Pipe has no superior: its popularity among discriminating architects suggests that it can have but few equals.

CHASE METAL WORKS
Division of Chase Companies Inc.
WATERBURY, CONNECTICUT
CHASE METAL WORKS
CHASE BRASS PIPE
CHASE ROLLING MILLS

Turk's Head Building, Providence, R. I. John Mead Howells, architect. Equipped with CHASE Brass Pipe.
THE TEMPLE OF ATHENA, AKROPOLIS, ATHENS

Restoration by Wiegand
All lovers of peace and concord will remember the high hopes which were raised in the minds of those who desire world-wide peace, when the late Andrew Carnegie made the announcement of his great gift for the purpose of founding an Arbitration Court for the settlement of international disputes. To many it seemed the dawn of the millennium. In this connection the following sentences from the deed setting forth the donor’s instructions for founding a Trust under the laws of the Netherlands, for the encouragement of international peace, may be of interest.

"Believing that the establishment of a permanent Court of Arbitration by the Treaty of 25th July, 1899, is the most important step forward of a world-wide humanitarian character which has ever been taken by the joint powers, as it must ultimately banish war; and further being of opinion that the cause of the Peace Conference will greatly benefit by the creation of a Court House and Library for the Permanent Court of Arbitration, I, Andrew Carnegie, of the City of New York, am willing to furnish a sum of one and a half million of dollars for the said purpose. . . ."

The site secured for this purpose is about sixteen acres, convenient in location and admirable in every way; it is an historic spot, the pleasance of royalty, beautifully furnished with fine timber, mostly beech and elm, which give to the site the charm of a Hobbema landscape, and a seclusion which is peculiarly appropriate to and expressive of Peace.

The international competition for the design of the Palace, which followed the acquisition of this site, was the event of the year, attracting the ablest men from every country. In the final result M. Cordonnier was awarded the first premium, being appointed, in collaboration with Mr. Van der Steur, a leading Dutch architect, superintending architect for the erection of the Palace.

Shortly after the acceptance of the designs for the Palace, it occurred to the trustees that they ought to have a scheme for the layout of the gardens. In furtherance of this, they instituted a limited competition, in which the writer was awarded the first place, and afterward appointed landscape architect to carry out the work. M. de Wilde, a well-known landscape architect from Brussels, was second favorite; his scheme was
so excellent that the assessors must have experienced difficulty in reaching their decision. As the two schemes are interesting as showing the English and Belgian point of view, I have pleasure in giving, as the first illustration to this article, the landscape plan submitted by M. de Wilde.

The problems to be dealt with were in many ways unusual, and such as seldom come within the practice of an English landscape architect. In the first place, although not primarily intended to serve the purpose of a public park, ample space had to be provided for the pleasure of a large number of diplomats and visitors on special occasions, and in particular to make very accessible the approaches to the main entrances and provide for the easy gyration of a large number of automobiles. In the second place, the character of the edifice seemed to call for the emphasis of a quiet, restful dignity in the gardens, and for the preservation so far as possible of all existing shade trees within the grounds. There was a stream passing through the northern part of the grounds, the levels of which had to be maintained, whatever water treatment was decided upon for the surrounding layout. The chief difficulty was in the nature of the soil, which was almost pure sand, with a depth of only some thirty inches or so to the water level.

In our original scheme the gardens were designed to fit the architect’s accepted design for the Palace, but in the interval which elapsed between the acceptance of this original competitive design and my own scheme for the gardens as executed, such alterations had been evolved in the building plan as called for drastic modifications. This was particularly so in the case of the carriage court and entrance and the terracing on the north side.

Apart from the modifications necessitated by the replanning of the Palace, other factors operated which had considerable bearing upon the work executed. Originally I proposed a modification of the existing boulevard along the eastern boundary of the property to focus the axis of Scheveningen avenue upon the Dutch tower as its focal point. The city authorities were not sympathetic towards external improvements which might interfere, as they thought, with any projected town planning scheme for the Hague. The most important factor, however, operating in the modifications of our scheme was the presentation to the trustees of the piers, wing walls, and wrought iron gates by the Kaiser. This foreshortened the carriage court with its flow-and-return drive and suggested the advisability of omitting the fountain and the obelisk surmounted by the statue of Peace, and led to the adoption of a ramped carriage way to the main Palace entrance. In the execution of this eastern part of the scheme we decided to adopt a freer treatment in the plantations, omitting the pleached lime avenue and securing color interest in flower borders.

By far the most interesting part of the scheme is the north front where the space is ample and expansive. Moreover, the property is secluded on this side by the embankment and existing timber, which completely screen the gardens. There is also a welcome break in the levels on this side; first the upper terrace, then the level of the canal, and finally the tree covered embankment already referred to. The illustrations show the value of the garden setting, enhancing the Palace building and the excellent proportions which the available width of ground permitted; the central portion of the canal and the northeast corner of the Palace. Unfortunately the photographs were not taken in the time of roses, when the two panel gardens on either side of the canal, which are planted with several thousand tea roses, arranged in a graduated color scheme, were in bloom.

With the two terminal bridges which mark the intake and outlet of the canal, is combined a pergola treatment, clad with climbers of interesting foliage. Owing to the water level being so near the surface, the construction of the ornamental canal was a matter of some difficulty but fortunately these are problems which the Dutch contractor (and the nation generally we may say) are constantly called upon to tackle. The whole canal
Plan of Gardens

PALACE OF PEACE, THE HAGUE, HOLLAND

H. de Wilde, Landscape Architect
Plan of Gardens
PALACE OF PEACE, THE HAGUE, HOLLAND
Thomas H. Mawson, Landscape Architect
had to be in reinforced concrete, and is so excellently executed that there has never been a leak. We have only one regret—the glaring white nondescript urns which formed no part of our scheme.

The gardens at the west end of the Palace were suggested by the contours which here are more varied than elsewhere, and the fringe of forest and undulating glades. These suggested a simple and effective treatment, with as little interference as possible with the natural contours and umbrageous effect of shade trees. The space immediately between the Palace and the radiating panel gardens, is laid out as a secondary carriage court, partly for departing automobiles on state occasions. The panel gardens are planted with what we call American plants, such as Gaultheria, Erica, Andromeda, Azalea, Kalmia and Rhododendron of the early flowering varieties. The central glade leads up to an old mount which is chosen as the site for a Temple of Peace, not yet erected, the glen leading thereto being hedged with tree box.

Along the southern boundary there was little opportunity for any landscape effect, partly because the central part of the southern wing was apportioned to the service department, including the heating apparatus, and also because the boundary follows the line of a light railway with its unsightly station building and sheds. Therefore, after laying down the service road, my energies were directed to the preservation of all existing timber trees, supplemented by the planting of such undergrowth and shrubs and trees, as would quickly screen off the unsightly buildings and the property beyond. The results are exceeding our best expectations. Needless to say, in order to maintain the foliage and floral effects, many hundreds of cubic yards of fibrous peat and loam had at considerable expense to be incorporated with the soil to enrich it. This expense has been fully justified.

It only remains to be said that my son, E. Prentice Mawson, was actively engaged with me in the preparation of the designs and in the execution of the work.
Gardens

PALACE OF PEACE, THE HAGUE, HOLLAND

Thomas H. Mawson, Landscape Architect
Ornamental Canal

PALACE OF PEACE, THE HAGUE, HOLLAND

Thomas H. Mawson, Landscape Architect
Ornamental Canal

PALACE OF PEACE, THE HAGUE, HOLLAND

Thomas H. Mawson, Landscape Architect
Gardens and Canal
PALACE OF PEACE, THE HAGUE, HOLLAND
Thomas H. Mawson, Landscape Architect
Gardens

PALACE OF PEACE, THE HAGUE, HOLLAND

Thomas H. Mawson, Landscape Architect
Gardens

PALACE OF PEACE, THE HAGUE, HOLLAND

Thomas H. Mawson, Landscape Architect
PALACE OF PEACE
THE HAGUE
GARDEN PLAN.

Thomas H. Mawson, Landscape Architect

September, 1923
Plan showing from the entrance through the carriage court to the Peace Palace.

Plan traversely across the carriage court

PALACE OF PEACE, THE HAGUE, HOLLAND
Thomas H. Mawson, Landscape Architect
DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS
Rebori, Wentworth & Dewey, Inc., Architects
AN INTERESTING DUPLEX APARTMENT HOUSE IN CHICAGO

REBORI, WENTWORTH & DEWEY, INC., ARCHITECTS

By

Wm. E. Parsons

Increasing concentration of population in large cities is perhaps inevitable, notwithstanding the popularity of the "own your home" movement and the prevailing idea of single detached homes representative of the standard in American communities as opposed to multiple family housing. Examination of recent zoning plans reveals the fact that large areas of existing single family houses are zoned for apartments. The Chicago Zoning Ordinance recently passed, provides for only 3.90 per cent of the city's area in the exclusively single family residence districts, as against 42.71 per cent in the apartment districts; this as a result of the expressed wishes of the property owners themselves. Furthermore, building permits in the larger cities show that more homes are built in the form of apartments than as single family dwellings. In Chicago, during the year 1922 building permits were issued for 6,340 single family homes and 18,605 apartment units.

The art of planning multiple family houses has unquestionably greatly improved in recent years. Tenement laws have imposed minimum sizes of rooms and minimum light, air, and safety requirements. Public opinion has resulted in making for convenience, attractiveness and a greater regard for sunlight and outlook. Generally, apartment buildings of twenty years ago are found to be difficult to rent, or command lower rentals. However, there is still room for great improvement in the development of apartment design with a view to creating home-like conditions. It is evident that the next move will be to introduce a degree of individuality into the apartment.

In co-operative apartment buildings, which are increasing in popularity, there is an opportunity, if not a demand, for the architect to consider the personal wants and tastes of each individual tenant-owner.

The co-operative apartment building at 40-50 Schiller Street, Chicago, designed by A. N. Rebori, architect, of Rebori, Wentworth & Dewey, Inc., is a noteworthy contribution to the list of successful apartment homes, and deserves a close view of its features, both financial and architectural.

There are eight ownerships in the stock of the company incorporated under the laws of Illinois, all involving an equal number of shares. The paid-in stock is approximately 44 per cent of the total investment of land and building, the balance of the cost being covered by five-year bonds secured by a first mortgage on the property. The owners have leased their apartments at rentals varying with the size and location. Since there are twenty apartments in all, of which eight are leased by tenant-owners, there remain twelve apartments which, leased to non-owner tenants, are expected to return to the owners the cost of upkeep, and ultimately to retire the bonded indebtedness.

The size of the lot is ninety by one hundred and fifty feet, with street frontage on two sides and an alley frontage of ninety feet. Built around three sides of a courtyard, the middle part of the fourth side being open southward to Schiller Street, the building covers 73 per cent of the area of the site, a small percentage, considering that the site is a corner lot. The total frontage on the courtyard, which is developed as a formal garden,
The Architectural Record

Ground Floor Plan

September, 1923

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS
Rebori, Wentworth & Dewey, Inc., Architects
slightly exceeds that on the two streets. Eight apartments have frontage on the streets only, four on the courtyard only, and eight front on both the streets and the courtyard. It is an interesting fact that the rental agent proposed somewhat lower rates for the apartments fronting on the courtyard only, but the demand for these apartments on account of absence of noise from street traffic is evidence that courtyard frontage in large cities may become the most desirable.

As a general rule, the typical apartment house plan in European cities develops greater frontage on courtyards than on the streets. In Paris particularly, the typical plan includes the courtyard, and usually a second courtyard or garden, the most desirable apartments being those giving upon the courtyards rather than upon the streets. Evidently this arrangement is a survival of the eighteenth century *hotels prives* such as existed on the Rue de Varenne, where only the stables and service rooms adjoined the street. The courtyard scheme is gaining favor in this country, but commonly they are too narrow. Fifty feet of minimum width should be allowed for air and sunshine, for the growth of trees to screen the view from the opposite side, and to muffle sounds. It is true that the usual one hundred and twenty-five feet depth of lots in American cities does not favor the court scheme. Two hundred feet depth would enable the architect to develop larger building units and would be more economical by reason of the possible reduction of street area.

The distinctive feature of this apartment building lies in the combination of duplex and studio apartments, for of the twenty apartments all but six have living rooms which extend through two stories, forming an arrangement similar to artists' studios, with dining room, kitchen and maid's room on the main floor and two or more bedrooms above, reached by circular stairs and balconies. This affords opportunities for interesting design of which the architect has taken full advantage.

As there are two ranges of duplex apartments, a lower and an upper, the building may be regarded as either a two-story or a four-story building according to whether the section is taken through the studio-like living rooms or through the dining rooms, kitchens and bedrooms. As a matter of fact, in the eyes of the Building Department of the City of Chicago, it was declared to be a four-story building, so that the usual construction permitted in three-story apartment buildings was not passed by that department. In consequence, metal lath and gypsum block partitions were used throughout. The public stairs are fireproof.

The aim of the projectors was to form in a corner lot of slightly less than one-third of an acre, a collection of city homes of the greatest possible home-like qualities. In this they have succeeded to a marked degree. In fact no two apartments are alike, the interior in each case having been designed to meet the particular need or taste of the prospective owner or tenant.

In the exterior design, the architect seems to have sought to make evident the separation of the home units, taking advantage of the stairways for this purpose and marking them off with narrow and deep archways. The separation of the home units is also evident from the belt courses and from the fenestration which is in itself interesting. There is in these elements a certain appeal of the picturesque and at the same time a sense of orderly arrangement. There is a judicious balance of limestone and brick work, and it is to be observed that the mortar joints are wide and of light color so that the stone and brick seem to belong to the same wall plane instead of producing an excessive contrast.

It pleases me to see a bit of architecture which is a thoughtful expression of structural conditions rather than a conscious effort to reproduce a given phase of historical style. Yet in the brick work, the stone quoins, lintels and flat pilasters, there is a pleasing echo of eighteenth century domestic architecture.
Central Arch at Open End of Court

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS

Rebori, Wentworth & Dewey, Inc., Architects
Garden Elevation Showing Fenestration

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS

Rebori, Wentworth & Dewey, Inc., Architects
First Floor Plan

Second Floor Plan

DUPEX APARTMENT BUILDING, CHICAGO, ILLINOIS
Rebori, Wentworth & Dewey, Inc., Architects

September, 1923
Third Floor Plan

Basement Plan

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS
Rebori, Wentworth & Dewey, Inc., Architects
Entrance

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS
Rebori, Wentworth & Dewey, Inc., Architects

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Stairs Leading to Gallery and Bedrooms

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS

Rebori, Wentworth & Dewey, Inc., Architects
Fireplace and Window from Dining Alcove

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS

Rebori, Wentworth & Dewey, Inc., Architects
High Living Room with Dining Alcove

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS

Rebori, Wentworth & Dewey, Inc., Architects
A Two-Story Living Room

DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS

Rebori, Wentworth & Dewey, Inc., Architects
September, 1923

The Architectural Record

Living Room
DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS
Rebori, Wentworth & Dewey, Inc., Architects

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One of the Single Story Living Rooms
DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS
Rebori, Wentworth & Dewey, Inc., Architects
This elaborate work* is intended to show that in ancient times and during the Middle Ages, not only was all religious architecture designed on strictly scientific geometrical principles of proportion, but that the square, with the many constructions to which it lends itself—and not the triangle as has been more commonly thought—gave every proportion and insured structural stability. Thus the author maintains virtually that the planning of temples and churches of the past was essentially a matter of mathematical science. "This general system," he declares, "is derived from the logical and yet varied uses of a certain proportion between the width, the length, and the height of the building, the construction being planned upon the ever-varying play of the elementary regular polygons and their angles." "That in the Middle Ages," he says further, "the geometric system of a building should have been considered the very point of its planning is shown in the famous extract of the Discussion of the Building Counsel of the Cathedral of Milan in 1398. The Italian masters at a critical point during the work had summoned Master Jean Mignot from Paris. In answer to his criticisms of the construction they said, rather unfortunately, "that the science of geometry was of no importance here, because science is one thing, art another," to which the Frenchman answered irrefutably, "Art without science is nothing." But I think it should be clear that the Frenchman's answer is by no means conclusive. If it were true, it would make science the primary principle of art, and art would thus become a mere matter of scientific prescription. Few, however, will deny that art is primarily and essentially an expression of human feeling—which immeasurably transcends mere science, in the making of a work of art.

Mr. Lund's belief that in the Middle Ages a scientific geometrical system universally prevailed in the design and construction of churches cannot be substantiated. It is, in fact, negatived by the very extract which he here produces; for the Italian masters, in this case, knew nothing of such a system. That men charged with the important work of building a great cathedral church were ignorant of it is proof that it did not prevail in general practice. But it should be realized that the fourteenth century was not the great age of mediaeval church building, and that therefore the works of that time do not afford enlightenment on the principles that governed mediaeval art in its integrity. In the fourteenth century, and more particularly at the close of it when this counsel of Milan was held, science, in France, was already usurping the place of living art. If we would find the principles that controlled the great architecture of the Middle Ages, we must go back to the twelfth and early thirteenth centuries; for these principles did not survive intact after that time. The monuments in which they are most fully developed are the Cathedrals of Chartres, Amiens, Reims, and a few others. The Italian masters of Milan were right beyond question, in saying that art is one thing, science another. It does not, however, follow that they were right in defending the design and construction of Milan Cathedral—a monument that has none of the qualities of great mediaeval art.

It should be obvious that science cannot be the moving principle of any art; for science is only knowledge, and is therefore, in itself, sterile. Human feeling and imagination are what give the creative impulse of art. In the Middle Ages the architect was schooled in the traditions and the current practice of his craft, the science of it being for the most part, if not altogether, unknown to him. This is no fancy, it is demonstrable fact. We are not in the dark on this point. For, in addition to what the extant monuments themselves teach, we have first-hand written and graphic information in the album of Villard de Honnecourt, preserved in the National Library of Paris. This precious little book—which is a sketchbook with written notes—gives clear evidence as to the extent of scientific knowledge, and methods of practice that prevailed among the master builders of the best time of French Gothic architecture. Its author, as the book itself makes clear, was a French architect of the thirteenth century, and his notes and drawings give ground for belief that he was one of the foremost masters of his time. It is a small parchment book containing many drawings, all done with the free-hand, and consisting of plans, elevations, and sections of buildings, together with a few sketches in perspective. There are also a considerable number of representations of birds, animals and human figures. Among the architectural subjects are several sketches of well-known buildings still extant, as the cathedrals of Laon and Reims. They are all fragmentary, no entire composition being given even as to plan; and all have the irregularities natural to free-hand work. But they show the economy of line and decision of hand of a practiced master.

In a note at the beginning the author says that in the book will be found very helpful instruction in the fundamental principles of masonry and carpentry, and also the method of drawing as the art of geometry teaches.* But the geometry is very limited, and is confined to such matters as "how to find the centre of a circle," "how to describe three different arcs with a single radius," and so forth. Of these and a few other simple problems, the author remarks: "Sur les quatre pages suivantes sont des figures de l'art de géométrie; mais il faut mettre grande application à les étudier, si l'on veut comprendre le sens pratique de chacune." There is no suggestion of any geometric systems of proportions as bases for architectural design, such as Mr. Lund supposes. Had there been such systems in use, it is incredible that a book like this should not afford some indication of it—more particularly since there is a plan given for the sanctuary of a large church, signed as the author's own composition; but with no geometric constructions to fix proportions. The only drawings in the book that show any application of geometric constructions are those of human and animal figures, to which some roughly drawn triangles are applied; and in one case a face is enclosed within a square divided into three parts to mark the levels of the eyes and the end of the nose.

The book is a very important document as showing that in the best period of the Middle Ages architecture was practiced naturally as an art, not as an applied science. The master builders, as their extant works show, were experienced craftsmen, working on traditional and communal lines. But, as their works also show, they were men of imagination, invention and highest artistic culture. It may be remarked, too, that mathematical formulae as bases for design were equally unknown among the most famous architects of the Italian Renaissance. This is clear from the well-known remark of Brunelleschi, that "in building experience teaches what is to be done," and from the saying of Michaelangelo, that the artist "should have the compass in his eye."

We know, indeed, that from ancient times there was a tradition of fixed proportions in the general planning of religious buildings; and I do not doubt that Mr. Lund is right in attributing the ori-

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* "Dans ce livre on peut trouver grand secours pour s'instruire des principes fondamentaux de la maçonnerie et de la construction en charpent. Vous y trouverez aussi la méthode pour dessiner au trait, selon que l'art de géométrie le command et enseigne."—(Quicherat's translation).
gin of these proportions to a recognition of the spiritual significance of numbers, so plainly involved in what is said of them in the Bible—as in the proportions laid down for the building of the Temple of Solomon, and the mystic proportions of the holy city of the New Jerusalem that "lieth foursquare," the "length and the breadth and the height" of which "are equal" (Rev. xxi, 16). And we know from Vitruvius, as Mr. Lund has pointed out, that there was in classic antiquity some survival of the idea of definite proportions for sacred edifices, though I do not know that we have any particular information on the matter. Referring to the mathematical use of the square in fixing proportions, Mr. Lund's remark, "The chief cause of this use of the square was a thought buried deep down in man's consciousness of the world, in ancient times," might very well be true if the word "this" were stricken out and the word "the" inserted. But what is known of ancient methods of planning gives no ground for the affirmation that this elaborate mathematical use of it was ever made in architectural practice.

It is important to bear in mind that in mediaeval building proportions were often changed, either as the work proceeded, or soon after completion. It is recorded that in rebuilding the dome of Saint Sophia of Constantinople, after the collapse of a part of it soon after its completion, the crown was raised about twenty feet. The clerestory of the Cathedral of Senlis, originally built about the middle of the twelfth century, was rebuilt in a later style, and raised to a much greater height. The change, of course, spoiled the proportions, but it was made by men who, on Mr. Lund's theory, should have been aware of the necessity of strict conformity to mathematical law in matters of proportion. The extensive changes, made during the thirteenth century, in the Cathedral of Paris are well known. If the proportions were right in the first construction, they cannot, of course, be so now. The changes here were confined to structural details, it is true; but Mr. Lund teaches that the laws of proportion are determined geometrically down to the smallest details. Again, most drastic changes were made in the architectural scheme of the choir of Beauvais, even before its completion, on account of weakness in construction, which threatened collapse, and made it necessary to substitute a sexpartite form of vaulting for the quadripartite system first intended. This doubled the number of bays, and thus materially altered the proportions of the composition, both internal and external. Such instances might be multiplied indefinitely. There are few buildings of the Middle Ages that have not important parts designed in different styles with different proportions.

Moreover, everyone at all acquainted with mediaeval monuments knows that very considerable, and often astonishing, irregularities are found in them. None of them are perfectly regular, either in their larger parts or in their details. Nothing like the mechanical regularity of modern work is ever found in them. Bays are rarely, if ever, exactly equal in width, and are not seldom strikingly unequal. The parts, from largest to smallest, are so unsymmetrical that they will not coincide with any regular geometric figures. It was on this ground, among others, that Wren—with his unsympathetic feeling for mediaeval architecture—condemned the old church of St. Paul, and found excuse for demolishing it, in order to build the existing fabric. It may be said in passing that the scheme of St. Paul's is based on no fixed geometrical proportions, although Wren was primarily a mathematician. The design was altered during construction, as well as before; and the monument as it stands was never embodied in any set of drawings. The same is true, as is well known, in the case of St. Peter's in Rome—from which Wren drew a large part of his inspiration.

The greater part of Mr. Lund's book—which extends to 372 closely printed quarto pages—is devoted to detailed demonstrations of many geometrical constructions based on the square that may be used in determining proportions of widely varied character. A very considerable part of the subject matter relates to the reconstruction of the Cathedral of Nida-
ros, of which Mr. Lund was put in charge in the year 1906, and in connection with which, he tells us, he discovered the geometric principle of which the book treats.

In addition to the large number of graphic illustrations embodied in the text, there is a supplementary portfolio of large folded sheets, giving extensive applications of the system to many mediaeval buildings, including the cathedrals of Paris, Amiens, Rheims, Laon, Bourges, and Chartres. For the curious in such matters these may be of interest, and to many they may appear to furnish irrefutable evidence that the monuments were designed on this mathematical basis. The coincidence of the geometric constructions with the plans, elevations and sections of the buildings seems remarkably complete. Be this as it may, it by no means establishes the proposition that the builders of the Middle Ages determined their proportions mathematically. The coincidence only shows that the artist by intuition may obey laws that are scientifically unknown to him. It should be remembered that other systems of proportion have been formulated which seem to agree with the buildings to which they are applied. The most important of these, so far as I know, is that of Viollet le Duc. In his *Entretiens sur L'Architecture* (Vol. I, pp. 406, 407) he gives constructions based on the triangle, which he applies to the cathedrals of Paris and Amiens; but he nowhere suggests that the builders of these monuments worked out their proportions mathematically. He recognized that the artist is guided by intuition and tradition rather than by conscious science.

But it is important to realize that there is a basal geometric principle in all things which the artist instinctively apprehends. It is beautifully illustrated, for instance, in the trillium flower, with its pointed petals in a triangle set within its sepals in another triangle, so that together they form a six-pointed star. But this principle is never carried out formally in nature. In the same way, with constant and extensive deviations from rigorous mathematical exactness, it underlies all good architectural design. The architect never works from formulas; he does not geometrize; he perceives.
PORTFOLIO
CURRENT ARCHITECTURE

CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY
Carrere & Hastings, Architects

St. Ambrose Chapel

September, 1923
St. Ambrose Chapel
CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY
Carrere & Hastings, Architects
St. Ambrose Chapel
CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK CITY
Carrere & Hastings, Architects
PASSAIC NATIONAL BANK & TRUST CO., PASSAIC, N. J.
Harry L. Walker, Architect

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PASSAIC NATIONAL BANK & TRUST CO., PASSAIC, N. J.
Harry L. Walker, Architect
PASSAIC NATIONAL BANK & TRUST CO., PASSAIC, N. J.
Harry L. Walker, Architect
BELLPORT MEMORIAL LIBRARY, BELLPORT, L. I.
Aymar Embury II, Architect

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GARDEN AT 115 EAST THIRTY-EIGHT STREET, NEW YORK
Ruth Dean, Landscape Architect

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SIGN POST FOR THE CITY OF NEW ROCHELLE, N. Y.

Clare Briggs, Designer
SIGN POST FOR THE CITY OF NEW ROCHELLE, N. Y.
Remington Schuyler, Designer
SIGN POST FOR THE CITY OF NEW ROCHELLE, N. Y.
Fred Dana Marsh, Designer
SIGN POST FOR THE CITY OF NEW ROCHELLE, N. Y.
George T. Tobin, Designer
SIGN POST FOR THE CITY OF NEW ROCHELLE, N. Y.

James R. Marsh, Designer

Settled in 1688

BY THE HUGUENOTS OF

LA ROCHELLE

New Rochelle
THE STATE ARCHITECT and HIS WORKS

2- The State Agricultural College and Other Institutions

By Prof. A. D. F. Homlin

In the January issue of the Architectural Record I endeavored to set forth the history of the establishment of the New York State Architect's office, technically known as the Department of Architecture of the State, to explain the organization and functions of the office, and to describe one phase—the military—of the remarkable work accomplished under Dr. Pilcher, its incumbent since its establishment on the present basis in 1914 to March, 1923.* In fulfillment of the intention expressed in that article to discuss another phase of its work, I propose in the present article to say something of Dr. Pilcher's work in the field of institutional architecture, with especial reference to the State College of Agriculture at Ithaca. The selection of this particular enterprise, suggested long ago by the Editor of the Record, is due to the admirable procedure by which it was initiated and developed, and has since been carried on, as well as to the intrinsic interest of the problem and of its solution by Dr. Pilcher.** When, in November, 1918, Dean Mann of the State College of Agriculture presented to the Agricultural Council of the Trustees of the Cornell University a detailed "Statement of the Needs of the New York State College of Agriculture at Cornell University" (the College of Agriculture) with a view to securing legislative action for the meeting of these needs, he and his College were setting an excellent example of the way to go about such a business. In the course of this statement the Dean, in his insistence upon the necessity for an ordered, logical plan for the location of all future buildings, put his finger upon a difficulty which nearly all our great educational institutions have encountered, as a result of the short-sighted and inartistic practices of their earlier administrators. In how many cases have these men, with the most excellent intentions, no doubt, been content to erect buildings wherever seemed at the moment most convenient, with no thought of a consistent, logical arrangement; with no conception of architectural effect; with no adequate vision of future needs; without expert advice, and too often from plans by architects of inferior ability! How Dean Mann grasped the nature of his problem, and how his views and his efforts were seconded by all the authorities concerned, I shall presently try to set forth, as a shining example for all to imitate who have to deal with problems of like nature.

But in order to understand the nature and magnitude of the problem it is necessary to know something of the history, complex organization and varied activities of the State College of Agriculture.

Cornell University was chartered in 1865 by the State under the provisions of the Morrill or Land Grant Act of 1862, which made extensive grants of Federal lands to each State for the establishment within its territory of at least one college whose leading object should be to teach, among other subjects, "agriculture and the mechanic arts . . . and to promote the liberal and practical education of the industrial classes." Endowed by the liberality of Ezra Cornell, who presented it with his fortune and a superb site of 200 acres in Ithaca, Cornell University was opened to

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*Dr. Pilcher resigned as State Architect, March 1, 1923. As consulting architect to the United States Veterans Bureau, his work now is nationwide.

**I beg to acknowledge with thanks the great assistance given me by Dean A. R. Mann, of the State College of Agriculture, in the preparation of the first part of this article, not only by furnishing copies of original documents, but also by revisions and correction of my first draft thereof.
students in 1868. With only a single building at first, soon increased to three, it has since grown into a mighty University, with a superb campus and a vast array of buildings on one of the most picturesque sites in the country. Its Department of Agriculture was long without a separate building, and was merely a small department of instruction in the University. It was not until 1897, when a formal division of the University into colleges was made, that the department of Agriculture became a distinct organism as the College of Agriculture of Cornell University.

Between 1868 and 1914 the Federal Government made further contribution to the land grant colleges by providing for the establishment of Federal experiment stations in connection with each of them (Hatch Act, 1887); by imposing upon them the responsibility for additional public service, for which limited funds were made available, by providing for the strengthening and broadening of the resident instruction in them (second Morrill Act of 1890 and Nelson Amendment of 1908); by the further endowment of the experiment stations (Adams Act, 1906); and by the Lever Act of 1914, providing for extensive development of non-resident teaching in cooperation with the United States Department of Agriculture.

The great expansion of the Agricultural College began in 1904, when the State legislature recognized and established it as the New York State College of Agriculture, placed it under the charge of the Trustees of Cornell University as agents of the State, and appropriated $250,000 for the erection of three buildings, now known as Roberts Hall, Stone Hall and the old Dairy Building. In 1906 the State assumed the primary expense of maintaining the College, defined its functions and placed its administration in the hands of the University as its agent, which has ever since met the liberality of the State with like-minded liberality, both educationally and materially. The College of Agriculture has grown from the modest institution of 1903-04, with 296 students, to a vast institution officered by 287 persons, giving courses in nineteen departments to nearly 2,500 registered students in its courses of varying lengths, besides conducting extension courses, experimentation work both in its own laboratories, on its farms,
and at various points in the State, holding "Farmers' Weeks" and "Farmers' Field Days," and managing its own extensive farm of nearly 1,200 acres.

The importance of this college to the agricultural interests of the State, and the value, variety, and extent of the services which it renders not only to the farmers but to the whole commonwealth, it is impossible to exaggerate. These services are seen to be of three kinds:

(a) The training in agricultural science of competent farmers, technical specialists and home economics workers, by direct instruction in the classrooms and laboratories and by practical demonstration on its farms.

(b) The carrying on of scientific experimentation on soils, crops, breeding of animals, methods of production and distribution, the utilization of food products and the like.

(c) Extending to the farmers of all parts of the State the benefit of the resources of the college and of the results of its experimentation by means of extension courses, correspondence, conferences, consultations and advice.

These three functions are carried on by means of a very complex but remarkably efficient organization of the College into nineteen departments, each of which within its own field performs all three services of teaching, research and extension or non-resident instruction. In the latter the work of the college reaches throughout the State, and coöperation is had in all possible ways with a great number of organizations and communities.

II.

It needs no argument to show that the efficient carrying on of these multifarious activities must require a physical plant of no ordinary size and cost; and one, moreover, that should be capable of future extension to meet the inevitable expansion of coming years. These requirements were set forth first in the Report of the Trustees to the State Legislature in January, 1910, and later in the supplementary report or statement by the Dean, A. R. Mann, to the Council of the College, dated November, 1918, embodying the detailed statements of the then existing twenty-four departments of instruction as to the space and equipment required in the proposed new buildings. In this admirable document, after enumerating these detailed requirements, the Dean observes: "It is seen that we are confronted by large and somewhat complicated problems of expansion. We need a ground-plan for our future buildings, as it is evident that we have already located some of our buildings where they will not fit into the best permanent arrangement."

This recognition of former errors and forethought for the future necessities I have already referred to; it is the central fact of the problem, and the wisdom that dictated it is seen in all the stages of the procedure in the enterprise.

Already in 1910, as we have previously noted, a report on the present and prospective needs of the institution had been presented to the State Legislature which provided funds for some of the buildings called for, and in 1914 made a small appropriation for a Plant Industries Building, the next in order on the list. But the Great War put an end to further work except the study of plans.

The "Statement" of 1918 embodied the results of the intervening eight years' experience and set forth new requirements in addition to those specified in the Report of 1910. It requested the coöperation of the Trustees in a restudy of the building program of 1910; a request seconded by the Financial Committees of the Legislature. In preparing the new program the Dean first secured from every department of the State College a carefully detailed schedule of its requirements, and followed this up with a series of reports made by nearly 150 leading farmers of the State who, organized in twenty-four committees on as many distinct subjects to cover the varied activities of the institution, visited the College at their own expense to inspect its work and equipment, and expressed their own views of its requirements. The Governor was requested to send the State Architect to examine the College, which request was promptly complied with, and the Chair-
men of the Legislative Committees on Finances and on Ways and Means also visited it in order to gain first hand impressions of the situation. Thus the teaching staff, the Trustees, the farmers, the State Architect and the Legislature were brought together to consider a program prepared with scientific thoroughness and economic foresight. As a result, of $500,000, since when, that is for nearly three years, Dr. Pilcher has been occupied with the preparation of the plans for this expansion. In this work (writes Mr. Mann) “the State Architect has carried large responsibility and has whipped into most satisfactory shape all of the recommendations placed in his hands, which, of course, he has checked and sup-

Figure 2

MAIN GROUP, STATE COLLEGE OF AGRICULTURE, CORNELL UNIVERSITY, ITHACA, NEW YORK
Buildings, from left to right: Home Economics, State Hall, Roberts Hall, Dairy

the State Architect, following a series of conferences with members of the faculty, was provided with a complete and clear-cut statement of the requirements and with accurate surveys of the grounds to be occupied, to supplement his personal acquaintance with the site and existing buildings.

Upon the basis of this statement and the preliminary revised plans filed by the State Architect, the legislature in 1920 recognized the necessity of providing, sooner or later, new buildings to cost approximately $5,000,000 and authorized construction in the amount of $3,000,000, appropriating therefor a first instalment

plemented by intimate personal examination.” He comments also on the sympathetic co-operation of Messrs. Sage and Machold, chairmen of the legislative Committees on Finance and Ways and Means, in the development of the tentative plans of 1920, and on the cordial co-operation of the Governor.

I have dwelt at length on these details of procedure because they present such an admirable example of the right way to do business of this sort. Foresight, large vision, careful preliminary investigation, thorough study of the problem before taking the first steps in its final solution, and then cordial co-
operation of all the interests concerned under and with competent expert advice—these are all too rare in the inception and carrying out of large public enterprises. One has only to recall the history of the New York County and City Court House to appreciate the difference between the right and the wrong way to do things, between public spirit on the one hand and political manipulation on the other, as the controlling factor.

III

If the patient reader will now refer to the general plan (Figure 1) of the eastern part of the University Campus occupied chiefly by buildings of the College of Agriculture, he will realize the difficulty of the problem set before the Architect. Apparently miscellaneous groups of buildings are seen dotted about on the landscape, with little or no reference to each other, and with no thought of the desirability or possibility of their final combination into a consistent and logical whole. Moreover the topography of the site is extremely irregular, “very accidental” as a Frenchman would say, Existing buildings must be preserved and utilized to the utmost, despite all differences of form, level, size, material and architectural character (Figure 3). Much of the seeming confusion was, after all, necessitated, or at least it can be explained, by requirements of practical convenience. The only important change allowed was the removal of the heating station at the eastern end of the main group to a site by the railroad, and the erection on its site of a large building for Rural Engineering. The plan Figure 4 shows the general scheme prepared by Dr. Pilcher and approved by the Trustees of the University and by the Legislature; while the plan, Figure 5, to a larger scale, shows the final development of the northern portion of this scheme. The two perspectives, Figures 6 and 7, represent the preliminary and the final designs for the architectural treatment of the revised plan of Figure 5.

The obvious point of departure for the new scheme was the existing group of five buildings east of Garden Avenue and north of the great playground or Students’ Common; the three connected buildings for Agronomy (Stone Hall), Administration (Roberts Hall), and the Dairy Building, and north of these the Home Economics Building and Caldwell Hall (Figure 2). These buildings, erected between 1904 and 1912, were so situated as to suggest inevitably the creation of an open quadrangle or Court of Honor, closed at the eastern end only. At the eastern end of the present group stands the Farm Management Building. The six buildings and the other present buildings are of diverse shape, size and character (Figure 3); they were not the product of Dr. Pilcher’s office. In his first scheme (Figure 4) the five of the main group were left intact, but the Farm Management Building and a smaller building behind it for Rural Engineering,
General Plan for Development of Buildings and Grounds Approved by New York State Legislature and Board of Trustees
NEW YORK STATE COLLEGE OF AGRICULTURE, CORNELL UNIVERSITY, ITHACA, NEW YORK
Lewis F. Pilcher, State Architect (1922)
1—Biology Building
2—Museum, Library Building
3—Auditorium
4—Plant Industry Building
5—Building for Agricultural Economics
6—Rural Engineering Building

Revised Plan Showing Further Development of Plans for New Buildings
NEW YORK STATE COLLEGE OF AGRICULTURE, CORNELL UNIVERSITY, ITHACA, NEW YORK
Lewis F. Fisher, State Architect (1922)
were eliminated; the first-named not being on the main axis, is to be replaced by a larger building as part of an imposing continuous group enclosing the eastern end of the court. The revised plan of Figure 5 shows how it is proposed to alter and extend northward the two terminal wings of the Administration group, while the original scheme for enclosing the eastern end of the court is there seen to have been greatly expanded by adding on either side, i.e., to North and South, extensive wings enclosing each two smaller courts. These expansions provide two large halls in addition to a great increase of floor-area for laboratories, lecture rooms and collections. A still larger auditorium is provided at the extreme east end, taking the place of the former Farm Management building. A further change observable in Figure 5 is the elimination of the Heating Station and its replacement by the great building for Rural Engineering, which does not appear in the first plan, Figure 4. An examination of the two perspectives, Figures 6 and 7, shows the further architectural development of the project. To mask the intractable masses and discordant architecture of the rear elevation of Roberts Hall, a long curtain structure is seen connecting the north ends of the northward extensions of the Dairy wing and Stone Hall, providing an imposing monumental façade towards the court, to match the eastern half of the same side. On the north side the form and position of the Home Economics and Caldwell Hall buildings make a similar treatment impossible.

The execution of this project will provide an educational group hardly to be matched in architectural dignity and decorative effect by any other institution in the country. The nearest analogue is probably the Institute of Technology group at Cambridge, Mass. Aside from its greater size and cost, this latter group has the advantage of standing on a perfectly open, level site and of having been designed with no limitations or drawbacks of existing buildings to be worked into the scheme. In comparison with it, the Ithaca group is seen to lack the domi-
nating and centralizing effect of any lofty mass like the Cambridge dome or the Columbia Library. But this is no re¬proach to the State Architect, who was not free to add any feature not clearly indicated by his practical program. The colonnade at the east end of the court, set upon a terrace some fifteen feet higher than the general level, forms a sufficiently accented feature to attract the eye and close the perspective of the court.

East of this main group all the miscellaneous existing buildings have been re¬tained, with no effort at the impossible task of tying them to the main group. But the Forestry Building has been made the head of a secondary court outlined by roads and trees, and by a new flanking building for Agricultural Economics, this being balanced by a new wing on the Poultry Husbandry building (Figure 8) on the east side of the open court. To the northeast is to be erected a very large building for Rural Engineering, on the site of the old heating plant. This is on the axis of the main group, but the inter¬vening irregularities of the topography and the forest growth make this fact of no real importance. For this reason Dr. Pilcher has refrained from any attempt to establish a vista between them or to connect them by a straight avenue over the irregular terrain.

Southeast of the groups already de¬scribed are to be, according to the gen¬eral plan of Figure 2, a number of new buildings, including a great new dairy building, adjoining the Animal Husbandry building and the University barns, while three other buildings are shown on the same plan south of the Students’ Common, and directly opposite the Forestry group. At the present writing I am unable to name these buildings, or to say whether they are to be retained in the final development of the enterprise, or merely represent tentative sites and groupings for further expansion.

Accompanying these architectural de¬velopments there has been a restudy of
the landscape treatment of the grounds, comprising the straightening of the roads enclosing the Students’ Commons, a transverse avenue near its east end to isolate from it the Animal Husbandry group, and a straightening of the avenue which divides this group from the University barns. Extensive tree-planting along these avenues will accentuate these diversions as well as embellish the

State College of Agriculture will possess an equipment of buildings and grounds unrivaled by any agricultural college in any other State or country. Such a result would have been impossible without the loyal cooperation of the Trustees and officers of the College and University, of the farmers, of the Legislature, and of an architect possessed of vision, of wide experience and of artistic imagina-

Figure 8
Perspective of Completed Building for Dairy Industries
NEW YORK STATE COLLEGE OF AGRICULTURE, CORNELL UNIVERSITY, ITHACA, NEW YORK
Lewis F. Pilcher, State Architect (1922)

grounds. Every architect and landscape-designer will appreciate the value of this new lay-out in giving an air of symmetry and system to what is at present in appearance a somewhat fortuitous scattering of these various groups.

If this admirable solution of an extremely difficult problem—the complexity of which does not appear on paper as it does to anyone who has studied the situation personally on the spot as I was privileged to do in 1921—if this admirable solution shall be carried out to its final completion, with only such minor changes of detail as the architect may find necessary as the work progresses, the

The plans for the State Agricultural College are not only architecturally sound but also thoroughly practical, embodying and satisfying the elaborate utilitarian requirements of the “Statement” of 1918. Dr. Pilcher has the gift, not always found in architects, even in men of distinguished ability, of penetrating to the core of the client’s wishes and requirements, putting himself at the client’s point
of view, trying to see the problem as he sees it, and then seeking to meet those requirements to the utmost degree consistent with good architecture.

In the case of the charitable and correctional institutions of the State he considered that his real clients were the inmates, the wards of the State, although their needs were necessarily presented by the authorities of these institutions. In other words, when a prison or hospital program was furnished by the administrative body of officials or trustees of an institution, he penetrated behind and beyond these formal requirements, in his own thinking, to the feelings and needs of the unfortunate beings that it was his problem to house. He studied the whole science of such institutions, from the social and moral as well as the purely scientific point of view, and familiarized himself with the different theories of the various systems underlying similar institutions in other States, and thus approached his architectural problem with an unusually broad grasp of what it involved. This deep sympathy, this warm human appreciation of the moral and social problems involved, give a special value to the numerous reports and articles which have come from his pen. In these he appears as an accomplished architect who is also a large-hearted humanitarian, to whom the inmates of an institution are not mere "numbers" or "cases" but human beings with hearts and rights and emotions to be cared for sympathetically and if possible to be restored to normal moral and physical and mental health and to usefulness in the social order.

I have before me a pamphlet of Dr. Pilcher's on "The Psychiatric Institute Hospital Quarterly" of November, 1922. It is a carefully reasoned plea for the establishment in New York City of an Institute and Hospital for the reception, classification, treatment and education of that pitiable class of mental and moral defectives who, without such care and education, drift inevitably into insanity or crime. The medical, social and architectural aspects of the problem are discussed with great thoroughness, with deep sympathy, and with remarkable clarity of presentation. It is by such cooperation with the State's charitable and corrective institutions and interests that the Department of Architecture renders social services of the greatest value to the whole country. Dr. Pilcher's interest in prison reform, referred to in my previous article, his admirable work in the reconstruction of Sing Sing State's Prison, his plans for the prisons at Wingdale and Great Meadow, and special buildings at Auburn, Clinton, Dannemora and Matteawan, have given the State a most enviable record in prison architecture and made it and its architect known throughout the Republic.

The limits of this article forbid further discussion of the institutional work of the Department of Architecture under Dr. Pilcher's control, or of his skilful handling of extensive group-plans like that, for example, of the Marcy Hospital for 3,600 insane. The list of such institutions designed in the State Architect's office from 1913 to 1923 is a formidable one.

I find on my list twenty-three hospitals for which one or more buildings have been designed, including three great group-plans for the insane, to accommodate each from 2,100 to 3,600 (Brooklyn, Creedmoor, Marcy) besides similar work by Dr. Pilcher for New Jersey and Ohio. I find in my list of State institutions designed in the Department of Architecture under his direction, ten armories and a Naval Station, eleven reformatories and prisons, five public buildings, thirteen central heating-plants, seven sewage-disposal plants, eight water-supply plants, five refrigeration plants, five laundries and fifteen schools—normal, agricultural, collegiate, deaf-mute, etc., besides many minor works and the State Agricultural College at Ithaca.

I cannot better close this paper than by reproducing the resolution passed by the Central New York Chapter of the American Institute of Architects three years ago:

"RESOLVED, That the Central New York Chapter of the American Institute of Architects, in its annual meeting assembled, desires to express to the Hon. Lewis F. Pilcher, State Architect of the

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State of New York, its sincere and deep appreciation of the great service he has rendered the State of New York in the practice of his profession as a State official. We feel that the manner in which he has rendered this service has given the State of New York buildings of a quality superior to any similar work previously executed and based upon a cost resulting in great economies for the taxpayers. We believe that he has largely contributed by this service in establishing in a position of respect and reliability the profession of architecture."
In these days when, at frequently recurrent intervals, we hear so much about garden cities, curiously enough, no one ever seems to think of mentioning Versailles in that connection. Yet, Versailles is most assuredly a garden city, if ever there was one. Furthermore, it is an admirable one, and efficiently devised, for there is scarcely a house within the city precincts that has not its own garden, usually large enough to make it a prized possession and oftentimes very extensive. In this respect Versailles is unique among the cities of France.

This aspect of the city's character has, perhaps, too often escaped notice. It is not always patent to the stranger because the French people choose to possess and enjoy their gardens in reasonable and decent privacy and, therefore, wall them round about, instead of turning the gardens inside out, so to speak, and spreading them open to the inquisitive gaze of every chance passer-by.

The local habit of giving each house its own garden has made it possible to design a city house with four aspects instead of one, and to create a well-considered and fully organized composition that will please the eye from whatever point it is viewed, whether all the points of view be the common property of the general public or not. This principle ought surely to please those nurtured on Ruskinian precepts, even though it be applied to a structure of purely Classical provenance.

Numero 147, Boulevard de la Reine, is an excellent example of this fully organized composition. It was built in the early part of the nineteenth century before the restrained ideals of the Directoire period had succumbed to the vulgarity of a later era, and it was constructed of materials brought from a demolished country house that had once belonged to Madame de Montespan. The walls are built of carefully dressed ashlar of the native cream-colored limestone, and the woodwork is painted a light grey, almost white.

Even when viewed in the most cursory manner, the poise and refinement of the composition compel attention, but whoever takes time to make a careful inspection is richly rewarded, for then are disclosed all the subtleties that bear eloquent witness to the taste and skill of the architect responsible for this performance of elaborate simplicity. Not a little diversity of detail has been incorporated without at all detracting from the aspect of strength and studied restraint. As the illustrations show all these items it is unnecessary to enumerate them. The plan is characteristically Gallic in its arrangement. This may or may not appeal to the reader. At any rate, it is a point deserving study.
South Front
NO. 147, BOULEVARD DE LA REINE, VERSAILLES

The Architectural Record
September, 1923
Plan of House and Grounds

NO. 147, BOULEVARD DE LA REINE, VERSAILLES

The Architectural Record

September, 1923
Street Front and Entrance
NO. 147, BOULEVARD DE LA REINE, VERSAILLES

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South and East Fronts
NO. 147, BOULEVARD DE LA REINE, VERSAILLES
NO. 147, BOULEVARD DE LA REINE, VERSAILLES
Garden Front

Entrance

NO. 147, BOULEVARD DE LA REINE, VERSAILLES
South Front

'NO. 147. BOULEVARD DE LA REINE, VERSAILLES

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POTOMAC PARK BATH HOUSE, WASHINGTON, D. C.

Horace W. Peaslee, Architect

The central pavilion provides space for the management, refreshment stands and a covered bleacher for spectators. Lockers are provided in the sheds at each side.
As a municipal institution, the bath house must observe a double purpose—recreation and public health. In careless communities, the first incentive takes precedence over the second; the happiness of the individual glosses over the menace to general health which bath houses for "individual freedom" impose. In advanced communities, regulations and restrictions are recognized as essential to bath house design if the general welfare is to be preserved.

Preliminary study of bath house requirements immediately reveals to the architect a set of conditions immeasurably more exacting than those outlined by the park commissioners, and frequently in direct conflict with their ideas. In a majority of cases, the cheapness with which a bath house can be built is of prime importance and the initial requirements are little more than those of a permanent tent. But notwithstanding such easy conditions to meet, the sketch preliminary plans should comprehend the provisions which communities of more experience have found essential. Such plans will serve as an educational basis. There need follow no economic strife if it is clearly pointed out, for example, that the bath house with open court wings effects a roofing economy more than sufficient to offset the expense of unexpected and undesired sanitary provision. Also, that modern bath house design favors an elastic unit which permits a moderate expenditure at the offset and expansion as the demand arises for additional accommodations. The aim in this respect is to provide a central shelter adequate to house the management of greatly extended wings at a future time.

The general requirements of bath house design can be observed by examination of some recent examples. The Lake Nokomis bath house at Minneapolis is typical of the several establishments in the parks of that progressive city. The following description of the management and operation of the Minneapolis bath houses furnished by Theodore Wirth, superintendent of the general park system, may be accepted as a carefully studied programme common to up-to-date communities and will be seen to predetermine the general plan of a modern bath house.

"Patrons entering a bath house must secure a ticket from the cashier's office in the central lobby, covering the charge for their locker and whatever other sundry supplies they wish in the way of suits, towels, caps, hose, water wings, etc. They then pass into the suit room—the men's department being to the right and the women's department to the left of the main lobby. Entrances to the locker
The women's locker court has batteries of lockers in double tiers with dressing rooms between, one dressing room to five lockers. A separate court for small children is provided in connection with the women's department.

The bath house has three departments: men, women and boys. The boys' locker court has no dressing rooms, but batteries of lockers with dressing benches between. The men's locker court has a few dressing rooms; the majority utilizing the benches placed between the lockers.

LAKE NOKOMIS BATH HOUSE, MINNEAPOLIS, MINN.
Designed by Park Engineering Department, A. C. Godware, Chief Engineer
courts are through a passage way along the suit room supply counter. Here the attendant in charge takes the ticket and furnishes the patron with whatever the ticket calls for. To the rear of the suit room is the 'valuable room,' and beyond this the locker court.

"The exit to the beach is through a continuously running shower and a shallow pool four inches deep. The purpose of the arrangement is to prevent others than bathers from entering the locker room by means of this exit and it also serves to wash the sand off the bather's feet when coming in from the beach.

"When leaving the bath house the patron has one means of exit through a turnstile, turning in one direction only, and the attendant at the exit collects the patron's key and other bathing supplies belonging to the establishment.

"A hospital room is provided completely equipped for rendering first aid and for respiration work.

"The Park Board operates a laundry at which all suits and towels are thoroughly laundered and sterilized after each using.

A type of bath house radically different from the open beach variety in municipal parks is that to be found at Hot Springs National Park, Arkansas. The forty-six radio-active hot springs, grouped about the base of Hot Springs Mountain, are all owned and controlled by the gov-
Bathing Establishment at Durand Eastman Park, Rochester

Gordon & Kaelbet, Architects

A decorative screen wall and archway entrance to the beach mask the bath house facilities from the park side.

ermanent and it is possible, therefore, to designate the kind of building, equipment, service and business administration that must be provided before the waters will be supplied.

The arrangement of the houses naturally depends on the class of business they cater to and most of them consist of a lobby with office and check room, dressing rooms, bath halls, pack rooms and cooling rooms. The more luxurious include massage rooms, electrical apparatus, special hydro-therapeutic apparatus, gymnasiums, writing rooms, game and social rooms. The buildings are planned with the idea that after a patron passes through the office and makes necessary arrangements at the desk, he goes to a dressing compartment or private rest room, changes clothes, goes to the bath hall, thence to the pack room, thence to the cooling rooms and back to the dressing rooms. By orderly circulation through the building a large number of patrons can be taken care of at one time without confusion.

Bath house buildings in municipal and national parks obviously should consider their environment, neither competing with the park scene by over-ornateness nor interrupting the landscape by rude silhouette or aggressive mass. In plan, the main effort of the architect will be to design a bath house that cannot be conducted on a low plane but which, by the assignment and arrangement of parts, will enforce management of a sort to protect the health of a community as well as to provide pleasure for the individual. The appearance of the building, however attractive and harmonious with the park environment, will not save the architect from censure if he does not inform himself thoroughly in the very specific requirements of this type of park structure. Although the park authorities may not welcome the idea of being “led” by the architect, they have a nice habit of inquiring who drew the plans of certain buildings observed in successful operation in other park systems and it frequently follows that an architect finds himself “leading” in a field where he had expected but a single commission.
ARCHITECTURE

The Journal of the Society of Architects,
London: Nov., 1922-Feb., 1923

It is a genuine pleasure to welcome the Journal of the Society of Architects in its new form and with a title "that can be pronounced without a respiratory pause in the middle," as the editor observes in the first paragraph of his monthly comment. He then goes on to say that "size, scope and presentation have, as the most superficial inspection will show, been modified to no small extent." These changes are all to the good. Continuing, the editorial note informs us that "important as the external changes will be found, they are not (or will not be) comparable to those that affect the scope of the new journal. The phrase 'will not be' is added intentionally, for it is impossible in the first number to give more than a suggestion of the final nature of a periodical: a suggestion which we shall try to develop somewhat in these notes. It remains to be seen, after a twelvemonth or so has elapsed, whether our intentions shall be expressed in the perspective view that will then be obtained."

Although doubtless actuated by becoming modesty, it was quite unnecessary for the editor to qualify his promises, as subsequent issues of Architecture have proved by their event. Indeed, the initial issue contains matter decidedly worth while. There is an important and well illustrated article on the Olympic Stadium, by Robert Atkinson, F. R. I. B. A., a propos of the designs submitted in the Society's Victory Scholarship Competition, in October, 1922. There is also a notice setting forth the origin and aims of the Architecture Club, an organization whose inception is significant and suggestive of what might be undertaken on this side of the water. "The Club originated," says the notice, "in discussions which took place last year (1921) between certain architects and men of letters interested in architecture. It was generally agreed that there was insufficient contact between architects and workers in other arts; that the Press devoted far too little attention to architecture and especially to informed criticism of it; that the general public, though in a considerable degree interested in buildings, was given too little guidance and did not even know the names of the most eminent architects; and that steps should be taken to remedy these evils. "A series of dinners followed, which some twenty or thirty persons attended. It was decided that a club should be founded, composed in part of architects, in part of authors and journalists, and in part of interested laymen, which should do its best to promote the interests of the best modern architecture." This club, it is further pointed out, has already accomplished signal results in arousing in the general public an intelligent interest in architecture.

The December number includes a contribution by Hilaire Belloc, entitled "The Return of a Norm." Whether one agrees with Mr. Belloc or not in his forecast of the future of architecture, his views always command respect and provoke fruitful discussion. There is, likewise, a very just appraisal of the work of the Brothers Adam in the shape of an exhaustive review of "The Architecture of Robert and James Adam," by Arthur T. Bolton, F. S. A., F. R. I. B. A., Curator of the Soane Museum. In the January issue "The Italian Garden" is agreeably treated by Georges Gromort, followed by a stimulating article on "The Architect and the Theatre," by St. John Ervine, while an iconoclastic letter from Bernard Shaw is calculated to stir up either wrath or amusement.

The bi-centenary of Sir Christopher Wren's death falling in February, the greater portion of the February issue is naturally devoted to Wren or to events connected with
the bi-centenary celebration. Especially de-
serving of notice are the drawings by Frank
Brangwyn and others, reproduced in half-
tone. Professor Reilly also contributes a
careful discussion of “Wren as a Baroque
Architect,” which gives timely food for thought
to those who commonly inveigh against
Baroque manifestations.

“Architecture” in its new form seems already
to have hewn out a distinct course and a
highly individual manner of presentation
which will assure it a valued place amongst
architectural publications and make its
monthly appearance an event to be awaited
with pleasant expectation.

HAROLD DONALDSON EBERLEIN.

ARCHITECTURAL SCULPTURE
By Paul Jennewein

The most recent work of Paul Jennewein
is architecturally very significant; it is a
frieze decorated with figures of young chil-
dren, which adorns the lobby of one of Ben-
jamin W. Morris’s new buildings, the Lin-
coln National Insurance Company, at Fort
Wayne, Ind. This frieze typifies, to a re-
markable degree, those basic requirements
essential to the complete incorporation of
sculpture in an architectural scheme; and
reflects the sculptor’s clear perception of
the precise relationship which should exist
between the two arts. Two points of view
or sympathies which are rarely completely
unified in the modern work of art, appear
to have guided its stylistic evolution; we find
evidence of an intensive study of natural
forms, combined with that decorative feel-
ing which characterizes the most formal
type of sculptural expression. This is the
outcome of two absorbing pursuits. Mr.
Jennewein’s diversion and joy is to model
his shapely children at every stage of their
growth, with the result that he has acquired
a profound knowledge of the beauty that
lies in immature human form. He models
them with an almost feverish fear lest
some subtlety of form in limb, extremity, or
torso, may be overlooked, or that he fail
to grasp a poise which suggests the hazard-
ous equilibrium of early childhood. This
diversion has been indulged simultaneously
with diligent research into the Greek man-
nner of the late VI and early V cen-
turies, B. C., to which he is attracted by
his ardent enthusiasm for its purely decora-
tive quality. In considering the stylistic ele-
ments of this interesting piece of sculpture,
we are inevitably reminded of the exquisite
bambinos of the Renaissance—though there
is not the slightest physical resemblance. In
both, absolute truth to nature is linked with
an essentially stylistic form of interpreta-
tion. There is an intense pleasure derivable
from the contemplation of purely decorative
work in which the artist has deliberately at-
ttempted to set aside his stylistic sympathies,
in the wholehearted effort to attain a truth-
ful record of the beauties of human form;
and to find that despite the surrender of
self, his sympathies have unconsciously con-
trolled his vision. Individuality in expres-
sion of this character is the result of so sincere an
effort that it compels admiration and carries
conviction with its spontaneity. This work of
Paul Jennewein’s places him in the foremost
rank of modern architectural sculptors.

Particular interest is attached to this
frieze in that it defines a definite trend in
modernity. We are shown the vital part
that life plays in a historic type of treatment
which threatened to become hackneyed, as a
result of mediocre exponents mistaking man-
erisms for feeling. For the architect it is ex-
tremely important that he analyze the charac-
teristics of such work, for it possesses those
qualities which contribute beauty to architec-
tural effect without competitive interest. To find
the ideal relation of sculpture to architecture,
we must turn to the Greek temple decora-
tions of the sixth and fifth centuries B. C.
In the friezes, metopes and pediment groups
a distinct beauty results from a deliberate
subordination of sculptural interest, without
any depreciation thereof actually resulting.
It was considered vital by the Greeks, that
any sculptural decoration forming part of a
structure should have a definite and relative effect-value; this was stated in terms of motif and field, as the colored background upon which reliefs and detached sculpture were silhouetted, determining the degree to which the decoration counted. There is little doubt that the perfection in balance which characterizes Greek figure composition was due in great measure to the necessity of considering grouping in silhouette upon a colored field. In this frieze of Jennewein's, pronounced signs are discernible to prove that his composition is benefiting by the attention recently given to the polychrome treatment of Greek sculpture.

The decoration of the vestibule of the Lincoln Insurance building presented a difficult and unusual problem, owing to the diversity in length of the spaces to be filled. This will readily be appreciated if the small layout be examined. Panels are inserted in a plain limestone wall over the elevator doors—a solution admirable in its simplicity and novelty. The height of the relief is perfectly adjusted to the proportion of space which surrounds each figure; the field being relieved with simple lettering carved in low relief, bearing the legends and words, "Abundantia Gloria," "Abundantia Fortuna," "Amor," "Veritas," and "Vanitas."

In architectural sculpture there are hopeful signs that the modern Gallic influence is about to receive the coup de grace. This influence,
so far paramount, and possessing great inspirational value in the individual piece, has no application to architectural decoration, because its effort is mainly concentrated upon producing qualities of tone through the play of light upon form, rather than upon the balance of form in a given space, as is essential in an architectural feature. It is not implied that in bas-relief the French have ignored the sense of space surrounding the subject; on the contrary they considered it as much as the Greeks, but with the difference that the former regarded the depth in space, whereas the latter were mainly conscious of its established boundaries. In the French treatment of relief their sentiment causes them to unify field and subject in the decorative idea; in the Greek feeling these two elements in composition were considered as distinct and inseparable decorative factors in effect. The original genius and great prestige of Rodin has exerted an influence in this country distinctly detrimental to the freedom of the true spirit in architectural sculpture. The majority of sculptors will doubtless regard such a statement as rank blasphemy. Fortunately, however, the growing sympathy of the American sculptor for the pre-Periclean mode of expression is rapidly neutralizing the prevailing Gallic influence.

When sculpture is used for architectural decoration it must possess what might be crudely termed pattern value; with the increase in opportunity for sculpture in public buildings this factor in design should be
cultivated with the greatest assiduity, if sculpture is to be associated with fitting dignity, and architecture to be truly beautified. We regard the sculptor’s capacity to arrange form within the given space, as an extremely important consideration for the architect to judge, when making his choice of the man most capable of contributing this extraneous interest to an architectural scheme. Few possess this faculty to a greater extent than Paul Jennewein, and the lack of conventionality which he shows in the work which we have just discussed, causes us to look forward with the greatest interest to his future work in architectural sculpture.

Leon V. Solon.

Artistic Sign Posts for the City of New Rochelle, N. Y.

New Rochelle, N. Y., where through a zoning ordinance the billboard sign has been banished from the residential sections, has just erected at seven of its ten arteries of traffic as many approach signs which are undoubtedly the finest of their kind in America. They are attracting nation-wide attention and the idea will be carried out by other municipalities. These approach signs were designed by famous artists, illustrators and cartoonists, all residents of New Rochelle. A number of the most interesting designs are illustrated in the Portfolio of this issue of the Record.

Two years ago the idea, conceived by the New Rochelle Chamber of Commerce, enlisted the enthusiasm and cooperation of the New Rochelle Art Association. Each artist was privileged to choose his own subject and as New Rochelle is rich in historical themes naturally many of the signs are representative of the Huguenot and Revolutionary days. Mayor Harry Scott headed the Chamber’s Committee, while Frederick Dana Marsh, the artist, was chairman of the Art Association Committee.

George T. Tobin, the artist, contributed a silhouette depicting the landing of the Huguenots at New Rochelle in 1688, while Edward Penfield, the illustrator, chose as his theme the stage coach. At a point where the trail of the Siwanoy tribe crossed what is now the Post Road, Remington Schuyler, perhaps the best known renderer of Indian life, has his Siwanoys returning with a deer from the hunt. James R. Marsh’s contribution is the Port of La Rochelle. That of his father, Fred Dana Marsh, is a model of the typical Huguenot ship in full rig, which, like the majority, is done in rich colors. Ralph T. Robertson, chief designer for W. & J. Sloane, of New York, uses the home appeal in his artistically proportioned sign, Clare Briggs, the New York Tribune’s cartoonist, has worked in his famous “Skin-nay,” who proclaims that New Rochelle is the place to visit “when a feller needs a friend.” The theme of both Coles Phillips and Norman Rockwell is of the Revolutionary period when Washington’s troops encamped in this section of Westchester county. Laurence Loeb pictures New Rochelle as the ideal residential community far from the manufacturing plant. These last three signs are not as yet placed in position.

The signs were executed in New York by James H. Marsh, designer and metal worker, who also contributed one of the designs. All the metal was forged by hand, which adds much to the character of the work and makes it unique from the point of view of craftsmanship.

The Second Pan American Congress of Architects, Santiago, Chile, September 10-20, 1923

The Second Pan American Congress of Architects will meet at Santiago, Chile, from September 10 to 20 of this year. The first Congress took place at Montevideo, Uruguay. Delegates from all of the American Republics will be present at the Santiago meeting. It is to be held under the auspices of the government of Chile, and the program is most comprehensive. The Congress will meet in September, which is spring in Latin America and a most attractive season. The steamer companies are quoting a round trip ticket from New York to New York—via the Panama Canal, west coast, Trans-Andean Railway and the east coast lines—for the sum of $630. This entire trip could be made in sixty days, permitting of a stop at Lima, Peru, ten days in Santiago, an equal time in Buenos Aires, Argentine, and stops in Montevideo, Uruguay, and Santos and Rio de Janeiro, Brazil.

The competition for the new Municipal Palace to be erected in Montevideo, Uruguay, brought forth ninety-two requests for detailed information, photographs, etc. While many of the applicants for the data have since advised us that the rules governing the contest are different from those in vogue in this country, and that it will be most inconvenient for American architects to actively compete, some fifteen or twenty seem to be engaged in the preparation of plans for submission.
An Impression
Of the School of Fine Arts,
Fontainebleau

The Fontainebleau School of Fine Arts, conducted by the French Government for American students, and assisted financially by friends of the movement in New York, has been going now for two weeks, and never has any group of teachers given so generously of their time and imparted so much of inspiration and enthusiasm as Director Carlu and his wife, M. Bray, M. Alaux, for the architects, M. Gourget for the painters, M. Saillens in history, M. Delamarre in French and the splendid musical faculty. Courtesy and a desire to be of service are shown by every officer and employee in the Palace, including the staff in the dining room and the guards.

The Palace faces the magnificent Carp Pond, the architectural wing is on one side, the music wing on the other, and the Galerie des Fleures, where the meals are served, connects the two wings.

Painting, architectural and music students fraternize, and on the frequent tours, for which large auto buses are supplied, the students do collaborative work, the architects assisting the painters and vice versa. Since noon today, (July 6,) a sixty mile tour was made to Nemours, Souffle, Chateau Landon and Ferrieres en Gatinais, coming back to the Palace at 7 for dinner.

This was the third time the trip was made this week. There are many shorter trips, and the students, who have all rented wheels, ride each day to nearby places either for study or for recreation.

Superb musical concerts are given in the Palace; there are frequent entertainments by the townspeople and on the opening day of the school, the mayor of Fontainebleau, M. Fragnaud, presided at a reception in honor of the students.

The students realize to the full the very rare opportunity extended to them in being allowed to work in the inspirational environment of the Palace and under an exceptional corps of teachers. America will, in turn, feel the influence of the labors of these fortunate students.

SAMUEL E. GORDON.
Fontainebleau, France.

Le Diplome d'Urbanisme, the highest degree in the profession of city planning, has recently been conferred upon Mr. George Burnap, one of our contributing editors, by l'Ecole des Hautes Etudes Urbaines, a graduate school of the University of Paris. The courses at this school are conducted by professors from all of the large universities of France.

Mr. Burnap was for several years government landscape architect of public buildings and grounds, during which time he re-designed many of the parks of Washington. He has prepared plans for future development of various parks, hospital grounds, school areas, etc. in and around Washington.

Mr. Burnap is the author of several books on parks and allied subjects.

Indiana Limestone

The Aristocrat of Building Materials

INDIANA LIMESTONE QUARRYMEN'S ASSOCIATION
Bedford, Indiana

August 10, 1923.

Mr. M. A. Mikkelsen, Editor,
The Architectural Record,
119 West 40th Street, New York City.

Dear Mr. Mikkelsen:

In the August issue of the Architectural Record you feature an article on the Tabernacle Presbyterian Church at Indianapolis, Indiana, in which it is stated "the exterior, dignified and churchly, is of smooth faced rubble, color of which ranges from warm gray to tan."

We desire to advise this building is an Indiana limestone structure in which the trim is of the regular cut Indiana limestone and the field of the walls of rough sawed-four-side quarry-run stock, laid up in the form of a random ashlar. When the term "rubble" is employed, it implies the class of work that is built of ledge or field stone, and not a sawed facing.

We consider the Tabernacle Church at Indianapolis an outstanding example of that form of construction. It is, therefore, with distinct regret that we note the incorrect designation of the material used in the exterior of this Church and the failure to give your readers any enlightenment as to the kind of material used.

Yours very truly,

INDIANA LIMESTONE QUARRYMEN'S Ass'N. (Signed) H. S. Brightly,
HSB/cm Service Engineer.
That genius thrives best under adverse conditions is a flyblown but recurrent fallacy. The Abbe Farina could have cut a better tunnel through his prison wall with a power drill than with a rusty nail, and Honest Abe would have entered upon life under less of a handicap if he had been able to study by a better light than that of a log fire, and write upon a more convenient substance than the back of a wooden shovel.

Modern lighting has revolutionized the industries and inconceivably bettered conditions in the home, not to speak of all other human activities where light is a vital factor. It has taken us once and for all out of what were very properly called “the Dark Ages”, and has removed the stunting effect of feeble and dim illumination upon the most valuable of the five senses of man. National Lamp Works of General Electric Company, Nela Park, Cleveland.
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Library
DENISON UNIVERSITY, GRANVILLE, OHIO
Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect

October, 1923
To design and plan a group of buildings for the accommodation of the needs of a college or university is to do more than provide for its material and administrative requirements. The problem is one of creating an environment. When Thomas Jefferson designed the buildings for the University of Virginia he created an environment which was a reflection, in terms of the Georgian classic of his day, of the old "Classic Ideal" which was the backbone, then, of a liberal education.

Those of our colleges and universities which have grown over a long period of years, and have received additional buildings in the varying architectural styles that mark only the sequence of transient fads, are less fortunate than the old University of Virginia. Few have been so unfortunate, architecturally, as Harvard, where the fine, simple style of the earliest brick buildings was abandoned for each successive fashion.

In the exact center of the State of Ohio is the town of Granville. There is located Denison University, founded as an educational institution for Baptists. In the days of pioneering, the more adventurous half of Granville, Massachusetts, pushed westward, and built this newer Granville in Ohio, where, on a picturesque site, like the site of ancient Rome, on seven hills, the new buildings for Granville College are being built.

For vision and ingenuity in relating the buildings to the site, and for the admirable qualities of consistency in the architectural treatment of all and each of the buildings, this project affords much of interest to every architect who recognizes intelligence as the essence of architectural design. Certainly a plan of high distinction has been evolved by the architect, Arnold W. Brunner, of New York, and Frederick Law Olmsted, the landscape architect, who has worked with him on the problem.

The general plan which shows the layout of the college on the seven hills will repay a somewhat detailed study. It is planned, with complete administrative,
View of Hill with Approach  
DENISON UNIVERSITY, GRANVILLE, OHIO  
Arnold W. Brunner, Architect  
Frederick Law Olmsted, Landscape Architect

educational and recreational buildings to accommodate five hundred women and five hundred men, with due provision for future enlargement.

It will be seen at once that the general plan follows the directions and contours of the site in a way which makes the most of these natural provisions, and which refuses to accept them as restraining limitations. The disposition of the main elements is as logical, as practical and as essentially architecturally planned as though the site had been perfectly level, and its natural hilly conformation is utilized to effect an unusually picturesque whole, as seen from the level ground below.

Approximately in the center is the administration building (3), flanked, and faced across a campus (5) with four academic buildings. At the head of this campus is the library (4) and north of it, the technical building (24). Northwest from this and following the lines of this extreme spur of the seven hills, are grouped the men’s dormitories (23). Their gymnasium (22) is located east of the dormitories, and north by east of the technical building, and beyond (20) are fraternity houses. Southwest of the dormitories is seen a miniature colony of houses for the faculty (26). Proceeding now eastward along the ridge, from the central campus, the president’s house (9) is passed immediately before reaching the chapel (2). Midway on the road between the chapel and the women’s group is the observatory (10), and the first buildings of the women’s group are the gymnasium (11) and music building (13), flanking a small campus, and then the auditorium (12). Somewhat down the hillside is the infirmary (14), and following the northerly swing of the easternmost spur of the seven hills are grouped the women’s dormitories. This, in brief, is the general disposition of the buildings, insofar as plan is concerned.

The architectural style in which the entire college is carried out represents an admirable choice, because it is Georgian Colonial in manner, deriving from the native architecture of the New England from which the settlers of the Ohio Granville transplanted themselves and expressing, at the same time, the pervasive characteristics of the brick Georgian architecture of Maryland and Virginia. It is an admirable choice, moreover, because it is not pretentious or artificial, and be-
cause it is a style which must remain of permanent significance and suitability in this country, regardless of what other styles may come or go across the stage of popularity.

From the purely pictorial point of view, the red brick, glimpsed here and there among the profusion of green of the trees, will make a happy color combination and will produce an effect which mental association will at once invest with some feeling of familiar domesticity—that here is a place to live, simply and earnestly, as well as a place in which to study. There can never be any element of the austere in these warm and friendly buildings of brick—yet their fine old architectural ancestry will make them amply dignified as an academic background.

Architectural preference has often made inexplicable detours in the direction of various European styles, overlooking logical and adaptable styles which are close at hand. The widespread popularity of various versions of the Italian Renaissance style, while it did not at first interfere with Georgian Colonial in our houses, generally stamped our larger buildings, when these were not done in an academic classic manner, or in a Beaux Arts French manner. Such instances as the old Colony Club and the Harvard Club were exceptions. And the most important college and university buildings were designed for the most part in renderings of Scholastic Gothic, with greater or less degrees of erudition and suitability.

Dr. Brunner's utilization of the Georgian Colonial style for the buildings of Denison University should afford excellent proof of the adaptability of the style for the logical and straightforward expression of a variety of architectural problems, as may best be seen by a survey of individual examples, observation of their details and a few general impressions.

The general plan divides itself into three principal parts, with the Administration Building and its campus approximately in the center, the men’s dormitory group on the northwesterly spur of the hills and the women’s dormitory group on the northeasterly spur.

The main campus is symmetrically planned, with the Administration Building on the center of one of the long sides, flanked and faced by academic buildings. The Administration Building is appropriately and suitably differentiated from the other buildings in its treatment, and is de-
Men's Group
DENISON UNIVERSITY, GRANVILLE, OHIO
Ar.: old W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect

signed in a way pleasantly reminiscent of Bulfinch's American version of the Georgian style. There is a quiet dignity in this building, which will age gracefully and belong always to its special purpose and environment. One illustration shows the building in perspective, in its relationship to the campus and to its neighboring academic buildings, and the reproduction of the working scale elevation gives convincing proof that it stands the test of this peculiarly exacting and revealing form of delineation.

The exterior of the Administration Building admirably expresses the plan within. A vestibule gives into the main lobby, where the college postoffice is located, while the corridor running with the length of the building gives access to the various college offices, such as the board room and the president's office.

The interiors of the Administration Building are designed in a good, consistent Georgian, pretending to no pomp or circumstance and according nicely with the quiet dignity of the architectural mood of the whole college. And this mood, as the writer intended to suggest at the opening of this article, is the architectural means used to create a certain environment—an environment which would be to successive classes of the college the atmosphere of "Denison," full of happy associations: it would always seem home-like, inviting—a place to revisit for reunions, and to hold in pleasant memory always.

At the head of the main campus the library assumes its logical dominance, with classic colonnade and dome—a building distinguished at once as of special purpose and special importance.

The two dormitory groups have much in common in their general aspects—each a prospect of quiet, grassy court, with arcade and colonnades, with red brick glimpsed through green trees. The chimneys are designed in a manner suggesting the spirit of the dwelling far more than of the institution. There is, in fact, a distinct quality of domesticity in these dormitory buildings, as well as a high order of architectural design and expression.

Two types of dormitory plan have been developed for these buildings—one of the corridor type, in which a whole floor may be supervised by a Proctor, and another in which the rooms are arranged like small apartments consisting of study.
Men's Group

DENISON UNIVERSITY, GRANVILLE, OHIO
Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect
Administration Building
DENISON UNIVERSITY, GRANVILLE, OHIO
Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect

The Architectural Record
October, 1923
bedroom and bath, with a bath usually shared by two of the study and bedroom units, and access from outside had by means of entries which serve four students to a floor up through the entire height of the building. Fortunately the old dormitories which looked like barracks or asylum buildings are a thing of the past, and the housing of large numbers of students has been solved architecturally as well as practically. Mere housing was solved by the barracks in the great cantonments of the World War. At the other end of the scale are such dormitories as the housing accommodations at Denison College.

The four drawings which show dormitory entrances and well-studied compositions of brick, stone and simple iron-work give interesting evidence that there need be no monotony in the design of a large group of closely related Georgian buildings of this character. It is a question largely of architectural resourcefulness, of developing the utmost in variety of which a style is capable, and at the same time maintaining a well-balanced consistency.

The general flavor of the Georgian of Denison College is of the South—of the type which evolved in Maryland, Delaware and Virginia. The gymnasium in the women's group, for instance, is distinctly a reminder, in feeling, of "Homewood" in Baltimore.

One of the most salient characteristics of the Georgian architecture of Maryland and Delaware is the gable chimney, broad and flat. These chimneys usually rose from the center of each gable end, and in the larger houses there were four gable chimneys, the space between each pair spanned by a brick arch, or by a plain piece of coped wall. This characteristic chimney design is seen in several of the dormitory buildings, and true, again, to the Maryland type, incidental iron-work is found much more frequently used than in New England. Essentially the Maryland, Delaware and Virginia type was brick architecture, and one which employed the material in a charmingly colloquial vernacular.

The application of this particular phase of Georgian architecture to the dormitories of Denison College has been accomplished with a great deal of sympathy and architectural ingenuity. The style is one in which even slight errors in scales are fatal to the effect, and in which, too, an over-scholarly manner would prove unfortunate.

Of all the qualities to be preserved, the most elusive was that of the quiet
Plan of Library
DENISON UNIVERSITY, GRANVILLE, OHIO
Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect

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Women's Gymnasium
DENISON UNIVERSITY, GRANVILLE, OHIO
Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect
domesticity of another age, yet this feeling, too, has been given expression in the dormitories, in spite of their size and extent. Though less conspicuous than such buildings as the Library and the Chapel, these dormitory buildings are no less important, and represent a degree of architectural merit no less to be reckoned with in a careful architectural estimate of the entire project.

If the architectural treatment of Denison College did nothing else, it should furnish ample evidence that a group of buildings need force no stylistic issue by attempting ostentation or elaboration.

Differing from the dormitories in kind, but not in manner, is the social hall, which is a part of the women's group. Its great square tower, dominating and dignified, sets it out from among the other buildings as being special and important, yet its scale is entirely in accord with every other building in the entire group.

Several illustrations show the college chapel, a well studied church building of the Christopher Wren kind, with a beautiful tower and an elevation which, like all the other Denison buildings which Mr. Brunner has designed, stands the test of hard and definite delineation in line elevation without loss of charm and distinct character.

It is a building of the utmost simplicity and dignity, in accord with the general feeling of the whole group, yet instinct with a pronounced architectural individuality and identity of its own.

The prospect of the college group, which can never be seen in its entirety, will be that of a wooded hill with picturesque glimpses of red brick buildings here and there, so seemingly scattered as to give no evidence of their well-articulated arrangement. The entrance
Scale Model of Chapel
DENISON UNIVERSITY, GRANVILLE, OHIO
Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect
Scale Detail of Chapel Tower

DENISON UNIVERSITY, GRANVILLE, OHIO

Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect
Plan of Chapel
DENISON UNIVERSITY, GRANVILLE, OHIO
Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect
gate, which is at the foot of the hill, is designed in the same style as the college buildings. From the nature of the site, no impression of the whole scheme will be had until the visitor reaches the crest of the hill, and from the campus which is enclosed by the Administration Building, Academic Building and Library, vistas are had of the winding roads and the level greens in the two dormitory groups.

So much for the more specific consideration of the layout and the architecture of Denison College, as planned by Mr. Brunner and landscaped by Mr. Olmsted. The essence of the project as an expression of architecture lies in the more intangible qualities which the architect, through vision and through sympathy, has given to the solution. He has made the architecture of Denison College serve the greatest of all architectural purposes, the creating of an environment of permanent beauty and dignity, and at the same time one of distinctly livable charm.

From this point of view the complete project for this college in Ohio seems to afford an unusually good illustration of the thing that might be called the larger aspect of architecture.

Too often, without a doubt, the architect is regarded as an adjuster of details: too often, indeed, the exigencies of his exacting profession force him to assume this rôle. There is nothing more detrimental to the fullest benefits to be derived from the architect’s services, nothing more detrimental to the architect himself than a too narrow vision of his larger creative potentialities. Too often he is given, figuratively speaking, too small a piece of paper on which to work; too often the material limitations surrounding a project are transcended by the architect’s vision and imagination. Material limitations, to be sure, are inevitable—but many restrictions imposed by unnecessary prejudices and short-sighted economies should be removed. Individuals involved, as well as whole communities, would be greatly benefited by the results of co-operating with architects instead of coercing them.

Something apparently approaching an ideal condition for creative architecture seems to have existed in the plan for Denison College, because the result affords a striking illustration of the functioning of that special kind of applied intelligence which characterizes the architect.

Architecture, from its inherent nature, is a human undertaking which demands and also expresses intelligence to a high degree. The initial vision must be an intelligent one, taking due thought of practical possibilities, yet at the same time transcending the expectations of the lay mind.

In the project which forms the subject of this article the main point of de-
Perspective of Chapel Interior
DENISON UNIVERSITY, GRANVILLE, OHIO
Arnold W. Brunner, Architect
Frederick Law Olmsted, Landscape Architect
parture was the unusual and difficult site. The secondary point was the architectural mood in which the several buildings would be carried out after their group arrangement had been planned.

To the irregular site was applied a plan by no means lacking in essential symmetry, and characterized by a distinct symmetry of its several parts. This plan, moreover, made no more compromises in the logical and convenient placement of the buildings than would have been necessary on a flat site of adequate area. Here the visible result of the architect's special mental working is apparent, and the arrangement, as fully developed, stands partly as, primarily, a demonstration of intelligence.

In the design of the individual buildings, with each considered as part of a group, and each group considered, again, as part of a whole, the primary requirement was architectural proficiency, a feeling for the style which would insure the avoidance of monotony, expressing an interesting diversity as between one building and another with, at the same time, a general consistency in the whole college group.

To the attainment of this tangible result there is to be added the most difficult of architectural achievements—the creation of an environment, and in this, too, the architect has demonstrated the qualities which make architecture an art as well as a profession.
The little house here illustrated stands at the corner of the Rue Saint Louis and the Rue Royale, in the Canton Sud of Versailles. Although it is often called the house of Madame de Pompadour, she was never the owner of the property. It belonged, at least officially, to her private secretary, M. Colin, who entered the service of the marquise about 1746, when she enjoyed the height of favor at court, and remained in her employ till her death in April, 1764. To all intents and purposes, however, the house belonged to Madame de Pompadour. She was very frequently there, and one chamber of the central pavilion is always called "Madame de Pompadour's room."

This perfectly appointed little dwelling was merely one of the houses of Madame de Pompadour, for she possessed several in Versailles. As pointed out in a previous number of this series, there were times when those attached to the Court of Versailles were glad to escape from the restraints of the palace into an atmosphere of domesticity, no matter how splendidly they might be housed in the palace, and not a few of them were not, although that limitation did not apply in the case of "Miss Fish," who always managed to get whatever she had a mind to, including the monarch himself.

Quite apart from any historical associations it may possess, this house at a corner of the Rue Royale fully justifies a close examination. Like many other good things in France, it does not throw its charms at the head of the chance comer, but must be sought out. One might pass it a thousand times without being aware of its existence. The entrance front, when the gate is shut, is neither imposing nor communicative, and the high wall along the Rue Royale completely conceals what is within.

When the gate is open, the story is different. The glimpse into the forecourt, embraced by the low, projecting east and west wings, strongly invites further exploration of the premises. Even a close inspection of the courtyard does not reveal the whole tale of outward charms. On the far side, to the south of the central pavilion, is the garden and a distinguished but exceedingly simple garden façade with the salon windows opening upon a stone paved terrace.

What particularly impresses one about the whole establishment is the completeness with which every requirement for polite and comfortable, not to say really luxurious existence, is fully provided for in a very small space. To the left, on entering the courtyard, the east wing contains a small stable and coach house. Beyond that are the kitchens, pantry and dining-room, while the upper floor has accommodations for the servants. The opposite wing has some further service accommodation and several sitting rooms belonging to the master portion of the house. The greater part of the central pavilion is given over to the salon, an arrangement of eighteenth century planning.
West Wing

HOUSE OF MADAME DE POMPADOUR IN THE CANTON SUD, VERSAILLES
HOUSE OF MADAME DE POMPADOUR IN THE CANTON SUD, VERSAILLES
Entrance to Forecourt

HOUSE OF MADAME DE POMPADOIR IN THE CANTON SUD, VERSAILLES

North Front

October, 1923
HOUSE OF MADAME DE POMPADOUR IN THE CANTON SUD, VERSAILLES

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End of Forecourt

Corner of Garden

HOUSE OF MADAME DE POMPADOUR IN THE CANTON SUD, VERSAILLES
that prefigures an ideal which not a few architects are now striving to put into practice—the use of one large room where the occupants may, for the most part, "live and move and have their being," rather than the division of a small house into a number of unsatisfactory compartments.

The house is coated with stucco and in this same material all the delicate mouldings and embellishments are executed. The woodwork is painted white. In the garden there is the same arrangement as when the King's favorite trod its paths. Incidentally, the character of the architecture is a refutation of the hackneyed but popular contention that the style prevailing during the reign of Louis XV was finicky and effeminate.

It would be difficult to find a more perfect specimen of those "petites maisons" of the eighteenth century, which are now so rare, or one that has more faithfully preserved the urbane atmosphere of the period in every respect. So far as can be ascertained, the house seems to have been built in or about 1746, at least the central pavilion. It is possible that the wings were added about 1752.

The central pavilion consisted of a salon, a bedchamber, to which was attached a boudoir, and a dining room. On the plan the last named is designated as the library, in accordance with the purpose it now serves. The portion of the east wing now indicated as a storeroom was originally a tiny stable and coach house.

In the salon, whose windows look out upon both the paved forecourt and the garden, the boisserie is of exceptional delicacy and beauty, and the overdoor paintings are copied from originals attributed to Boucher. Mirrors are let into the paneling. The "chamber of Madame de Pompadour," adjoining the salon, has a lower ceiling and is more intimate in character. Here the boisserie is equally admirable and contains ten panels forming a series of Chinese subjects, painted by or in the manner of Jean Pillement, a painter who did much to bring "Chinoiserie" into favor. One of the panels is dated "1746." This seems to fix the year in which the house was completed.
October, 1923

RESIDENCE OF H. VAN DUSEN MACONIGLE, ESQ., RYE, N. Y.

Jerauld Dahler, Architect
MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MASS.
Welles Bosworth, Architect
PINEHURST THEATRE, PINEHURST, N. C.
Aymar Embury II, Architect

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RESIDENCE OF F. S. WONHAM, ESQ., RYE, N. Y.
Jerauld Dahler, Architect
RESIDENCE OF F. S. WONHAM, ESQ., RYE, N. Y.
Jerauld Dahler, Architect

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WAYNE COUNTY AND HOME SAVINGS BANK, DETROIT, MICHIGAN

Donaldson & Meier, Architects
OFFICE OF PIERPONT AND WALTER S. DAVIS, ARCHITECTS, LOS ANGELES, CAL.
Pierpont and Walter S. Davis, Architects
SIXTH STREET SHOPS, LOS ANGELES, CAL.
Pierpont and Walter S. Davis, Architects

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CORNER SHOP, SIXTH STREET, LOS ANGELES, CAL.
Pierpont and Walter S. Davis, Architects
Old Dairy, Upper Level
THE GARDENS, SNOWSHILL MANOR, GLOUCESTERSHIRE
Charles Wade, Architect
The Pool, Lower Level
THE GARDENS, SNOWSHILL MANOR, GLOUCESTERSHIRE
Charles Wade, Architect
Sheepfold and Pool, Lower Level

THE GARDENS, SNOWSHILL MANOR, GLOUCESTERSHIRE

Charles Wade, Architect

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Back in the days when they held competitions for Government buildings and when there was a Tarsney act, in the Spring of 1909 to be precise, the Treasury Department which, for some inconceivable reason or other, has charge of the public buildings of the Government, issued to about a dozen architects an invitation to submit plans in competition for a Post Office in Denver. I remember that competition very well, as it was the first really big competition I was ever in. The programme, prepared by James Knox Taylor, then Architect of the Treasury, was a model of brevity and conciseness; a printed document of only two pages, giving in the simplest and most direct way the requirements of the building, practically all of which were mandatory, and calling for but few drawings, and those at a small scale.

As I remember the programme, there were required a large, well lighted working space for the Post Office, surrounded by a public corridor, and certain offices for the postmaster and other officials on the ground floor, and on the second floor three court rooms for the district, circuit and court of appeals, with judges’ rooms and the usual dependencies, the areas for all these rooms mandatory with a five per cent allowable variation. There was to be a third floor and a fourth, for various Government departments, and a basement, of course, but very properly the plans of these floors were not called for in the programme. And at this point let me digress again. A competition is for the primary purpose of selecting an architect and incidentally, but very definitely, a scheme. Now, in most buildings, the scheme can be shown by a very few drawings, one or two plans, an elevation and a section; as a matter of fact, in most judgments the award is made by the consideration of only the plan and elevation. The other drawings are passed over, although often a great deal of time is spent on their production, for most programmes call for a plan of every floor, with endless departments carefully worked out and private offices and vaults and lavatories and the Lord knows what. Draughtsmen laboriously exercise their imagination, and carefully show desks, tables and chairs quite out of place and usually quite out of scale, in order to form a pattern on the floor to make it look busy. Then, no one considers these things in the judgment, and the winner finds he has to begin his office layout all over again. Such details are unnecessary, and they are distracting to the competitor and to the jury. Of course, I speak of details that are details. Sometimes details become most important. It is sometimes an absolute necessity that there shall be certain offices of a certain size, and that these offices have a definite relation to each other and to the public corridor. This necessity sometimes exists, but rarely. Generally, all such requirements can be summed up in the phrase—allow 10,000 square feet of floor area for the departments on the third floor—no detailed layout is necessary and no plans.

But to return to this competition: three things had to be considered, the lighting of the postoffice working space, the arrangement of the court rooms and the provision for departmental requirements on the top floors. The court rooms must be entered by the public at one end and by the judges and jury at the other; this logically led to an E shaped plan with the courts forming the horizontal and a connecting corridor the vertical member; there was a narrow circulation on the
UNITED STATES POST OFFICE AND COURT HOUSE, DENVER, COLORADO
Tracy, Swartwout & Litchfield, Architects
inside of the side court rooms and the parallelogram completed by a central circulation at the back with offices on each side of the corridor. This meant, of course, that the entire front of the building was given up to corridor space, but as this corridor was only twenty feet wide, the width of the post office lobby below, there was direct overhead light on the letter boxes in the screen—and further, the great colonnade, the feature of the front, did not obscure the light in any office. It was an unusual scheme, but proved workable and has a monumental effect with common sense as a basis. Also by placing the elevators and stairs at the corner on the outside wall we were able to get a heavy pier wall with which to terminate the colonnade.

After we received notification of the award we found ourselves in that vague position in which every architect who has won a large competition finds himself, a feeling of natural elation, qualified by a harrowing doubt as to what is to be done next. How do you start the working drawings? What is the first step? In our case there was nothing definite to start with; we did have the size of the lot, but as our building did not cover the entire lot there were no definite dimensions to go by. We could only assume the scaled dimensions of the competition drawings would work out, and we made tracings of these drawings, and had a number of white prints made, and I took the train for Denver, having first consulted the authorities in Washington to find out what they wanted. I remember the common sense advice given by James Knox Taylor. “You have,” said he, “a good, simple plan for the post office work; keep it so; give us the height and the light, and easy access to the mailing platform and we will do the rest; don’t bother with the local men; they’ll want all sorts of things but they’ll be out in a year or so and the new men will want something entirely different; as far as the departments go, see the men in Denver. They will tell you they need four times as much space as we can give them, but do the best you can and then tell them this is your allotted space and we’ll back you up.” Good, practical, common sense. I went carefully over the post offices here (the new one on Eighth Avenue had not then been built), and stopped on my way at Indianapolis and at Chicago, so that when I got to Denver I really knew a little about the inside of a post office; not much, but enough to talk with some degree of intelligence on the subject. In Denver I found it worked out just as Knox Taylor had said. The local postal authorities had many ideas which were only matters of detail; some few had to do with local conditions such as the unusually large proportionate size of the general delivery accounted for by the many tourists and the large floating population in Denver, but no change was made in the general scheme, with one exception. The building takes up an entire block in a rather out of the way section of the city. That is to say, it is not very near the station, not in the business district, and nowhere near the Capitol group which has been recently so well developed. All the four streets which surrounded it were generally of equal importance, and when I got out there I found the taxpayers on each street demanded, very vociferously, that the building should front on their street, but no one wanted the mail delivery platform on their street at all. There were meetings of the Chamber of Commerce, letters in the papers and public dinners at which this vital question was considered in all phases. Finally we compromised, as we always do. The post office was to face as it was originally shown, but the mailing platform was to be depressed under a terrace with an easy runway to the basement, and the rear was not to look like a rear at all, but like a front, and so it was built.

The court room arrangement gave little trouble. The layout we had made was considered good and the judges were concerned chiefly with their own chambers and with the acoustics of the court rooms. The arrangements of the Federal courts there vary a little from ours and are better in some ways; the witness box is beyond the jury box, so that if the judge can hear the witness the jury is bound to. Then, too, the furniture is not fixed but
Side and Rear

UNITED STATES POST OFFICE AND COURT HOUSE, DENVER, COLORADO

Tracy, Swartwout & Litchfield, Architects
movable, that is, the jury box and the witness box are on rollers so that on occasion they can be shifted.

The departments gave us more trouble. There were many of them, Internal Revenue, Pure Food and Drugs, the Weather Bureau, Animal Industry, and the like. For instance, I found the Animal man in a back room over a drug store with one office assistant and two or three inspectors who were always out on the road, all doing business in one room easily, and a small room at that. But when it came to offices in the new Federal Building, the Animal Industry expanded; they must have an outer office and a workroom, two private offices, a laboratory, a lavatory and must be on the front, near the elevators. And so with every department; the accommodations they demanded would have filled three new Federal Buildings and left no room at all for the post office. Well, I collected all the data, tabulated it and apportioned the space according to the number of employees, the importance of the department and the public accommodation necessary; and then to each head of the department I gave a print showing his space in the building, arranged the partitions the way they wanted them, arranged their closet space and shelving and got their signed approval of these prints. It took a week to do it in Denver; it would have taken years if it had been attempted by mail.

When I came back to New York we started the working drawings, and the first step was to study the order, as the main elevation was substantially a great portico. In the competition drawing it was Ionic, somewhat like an overgrown Erechtheum Order, but with some study we evolved a variant using the national coat-of-arms in the cap, an eagle with outstretched wings over a shield, the curve of the wings corresponding to the dip in the line connecting the volutes, which is usual in Greek work. We studied that order very carefully at quarter and then at three-quarter scale, and definitely established by figures the height, the upper and lower diameter, the location of the lower architrave face and the intercolumniation, and from these data we were able to start upon our plans.

The side elevation gave us a great deal of trouble. The competition drawing showed a rather stiff classic treatment which did well enough on a thirty-second scale line drawing, but was rather banal and uninteresting when developed. After some deal of study, much more than should have been necessary, we threw our classicity to the winds and became rational, trying to use classic motives as the builders of the Capitol in Washington had done, with the result that the side of the building is more interesting than the front. I think our greatest departure from precedent was in the light court. At first we had the usual plain, brick interior court, perfectly respectable but wholly uninspiring. We realized that, as the circulation extended around three sides of the court, the public would see the court walls even more in detail than the front. So we made a really architectural treatment of it, but in limestone, not in marble, as was the exterior, and not at the scale of the exterior but of the interiors, with the idea that this would give more apparent size to the court and be in better harmony with the interior. A rather interesting feature of these courts was the treatment of the skylights over the post office working space. The entire floor of the court was composed of vault lights, as on a sidewalk, and in the center was a raised skylight with a fountain on top of it from which a stream of water flowed down over the heavily stepped skylight. It was also our intention to have trees in boxes around the court, and allow people to walk and sit out there, all of which was good as a scheme, but either too expensive or too troublesome to maintain, so they don't maintain it.

The exterior of the building is all in white marble quarried in Colorado. It was originally intended to put the exterior in Indiana limestone on account of the limited appropriation, but there was so much agitation through the state for the use of a local material which was handsomer, if more expensive, that the contract was finally let in marble and an additional appropriation put through to complete the interiors. They had a great old
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Detail of Colonnade

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Detail of the Order

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Side Entrance

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Under the Colonnade

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Interior Light Court

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Tracy, Swartwout & Litchfield, Architects
Judges' Entrance and Runway to Mail Delivery Platform
UNITED STATES POST OFFICE AND COURT HOUSE, DENVER, COLORADO
Tracy, Swartwout & Litchfield, Architects
Post Office Lobby

UNITED STATES POST OFFICE AND COURT HOUSE, DENVER, COLORADO

Tracy, Swartwout & Litchfield, Architects
time letting that contract in Washington; half the state of Colorado was there boosting their marble, and my partner, the late Col. Evarts Tracy, was hard put to it trying to preserve an attitude of beneficent neutrality between the proponents of limestone who advocated economy, and the boosters of marble who advocated beauty. I remember one day Ev called in state on the Architect of the Treasury, high hat, morning coat and spats and a stick. When Knox Taylor saw the unusual sight he uttered a loud yell and jumped on top of his desk, and on that precarious perch had to receive the two Senators from Colorado, several members of the House and a large group of constituents who had followed immedi-
ately behind Tracy. And after Knox we had many interesting meetings with his successor, Oscar Wenderoth, and to him is due the acoustic success of the court rooms. Wendy told us that he was tired of trying to improve the acoustics of court rooms that had been built without any regard for or even knowledge of that science, and he instructed us to secure the advice of the late Professor Sabine of Harvard, the man who first made acoustics a science. Consequently, the court rooms were laid out according to his instructions and were perfectly satisfactory. Even when empty, they are acoustically good, and they were the first ones so laid out for the Government.
MEASURED DRAWINGS OF OLD ITALIAN IRONWORK
By Louis C. Rosenberg

October, 1923

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In entering upon a discussion of the art of the iron worker, the task seems so great that one feels at a loss to know where to begin. This very little understood craft or art (either word applies) has been much abused, largely from lack of sympathy and from misunderstanding of the principles of design and the methods of operation. While that can be said for nearly all materials, it is especially true of iron work, where heat imposes strict limitations on the time available for working the material. A sculptor may spend any amount of time studying the effects of light and shade upon his sketch, but the iron worker must have in mind a fully developed idea of his finished product and in addition must have the skill to complete this product at a rapid rate. When one realizes that the old saying, "Strike while the iron is hot," applies to every part of the very intricate designs we have in old and new work, the skill required is more readily appreciated. The iron worker is a sculptor of iron; perhaps his work may be compared more closely to the carver of wood; at any event, he is called upon to carve from iron, designs that are quite as intricate and delicate as those of the carver in stone or wood, though his material has a greater elasticity and is therefore capable of much more relief.

The use of iron has been closely connected with architecture for many centuries, in practically all countries, and its decorative and utilitarian possibilities have been fully realized by designers. The word "decorative" is used not to mean applied decoration but to distinguish it from structural iron work, for practically all decorative iron work is utilitarian and its use is the most varied of all materials. For instance, we find that the finest chapel screens in the great cathedrals and the kitchen utensils in the homes of the peasants, are of iron. In both ends of this rainbow the decorative quality is seen. Design in iron work has followed the varying taste of all periods and because of its elasticity the florid Baroque period especially abounds in it.

Iron, like most other materials, has suffered at the hands of the modern machine, and we have tried to accomplish by short cut methods, a result which only the hand and eye of man can bring forth. Lack of sympathy with and knowledge of the materials, have been cited as reasons for these unfortunate results, but other conditions often combine to bring down the standard of the finished work. One of these is the tendency of most architects to specify iron work in the general contract, instead of handling it as a separate contract as in the case of a mural painting or a piece of sculpture. In order to protect their clients most architects feel that they must define and state the size, shape and relation of each piece of iron in the design. By doing that, no alternative is given to the artist but to produce a set, hard, lifeless mass covered with hammer marks. Yet no architect would impose similar conditions upon a sculptor or painter.

Mr. Samuel Yellin, the eminent sculptor of iron, has said that he has been asked more than once to give the proper specifications for iron work, stating just how many hammer marks there should be to the inch, and many other absurd requirements. The solution which Mr. Yellin gives for the problem is to make
a sketch design for the craftsman, showing size of openings and general style of the buildings in which the iron is to be used, letting the craftsman determine sizes, type and detail design. This in turn would be submitted to the architect for his approval. In other words, one should allow the iron worker the same privileges given to the painter and sculptor.

The average iron worker, however, is not always competent to do the things mentioned, but one should not set a boy to carry a man's load. If the requirements are too elaborate for a mediocre workman, then they must be done by a high class man.

In an attempt to produce good iron work from one's own design, an architect who has achieved splendid results has used the following note, which is copied from one of his details: "All iron work to be hammered hot from heavier stock, to sizes not larger than shown, but to vary in general 1/16" less." It is doubtful whether this would actually guarantee a pleasing result, but it is at least an attempt to show what is wanted and at the same time allow a slight variation to the craftsman.

In speaking of iron work one naturally thinks only of wrought iron, but the use of cast iron has in the past produced some extremely interesting results. Unfortunately, it has been much used as a substitute for wrought iron, especially for ornament. In the Netherlands and England cast iron backs for fireplaces were used at an early date and the low relief designs were true works of art. One of the finest modern uses of cast iron was the portico of the Colony Club on Madison Avenue, New York City, of which McKim, Mead and White were the architects. The fluted columns, Corinthian caps and entablature with ornamented frieze were entirely of iron, so beautifully designed and executed that one wishes more use of cast iron could be made in this way. It is regrettable that this portico is now being demolished to permit the widening of the street—another example of the present day disregard for architecture, both old and modern.

Some one has said that the beginnings of all great arts were on the shores of the Mediterranean and Italy, but France and Spain have not fallen behind in the art of the iron worker. English iron work design was undoubtedly influenced by France, and the Netherlands felt the effects of the Spanish invasion. The method of working was much the same, but the designs of Italy, Spain and France were entirely distinct. In America we have many wonderful examples of iron work of the Colonial period, so generally known to our architects that it seems unnecessary to comment upon them. Undoubtedly our early work was influenced by English and Dutch work more than by that of the Latin countries. The New England colonists used little iron except for utensils, but in New York and places south on the seacoast, iron railings on marble steps and balconies on brick houses were in common use. That our smiths knew the material is shown by the lightness and grace characteristic of their work. Occasionally the use of brass finials, in urn or ball shapes, gave an added crispness to the design and in some of the New York work leaf designs were used. These deviations, however, from a strict use of iron alone were by no means common, so that American work is quite free from the rococo forms of France.

In Italy and Spain the use of iron as a decorative motif was especially effective against the contrasting white or natural colored stucco. These blank walls received the shadows and even the simplest designs were endowed with entirely new forms due to the sunlight.

The construction of the later French iron work is especially interesting, for it was then that the welding of various pieces to form moldings began. Even the most elaborate sections when dissected will be found to consist of simple pieces of squares, rectangles and rounds skilfully and ingeniously combined. In France the marvelous fences and gates were generally backed up with heavy foliage, or placed so that the sky formed a background to bring out the design, as at the entrance gates at Versailles.
MEASURED DRAWINGS OF OLD ITALIAN IRONWORK
By Louis C. Rosenberg

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MEASURED DRAWINGS OF OLD FRENCH IRONWORK
By Louis C. Rosenberg

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MEASURED DRAWINGS OF OLD FRENCH IRONWORK
By Louis C. Rosenberg
THE ARCHITECT AND THE BUSINESS CYCLE

By Thomas S. Holden,
Statistician for F. W. Dodge Corporation

Of the hundreds of thousands of construction projects that have been entered on the records of the Statistical Department of F. W. Dodge Corporation there are three that stand out more strongly than any others in the writer's mind.

In August, 1921, contracts were awarded on a large factory and a large hotel, and in the following month on a big bank building. In the case of the factory project a statement was issued by the owners to the press to the effect that careful study of conditions led them to believe that the building could be erected then as advantageously, costs and availability of materials and labor considered, as at any time within the next year or so. A glance at Chart No. 4 shows that building volume was at a very low ebb in July, 1921. In that month general business conditions were at their very lowest ebb since the war.

While the writer never saw any statements made by the owners of the hotel or the bank project initiated at that time, he is reasonably certain that the courage shown by the owners in venturing millions of dollars at such a moment must have come from similar study of conditions and a conviction that the moment was propitious.

Again referring to Chart No. 4, it is seen that the trend of construction volume was definitely upward from July, 1921, until February, 1923. Reference to Chart No. 5 indicates that prices of materials were advantageous to the owners of these projects for nearly a year from the time of the letting of the contracts.

Those three projects have stood out in the writer's mind because they exhibited unusual business sagacity on the part of their owners and because they showed courage when the majority were afraid to risk their money on building projects. The majority waited. The heaviest volume of building activity on record was initiated in the early months of this year when costs had risen to peak proportions and labor and materials were not available in sufficient quantities to carry out the program of construction planned.

Architects are frequently called upon to advise clients as to whether conditions are favorable for starting a building project at a particular time. In many cases millions of dollars are involved. If the architect is able to advise his clients as the three owners of the 1921 projects were advised, either by their architects, bankers, builders, or well-informed members of their own staffs, he has a wonderful opportunity to save money for his clients and enhance his own reputation as a business adviser.

The business world in general has only recently availed itself of the results of the studies of the business cycle made by statisticians and economists. The data on the subject, now increasing in volume, has been somewhat meager. The experts themselves have not long been convinced of the existence of the minor three-year cycle in business activities.

The charts appended to this article are a presentation of evidence of a complete three-year cycle that has been under close observation and carefully recorded.

A careful explanation of the charts will make the whole story clear.

CHART NO. 1 shows monthly dollar totals of contemplated projects as reported for the 27 northeastern states (which include three-fourths of the total construction of the country) by F. W. Dodge Corporation. The record of contemplated projects includes all first reports turned in by the Dodge News Department. The curve of monthly totals is shown by a heavy black line. The broken line is the curve of average seasonal fluctuations of contemplated work reported. For this curve, the five January figures plotted are the same, con-
sisting of the average January figure for the years 1919, 1920, 1921 and 1922. The five February figures are the average for February 1919, 1920, 1921 and 1922, and so on. During parts of the period covered the curve of monthly totals (solid black line) is above the curve of average seasonal fluctuations and the rest of the time below.

CHART NO. 2 shows a reduction of the data of Chart No. 1 to simpler terms. The “index numbers” are nothing more than percentages. The January, 1919, figure is the ratio of the January, 1919, total, to the average January figure, and so on. The “index number” for any single month is the percentage of that month’s recorded total to the average figure for the particular month. This has the effect of eliminating seasonal fluctuations. The broken curve of seasonal fluctuations in Chart No. 1 has been transformed into a straight line, the 100 per cent. line of Chart No. 2. Points on the solid curve of Chart No. 1 which are above the curve of average seasonal fluctuations appear in Chart No. 2 as points above the 100 per cent. line, and vice versa. The “index number” curve of Chart No. 2 shows a definite cycle of exactly three years’ duration, the peaks appearing in January, 1920, and in January, 1923.

CHARTS 3 and 4 give similar data for the recorded figures on contracts awarded. Dollar totals have been used, instead of figures representing construction volume (square feet of floor space) because dollar totals are the only totals we have for contemplated work. It is interesting to note that a curve similar to that of Chart No. 4, but based on square foot totals instead of dollar totals, is of practically the same shape as the one in Chart No. 4.

The trend of construction volume, as shown in Chart No. 4, is more definitely marked than in Chart No. 2. The second peak occurs in February, 1923, giving three years and one month as the period of the cycle. The fact that the peak of contemplated work in January of this year anticipated the peak of contracts awarded by one month is scarcely suffi-

CHART NO. 5 shows the U. S. Bureau of Labor Statistics index numbers on building material prices. Note that the curve of Chart No. 4 anticipates the curve of material prices by about three months. This is significant. The first five charts present a definite picture of a complete cycle of construction operations and material prices. This picture is not definite until the seasonal fluctuations are eliminated, as in Charts No. 2 and No. 4. Seasonal fluctuations have obscured the facts about the three-year cycle to a greater extent than is generally realized.

Seasonal fluctuations, observed in nature and in so many operations of production and general business activity, are obvious to every one. They are completely discounted in the fixing of prices. In many cases the manufacture of building materials is a seasonal activity. In all cases, a seasonal variation in building volume is anticipated, and prices of materials seem to vary without regard to seasonal variations in construction volume. The curve of Chart No. 5, made up of averages of quoted prices on a number of materials, shows no seasonal variation whatever, but follows very closely the curve of Chart No. 4, from which seasonal variations have been eliminated.

CHART NO. 6 shows the seasonal curves of contemplated work and of contracts awarded, placed together for close comparison. The January points of the two curves indicate the percent of the average January total, in each case, above or below the average monthly total, and similarly for the other months. The seasonal curve for contracts awarded (which may be taken as the equivalent of work started) requires no comment. Note that the seasonal curve for contemplated work shows a steady rise during the first three months of the year, then a drop, a minor rise, another drop, and then rises to a maximum in December. The heavy planning is done in the
winter months, the heavy construction in the summer. It is obvious that the planning is done very largely in anticipation of seasonal conditions. The largest monthly total of contemplated work in the entire period was recorded in December, 1922. To one knowing the construction trend this was merely an indication that vastly more work was being planned for “next spring” than could be executed under conditions sure to prevail when spring came. The vast majority have the foresight to plan for “next spring.” But up to the present very few have had the facts before them to enable them to foresee whether “next spring” would be a better or a worse time to build than “last spring.”

The fact that the maximum of contemplated work usually occurs in December shows also the error of basing estimates of the following year’s building volume solely on the volume of work reported in the plan stage during the closing months of the current year.

To get plans ready when building operations are slackening, and to let contracts when construction volume and costs are low, is the economical procedure. A few people, possessed of the facts, have been able to do this in the past. By watching carefully the cyclical trend and properly discounting the seasonal trend, any one can do it with more or less accuracy.

It is not to be assumed that things ever happen twice in just the same way. No two cycles of operations are likely to be exactly similar in duration or extent of fluctuations. But with knowledge of the construction trend and of surrounding conditions, it is possible to substitute reasoned judgment for guesswork, to get ahead of the rush instead of going with it.

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ARCHITECTURAL SCULPTURE BY
LEE LAWRIE

In the panels which Lee Lawrie has modeled for the Nebraska State Capitol by Bertram G. Goodhue, he has achieved a decorative architectural quality that is rare in modern sculpture. A virile feeling in the decorative translation of the human form and versatility in composition are qualities which please without surprising us in his work; but in the schematic value attained through a distinctive technique we experience all the charm of the untrammelled. A remarkable sense of spatial depth has been realized by the manipulation of planes of very slight projection, the treatment of edges, the silhouetting of form, and the undercutting of detail. In the general impression of treatment we feel that a thoroughly homogeneous stylistic result has been produced by a curious amalgam of apparently contradictory influences: in the ornamental balance of the composition in the allotted space and the pattern-value of details we recognize the actuation of the Greek feeling, but in the delineation of detail and in the impression obtained of successively receding planes we are forcibly reminded of the Chinese carvings of the seventh century, in which a landscape of great apparent atmospheric depth is carved in a narrow soapstone slab with a counter-

part of the technique employed by Lee Lawrie. This similarity in method, of which the sculptor is possibly unconscious, has produced a result which offers considerable resources in architectural effect in locations where a spot of sparkling tonal interest would be advantageous, but where it is architecturally impossible to achieve the result by the usual methods.
In the conception of these panels the sculptor has recognized the fact that when sculpture fills an architectural space it must rank as an adjunct to architectural effect. Where we find sculpture and architecture combined in buildings of the best periods of the historic styles, we sense that the sculptors were impelled by the consciousness of an imperative architectural obligation. They express themselves primarily in architectural terms; the scale, the conformation of detail, the grouping of shadow and the silhouetting of form were all devised to contribute to architectural effect. The building never appears to have been regarded as a scheme created to furnish the sculptor with pedestals, niches and backgrounds for his work. The reason for that perfect attunement in sculptural and architectural effort was that, through the close inter-relation of those arts, formal aesthetic values were intuitively and accurately appreciated by architect and sculptor. The architect anticipated the exact contribution that the sculptor would make to his composition in the term of the former’s art; and the sculptor appreciated just what function his work should perform in its architectural
entourage, knowing intuitively that when his work was associated with architecture the result of the combination must be architectural, and that it was not a question of creating a species of duet between two arts.

Leon V. Solon.

THE OLDEST AND THE NEWEST OF AMERICAN SCHOOLS OF FINE ARTS

It is little known that the first university instruction in fine arts given in America was inaugurated by New York University on its foundation in 1832, and that the first holder of its chair of design was Samuel F. B. Morse, more familiar as the inventor of the telegraph. Up to that time Morse had devoted himself to painting, and it was, indeed, as President of the National Academy of Design that he received the appointment. It was in his studio in the old University building at Washington Square that Morse, despairing of public appreciation of painting, constructed his first telegraph; and he continued to hold his professorship of art until his death, although scientific pursuits later left him but little time for instruction.

The work which thus lapsed has now been re-established through the generous support of Colonel Michael Friedsam and the Altman foundation, and the scope of the department of fine arts has been greatly increased. Through the cooperation of the Art-in-Trades Club of New York City, which has done so much to raise the artistic standard in manufacture and trade, the work offered in the decorative arts will be especially important.

The Morse Professorship will be held by Fiske Kimball, formerly head of the School of Fine Arts at the University of Virginia and writer of many books and articles on architecture and the other arts. Mr. Kimball heads a strong faculty including Dr. Richard Offner, in charge of the study of Italian Art, for which he is especially qualified, having spent the better part of ten years in research work there. During this time his “History of Florentine Painting,” which is now nearing completion, has received frequent commendation through important articles. Lectures on historic textile fabrics, on tapestries and on oriental rugs will be given by Dr. R. M. Riefstahl, associated with the Anderson Galleries, and well known for his writings on textiles and on Mohammedan art. After long residence in France Mr. William M. Odom, author of the great “History of Italian Furniture” and director of the New York School of Fine and Applied Art in Paris, will lecture on interiors and decoration in France. Mr. Francis Leneyson, author of many books and well known as a decorator in New York and in London, where his firm acts by appointment to His Majesty, will supervise a course in the design of interiors and furniture.

Edwin H. Blashfield, President of the National Academy of Design, will be the first of a number of special lecturers and will inaugurate a series of Morse Lectures. It is interesting to note that his talks, given in the form of reminiscences dating back to student days with Morse in Paris, will be given in the auditorium at Washington Square on the site of the old University building where Morse had his studio.

New York University and the National Academy of Design will offer a combined course for art students desiring also to obtain a liberal college education, thus restoring and enlarging the old relation between the University and the Academy. Four years will be spent in the course—the first three on academic subjects at the University and the fourth exclusively on drawing and painting at the Academy. Thus University students will profit by having instruction by such well known masters as Charles W. Hawthorne, Francis C. Jones, Charles C. Curran and others, under whom they may continue the study of painting at the Academy following their graduation from the University.

Courses in the history of architecture and other phases of painting and the decorative arts will be among the general courses. These are open to the public, especially to those engaged in professional or commercial work—as well as to regular students of the University. Women as well as men will be admitted to most of these, a number of which, through the courtesy of the Metropolitan Museum of Art, will be held at the Museum. Other lectures will be held at Washington Square and University Heights, many of them in the evening.

New York with its valuable artistic sources, its multitude of public and private collections and exhibitions, is the obvious location for a great University department of fine arts. It has seemed a great anomaly that there should have been none there. Now we may hope that the want will be supplied.

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Prize Winning Design

MASONIC TEMPLE, TRENTON, NEW JERSEY

Harry A. Hill, Architect
COMPETITION FOR MASONIC TEMPLE
TRENTON, NEW JERSEY

A competition for a new Masonic Temple for the city of Trenton was closed recently and announcement of the awards has been made. The competition was limited to architects with an established practice, Master Masons in good standing, living in Mercer County.

In submitting their report on the awards, the jury advised: "The selected design is one that is lasting in merit and well conceived as to detail and proportion. As the major interior walls extend from foundations to roof, simplicity of construction has been secured. This will result in the min-

The drawings for actual working operation will be started at once and it is expected that work will be well under way by October.

Prize Winning Design
MASONIC TEMPLE, TRENTON, NEW JERSEY
Harry A. Hill, Architect

According to its terms, the building is to cost approximately $1,000,000; is to be 96 feet x 156 feet with five stories and basement; provision to be made for five lodge rooms, an armory and an auditorium with stage, seating 1400 people. There is to be a library and a suite of offices for the Grand Lodge of the state, also a dining room, kitchen and lounge room, card rooms and other social facilities.

The first prize was awarded to Mr. Harry Armstrong Hill, architect, of Trenton, and the second, to The P. L. Fowler Company, also of Trenton.

The judges of the competition were Mr. Charles Z. Klauder of Day & Klauder, Philadelphia, Mr. Thomas Hastings of Carrere & Hastings, New York, and the Hon. Frederick W. Gnichtel of Trenton.

The second prize-winning design was very commendable but the jury felt that if executed, the result would be somewhat too monumental for the size, the city itself and the general surroundings.

The drawings for actual working operation will be started at once and it is expected that work will be well under way by October.
Solving the Upholstery Material Problem

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PROPOSED RESIDENCE ON LONG ISLAND
Office of John Russell Pope, Architect
Rendering by Otto Eggers
By classifying the subjects illustrated in this issue of The Architectural Record according to the materials of which they are built, there has been a complete departure from the methods used in former Country House Numbers, since no attempt has been made here to group houses either regionally or by traditional styles. The regional grouping has never been completely satisfactory, because it is almost impossible to assume with truth that the various sections of the United States are architectural entities. It is difficult to determine whether a house built in California by a New York architect should be placed with the Pacific Coast work or whether a house built in Florida by a Chicago architect should be called Southern or Western. It is true that architects do, to some extent, adjust their design to the climatic conditions of the regions in which the houses are to be built, but this is by no means invariably the case possibly because the architects feel it unnecessary; or possibly because the client selects a certain architect because of a liking for his type of work regardless of its regional suitability.

As the whole point of setting off the work found in each region in separate chapters is to indicate the progress made by the architects of these regions, it is obvious that if the houses do not display certain quite distinctive local characteristics, it is useless to collect them in this way. Nothing is proved by such an arrangement. One finds a house of Colonial proportion next to one of Italian tradition in photographs from Dallas, Texas and from Eastport, Maine. Such groupings would only serve to show that the Eastport architect is more familiar with Italian than the Dallas architect is with Colonial, or the contrary.

Few of the houses illustrated in this number can even vaguely be classified by traditional styles, and those which can are derived, as we shall see, from sources not very remote either in time or place.
One of the definite functions of this annual Country House Number is to enable us to “take stock” of our position in domestic design throughout the whole country. This does not constitute a review of the work of the past year, for few houses have the entourage in such condition that they can be photographed immediately after their completion, and the slight variation in the ages of the houses is negligible for purposes of comparative study. American architecture changes rapidly, but not so rapidly that a year makes a very great difference in its position as a whole.

If the houses in this “stock-taking” were so arranged as to emphasize their points of difference, and if the selections were subtly made, it would not be difficult to prove that we are building up in this country a variety of architectural schools; but the facts are otherwise.

We are very properly adjusting our design to meet climatic conditions, so that there is perhaps as much difference between the average house built in Texas and the average house built in Maine as there was between the house of the French Renaissance built in Normandy and that built in Provence,—but not more. Likewise, it would be very easy indeed to make a selection of houses which should prove that a derivative of the Italian school is being used all over the United States, or by the same exercise of selection, the Colonial might appear to be the all-pervading style.

Such systems are fallacious; what we believe to be true, and think the illustrations prove very definitely, is that our American country house architecture has a flavor of its own that is wide spread, of our own time and distinct from any other. Take, for example, the stone houses designed by the Philadelphia men. Many of them are obviously inspired by the Pennsylvania Dutch farm house and an almost equal number by the English cottages, yet there has been so great a commerce in ideas between the two sources that it is impossible, in many cases, to distinguish the preponderant idea. The styles are becoming, (or have become) variants of a single theory of design.

Since no one can wholly divest his design of reminiscences, we find that a stone built house will tend toward the historic work with which the architect is familiar, and that a wood built house will inevitably lean toward the only wood architecture—Colonial. Thus it will be found that the houses of different materials show strong tendencies toward particular historic styles, but with such freedom in their use that the prevailing impression is one of unity rather than of diversity.

While the first consideration in the arrangement of the illustrations was that of the material of the building, it was found that the subjects also divided, so far as might be, in accordance with their styles. Beginning, with stone, followed by houses partly of stone and partly of brick, then by houses of brick, and of brick and stucco; stucco, and finally of wood, a cycle of tradition has more or less been completed, ranging from the Mediaeval farm houses to the American Colonial. It was also found that the arrangement did not bring together any two houses which would not look well built side by side, so great is their family resemblance in scale and design. We found that in trying to make our arrangement a kind of prismatic scale of materials, it appeared to matter very little how we paired the houses; they had a pleasant friendly look together; our modern American work is plainly of one family, from the Spanish-Italianate work of California to the Colonial of New England.

Our selections have not been made to prove any preconceived theses, but with few and simple principles in mind: First, that the work must be interesting to other architects and to the public; second, that the houses must have been recently completed; third, that they must be well presented.
Ground Floor Plan

RESIDENCE OF PERSIFOR FRAZER, ESQ., CHESTNUT HILL, PA.
Robert Rodes McGoodwin, Architect
RESIDENCE OF ANDREW J. THOMAS, ESQ., HARTSDALE, N. Y.
Andrew J. Thomas, Architect
RESIDENCE OF ANDREW J. THOMAS, ESQ., HARTSDALE, N. Y.
Andrew J. Thomas, Architect

Ground Floor Plan
RESIDENCE OF HERBERT P. LUCE, ESQ., FOREST HILLS, N. Y.
Aymar Embury II, Architect

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FIRST FLOOR PLAN
OF HOUSE FOR
MR. HERBERT P. LUCE
FOREST HILLS, N.Y.

AYMAR EMBURY II
ARCHITECT
150 E. 61 ST. N.Y.C

RESIDENCE OF HERBERT P. LUCE, ESQ., FOREST HILLS, N. Y.
Aymar Embury II, Architect
RESIDENCE OF THOMAS FROTHINGHAM, ESQ., FAR HILLS, N. J.
Office of John Russell Pope, Architect

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RESIDENCE OF THOMAS FROTHINGHAM, ESQ., FAR HILLS, N. J.
Office of John Russell Pope, Architect
RESIDENCE OF HARRY W. WALKER, ESQ., FAIRFIELD, CONNECTICUT
Murphy and Dana, Architects
SECOND FLOOR

RESIDENCE OF HARRY W. WALKER, ESQ., FAIRFIELD, CONNECTICUT
Murphy and Dana, Architects
RESIDENCE OF W. JULE DAY, ESQ., DOUGLASTON, L. I.
Frank J. Forster, Architect
RESIDENCE OF JULIUS FEISS, ESQ., OAKWOOD DRIVE, CLEVELAND, OHIO
Howell & Thomas, Architects

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RESIDENCE OF JULIUS FEISS, ESQ., CLEVELAND, OHIO
Howell & Thomas, Architects

Second Floor Plan

First Floor Plan
COTTAGE ON ESTATE OF RICHARD SELLERS, ESQ., BELLEVUE, DELAWARE
Prentice Sanger, Architect
RESIDENCE OF BROOKS FROTHINGHAM, ESQ., SANTA BARBARA, CAL.
George Washington Smith, Architect

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RESIDENCE OF BROOKS FROTHINGHAM, ESQ., SANTA BARBARA, CAL.

George Washington Smith, Architect
Residence of William Gehron, Esq., Pelhamwood, N.Y.

William Gehron, Architect
RESIDENCE OF WILLIAM GEHRON, ESQ., PELHAMWOOD, N. Y.
William Gehron, Architect
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RESIDENCE OF DAVID ADLER, ESQ., LIBERTYVILLE, ILL.
David Adler, Architect
Key Plot Plan

RESIDENCE OF DAVID ADLER, ESQ., LIBERTYVILLE, ILL.
David Adler, Architect
RESIDENCE OF WM. S. JENNEY, ESQ., EASTHAMPTON, LONG ISLAND
Polhemus & Coffin, Architects
RESIDENCE OF WM. S. JENNEY, ESQ., EASTHAMPTON, LONG ISLAND
Polhemus & Coffin, Architects
RESIDENCE OF BARTOW CROCKER, ESQ., FITCHBURGH, MASSACHUSETTS
Prentice Sanger, Architect and Landscape Architect
RESIDENCE OF ARTHUR C. SHOREY, ESQ., ARDSLEY-ON-HUDSON, N. Y.
Leigh French, Jr., Architect
RESIDENCE OF ARTHUR C. SHOREY, ESQ., ARDSLEY-ON-HUDSON, N. Y.
Leigh French, Jr., Architect
RESIDENCE OF L. A. VAN PATTEN, ESQ., PELHAM HEIGHTS, N. Y.
Lewis Bowman, Architect
RESIDENCE OF L. A. VAN PATTEN, ESQ., PELHAM HEIGHTS, N. Y.
Lewis Bowman, Architect

Front Elevation

First Floor Plan
That it was found impossible to group the illustrations in this number of The Architectural Record either by style or regionally, is perhaps the strongest indication of the healthy condition of American architecture at the present time. Publishing annually a number entirely devoted to illustrations of country domestic architecture, it is brought home to us as to few practicing architects, that the increasing strength in American design is less apparent in the individual achievements of our best architects, than in the increase in the number of men or firms who are capable of really fine work. We see also that where the best of our designers used to fail quite often, now the percentage of entire failures is almost negligible, and even the less excellent houses of fifty or sixty architects contain much of interest, and even more of technical ability, of savoir faire.

If this be doubted, look back twenty-five years to the time when the great firm of McKim, Mead & White was still willing to design country houses. There is a firm whose ability is beyond question, and who designed so many country houses that their number is forgotten; yet of all that number there is but one* which is comparable to the average good work of today. The very fact that many of our suburban homes were designed by them is not known to the communities in which they exist, and it may be imagined that the architects themselves would be loath to have their authorship publicly advertised. McKim, Mead & White were very likely abler men than most of the architects who are engaged in the design of country houses, and were certainly better trained than most of them; so the advance in quality must be in the art as a whole, and not in the individuals practicing it.

It may be true—that there is always that danger—that our estimate of the situation is false, and that what we take to be an advance is only a change, or perhaps even a retrogression; but such signs as we can read lead us to believe that we are distinctly on the up-grade. The enormous growth of interest in architecture on the part of the general public, has unquestionably stimulated the profession to a marked degree; but such stimulus is not always beneficial, for instance the Strawberry Hill Gothic of the Nineteenth century, a movement which did not arise within the profession, but was forced upon it by the buying public. Nor do we have to go back so far to seek for proof; consider only the medieval castles on the Hudson by which a reluctant profession was seduced from the paths of righteousness.

After all, before it can be said that architecture is advancing, we must ascertain whether the path we are now treading is the righteous path, or whether it is an alluring by-way from the real road; and the strongest proof that we are right is the impossibility of classifying with safety the bulk of good modern work under any traditional head. We seem to be more than creating a fashion, we are developing a style, a style which as yet we cannot even name, and least of all can we call it "modern."

It is surprising how little the modernist schools of Europe have affected our work; rather is the tendency the other way, and Frank Lloyd Wright and Louis Sullivan are names to conjure with abroad rather than at home; the Englishmen, Baillie-Scott and C. A. Voysey, have probably had more influence on our work than all our own modernists put together, and even their influence is slight.

It is rather curious that the "Art Nouveau," or "Modernist" movement in art has met with so little sympathy in a profession so vigorous (at least, materially) as is architecture in this country. It may be that our architects have not the spirit to appreciate, or the intelligence to inquire what lies behind the flat, angular and dirty-colored surfaces of the new art; it may be that there is nothing but this surface, and that the whole movement is

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*The writer refers to the Breese house at Southampton, Long Island.
not the result of genuine need of the world for a new method of expression, but rather born of a restless and simian desire for novelty. It is certain, at least to us, that the whole expressionistic movement to rationalize beauty is as hopeless as were the attempts of Vitruvius and Palladio and Vignola to settle once and for all the proper proportions of the orders, no matter where or how used, so that architecture would become a sort of standardized vehicle with interchangeable parts, with the column as the cotter pin to hold together any design.

Our work is still to some extent eclectic; we are still conscious of deliberating as to what tradition to follow, and no question to a client is more common than, "What style house do you want?" It is regrettable that we should view our art so much from outside that we depend upon the client to choose the style, like the dressmakers making up costumes, though we have at least progressed far enough to be sure that our houses of traditional labels resemble their prototypes even less than the products of the Jewish clothing trade in New York resemble the imported models. This departure from precedent is far from destroying the illusion of beauty which draws us to the older work; rather, we create a new illusion.

In the past no new style was ever created by throwing away the older work. Every style, even Renaissance, was a slow evolution through continuous grafting of new elements on old stock; and it is not a dissimilar process which is going on today. Our method is partly aesthetic, whereby we borrow from the Italian to enrich the English, or graft Spanish motives on Italian forms. But to a larger degree the process of change is accelerated by material necessities, such as our climate and our modes of life. So there can be, with occasional exceptions, no genuine reproductions of old work; too much has to be sacrificed to produce them. We would have to forget most of what we have learnt, and be content to work with the tools and live the life of an outgrown stage of the world's develop-

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ment. Just as the Renaissance architect of the time of Francis I, in his attempt to recreate the art of Rome, could not forget his trained sense of fenestration or consider building a house without glass and chimneys, so is the modern architect unable to divest himself of his knowledge and ignore the requisites of modern life.

From the beginning of the Eighteenth century people in Northern Europe and in the settled parts of American colonies have lived lives not very different from our own, under conditions both climatic and social which closely approximate ours. It is to be expected that houses of this class can be lifted bodily from their periods to ours with only such changes as would occur when any architect has a client who wants a house "like Mr. Smith's." Yet it will be found that the houses which most closely follow historic precedent, yet follow less closely than they might; even where there is apparently an attempt to produce a "period" house, the result is from that point of view a failure; we have got beyond the point of "doing period houses."

We do find, however, that houses of certain materials tend to resemble houses of historic styles in which these materials were mainly employed; whether this is because the architect starts to build a Cotswold house and uses stone, or because he builds a stone house and uses the well-known Cotswold precedent, cannot be definitely said, but the fact remains that certain styles and certain materials seem to have a kind of affinity for each other, and while practically every style has been and can be built in almost any material, we nevertheless have a very definite association of materials with each; for instance, white woodwork with green shutters for Colonial, and stucco and tile for Italian.

So it was impressed upon us that the thing to emphasize in our discussion of the current work was rather its homogeneity than its diversity. So feeling, as we do, that the American architect is at present leading the world, it came as a pleasant surprise to us that the hope
(rather than belief) that we are gradually developing a distinct and national style of our own, is by way of being realized.

The one thing that most disturbs our belief that the hope will soon become a fact, is that architecture is in this country pursuing a course peculiarly its own, while in every past period it formed a part of, or was the leader in, a general art movement. If this is still the case today it can be seen only obscurely. The two great sister arts, sculpture and painting seem to have been violently rent asunder by the feud between the classic and the modern. In architecture there appears to be no such feud. Certainly most of our acceptable current work is far from the modernistic movement of France, Austria and Germany. While not so distant from classic art, it is still not dominated by the dead hand to the extent which, let us say, Michaelangelo or the Archiaistic Greeks dominate one section of the sculptors.

Nor does the kinship with the minor arts seem to be much greater except in those which are directly contrived to serve as ornaments of architecture. The design of furniture and of upholstery fabrics is in the healthy condition of combining a respectable deference to tradition with a vigorous independence in design. This gives the householder an ample field from which to chose the lesser but tremendously important fittings for his house. However, in the arts not subsidiary to architecture there appears to be a genuine divergence of feeling which cannot lightly be called a different fashion. Certainly, the most interesting (and apparently the most vital) work of the theater, of the dressmaker, of the poster artist, of the illustrator, is far more daring and far less traditional than is our architecture, and, it must be admitted, not less valuable.

However, even in these arts a certain analogy may be perceived if we compare them with their European counterparts. We seem to have a certain taste for simplicity and clean line even in our least serious things. The leaven of the hard Colonial days and of the dissenting English, Scotch, German and French who were the founders of our traditions in art as in morals, has kept us away from the excesses of the Continent in color and design, and this in spite of our enormous importations of European art entire, and in spite of the great infusion of less restrained bloods. Even the florid Italian and the opulent Jew, transplanted in such quantities, feel its effects, and here produce work genuinely American, relying less upon color and ornament than upon line and mass. Compare the Italian work of today with the work of our architects of Italian descent and be convinced.

Now all this may seem a far cry from the country houses which are the reason for this number, but these houses are because of the whole of architecture and are significant only as they form a part of it. There was a time when our public buildings were the best things we produced; and the designers of the house had to learn from the architect of the

Detail
RESIDENCE OF PERSIFOR FRAZER, ESQ., CHESTNUT HILL, PA.
Robert Rodes McGoodwin, Architect

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RESIDENCE OF PERSIFOR FRAZER, ESQ., CHESTNUT HILL, PENNSYLVANIA
Robert Rodes McGoodwin, Architect

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RESIDENCE OF
DEVEREAUX C. JOSEPHS, ESQ.,
CHESTNUT HILL, PA.

Robert Rodes McGoodwin, Architect
RESIDENCE OF FRANKLIN D'OLIER, ESQ.,
WYNNEWOOD, PA.
Tilden & Register, Architects
RESIDENCE OF JOHN W. PRENTISS, ESQ. EASTERN POINT, GLOUCESTER, MASS.
Parker, Thomas & Rice, Architects

RESIDENCE AT SNEEDENS LANDING, NEW JERSEY
William Lawrence Bottomley, Architect
RESIDENCE OF JOHN N. FRAZIER, ESQ., RYDAL, PENNSYLVANIA
Tilden & Register, Architects

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great building that plan must be expressed in elevation; that ornament without meaning is worse than useless; that structure should be logical; that scale should be studied with the mass. Now the condition is reversed, and it is the architect of public buildings who has much to learn from the designers of houses. These lessons well learned can make our architecture the greatest the world has ever known.

Our public work is based on sound and wise principles, in part acquired from the École des Beaux Arts, and in part from the earlier American architects who not only talked about, but designed with "Republican simplicity" and strove to express the lofty principles on which our government was founded, in the buildings erected for its use.

But these principles have hardened into dogmas; symmetry has become an obsession; the Order is the sole way by which importance can be obtained. We have within the past twenty years erected a group of great buildings, notable for the exquisite proportion of their detail, for the splendid execution of their ornament, but in motive showing an inconceivable poverty of invention. Our public architecture seems to have been cut out with a rubber stamp, and the two great public buildings whose authors have shown even a timid originality, the Nebraska State Capitol, and the New York Courthouse, have been mercilessly criticized for their slight departures from the normal. It would seem possible to attain dignity without stupidity in public as well as in private work. If not the most perfectly proportioned, the Propylaea was probably the most interesting of the buildings on the Athenian Acropolis, and while this was the main entrance to the place of shrines, and great dignity was its only purpose, it was not symmetrical, and should be studied as an example of adjustment to site as some of our men study to adjust their designs to their sites.

These country houses seem to increase in interest as they depart from symmetry, yet without losing a proper dignity. They are obviously designed to meet requirements of plan or of site, and are not theses on the country house façade with the plans balanced and symmetrical about irrelevant axes.

Of course, this is natural in houses where the English country house precedent has been adopted as the basis of design. There, we expect a picturesque house. But how about the houses in which the orders are freely employed, as for example, the wonderful little house of the architect, David Adler, illustrated on Plate 415 and on pages 458-59-60? Is this undignified? Or unworthy? Or unlivable? Compare the plan with the photographs of the exterior, and the various rooms. The "architecture" is so obviously the appropriate expression of the life of the occupant that criticism fails. Yet the building is of classic derivation, though it is hard to assign it to any period. It has in it something of the Italian Renaissance, something of the Graeco-Roman country house and something of our Colonial. Tradition is respected, but...
RESIDENCE OF ANDREW J. THOMAS, ESQ., HARTSDALE, NEW YORK

Andrew J. Thomas, Architect
RESIDENCE OF THOMAS FROTHINGHAM, ESQ., FAR HILLS, NEW JERSEY
Office of John Russell Pope, Architect
RESIDENCE OF THOMAS FROTHINGHAM, ESQ., FAR HILLS, NEW JERSEY

Office of John Russell Pope, Architect

November, 1923
Entrance Detail

RESIDENCE OF HARRY W. WALKER, ESQ., FAIRFIELD, CONNECTICUT
Murphy & Dana, Architects

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West End of Living Room

Mantel Detail in Reception Room

RESIDENCE OF
HARRY W. WALKER, ESQ.,
FAIRFIELD, CONN.
Murphy & Dana, Architects
RESIDENCE OF
HARRY W. WALKER, ESQ.,
FAIRFIELD, CONN.
Murphy & Dana, Architects
RESIDENCE OF LYFORD M. MOORE, ESQ., DETROIT, MICH.

J. Ivan Disc, Architect; E. J. Maier, Associate
RESIDENCE OF WM. G. BURT, ESQ., EVANSTON, ILLINOIS
Clark & Walcott, Architects

RESIDENCE OF LE ROY BARTON, ESQ., PORT WASHINGTON, NEW YORK
Le Roy Barton, Architect
to repeat a phrase, the dead hand does not dominate. It is living architecture to which the best of our architects of public work can go for information as to how a public building can be designed.

This freedom from the spell of symmetry has not always been characteristic of our country work, any more than it is now true of our public work. When our architects began to emerge from the horrors of the late Victorian period (largely through the purifying influence of the École des Beaux Arts) and saw that it was right to design from within outward rather than to force a plant to fit what they then considered to be picturesque compositions, the revelation was complete, and country houses became mannered and formal in no matter what traditional style, to a degree that the founders of these styles never imagined. Our houses of Italian type outdid Palladio, and we still have with us very fine and expensive houses at Newport and Southampton, in which the living room is exactly balanced by the dining room, and the sun room by the kitchen, as well as Colonial houses of the simplest and most rigid symmetry. Now we appear to have learned that neither the Italian nor the Colonial work was successful because of its formality, and the houses of Italian and Colonial precedent illustrated in this number are almost as easy and graceful in their design as are those of English ancestry, or as their precedents! Our country house design is out of its swaddling clothes.

Our monumental design is not, and will not be until our architects learn that it is not necessary to fill ravines with the top of adjoining hills to provide a level site, and to change streets and divert rivers so that axes may pass through the centers of balanced façades.

It seems hardly necessary to call attention to the excellent detail and execution of our country work; our architects know their business, and where liberties are taken with precedent, they are liberties which will not be resented. We suppose that the first Roman architect who dared to place columns on each side of an arch was denounced by the traditional Greek school as an asinine and almost impious innovator, and in the same spirit, there is far too much criticism of modern work from the standpoint that "it just wasn't done." We heard not long ago of an architect who was requested by the Bronx Parkway Commission to design a plate girder bridge over the Parkway and the railroad tracks adjoining. He submitted two drawings, and the head of the Commission objected to them, saying that he had traveled extensively and had studied the designs of the Greek, Roman, Medieval and Renaissance architects. "Where can you show me a bridge anything like that?" said he. To which the architect answered that when the Greeks used sixty-foot plate girders, he would show him such a bridge. No criticism is more foolish than that which says, "the old work was not done that way." If the
RESIDENCE OF W. JULE DAY, ESQ., DOUGLASTON, LONG ISLAND

Frank J. Forster, Architect
RESIDENCE OF CHARLES H. CUNO, ESQ., MERIDEN, CONNECTICUT
Frank J. Forster, Architect
RESIDENCE OF CHARLES H. CUNO, ESQ., MERIDEN, CONNECTICUT
Frank J. Forster, Architect

Entrance Detail

Garage

The Architectural Record

November, 1923
old work were always good and if the
older architects had used all possible
forms, such a criticism might be sensible,
but when one considers that even on so
simple a problem as the Greek temple
form, many architects worked for cen¬
turies with constant innovations, and
without exhausting the possible variations
of the design, it is obvious that there are
always different things to do. If a critic
objects to a certain combination of forms
as unpleasing in themselves, he is
right, but before making such objec¬
tion, he should first examine his own
mind and make sure that his ob¬
jection is not caused by a viola¬
tion of the ex¬
pected, rather than
by a genuine in¬
congruity of mo¬
tives.

One of the most
interesting features
of all modern work
is the realization on
the part of prac¬
tically all architects,
that the scale of the
material is as much
a part of the design
as anything else.
Of course, with
brick the scale is
established except
for such excep¬
tional variations as
the use of Roman sized brick, or a special
brick of unusual dimension, but even in
these cases the limits of variations are very
narrow. With stone and wood this is by
no means true, and especially in stone
many otherwise excellent buildings have
been injured pictorially by the failure of
their architects to employ stone work
which was right in pattern and size. There
are no limits to the interesting surfaces
which can be got from stone work, and
while our architects are using certain
forms extremely well, few are doing such
delightfully playful work as the English
architect, Lutyens, frequently employs,
nor do any dare to go so far as the
medieval architects of Normandy went
in such buildings as the Manoir d’Ango.

However, in the houses of stone or
partially of stone illustrated in this num¬
ber, there is much variety in the stone
work, all of it admirably scaled, and
giving at least a satisfactory, if not an
unusual texture. It is noticeable that
the method of laying the stone in most
of the work seems to have been copied
from the local farmhouses of some age rather than
from foreign ex¬
amples, even when
the buildings re¬
semble more nearly
foreign precedent
than Colonial.

In the house at
Chestnut Hill, by
Robert Rodes Mc¬
Goodwin, and in
the house which
Andrew J. Thomas
has designed for
himself, we find
stone work not too
carefully surfaced
or bedded, but laid
with a mortar joint
so wide that the
proportion of mor¬
tar on the exterior
probably exceeds
that of stone.
While walls laid in
this way were not
uncommon in England and on the
Continent, work of such crudeness was
generally limited to humble structures
such as stables, dove cotes, dependencies
and division walls (as is indeed the
case in Mr. Thomas’ house), but there
is no real discrepancy between the mate¬
rial and its use. The Chestnut Hill house
is about as near to English work as we
are getting in this country, but it is after
all not a very strict copy of English work,
and is all the better for it. Mr. Thomas’
garden, house and walls may be roughly
described as of French motive, but the

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(Text continued on page 470)
Garage and Side Elevation

RESIDENCE OF WILLIAM GEHRON, ESQ., PELHAMWOOD, NEW YORK

William Gehron, Architect
RESIDENCE OF WILLIAM GEHRON, ESQ., PELHAMWOOD, NEW YORK

William Gehron, Architect
RESIDENCE OF ERIC MUELBERGER, ESQ., MONTCLAIR, N. J.
Designed by William Wickstrom
Dining Room

RESIDENCE OF DAVID ADLER, ESQ., LIBERTYVILLE, ILLINOIS
David Adler, Architect

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Living Room
RESIDENCE OF DAVID ADLER, ESQ., LIBERTYVILLE, ILLINOIS
David Adler, Architect

Front Elevation
RESIDENCE OF DAVID ADLER, ESQ., LIBERTYVILLE, ILLINOIS
David Adler, Architect

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RESIDENCE OF JAMES SCRIPPS BOOTH, ESQ., LINDA VISTA, CALIFORNIA
Marston, Van Pelt & Maybury, Architects
RESIDENCE OF JAMES SCRIPPS BOOTH, ESQ., LINDA VISTA, CALIFORNIA
Marston, Van Pelt & Maybury, Architects

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RESIDENCE OF MRS. GEOFFREY S. COURTNEY, SANTA BARBARA, CALIFORNIA
George Washington Smith, Architect

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RESIDENCE OF E. H. ADRIANCE, ESQ., RIDGEFIELD, CONNECTICUT
Polhemus & Coffin, Architects

[464]
RESIDENCE OF JOHN TROST, ESQ., DETROIT, MICHIGAN
J. Ivan Dise, Architect

SECOND FLOOR PLAN

FIRST FLOOR PLAN
THE FRANK BROPHY RANCH HOUSE, NEAR PHOENIX, ARIZONA
Lescher & Mahoney, Architects
RESIDENCE OF GEORGE WASHINGTON SMITH, ESQ., MONTECITO, CALIFORNIA

George Washington Smith, Architect
Key Plan of First and Second Floors and Grounds

RESIDENCE OF GEORGE WASHINGTON SMITH, ESQ., MONTECITO, CALIFORNIA

George Washington Smith, Architect
house proper, though admirably set off by the garden work, cannot be so described, in short, we cannot place it with any historic style; it is just a first rate piece of modern design.

The house at Douglaston, designed by Mr. Frank J. Forster, is of an unaffected brick surface, with hewn lintels and posts. The attempt to secure texture on the woodwork by adzing has been carried a bit too far, but the house is extremely pleasing, and a very free derivative of the English cottage type. The fact that the windows are grouped and the house is asymmetrical leads us to so describe it, although in fact it is by no means a literal transcription.

Another house in which English motives appear, although of a different period, is the little house at Forest Hills, designed by Mr. Aymar Embury II. As in the other cases, it is hard to say whether this is Colonial or Georgian or perhaps Italian, but it is admirably designed as a free-standing city house, and not as a country house crowded on a tiny lot. Mr. Embury tells us that it was very hard to get the consulting architect of Forest Hills to approve the drawings of this house. He said that it seemed to him “a very ugly little house”; so even the architect does not always appreciate from working drawings the quality of the design.

Again in the house at Fairfield, by Messrs. Murphy and Dana, it is impossible to assign to the whole house a single precedent. The treatment of the porches is obviously American, and not very early American at that, but the details of the cornice and doorway are rather Georgian than Colonial, and the mass of the building suggests the pleasantly mannered architecture of France under Louis XVI more than anything else. It is a very agreeable piece of brick design with admirably restrained detail, and is one of the best examples to prove the thesis (if it needs proof), that the possible treatment of the simple square block of a house was by no means exhausted in the eighteenth century.

A similar combination of motives appears in the delightful house at Far Hills, designed by the office of John Russell Pope, although in this case the central mass is flanked by extended wings in the Maryland manner, a motive, which, given a reasonably level site, is perhaps the most satisfactory for the modestly dignified country house that has yet been devised. Executed as this one is, it can never fail to impress, and could well take a first rank among the old houses of Annapolis, although it is quite as much in place in a collection of modern work.

The house at Cleveland, designed by Messrs. Howell and Thomas, is one of the most interesting in this number. The combination of painted brick walls and Neo-Greco ornament was common enough in the eighteen thirties, but we remember no house of that period, even among the admirable examples in Baltimore, where so excellent a scale was employed, and where the proportions of cornice, columns and fenestration were so precisely adapted to the wall texture and to the situation. This house, like the one at Forest Hills, is distinctly a free-standing city house, and is so designed—a thing our architects too often fail to appreciate.

Among the houses of stucco the two houses in Santa Barbara and Easthampton, by Mr. George Washington Smith and Messrs. Polhemus and Coffin, respectively, present an interesting contrast. Each is a seasonal house, one for California winters, and the other for Long Island summers, and while it is quite possible that their authors began their sketches with the idea of doing one a “Mission type” and the other an “English cottage,” it is much more likely that Mr. Smith had in mind the foliage and the climate of California, while Messrs. Polhemus and Coffin were thinking of the kind of house which would hug the ground and simulate in line the soft contours of the sand dunes of the coast.

At any rate they have both produced houses which admirably fit their settings, and which are not archaeological, but frank expressions of the requirements of the people who live in them, and while they are probably as far apart in their precedent as any two houses in this collection, they are still within the limits of

[470] (Text continued on page 475)
RESIDENCE OF WILLIAM S. JENNEY, ESQ., EASTHAMPTON, LONG ISLAND
Polhemus & Coffin, Architects
RESIDENCE OF WILLIAM S. JENNEY, ESQ., EASTHAMPTON, LONG ISLAND

Polhemus & Coffin, Architects
HOUSE AT ARDSLEY-ON-HUDSON, NEW YORK
Leigh French, Jr., Architect
RESIDENCE AT ARDSLEY-ON-HUDSON, NEW YORK
Leigh French, Jr., Architect

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the single school that we maintain is current today throughout the United States. Both are of stucco, and of not unlike texture, but carefully considered as to color. Their principal point of difference is the shape and material of the roof.

The Delaware cottage designed, by Mr. Prentice Sanger, who combines the functions of architect and landscape architect, shows a very interesting grouping of the three mason’s materials, stucco, stone and brick, although we feel that the points of application of these materials might have been altered to the improvement of the design. There is something about stone which leads one instinctively to require it to be the material of the dominant portion of the house. The word “stone” conjures up in our minds something enduring, solid and permanent, while “stucco,” probably because of the many centuries in which it was a temporary and not too excellent surfacing, suggests additions to the main structure or, at least, portions of lesser importance. So that when several materials are used in the same house, as in this case, we would have expected the body of the building to be of stone with the wings of brick and stucco.

In the house by Mr. William Gehron at Pelham Wood, designed for his own occupancy, we have an example of what good proportion of mass and proper fenestration can do with the simplest conceivable motive. This is one of the most attractive small houses that has been built in many years, and the extremely happy treatment of the garage and sun parlor has played a great part in it. When decorative motives are reduced to the lowest terms, or eliminated altogether, it needs a skillful man to give us something which will not be another of those houses built literally by the thousand in the suburbs of our cities, and we cannot too much admire Mr. Gehron for the clarity of his thought and the precision of his design.

Mr. Adler, like Mr. Gehron, has used stucco in his house at Evanston, Illinois. We have spoken above of this, perhaps the most interesting of the houses illustrated in this number, and little more need be said of it. The architect who can so freely and gracefully mingle Classic and Victorian motives on a plan so rationally developed in accordance with the living requirements of the owner, needs no words from us to tell the reader of his success.

The house at Ardsley, by Mr. Leigh Hill French, Jr., and the Hamilton house at St. Paul, Minnesota, are easy, gracious adaptations of well known Colonial motives, and of all three illustrated, are the nearest to precedent, very probably because of all the historic styles our own Colonial is the nearest to our own way of living. This Colonial work looks so simple that it seems as if no architect were necessary, and yet the modern house in which the designer has caught the spirit of the old work is rare indeed. In both of those houses it is apparent, and although, generally speaking, the house at Ardsley follows Massachusetts motifs, and that at St. Paul, the Dutch work around New York, neither is literal in its copying; both are rather translations. Especially interesting is it to see these two architects employing a change in the method of applying the wood to produce a change in texture where such a change is needed, a thing common enough in old work but rare in new.

In the Crocker house at Fitchburg, Massachusetts, Mr. Sanger has used shingles painted white for his wall surfaces, while in the house at Pelham Mr. Lewis Bowman has used rough stained clapboards in combination with a great chimney, partly of stone and partly of brick. This house at Pelham is one of the few American houses in which the general effect of the high gabled English cottage has been produced by wood surfaces with real success. If one calls to mind not one of the good houses of this type, but the thousands of bad ones where this wall treatment has been attempted, we can comprehend its difficulty and appreciate Mr. Bowman’s success. Clapboards were occasionally used in old English work, but we can call to mind no instances where they were so interesting as here. This is another indication of the growing tendency among our architects to make
HOUSE AT KATONAH, NEW YORK
Butler & Corse, Architects
RESIDENCE OF CARL L. HAMILTON, ESQ., SAINT PAUL, MINNESOTA

Russell F. Whitehead and John H. Wheeler, Associate Architects
RESIDENCE OF CARL L. HAMILTON, ESQ., SAINT PAUL, MINNESOTA
Russell F. Whitehead and John H. Wheeler, Associate Architects
Entrance

Floor Plans

RESIDENCE OF EDWARD BROOKS, ESQ., SAINT PAUL, MINNESOTA
C. Howard Johnston, Jr., Architect
RESIDENCE OF CHARLES ETHERIDGE, ESQ., NORFOLK, VA.
Calrow & Wrenn, Architects
Entrance Detail

RESIDENCE AT SCARSDALE, NEW YORK
Andrew J. Thomas, Architect
SUPERINTENDENT'S HOUSE, ESTATE OF MRS. W. L. HARKNESS, GLEN COVE, L. I.
Charles S. Keefe, Architect

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RESIDENCE OF FRANCIS E. HOUSE, ESQ., DULUTH, MINNESOTA
Wm. Chalmers Agnew, Jr., Architect
RESIDENCE OF JOHN W. FROTHINGHAM, ESQ., TARRYTOWN, N. Y.
Walter D. Blair, Architect

RESIDENCE OF WM. E. DIXON, GUILFORD, BALTIMORE, MD.
Lawrence Hall Fowler, Architect

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Entrance Elevation

RESIDENCE OF H. H. ANDERSON, ESQ., ROSLYN, LONG ISLAND
Mott B. Schmidt, Architect
the design fit the material, rather than the material fit the design.

It will be noticed that the general impression produced by these illustrations, entirely aside from the architecture of the buildings themselves, is much more agreeable than was the case some years ago. This is equally true of the exteriors and the interiors, and is due to the growth in taste on the part of our building public in matters of landscape design and in furnishing. It is now a common practice even in small houses, to find the owner employing a decorator and a landscape architect to supplement the work of the architect, and with results that are certainly beneficial to the houses as a whole. We may add also, that these professions are working together much more harmoniously than was formerly the case, and while there will always be differences of opinion between practitioners of related arts, there is less of acrimony in their relationship and almost that "meeting of the minds" which Mr. Woodrow Wilson used to talk about.

Permit us in conclusion to express our thanks to the many architects who have allowed us to use photographs of their work, and to assure them that we and the public we reach have profited by their courtesy.
RESIDENCE FOR MURRAY OLIVER, ENGLEWOOD, N.J.
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The Architectural Record

December 1923
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CONVENTO DE LA MERCE
DE SEVILLA
If Andalusia receives all our attention in these chapters, it is because elsewhere in Spain gardens follow the general European tradition. Thus in this subject as in all phases of Spanish art, we have on the one hand the influence of Europe and Christians, on the other, of Asia and Mohammedans. Arab civilization dominated in the south from the opening of the eighth century till the close of the fifteenth. When the Christians reconquered Cordova and Seville (1236 and 1248), and Granada (1492), they kept the Moorish artisan class and thus preserved the firmly implanted oriental tradition in the industrial arts. Domestic architecture and gardens, both so admirably adapted to the Andalusian climate, were modified slightly but not changed. The cool white house with its open patio, the small garden made for the master's delectation and not for the entertainment of his friends, were admirably suited to the reserved and exclusive character of the incoming Spaniards.

Patios are included because, being at the same time an indoor garden and an outdoor salon, they illustrate the Moorish intent to draw outdoors indoors—to have no sharp contrast between these two settings of the daily life. The only garden of dwellers in cities, it puts our small city yards to shame. "The patio," wrote Théophile Gautier, who made its acquaintance in 1840, "is a delightful invention." In truth it is much more; it is a very practical solution for house planning and a unit that offers great decorative possibilities.

A few old Andalusian cloisters are given because they represent the sort of arcade and court that served as prototype for the early missions built by Spanish priests and monks in America. The monastery having always been and still being a very prominent factor in Spanish life, it is no exaggeration to say that without the cloister no collection of Spanish gardens and patios would be complete.

A word as to the illustrations offered. Graphically, a book on any phase of Spanish art, except painting, must be inadequate unless the author be prepared to act as photographer and draughtsman as well. Outside of Catalonia no group of investigators has appointed a competent photographer to record the artistic wealth of its region and to put such photos within reach of students. If great architectural monuments have not received this merited attention, how much less have old gardens. The only exception to this general observation would be the perfectly obvious views sold to tourists in Seville and Granada.

This neglect of graphic record has always existed. In presenting Spanish gardens it would be a pleasure to show, as might a garden-book dealing with any other country, some charming old plates engraved in the seventeenth and eighteenth centuries; but, unfortunately, Spanish archives yield no such material. When the art of engraving was at its height, Spaniards, from whom much might have been expected, made no effort to contribute. At a time when Falda, Silvestre, Scherm, Rigaud, Sutton Nichols, to mention only a few of the most important in their class, were making magnificent plates of the great gardens of Italy,
Rear Garden
MEDINACELI PALACE, SEVILLE

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France, The Lowlands, and England, nothing was produced in Spain but a few engravings of Philip II's Escorial and Philip V's La Granja. True that in Andalusia many of the best Moorish gardens disappeared along with much else that was oriental soon after the Christian conquest; yet as late as the seventeenth and eighteenth centuries there still existed sufficient to repay the limner had he been interested. In the Netherlands, for instance, we read that it was the ambition of everyone who owned a fine garden to have it engraved. In Spain only royalty, and very occasionally at that, shared this ambition. Indeed, even in the case of a royal and important garden like that of the Alcazar at Seville, no sketch or plan can be encountered in the Castle's archives.*

*Certain books of horticultural and geoponic nature written by Spanish Arabs have been translated, but these, with one remarkable exception, are literary curiosities rather than practical helps. The exception referred to is the work by the Arab author Abuzacaria, which has just been translated by the distinguished Arabist Don José A. Sánchez Pérez. Abuzacaria, who lived in the middle of the XII century, had extensive farms and gardens in Aljarafe, Sevilla. He wrote all his own personal observations and experiments, besides making a résumé of all the agronomic science known up to his time. For the Mohammedan world his book was law in agricultural matters. An earlier Spanish translation (1802) and a French (1864) were made, but copies are now so rare as to be beyond price.

Our illustrations, therefore, had to be obtained first hand. We made our own photos, sketches, and plans; and so in place of the charm of old engravings, we can offer only modern accuracy and applicability.

Numerous and beautiful must have been the gardens of Andalusia during the Mohammedan régime. To quote but one contemporary, Eben Said, a Moor of Granada who traveled through southern Spain and northern Africa in the thirteenth century: "The splendor of Andalusia appears to have spread to Tunis where the Sultan is constructing palaces and planting gardens in our manner. All
his architects are natives of Andalusia, likewise his gardeners." Small wonder that the Sultan should have summoned garden experts from Spain, for the treatise written a century before by the Sevillian Moor, Abuzacaria, with its two chapters devoted to ornamental shrubs and plants for the garden, was still the agrarian Bible of Tunis, Turkey, Egypt, Arabia and Syria.

But in that same century when Tunis was learning from Andalusia, the gardens whose fame had spread so far fell to new owners. Not only gardens, but all agriculture was neglected. The Christians let the extensive and very scientific irrigation system of the Moors fall into disuse, and southern Spain became, by comparison with its former flourishing state, a waste. To-day, the only Moorish sites still dedicated to gardens are the Alcazar (The Castle) in Seville and the Generalife in Granada. These, in spite of alterations and long periods of abandonment, preserve much of their original character. In addition, there are several simpler untouched spots like the Patio de los Naranjos (orange trees) in Cordova and another of similar name in Seville, both having been the gardens of the principal mosques, and, therefore, the counterpart of the Christian cloister.

When the Spaniards who domiciled themselves in the south emerged, as did other Europeans, from feudal insecurity and began to build themselves palaces and gardens, these were constructed by Moorish artisans and specialists. Naturally such works followed Moorish tradition but were modified slightly to suit the new masters. For this reason the few early Spanish gardens we are able to present are probably more sympathetic to European taste than would be the genuinely oriental, could the latter be found. Dating from this period, the gardens of the Casa de las Hojas de Don Gomez in Cordova and of the Pilatos and Dueñas palaces in Seville are the best examples.

Happily Andalusian garden-making has entered its renaissance. In the revival a foreigner is playing a prominent part. We refer to the excellent work done by M. Forrestier, a Frenchman, who has worked with Spanish architects in laying out the new municipal park in Seville. Here and in other modern work, not only have they carried on the old tradition, but have introduced new ideas with taste and discretion.

The Andalusian garden is an urban, not a rural creation. It exists in and near the towns. In Moorish days, the caliphs having accorded very special encouragement to agriculture and horticulture, the vega$ of Granada, Cordova, Seville, Murcia and Valencia had been converted from arid stretches into smiling orchards and gardens; but the Spaniards on conquering the same appear to have huddled in true medieval fashion close to the towns. The fields were abandoned. True, Christian fear of the hostile population was not unjustifiable, but even after the Mohammedans were driven from their last stronghold, Granada (1492), the vega$ were not put under cultivation. Insecurity was then due to Christian nobles nourishing their feuds, and commoners living as highwaymen. Even when, in time, these conditions changed for better, the Spaniard seems to have had small inclination to be a country gentleman in the old Roman or modern English sense. He probably had his villa rustica to which he repaired in harvest time; this is perpetuated in the cortijo of the modern Andalusian, but it is a practical farm, not a mansion and garden. At any rate the old gardens that have survived are in, or close to cities. In Seville we have the grounds of the Alcazar; overlooking Granada, the Generalife. Cordova's great garden, Medinat-az-Zahra, now but a memory, lay only three miles from the mosque; if it be true that the Cordova of the Caliphate was twenty miles in extent, then Medinat must have been on its very fringe.

There are many reasons why the gardens of Andalusia should have so little in common with the rest of Europe. Merely to say that grass is not indigenous explains much; further, the climate is utterly dissimilar—heat, no frost, and but little moisture. Instead of every effort being made to catch and hold the sun's
Brick staircase serving three different terraces.
GARDENS OF THE GENERALIFE, GRANADA
What one sees of sculpture today is posterior to the sixteenth century

GARDEN OF DON MIGUEL SANCHEZ DALP, SEVILLE
Combining Spanish and Italian features
GARDEN OF DON JOSE ACOSTA, GRANADA
Each enclosure is laid out with paths radiating from a central fountain

GARDEN OF THE UNIVERSITY, SEVILLE
rays, to avoid them is the prime object. Plants and humans must be cooled and shaded. Garden beds are sunken—real depressions; the raised flower bed so liked in France would wilt under an Andalusian sun. Water being far from abundant, there is no prodigal display of it.

Even with natural conditions less different, it is unlikely that the Mohammedan would have evolved anything resembling the vast English or French park or the highly architectonic villa garden of Italy. His attitude towards family life was reflected in his garden and in the Spanish derived from it. The Asiatic tendency to seclude women found its expression in a series of walled courts behind the house, not in a great open park surrounding it. Engravings of Andalusian gardens, had such been left to posterity, would not have been enlivened by richly dressed ladies lunching on the green and served by cavaliers on bended knee; nor would they show outdoor playhouses for children, nor “booths and tents to serve for the amusement of my lady and her guests.” Such convivialities were appropriate north of the Pyrenees but not in Andalusia. Not recreation nor grandeur, but privacy, shade, fragrance, repose, were the desiderata.

Another Mohammedan tenet which had its effect on the garden was that sculpture, the chief embellishment of old Roman and Renaissance gardens, was forbidden to the Moor; what one sees of it to-day in Andalusia is posterior to the sixteenth century. The type of house also influenced the garden treatment—façade plain, all ornament being concentrated within to be admired by the owner and not by the passer-by. This being the case the garden was not “architecturalized” out of all relation to the simple dwelling. In other words, the art of architecture was not confused with that of gardening. There were no tempiettos, exedras, imposing ramps, stairways; nor was the Andalusian, Moor or Spaniard, interested in the medieval treillage that the French Renaissance developed almost
Garden walls are provided with recessed openings, giving pleasant vistas from one enclosure to another.

GARDENS OF THE ALCAZAR, SEVILLE

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One of the many stairs of polychrome tiles
GARDENS OF THE ALCAZAR, SEVILLE
A cypress arch emphasizing the main walk
GARDENS OF THE ALCAZAR, SEVILLE
The cypress of tall symmetrical habit lends itself to arching

LAS ERMITAS, SIERRA DE CORDOVA
Wall openings overlooking the street
GARDEN OF THE MARQUES DE VIANA, CORDOVA
Gothic Arcade of Cedar
GARDEN OF THE MARQUES DE VIANA, CORDOVA
[503]
A cypress arcade
PARQUE DE MARIA LUISA, SEVILLE

[504]
Brick steps from a lower to a higher enclosure
QUINTA DE ARRIZAPA, CORDOVA
to excess. With an arcade, horseshoe or round, visible from his garden he was content. Even similarity of climate between Spain and the country north of the Pyrenees could hardly have produced a Du Cerceau or a Le Nôtre.

UBEDO

Postern gate in a small garden. Hood of green and white tiles.
Much glorious scenery, in California and elsewhere, has been ruined by haphazard building. The owners of the five thousand acres surrounding Lake Arrowhead had the wisdom to insure a general unity of design in all buildings, public and private, by appointing an architectural committee whose duty it was to enforce a standard of construction and conformity to an established ideal.

Lake Arrowhead lies just a mile above sea-level, among the peaks of the San Bernardino mountains, eighty-one miles from Los Angeles. One finds here a diversity of out-door loveliness that thrills all seekers of the exquisite beauty expressed in the hills and mountains of Southern California. The woods are luxuriant in summer with blossoming dog-wood, manzanita, cedar, pines, live oaks, and a carpet of bracken, lightened by clumps of lupine, wild iris and wild lilac, and in the winter the whole is covered with a mantle of snow. The transformation from primeval forest to a modern village, with every comfort one would expect to find in a city, has been accomplished without marring the natural aspect of these woods.

In determining the style of architecture, Mr. Swasey, after studying the landscape, decided that the steep, heavily wooded mountainside, so characteristic of the woods surrounding the lake, was an un congenial setting for the Spanish and Italian type of house, so appropriate for the rolling country of the neighboring valley. He, therefore, turned to the early English and Norman type of village for inspiration. The steep roofs, which were one of the first considerations, have the twofold purpose of adapting themselves to the mountain slopes and recalling the peaked pine trees, as also the more practical one of shedding the snow.

Quaintness, picturesqueness, Mr. Swasey decided must be the compelling influence in the designing of the buildings. The utmost simplicity of design and of use of materials prevails. Brown creosote stain has been used on the roofs, and serves to blend them into the hillsides. Dust-colored walls and brown half-timber work have been used exclusively, and the results justify the efforts made to maintain this uniformity.

The village proper was the most interesting problem at the lake. The natural topography of the point on which it lies reminds one of the Devonshire hamlet of Clovelly. The village is remarkably complete—containing such modern essentials as a telephone office, a Post Office, all the necessary stores and shops, a cafeteria, a tea-room, garage, service station, a splendid inn, and a hostelry—Arlington Lodge—which really calls for
Dance Pavilion
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate
an article by itself. The shops are grouped about the common in an irregular line, and straggle along the face of the hillside, with winding alleyways between the buildings, leading to the higher ground behind.

One of the loveliest features of the village is the rock gardens in which iris, ferns and columbines predominate. Dry rock walls form terraces in front of the shops, and winding stone steps lead down to the boat landings. The village is lighted by high lanterns swung from wrought iron posts. There is a large, twelve-sided pavilion out on the point, in which dances are held every night during the summer. It is of an unusual design. Heavy timbers have been employed in its construction, and the framing, left exposed, was first treated with creosote stain and then lightly sprayed with white cold water paint.

Cottages on the hillside above the village conform to the architectural precedent established by the village, the lodge, and the club house. A sixteen-mile drive of winding roads extends around the lake. Fleming Camp, about a mile from the Common, nestles in a canyon of cedar, fir and dogwood. Arranged along the entire length of the canyon are bungalows with gay striped awnings, each with an individual setting.

On the north side of the lake, and directly across from the village, is the club house. This was the first of the buildings to be erected. It is delightful in design, surroundings and furnishings. There are several cottages to rent on the hotel basis, besides three guest houses. These are all simply and tastefully furnished, the suitability of everything to the environment being a first consideration always.

An interesting feature of the club house is a huge, center fireplace in the
Club House

ARROWHEAD LAKE, CALIFORNIA

McNeal Swasey, Architect. H. C. McAfee, Associate
enclosed porch, which has a “fire-back” connected with radiators at either end. This, with the fireplace in the living room and another in the dining room, makes the club house comfortable in winter weather.

No opportunity has been overlooked to make the homes picturesque. The contours of the ground have made it possible to place the various rooms on different levels, with consistency, and in an endeavor to preserve the trees, the plans of some of the larger homes have wings at odd angles, with surprisingly happy results.

Lake Arrowhead being an all-year-round playground, the most important consideration in the designing of the cottages was the sleeping accommodations for guests. The result is that many of the homes have dormitories incorporated in the plans, and almost without exception dining rooms have been dispensed with and the entire space has been thrown into the living room.

The living rooms in the more pretentious cottages have been treated in the manner of the Great Hall, the exposed roof trusses being stained, and much attention has been given to the designing of the fireplaces.

For the auto camper there is a large area set aside, not only provided with all conveniences, but near a huge “Ramada,” in which food can be prepared for as many as 500 people.

The more precipitous sides of the Lake have presented many interesting problems. Granite retaining walls and foundations have added to the picturesque quality of the cottages; and by “stepping” the rooms down, two-story halls have been obtained, with balconies opening out from the bedrooms above, giving in some cases a slightly theatrical touch to the whole.
On an eminence just west of the common, a bit of the old world has been reproduced in the form of a quaint old tavern, called The Village Inn. It overlooks the lake, and is approached from the back through an informal court containing a rock garden and guarded by one of the largest oak trees in the neighborhood. The roof of the inn is par-
ticularly interesting, a thatched effect having been obtained by laying the shingles in irregular courses. Here, a slight departure in the matter of color has been made. The stucco is of a most delicate grey-buff, and the half timber, instead of being stained, has been painted a slightly deeper shade than the plaster, so that the whole picture is one of soft, subtle tones. The native granite, quarried at the lake, has been used extensively.

Across the road, and several hundred yards to the west on a point extending into the lake, is the site of the lodge. The lodge is decidedly more pretentious than the inn, and has a flavor quite feudal. The handling of design and material is consistent with the rest of the buildings at the lake, and helps to blend it into its forest setting.

In plan, the lodge is quite irregular, due to the desire on the part of the archi-
tects to preserve all trees over ten inches in diameter. The two wings, containing the eighty-five guest rooms and baths, radiate from the central portion, and form an irregular court. Here again rock gardens and native shrubbery have been used with such happy results that one is hardly conscious of the fact that the landscaping is the work of man and not of nature. A tower, with a projecting half-timbered frieze, forms the lobby, access being gained through a large cut granite arch.
Main Hall, Arlington Lodge
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate

The great hall forms a connecting link between the wings. It is eighty feet long, forty feet wide, and forty-five feet high. The massive roof trusses have been left exposed and have been treated in much the same manner as those of the dance pavilion. Between the trusses, the roof boards have been glazed with blue, a subtle depth being attained thereby. A granite fireplace (large enough to accommodate logs of prodigious size) fills one end of the room. A minstrel gallery is carried around two sides of the Hall, similar to the ones used in Tudor days.

The dining hall projects from the intersection of the great hall and the east wing, dividing the angle of the two. Tall windows on three sides give an unobstructed view of the lake. The interior walls recall the half timber of the exterior, and a glaze coat of umber, wiped away at the center of the panels, gives an effect of age which is most delightful.
COTTAGE OF A. J. EDWARDS, ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate
VAN DUYS' HOUSE, ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate
The Village Inn

Art Store
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAtee, Associate
Darby Cottage

Tailor Shop
ARROWHEAD LAKE, CALIFORNIA
McNeal Swasey, Architect. H. C. McAfee, Associate
Cafeteria and Post Office

Real Estate Office and Barber Shop

ARROWHEAD LAKE, CALIFORNIA

McNeal Swasey, Architect. H. C. McAfee, Associate
MRS. WOODS' COTTAGE, ARROWHEAD LAKE, CALIFORNIA

McNeal Swasey, Architect. H. C. McAfee, Associate
Printed linen of gay colors has been used for draperies; furniture suggestive of the Jacobean period makes this a highly successful room.

A game room, beyond the great hall, is treated in the same manner. Below the dining room is the ball room and adjoining this is a grill, furnished in the spirit of an old tap room, with bright colored prints relieving the walls.

The mechanical features of the lodge are as modern and complete as one would expect to find in any large city hotel. The lodge is architecturally an aesthetic treat. Orientation, use of materials, attention to color, all the details which raise a building above the commonplace, have been intelligently considered and carried out.

Lake Arrowhead is a project, essentially commercial, financed by business men who expect a return on their money, and yet because the planning was placed in the hands of a man who had the purposefulness and determination to see his dreams materialized, we have a consistent scheme which is above criticism of the most hypercritical.
AMERICAN NATIONAL BANK, AURORA, ILLINOIS
Bankers Architectural & Engineering Company
Lawrence A. Fournier, Architect
Entrance Detail

LOS ANGELES-BILTMORE HOTEL, LOS ANGELES, CALIFORNIA
Schultze & Weaver, Architects

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Great Hall

LOS ANGELES-BILTMORE HOTEL, LOS ANGELES, CALIFORNIA
Schultze & Weaver, Architects
ST. CHRYSOSTOM'S PARISH HOUSE, CHICAGO, ILLINOIS
Clark & Walcott, Architects
ST. CHRYSTOSOM'S PARISH HOUSE, CHICAGO, ILLINOIS
Clark & Walcott, Architects

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ST. CHRYSOSTOM'S PARISH HOUSE, CHICAGO, ILLINOIS
Clark & Walcott, Architects

[535]
RESIDENCE OF J. B. MARTIN, ESQ., COLUMBUS, OHIO
J. B. Martin, Architect
SCHRAFFT’S NEW TEAROOM, FORTY-SECOND STREET, NEW YORK
Charles E. Birge, Architect

The Architectural Record

December, 1923
SCHRAFFT'S NEW TEAROOM, FORTY-SECOND STREET, NEW YORK
Charles E. Birge, Architect

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FIRST BAPTIST CHURCH, WESTFIELD, NEW JERSEY
Ludlow & Peabody, Architects
FIRST BAPTIST CHURCH, WESTFIELD, NEW JERSEY
Ludlow & Peabody, Architects

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FIRST BAPTIST CHURCH, WESTFIELD, NEW JERSEY
Ludlow & Peabody, Architects
RESIDENCE OF VICTOR S. PEARLMAN, ESQ., CHICAGO, ILLINOIS
Victor S. Pearlman, S. C. Wentworth and Clark & Walcott, Associate Architects
WALTER HAMPDEN’S PRODUCTION
OF
CYRANO DE BERGERAC

By Claude Bragdon

By reason of the increased insistence upon beauty and appropriateness in stage representation, the past few years have witnessed the rise of a new profession: the artist of the theatre, or art director. His function is to give a play its physical body, as it were, through and by means of scenery, costumes, properties, lighting — everything except the face, voice, movements of the actor. All of the things which meet the eye he must coordinate and unify in such a manner that they shall become eloquent of the spirit of the piece, supplementing and reinforcing the work of the actor like an accompaniment, helping to build up in the mind of the spectator a single memorable impression.

The relation of the art director to the producing manager is largely that of the architect toward his client—he designs and superintends the production, subjecting himself to the imposed limitations, practical and economical, but free within these limitations, and empowered with full jurisdiction over everything pertaining to the mise-en-scène.

The editor of The Architectural Record, aware of my immersion in this new medium of expression, by reason of my association with Walter Hampden in his production of Cyrano de Bergerac, has asked me to state some of the problems and describe some of the processes involved in the staging of this play. I am invited to tear off the mask and remove the cloak of Harlequin—very well!

Cyrano de Bergerac was written for Coquelin by Rostand when both were at the height of their power. It is a play deliberately devised to enable the actor to display all his virtuosity, and at the same time provide a spectacle full of movement and magnificence. It would seem as though Rostand had determined to exhaust every possibility and tax every resource both of the theatre and the actor. This makes Cyrano — to speak colloquially—a “good show” with a “fat” part.

At the time it was produced by Coquelin in France, and Mansfield in this country—some twenty-three years ago—stages were larger, labor cheaper and more expert, audiences more leisurely and less exacting. These things all lessened the difficulty of production compared with the conditions now, yet to fall below the standard heretofore established would be to court failure from the start. The necessity for a “heavy” production is imposed by the play itself, which requires stairways, platforms, galleries, balconies, ramparts and what not, all so inextricably tied up with the text and the action that evasion or escape is out of the question. Five changes of scene are required, and these must be made quickly, so as to bring down the final curtain in time for the commuters to catch the late suburban trains.

The kind of a big production modeled on the pattern established by Henry Irving was out of the question for purely practical reasons—the National Theatre stage would not contain the scenery necessary for five independent and unrelated sets. I was therefore committed to some kind of a “unit” system, whereby the same material could be used in different combinations, artfully differentiated and disguised.

As will be seen by reference to the plans of the five scenes, the keystones of the entire production are two scenery wagons. These are rectangular, about
eight feet by twelve, with one floor or platform eighteen inches above the stage and a second seven feet higher. They are mounted on wheels, and all four sides covered by twenty-four foot "flats," into which such doors, windows, arches, balconies are inserted as the exigencies of the piece demand. By rolling these wagons into different positions and exposing different faces to the audience at different times; by combining them in one scene and separating them in another; and by supplementing them with sections of scenery of the ordinary sort it is possible to meet the acting requirements, and at the same time differentiate the scenes sufficiently to deceive all but the most expert and analytical eye.

The advantages of this device are obvious. In the first place, two levels above the stage level are always available without the use of getaway steps and skeleton platforms, for within each wagon—a veritable house on wheels—are solid floors, and stairways which may be shifted from one end to the other, a hinged trap covering the well when not in use. Second, the high and heavy scenery for all five scenes is both set and stored before the rise of the opening curtain and the interiors of the wagons can be used for the storage of properties—of which there are more than two hundred in Cyrano. Third, a great deal of "masking" behind doors and windows is achieved automatically, the backs of the flats averted for the time being from the audience serving this purpose—in other words, both sides, instead of one side of the scenery is used. Fourth and last, much time is saved in making scene changes, and relatively few men are required.

This principle of the double and triple use of material extends to the minor items of the scene as well as the major. The front of the inner theatre stage in the first act, for example, becomes the counter in the cook shop scene next following. The stairway which appears in the first, second, and third acts is masked differently in each case. The ramparts, the same stairway, in the fourth act are the box hedges in the fifth, with dyed burlap thrown over them to give the appearance of earthworks.

This employment, throughout the production, of the same units in different relations imposed the necessity for a single dominant color tone throughout. This, while it makes for monotony, makes also for unity, the most imperative and precious quality in any work of art, because most potent to impress the seat of memory itself. The color chosen, after much consideration, was a deep purple-violet, black in the shadow, and in the strong, warm light of the theatre taking on tones of grayish brown. The choice of this particular background color, rather than another, was dictated by reasons philosophical as well aesthetic. Despite Schopenhauer's dictum that the concept is unfruitful in art, being myself perhaps more of a philosopher than an artist, I am not content to "follow the rules without knowing them" as artists are said to do, but am always asking why? I crave the indulgence of the reader therefore, while I unfold, in the fewest possible words, my little system—my philosophy, if I may call it by so grand a word.

In every theatrical representation let it be granted that "the play's the thing." This being so, everything should be made to contribute to the rendering of its mood, its message, through tone, color, tempo—to borrow words derived from sister arts. This is the affair which most nearly concerns the actor, and in which he has the largest share and plays the most important part. He is the direct interpreter of the drama, he preempts both the eye and the ear. The thing which is of the next importance is naturally that which is nearest to himself—the clothes he wears. His costume should have the character, cut, color, texture demanded by the part; all the ornaments and accessories should receive the most minute consideration, for they are always being considered, because always "in the limelight" as it were. Going down the scale of relative values, the properties, next to the costumes, should usurp the most attention; those things with which the actor comes into direct contact and relation—rugs, chairs, tables, and so forth. These
WALTER HAMPDEN'S PRODUCTION OF CYRANO DE BERGERAC—CLAUDE BRAGDON, A.I.A.

PLAN OF ACT I.
PLAN OF ACT II.
WALTER HAMPTON'S PRODUCTION OF CYRANO DE BERGERAC—CLAUDE BRETON. ARTII

PLAN OF ACT III.
PLAN OF ACT IV.
WALTER HAMPEL'S PRODUCTION OF CYRANO DE BERGERAC — CLAUDE BRAGDON, ARTIF

PLAN OF ACT V.
things should have their own character and appropriateness, bearing the stamp of the particular kind of authenticity which the play itself demands, but never competing for attention with the living presences who people the scene. At the very foot of this ladder of relative importances—though in one sense everything is equally important—comes the scenery itself. Remote, static, but pervasive by reason of its spatial extension, it is the big drum and bass viol in the orchestra of instruments at the producer’s disposal. Its function is to accompany but never obtrude, to sound always the right chord, true to the key, but never to attract to itself too much attention. Scenery should never be considered other than as background—it is such by the very necessities of the case.

A background may be appropriately light or dark, simple or complicated but when, as in Cyrano, the stage is so often brilliantly peopled the law of opposition or contrast is best served by making the background plain and dark. Now violet is the most receding of all colors—the veil which objects draw over them as the light loses its strength; it is in some sort a universal solvent of all of the colors of the spectrum, like the “great tone” into which the Chinese say all music is resolved. Violet, then [brown-purple-violet under a warm light], was the color settled upon. With this for a base and background it was easy to differentiate the first act scene from the second (where the same walls stand) by a complete change in the color scheme of such things as flowers, curtains, rugs. In the first act a bouquet of red roses in a peacock blue vase gives the key to the scene; the great curtains, the cartouche of the kings arms, and the cardinal’s baldachin being respectively purple-red, blue, crimson, with gold as an overtone. In the second act
(Ragueneau's kitchen), the brown, yellow and green of sunflowers in yellow majolica jars fixes the color scheme, being echoed and repeated in curtains and hangings, in the array of copper dishes, brown chairs, barrels, and so on.

Another advantage of this deep-toned background is that it so absorbs the light that by keeping down the illumination on the sides and top of the stage all sorts of Rembrandtesque effects are possible, and the hard rectangle of the proscenium arch is softened almost to the point of forgetfulness, as it were, so that we seem to be seeing rather with the inward than with the outward eye. This obliteration of the inessential creates a poetic atmosphere quite in keeping with the incorrigibly romantic quality of the play, which, despite its Gallic concreteness, its historic personages in a historic setting, is nevertheless sheer fantasy, the sort of thing which all of us would like to happen, but seldom does. What man would not desire to be at once as brave and witty as Cyrano, as handsome as Christian, would not choose to die in the arms of his beloved, to music, with sword in hand? What woman would not delight to be made love to in impassioned verse, by moonlight? Who would not like to eat Ragueneau's inspired pastry, to dine on ortolans?

The arrival of Roxane's coach in the fourth act, stuffed with food and wine, its lamps, cake boxes, the handle of the whip "one long sausage," is sheer circus, and is frankly treated as such. The body of the coach is scarlet, its wheels canary yellow, the coachman's coat is garnet and gold, and the footmen's livery the brightest of bright greens. Roxane steps out of this preposterous conveyance in a gown of crimson and orange, heavily embroidered with gold. Thus does the boulevard invade the battlefield!

In the final act, a deep and true note is sounded—call it sob stuff who will—and here the costumes and accessories are all sombre and restrained. The autumnal landscape, the waning amber light, the falling leaves, the procession of nuns, the bells, the sad music, all contribute to in-
BALCONY SCENE—CYRANO DE BERGERAC

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duce a mood which gives the last poignancy to Cyrano’s death scene.

One reviewer said of the production that it was rumored to have cost seventy-five thousand dollars and looked it. He might be surprised therefore to learn that the scenery for all five acts could be loaded on one theatrical truck; that coach and wagons—yes, even tables and chairs—fold up, reduce themselves as it were from three to two dimensions, and there is nothing that cannot go inside the door of a baggage car.

It will be seen from this that the production of Cyrano was largely an engineering problem, and indeed the entire job was handled as though it were just another architectural job. Preliminary sketches were accepted by Mr. Hampden, and in due course developed into working drawings at one-half inch scale. All the important properties were similarly drawn to scale and afterwards full sized. The furniture was detailed at one-quarter full size, and color sketches were made of the scenery, costumes, coach, curtains and the like. Contracts on all this data were let to responsible parties, sometimes being awarded outright, and sometimes to the lowest bidder after restricted competition. The lighting equipment was let from specifications and plans. All these foreign elements were found to pass through the architectural mill without friction, and with completely satisfactory results.

The reason why these pictured scenes and figures of romance are permitted to invade the pages of an architectural magazine is because they are illustrative of the widening scope of the architect. He may enter, if he will, new fields of endeavor, where he may feed upon the violets of fancy instead of the hay and husks of fact.

ROXANE’S COACH—ACT IV.
SOME NOTES ON IRONWORK

SKETCHES by LOUIS C. ROSENBERG
TEXT by LEWIS E. WELSH

PART II

One delightful thing about the iron work of the past is that we have so many fine examples either in their original positions or in museums. Europe has four museums which have extensive collections, Cluny in Paris, South Kensington in London, Castello Sforza in Milan and the Musee des Halles in Bruges. In these are gathered iron work of all periods and types, so splendidly arranged that one is able to study the development of the craft, and, better still, the technique of the craftsman.

A feature of the low countries which seems unique is the decorative use of iron for finials, brackets, wall tiles and weather vanes. These features were developed to such an extent that they became the principal features in the decorative scheme of the façades. The Netherlands also produced extremely interesting kitchen utensils, fireirons and backs.

English iron work, from the 12th century all-over patterns on wood doors down to the late Georgian period, has produced some splendid examples, but none are finer than the gates at Hampton Court and the screen in St. Paul’s Cathedral, done by Jean Titjou, whose work influenced most of the craftsmen of that period and had its effect on much of the later work, especially that in America. Sir Christopher Wren was fortunate to have had such a splendid fellow artist as Titjou to assist him in carrying out the majestic work entrusted to him. During the eighteenth century fan lights of wrought iron were subjects of much ingenuity and a great deal of the charm of the doorways is due to them. In the city houses of London and Liverpool in particular, are found many beautiful railings, gates, lamp brackets and standards with torch extinguishers. The rails generally had a scroll against the house, a feature which helped to tie in the railings with the house itself.

In the interior of the houses by far the most effective use of iron was as rails on the spiral staircases, in which scrolls and florid forms were used in the most intricate designs, but the whole so light in scale that it was in perfect harmony with the other Georgian features of the rooms. The sword-rests in certain London churches also gave the iron craftsman a chance to use his imagination. This arrangement was attached to the pew, generally had coats of arms or other heraldic forms worked into it, and was very often highly painted in color.

The use of wrought iron in railings, balconies and fences continued until the second quarter of the 19th century, when cast iron was substituted for the repeating members. This combination of materials gradually gave way to the cast iron ensemble of the Greek Revival period.

In Spain, a large part of the earliest existing iron work is of the late 15th century, and from then on until the end of the 16th century it produced some of the finest in Europe. Of the more monumental works the chapel screens are the most common, due to the plan of Spanish churches in general. In Spain was developed the “plateresque” style; figures in relief and free standing, heraldic and biblical forms were combined with balusters and molded courses. These delicately wrought balusters were so well designed and placed that while effective they were never obtrusive.

The use of entire iron pulpits, while not unheard of elsewhere, was quite common in certain sections of Spain. The method of cutting out traceries from thin metal plates and then applying them to a wooden frame, seems to have been the most popular.
In domestic work, the balconies, door and window grilles and railings seem to be the most important features both practically and architecturally. On the simplest houses we find these features fashioned in the most appealing manner, while in the “Casa di Pilatos” in Seville these same details are carried to the point where they become works of art on a par with the paintings of the period.

The early iron work of France, especially in the south, was extremely simple, such as the plain round bars, sometimes pierced and threaded with almost no moulded work, which seems to follow the early Italian and Spanish style. As architecture and town planning was given a great impetus during the reign of Louis XV, so also the various details came in for careful study. Iron work was peculiarly suited to the character of the rococo design and its popularity brought forth a great many fine examples, the most noted being the gateways, fountains and grilles of Place Stanislas in Nancy by Jean Larmour, and the staircase of the Hotel de Ville, also in Nancy.

The choir grilles in the church of St. Ouen, Rouen, are probably the finest collection of wrought iron work in France, and range from small chapel gates and railings to the most elaborate screen partitions.

As in Spain, the churches of Italy contain much of the best existing iron work. Italy, however, has found many admirable uses for iron in its palaces, and the candle holders, andirons, lamp brackets, and brazier holders are designed and executed with splendid understanding of the material. The hammering of a simple knob or the twisting of a straight rod to add interest to a long unornamented piece, show the artist’s appreciation.

The quatrefoil was the most popular ornamental motif and was used in the center of a plain grille or combined with others to create an all over pattern. Most of the simple work, and that showing greatest strength, was of the pierced and threaded type, while the lighter examples had their members riveted together or jointed by ornamental bands.

During the Byzantine period Italy produced very little important iron work and during the Renaissance bronze was in high favor, being often used to imitate iron, as it still is today. The Renaissance period did, however, produce many fine lanterns, brackets, banner holders and rings of iron.

Our renewed interest in iron work in America has come in the past decade, no doubt with our renewed interest in the southern European styles. Popularity has caused an over production of iron work as with all other things, but it is to be hoped that after the present vogue has passed, we shall find the lasting appreciation of iron work that the art deserves.
MEASURED DRAWINGS OF OLD BELGIAN IRONWORK

By Louis C. Rosenberg

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MEASURED DRAWINGS OF OLD BELGIAN IRONWORK
By Louis C. Rosenberg

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MEASURED DRAWINGS OF OLD FRENCH IRONWORK

By Louis C. Rosenberg
MEASURED DRAWINGS OF OLD ENGLISH IRONWORK
By Louis C. Rosenberg
MEASURED DRAWINGS OF OLD ENGLISH IRONWORK
By Louis C. Rosenberg
THE MOLIN FOUNTAIN, STOCKHOLM, SWEDEN
WHAT ARCHITECTURE DEMANDS
OF THE CAMERA

The Photographic Studies of Sigurd Fischer

By
Leon V. Solon

The approval of the colleague is the foundation upon which professional reputation rests in the arts and sciences. In the architectural profession this endorsement is accorded under unusual circumstances. Those who discover excellence in an architect's work have usually not seen the actual structures, but have formed their opinion from illustrations in the architectural magazines—an experience familiar to practically all who follow architectural activity in this country. The fact must therefore be recognized, that professional judgment, and the consequent tribute to attainment, is considerably influenced by the manner in which the buildings are photographically represented in those publications; their pages are the channels through which the architect submits his creations to confrère and layman for appraisal, with the camera as the medium for transmission.

It must be admitted, without any intention to depreciate the pictorial skill of our architectural renderers, that the gift for dramatic composition which endows the architectural subject with the farthest reaching interest, is lamentably lacking. This scenic quality is found in its most highly developed condition in the architectural compositions of the Italian school of the sixteenth and seventeenth centuries, and in the French school of the seventeenth and eighteenth. If we take Pencil's development of the Whistler architectural technique as an example of the dramatic manner in line, we find picturesque procured at the cost of precise architectural information; those who seek a record of form must satisfy themselves with its projected shadow, and bethink themselves of the dog in the fable. Had we to rely upon graphic representations for our acquaintance with current achievement, an enormous number of excellent buildings would fail of due recognition, either through unsympathetic treatment, or by reason of the numerous difficulties attending that method of presentation. On the artist-photographer we must therefore depend for a worthy and informative likeness of those structures which, for a variety of reasons, we are unable to study in their three dimensions. The crude and unimaginative methods prevailing today in architectural photography, constitute a serious obstacle to professional recognition in a great number of cases, and also to the proper study of current work throughout the country.

The necessity for a radical revision of the average photographer's point of view where architectural subjects are concerned, cannot be over-emphasized. Only a very limited number are capable of the desired quality of effort, despite the urgent need. Perhaps the complex qualifications necessary to the achievement of acceptable results accounts for the scarcity of capable exponents. The first qualification is an acutely developed ability to grasp the pictorial value of certain aspects of a structural mass, and an intuitive perception of the architecturally important and distinctive. This obviously implies professional training, as the choice of that viewpoint most favorable to the accentuation of architectonic qualities, calls for an intimate acquaintance with the art, and a keen appreciation of its subtleties. The next requirement concerns the photographer's capacity to create effect with light and shade as the natural medium for grouping masses, and for regulating that degree of ac-
centuation or subordination of detail which is most desirable. This calls for the exercise of a specific faculty which plays an important part in certain phases of the landscape painter’s art. When the architectural photographer is deficient in these vital qualifications, the subjects treated by him suffer a relative depreciation in the eyes of those who are compelled to form opinions through photographic representations—and they constitute the majority.

Many other considerations must also be weighed. In the composition of a subject its pictorial balance must be contrived in such manner that a definite relationship is established between the main object of interest, the foreground, and the sky. Many attractive subjects in Nature depend largely upon color for the visual attraction which they exert. Few photographers appear competent to calculate the residue which survives the elimination of that factor in the negative. It is probably the experience of all who have essayed photography, to find that the impression received in the contemplation of a beautiful scene is rarely recalled by a photograph taken from the same viewpoint, even when subject-interest preponderates over that of color. In many instances the inevitable density of photographic shadow is responsible for this depreciation in pictorial interest, as the translucency of shadow in the natural scene lends a quality of charm which cannot be eliminated without serious loss. The capacity to calculate intuitively the ultimate effect which will be recorded in the photographic print, calls for a distinct type of mental process which becomes a constructive phase of the artistic temperament.

When foliage is associated with architectural subjects, the manner in which it is illuminated is a matter of the greatest pictorial importance. If this type of subject be examined in the pages of the architectural magazines, it will be found in the majority of cases, that a time of day has been chosen when bright sunlight plays directly upon the glossy surface of the leaves, producing an unmeaning area of sparkling spots. Had the right feeling been cultivated, and an advantageous angle of illumination seized, great pictorial advantage could be derived.

It would repay the architectural photographer to study the landscape painter’s works; much might be learned upon the subject of arboreal composition from the British schools of the eighteenth and early nineteenth centuries, in which the grouping of trees around buildings was a favored theme. Though the study of painted landscape would be of great educational value as a guide to the lighting of foliage, it is essential that attention be directed to certain schools based upon specific angles of observation and selection. If, for instance, the student-photographer were to commence with the Barbizon or Impressionistic schools, it is doubtful whether there would be any result other than confusion and discouragement. In the paintings of Corot, Sisley and Cézanne, for instance, effort was concentrated upon revealing the extent to which shadow is saturated with light. In previous schools we find that the artistic intention was to classify color with a distinct differentiation between light and shade, rather than to seek subjects which revealed the various phases of decomposed light, as was the case with the painters just named. When a typical Corot subject of willows and water is photographed, with the expectation that a measure of the charm expressed by the master will be realizable photographically, the result is invariably flat and disappointing, because the camera records its own equivalent for certain color values, and has no quality to correspond to the chromatic subtlety of luminous shade. In the photographs of a garden ablaze with brilliant flowers, the photographer often loses sight of the fact that color, the main element of interest, will be lacking in his composition, and that shadow, the least conspicuous element of effect, is his most forceful medium. The preoccupation of the etcher or monotypist in visualizing the pictorial possibilities of a promising subject are those of the artist-photographer—values must be reduced to terms of monotone. In every photographic subject there are a multiplicity of colors. These,
CITY HALL, STOCKHOLM, SWEDEN
Ragnar Östberg, Architect

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CITY HALL, STOCKHOLM, SWEDEN

Ragnar Östberg, Architect

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CITY HALL, STOCKHOLM, SWEDEN

Ragnar Östberg, Architect

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EREMITAGEN AT COPENHAGEN, DENMARK
in their photographic translation, rarely accord with the mutual tonal relation which exists between them in natural scene. This condition demands that the photographer cultivate a mental process which enables him to approximate their final reduction to monotone, with each color figuring at the value of its photographic equivalent.

In the photography of architectural subjects we frequently note a very serious lack of judgment in the moment chosen for exposure. In the composition of an architectural scheme the architect has a conventional conception of shadow projection, with which the penetrations of the facade will have a specific degree of emphasis. It is obviously possible to view the structure at an hour at which the inclination of the sun's rays will cause an elongation of the shadows cast by the reveals of openings, with the result that an excessive emphasis is given to penetrations and considerable detriment done to the design thereby.

In the photographic studies of Sigurd Fischer there is ample evidence that he is endowed with many of the qualifications enumerated, and that he possesses them in a high degree of development. His talent can be in a measure accounted for by architectural training, heredity and environment. He is a Dane, born in Copenhagen, where he received his initial architectural training, subsequently applied to American practice. Coming of a race of artists, his youth was passed among painters, architects, and practitioners of the various arts. His father is Paul Fischer, the genre painter; his uncle August Fischer, a painter of landscape and architectural subjects, with considerable reputation in his country. To attribute talent to heredity is to discount natural ability; when we consider how rarely sons of distinguished artists are professionally worthy of their sires, the argument of heredity is a negligible factor in the face of averages. Environment, however, is an undoubted advantage, and that which surrounds the younger members of artistic families must exert a strong influence upon those who are temperamentally capable of assimilating the predominant trend of thought. In the earlier periods of mental development much information is unconsciously assimilated. This fund of dormant knowledge becomes active as intellectual capacity augments, and bears fruit in the refinement of the critical faculty—the most elusive and essential of the artist's compendium of gifts. Many qualities in Fischer's photographs point to his obligation to youthful environment; in his appreciation of the scale of values in chiaroscuro and amusing divergencies of interest in minor accessories, in the composition of objects in an interior, and their relative degree of prominence in the scheme, the mental angle of the genre painter can be discerned. The manner in which interest is focussed in his landscape settings, clearly indicates the feeling of the landscapeist; this is shown in the placing of the horizon, the varying location of the centre of interest in the picture frame, and the advantage taken of cloud grouping and atmospheric conditions. Artistic intuition enables him to judge the extent to which details of minor interest may be effected, and how the fullest measure of dramatic effect can be gained with broad unbroken masses of rich tone. In this latter respect he converts the apparent disadvantage of photographic shadow density to a scenic advantage, and uses these deep and opaque tones as a medium for grouping masses in composition.

In his photograph of Ostberg's impressive design, the City Hall of Stockholm, we find that dramatic spirit in composition which is characteristic of the architectural painters of Italy during the sixteenth century. This is an excellent illustration of the manner in which Fischer uses dense shadow in the grouping of masses and for the focus of interest. These broad areas of unbroken tone and the total elimination of detail in shadow, do much towards conveying the sense of majestic scale. The thin haze of cloud hovering over the structure gives an impression of vaulting space. As a tone study, the photograph of the Molin Fountain in Stockholm is admirable. He has seized a moment when an exquisite
THE ENGELBREKT CHURCH, STOCKHOLM, SWEDEN
THE GATE, COPENHAGEN, DENMARK
passage of light through the foliage could be rendered in his print with the subtlety of a fine mezzotint. The ribbons of light upon the falling water are a beautiful feature in his composition, and the scenic function of this park fountain is clearly stated. The idea of taking this picture against the light shows his resourcefulness in grasping pictorial opportunities. In his picture of the Ermitage, we are made to realize what lighting can do for a subject which is architecturally negligible. As a composition it is truly dramatic in the most literal sense, causing the imagination of the beholder to run riot in its possibilities as a background for lurid incident. It is easy to conceive the banality of this baroque structure in full sunshine, but with its superb mass of speeding clouds and the black silhouette of the hill revealing the gathering storm in its fringe of wind-bent branches, Fischer shows the extent to which the camera is capable of transmitting an artistic possibility and stimulating imagination. The Gate (Copenhagen) is a study in the concentration of pictorial interest with the massing of opaque shadow.

In the vaulted corridor of the City Hall of Stockholm we see the influence of the genre painter. The passage of light has been timed with true artistry, and that moment seized at which each feature has its relative degree of scenic importance in the composition. The precision of detail in the hanging lighting fixtures is an admirable foil to the finely gradated tones upon the vaulting, and the manner in which the vanishing lines of the base are arrested by the door opened at right angles indicates artistic resourcefulness. In the main hall of the same building another equally expressive quality of lighting accentuates and reveals the architectural interest of this impressive corridor.

Our space permits only a very limited selection of illustrations, doing less than justice to Fischer's artistry in lighting his subject and choosing the most telling viewpoint. Photography of this calibre can do much towards bridging the gulf which so frequently separates architect from client, owing to the latter's deficiency in artistic perception. There is one factor in effect to which the artistically untrained individual usually reacts, and this Fischer accentuates with intuitive skill. The term "picturesque" most nearly describes the quality to which we allude. In its most telling phases it is characterized by a certain dramatic quality; it may reveal grandeur in the suggestion of abnormal scale; interest may be compelled to that which is architecturally significant by controlling the flight of vanishing lines, or by the massing of shadows; through the contrivance of pictorial proportion the vaulting of the heavens over human handiwork, a sense of spatiality stimulates an impression akin to awe; atmospheric quality can invest the banal in Nature with an air of romances and decay which bespeak only the passage of ages. With the advent of artists such as Sigurd Fischer, we may hope to see the day near at hand when the term "photographic" will cease to be one of artistic disparagement.
### TABLE I.

**Estimated Annual Construction Volume in Continental U. S.**

*(Figures in Millions of Dollars)*

<table>
<thead>
<tr>
<th>Class</th>
<th>1919-22</th>
<th>1922</th>
<th>1923</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Buildings</td>
<td>563</td>
<td>661</td>
<td>589</td>
</tr>
<tr>
<td>Educational Buildings</td>
<td>281</td>
<td>404</td>
<td>334</td>
</tr>
<tr>
<td>Hospitals and Institutions</td>
<td>83</td>
<td>105</td>
<td>77</td>
</tr>
<tr>
<td>Industrial Plants</td>
<td>460</td>
<td>371</td>
<td>398</td>
</tr>
<tr>
<td>Military, Naval and other Public Buildings</td>
<td>46</td>
<td>48</td>
<td>23</td>
</tr>
<tr>
<td>Public Works and Utilities</td>
<td>701</td>
<td>749</td>
<td>737</td>
</tr>
<tr>
<td>Religious and Memorial Buildings</td>
<td>75</td>
<td>115</td>
<td>96</td>
</tr>
<tr>
<td>Residential Buildings</td>
<td>1,309</td>
<td>1,901</td>
<td>2,015</td>
</tr>
<tr>
<td>Social and Recreational Projects</td>
<td>132</td>
<td>146</td>
<td>131</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>3,650</strong></td>
<td><strong>4,500</strong></td>
<td><strong>4,400</strong></td>
</tr>
</tbody>
</table>

### TABLE II.

**Rough Estimate of Total Construction, 1924** *(see text)*

- Rough Estimate of 1924 Construction to be Built from Architects Plans... **$4,000,000,000**
- Rough Estimate of 1924 Construction to be Built from Architects Plans... **2,444,000,000**

### TABLE III.

**Analysis of Total Construction**

NOTE—This table includes a tentative analysis for 1924. By applying the 1924 percentages to the estimated total shown in Table II, a rough schedule of 1924 construction by classes may be obtained. Such a schedule should be looked upon as tentative and subject to modifications if conditions develop differently from present indications as outlined in the text.

<table>
<thead>
<tr>
<th>Class</th>
<th>1919-22</th>
<th>1922</th>
<th>1924</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Buildings</td>
<td>15.4%</td>
<td>13.4%</td>
<td>15%</td>
</tr>
<tr>
<td>Educational Buildings</td>
<td>7.7</td>
<td>7.6</td>
<td>7</td>
</tr>
<tr>
<td>Hospitals and Institutions</td>
<td>2.3</td>
<td>1.8</td>
<td>2</td>
</tr>
<tr>
<td>Industrial Plants</td>
<td>12.6</td>
<td>9.0</td>
<td>13</td>
</tr>
<tr>
<td>Military, Naval and other Public Buildings</td>
<td>1.2</td>
<td>.5</td>
<td>1</td>
</tr>
<tr>
<td>Public Works and Utilities</td>
<td>19.2</td>
<td>16.8</td>
<td>19</td>
</tr>
<tr>
<td>Religious and Memorial Buildings</td>
<td>2.1</td>
<td>2.2</td>
<td>2</td>
</tr>
<tr>
<td>Residential Buildings</td>
<td>35.9</td>
<td>45.8</td>
<td>38</td>
</tr>
<tr>
<td>Social and Recreational Projects</td>
<td>3.6</td>
<td>2.9</td>
<td>3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### TABLE IV.

**Construction Planned by Architects**

*(See Analysis in *The Architectural Record* for September, 1922)*

*(Percentages based on dollar totals of construction recorded in 1922)*

<table>
<thead>
<tr>
<th>Class</th>
<th>Percentage by Architects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Buildings</td>
<td>82.9</td>
</tr>
<tr>
<td>Educational Buildings</td>
<td>94.6</td>
</tr>
<tr>
<td>Hospitals and Institutions</td>
<td>87.4</td>
</tr>
<tr>
<td>Industrial Buildings</td>
<td>47.3</td>
</tr>
<tr>
<td>Military, Naval and other Public Buildings</td>
<td>89.3</td>
</tr>
<tr>
<td>Public Works and Utilities</td>
<td>91.6</td>
</tr>
<tr>
<td>Religious and Memorial Buildings</td>
<td>64.7</td>
</tr>
<tr>
<td>Residential Buildings</td>
<td>88.8</td>
</tr>
<tr>
<td>Social and Recreational Projects</td>
<td>61.1</td>
</tr>
</tbody>
</table>

**ALL CONSTRUCTION**

All estimates and analyses based on statistical records compiled by the F. W. DODGE CORPORATION.
THE BUILDING PROSPECT FOR 1924

By THOMAS S. HOLDEN, Statistician
For F. W. Dodge Corporation

In making his estimate for 1923, which was published in the December, 1922, issue of The Architectural Record, the writer anticipated the most important feature of this year's construction record, the setback in the rate of activity which occurred last spring. That setback was inevitable. A factor that was underestimated in last year's forecast was the enormous momentum of the upward movement in building activity which caused the closing months of 1922 and the first five months of 1923 to show a volume large beyond expectations. Although the anticipated reaction took place, the decline in activity has not been great, and this year's total volume of building will probably be only a little less than that of 1922, the record year. Residential construction, in particular, has continued at a considerably higher rate than was anticipated.

The only method of reasonably forecasting building activity is by following the up-and-down swings of the business cycle. The charts appended to this article give a representation of the cyclical fluctuations in building activity since January, 1919.

The method by which this chart was prepared, which was described in an article in the October, 1923, issue of The Architectural Record, is crude, but it is sufficiently accurate for the present purpose. The article just referred to showed that heretofore little attention has been paid to cyclical fluctuations in the planning of construction projects, and that, in consequence, tabulations of work in the planning stage are of little value in forecasting. Actual past experience is the best guide for estimating future activities.

Chart No. 1 gives a graphic picture of the cyclical fluctuations in construction activity during the past five years. The last cycle was of 37 months' duration, the two peaks having occurred in January, 1920, and February, 1923. The average duration of the minor cycle, taken over a long period of years, is 40 months. Construction activity is now in the downward phase of the present cycle. Unless some far-reaching influence alters the customary trend, the present cycle should extend to a little more than three years from February, 1923, when another peak should be reached. The likelihood of any influence sufficiently important to change the natural trend seems remote, at the present writing. A premature revival would, in all probability, bring about a fairly quick reaction, and is not desirable.

The second chart shows the cycle of building material prices, which seems to follow the construction volume cycle with an interval of two or three months. On this chart are indicated the September, 1923, indices of all commodities and of farm products, for comparison with the September index on building material prices. The building industry, including production of materials as well as the construction of buildings, is the second largest in the country, agriculture being the largest. The price levels in these two largest industries are out of line with each other and with the price level of all commodities. In the long run there must be a tendency toward removal of the disparity in these price levels. Until building costs, including wages in the building trades as well as material prices, return to a more nearly normal relationship with the price level of general commodities, high building costs are going to continue to act as a brake on construction volume.

So far the decline in building activity and in building costs has been very slight and very gradual. It seems unlikely that the low-point of the present cycle will be reached until some time in 1924. Consequently, present conditions seem to indicate a smaller total of construction vol-
ume next year than there has been this year. Since there is still a large demand for construction that has not been fully met, it does not seem that the falling off in building volume will be large. The estimated total for 1924, which appears in Table II, is set at four billions of dollars, about 9 per cent under the estimate of this year's final total.

Should any one desire to make a tentative schedule of next year's building program in detail according to the various classifications of buildings, the figures of Table III may be used. Table IV gives the percentages of the various classes of work that are likely to be planned by architects. By applying the percentages in the last column of Table III to the estimated 1924 total of 4 billion dollars, a schedule of estimated work by classes is obtained; by applying to these classified figures the percentages given in Table IV, an estimate of the amount of work in each class likely to be handled in architects' offices may be had.

Author's Note.—As this article goes to press the tabulation of construction statistics for the month of October, 1923, is just completed. The October record is a surprise, as it shows quite a jump over September and also over October of last year, the unexpected increase being most evident in New York State and Northern New Jersey, and in the residential class.

Apparently the fact that building costs have declined only slightly is not acting as a very strong deterrent on building activity. If the remaining months of this year show an abnormally large volume of activity there is danger of a more drastic reaction next year than there was in the spring of 1923. An orderly decline in building volume and costs is not only desirable, but seemed most probable when the above article was written. As is always the case, the situation calls for careful observation from month to month.
THE REGISTRATION TANGLE

Architectural registration is getting to be like the automobile laws in the early days. You can scarcely cross a State line without being arrested. Most State registration laws, to be sure, include a provision for reciprocity, but this happens to contain a joker. Ordinarily it stipulates that registration shall be granted without examination to registered architects from other States, provided the qualifications required there are equal and the same privilege is extended in return. Now, as no two States have exactly the same requirements—some demanding more general education; some, more professional education; and some, more practical experience—it is open to any State to refuse reciprocity, either on the ground that its requirements are greater in this or that respect, or, if they are less, on the ground that they are not accepted as equal by the other State.

It has been, moreover, the practice of the National Council of Architectural Registration Boards that when registration was granted in the home State under exemption from examination provisions, as was ordinarily the case with practitioners of experience and standing, such registration is not accepted as ground for registration by transfer in another State; in other words, registration by exemption stops at the State line. To the unfortunate beneficiary of exemption at home the other State says: Go back and be examined in your own State, and then we will consider a transfer of registration. Very well, he takes the examination at home, perhaps a "senior examination" intended for men in practice for many years and calculated to establish his experience and personal responsibility, perhaps even the full written examination, theoretical and practical. Even then he has no reasonable assurance that it will be accepted in the other State. Michigan has recently refused a transfer of registration from another State, giving the ground that the examination there only lasted two days, whereas the Michigan examination lasts three. There is little else to do than to appear and take an examination in each State.

As one can scarcely anticipate when one may get a job in another State, this may still not prevent one from breaking the law. The examinations may be held at stated and rare intervals, and no provision be made for an ad interim registration. Your building may have to be done before there is opportunity for you to appear and prove your competence.

All this is not an argument against registration. Good or bad, it has got past argument when twenty odd States have a law of some sort. The others need one now if it is only as a club in self-defense against the requirements of other States. But one may hope that this mutual clubbing will give way to a broader policy. As with the automobile, reason will begin to prevail when the nuisance gets intolerable enough.

THE RECLAMATION OF A BUSINESS SLUM

Recently the New York daily newspapers contained the announcement of the leasing and the prospective "improvement" of the last remaining vacant block fronts on Park Avenue, north of the Grand Central Station. So ends the most extensive and expensive transformation of a district in the heart of a great city ever undertaken by a private corporation. The only similar undertakings which compare with it are the projects of reconstructing congested areas carried out by the municipalities of Paris and London.

In 1902, when the New York Central Railroad company decided to electrify its tunnel into Manhattan and enlarge its terminal, the whole area to the north and northeast of the old station was devoted to economically second-rate purposes and improved with tenements, factories, breweries and the like. Park Avenue up to Fifty-second and Fifty-third Streets was not much better than a slum. But now almost every vestige
of its former condition has vanished. Its streets are occupied with skyscrapers. Park Avenue for a mile north of the station itself presents a more uniform skyline of cornices twelve or more stories high than any avenue in New York. It is a complete transformation, and it was accomplished exclusively by a private corporation. The corporation acted, indeed, from necessity rather than from choice; but it is typical of the grandiose enterprise which a railroad company sometimes undertook in 1902 but never feels opulent enough to undertake now.

The new buildings erected in the district do not belong to the class of "improvement" which the management of the company originally planned and hoped to see erected. It tried for several years to lease the block fronts near the station to public or semi-public corporations. It hoped to see an art museum, a new Metropolitan Opera House and other similar structures occupy the Park Avenue frontages and in that way to concentrate in and near the station the buildings in which many of the city's public activities would be carried on. It even proposed for a while to restrict the height of the Park Avenue "improvements." But it failed in this respect completely. The new buildings with two or three exceptions are either hotels, apartment houses or offices. The district as a whole will not possess a marked special character—nothing like as much as Fifth Avenue has or Times Square. The most expensive restaurants are concentrated in the neighborhood, but in other respects it has not taken on any special and peculiar metropolitan function.

The uniform mass and size of the buildings makes the district representative of modern New York, but it contains very few distinctive successes in architectural design. St. Bartholomew's Church and the Racquet Club are, to be sure, edifices to which any city and any country may "point with pride," but for the rest a massive monotony and a stupendous dullness is the overpowering note. The most interesting development of recent years in the design of New York skyscrapers is, of course, the receding tower. If these towers continue to rise from bases furnished by twelve-story buildings New York will at the end of another twenty years be as picturesque on a large scale as a turreted Italian mediaeval town on top of a hill was on a small scale. But there is nothing picturesque about the apartment houses and hotels which are being and have been built north of the Grand Central Station. They are the last word in colossal conventionality. It is an interesting and significant fact that apartment houses and hotels, which are more often designed with an eye to appearances than office or loft buildings are less likely to possess architectural significance. There is a reason, but that is another story. —Herbert Croly.

THE LITTLE VOORSTRAATSHAVN
Etching by Hugh Paton, A.R.E.

THE TRAVESTY OF ARCHITECTURE BY THE ETCHER OF TO-DAY
A British publication (66 Etchings, by Members of the Print Society; The Print Society, Hampshire, England; 1923; 21/ net)—was recently brought to our notice, containing 66 reproductions of etchings printed by The Print Society. Many of the plates are of architectural subjects, and reveal a tendency requiring prompt correction if the art of etching is to be considered seriously in an architectural connection. A careful examination of these prints raises the question as to whether a work of art worthy of the designation can be produced, which purports to represent the effect-value of another work of art, when the dominant characteristics and beauties of the latter are unappreciated by the artist. In the majority of these etchings we are surprised to find a complete lack of sympathy and acquaintance with the elements of structural beauty. The basic
elements of architectural effect are contained in a sense of stability in structural mass, the proportional control of its articulation, and the mutual relation of projections. None of these spiritual and physical characteristics of architectural expression appear to have been sensed by these etchers. No inclination is evinced to utilize tone as a means for imparting structural scale. On the contrary, there is a marked insistence upon detail which is not only architectonically irrelevant, but reacts adversely upon apparent dimensions. Those who make a study of degrees of effectiveness in architecture, know that the measure of beauty varies appreciably with the angle of illumination; but this elementary observation does not appear to have influenced these artists in their calculation of effect. It must be remembered, nevertheless, that qualities of light and shade play as important a part in the etcher’s resources as in the architect’s, with the difference that the work of the former records one condition of illumination only, a fact calling for the exercise of the greatest discretion in choice. We find the architectural etcher of to-day possessed of a mania for picturesque decay, indulged at the expense of all that is noble in the art of architecture. His interest seems concentrated upon the fabrication of pattern and tone values which he derives from dis-integrated masonry, tonal variation in structural material, tangled vines and such like accidental features. Structural masses have come to be regarded merely as so many areas which furnish opportunities for practicing the conventional tricks of the trade. Take, for example, plate 46, by Hugh Paton, representing “The Little Vourstaatshavn.” Groups of ancient houses of such character, with their irregular alignment, lack of perpendicularity, promiscuous fenestration and erratic roofing, possess without exception the charm of sturdy craftsmanship. As they are depicted in this etching all structural characteristics of an abstract nature are completely ignored; the true romance of their decrepitude is unsuspected, and a fictitious picturesqueness is sought in the featuring of leaders. We seek in vain for a symptom of that structural integrity which Rembrandt imparts to the smallest peasant’s cottage, and even to some of those ancient barns which are so patently insecure.

In plate 17, of Trinity College, by H. Sheppard Dale, we find an even more serious lack of sympathy and comprehension between etcher and subject. We can detect no appreciation of structural co-ordination, and little visible reaction to the eloquent expression of projected shadow in architectural effect. The exquisitely fenestrated façade which is so admirably designed to produce subtle and precise values by means of projected shadows, has palpably bored the etcher with its repetition. The treatment of the bay window in perspective on the right of the plate is so unfeelingly rendered that the illusion of the projection of that feature is completely destroyed. In the fountain columns, texture is developed at the cost of their sense of support; and in the suggestion of the fine ornamentation in the cresting and the frieze nothing intelligible is conveyed to the lover of architecture. Can it be said that the art of etching is benefited by these slights which it offers to the beauties and refinements of the other art?

While recognizing their technical skill, we have singled out these two etchings as typifying a mental attitude towards architecture which is unfortunately prevalent among etchers to-day. A building which is sufficiently inspiring to be chosen as the subject for an etching makes specific demands for comprehension in its dominant excellences. These may only be expressed in the representational art through intelligent sym-
pathy. We recognize the obvious fact that it is impossible for an artist to create beauty from a subject which stimulates no creative impulse. No effort of will can produce an equivalent for that form of intuition which is actuated through aesthetic attraction. The artistic portrayal of architectural subjects depends upon the capacity to experience a definite type of imaginative reaction, not upon the practice of specialized technique. Architectural expression is identified with distinctive qualities of effect. In their statement through the medium of a representational art, an individual form of aesthetic feeling must actuate interpretation. We recognize without difficulty the operation of a similar impulse in works of art which convey the beauty and animation of the human form, or the delicacy of a flower. How can an etching express the impressiveness of structure, the exquisite adjustment of proportion and enrichment, or its capacity for picturesqueness, when the most vital architectural factors do not enter the etcher's sphere of professional interest? Our protest is against myopia in artistry which regards the incident of structural texture as a major factor in effect. Were we to find that the etcher of figures or landscapes had regarded his subject from the obtuse angle at which he considers the less generally comprehended subject of architecture, the result would be instantly condemned.

It must not be assumed that the informative technique of architectural draughtsmanship is considered fitting for the etched representation of structure, or that the ideal lighting for purely architectural effect is to be the etcher's choice. To suggest so arbitrary a view would be to deny that freedom which is the prerequisite of artistry, equivalent to the condemnation of Rembrandt upon the evidence of Memling and Holbein. It is through a faculty for appreciating the inherent aesthetic capacity of a subject that the master lays the foundation for achievement. A false sense of proportion in aesthetic values is an insurmountable barrier to the attainment of excellence. We do not find Rembrandt overlooking the dignity and venerable beauty of his aged models in the amusing pastime of charting wrinkles.

The Print Society consists of a group of etchers with a lay membership, on a plan similar to the constitution of the American Sculptors' Society. One of its objects is to foster a wider interest in the art of etching. This publication is prefaced with an excellent treatise by Kineton Parkes upon print collecting and the intelligent appreciation of etching. He does not disregard the fact that the lay member's enthusiasm must be nourished with information, which, though familiar to the artist, is difficult to find in books that are easily accessible. For this reason, after treating his subject from the purely artistic angle, he enlightens the novice upon such subjects as the mounting and framing of prints, their care, and plans of procedure in collecting. Kineton Parkes is himself a veteran collector and is familiar with the various stages of the collector's evolution, the hopes, ambitions, and difficulties. His introduction is valuable for reference purposes and is endorsed by the attested value of personal experience. The general plan chosen for his theme is admirably suited to the aims of this society.

Leon V. Solon.

COMPETITION OF HOUSE BEAUTIFUL COVERS

The success of the competition for cover designs held last year has led the House Beautiful to repeat this event and again to offer two prizes, one of $500 and one of $250, to the successful contestants. The competition closes February 9, 1924. Full particulars may be had on application to the Competition Committee, House Beautiful, 8 Arlington Street, Boston, Mass.

Our attention has been called to the fact that the residence of Mr. Eric Muelberger at Montclair, N. J., is the work of Messrs. Davis, McGrath & Kiessling, architects, 220 Fifth Avenue, New York. Mr. William Wickstrom was the general contractor for this house.