Vol. XLVIII. No. 3 SEPTEMBER, 1920 Serial No. 264

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FRONT PORCH—"PIGEON HILL," RESIDENCE OF MEREDITH HARE, ESQ., HUNTINGTON, L. I. CHARLES A. PLATT, ARCHITECT.
It was something less than twenty years ago that well-to-do residents of New York began to build new houses on Long Island, within easy commuting distance of the city. Since then the district on Long Island between twenty and forty miles from the Pennsylvania Station has steadily increased in popularity. Improvements in transit by motor and the construction of the tunnels under the East River have had much to do with this increase in popularity, but it is also traceable to the desire of New Yorkers for country houses, at a convenient distance from the city, which were available for residence throughout the whole of the year and that afforded the opportunity not only for the usual country games and sports, but for gardening, farming, the raising of stock and the other less frivolous occupations of rural life. A much more wholesome attitude towards the country has prompted the building of the Long Island houses than the attitude which prompted the earlier building of villas, sometimes by the same families, either at Newport or anywhere else on the coast.

This more wholesome attitude is expressed in the character and the design of the houses. There are comparatively few examples on Long Island of the
pompous formality and the palatial pretentiousness which characterized so many houses erected by rich Americans during the last decade of the nineteenth century. More and more the builders of the new houses have started with their minds fastened on the kind of residence which an English country gentleman would wish rather than a seventeenth century nobleman; and this comparative unpretentiousness of outlook has released the architects of these buildings from the necessity of complying with many embarrassing and paralyzing demands. The newer houses have usually remained formal, which is a good thing, because sound architectural design requires a large infusion of formality; but their avoidance of mere informality and picturesqueness has not stood in the way of a great gain in individuality, in homeliness, and in domestic propriety. In many cases the houses bespeak a living relationship with the people who occupy them; and the people who occupy them possess standards and interests which are adapted to sincere, beautiful and significant expression. When the history of American domestic architecture of the existing generation comes to be written, the Long Island houses, particularly those built during the past twelve or thirteen years, will form the best and the richest material which the historian will have to use.

Long Island before the advent of the modern architectural movement possessed the advantage of a peculiar species of domestic design. The usual farmhouse of that region was not clap-boarded or sheathed but was shingled; and the shingles were somewhat larger in size than those used elsewhere, somewhat thicker and were painted white. Since in a wooden building so much of the effect depends upon the surface, the texture, and the delineation of the material, these Long Island shingles, super-imposed upon the generally good lines and appropriate details of the early farmhouse, created perhaps the most interesting type of small residence, for the use of the yeoman farmer, which was erected in this country. It certainly created a type which was more flexible than the New England farm-

house, and whose elements could be developed and varied without necessarily losing the merits of the original design. It is no wonder, consequently, that during the revival of domestic building that has recently taken place on Long Island the builders have frequently altered and enlarged the old farmhouses. In many cases they have succeeded in converting them from the residences of yeomen farmers into the residences of gentlemen farmers, without any falsification of the original type.

In some few instances, however, architects have perpetuated the type not merely in alterations but in an entirely new building. Such is the case with the house of Mr. Meredith Hare at Huntington, Long Island, designed by Charles A. Platt. The Hare residence is an excellent example of the very best qualities which are now characterizing American domestic architecture. It combines in a very happy way spaciousness with economy. Architects always find it difficult to design a house which look ample enough to form the background for a liberal life without becoming wasteful of space; but in Mr. Hare's house, Mr. Platt has succeeded in excluding all superfluities while retaining an atmosphere of generosity and abundance. He has kept the scale and the general appearance of a Long Island farmhouse, which formed, of course, the background for anything but a spacious life; and without departing from the unpretentious simplicity essential to the type, he has designed a building which forms an entirely appropriate residence for people with leisure who prefer to devote the time, no longer occupied with the struggle for existence, to cultivating the arts and amenities of life. This house was designed, and successfully designed, for the purpose of providing an appropriate setting for the life of a particular family. When a nation educates architects who are capable of creating propriety of relationship between buildings and lives, and when the life which is expressed in the building possesses sincerity, distinction and value, it is by way of creating a domestic architecture which will endure, and deserve to endure, in the aes-

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GARDEN ELEVATION—"PIDGEON HILL," RESIDENCE OF MEREDITH HARE, ESQ., HUNTINGTON, L. I.
Charles A. Platt, Architect.

BLOCK PLAN—"PIDGEON HILL," RESIDENCE OF MEREDITH HARE, ESQ., HUNTINGTON, L. I.
Charles A. Platt, Architect.
DETAIL OF GARDEN ELEVATION—“PIDGEON HILL,” RESIDENCE OF MERE- 
DITH HARE, ESQ., HUNTINGTON, L. I. CHARLES A. PLATT, ARCHITECT.
DETAIL OF GARDEN ELEVATION—"PIDGEON HILL," RESIDENCE OF MEREDITH HARE, ESQ., HUNTINGTON, L. I. CHARLES A. PLATT, ARCHITECT.
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STAIR HALL—"PIDGEON HILL," RESIDENCE OF MEREDITH HARE, ESQ., HUNTINGTON, L. I. CHARLES A. PLATT, ARCHITECT.
A SECLUDED SPOT—"PIDGEON HILL," RESIDENCE OF MEREDITH HARE, ESQ., HUNTINGTON, L. I.
Charles A. Pratt, Architect.

But, of course, a country house needs also another kind of propriety. It needs to fit not only the lives of its occupants, but also the particular site on which it is built. There are some residences, of which the Newport palaces form the perfect illustration, which can never become adapted to their sites. There are others, of which one finds so many examples in England, that, while they were not designed for their sites, have after a few hundred years grown into the landscape and now look as if they were always intended to be just where they are. Finally, there are others that only a few years after their erection look as if they had grown up on their site. They obtain their confirmation not from the weathering of time, but from their intimate relationship to the advantages and limitations of their immediate surroundings. Among the many American architects who have made a personal contribution to American domestic architecture there is none who has so frequently succeeded in providing for his clients buildings which in a few years look as if they had been a very long time where they are. Mr. Hare's house does not look old yet. It is not old enough to settle down into its landscape with gentlemanly assurance and with complete self-possession. A few more years must elapse before it will become really mellow. But it is clearly becoming mellow very rapidly; and if the reader would like to know why, he can discover the reason by examining the plan and the lay-out in relation to the design. The scale and the dimensions of the house are nicely adjusted to a site which demanded intimacy and some informality of treatment. This the illustrations clearly show. What they cannot show so well is the success with which the porch of the house provides its residents with an introductory approach to that which is best worth looking at in the surrounding landscape.
ADDITION TO NEW YORK STOCK EXCHANGE
-TROWBRIDGE & LIVINGSTON, ARCHITECTS.
The NEW YORK ZONING RESOLUTION
AND ITS INFLUENCE UPON DESIGN

By John Taylor Boyd, Jr

FOUR years’ trial has proved the value of the New York Zoning Resolution of 1916. By adopting this measure New York City put into practice principles new to the planning of American cities. Fundamentally, the effects of the law are two: It safeguards the interests of the city and of adjacent property owners in the location and in the design of all buildings; it organizes the city into a coherent, highly developed system of districts or neighborhoods, in which each district unit is clearly defined, and its character maintained by the provisions of the law.

Quite different is this conception of a city from older notions prevailing in America. Both in law, and in fact, our cities are huge, formless masses of streets and blocks, sprawling over areas of geography, none too well accommodated to conditions of topography. Their maps develop haphazardly, without any rational control, in whatever ways irresponsible private interests dictate—usually in deeper confusion as the complexity of modern life increases, and generating as they grow discomfort, demoralization, and economic loss.

The street system of itself brings no real organization into a city. With its units of blocks, the street system is nothing more than a scheme of measurement in the city plan, except as it forms part of the transportation system. The truth of this assertion becomes clearer if one compares the plan of a city with the plan of a building. If the floor plan of a building were left as an open space, and if its area were then marked off into a series of small squares, the building would be “planned” like most modern cities. A building has an effective plan only when its floor area is divided clearly into separate but related spaces, each carefully arranged and dimensioned to suit the purposes for which the building is used. So, likewise, a city becomes an organized, efficient structure, only when it is arranged by districts, each of which is a carefully defined unit serving a definite purpose. And, since a city cannot be divided into units by walls, its neighborhoods must be set off from one another by law, and by law its character must be prescribed through requiring that all the buildings that are erected within the bounds of each district conform to the standards established for the district. In a word, one may compare this new conception of a city with the older one by saying that older ideas picture the city as a kind of fungus, in which the street and block system are the cells; while the new ideal created by the Zoning Resolution conceives it to be a mechanism of related parts, or units, in the shape of neighborhoods.

The break in ideas is evident in the working out of the zoning scheme. The districts were established by classifying them into types. The types were determined not at all arbitrarily, but only after a long study which, at the time that it was made, impressed people by its breadth, its thoroughness, and its practical and scientific accuracy. As a result of this investigation, the legal neighborhoods which are formed by the Zoning Resolution correspond closely to the physical characteristics of the neighborhoods as they existed—some of them vaguely defined—at the time of passage of the resolution. The physical characteristics of the neighborhoods are chiefly their area of streets and blocks, and types of buildings, and, even more important, their local social and economic organization.

But it should not be thought that the character of these neighborhoods was
fixed solely upon their local aspects; the process of zoning also covered the city as a whole and took account of all its many factors of co-ordination. In the resulting scheme, the block system is but the unit of measurement, and recently it is coming to be thought of as the proper unit of housing in apartments. Thus the century-old block sub-division into lots 25 by 100 feet promises to become obsolete. This relationship of housing to city planning was treated in the two preceding issues of the Architectural Record under the title of “Garden Apartments in Cities.”

But, important as zoning is, its organization of a city into a mechanism of districts is not the whole of city planning. City planning has come to mean in recent years a multitude of activities, and its field has expanded until it includes most of the aspects of city life. The relationships of these other aspects to zoning deserve a brief notice.

City planning may be said to have both a mechanical and a non-mechanical side. The mechanical side includes the familiar activities of engineering, sanitation, the street system and transportation. On the non-mechanical side there are the human relationships, taking form in countless ways, but principally in the fields of law, political administration, economics and social organization. Together, all this variety of factors tends to create a tangle of interests, which hitherto has foiled attempts to unravel it. The confusion has bred in some quarters an attitude of hopelessness toward the problems of the modern business city. Many observers have pronounced the task of organizing a city to be impossible, and they can see at best but a method of haphazard day-to-day meeting of difficulties as they arise.

The zoning principle definitely repudiates this muddle-through method of city organization. Zoning is only another factor of the mechanical side of city planning; and housing is still another new department to be added to those of engineering, sanitation and transportation. Now when we view this mechanical side of city planning as a whole, it would seem as if a significant truth in regard to it becomes apparent. That is, the mechanical activities of a city function more efficiently, and reach higher standards than do the non-mechanical activities of political administration and of social and economic relationships. These latter, every one knows, are the dark part of modern business cities. Consequently, in view of the contrast, may not the essential need of a city be to regard it as a structure and as a mechanism of city planning and engineering and of architecture; and then to plan and to construct it soundly on this basis? If that be done, the political and social side of the city, with all its human relationships, might become more wholesome. There might then be less confusion and disagreement and partisanship. It would seem as if many of the troubles of city life were debated on the wrong premises. Energies are wasted in a conflict of isms andologies, when the real cause may be discomfort, due to faults in the mechanical structure. The civic organization can hardly function properly in a city if the city is not planned to accommodate it, any more than a business organization can be efficient if it operates in a building that has not been planned to suit its needs.

When these broader relationships of zoning in the city plan are thus understood, one will more easily appreciate the technical operation of its principles. It should be said that the law itself is intricate in its workings, because it deals with the intricate conditions of New York real estate. These in turn reflect both the divided topography of the Port of New York and of the surrounding lands, and also the complex, growing, ever-changing character of the modern business city. For these reasons, taking a specific example, the particular technical details of the law which deal with heights of buildings are much more involved than the corresponding building regulations of certain European cities like Paris. Paris is a city of a long history of steady, slow growth, which has been carefully planned and controlled for generations. Also, Paris is not a center of commerce like New York, and it is not to any extent in-
LIGGETT-WINCHESTER-LEY CORPORATION BUILDING, NEW YORK CITY. CARRERE & HASTINGS, AND R. H. SHREVE, CONSULTING ARCHITECTS.
and developed many characters, allowing it to be agreeable and unobjectionable, which permitted normally scaling down, or cutting, the height of the buildings proportionately on the narrower streets, in order to protect the rights and equities of property owners in sanitation and light and air. These objects are accomplished in a variety of ways. First, there is the division of the city into five types of Height Districts, called the "one, 1 1/4, 1 1/2, 2 and 2 1/2 times" districts. How this rule operates technically may be illustrated by taking the "1 1/2 times" districts as an example. It means that if the street on which a building is to be built is 100 feet wide, and the building height will be 1 1/2 times 100 feet or 150 feet. This refers to the height of the building at the building line. Above that height the building may go higher, provided the wall on the building is set back in the same proportion, that is, set back 1 1/2 feet for every one foot of height that the wall is carried up. Several setbacks may be built, all conforming to the angle formed by drawing a line from the center of the street through a point in the top of the wall of the first setback on the building line. The principle is more easily understood by referring to the illustrations of the buildings in these pages. On streets less than 50 feet wide, height regulations are those of 50 feet wide streets, and on streets more than 100 feet wide, or on streets fronting parks, the height regulations are those of streets 100 feet wide. This latter exception embodies the principle that on a wide street a tall building robs the neighbors at the rear of light and air as much as it would if it were located on a narrow street.

Besides this general proportioning of heights the law introduces further refinements. It requires setbacks on "exterior" or street lines, but not on "interior" or lot lines. Projections above walls—termed "dormers" or bulkheads—are allowed under certain limitations. As an example, the turrets at the corners of the first setback on the Liggett Building, illustrated herewith, are technically "dormers" under the law. A similar slight excess is allowed for cornices and para-

width of streets, which is recognized in the principle of cutting down the heights of the buildings proportionately on the narrower streets, in order to protect the rights and equities of property owners in sanitation and light and air. These objects are accomplished in a variety of ways. First, there is the division of the city into five types of Height Districts, called the "one, 1 1/4, 1 1/2, 2 and 2 1/2 times" districts. How this rule operates technically may be illustrated by taking the "1 1/2 times" districts as an example. It means that if the street on which a building is to be built is 100 feet wide, taking the width between building lines, the building height will be 1 1/2 times 100 feet or 150 feet. This refers to the height of the building at the building line. Above that height the building may go higher, provided the wall on the building is set back in the same proportion, that is, set back 1 1/2 feet for every one foot of height that the wall is carried up. Several setbacks may be built, all conforming to the angle formed by drawing a line from the center of the street through a point in the top of the wall of the first setback on the building line. The principle is more easily understood by referring to the illustrations of the buildings in these pages. On streets less than 50 feet wide, height regulations are those of 50 feet wide streets, and on streets more than 100 feet wide, or on streets fronting parks, the height regulations are those of streets 100 feet wide. This latter exception embodies the principle that on a wide street a tall building robs the neighbors at the rear of light and air as much as it would if it were located on a narrow street.

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FISK BUILDING, NEW YORK CITY. CARRÈRE & HASTINGS AND R. H. SHREVE, ARCHITECTS.
FISK BUILDING, NEW YORK CITY.
Carrère & Hastings and R. H. Shreve, Architects.
pets. Another variation permits excess heights where a building is constructed amid a group of old buildings that were built before the Zoning Resolution was adopted, and which were carried to greater height than is now permitted.

Still a fifth variation of the height regulations deserves attention. Under limitations governing position on the plan in relation to building lines, street corners, etc., a tower may rise to any height desired, provided it does not cover more than 25 per cent. of the lot area. This provision for towers is one of the finest features of the zoning resolution, for it encourages the building of great towers like those of the Woolworth and Metropolitan Life, which have added so much to the beauty of the city.

The division into Area Districts follows the same principles as those employed in the height districting, especially in preserving standards for light and for ventilation. The Area classification also recognizes the gradation between the desirable height extremes of Commercial and Residence Districts. It increases the sizes of interior courts and yards as the heights
of buildings increases, corresponding to the Height District classification; and it secures open spaces in Residence Districts by means of an ingenious system. One noteworthy provision is that the area districting scheme operates to encourage the owners of buildings in Residence Districts to set apart additional areas for recreation space besides those required for courts.

Under the scheme of Area Districts five types of districts are established, known as A, B, C, D, E. In the “A” and “B” districts, commercial structures predominate; in the “C” districts tenements are the rule, and in them the area regulations are much like those of the Tenement House Act of 1901 for buildings less than six stories high. “D” district regulations are designed for row housing of dwellings for one and two families. “E” districts are composed of detached and semi-detached private dwellings. In the “E” districts, only 50 per cent. of the area of the lot may be built upon interior lots, and 70 per cent. on corner lots. The “D” districts also have a similar percentage limitation on the area of the lot to be occupied by the building.

The foregoing summarizes the main points of the law, chiefly those establishing the Use, Height and Area classifications. I have carried it only far enough to show how thoroughly the law prescribes the location and design of buildings. For further technical details, the reader is referred to a pamphlet, “Building Zones,” published by the Lawyers’ Mortgage Company of New York City, which gives a full account of the law and its technical application in architecture, together with many diagrams illustrating the working out of the principles in building design. This admirable pamphlet is the work of Mr. George Burdett Ford, consultant to the commission charged with zoning, assisted by Mr. Herbert S. Swan, well-known for his studies in light and air restrictions on buildings, and by Mr. F. P. Schiavoni.

When the essentials of the law are understood one realizes, I think, how truly they break with old ideas by thus establishing the character of the city as a mechanism of districts or neighborhoods. In fact, one not familiar with the history of the adoption of the law might ask, how was such a completely new system of city planning ever established in face of the older practice, which allowed an individual to build where, what and how he wished?

The full answer to this question cannot be given here; but I may say that one reason was the extraordinary effort to make the provisions of the law just, and to define the districts with the greatest precision so as to cause the least possible damage to existing property values. Even the excellence of the law, however, could hardly have ensured its adoption had not the growing chaos in New York City real estate forced civic action to relieve it. Property owners were taking alarm. Huge real estate values were being created or destroyed within the space of a few years’ time in certain areas, until finally the old system actually broke down in some blocks. According to Mr. Lawson Purdy, an authority on New York real estate, the construction of the Equitable Building on lower Broadway injured the equity in surrounding property, by monopolizing the light and air, to the extent of over a million dollars, and the city was forced to reduce adjacent assessments by at least that amount. Further uptown a single block, in size 200 feet by 800 feet, was assessed in 1911 for $17,000,000 and in 1916 for $7,000,000; the erection of industrial buildings in the district was the chief cause of the loss. Cases like these persuaded people to accept the zoning system as the only way to protect property values. The system has proved a success, and today no one would care to return to old methods. In fact, only four cases attacking the validity of the law have so far been tried in the courts, and these were decided on grounds that did not affect the constitutionality of the law itself; thus the constitutionality of the Zoning Resolution has never yet been passed upon.

As concerns the legal aspect of zoning regulations, the weight of authority seems to be that they can be made to conform to our American legal system. The
PARK-MADISON BUILDING, NEW YORK
CITY. WARREN & WETMORE, ARCHITECTS.
courts in recent years have upheld laws of various states, which contain some of the principles applied in zoning. They have done this on the basis of the police power, "which extends to public health, morals and safety." Sanitation is legally a function of the police power, and thus a property holder may be forbidden to build his building so high above adjoining buildings as to rob his neighbor of
light and air. A commission is charged with the operation of the law.

With this account of the chief characteristics of the Zoning Resolution ended, we may proceed to some illustrations of its specific operation in the design of buildings. The buildings shown herewith are all huge commercial structures, and form, therefore, only one class of all the buildings which are affected by the law. This is, however, the class that is most

The Liggett Building, as it is coming to be called, is in process of construction on the corner of Madison Avenue and Forty-second Street. The key to the suc-

PARK-MADISON BUILDING, NEW YORK CITY.
Warren & Wetmore, Architects.
only an efficient plan, but, in the upper stories, it has the great merit of facilitating the beautiful setbacks in terraces and towers. In the Liggett Building, for example, the fine central tower—which is the making of the design of the exterior—could never have been constructed over a center court.

The illustration showing the perspective of this structure indicates that it should be one of the most effective buildings in New York. Such distinction in mass, outline and detail, if carried into all architecture, would make the business districts of American cities beautiful—not only in respect to individual buildings, but considered from the aspect of each street as a whole. They would furnish an extraordinary picture where the building masses would harmonize by virtue of the cornice line of the first setback coming on the same level, forming thus a vast terrace, above which would rise a wonderful array of minor terraces, pavilions, loggias, roofs, dormers, turrets, towers, all pyramid into the sky. New York might vie with ancient Rome of the seven hills, but in a different way, in a character entirely its own. Such is the possible effect of the zoning principle, and how different it is from the present collection of crude cubical masses that poke their harsh, gaunt outlines into the sky, without any harmony of one building to another, blunt, angular objects that no skill in design or in details can redeem or else conceal. I believe that the reader will admit that this picture of the ugliness of American cities is not exaggerated. It is true, here and there the imagination of the architect and the appreciation of an owner have created a building that shows artistry in its mass and outline; but such exceptions are rare, and they occur mostly when a building resembles the form of a tower. The beauty of these towers suffers from the proximity of bulkier structures. Even the tower of the Woolworth Building is somewhat marred by the two low, boxlike wings beside it. Had the Woolworth Building been erected after the passage of the Zoning Resolution, Mr. Cass Gilbert would not have let pass the opportunity thus offered of modelling the lower wings in setbacks and terraces, so that their form and outlines would have harmonized better with the design of the tower. On the whole, it is fair to say that most of the tall buildings of New York antedating the Zoning Resolution are failures architecturally, in spite of the ingenuity which their architects have lavished on them, trying vainly to overcome their blocky mass. Such beautiful effects as one sees are due either to isolated towers or to occasional picturesque effects of groupings or perspectives which are purely accidental. Of such is the famous spectacle of the buildings in the financial district of lower Manhattan, where the ugly blocks of the bulky buildings cannot be distinguished from the silhouette of the mass, with outline of the whole group accent here and there by the tall towers of the Woolworth, the Singer and the Bankers' Trust buildings. And if New York is afflicted with many ugly tall buildings, what shall be said of other cities, whose picture shows two or three or a half dozen colossal, crude, block-line structures poking up at intervals above low buildings into the sky, without shape or proportion, unrelated to each other—about as beautiful and as inspiring as a collection of packing cases on a sidewalk. Quantity is not quality, and vast size of itself is not a recipe for beautiful architecture.

On the other hand, one should not make the mistake of concluding that the Zoning Resolution of itself creates beautiful buildings. It merely offers the architect an opportunity to prove his ability. As stated above, the law is based on economic and sanitary factors, and does not directly take account of aesthetic values. If the desire for fine architecture appears to be growing in New York City, that is due to the spirit of the owners of these tall buildings, and to the architects, who are slowly persuading the public of the truth that fine architecture has definite value in a commercial building. Therefore, the effect of the Zoning Resolution is to offer the architect a geometrical shell which is based almost solely on sanitary
NATIONAL ASSOCIATION BUILDING, NEW YORK CITY. STARRETT & VAN VLECK, ARCHITECTS.
NATIONAL ASSOCIATION BUILDING, NEW YORK CITY.
Starrett & Van Vleck, Architects.

NATIONAL ASSOCIATION BUILDING, NEW YORK CITY.
Starrett & Van Vleck, Architects.

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OPEN BEYOND

PLAN OF 20TH FLOOR
NATIONAL ASSOCIATION BUILDING, NEW YORK CITY.
Starrett & Van Vleck, Architects.

PLAN OF 15TH FLOOR
NATIONAL ASSOCIATION BUILDING, NEW YORK CITY.
Starrett & Van Vleck, Architects.
and financial considerations. If the architect proceeds to fill this shell with a building, he will find that the result has no form or proportion or symmetry of outline. It is his duty to model within the limits of the legal shell a beautiful building. In the process he may even find it necessary to persuade the owner to sacrifice a bit of space here and there in order to achieve his design.

Such was the method employed in the Liggett Building. The fine symmetry of its upper stories is not prescribed by the law, which would enforce only two setbacks, those in the streets. The setbacks have been carried around the other two sides, where a small amount of space was sacrificed beyond the requirement of the law in order to gain the effect. The owners thus viewed the project broadly, carrying the same fine appreciation into details, with concessions here and there to design,—yet at the same time mindful of the necessary limitations of cost of a business structure. For instance, they objected to the use of metal spandrels between the windows, which, painted black, made possible the fine vertical lines of the front, but approved the making of these spandrels in black terra cotta. The owners, on their own initiative, installed marble wainscots in the corridors of all floors. I cite these details to show the broad point of view that governs the design of these great buildings, and how even present costs do not prevent people from obtaining fine architecture.

Some further features of the design of this Liggett Building are of interest. In the elevations, factors of design and cost are finely adjusted. Brick was used effectively instead of more expensive materials, and the blending of color promises to be one of the best features of the upper stories. In the two lowest floors, the big motive of glass and metal is a bold device in design, forming a fine, strong base to the whole building, and yielding the maximum space for the show windows of the stores. This is a far better solution than the usual thin, long lines of stone, wide apart, that cover the steel points of support, a very weak looking effect indeed.

In designing the Fisk Building, the architects again showed fine understanding of the features of the law. Where, in the Liggett Building, they demonstrated to the owner how fine a design might be obtained, in the Fisk Building they upheld the same principle before the Zoning Commission. It happens that the Fisk Building, located at 1767 Broadway, lies across the boundaries of a “1½ times” and a “2½ times” Height District. A literal following of the restrictions would have dropped the first setback on Eighth Avenue much lower for a distance of 100 feet, and would have carried this setback along Fifty-seventh Street. This would have cut off a corner of the first setback on Fifty-seventh Street and thus made a fine, symmetrical design impossible. When the architects perceived how the law operated so unfortunately in this instance, they went before the commission and asked, and obtained, an exception which allowed the first setback on Fifty-seventh Street to be raised to the height of the one on Eighth Avenue. Their appeal was based solely on the wish to provide a beautiful building; and following this object, the architects agreed to set back the rear of the building more than the law required, so that the space thus sacrificed equals the space gained by raising the setback. Thus their clients gained no financial benefit from the change. This decision reflects admirably upon the board and the architects, for, although the board does not solicit exceptions to its regulations on artistic grounds—that depends on the initiative of the architect—by its action it showed itself willing to admit the factor of architectural beauty into its policy. It is to be hoped that this principle will be extended in zoning.

A third splendid structure is the Cunard Steamship Company’s building in lower Broadway, in the financial district of Manhattan, now under construction, of which Mr. Benjamin Wistar Morris is the architect. Its plan is exceptional by reason of the huge open domed lobby on the ground floor to be used by the Cunard
MADISON AVENUE OFFICES, NEW YORK CITY. STARRETT & VAN VLECK AND A. D. PICKERING, ARCHITECTS.
MADISON AVENUE OFFICES, NEW YORK CITY.
organization. The fine massing of its upper stories should add to the appearance of the district.

Warren & Wetmore are the architects of the Park-Madison Building, which occupies the whole block between Madison and Park avenues and Forty-sixth and Forty-seventh streets, and is now under construction. Here, also, like its neighbor, the Liggett Building, the elevators and similar services occupy the centers of the two parts of the buildings, which space is too dark to be rentable for offices. Monumental, indeed, are its vast proportions, with its twin-like upper parts rising above the lower mass, their tops well modeled with setbacks. This design conforms to the style of most of the buildings in this district around the Grand Central Station, which was also designed by Warren & Wetmore.

The National Association Building and the Madison Avenue Offices are both designed by Starrett & Van Vleck. The first runs from Forty-third to Forty-fourth Street, between Fifth and Sixth avenues, and was recently completed; while the second is being erected on Madison Avenue, between Forty-third and Forty-fourth streets. The first has not the advantage of a situation on a corner like the other buildings, but the architect has effected a striking pyramid of terraces. This building illustrates the terracing principle of setbacks to a higher degree than most buildings. In the building of the Madison Avenue Offices the owners could not gain possession of the two lots in the area built upon, and as a result the building could not be designed as a whole. This is to be regretted, for Starrett & Van Vleck have produced some fine business buildings. Their older design, No. 8 West Fortieth Street, is one of the most beautiful business buildings in New York, in its towerlike aspect, exquisite outlines, fineness of scale and beautifully blended color of light tan brick and limestone details that fuse like a pattern of tapestry in the upper portions. I have always admired the color of this edifice, which is of a quality
Plan of First Floor.

CUNARD BUILDING, NEW YORK CITY.
Benjamin Warner Morris, Architect.

Plan of Fifth Floor.
CUNARD BUILDING, NEW YORK CITY.
BENJAMIN WISTAR MORRIS, ARCHITECT.
that is but rarely attained in tall build-
ing. Its surface gleams and shines in
the sunlight and catches the light so
that the color seems always to be
changing. Nothing could yield greater
charm in a tall building, and it is seen at
its best in the Giralda Tower in Seville,
Spain. The Giralda, too, has a very
light brick, but it is warmer, slightly
more roseate in tone in some lights and
golden in others. The equally famous
Mangia Tower of Siena has this same
effect of evanescent color. But so
far most of the architects of Ameri-
can skyscrapers have not been able
to picture their towers with the eyes
of a colorist. Their practice is to accent
form and outline until, three hundred
feet in air, every detail of their buildings
appears as hard, and often as cold, as
steel. It might be that the character of
some of those old Gothic towers might
be studied to advantage, whose tops
grow finer in scale toward the tip, in such
a way as to cause an illusion of distance,
of atmosphere, of mystery. In Renais-
sance and modern towers the opposite
practice is followed, of coarsening the
scale in the upper heights. It may be
claimed that this latter practice is good
architecture; but it can hardly be doubted
that the other, the Gothic one, is more
surely art.

All in all, New York may look forward
to the day when these giant structures
shall be completed, when they shoulder
their tops of terraced and pylonized masses
high above the skyline of the city, into
the brilliant light of the sky in America.

At times, when the wind is from the
north and the atmosphere is crystal, these
vast shapes will jut up gaunt and stark,
every line and detail revealed, as if cut
from steel, naked in the cold blinding
glare. But on other days, when the wind
comes off the sea, from the east or south,
tingeing the light with a faint mellowness
or mist, then the towers will stand in a
thinnest dazzling veil of atmosphere, their
soaring outlines melting ever so slightly
into the blue sky, their vast flanks stream-
ing with sunshine. In this softer, slightly
golden illumination they may have some-
thing of the harmony and mystery and
illusion that brings the final quality of art
into architecture.

These new skyscrapers will be the vis-
ible symbols of the Zoning Resolution.
But one should not forget that they are
but the crowning dramatic feature of the
deep-lying new purpose of the modern
business city—of its new structural or-
ganization. The Zoning Resolution is the
basic step in city planning; the new city
planning that aims to bring order, coher-
ence and coordination into city life. The
older conception of a city as a formless,
unrelated mass of blocks, growing as it
will, tied together by the system of streets,
developing haphazardly—this no longer
serves the purpose. In New York this
idea of a fungus has now given way to
an organization of well defined units
of districts and neighborhoods, carefully
co-ordinated to the plan of the whole
city. Such is its theory, and New
York came to accept it as a matter of
self-preservation.
PROPOSED VICTORY BRIDGE OVER THE HUDSON. ALFRED C. BOSSOM, ARCHITECT.
PROPOSED VICTORY BRIDGE
OVER THE HUDSON BETWEEN
NEW YORK CITY & WEEHAWKEN
ALFRED C. BOSCOM, ARCHITECT

By Robert Imlay

With her immense rivers, America is the builder of mighty bridges. The best known of these is the group spanning the East River and connecting Manhattan Island with the Boroughs of Brooklyn and of Queens in Long Island. It is proposed to supplement these East River bridges on the other side of Manhattan with a gigantic new one that shall link New York City with the New Jersey communities on the other side of the Hudson River. The sponsors of the project intend it as a memorial of the late war, to be called the Victory Bridge.

As the illustrations show, this Victory Bridge will be far larger than its predecessors over the East River. It will be larger, because the Hudson River is wider—its span will be one-half mile long; in width and capacity it will be much bigger, since the railroad tracks will cross it on the lowest deck in addition to the traffic of rapid transit, motors and foot passengers; and in the monumental design of its huge towers it will be one of the great works of architecture of the nation. A more daring project could hardly be conceived, yet it is planned to be self-supporting financially. It may be well to point out here that, although in this form the scheme is new, the idea of it is old. The first definite proposal to build a Hudson River bridge came just before the war, when a joint commission of the states of New York and New Jersey was appointed to determine the relative merits of a bridge and a tunnel. A tunnel was chosen as being more effective at that time, but since the war the traffic difficulties of New York have so increased that the day seems to be drawing near when a bridge will become feasible.

But whatever be the future of this proposed Bridge of Victory, it is of vital interest as a design, and for us its significance lies chiefly in the possible effect on the city plan of New York.

With the traffic tunnel—of which the construction has been authorized—it will be the second great link between Manhattan and New Jersey. Doubtless more tunnels will be driven under the river in the future, for the experts concerned in the construction of the tunnel feel that it will be the first of a group. Thus, by virtue of these surface and sub-surface links, the division created by the Hudson River will be overcome and, in the matter of city plan, the New Jersey communities, of Jersey City, Hoboken, Weehawken, may become an integral part of New York. In fact, in recent years, this conception of planning New York to include the New Jersey side of the river has been growing. It first developed with regard to the Port of New York which—authorities who are not influenced by local allegiance agree—should be conceived to include the New Jersey as well as the New York waters surrounding New York Bay. This viewpoint includes the transportation system of the whole Metropolitan district, particularly the terminal systems of the railroads that radiate into New York City, in New York and New Jersey. The railroads
serve both the Port of New York and New York City, and the traffic congestion, which has grown up in loading and unloading of freight, its transfer and exchange, threatens, unless it be promptly and radically solved, to injure permanently the Port and the city. Heavy lighterage expenses and expenses of motor transport, resulting from the need of these services to supplement the railroads, have laid a heavy burden of charges on commerce.

The pressure of events, therefore, more than anything else, has forced New York City and the New Jersey bank of the river to act together vigorously to protect the welfare of both. Unfortunately local interests and political divisions still stand obstinately in the way—they are in some ways harder to overcome than the tremendous physical obstacles of geography. One may gain a hint of what these are when it is said that the more far-sighted authorities interested in the city plan are coming to feel that much of the difficulty in the whole complex problem of New York City is caused by the congestion in Manhattan Island. Manhattan Island has many functions. It is a large part of the Port of New York, which carries a far larger proportion of the shipping of the United States than any other Port; it is a great railroad terminal and distributing center for freight of the adjacent country by rail and motor; it is a great market center; and besides these it carries on much manufacturing—all in addition to its vast activities in finance, retail selling, real estate, its intellectual and recreational activities and its own local necessities. The long, narrow island can hardly hold them all, and they are all growing amazingly. Confusion is great, is increasing, and causes economic loss. The situation is becoming intolerable.

Hence the relationship of both tunnel and bridge to this congestion of Manhattan Island is most significant. In fact, it may be more important even than its more obvious usefulness, that of providing better communications across
PROPOSED VICTORY BRIDGE OVER THE HUDSON. ALFRED C. BOSSOM, ARCHITECT.
MAP SHOWING CONNECTION BETWEEN THE PROPOSED VICTORY BRIDGE (HERE CALLED "MEMORIAL BRIDGE") AND THE EXISTING BRIDGES OVER THE EAST RIVER.

the Hudson River between New York and New Jersey. Here one must be guarded in making sweeping statements as to so complicated a problem, with the changes that the future may bring to it, which cannot all be foreseen. Still, notwithstanding the uncertainty as to the future, it may be said that these tunnels and bridges may be the first step in the decentralization of Manhattan Island. In other words, there are many activities now carried on in Manhattan, such as manufacturing, warehousing and shipping, that could just as well be carried on outside the island, provided quick transportation could be had in and out of the city. Time, in transportation, even more than distance, may separate the parts of a city, and today it often takes more time and costs more—even where motor transport is called upon—to bring freight from New Jersey terminals into New York City than it does to bring this same freight from Pittsburgh or Buffalo to New York on the railroad. The delays on ferry and lighter, due to congestion, run into hours, often even more than a day in a trip back and forth across the river by motor. Thus it is no exaggeration to say that the New Jersey communities near New York Bay are, in the matter of freight communication, as far away from Manhattan Island as they are from Philadelphia or even from Baltimore or Boston. Under present conditions, when quick delivery is required, goods must be made or stored in Manhattan. It is this situation that the bridge and tunnels should help relieve through providing quick transportation and allowing business to locate outside Manhattan Island.

An idea of these factors will aid in appreciating some of the features of design of the proposed Victory Bridge. The floor of the bridge is very high above the water. This is, of course, required by the War Department, in order to insure clearance for ocean-going ships.
But this height has the additional advantage of allowing the New Jersey end of the bridge to rest upon the Weehawken heights—the continuation of the famous Palisades—that stand back about one mile from the pierhead line. This ridge has been another natural barrier, parallel to the river and, with it, dividing New York City from New Jersey, interrupting communication. So, by placing the approach to the bridge on its top, the obstacle of the ridge is in large part overcome. The railroad tracks and other types of transport carried by the bridge may discharge directly into the big trunk railroads and into their terminals and classification yards, which are located in the Hackensack meadows west of the ridge. On its New York end, the bridge abuts at a point near the western approaches of the three East River bridges referred to, as the map shows. This arrangement will facilitate traffic between New Jersey and Brooklyn. In time, if such cross-traffic should cause too much congestion in the streets, it could be accommodated in short traffic tunnels. One point, however, concerning the Manhattan end is not made clear by the sponsors of the bridge; that is, what function will be performed by the ten railroad tracks arriving this part of New York City?

From these considerations one gains an idea of the complex character of this colossal scheme. Other details there are, such as a system of warehouses, stores, commercial buildings, etc., to be constructed under the approaches of the bridge, at each end. The space in the towers can also be utilized.

But, we may well ask, will not the memorial ideal be swallowed up in this fast scheme of transport and of commerce? Such a question is indeed pertinent. One may acknowledge frankly that unscrupulous interests have used the sacred symbolism of the memorial in more than one case as an alluring disguise for a materialistic business "proposition," that could not succeed otherwise. Certainly, the objection to any utilitarian character in a memorial is a sound one. There are, however, peculiar cases which meet this objection, and a colossal bridge is one. This bridge is, besides, intended as a monument to Victory rather than as a memorial. Who has not felt his imagination kindle as he crossed a great bridge suspended over the mouth of a river at a huge port, its water teeming with great ships from all the harbors of the seven oceans, and little craft; its banks lined with splendid docks, behind them towering the skyline of a city? To a myriad of humans that traverse the East River Bridges each day, the trip is always an event which lifts them a little above the materialism of life. Is not this exaltation just the impression that a monument of victory should give? There is no better symbol for a memorial than a tower, and the two huge pylons, designed by Mr. Bossom, that support the suspension cables, are intended to give the memorial character inseparable from a bridge of victory—one tower devoted to New York and one to New Jersey, and to be used for no other utilitarian purpose than their function of supporting the cables. Such towers are fit memorials, both in their splendid monumental architecture and in their incomparable position astride a great river where it enters the sea—the portals of a huge city and of two states.
CEILING TO LIBRARY—RAVEN'S COURT PARK, LONDON, W.
THE English people have a natural sense of adoration for the prime organizer or master mind in any movement to the exclusion of many who may have an equal right of recognition. This is especially patent when treating of architectural biography.

Inigo Jones was believed to be the originator of the design for the quadrangle of St. John's College, Oxford, until it was proven that there was no stable evidence for his having visited that city during any period of his career. Hubert le Sueur was next associated with this work, because he was known to have executed the bronze figures in the niches over the colonnade, after which it was stated to have been undoubtedly designed by Flemish hands, owing to the character of the detail. No one, however, appears to have suggested the possibility that the architect was in point of fact the master mason who built Cornbury, erected the porch to St. Mary's Church and the arches to the physic garden, and who had, moreover, spent some years in Holland prior to the creation of his work-shop in Long Acre, London. This mason, Nicholas Stone, had an agent in Oxford in the person of his cousin, Gabriel Staces, with whom he was in continual communication for the supply of material for Cornbury and many other works there, including mural tablets erected in the various colleges, as Merton, Christ Church, etc., and had employed Le Sueur on more than one occasion.

Stone carried out his own designs for additions to churches in Amsterdam when working with his father-in-law, Pieter de Keyser, and was quite capable of acting in both capacities.

The biographers of Inigo Jones have assumed that all architectural works executed by Stone were originally designed by Jones.

As with Inigo Jones, so it is with Sir Christopher Wren and Robert Adam.

Darley competed with Adam in the execution of much work of equal merit, and Carter, a contemporary of Chippendale, anticipated the style which subsequently developed into the Adam manner. These men culled their information from the same sources, namely, France and Italy, and in particular the publications of researches, designs of men like Cauvet and engravings of that inspired genius Piranesi. There were also many French decorators of the period whose works were known in England, like Bellanger, Berthault, Kraftr and Sombré. Some of their features were directly plagiarized by English decorators, especially the works of Berthault and Lemoine le Romain.

Inspired as was Inigo Jones by the works of Palladio and the writings of Vitruvius, Robert Adam was in like manner subject to the influences of Piranesi. This engraver was remarkable for his original compositions of architectural subjects, depicting ruins and restoring them by the medium of his versatile nature. In details his motifs formed the fountain head of the Adam period of art, from the ram's head and winged griffins to the fluting and beading which accompanied the Greek honeysuckle ornament that adorns most of the work of the age.

Yet this was by no means the only source of inspiration. There is no doubt that Raphael's gallery at the Vatican and the fifteenth century work from the Cathedral at Pavia received more than passing notice by the eighteenth century designers.

Some of the unexecuted designs of Sion...
House were conceived with the assistance of Piranesi, whose grand manner was the source from which the general plan appears to have been evolved.

Nor was Adam the only English architect who was directly influenced by the works of Piranesi, the publication of which dated from the middle of the century. Born in 1720, he published his first engravings at the age of 21, and continued to execute most elaborate work until his death in 1778, at the rate of one a fortnight. His series of chimneypieces and vases indicate a highly technical skill, both in engraving and design, with a knowledge of the limitations of the subject; while his representations of the various palaces and ancient ruins of his country are very truthfully portrayed.

Robert Adam and his coterie of Italian assistants would have immediate access to these designs, owing to the friendship which existed between the two men; and when James Adam visited Italy Piranesi was in his fortieth year and at the height of his career.

What perhaps is most evident to the student of the history of the styles of interior decoration is the unanimity with which the vogue developed in far-reaching districts of England.

Mention has already been made of John Wood of Bath, who designed Buckland in Berkshire for Sir Robert Throckmorton and Stanlinch in Wiltshire for Mr. Henry Dawkins, apart from his extensive works in the city of Bath. While John Carr of York executed Thoresby Lodge, Nottinghamshire, for the Duke of Kingston; Oakland House, Cheshire, for Sir Peter Leicester; Harwood House, Yorkshire, for Edwin Lascelles, and Constable Barton, Yorkshire, for Sir Marmaduke Wyvill.

Of the lesser known men we have S. Leadbetter, the author of Newnham, Oxfordshire, the seat of Earl Harcourt, and J. Sanderson, who was associated with Smith (probably of Warwick) in the erection of Kertlington Park, Oxfordshire, for Sir James Dashwood, and Stratton Park, Hampshire, for the Duke of Bedford. J. James was the architect of Sir Gregory Page’s seat at Blackheath, Kent, and R. Morris, the author of Thomas Wyndham’s House at Hammer-smith, was associated with the Earl of Burlington in the designs for Kirby Hall, Yorkshire, for John Thompson, Esq.

These last mentioned buildings were executed earlier in the century than the period with which we are now dealing; but the publication of the designs in the fourth and fifth volumes of "Vitruvius Britannus" were intended to supplement the first three volumes by Colin Campbell as a guide to architects of the standard works of renown.

Books dealing with furniture were scarce in the eighteenth century. Sheraton states that he had seen one which was apparently published before Chippendale’s "Director," which latter appeared in 1754. The third edition of Thomas Sheraton’s book, "The Cabinet-Makers and Upholsterers Drawing Book," in four parts, saw the light in 1802, and contains many designs by Sheraton and G. Terry executed in 1793 and 1794. This was followed by the Leeds and Manchester Price Books, the latter appearing in 1810, with drawings by Shearer, Hepplewhite and Casement; after which numerous works were placed on the market dealing with various features of the house both modern and ancient. In 1834 Shaw published his series of measured drawings of Jacobean houses, which is a standard work of great value; while J. C. Richardson was an indefatigable worker in the same period of research. His large collection of drawings, housed in the Victoria and Albert Museum, are finished with great care and afford a valuable addition to the student’s library.

In 1879 Charles’s "Compiler" was published, embracing the work of many of the better examples appearing in previous publications, including designs by Pergolesi, R. Adam, W. & J. Pain, W. Thomas and certain French architects, with a view to putting on record in one volume the chief characteristics of the
STAIRCASE CEILING AT
BEACON HOUSE, PAINSWICK.
DETAIL OF CHIMNEYPiece,
DESIGNED BY PEROLESII.
CHIMNEY-PIECE DESIGNED BY PERGOLESI 1794.

CHIMNEYPIECE DESIGNED BY PERGOLESI.
(FOR SCALE, SEE OPPOSITE PAGE.)
DESIGN BY PERGOLESI. 1784.

PANEL DESIGN BY PERGOLESI.
ORNAMENT for a PAINTED PANEL.

PANEL DESIGN BY SHERATON.
more notable designers of the eighteenth and early years of the nineteenth century.

The illustrations which accompany this article are drawn from the latter work and Sheraton's book in order to exhibit the peculiarities of various artists who assisted or followed in the wake of Robert Adam.

The particular skill of Pergolesi lay in the practicability of most of his designs, together with a certain artistic expression which was peculiarly his own; while men like W. Thomas, N. Wallis and W. & J. Pain carried out the Adam manner with evident zest. Works of the Chippendale era by Ince and Mayhew, and Abraham Swan, although exhibiting a sound knowledge of the orders of architecture, gave expression to a piracy of French cult and plagiaristic tendency in the incorporation of certain features of the earlier styles. In dealing with ornament the play on the husk motifs is noticeable with the work of Swan, whose style in execution is very like the two Georgian rooms in the Victoria and Albert Museum, which have already been illustrated in these pages. Ornament for ornament's sake would seem to have been the theme of this era of decoration.

The ram's head and husk festoon figure in some of the designs of James Gibbs as early as 1739, who had among his vases some hexagonal shaped designs anticipating work which was executed similarly during the Adam period. Gibbs was in point of fact a particularly skilful designer from a decorator's standard; and although his cartouches are somewhat heavy and lack the grace attending some earlier examples, his other features were for the most part applicable to decorative use and obviously appropriate to the general work of the period of its vogue. It was Chambers's publication which brought about the pagoda like finish in China cabinets, sideboards and the like, as with the ecoinleurs or angle "whatnots" (as they were called in the Victorian era).

The early years of the nineteenth cen-
tury witnessed the Greek revival which Cockerell produced in its fullness, Sir John Soane with certain modifications and predilections of his own, and Thomas Hope with the addition of Pompeian and Egyptian features. The phrase, however, was not successful in producing a new style, each strove with Chinese exactitude to reproduce given objects with the evident result that inventive convention became a lost art, and a very confused state prevailed that terminated with the type of work which produced the 1851 Exhibition of London and the Paris Exhibition of 1878, when the panelling became heavily molded and the panels were carved, inlaid or painted with much elaboration but little soul.

The redeeming features of the century were the genius of Alfred Stevens in decoration and the garden work of George Devey and Sir Charles Barry.

Had it not been for men of this stamp, the century would have been devoid of artistic expression other than what was produced by the Gothic revivalists and the architects who laid out the West End of London on sound principles of town-planning on the one hand, and those who were actively measuring and executing reproductions of examples of earlier periods.
WINNING DESIGNS in the COMPETITION FOR THE FELLOWSHIP in ARCHITECTURE OF THE AMERICAN ACADEMY in ROME

THE prize designs published here-with display a soundness of conception and a maturity of execution which one hardly expects to find among young designers who are scarcely a year out of the architectural schools. Indeed, the first prize design challenges a comparison with the better work of experienced architects. The designs picture a "Memorial to a Great Man," who, though not mentioned by name in the program, could be none other than Theodore Roosevelt. The monument is planned for a site on an eminence, the site about five hundred feet in diameter and the building not over two hundred feet in its largest dimension; and it is to commemorate in a triple manner services in citizenship, in science and in letters. The interior was to be designed as a composition of painting, sculpture and architecture, with mural paintings and sculpture symbolizing achievements in science and in letters.

A very simple program; and because it is so simple, it inspires—if the designer has the power—a monument of tremendous single impression. When such unity is rendered expressively in beautiful form, architecture has the essentials of a masterpiece. How finely, even exquisitely, these qualities can be symbolized as a memorial may be perceived in the illustrations of Mr. Smith's winning design—in the plan, with its one simple, stately chamber; in section, with its mural and sculptural decorations; and, in elevation, with its splendid classic mass and modeling reminiscent of the Mausoleum of Halicarnassus of Hellenic Greece. It expresses the triple character of the memorial, yet this division is so carefully subordinated that the singleness of impression is not weakened. In the other designs the threefold purpose has brought something of diffusion.

The author of this fine conception is Mr. James Kellum Smith, A. B. Amherst and A. M. University of Pennsylvania, an American artist of American ancestry and American art education. He is at present in the office of McKim, Mead and White. Of much the same character are the winners of the second and third prizes, Leland King Cardwell, Chicago Art Institute, and Warren L. Hindenach, B. S. University of Pennsylvania and M. S. Harvard. To architects this success of native artists may cause no surprise, but it may well be noted in certain art circles outside architecture where the myth has grown up that American art is possible only if produced by aliens. Like many another nineteenth century assumption regarding art, this myth takes little account of fact, which appears to be that, no matter how great any art may be, or how cosmopolitan may be its appeal, it is at the same time a symbol of native and local flavor. Unless it is native and local it can hardly be fundamental and true and vivid—and it certainly cannot have the personality of craftsmanship, which is always racy of a particular locality.

The American Academy in Rome may well be congratulated on the excellence of this competition for its fellowship in architecture, and its sponsors may feel that their fine ideal of art education is bearing fruit.
ELEVATION—FIRST PRIZE DESIGN, BY JAMES KELLUM SMITH. COMPETITION FOR THE FELLOWSHIP IN ARCHITECTURE OF THE AMERICAN ACADEMY IN ROME.
PLAN—FIRST PRIZE DESIGN, BY JAMES KELLUM SMITH. COMPETITION FOR THE FELLOWSHIP IN ARCHITECTURE OF THE AMERICAN ACADEMY IN ROME.
SECTION—FIRST PRIZE DESIGN, BY JAMES KELLOM SMITH. COMPETITION FOR THE FELLOWSHIP IN ARCHITECTURE OF THE AMERICAN ACADEMY IN ROME.
ELEVATION AND PLAN — SECOND PRIZE DESIGN, BY LELAND KING CARDWELL. COMPETITION FOR THE FELLOWSHIP IN ARCHITECTURE OF THE AMERICAN ACADEMY IN ROME.
SOME PRINCIPLES OF SMALL HOUSE DESIGN

By

JOHN TAYLOR BOYD, JR.

Part IX Interiors-Continued

This chapter, which is the third one on interiors of the series, concerns that part of the art of interiors known as "interior decoration." Interior decoration is the art of furnishing and of finishing interiors, and in practice it usually covers the scheme of color and of finish, and the arrangement of furniture, hangings, art objects and other decorations. It is true, the ablest designers do not thus restrict the meaning of the term "interior decoration," but these are still in the minority. Too commonly, interior decoration is an art separated from the rest of the design of the interior.

It is not necessary, even if needs of space did not forbid, to cover in these pages the whole range of interior decoration. The principles of this particular art specialty are now well established—or re-established, it is more correct to say—in the United States, both in actual designs and in excellent writings. Consequently, only certain truths regarding them need be emphasized. These are, first, the relationship of interior decoration, as commonly practised, to the whole art of interiors in the small house; second, certain principles of style and good taste in interior decoration; and, third, the more detailed description of the principles of design that underlie interior decoration in all its multitude of arts and crafts. For this latter, it will be necessary to refer the reader to the better technical writings on interior decoration. As regards the first two subjects much has already been set forth in previous articles of the series.

If one would state the whole character of interior decoration in a sentence, one might say that it concerns the fundamental aesthetic principles common to all the arts in their specific application to the great variety of arts and crafts which are combined in interior design. These principles, under the name of Pure Design, should be understood, because they are of vital importance in the modern world of art. In the confusion of the arts, which have become so diversified, so specialized, so out of touch one with another, drifting away from the main current of the stream of art, a great need has arisen to seek again the fundamental principles of beauty. Since beauty can hardly be formulated mathematically, design has been studied as the thing nearest to it. Through knowledge of the fundamentals of design, it is hoped to reestablish art on its ancient bases of soundness and coherence. This task of formulating basic principles is now well under way, and, in some arts at least, the practical application of such principles is now well understood.

The progress towards a return to the normal in art is very recent. Mrs. Edith Wharton in her book, "The Decoration of Houses," Scribner's Sons, first published in 1897, says in her concluding chapter, "Many hold that in questions of taste Gefühl ist alles; while those who believe that beyond the oscillations of fashion certain fixed laws may be discerned have as yet agreed upon no definite formula defining their belief. In short, our civilization has not yet devel-
oped any artistic creed so generally recognized that it may be invoked ... without risk of misunderstanding.” Mrs. Wharton, however, excepts architecture and the allied arts, because in them “beauty depends on fitness, and the practical requirements of life are the ultimate test of fitness.” Twenty-five years has made this latter statement seem almost primitive. The former, however, was altogether prophetic. For, in view of Mrs. Wharton’s standing in art and letters, and her wide knowledge of European thought, one must suppose that she spoke conservatively in thus describing the want of basis and of purpose in late nineteenth century art.

When a need is pressing in the world, some one usually arises to meet it. Still, it is surprising that, a few years after Mrs. Wharton’s statement, Mr. Denman Waldo Ross, Lecturer in Fine Arts at Harvard University, completed a formulation of principles of design, as the aesthetic principles common to all the arts irrespective of time or conditions. His system, with its clear statement and clear terminology, but slightly altered since, has stood the test both of theory and of practice. His theory of pure design has been recently applied to the art of interior decoration, and it forms the basis of the best writings on the subject. If the reader would study these writings with discrimination, he should understand something of their basic theory; and, equally important, since a formulation of theory is only a means to an end, he might well know its place in the trend of thought of the times.

The twentieth century, in its task of restoring order in the nineteenth century confusion in art, was forced to analyze the causes of disaster. In older, more spontaneous times, these principles were accepted instinctively, as a matter of experience, and were handed down in the form of customs and habits and understandings, in the lore of art, from generation to generation, from groups to groups; and from artist to artist. Furthermore, the arts were not so sepa-
rate as now, being instead mostly joined with architecture. Artists were often masters of several arts at once. Hence there was no great need either to detach a body of abstract principles fundamental to all the arts, nor to distinguish formally between theory and practice in any one art. The unity of brain and hand and heart was absolute. This situation is the normal one, and the one which the twentieth century is striving to reestablish. Already it is far along on the journey towards the goal.

To appreciate the recent progress it is necessary to understand how far we have advanced beyond our starting point in the last century. We now see, I think, that the nineteenth century was an age of revolution—revolution in all respects, in thought, politics and in the mechanical and economic structure of society. In such an abnormal setting art was bound to be abnormal. How could art flourish in an age of unrelated specialist experimentation and in the chaos of theories arising therefrom!

Could art be sound in a century given over to extremes of individualism, of egotism, of an undiscriminating naturalism; in an age that was addicted to a spurious cosmopolitanism and to a search for programmes of philosophical absolutes! How could a sense of form and of order and of reason, or wholesomeness and spontaneity—which are at the basis of art—be retained in such abnormal conditions!

But if the culture of the nineteenth century was unfavorable for art, so also were the economic and mechanical upheavals of the period. These are still in process, though some keen observers are willing to say that present extremes cannot continue much longer. What is important to realize is, that the existing complication and subdivision of the mechanical structure of society cause an insidious complication and subdivision of the thought produced in it. Thought is "pyramided," as well as finance or government. This tendency towards an over-complicated, top heavy culture should be
counteracted in every possible way, if we are once again to attain the normal. Thus it is not surprising that, in art, in the nineteenth century, design—and beauty—dropped away until it became no more than an incident, or else disappeared altogether. Conflicting views on art sprung up. Art was a mysterious personal power of extraordinary individuals—a divine gift to favored apostles, or, in the opinion of some, a species of rare mental disease. Art was a matter of reviving historic styles, or of the looting of them all under the labels of "eclecticism" or of "cosmopolitanism." It was the expression of the age or of the world spirit. Sometimes it was a by-product of literature. In architecture, it was often a phase of mechanics. Thus you will find that much of the nineteenth century art criticism is based on almost any other premises than the essential ones—pure design, and style. Amid all their disagreements and pursuit of side issues, artists and critics were usually willing to forsake the worship of art for the delights of personal combat, in upholding the theories of some loved master against all comers.

The present temper is to seek agreement on essentials. But the few survivors of the old guard will not surrender, and it is not surprising that they who hold a vested interest in the occult and individualistic conception of art should resist valiantly any attempt to regain the normal. As stated above, the aim is now to separate from its applications in style and technique in the various arts a body of underlying theory that shall guide the arts and that shall harmonize art as a whole. This was not so necessary in simpler ages, when these principles were more or less consciously grasped; but now in our complex times, when the many arts are so separated and so expertized, it seems indispensable. Otherwise the economic pressure of business would de-
CORNER OF WRITING ROOM—FARMHOUSE OF MRS. W. M. RITTER, MANCHESTER, VT. MURPHY & DANA, ARCHITECTS.
stroy art, by shattering it into bits with the principle of the division of labor.

Thus pure design is pure theory, and therefore it does not take into account utility or expression or function or style, or even the technique of any one art. Though comparisons are risky, it may be said that Pure Design is to art in the individual artist. In other words, the aim of the artist is to interpret these universal principles of art in terms of his particular problem and of the situation in which he finds himself. And, most necessary above all else, the process should not be a cold, intellectual, analytical one. Brain and hand and heart should work as one. The artists must feel as well as think, if his work is to be inspired.

Since design is not a cold, intellectual, mechanical process, Americans should be on their guard against being too self-conscious in their interest in abstract principles. The value of these lies rather in criticism and analysis and in teaching,

WRITING ROOM—FARMHOUSE OF MRS. W. M. RITTER, MANCHESTER, VT.
Murphy & Dana, Architects.

what mathematics is to construction, or, to use the comparison favored by Mr. Ross, what the laws of rhythm, harmony and counterpoint are to music. Pure design is the theory; while the application of it lies in the particular art, the style, the conditions of time and people and locality, and, more specifically, in the conditions of the particular problem and
and they become useful in actual design only when they are as second nature to the designer. We should recall the example of France who has maintained her old art lore and traditions less impaired through the upheavals of the nineteenth century than any other nation. Her art is, therefore, more free the best formulation of the principles of design that the world is seeking seems to be that of Mr. Denman Waldo Ross. It is contained in his book, "Theory of Pure Design."

Mr. Ross had fully worked it out in his lectures given in 1904, and subsequent revision has made no great changes

BEDROOM—FARMHOUSE OF MRS. W. M. RITTER, MANCHESTER, VT.
Murphy & Dana, Architects.

and imaginative than ours; and, as Americans return to fundamentals, they should seek a like spontaneous expression. The next generation of Americans at the age of twenty will easily grasp what their fathers struggled to understand at forty, and will ask why there was ever such a pother made about it!

As I stated in a preceding paragraph, in it. He has not attempted to apply his principles systematically to any one art except the art of painting, although his class teaching abounds in illustrations taken from the whole range of art. The value of his formulation is proven by the fact that other men have been willing to apply it in their own fields. The late Prof. H. Langford Warren
drew freely on Mr. Ross in his splendid critical teaching of architecture at Harvard. The result, in Warren's later teaching, was not essentially different from that of the great professors of the École-des-Beaux-Arts, except that, as

This volume is akin to a textbook; impersonal almost as a textbook on geometry, and, like a geometry, while easily understood, it leaves the reader to work out the practical applications for himself. Thus one cannot hope to master

might be expected because of the greater strength of the background of art in France, the Paris teaching was the more imaginative and the more spontaneous.

All this lengthy statement of principles of design, and their place in the modern art world, will aid the reader in any study of writings on interior decoration. It is well to acquaint oneself with this background at its source, Ross' volume in Pure Design, referred to above.

all its aspects in a night's reading. Much study, constant observation, and, even better, practice in exercises in design are desirable. This is particularly true of principles of color. Principles and practice of color, in most arts, still offer the toughest problem for the designer. It was the sense of color, along with the sense of design, that became so atrophied in the nineteenth century.

When the significance of Pure Design
LIVING ROOM—RESIDENCE OF MRS. ARTHUR CAHN, HARTSDALE, N. Y.
Alfred Hopkins, Architect.

DINING ROOM—RESIDENCE OF MRS. ARTHUR CAHN, HARTSDALE, N. Y.
Alfred Hopkins, Architect.
is grasped, and its place in the modern movement to put art back into the arts, the next concern is how soundly the writers on interior decoration apply its principles in that particular art.

In reading the best recent American works on interior decoration, it would seem that the writers had succeeded admirably in applying the fundamental principles of art in the technique of interior decoration, but had not been so successful in their application in the matter of style and good taste. They are sound up to the point where they condemn period art in its strict historical interpretation, but they place too much emphasis on international and cosmopolitan influences. They do not consider national characteristics enough, and they overlook entirely the fundamental geographical factors in style—those of light, color, atmosphere and landscape, that were previously mentioned in these pages. Here, clearly, is another source of confusion; here are another conflicting sets of principles to be reconciled.

Since the cosmopolitan influence brings into question the last great factor in style not hitherto considered, the whole matter of style may be set forth completely.

Style—which is much the same thing as good taste—is the background of art traditions of a people, the stream of experience that flows from the past, through the present, into the future. The character of this background is always changing, as its principles are being interpreted anew to fit existing conditions of place and time and problem. Some of these conditions change rapidly; others evolve slowly; while some of them never change. These factors may be classified as those of nature—geographical, climatic; as racial ones; as cosmopolitan and international; as social; as
The geographical and climatic factors are geological causes; they are, therefore, eternal for man's purposes, and they will always exert a determining influence on the style of the art of a people. They vary in different regions of the earth's surface. Racial factors in style—national temperament—vary also by regions, and they vary slowly by time. That is to say, Americans will always be American in their art, not Englishmen or Frenchmen; but, as the American race grows older, or at certain times is more luxuriously inclined, and at others more austere, following changes in its social structure, it will slightly modify its style from century to century and from generation to generation. This racial factor is probably the one that produces periods in style. Style will also correspond to cosmopolitan influences from time to time; but, in any soundly established art, the international influences will be quickly absorbed into the native stream, receiving a distinctive native stamp. As to the mechanical factors in style, some are nearly changeless, like the use of regional building materials; while others are not, such as the mechanical part of the house. Of the economic and social factors, some of these, too, change slowly or but little, by centuries and generations; while others vary in the space of a few years. Then, lastly, in this classification of factors of style and good taste come the evanescent ideas of fashion which vary from year to year.

Thus style consists of a multitude of factors: some permanent, others variable and varying differently each from the other. None of them can safely be ignored. The problem of the artist is the decision of exactly how to apply the theoretical principles of pure design in.
any one art, in a specific case, in terms of style and good taste.

It seems evident that the factor of style, which I have called the cosmopolitan influence, is only one item in a complex series. It cannot be substituted for the whole, yet that nineteenth century practice of so doing still causes confusion today. Some American designers still follow it. How unsound this conception is may easily be realized by referring to the art history of France. The influence of the Renaissance, of the baroque, and later of the Chinese and classic art upon the French, has been carefully traced; but all critics agree that these influences were immediately absorbed, and the art of France always remained French. For instance, even at its height, the baroque was in France a French baroque, not Italian baroque.

Consequently, while American designers have the whole world to draw from, they will make a great mistake if they adopt internationalism as a fetish. In fact, American artists have been on a prolonged spree of cosmopolitanism, and now they may well settle down to their own style traditions for a while, their minds limbered up with new ideas, and with the memory of a gay experience to stimulate their imagination on the path of progress.

Except for this exaggeration of the factor of internationalism in style, the best books on interior decoration are excellent indeed. Perhaps those of a more serious technical nature are Frank Alvah Parsons’ “Interior Decoration, Its Principles and Practice,” 1913; and Harold Donaldson Eberlein’s “Practical Book of Interior Decoration,” 1919. It is not my intention to review either of them here, beyond pointing out certain characteristics. The two books are somewhat parallel in plan, being roughly divided into two parts: one dealing with the application of the principles of pure design to the technique of interior decoration; the other covering a historical survey of the historic periods and of the international influences. Thus the two books supplement each other admirably. Mr. Parsons states general principles very clearly;
but in his historical survey his chapter on early American interiors is as superficial as it well could be, since it is largely based on the false conception that the early American interior was a somewhat crude formula of mahogany furniture contrasted against white walls. Mr. Eberlein's knowledge of American art is much sounder, for it is a field that he knows well. I prefer Mr. Parsons summary of historical periods in essentials; but I like Mr. Eberlein's better in details. The latter has a better collection of illustrations, though here and there in them are to be noted the current faults of interior decoration, particularly that one of large, fat rectangles used beside delicate flowing curves and complex forms. However, from my own experience, I know how difficult it is to obtain good photographs of designs that illustrate specific principles, yet which in all other respects are faultless.

There are a dozen or more recent writings on interior decoration, besides scores of a more special character on furniture, textiles, ceramics, etc. The latter class can hardly be considered here, and only a few words may be spared for the former. Miss Edith Wharton's book was, with Miss Elsie de Wolfe's, "The House in Good Taste," 1913, a forerunner of the volumes of Mr. Eberlein and of Mr. Parsons. Each contains much sound wisdom, but neither attempts a technical discussion of principles. Of the other books, most of them are popular like the two just mentioned, but, unlike them, are too apt to be superficial. One notes in them the error of attempting to lay down specific rules and formulae as principles. The illustrations are often questionable, with designs that are sometimes crude examples of the mechanics of design, unclothed by any artistry. Thus they display that bad device of the modern decorator, the excessive use of groupings of minor objects in the shape of books, pictures, etc., around an axis. Except as part of a formal architectural motive, such as a mantelpiece, this practice is not design, but a substitute for it. It is the formula of the show window; though, to judge from some recent developments of that art, it might be better to say, of the third rate show window. An exception to the rather mediocre character of many popular books on interior decoration is "The Effective Small House," by Lillian Green, which contains valuable suggestions on practical and economical methods of decorating the small house. The author is to be congratulated on the merit of her illustrations.

It remains to consider how these general works on interior decoration may be applied in terms of the small house. This is not a difficult matter. Economy rules out elaboration in most cases, and small dimensions forbid the use of the bulky furniture and decorations sometimes found in large houses. The type of design and factors of style also do not suit this kind of decoration. Almost automatically, therefore, the small house is limited to the small, compact, practical kinds of furniture of the eighteenth century, which were developed in France, England, and also in America. Of these, French types with their subtle curves in their pure form cannot be turned out successfully, except by the most artistic handworkers. Thus, for furniture that is practical and compact, and at the same time beautiful, the decorator of the small house can hardly do better than to work on the lines of the noted English designers of the late eighteenth century—Sheraton, Chippendale, Hepplewhite and the Brothers Adam; and also of the slightly earlier type of design, less exquisitely classic, but still finely proportioned and of much charm and picturesqueness, of homelike quality. These latter may also be better rendered by machinery than the more refined types, because of their simple rectangular shapes, turned legs or spindles, which require only a little hand finish, particularly, to soften the hard edges made by the machine.

One may only mention the great opportunity of house furnishings in the textiles, ceramics, metal work and art objects of all kinds. In addition to their own reviving household arts, Americans have the whole world to draw upon, and there is no reason why they should not borrow freely from the international influences of the day, in the modern love.
of grace and vivacity and form, and of cheerful glowing color. But they should remember that they are Americans at the same time. Their plunder, even when gathered from all lands of the earth, should be wrought into a harmonious pattern of design in form and color and light, in the expression of American style and good taste, in the unity of a picture. The work of our best designers proves that this is their conception, whether consciously so or not, it does not matter. Indeed, if unconsciously, it may be all the better art. To quote the concluding sentence of Mrs. Wharton’s book, of her prophecy now being fulfilled by Mr. Ross: “... much that is empiric, much that is confused and extravagant, will give way before the application of principles based on common sense and regulated by the laws of harmony and proportion.”

(This paper concludes Mr. Boyd’s series, published in consecutive issues from November, 1919, to June, 1920.)