

EARLY AMERICAN DOORWAY, DAN-BURY, CONN. ABOUT 1805 OR 1806.

# THE ARCHITECTVRAL RECORD

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## SOME PRINCIPLES OF SMALL HOUSE DESIGN

#### By D JOHN TAYLOR BOYD, J₽ PART VI - ELEVATIONS-STYLE

THIS part of the series contains specific illustrations of the principles of design of elevations that were set forth in part V. It concerns the technical methods of architectural design through which are expressed those principles common to all the arts, and which should be at the basis of any design.

In a given problem, as noted in the previous articles, the first step necessary is to form a clear conception of the arrangement of the lot and of the precise scheme of house plan that develops from that arrangement and from the practical needs and the ideals of the family. In this fundamental scheme, the plan of lot

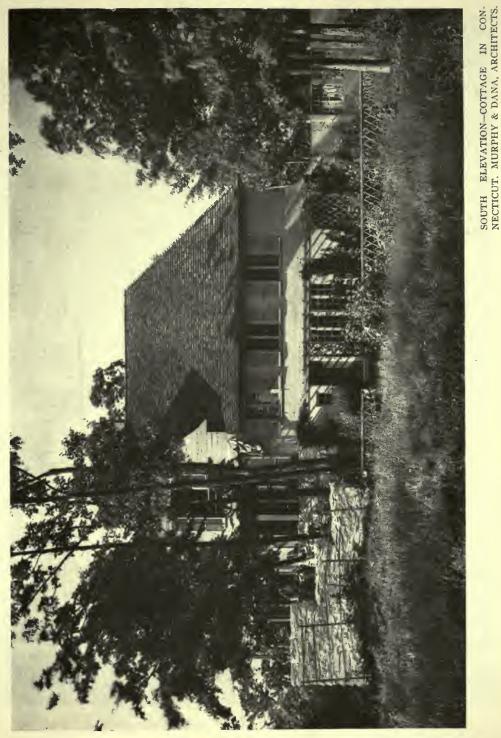
and house are imagined with the purpose of creating an artistic picture in the landscape setting or, if the lot is a small town lot, of creating a picture in the neighborhood. The aim as regards the design should be to attain an inspiration that is akin both to painting and sculpture-an effect of masses and spots and shapes of color in light on one hand, and an effect of geometrical form in perspective of relief, of modelling in different planes, and of decoration in light and shade and shadow. Otherwise, if the design is worked out in the routine way, all too common, it will be merely design on paper. The design of the elevations, the pretty one-eighth inch scale sketches

that attract the client, will steadily lose quality with each step as it develops through working drawings and full sizes into the final forms of the constructed house. When the fundamental scheme or *parti* as it is known in the slang of the architect's office—is once settled, the application of the principles of design is more strictly a matter of architectural technique. Design thereafter becomes a matter of how to make the most of the artistic and practical possibilities of the preliminary scheme in the mechanics and materials of building construction.

Among the technical principles of the particular art of architecture, the most fundamental element of all is style. The preceding article was devoted to this subject which has so baffled American architects and confused their clients, the American people. It was found that, whatever may be the confusion of styles in the architecture of our misshapen, half-planned, half-understood, heterogeneous and discordant cities, the problem of style in domestic architecture is solved. The style to use is that which is founded on early American architecture. It is the simple, exquisite household art of our farmland, village and town neighborhood-the native American style that was developed through two centuries of craftsmanship to express the simple American society which has not changed This art much in one hundred vears. flowered out in the first half of the nineteenth century, in the formative period of the United States, when the great traditions of Americanism took lasting shape. It was the art of the hearth that nurtured Lincoln and Grant and Marshall and Emerson and Poe and Whitman and Henry Adams. It has come back strong among us, and has nearly driven out whatever foreign importations it could not easily assimilate. Even the modern British picturesque style of direct Gothic ancestry is vanish-Practical difficulties stand in the ing. way of using this British and other styles, and furthermore they neither respond to the conditions of American climate and landscape and light and atmosphere, nor do they express the in-

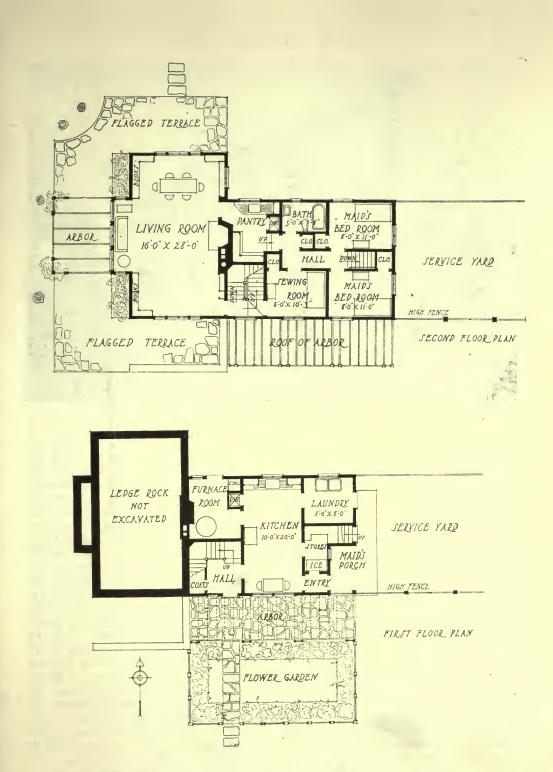
stincts of American civilization. It should no longer cause surprise to say that the temper of American design is coming to a point where it can hardly accommodate itself to any foreign spirit in form. The struggle of native architecture against foreign still goes on in the cities and in the great residences of the wealthy, though these latter contain many victories for our own tradition. Our intellectual people have overlooked the obvious fact of this conflict of forms, and also the obvious result of it. They dwell in the incoherent cities, with "isms" coming at them from all directions at once, like the motor-cars, and, in their excitement over their narrow escapes, imagine, some of them, that their agility is developing a new art-the expression of a new erathat will revolutionize the countrysides. But cities never revolutionize countrysides. This is one of the simplest principles of history. What neither Rome nor Paris nor London could do, New York, in its present unformed state, cannot hope to do. It can never force an alien or exotic art upon the people of the villages and countrysides, above all an art of the household that is an intellectual abstraction which does not vitally express the traditions of that society of small neighborhoods that forms the backbone of the country. When the small communities have developed an art that meets their needs, the cities may take this vernacular and create with it a great civic architecture.

Therefore, it seems safe to conclude that, in the matter of style as in most other respects, the small house has come into its own. We have now an American style suitable for any type of design, formal or informal, severe or free, classic or picturesque, symmetrical or not. Besides, and this is one of its greatest virtues, it is adapted to the flexible system of planning which both twentieth century economic conditions and the modern spirit force upon us. In the third and fourth articles, design was pictured as the problem of reconciling two conflicting powerful forces. One was economic -modern conditions of cost and maintenance, limiting the size of small houses





DETAIL—COTTAGE IN CONNECTICUT MURPHY & DANA, ARCHITECTS.



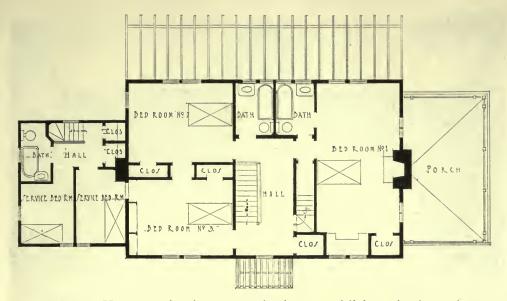
FLOOR PLANS-COTTAGE IN CONNECTI-CUT. MURPHY & DANA, ARCHITECTS. THE ARCHITECTURAL RECORD.



RESIDENCE OF MISS ETHEL KETCHAM, BELLPORT, L. I. Delano & Aldrich, Architects.

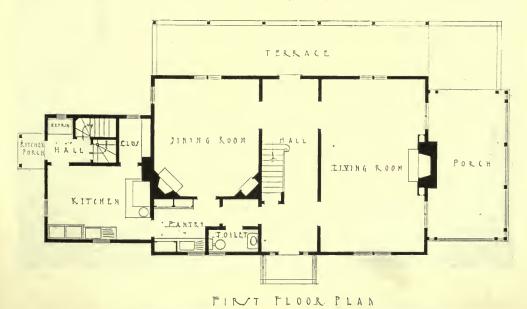
and ruthlessly cutting away luxuries, The other was the even necessities. modern art spirit which has stimulated the imagination, and which demands free, full creative design-inspiration. Only great ingenuity can break the deadlock between the two demands. Formulae, customs and habits of design, routine, or bookish inspiration cannot meet the situation. Designers are compelled to reclassify the essentials and to adopt a flexible scheme of planning and design to meet specific cases. This much of a summary of the four preceding articles is necessary before turning again to technical details.

When, as remarked above, in solving a particular problem, the general scheme of arrangement of lot and house and of the picture of the house in its setting has been decided, the next step is to fix upon that type of the American style that best expresses the scheme. One must decide the variety of regional types of architecture to use. Now, before considering some of the good points of the several types, it should be said that the most experienced designers believe that the soundest practice is to stick to the current of tradition of the region where the house is located. This is, after all, but one of the oldest principles in architecture. Without it, no consistent character of town, no beauty of neighborhood, may be obtained. Even in the field of the American style there is such contrast between the types of New England and Philadelphia, for example, or of New Jersey and the south, that they could hardly be harmonious. This principle should be followed willingly by the designer, nor should he fear that it will hamper his initiative or stifle his personality, to use a catchword of certain modern artists. A thorough knowledge of the regional type should provide him with a vocabulary ample enough to enable him to express all the creative ideas he may possess. It is evident that the imagination of Mellor, Meigs and Howe has been helped, not handicapped, by keeping to the spirit of the Philadelphia type; and this is true in the case of

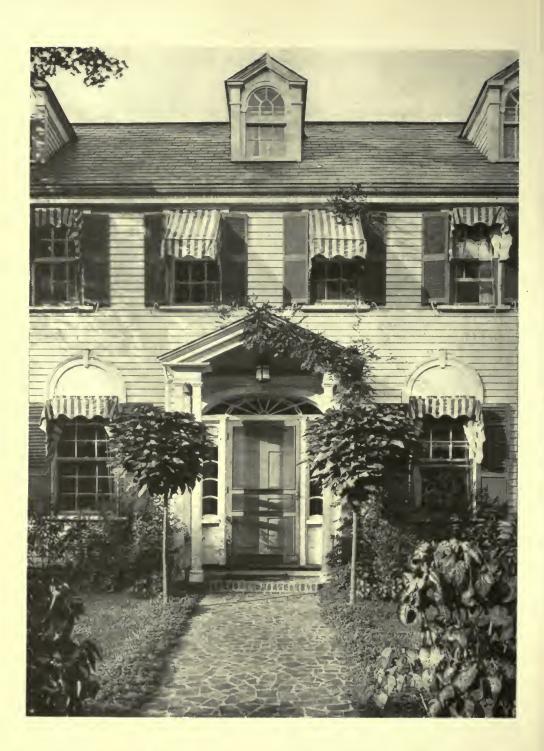


Parker Morse Hooper, who interprets the wood style of New York with a bold originality rare in architecture. Of course, in newer communities where there is no tradition of old houses, a type should be settled upon if possible, and it should be a fascinating enterprise to interpret the ideal which best expresses the local conditions of climate and landscape and light and color and atmosphere as well as the local building materials and the social character of the community.

There is not space in these pages to cover fully the value and characteristics of the various regional types of the United States. Only a few paragraphs may be spared to mention some of their



FLOOR PLANS-RESIDENCE OF MISS ETHEL KETCHAM, BELLPORT, L. I. Delano & Aldrich, Architects.

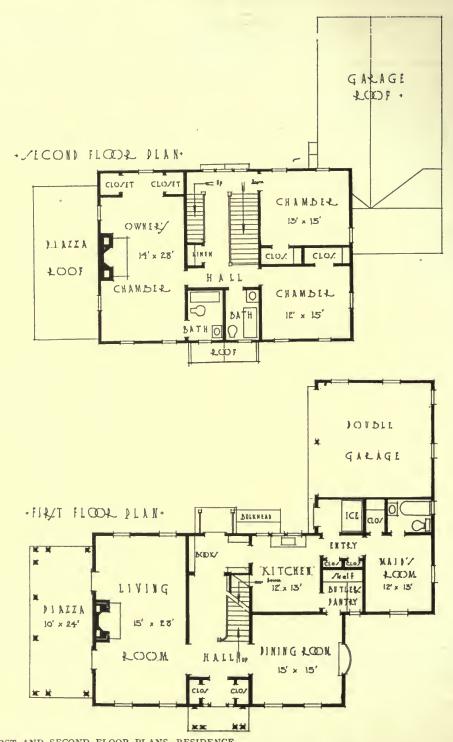


DOOR DETAIL—RESIDENCE OF W. N. HARTSHORN, ESQ., CAMBRIDGE, MASS. GRANDGENT & ELWELL, ARCHITECTS. essentials. Among them, as an all-round type, the regional architecture of Eastern Pennsylvania is not surpassed. Splendid in conception, bold and perfect in execution, with extraordinary charm and cheerful personality, the best examples follow interpretively, but closely and consistently, the old fieldstone and stucco houses of Eastern Pennsylvania, whose big, solid, full, spreading proportions, large roofs, fat chimneys, afford an air of comfort, of permanence, of home, equal to anything in the world. Yet, notwithstanding all its strength and big mass, the Philadelphia type is not clumsy. It is beautiful in proportions, excellent in scale, and the houses are set well into their site, the wings and porches being well designed with this object in view, while the low, horizontal effect so necessary in most small houses is aided by the fine use of the projecting hoods over the first-story windows which cast a long horizontal shadow, tying the elements of the elevation together and adjusting them to the elements of the lot. These hoods also facilitate an unsymmetrical spacing of windows. Some times the Philadelphia details are heavy, but in the hands of the best designers they are as delicate as anything in New England, and serve as a fine contrast to the sturdy proportions. The best Philadelphia houses meet the real test of a masterwork, for when viewed in their situation, it does not seem as if anything else could do so well. Nowhere do houses look more homelike. Nowhere do they have a finer air of breeding and good taste. They are symbols of a region that has maintained American traditions of living and manners through the Victorian period, perhaps more vitally than elsewhere. It is therefore not surprising that the Pennsylvania people have recaptured that elusive quality of neighborhood beautyif, indeed, they ever quite lost it-which is the final achievement of house architecture and the greatest glory of the old American towns.

Coming to the district around New York City, one finds a greater variety of types than around Philadelphia,

though the wooden architectures of Westchester County, Long Island and Western Connecticut are much alike. This architecture lacks the sturdy, solid quality of the Philadelphia region, but, like it, has a fine massing and sets well into the site when it uses low wings and porches. Its low roof slope—about thirty degrees-has beautiful angles, and is much admired. In Connecticut this style has the striking merit of many varied groupings in a free, picturesque manner on all sorts of sites, level or sloping or uneven, where houses and wings are combined with out-buildings and low sheds. Good use is made of glazed porches and loggia motives. These afford much charm and a variation of wall planes, alleviating the thinness and flatness of wooden walls. One of the most extraordinary qualities of this style is the perfection of its proportions and shapes, and its grace and gayety, carried out in perfect taste, very simply and moderately. Such artistry is indeed rare in house architecture, especially in free, informal types, which are too often clumsy and unrefined. This New York-Connecticut type has also a series of houses conceived in a more formal, sophisticated manner, which finds favor in ambitious suburbs and wealthy countrysides.

The New York district contains some brick and stucco architecture, on the whole successful, and resembling the wooden type. Unfortunately, the New York architects have not concentrated enough on their local type, though they devote themselves more to it each year. They have been handicapped by working at the Port of New York, which carries on an import business in art as in other things. This foreign influence combines with the constant flow of new people with conflicting tastes into the district to create much confusion in art and decoration. This confusion has wrecked the neighborhood beauty of many communities in the metropolitan The situation has not been district. helped by the popularization of the modern hybrid called "Dutch Colonial," which people have seized upon because



FIRST AND SECOND FLOOR PLANS-RESIDENCE OF W. N. HARTSHORN, ESQ., CAMBRIDGE, MASS. GRANDGENT & ELWELL, ARCHITECTS. 1



RESIDENCE OF W. N. HARTSHORN, ESQ., CAMBRIDGE, MASS. Grandgent & Elwell, Architects.

TOLAGE

CHAMDER

15' x 16'

DLAN+

/TORAGE

MAID'

LOOM

14' × 16'

+ THIRD

they appreciate that extraordinary expression of hearthfire-the ultimate quality in a home — so characteristic of the houses of the descendants of the Holland farmers in Long Island and New Jersey The "Dutch Colonial" has done the true New Jersey type harm, for it has ruined the

exquisite proportions and beautiful angles and lines of the old local gambrel roof, through changing them to get maximum space for the second story and to get maximum light by dormer windows. Only in the rarest cases is the hybrid passable.

In New Jersey it is to be regretted that the local architects have not given their own type the opportunity of a modern

expression. Many New Jersey houses are designed in New York City, where neither the value nor the character of the New Jersey tradition is perfectly understood. There are three types of tradition in the state. Besides the pure "Dutch" type, there is a two-storied type, sometimes

with gambrel roof, in Newark and south in Monmouth County, and also the western type which resembles Pennsylvania architecture. The eastern type, whether in stone, stucco, brick or wood, sets well in the flat or rolling land—low in proportions, small in scale, and wonderfully homelike. The western type, of brick or frame, is often taller, but is still small in scale. Many are familiar with the fine

FLOOL



EAST END-RESIDENCE OF W. N. HARTSHORN, ESQ., CAMBRIDGE, MASS. Grandgent & Elwell, Architects.

old brick houses in Princeton. They are painted a clear light yellow, which renders them peculiarly attractive in the soft, thick vegetation in the delicate, slightly radiant New Jersey light.

As to the local New England types, they are well known. They are the ones that have borne most of the criticism directed against our native style as cold and thin, too symbolical of the eighteenth century, too uninspired in its rigid "Puritanism" to be pertinent to modern times. It cannot be denied that there are a few houses in Eastern Massachusetts which this description fits. In some of the New England examples the mass sticks up gaunt and blocklike, the roof angles are cruder than in Connecticut, the lines are hard and the walls are cut up with windows set too close together. Their air is prim and somewhat uncompromising. However, this prim, sophisticated kind of house is not typical, although it has some beautiful details. Throughout New England are plenty of another kind, examples which belie the

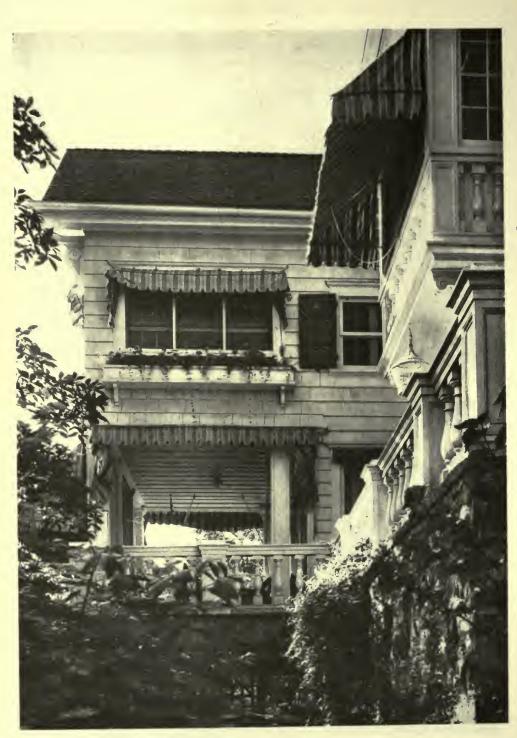
The New England form of critics. gambrel at its best is excellent indeed, as, for instance, in the Wadsworth House at Harvard. The smaller towns contain many free, picturesque examples, and all this architecture of brick and wood is a wonderful mine for a vocabulary of forms and details. New England architects have done some excellent work in their local types, particularly lately. A typical New England home is the house at Cambridge, Mass., designed by Grandgent and Elwell. The front elevation is characteristic, finely interpreted. Note how the tall mass of the main part of the house is harmonized with the level site by the low wing, which is placed at the rear next the kitchen. This arrangement is a case where the plan has fixed the art of the elevation, for it opens the dining-room to the garden on the east and to the morning sun. The end gable is admirably designed, which, with the juncture of the wing, is a frequent failure in house design. The view of the north elevation and garage is especially tine—New England at its best. Characteristic of New England is the whole design of Grandgent and Elwell, who have exercised imagination where it was required and for the rest followed carefully, in faultless proportion, both letter and spirit of their tradition, carrying it out with a restrained, yet very fine, taste. It is clearly the work of gentlemen. This Cambridge house offers an interesting comparison with some of the freer, more imaginative New York and Philadelphia designs shown in these pages.

From New England it is a far jump to the south, where different conditions, a different people, and consequently a different type of architecture are met with. I have mentioned many of the southern characteristics in previous pages. To the south we are indebted for a warmer inspiration, a more luxurious spirit, for ideas of brilliant color keyed to golden sunlight, of a more sensuous, a more lavish use of form, a richer sense of decoration. One must regret that southern architects, like the architects of New Jersey, have not fully appreciated the remarkable value of their local forms, have not developed a modern type of the southern vernacular. We cannot afford to squander any of our heritage, either the hearth-character of older New Jersey or the luxurious spirit of the south in its traditions of hospitality and fine country manners. Both of these influences appeal to the modern American.

This ends a hasty survey of the regional variations of the native style. They should be thoroughly understood, in letter and spirit, not for the sake of historical accuracy, but for the purpose of grasping their meaning. In a recent house designed by a well-known architect, which for evident reasons cannot be reproduced in these pages, is to be seen the result of not knowing architectural styles. The house has a heavy English Georgian cornice, a more delicate, but simple, early American mass and windows, and an Adam entrance porch and window above, this last of a very sophis-



NORTH SIDE AND GARAGE-RESIDENCE OF W. N. HARTSHORN, ESQ., CAMBRIDGE, MASS. Grandgent & Elwell, Architects.



RESIDENCE OF WALTER CRITTENDEN, ESQ., CORNWALL-ON-HUDSON, N. Y. PARKER MORSE HOOPER, ARCHITECT.



RESIDENCE OF WALTER CRITTENDEN, ESQ., CORNWALL-ON-HUDSON, N. Y. Parker Morse Hooper, Architect.

ticated air. Here are found on the same small house front three sets or styles of forms of opposing spirit and different scales, each perfect of its kind, but not harmonious with the other two. Such a result teaches the principle that one should possess that consistency and knowledge of style which alone will permit one to incorporate variations of motive and one's own individuality with success. It shows also what a difficult task it is really to master a style of architecture. One in a lifetime is enough for most designers. To design in two styles perfectly is as difficult as it is to write in two languages, for, like language, architectural style is a profounder thing than an arbitrary set of forms.

After this summary of style, more specific aspects of elevations are in order. There is the practical matter of choosing building materials. All the different materials have their artistic and practical merits, each its peculiar qualities in which it surpasses the others. They are well known, and need no great comment. The essential principles are architectural expression, coloring and modelling and decoration and texture, in the mass and form and details of the house, in sunlight and shadow.

Of course, there is nothing superior to stone in building. Everyone envies the Philadelphia architects their supply of beautiful, light-colored, variegated, easily worked, cheap stone. They know perfectly how to use it-how to proportion the sizes and joints to give it strength, color and solidity. A study of this stonework will explain its excellence more than any description could do. The Philadelphia design emphasizes the light colors of this stone, and treats it as one colored and textured mass of many tiny hues mingling as in a tapestry, maintaining a unity of color. The emphasis is neither on single stone nor joint. In many cases the mortar is spread around freely, with a whitish effect and in some recent houses I have noted walls that



SOUTH FRONT-PAIR OF SMALL HOUSES NEAR HAVERFORD, PA. Wilson Eyre & McIlvaine, Architects.

were entirely painted or whitewashed, like stucco. The result is wonderfully beautiful, showing a perfect appreciation of coloration in sunlight. In districts where the stone is of dull color this painting and whitewashing is advisable.

In brickwork, Americans are not so skillful. This assertion will surprise many, because great progress in brickwork has been made in twenty years, since the days of the impossible pressed brick. Architects have developed welltextured brick, well-jointed, of good "local" color and a good tapestry of hues, but they seem to overlook the effect of sunshine on the brick. Dark brick in Europe retains its warm, rich tone in the misty light, but here in the United States its color is neutralized in the bright light, and it looks cold and drab. In many cases bright white joints only serve to make it spotty. It loses the sparkle of shadows and does not catch and reflect the light. If anyone doubts this statement, let him visit the new neighborhoods in New York City in which most of

the houses have been remodeled recently, their brick or brownstone fronts stuccoed and painted in lightest tints of warm grays or gay yellows. He will be astonished in these streets to see the warmth and brilliancy of the sunlight, its luminous shadows, its play of light and color on surfaces and details, all of which will make him feel, when again he returns to the cold drab brick streets, that he has been in a latitude a thousand miles south. He has obtained a new idea of the American sun. However, this is not to condemn brick entirely. It is likely that there will come into use brick of light, clear colors, in a variety of "hot" hues, such a brick as I saw in Hampton Institute, Virginia, which was admirably keyed to the sunlight and landscape. A similar brick is found in the old southern plantation mansions. Only such massing of color and surface will count in our big sunlit landscapes, and no longer will designs pass which are merely an "interesting" pattern of white details of cornice and trims and quoins and doorways,



ENTRANCE COURT-PAIR OF SMALL HOUSES NEAR HAVERFORD, PA. Wilson Eyre & McIlvaine, Architects.

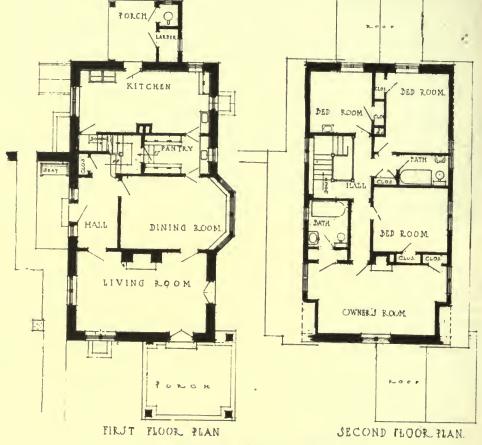
standing out hard and naked against a dark brick wall, inharmonious with it and both inharmonious with the sun. This latter method is drawing-board design, while the former is architecture.

Stucco and wood are two materials too well known and too well understood by designers to need much comment. The former has been prized by designers since the days of Pompeii. American architects use it admirably, but only a few of them make full use of its possibilities of There is no better material for color. our native light. Of wood, much has been said. No artists in the world have better used wood outdoors than Americans. Our early craftsmen developed a series of wood forms that are thoroughly functional, an organic expression of the construction, in the simplest, most direct way. They also modelled them to make the most of sunlight. In the north the hard, cold, light brings out every form and line of detail with uncomfortable This fact led the old cardistinctness.

penter craftsmen to make their details very simple and delicate and fine in scale, using rounder mouldings to soften the edges, avoiding a machinelike appearance; while to the south, where the light is warmer, mellower, and vibrating with color, it does not accent edges, hence the craftsmen used heavier and bolder detail, with richer decoration in the luminous shadows. The reader may have felt at times that I have a hobby for the early American tradition and that I thrust it forward at every turn. Notwithstanding this, it seems clear that, with all the immense study that we have put on the old buildings, we have not progressed very far beyond form and details. In the matter of essentials we are only beginning to appreciate the value of our older craftsmen and architects, particularly in the matter of form and color of architecture. In fact, I believe that it is no exaggeration to say this: Never in the whole history of architecture did a single people or nation so homo-

#### THE ARCHITECTURAL RECORD.

geneous as the early Americans were develop a single domestic architectural style over such a range of geographical space of climate and of landscape conditions. Thus, in its flexible, imaginative craftsmanship, adapting form and color to such a variety of conditions, it illustrates the fundamental principles of walls cannot be considered apart from roofs. In a small house the great difficulty is to keep its proportions from appearing poked up, from looking like a box without much relation to its site, with an air of having been moved there from somewhere else, instead of belonging to its site. In roofing, the es-



PAIR OF SMALL HOUSES NEAR HAVERFORD, PA. Wilson Eyre & McIlvaine, Architects.

form and color in architecture, as influenced by the conditions of nature, better than any other historical style. It even rivals Gothic in this respect, for the principles of Gothic architecture are complicated by the fact that they were put into practice by several different peoples, of differing temperament and social organization.

Leaving this digression, the design of

sential is to achieve this relation to site, and then to keep its mass and shapes simple without too many jerky peaks and gables and angles and spotty dormers. Those designers whose work shows clearly that they do not believe in simple, harmonious roofing as a matter of art, should at least accept this principle on the ground of economy.

If the house is symmetrical, a low



SOUTH END—PAIR OF SMALL HOUSES NEAR HAVERFORD, PA. WILSON EYRE & McILVAINE, ARCHITECTS.



SOUTH FRONT-PAIR OF SMALL HOUSES NEAR HAVERFORD, PA. WILSON EYRE & McILVAINE, ARCHITECTS.

wing or shed, aided by terraces or walls or porch, will tie the house to the ground. Many examples of this are seen, and one of the best—in that difficult situation, a flat billiard table site-is the Cambridge house in these pages. If the house is unsymmetrical, the problem of roofing is one of the toughest in architecture, and reveals how real is the artistic power of the designer over form. The laws of picturesque design are as severe as, and far more difficult than, those of balanced design. This type of design is not taught in the architectural schools. Much was said of this matter in the previous articles of this series, in speaking of the characteristics of the modern English free style. Confusion of elements is not picturesque art. As in classic design, simplicity and grace and harmony and perfect proportion are essentials; together with the careful subordination of minor to major elements. Specifically, a single long roof ridge with a single minor peak or gable at one end, and a tiny dormer or two, or one long dormer nestling into the roof, may be all that is needed to achieve a beautiful, picturesque result. Bay windows need not be too much multiplied, and frequently those tricky, clever details of low roof over entrance, and porch gables, which look so clever on paper, may easily be simplified and united with the main roof, thus gaining unity, adding boldness yet maintaining interest. In the walls of a picturesque style, it is well not to cut them up too much with windows, which should have plenty of space around them. Another mistake in American picturesque design is too much variety in window shapes and sizes. While windows need not "line up" in every case, many of them may well be so tied together, and one can hardly deny that they should have an absolute consistency of scale and avoid spottiness. Some of the very finest picturesque houses are extremely simple in mass and roof, with but a few minor features and but a few different sizes and types of windows. Their restraint in minor motives emphasizes the beauty of their mass.

In a free style, the shapes and angles

should be thoroughly consistent. How often does one see fat windows on tall thin gables with steep roofed peaks, or the opposite relation. Where a "battery" of windows are used, the shape of each unit should be harmonized with the general character of the house. One great fault of roofing is the use of angles approximately forty-five degrees. This is the crudest form of angle there isninety degrees at the peaks and 135 degrees at the eaves. The slope should be either much greater or much less, according to the character of the design, whether it be horizontal or vertical, as determined by the shapes and contours of the site. It may be remarked here that the heavy, clumsy details so often seen in picturesque design are as much out of place as they would be in formal design. They show ignorance of how to draw at full size. Mr. Delano's house, in these pages, contains a picturesque roof dormer; the proportions of the sticks of rough timbers are as beautiful and as accurate as in any motive of column and entablature. Although this house is not a small house, this detail of it is published as a splendid example of how simple form may be, and yet how interesting and very stylish. As in the brick design for the Watson house at White Plains, N. Y., the cornice detail is almost eliminated, leaving the bare mass of the walls with simple openings of windows to contrast with the finely textured roof, sloping at the right angle. The whole effect is prevented from being bare and flat by the interesting dormer and the deep shadows of the porch. The effect is perfectly designed for intense sunlight. Mr. Delano is one of the leading architects in the design of great houses, the author, with Mr. Aldrich, of the Knickerbocker and Colony Clubs of New York City. It is interesting to see his taste as displayed in his own house.

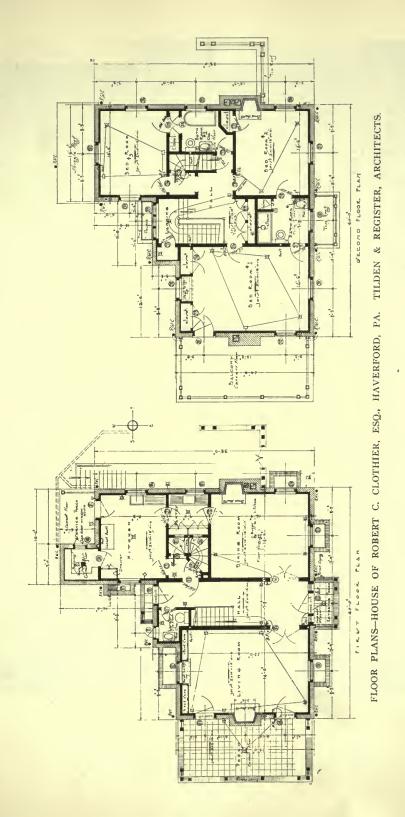
All these many considerations, which advise us to be ingenious in maintainining simple design in small houses, even when they are picturesque, and also to fit them well into their site so as not to appear top-heavy, favor a house plan that is lengthened out, rather

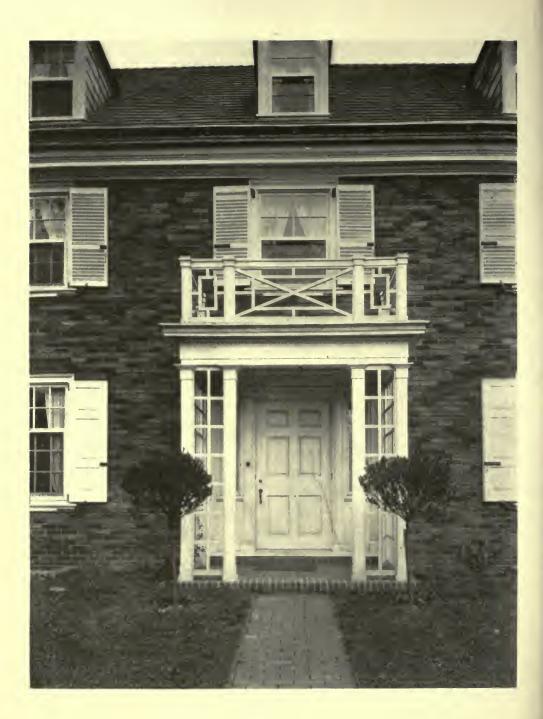
than squared, and one incorporating the garage or a shed or two in the house plan. Stated in dimensions and terms of geometry, a compact small house, without garage, will have an area of about thirty feet by forty. This is a box, with little difference in shape between end and side elevations. It is a type sometimes unavoidable on a small lot, and the house designed by Tilden and Register shows how this difficult type may nevertheless be made attractive. It is hard, indeed, to prevent such a house from poking up too high. On the other hand, if this floor area, 1,200 square feet, be a rectangle approaching twenty feet by sixty, it then has a fine long front, contrasting with an interesting narrow end. If the garage be added at one end, the front then becomes sixty-five to seventy-five feet long, possessing endless possibilities of design in interesting groupings. This group design is a natural result of a flexible system of planning. The reader may have noticed that the lengthened type of plan predominates in the houses shown in these articles, and while this choice is deliberate on the writer's part, it is fair to say that the most skillful architects like this arrangement.

In respect to color, there is room for much improvement in roofs. Cold colors are apt to be lost in roofs, since sunlight, particularly when mellow or golden, takes the color out of slate or shingle when they are blue or black or gray or dark green. Much better are the hot colors, either in a mixture of variegated bright colors or in softer colors, such as leathery browns, or soft claret colors or straw color. Where there are variations in the colors of a roof, the variety should not be so great as to cause a spotty effect, but just enough to add life and vibration to a mass of color. Where stained shingles are used, it is easy to decide on an appropriate color. If the designer is doubtful, he may easily find some tone in the landscape, of earth or rock or tree trunk. that will be absolutely safe to use. Slate is beautiful in character and texture, but its colors are apt to lie in the cold side

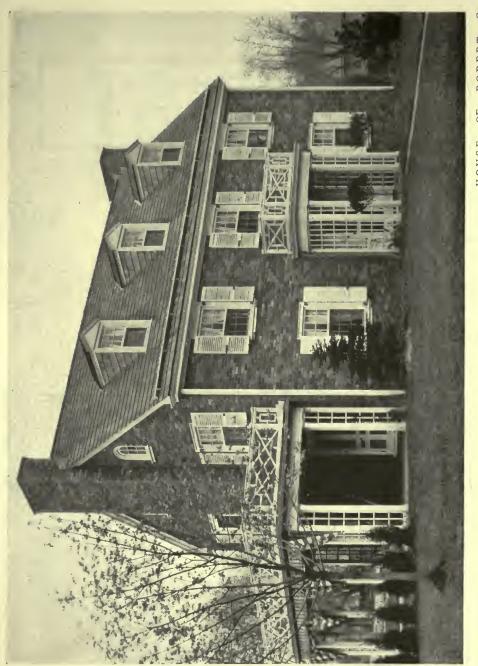
of the spectrum. In such cases the lighter the hue the better. One may see in Spain what roof colors should be in a hot strong sunlight. There, every hue is found, from the rich, incredibly vivid claret and vermilion and scarlet tiles of the north to the softer, more straw colored ones in the south. The reds go with warm tawny or golden walls, and the straw yellows with whitish walls. Beside such coloration, the heavy, dull dark roofs of America seem commonplace.

Walls and roofs and wings form the mass of a house, but porches are features only slightly less important. Formerly they were disliked because, as it was said, they were apt to appear like separate things tacked on to a house, and not an integral part of it. But experience has shown that the trouble was due rather to unskillful design of this feature, than any inherent defect of the motive itself. Besides, the design of the house may be at fault. There are, of course, many ways to make the porch seem a part of the house. One method recognizes the custom of glazing in porches, and designs them as wings or outbuildings, loggias or even bay windows, with sloping roofs and simple solid corners enframing a broad mass of window panes. This is indeed an effective motive. Another scheme also favors simplicity, but of a more open kind. It uses slender uprights and lintels, with no great elaboration of columns or balustrades. There is no longer that heaviness of these details, that excessive grouping of posts and columns, particularly at the corners; and fortunately the ugly short, round columns are nearly extinct. They looked more like garden products than architecture. In very small houses and very small porches a good recent practice is to form the corners of plain solid uprights, two inches by four or four inches by four, about a foot or so apart, filled in between with lattice of simple pattern. The result is a light, graceful porch which is at the same time a solid part of the house. Service porches are more appropriate when picturesque or naive in character.



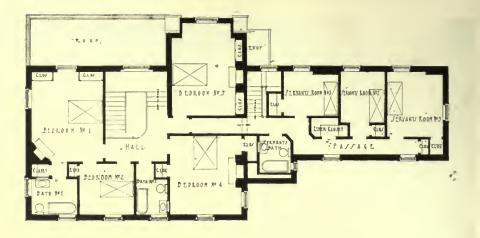


ENTRANCE DETAIL-HOUSE OF ROBERT C. CLOTHIER, ESQ., HAVERFORD, PA. TILDEN & REGISTER, ARCHITECTS.

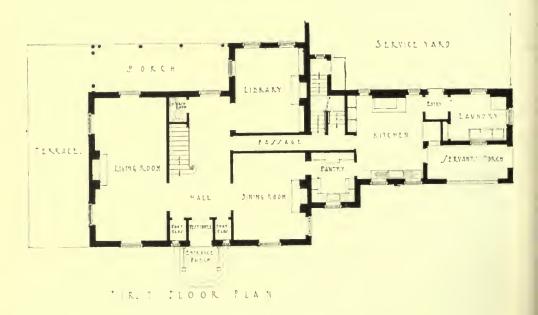


H O U S E OF R O B E R T C. CLOTHIER, ESQ., HAVERFORD, PA. TILDEN & REGISTER, ARCHITECTS.

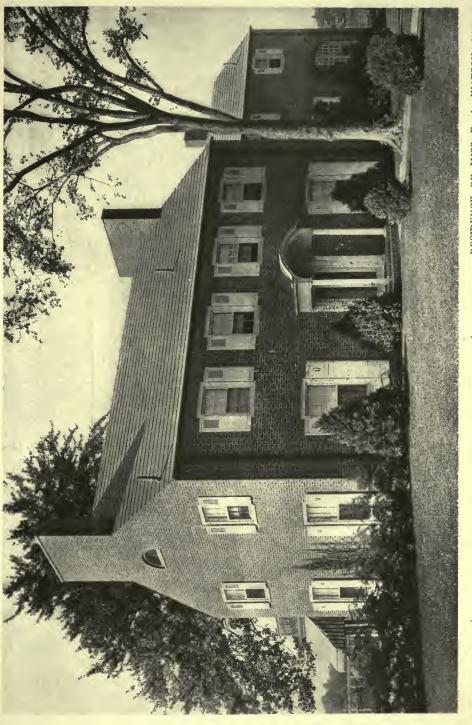
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JECOND FLOOR PLAN



FIRST AND SECOND FLOOR PLANS-RESIDENCE OF MISS E. A. WATSON, WHITE PLAINS, N. Y. DELANO & ALDRICH, ARCHITECTS.

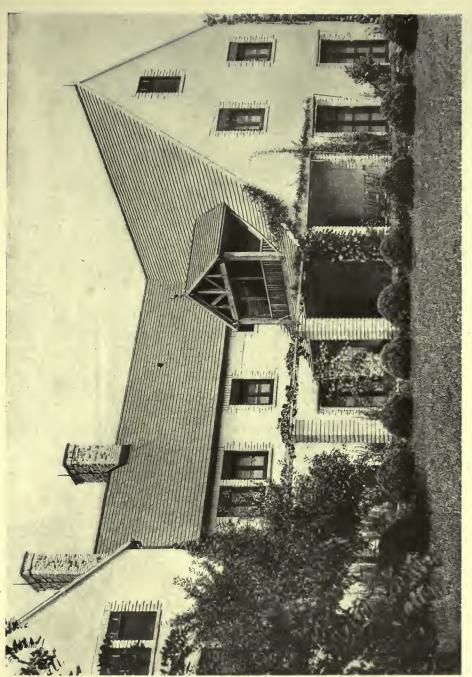


RESIDENCE OF MISS E. A. WATSON, WHITE PLAINS, N. Y. DELANO & ALDRICH, ARCHITECTS.

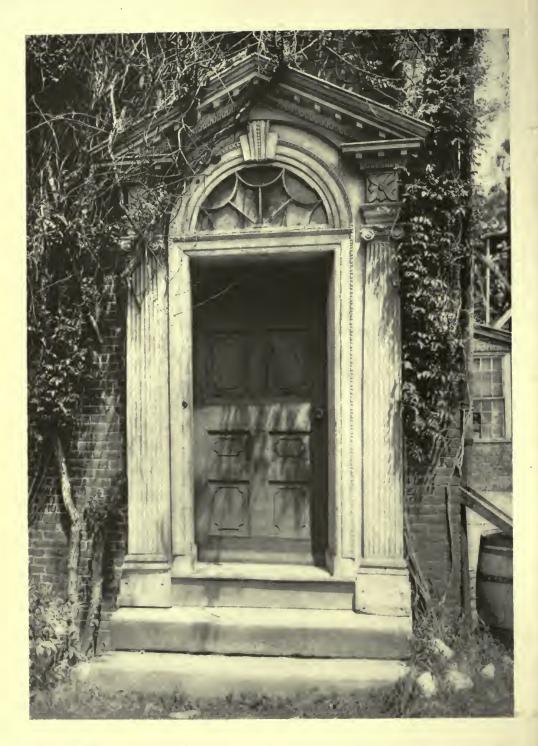
The above are some of the principles of the mass and of the minor features Details would require of elevations. volumes to describe them fully. Chimnevs are one of the finest features of the house. None know better how to use them than the British architects, whose houses are heated by many fireplaces and chimneys, modeled on a fascinating array of ancient examples. Americans, too, have a series of excellent old chimnevs, different in character, but better suited to our forms and system of proportions. Our modern designers have some splendid effects in them. Excellent are the chimneys of the Philadelphia architects, of Mr. Parker Morse Hooper and Mr. Theodore Blake-the latter in Part I of this series. Usually, the more flues concentrated in a chimney to make it bigger, the better for its appearance outdoors. Incidentally, if the chimney tapers, a very slight batter is all that is necessary, because the slopes are exaggerated in perspective at the corners. Also where chimneys are designed with breaks and offsets, these should be as carefully proportioned in mass, slope angle and line as any other feature of the house.

Perhaps nothing affects the design of a house so much as the windows. They are important in free picturesque design, in the ways noted above; and in a symmetrical elevation, which consists of nothing else than a cornice, an entrance and side porch, the windows either make or break the house. The mistakes common in windows are in shape, size-usually width—and scale. As to shape, a common fault is to see elevations of long horizontal proportions pierced with tallshaped windows, and the contrary. The combination of window and shutter--usually necessary, both practically and artistically, particularly on wood houses -trips many a designer. The relation of second story windows with those on the first story often cause trouble. In some of the oldest houses-eighteenth century -the windows are the same size on first and second story, emphasizing the interest and importance of the entrance motive, which is large and dominates the

whole front. In very small houses this is an excellent scheme. Usually, how-ever, the second floor windows are smaller, but it is not well to exaggerate the difference. This arrangement is most effective in a larger type of small house with wing, when contrasted with the opposite arrangement in the wing or service portion, where the first story windows are small, high up from the floor-which is good practically-and a little narrower than the bedroom windows above. As a rule these three sizes of windows are usually all the general variety that is needed to make an elevation interesting. Sometimes a few second story windows are the larger and there is, of course, the interesting variation of casement windows to the floor. In many designs the tendency is to get the windows too wide. A couple of inches seems little on a ¼-inch or <sup>1</sup>/8-inch working drawing, but it is serious at fullsize. It is especially serious in third story gable or dormer windows, which are usually best when small. Also if windows are grouped in pairs or in a battery of three or more, a mistake in the width of the unit is multiplied in the width of the group. Windows grouped together are finely effective, particularly casements, and the effect is increased when they are placed in bays, or tied together with some element of design like the overhanging hoods of the Philadelphia style. The placing of windows with regard to the roof cornice is the cause of many mistakes. Too much space between tops of second story windows and cornice usually makes the house too high and causes the windows to "float" in the walls. Particularly in wooden houses, the windows are better tied to the cornice with the top of window trim of window head coming up against the bottom moulding of the cornice. Of course, this arrangement will not go where there is no cornice, as in two of the houses of Delano and Aldrich shown herewith. Dormers should be carefully proportioned-not too large, not top-heavy, not too many of them. The more delicate and compact their tops and jambs, the better.



RESIDENCE OF W. A. DELANO, ESQ., SYOSSET, L. I. OWNER AND ARCHITECT.



EARLY AMERICAN DOORWAY, BARRINGTON, R. I. ABOUT 1800. One of the most frequent failures is lack of harmony between double-hung and casement windows. There is no reason at all why these types of windows should not be used in the same house and even in the same elevation. What is necessary is to attain a certain harmony of sizes and shapes of the two kinds of windows, and, equally important, between the sizes and shapes of window panes.

But all these principles of window design will avail little if the sizes of window panes are not accurate. In the first place they are usually too large. On very small elevations a pane nine inches wide is ample, which means three panes wide for a window two feet four inches or two feet six inches wide, and four panes for a window three feet or three feet two inches wide. In stone walls the panes may look better when wider. but in flat wood walls, the pattern of the glass tells strongly in contrast to the wall, and hence the smaller they are, the more "snap" there is in the elevation. In some of the finest of the smaller New England houses the windows are two feet four inches wide, with twenty-four sixinch by eight-inch panes on the first and second floors, and about one foot ten inches wide, with twelve six-inch by eight-inch panes on the third story gables. Thus the windows are varied in size by changing the number of panes in the window, and maintaining the same size. Of course, in those days the builders may have been able to obtain panes of only one size, but whatever the cause, there is no denying the artistry of the result. If possible, the panes should be of a decided oblong shape throughout, though the oblong need not be mechanically repeated. The best way to make sure of this consistency of window sizes and panes is to draw a 3/4-inch scale detail sheet of all the types of windows in the house-especially if there is a variety of windows—and carefully harmonize them with each other. Inches are decisive in this process and are too easily lost in  $\frac{1}{4}$ inch and <sup>1</sup>/<sub>8</sub>-inch scale working drawings.

Entrance porches and doorways are one of the most fascinating motives in design. No house architecture in the world has a greater variety of them than

our early architecture. On page 320 of this article is one hitherto unpublished, as beautiful as any that I know of. It is one of a type of the Rhode Island region. It has not only the exquisite grace and perfection of the very best of the American doorways, but also a wonderful personality, an almost mediaeval richness of decoration. Another one, of wider proportions, is that of an old house at Danbury, Conn. With such models to guide the designer there should be little chance for failure in entrances, and certainly no excuse. The greatest difficulty in the choice of a model-for one can hardly invent an entirely new motive which has not already been discovered by the old craftsmen-seems to be to obtain a shape. or modified shape, in harmony with the shapes and the mass of the rest of the elevation. Very appropriate, indeed, is that series of spready, but delicately proportioned and detailed, doorways that look so comfortable and have such a fine cordial, hospitable air of welcome. One fault may be noticed in some of the best modern doorways; that is, they are sometimes too small for the whole front. Some of the small, old houses have fine big doorways, whose top peak or gable reaches well up to the sill of the second-story windows, dominating the whole front.

Besides these major and minor features of the elevation, there is a whole class of very subordinate details of metal work, lamps, window boxes, railings, walls, fences, gateways, trellises, lattice. etc., which may only be mentioned here. As every one knows, they add greatly to the finish and interest and life of the design. Lattice and trellises seem to be the hardest of these to do, as a study of old trellises proves. Exeter, New Hampshire, is noteworthy for countless exquisite old trellis details. These minor details add much sparkle of color and shadow against a light wall, especially stucco. Examples of this are seen in those rows of stucco fronted houses in New York City, referred to above, where these details, particularly of the ironwork, are tinted all sorts of the gayest colors, even vermillion or cobalt. When first applied, such hues may well startle

prosaic eyes, but the weather soon softens them without injuring their vivacity.

This ends the discussion of some of the principles of design of elevations. There are many more of them, particularly concerning details, and the discussion of their application never ends during the lifetime of a man. I have mentioned them briefly, and notice principally those in which further improvement in design is needed. But even in this I have wasted time if I have not put forward the vital importance of using our beautiful old American buildings as models of design. They are the best teachers. They alone make design real and inspired. Not until the young graduate of the school of architecture takes to measuring and observing models. do his drawings become altogether sound, no matter how clever and facile a draughtsman he may be. Too many young draughtsmen expect to learn entirely from older men whose skill dazzles them. They may indeed learn something of good taste and of the abstract principles of composition; but from early American buildings alone can they acquire a vocabulary and reality in form and color and art outdoors. When the older man works he has clear pictures in his mind of what he is aiming at, which the younger man gets second-hand.

The houses illustrated in these pages are fine examples of design of elevation, especially as developed from the plan. The charming little house of Murphy and Dana has a trace of French influence, with its high backed roof and casement windows. It obeys the scriptural injunction to build upon a rock, which is the chief reason for its interesting scheme. One enters on the ground floor, ascending to the first floor to arrive at the main part of the house, the direct openings, left and right off the stair hall, being another French touch in plan. It will be seen that the principle of one big living-room, put forth in Part III, is here fully carried out, in a room of interesting shape, so arranged as to

allow its different functions of eating, lounging and receiving to be easily performed. The exterior is most vivacious and picturesque, yet utterly simple, exquisite in grace and scale. It has a striking color scheme, both indoors and out.

In Miss Ketcham's house, Delano and Aldrich have brought out most effectively the Long Island type of New York with an unmistakable trace of the fisherman's cottage, which is to be recognized all up and down the Atlantic coast. It is of simple plan, without any apparent striving at display. Outside, the softness of texture of the elevation is noteworthy, an object-lesson for so many of our designers of steel-like lines and surfaces.

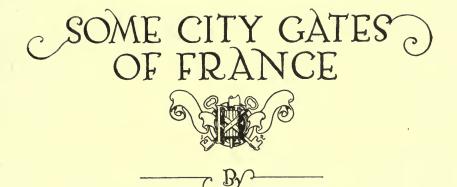
The Cambridge house, designed by Grandgent and Elwell, has been mentioned above as typical of the small house of the old New England town, as distinguished from the mansion types of Salem, Newburyport and Portsmouth. Another design in wood-forms is the house at Cornwall-on-Hudson, another example of Mr. Parker Morse Hooper's bold, strong design in strikingly modelled wood details.

The pair of small houses at Haverford recall a similar arrangement of Mellor, Meigs and Howe, illustrated in Part V. It reminds one also of the "Dutch-Colonial" type of New York, with the difference, that here, at last, is a perfect example of that marriage of old and new, which has turned out to be a happy one. It is also a fine sample of stonework.

Two brick designs are next given. One is an example of Delano and Aldrich's exquisite proportions and restrained, delicate grace. With the high service wing it is a type of plan much favored several years ago. The other design, of Tilden and Register, is much similar in the main part, but expressed in the characteristic Philadelphia style. Both designs seek to avoid finicky contrasts of white wood details against dark brick walls, by separating the colors into larger and simpler masses.



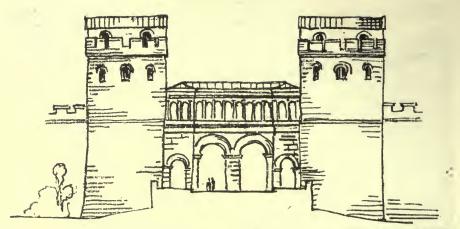
REMAINS OF ROMAN GATE AT LANGRES.



### JOSEPH PATTERSON SIMS

THERE is an old axiom that types of society are as old as their systems of circulation. Taking this as true, by a careful examination of the landways and waterways, including primarily roads and bridges and, as a natural concomitant, city gates, we arrive at the social conditions of a country during its various stages of development. City gates, aside from their beauty, have a strong appeal which stirs the imagination, for, under these arches, how many types of society, with their various customs, religions, fears, hopes, ambitions, predatory trades and pillaging armies, must have passed—passed and vanished, devoured by time. In their wake we find an interesting record and manycolored variation, from the medieval gateway, through whose machicolations red hot stones and boiling oil were poured on the heads of the attacking enemy, to those gigantic arches, personal vanities, built in honor of "Le Roi Soleil" or the Great Napoleon. Thus, by finding the raison d'être of the dominating motives, one can better understand the architecture itself.

Among the earliest city gates of the Christian era in France are those at



RESTORATION OF PORTE ST. ANDRÉ AT AUTUN IN MIDDLE AGES. AFTER VIOLLET-LE-DUC.

Langres, Autun, Nimes and Arles. They are all much on the same plan, consisting of two main outlets for the entry and exit of vehicles, and two for foot passengers, flanked on the outside by two semicircular towers, forming a pronounced projection. At Autun, the Porte St. André, a most complete example of the Roman model, built A. D. 69, is surmounted, above the two arches forming the passageway, by an arcaded gallery, using the Ionic order, serving for communication between the flanking towers and, at need, for defense. The bays were originally closed by wood gates and lacked both portcullis and drawbridge. The towers served as military posts for the garrison, the two top stories being reserved for defense.

This gate is constructed of large sandstone blocks, laid dry, following the Roman method, and on the road are remains of Roman paving in large irregular blocks. The road from the city stretches away, ribbonlike, into the valley, and far enough in plain view to



ENTRANCE SIDE-PORTE D'ARROUX AT AUTUN.



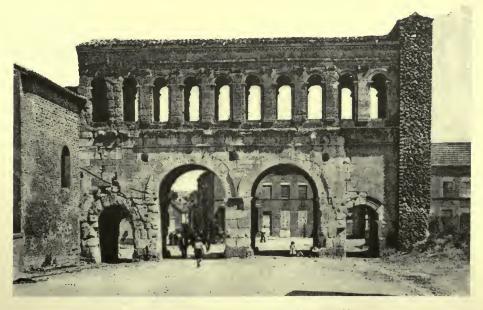
EXTERIOR-PORTE ST. ANDRÉ AT AUTUN.

give warning of the approach of enemies. Time has laid an obliterating hand on some of the details, but in mass and proportion this is one of the finest of the Roman gates.

The Porte D'Arroux is similar in scheme, but uses the Corinthian order

in the arcade, and is in greater disrepair.

As we proceed toward the middle ages we see an ever-increasing emphasis on defense. It was only with the regular establishment of the feudal regime that the gate development arrived at the point we see in the eleventh century. How-



INTERIOR-PORTE ST. ANDRÉ AT AUTUN.



PORTE DES DEGRÉS, BOULOGNE-SUR-MER.

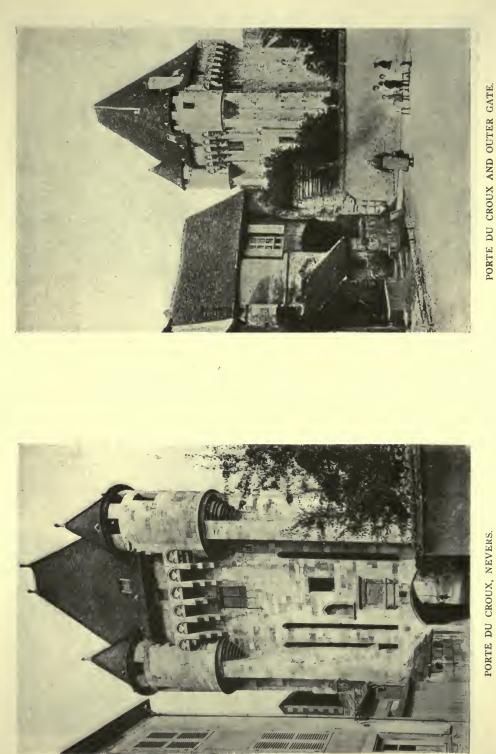
ever, most of the gates before this time, nearly always modified, show that already the art of defense was well understood. It was no longer the question, as in the Gallo-Roman epoch, of having large openings for those coming and going, but on the contrary to make the gates as narrow as possible, thereby doing away with the possibility of surprises and facilitating the defense. In all instances heavy projecting towers protected the gates. Two excellent examples of the projecting towers, but with a single entrance, are the Porte des Degrés and the Porte Gayolle at Boulogne.

In the gates of the twelfth and thir-



PORTE GAYOLLE, BOULOGNE-SUR-MER.

<sup>326</sup> 



PORTE DU CROUX AND OUTER GATE.



GATE AT GUERANDE, BRITTANY.

teenth centuries elaborate methods of defense are found, with main towers, outer towers, moats and all the medieval war mechanisms of drawbridge, portcullis, etc. Probably the best and most complete form of this means of defense is to be found at Carcassonne, in the south of France. These gates have been many times reproduced in drawings and photographs and can be studied at length in Viollet-le-Duc's La Cite de Carcassonne.

Another excellent example, here reproduced, is the Porte du Croux at Nevers. Built at the end of the twelfth century by Pierre de Courtenay, Comte de Nevers, there remains today only the main gate and its outer gate. Both gates



PORTE DE BOURGOGNE, MORET-SUR-LOING.

were originally defended alike with moats and drawbridges, and the road connecting the two was flanked by a battlemented wall from which archers could shoot. At Loches, in Touraine, the Porte des Cordeliers is a tower of de Bourgogne, and the Postern, show a most interesting variety of treatment. The Porte de Bourgogne is part of an ancient war bridge, and the old ramparts flanking it are still to be seen. An idea of the smallness of the city can be ob-



PORTE DES CORDELIERS, LOCHES.

much the same scheme, only on a smaller scale. It belongs to a much later period, in fact to the fifteenth century; but the similarity is so striking that one cannot help feeling that the Porte du Croux must have been its inspiration.

The city gateway at Guérande is a Brittany example, very charming in its simplicity. At Moret-sur-Loing are the remains of a medieval walled city; the three gates, the Porte de Samois, Porte tained from the view of the Porte de Samois, through the opening of which, at the other end of the street, is seen the inside of the Porte de Bourgogne.

In the period of Henri IV the sturdy character of the architecture was well adapted to defense. It may be seen applied to this purpose in the old gates of Nancy, and in others at Richelieu, that somnolent but not dead creation of the great Cardinal's. Several of the gates



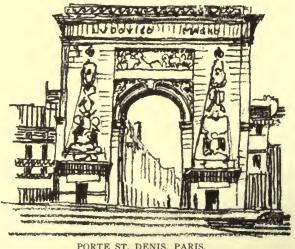
PORTE GUILLAUME, DIJON.

of Paris, the Portes St. Bernard and St. Honoré, long since disappeared, were also of this age and character. If the style lacked refinement of detail, it still had vigorous and original decorative qualities.

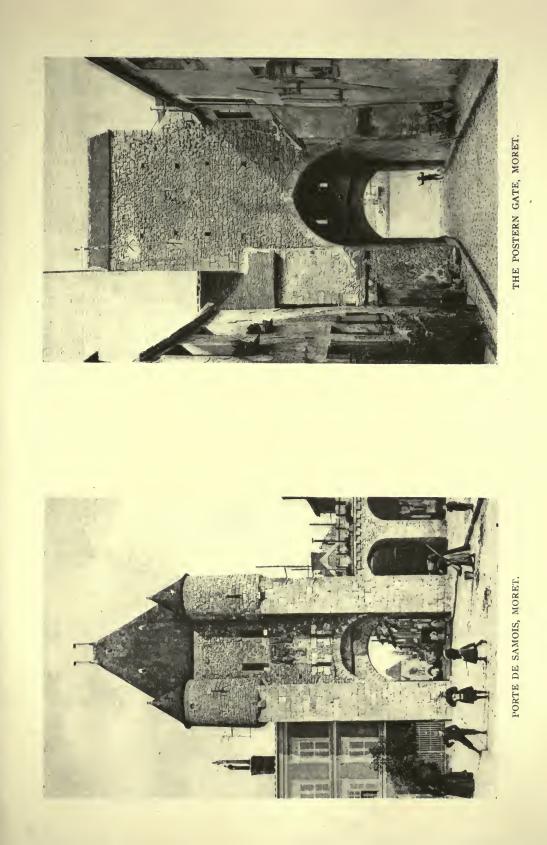
Shortly after this time city gates lost their original function of defense and became simply a monument and ornament. The arch form was greatly in favor, and all sorts were erected by

Louis XIV to impress the public. At Paris the Porte St. Denis, built in 1672, was one of the best examples, and there is no building of the time more inspired, as Ward says, "by the magniloquent spirit of barocco expressed in terms of French rationalism.'

There are no orders, no pediment, no rustication, which, by the way, was a favorite device. It is a plain, square mass, seventy-eight feet high, crowned



PORTE ST. DENIS, PARIS.

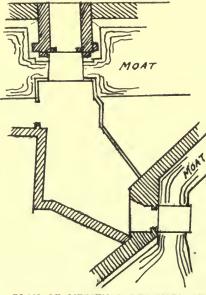


by a bold cornice and pierced by a single arch. On either side are obelisks bearing trophies in high relief. Everything in the design, from the scale of the sculpture and the laconic inscription *Ludovico Magno* to the minuteness of the openings for foot passengers through the pedestals, conspires to produce an overwhelming impression of power.

Under Louis XVI the designs are more ornate as a rule; excellent examples at Bordeaux, Nancy and the Porte Guillaume at Dijon are here reproduced. As monumental architecture in Napoleon's day, the arch form reached its highest mark in the Arc de Triomphe at Paris. If not a city gate in the sense of forming the boundary on a main city thoroughfare, it is certainly the direct descendant of those earlier gates. The description of it in Ibanez's Four Horsemen of the Apocalypse occurs to one as a splendid expression of the "soul" of a piece of architecture:

"This arch is French within, with its names of battles and generals open to criticism. On the outside, it is the mon-

ument of the people who carried through the greatest battle for liberty ever known. The glorification of man is there below in the column of the Place Vendome. Here there is nothing individual. Its builders erected it to the memory of 'la grande Armee' and that grand army was the people in arms who spread revolution throughout Europe. The artists, great inventors, foresaw the true significance of this work. The warriors of Rude who are chanting the Marseillaise in the group at the left are not professional soldiers, they are armed citizens marching to work out their sublime and violent mission. Their nudity makes them appear like Sans-Culottes in Grecian helmets. Here there is more than the glory and egoism of a great nation. All Europe is awake to new life, thanks to these Crusaders of Liberty. The nations call to mind certain images. If I think of Greece, I see the columns of the Parthenon; Rome, Mistress of the World, is the Coliseum and the Arch of Trajan; and revolutionary France is the Arc de Triomphe."



PLAN OF MEDIEVAL DEFENSES OF PORTE DU CROUX, NEVERS.

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

#### Part XIV. Staircases.

T HE design and evolution of the English staircase is one of the most interesting features relating to the adornment of the interior of the English house. From earliest Jacobean times the utmost elaboration of joinery prevails. Much variation exists in plan, treatment and detail of ornament in most of the notable examples. The early oak staircases of the larger mansions, such as Hatfield House, Crewe Hall and Blickling Hall, are heavily carved, with much strap work and other ornament filling the space between the stairs and handrail.

The earliest form of staircase plan was either a straight flight between two walls or a circular form with a big newel going its full height, as at Eastbury Manor, Barking. The smaller stairs were built with the upper and lower flights joining a single newel—known as the "dog leg staircase"—and the larger ones with an open well. In Jacobean days the newels of these open well staircases were frequently continued through to the upper flights or were carved with moldings a foot or two above the handrail level.

Closed strings were common in the earlier examples, and open strings favored from the latter end of the seventeenth century.

The balustrading varied at different periods. In Jacobean times strap work and carving prevailed, followed by heavy pedestal balusters, as at Ashburnham House, Flaxley Abbey and Pump Court, Fleet Street; carving and piercing of solid panel work succeeded, as at Forde Abbey, Guildford and other works of mid-seventeenth century origin; and the close of the century saw the introduction of wrought iron work, as at Chatsworth and Hampton Court Palace. During this period large balusters were reverted to, as at the Ward School, Love Lane, which in the eighteenth century were gradually reduced in size until it became common to put three balusters to a tread, often varying in pattern, as at Beacon House, Painswick, No. 5 Conduit Street and many others.

Several examples of lath work to the balustrading are extant at No. 5 John Street, Bedford Row, and the back stairs at Beacon House; the spandrel pieces were nearly always carved in console formation either to each stair end or, combined with a sunk panel, to every second stair, as at Ladybellegate House, Gloucester, and Victoria Hotel, Newnham. At Newnham the moldings formed by the carved end are continued under the soffit to the supporting wall, which is a very elaborate and costly form of joinery.

During the Adam period the hardwood stairs were sometimes inlaid on the risers and treads to give additional interest and adornment, which obtains at Claydon House, Bucks.

Wrought iron, which was introduced during the Wren period, was also common from the middle of the eighteenth centry, of which a simple example is to be seen at Pembroke House, Whitehall Place, Westminster.

Of the examples illustrated, mention should be made of the staircase at the Museum at Newbury, known as the Cloth Hall, which is a good late Jacobean example with balusters molded on the square, a type of which there have been many modern copies.

The most interesting staircase, from the point of architectural design, exists at Ashburnham House, attributed to Inigo Jones. It is wide and solid, with simple wall decorations combined with Ionic pilasters and a ceiling decoration having an oval center light ornamented with small columns and balusters to the attic dormers, of the most unique and original character. The pedestal balusters are carved with egg and tongue ornament, and carving is executed upon the panelled newels. At the Queen's House, Greenwich Hospital, also by Inigo Jones, the balusters to the gallery handrailing are of similar character, but without enrichment.

At Forde Abbey the balustrading is pierced and carved in the usual Charles II manner, of which there are several other examples, notably at an old house at Guildford. There is preserved at Hampton Court Palace an altar rail of similar type, painted and gilt, probably slightly earlier, say of the Commonwealth period, which formerly adorned the Chapel.

Throughout the realm of joinery there has been no feature where the skill and inventive genius of the craftsman has been so successfully tried as in this matter of staircase construction, and the mason has vied with his brother craftsmen in the formation of oval and spiral stairs in stone, as at St. Paul's Cathedral, at houses in Lincoln's Inn Fields, and many other parts of London. Where stone steps are used the balustrading was invariably of wrought iron work, of which there are several interesting examples. This is the only instance where the smith competed favorably with his compeers in the interior.

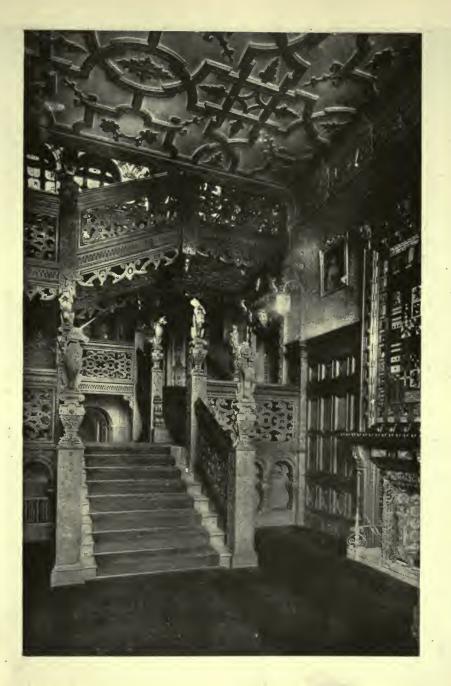
One may see in most of the larger towns of England excellent examples of his work, especially in the Cathedral cities, where skilled smiths were in continual demand for making grilles within the fanes situated in the vicinity. Chichester, Yeovil, Bath, Gloucester and a host of other places furnish examples of much skill in wrought iron work, but the joiner has always held his own in the interior because the nature of his medium renders a cheaper and more convenient form of decoration.

It was typical of the mid-eighteenth century examples to have a newel formed of a Doric or Corinthian order, the former type being occasionally ornamented with a series of blockings, as is

illustrated at the Victoria Hotel, Newnham, and at North Pallant House, Chichester.

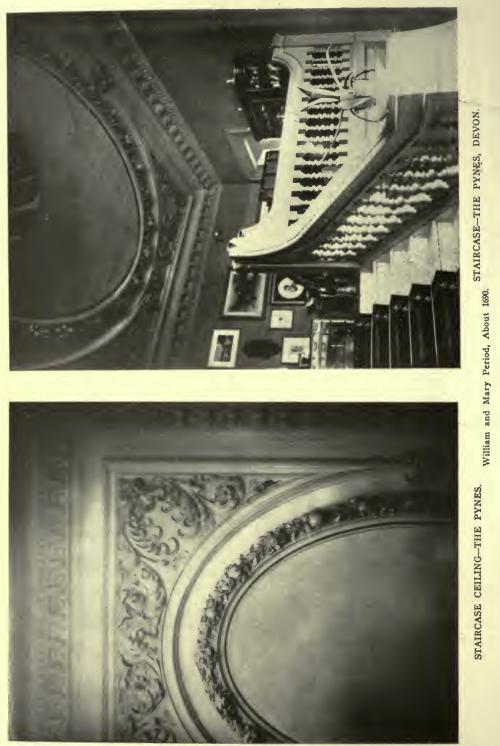
Treating the subject in detail, quite apart from the plan, the formation of the handrail provides a useful guide to the date of a staircase. Early handrails and strings stopped on the newel post, which if square usually had a half baluster attached, and the baluster spacing had little relation to the number of stairs in the flight. The principle of ramping the handrail in graceful curves was not fully developed until the eighteenth century. Early attempts first occurred on the capping to the wall panelling, as the old stairs at Flaxley Abbey illustrate. Later the top members of the handrail were run into the newel capping. which was mitred round the top of the newel and worked into the other portion, the top forming an obtuse angle with the rake of the rail. Some of the early staircases in Whitehall, as that at the rear of the building now occupied by the Paymaster-General, are ramped up to the newel post, although having a solid molded string. Ramping was, however, more usual with staircases having an open string. Various methods were adopted for getting over the necessity of mitering the top of the newel. Sometimes the top member of the Doric capital molding, instead of being square on plan, was made circular, cleared by an inch or so from the soffit of the handrail; and this portion was turned-in in a cavetto mold of reduced width, which would allow of making a much smaller twist to the finish of the handrail at the foot of the stair. In other cases a baluster sufficed, and the handrail was ramped up both ways without mitering at the angle return, as at Hardwick Hall, Shropshire.

The very elaborate carving to the newels of the early Renaissance staircases ceased by the middle of the seventeenth century. The much advertised staircase formerly at Cromwell House, Highgate, had figures of Commonwealth soldiers terminating the newel posts. This house is said by Mr. Lichfield to have been the residence of General Ire-



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THE STAIRCASE-CREWE HALL, CREWE.





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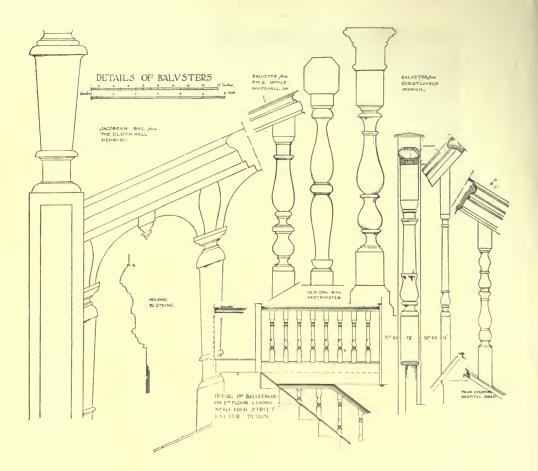
STAIRCASE — THE MALL, HAMMERSMITH.



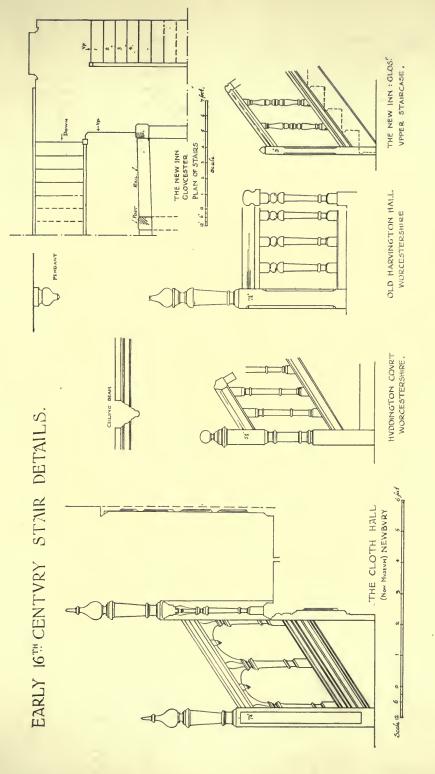
STAIRCASE – THE WARD SCHOOL, LOVE LANE, LONDON. WREN PERIOD.

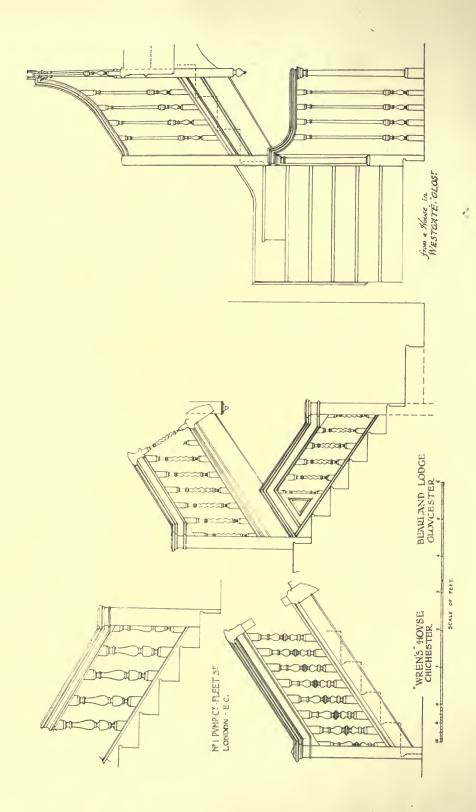


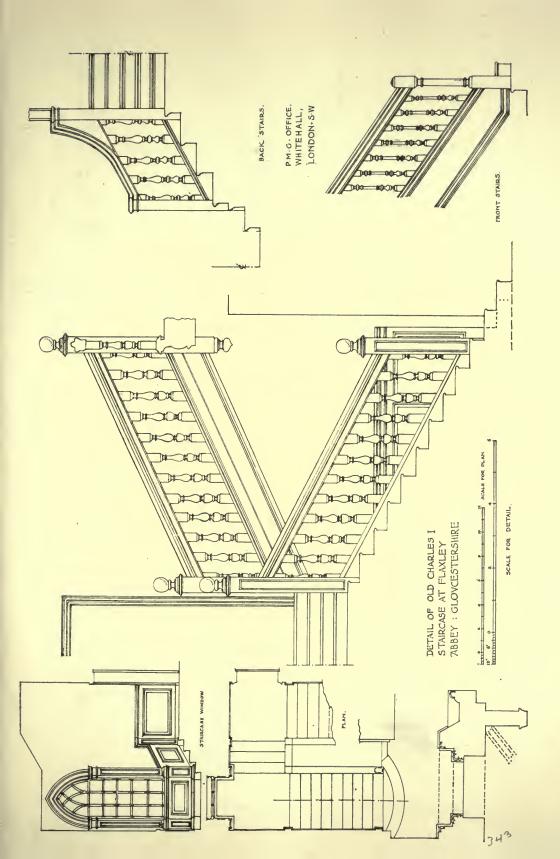
STAIRCASE — ASTON HALL, BIRMINGHAM, 1618-35.

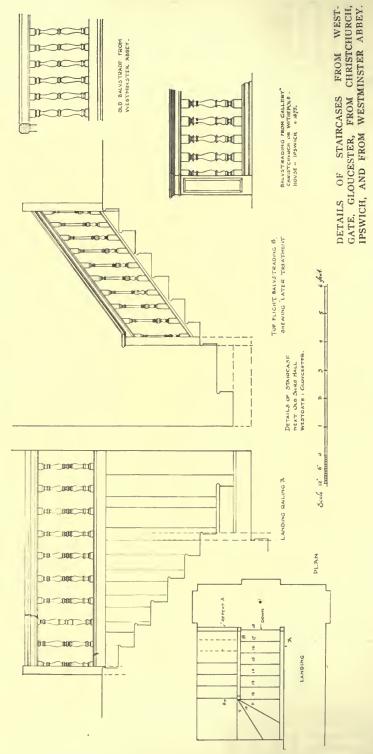


#### DETAILS OF EARLY SIXTEENTH CENTURY STAIR BALUSTERS.

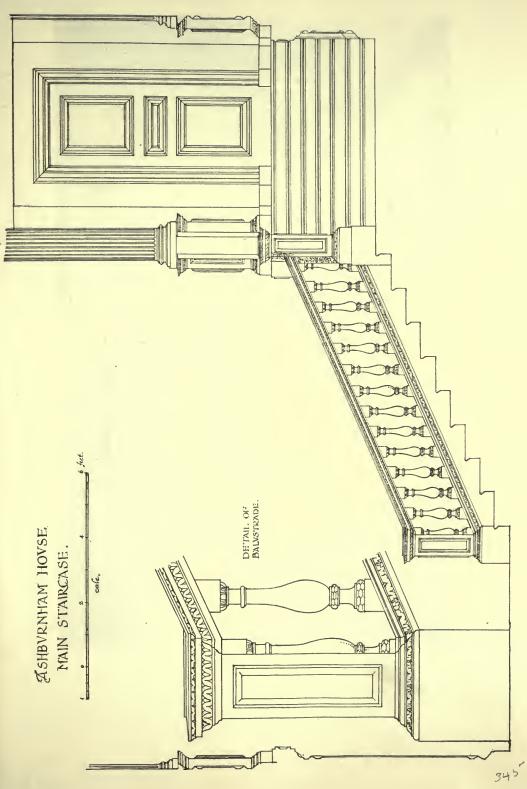








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STAIRCASE—NO. 25 HIGH STREET, GUILDFORD. ton, who married Bridget, daughter of the Protector. At this time there existed several different types of staircases, but all having "closed" or solid strings. There were balusters of the double pedestal formation, some molded like a skittle, as at the New Inn, Gloucester, and a house next the Shire Hall, Westgate, Gloucester; while others were of the Palladian type usually adopted by Inigo Jones and John Webb, as at Ashburnham House, Coleshill and Flaxley Abbey. At Forde Abbey pierced balustrading is adopted with very fine carving, the newels being terminated with a vase holding fruit and flowers in a naturalistic manner. A house in High Street, Guildford, has a similar treatment, which became common with John Webb and his carver Simon Gibbons during the latter years of the reign of Charles I. With Charles II the twisted baluster was introduced both to staircases and furniture. Of the latter instances may be found in Shaw's "Ancient Furniture." The Pynes, Devon, Bearland Lodge and Forbes House, both at Gloucester, and many other houses possess this type when the ramp in the handrail came into general use.

A baluster of three-inch square section was quite common during the reigns of Charles I and Charles II, to which the newel would vary from four inches to eight inches, the latter usually having a sunk or raised panel. When the twisted baluster was introduced a slight reduction in thickness took place. With many of the Wren period stairs a return to the heavy baluster resulted, except where wrought iron was adopted, as at Chatsworth and Hampton Court Palace. These stone stairs, being built up of simple blocks, mark the beginning of the cut string which became common in the early years of the eighteenth century.

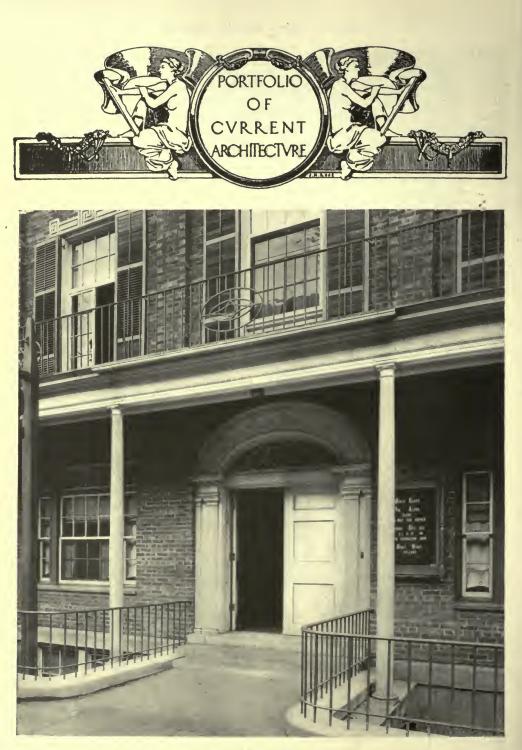
Staircases with the soffits molded through to the wall string are to be seen at the Victoria Hotel at Newnham, and "Unlawater," Lady Paget's house hard by. There is an instance of one in London, at No. 5 Clifford Street, Mayfair, but this is a later type. Panelled risers

were not uncommon, the Foresters' Hall (Ladybellegate House) at Gloucester possessing such an example. In this case the landings are carefully joined in a form of parquet. Newels composed of four balusters grouped together are occasionally to be seen, the last mentioned instance being of this nature, but they were more common during the eighteenth century, when the cut string was in vogue. Bearland House has a particularly fine example. This staircase is rich in detail, with molded soffits and clustered newel placed on the second stair, the two bottom stairs being turned beneath the base of the newel. The handrail is ramped and turned in a variety of interesting curves. The hall screen or arched division is pierced with a well carved leaf design. At Winchester there is a house with a well planned hall and an early rear staircase; the main stairs are recessed between the principal rooms and approached through an arched opening.

The illustrations accompanying this article are largely confined to the earlier closed string type of staircase. Our next article will deal with the later examples, some of which are referred to above by way of comparison in describing the characteristic features of the English staircase. Of the illustrations here given the attention of readers is drawn to the examples from Flaxley Abbey and Ashburnham House. The measured drawings of these exhibit the typical, sound bold nature of the later Charles I era.

The staircase window on the landing at Flaxley is later than the staircase, the reason for the pointed architrave being occasioned by an attempt to create a note of harmony with the vaulted refectory now forming the kitchen and offices of the mansion. It is a curious compromise between two opposed periods, the happiness of the blending being open to question.

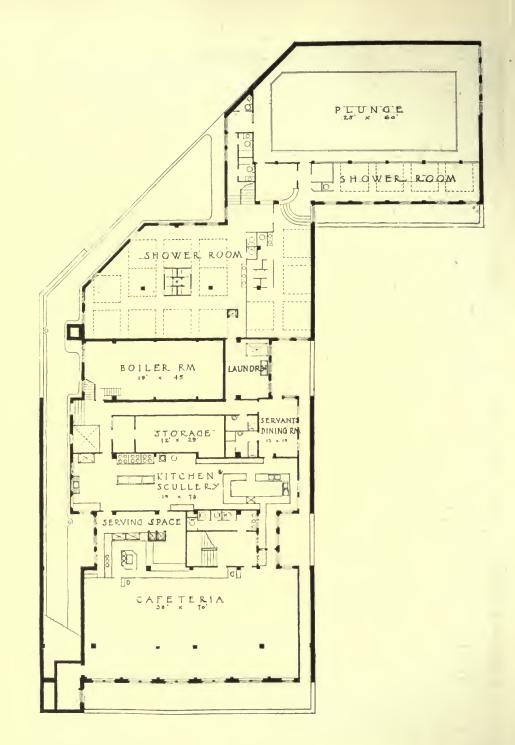
The example from Ashburnham House is always regarded as the *chef d'oeuvre* of Inigo Jones, and is among the finest types one can select from the wealth of material at one's hand in England.



ENTRANCE TO ADMINISTRATION SIDE -Y. W. C. A. BUILDING, SYRACUSE, N. Y. TAYLOR & BONTA, ARCHITECTS.

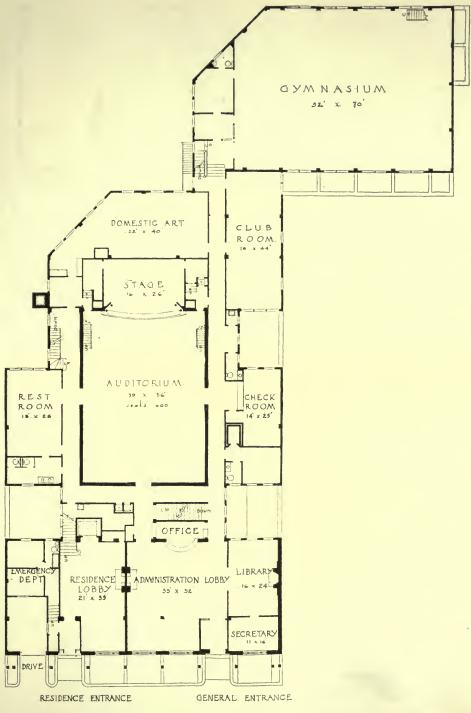


FAÇADE-Y. W. C. A. BUILDING, SYRACUSE. N. Y. TAYLOR & BONTA, ARCHITECTS.

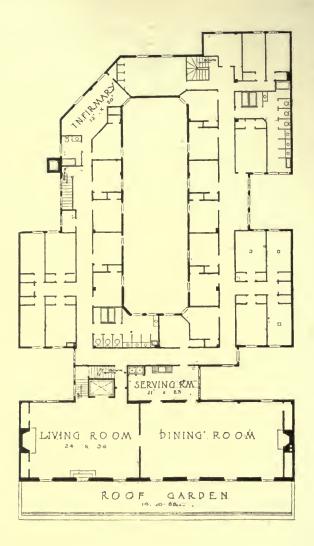


BASEMENT FLOOR PLAN—Y. W. C. A. BUILDING, SYRACUSE, N. Y. TAYLOR & BONTA, ARCHITECTS.

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FIRST FLOOR PLAN-Y. W. C. A. BUILDING, SYRACUSE, N. Y. TAYLOR & BONTA, ARCHITECTS.



RESIDENCE FLOOR PLAN—Y. W. C. A. BUILDING, SYRACUSE, N. Y. TAYLOR & BONTA, ARCHITECTS.

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LOBBY-Y. W. C. A. BUILDING, SYRACUSE, N. Y. Taylor & Bonta, Architects.



ROOF TERRACE-Y. W. C. A. BUILDING, SYRACUSE, N. Y. Taylor & Bonta, Architects. 353

# WAR BOOKS OF THE GATHEDRALS

#### BY BARR FERREE

#### PART VIII.

NE of the most interesting narratives of personal experiences at Verdun is the Journal du Commandant Raynal, which carries the subtitle Le Fort de Vaux, with which famous fort his name will always be associated. It is the story of a tragedy in the highest sense of the word, the most tragic episode in the whole history of Verdun. At the opening of the war Raynal was a major with troops in Africa; a severe sickness incapacitated him for a time in France, but finally he reached Verdun, and was almost immediately placed in command of Fort Vaux. Long since disarmed, it was used as a shelter for relief troops for the ad-The ferocity of the joining trenches. German attack, the heroic defense made by Commandant Raynal, the dreadful sufferings of his men, his appeals for help which never reached him, and his unavoidable surrender, all these are part of the glory of France. It is indeed something to have this tragic story related by its chief actor. It is a story of almost inconceivable suffering and heroism, told in a most engaging manner, and a book well entitled to rank among the most notable relating to Verdun.

The brilliant pages of L'Angoisse de Verdun by Pierre Alexis Muenier are saturated with blood and horror. The author was a driver of an ambulance. Unlike some American writers, who thought to keep up the spirits of their families by telling of daily sports and pleasantries, Mr. Muenier is solely concerned with war as it was. He was absorbed in his work, work of the hardest kind, work without relaxation, bitter work among the wounded and the dying. In his pages one gets very close to real war and its utter horror. His book is at once profoundly interesting and profoundly moving. A veritable masterpiece.

A highly distinctive quality is given to books by writers connected with the war

in different aspects. Mr. Muenier shows it from the point of view of the ambulance driver. The Abbé Thellier de Poncheville, Military Chaplain at Verdun, naturally viewed the war from the standpoint of his sacred office. His Dix Mois à Verdun, is thus not only 'a narrative of personal experiences, but an interesting summary of the work of a war chaplain during a period of heavy military operations. His ten months at Verdun coincided almost exactly with the great year of Verdun. It is not a cheerful story he has to tell, for much of his work was among the wounded and the dying. He gets very close to the individual soldier, and is only concerned with the great movements at Verdun as they affect the men personally.

Very moving indeed is the story of three months at Verdun as told by the Sous-Lieutenant Raymond Jubert in his Verdun (Mars-Avril-Mai 1916). Born at Charleville he was an advocate at Reims. His book, which has the distinguished advantage of a sympathetic preface by Paul Bourget, is a personal narrative of experiences which the author himself describes as miserably small and restrained in the midst of most formidable events. Yet quite unconsciously he has produced a master; piece, and writes a book that will surely live. It covers, as the subtitle indicates, the most tragic period of the battle of Verdun. It was completed in a hospital at Brest in 1917. In August of that year he was returned to Verdun, and was almost immediately killed.

Trench life, as distinguished from active war duty, forms the special theme of *Tranchées de Verdun* by Daniel Mornet. He particularly treats of experiences from July, 1916, to May, 1917. The great pleasures of trench life, he points out, are negative: not to be thirsty, not to be hungry, not to be cold, not to be afraid. A chapter on "Quelques notions d'architecture" offers some notes on the construction of second line trenches.

L'Abbé Chevoleau, by Émile Baumann. is a brief biography of a priest who was corporal of the 90th Infantry. He saw much active service in the war, in which he distinguished himself by absolute disregard of danger. He was killed at Verdun shortly after being sent there. En Batterie! by Lieutenant Fonsagrive covers a very considerable period of war, including Verdun in 1916, the Somme, the Aisne, and again at Verdun in 1917. Although not unduly long, the author has the art of conveying a great deal of detailed information within comparatively restricted space. His experiences are connected with the artillery. De Verdun au Rhin by François de Tessan reproduces the notes of a newspaper correspondent during the time immediately following the armistice. His book is, therefore, quite outside the war period.

The earlier period of the war is admirably depicted by Dr. Georges Veaux in his book entitled *En suivant nos Soldats de l'Ouest*. Mobilized at Rennes, he was connected with Breton troops, and his book is concerned with their adventures over a wide territory. He saw service in Belgium, in the first battle of the Marne, at Reims, Arras, Ypres and many other places. The story moves swiftly and is told in a most interesting manner.

Very considerable, also, are the experiences related by the Commandant Bréant in his book *De l'Alsace à la Somme*. Alsace, Lorraine, the first battle of the Marne, two sojourns in Champagne, at Verdun and on the Somme constitute a career of ample military experience. A true soldier, Commandant Bréant, for after six days' holiday in Paris he returned to his regiment with satisfaction.

La Grande Mutilée de Reims by Georges Ferrero is a lecture given at Toulouse, and summarizes the history of the cathedral. Les Sacrifices by Henri Lavedan and Miguel Zamacois is a dramatic poem in three tableaux. The final section is entitled Reims, and is in prose; the first two, Les Flandres and Noël, are in verse. The section on Reims is a highly poetic conception, representing events supposed to be taking place within the cathedral. It begins with the coronation of Charles VII under the direct view of Jeanne d'Are, and concludes with the desecration and destruction of the cathedral by the Germans. The vision is magnificently conceived and superbly carried out.

The Jackdaw of Rheims, the famous old story reproduced by the Ingoldsby Legends, furnishes the theme for some spirited drawings by George Wharton Edwards. His diagramatic version of the west front, however, gives somewhat the impression of a church with five portals, instead of three as is actually the case.

Vive la France by E. B. and A. A. Knipe is a novel dealing with a young girl of Reims and largely centered in that cathedral. As a story it has real interest, but the authors are not always quite accurate in their chronology. They represent Cardinal Luçon, the archbishop of Reims, as present at the time of the first bombardment, while actually he was not in the city. This, however, is a slight blemish in a well written tale.

L'Art pendant la Guerre by Robert de La Sizeranne reproduces a number of articles contributed to various periodicals by the author. They cover a considerable range of topics, from caricature to the new esthetic of battles. Two notable chapters are concerned with Reims, one on the famous tapestries and the other on the cathedral.

La Destruction des Monuments sur le Front Occidental by Auguste Marguillier treats of a very large subject within modest scope. It includes chapters on artistic destructions in Belgium, Italy and France. The notes on France relate to Senlis, Soissons, Reims, Arras and other places. The author has space only for the most important facts, but these are admirably grouped, and his book forms an excellent handbook to one of the most horrible phases of the war. Forty-nine photographs of destroyed monuments supplement the text.

*Pour Relever les Ruines* by Joseph Dassonville is a discussion of what steps may be taken to repair the unnecessary

ruin wrought by the Germans on French soil. One may not always agree with the author's proposals, but he presents a serious discussion of a very difficult subject. His book includes a chapter on the cathedral of Reims, and some other matters relating to the same city.

Now that the war is over many books on the devastated regions may be looked for. One of the earliest is Mlle. Noelle Roger's *Terres Dévastées et Cités mortes*. The author is a newspaper woman who seems to have had some exceptionally favorable opportunities to make early visits to the destroyed regions. She offers interesting chapters on Rheims, St. Dié, and Verdun, the cathedral cities especially noted in her survey.

The interest attached to La 56° Division au Feu by General F. de Dartien, is not wholly due to the fact that it is by the Commandant himself, although this is not inconsiderable. It treats of the earlier days of the war, from August 1 to October 2, 1914; but in that limited time the Division saw service from the Woevre to the Ourcq and from the Aisne to the Oise. Some interesting pages are given to the battle of Senlis in September, 1914.

*Prés des Combattants* by André Chevrillon is a miscellaneous collection of papers on various aspects and periods of the war. He visited the front from the Argonne to Champagne in May, 1916, and spent the following month with the British troops. He chronicles his impressions with the skill of a

trained observer. The book includes chapters on Arras and Reims. Another volume by a newspaper correspondent is Sur les Champs de Bataille by André Tudesq, which likewise covers a wide territory. Leur Calvaire by Benjamin' Vallotton is specifically dedicated to the refugees of Cambrai, Noyon, Lille and St. Quentin. The author is a Swiss; he makes no effort to differentiate between the experiences of the refugees from these various places, but summarizes the experiences of these unfortunate folk as whole. Dans Paris Bombardé by а Lucien Descaves is a brief summary of bombardments in 1871 and from 1914 to 1918. St. Dié sous la Botte by Ernest Colin describes the remarkable adventures of the author in seeking the return of the women and children taken away by the French as suspects when they left the city, a return demanded by the German general. It was an episode that constituted one of the most painful experiences of the German occupancy of this city.

Out of the Ruins by George B. Ford, of the American Red Cross Reconstruction Bureau in France is a rapid survey of what must be done to reconstruct the devastated regions. The author is not so much concerned with the ruin accomplished by the Germans as with what must be done to bring about restoration. He presents a graphic summary of what the French government has already accomplished and what still remains to be done.

# THE CLASSIC FACTOR IN FURNITURE DESIGN



### BY WALTER A DYER Photographs from the Metropolitan Museum of Art

S o large a proportion of modern furniture is being designed in the period styles—or what purport to be such—that the average person feels the need of knowing enough about their essential characteristics to enable him to discriminate between authentic reproductions and slipshod adaptations. To be ill informed on this subject is to be well, ill informed.

1 11

But information is not the whole of education and culture; one of our American defects lies in our worship of facts. To train the powers of appreciation is more important than to store or impart mere information, for therein lies the whole question of our relation to the arts. One may be informed about the arts and still remain uncultured. One may memorize for useful or conversational purposes many interesting facts regarding musical composition or schools of painting and yet remain untouched by the enlightening power of the arts. There is a criterion of taste which transcends information.

We are speaking of furniture design, which, as I see it, is one of the applied arts. A finely wrought chair, for all its utilitarian purpose, may be as much a work of art as a painting or a poem, a sonata or a cathedral. Working upward through the ages the craftsman spirit has expressed itself through the medium of those things which are intended for homely uses, and civilization may be measured to a large extent by this glorification of our home life by the craftsman's art. To the Chinese potter, to the rug weaver of Ispahan, to the metal worker of old Granada, to the cabinet maker of sixteenth-century Florence we are indebted for much of the beauty

which warms and illumines our twentieth-century homes, but which has become so familiar to us as to be almost commonplace. We observe our furniture and that of our neighbors less critically than we observe our paintings or our books, and yet since the dawn of civilization the spirit of the artist has been wrought in the form of household furniture.

Let me not be misunderstood as disparaging information; I am simply maintaining that in the realm of art information is not sufficient, does not carry us far enough. The facts regarding the historical development of the furniture styles are essential as a basis for understanding and appreciating those styles. Poverty of information is but another name for ignorance, and we none of us like to appear ignorant.

Let us have the facts, by all means. But in that we have been making some progress. A great deal has been written and read about the facts of furniture design. Most people are more or less well informed nowadays. Most people have some idea of who Buhl and Chippendale were and know that Jacobean furniture is older than Georgian. Perhaps we have reached a point where we can safely take another step in advance. The collecting of old furniture is a pretty universal hobby, though too often its indulgence displays a sad lack of discrimination. Why not make something more than a hobby of it? Why not let it become a study, a part of our education? For there is no short cut to culture; we must give more than a passing thought to these things.

In short, perhaps the time has arrived when we should begin to advance beyond the stage of collecting furniture and facts and begin the training of our powers of appreciation and discrimination. Perhaps we may hope for a keener vision that will enable us to recognize artistic merit without the help of a guide-book, to know inwardly and with conviction why a thing is good, and to tell the good from the bad. For not all old furniture is worthy of equal consideration. How,

then, are we to know? What are we to look for? By what criterion are we to judge?

The first step for one genuinely desirous of acquiring a critical knowledge of the furniture styles is the accumulation of the essential information and the arrangement of the essential facts in their relation 10 each other. Assuming that this labor is at all worth while, we may then proceed to the cultivation of the appreciative and discriminating faculties.

As to the facts, it may be useful to

marshal them briefly in review, partly as a basis for discussion and partly in order to note how the art impulse in furniture design has persisted through the centuries.

In the earliest periods furniture was either rude and lacking in artistic expression, or else it was architectural or sculptural in form. Furniture design as a distinct art can hardly be said to have emerged from architecture and sculpture until the period of the Renaissance. But Greek and Egyptian furniture is not to be ignored on that account, for the best of what followed constantly harked back to the classic for its inspiration. In the Roman and Pompeiian chairs and tables we discover the first signs of a mobiliary art in which the

classic feeling was evidently paramount.

About the year 1400 began that extraordinary movement, that awakening of the creative impulse, that emergence from the conditions of the Dark Ages that we have called the Renaissance. It expanded to its fullest flower in the sixteenth century, having its genesis, focus and highest development in Italy and spreading over most of the rest of Eu-

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Greek spirit found

furniture design, to

which the age added

art of wood carving

and joinery was

perfected, and the

homes of the nobles

of Florence, Milan,

Rome and Venice

were furnished with

elaborate and hand-

some chests. cabi-

tables

chairs. Design fea-

recrudescence in

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All the arts

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Fig. 2. Italian Renaissance chair, late sixteenth century, of the curule type. Excellent in line and proportion.

and proportion. the classic, became fixed and a definite, recognizable period style was evolved.

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To attempt to catalogue the distinguishing features of this or any of the succeeding styles would be to ex-, ceed the limits of the present discussion. A description of them may be found in any good book on furniture. Suffice it to say that no education is complete, in the field of decorative and applied art, without some knowledge of the best work of the carvers and cabinet makers of the Italian Renaissance.

During the seventeenth century the Italian furniture styles suffered a decline or decadence, with a tendency toward confusion of ideas, over-ornamentation, and the lavish use of baroque and rococo details. Meanwhile, both in England

358

and on the Continent, the Gothic style in architecture had left its impress on furniture design, and some of the French and English Gothic furniture of the fourteenth and fifteenth centuries, while distinctly architectural in character, displayed a genuine feeling for design, particularly in the exquisite carving.

Then, in France, Spain and Flanders the Gothic influence in furniture design gradually disappeared before the resistless tide of the Italian Renaissance movement. and in each of those countries a Renaissance style was developed. based very definitely on the Italian, but undergoing some changes through force of environment and national character. In France the reign of Francois Ī (1515-1547) was one of the high-water marks in the history of French furniture design. A decline followed, succeeded in turn by a rise in the artistic curve during the reign of Louis XIII, when Cardinal Richelieu was prime minister and Simon Vouet was a leader in the art world.

The contemporary styles of Germany, Holland, Flanders and Spain were all closely related, though

in Spain the virile Moorish elements, always stronger there than the Gothic, persisted and modified the style of the Spanish Renaissance.

The Renaissance movement, strictly speaking, was less marked in England than on the Continent. England was slower to respond to the almost universal impulse, but there was a gradual development of styles during the Tudor period which parallels the Renaissance movement elsewhere. Roughly, English furniture may be divided into that of the age of oak, lasting until about 1660; the age of walnut, 1660 till about 1725; and the age of mahogany, 1725 to the beginning of the nineteenth century.

During the reign of Henry VIII (1509-1547) English furniture styles emerged from Gothic crudities, largely because of the monarch's anti-Papist and hence anti-Gothic predilections.

Decorative details were imported from the Continent, but the Renaissance spirit was not fully felt in England until the reign of Elizabeth, during the last half of the sixteenth century. The styles were still not strictly Renaissance in type, but they were freer, more imaginative, and more fully expressive of an art im-New furniture pulse. forms were introduced. the plain trestle table gave place to something more pleasing, chairs became more common, and distinctive decorative details in line and carving were The classic introduced. influence was felt, though remotely.

The Jacobean period, properly speaking, extended from 1603 to 1649. The styles showed a continuation of the Elizabethan along what may be termed native British lines in spite of numerous importations. New

forms and new ornamental details were introduced, but the styles remained natural and virile, tending even toward a greater austerity than those of Elizabeth's day rather than toward anything more effeminate or elaborate. These were the days of Inigo Jones and the beginnings of an English architecture.

With the restoration of Charles II to the throne of England in the year 1660, there came an era of greater luxury and of imported ideas. Walnut became the popular wood and a greater ornateness came into vogue. With the



Fig. 1. French Gothic chair stall, fifteenth century, illustrating the stiffness of line with

delicacy of ornament.

historic influences what they were, this might easily have been a period of decadence but for the fact that the styles then borrowed from Spain and France and Flanders still possessed beauties inherited from the Renaissance. It was a borrowed but not a decadent style. The chairs were patterned directly after more distinctly British product in which the purely classic motifs, doubtless due to the influence of Sir Christopher Wren, became more and more evident.

And so, without any serious slipping back into the inartistic errors of either slipshod crudity or wanton overelaboration, the English styles gradually de-



Fig. 3. Late sixteenth century Italian Renaissance chairs. Proportion good, lines stiff, carved and inlaid ornament.

those of Spain and Flanders, but there were still some heritages from the Jacobean period, notably the gate-leg table.

Following the abdication of James II, in 1689, and the accession of William and Mary to the throne, the Dutch element, brought over by William, entered strongly into the English styles, together with borrowings from the French of Louis XIV, which, in turn, had been adopted by the Dutch through the agency of Huguenot exiles like Daniel Marot. Here again we find in England a borrowed, almost a mongrel, style, which might easily have slipped into degeneracy had not the designers of the reign of Queen Anne, which followed, seen fit to engraft upon the Dutch elements a veloped into those of the Georgian period, when mahogany became the popular wood and when, in spite of many whimsical lateral tendencies, the classic tradition was kept alive.

From the time of Queen Anne the furniture styles developed through the early Georgian transition period until, about the middle of the eighteenth century, the influence of Thomas Chippendale became paramount. Chippendale's styles show a strange mixture of good and bad. He was a master carver and a master of ornament. Unquestionably his feeling for line and proportion was highly developed and he was nothing if not original in spite of his many borrowings. But he suffered from too much

versatility, from too great a desire to outdo himself in the matter of novelty, so that while his best work stands supreme as typical of the Georgian golden age, his poorest work is so lacking in consistency and restraint as almost to seem decadent. And between these two extremes there was not a little mediocrity. But I shall have more to say of Chippendale presently.

There followed the later Georgian period in which the work of Adam, Hepplewhite and Sheraton predominated. Robert Adam was not a cabinet maker, but as an architect, interior decorator and designer, he exerted a powerful influence on the furniture styles of the day. Adam's style was almost purely

classic, based upon his study of Roman and Pompeiian antiquities and affected, no doubt, by the contemporary classic spirit of the Louis XVI period in France. What it lacked in virility was more than compensated for in its chastity, delicacy and restraint.

Hepplewhite's style was influenced by this classic revival, but not entirely so. Many of his details were his own, or the product of native fashions; but his lines, proportions and decorative details all show the classic influence.

Sheraton was the truer classicist in his earlier work, and his wonderful feeling for line and proportion was that of a born artist. He never, in those early days, allowed himself the extravagance of an unnecessary curve and his

touch was delicate. But Sheraton was unfortunate in more ways than one, and gradually he allowed himself to be engulfed by the vulgar wave of popular taste that demanded something more ornate and showy, so that his later work, in the early years of the nineteenth century, was distinctly decadent. And with him there came to an end all that may be truly termed artistic in English furniture until the present generation.

Returning now to France, we find in the period of Louis XIV (1643-1715) a recrudescence of the art impulse as applied to furniture design. France spoke her own language in this and the following periods. The Louis XIV style is marked by dignity, grandeur, bold effects, lavish but not excessive ornament. and faultless workmanship. It was too voluptuous to be called truly classic, and yet many of its motifs were of classic derivation. The details were symmetrical and balanced.

But French exuberance was not long to be restrained. Even the great cabi-

net makers and designers who flourished at that time succumbed to the movement of popular and royal taste. Rococo ornament became more and more lavishly employed and details became unbalanced to the point of eccentricity, till we find, during the reign of Louis XV (1715-1774), a veritable riot of florid ornament and gilded luxuriousness, by no means lacking in decorative merit but often sadly overdone.

Then came the reaction. The style of Louis XVI (1774-1793) shows a return to simpler lines, a more restrained and delicate ornament, and a classic feeling. Grace, restraint, daintiness, refinement and excellent workmanship distinguished the period, with a preference for straight lines and simple curves and the aban-

donment of the rococo.

The Empire style (1799-1814) is more difficult to characterize, for here we are considering less a natural style evolution than the whim of an egotistical emperor. The style was based on the classic Roman, and at its best it was worthy of being classed as a classic style. But



lacking all the essenti qualities of good design.



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Fig. 5. The Louis XIV, style was marked by dignity of line, proportion and ornament.



Fig. 8. The best of the furniture of the French Empire was dignified, if somewhat formal and severe.



Fig. 6. Excessive ornamentation and gilding and unbalanced details were characteristic of Louis XV. furniture.



Fig. 7. A return to simpler lines and more delicate ornamentation marked the Louis XVI. style.



Fig. 9. The late Empire styles were often grotesque and decadent.



Fig. 10. The Wainscot chairs of the Tudor period in England were not without decorative distinction.



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Fig. 13. A domestic simplicity, combined with pleasing curves and good proportions, distinguished the style of the Queen Anne period.



Fig. 14. The best of the Chippendale designs show a harmony of line and exquisite ornament.



Fig. 11. A certain grace of line and carving saved the highbacked chairs of the Restoration from over-ornate degeneracy.

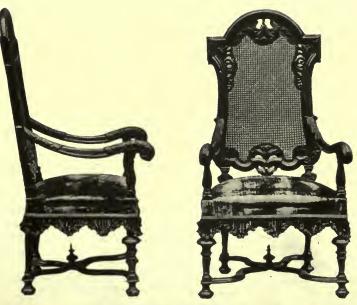


Fig. 12. The chairs of the William and Mary period partook of the qualities which distinguished those of Louis XIV.

### THE ARCHITECTURAL RECORD.

in its usual manifestations it was stiff, formal, heavy and sombre, and but poorly adapted to domestic needs. At its worst it was decadent, and it ushered in decadence.

So much, then, by way of a brief survey of the historic facts of the development of the furniture styles. They may easily be committed to memory, but that is not the final test of understanding. The more subtle realm of appreciation stretches ahead of us still. Some of us are born with this power to a certain extent; we have natural taste, as the saying is. But whether we are born with it or not, our taste, our powers of appreciation, the responsiveness of our reactions may be trained and cultivated. Most of us do not appreciate classical music when we first hear it—though we may insist that we do; our musical tastes must be cultivated. In the same way we may cultivate our powers of appreciation of



Fig. 17. Robert Adam introduced a classic simplicity and grace which displays a kinship with the Louis XVI. style.

During all these centuries both good and bad furniture was produced, but the art impulse persisted. Always there were sincere craftsmen who sought to impart the artistic touch to their designs, and usually there were some who succeeded. We may accept this statement without question or we may seek to comprehend and believe it. If we are honest, we will ask ourselves whether we really see anything beautiful in a piece of old furniture, or whether we merely say that we do because it is the fashion. Do our natures pleasurably react to the element of beauty in these things? For that is the ultimate testthe personal reaction. It is the indication and measure of our powers of appreciation.

what is fine and beautiful in applied art, in furniture. And if the attempt is to be honestly made, perhaps I can give a helpful hint as to its direction.

In the first place we must learn to discriminate. Perhaps we have taken it for granted that all old furniture is equally worthy; or perhaps we have been a bit skeptical about the whole of it. It was not all of it good, and we may hope to learn to discriminate between the good and the bad and so to establish a criterion of excellence. To some extent this is a matter of taste, with opportunity for honest differences of opinion. To take a concrete example, there are friends of mine who prefer Chippendale's work to that of Sheraton. They find his sweeping curves more



## THE ARCHITECTURAL RECORD.



Fig. 19. The early work of Sheraton shows a rare perfection of line, proportion and workmanship, and restraint in the use of ornament.

pleasing than Sheraton's sometimes austere simplicity. To me, on the other hand, there is something so refined and perfect in Sheraton's best lines and proportions that he rises quite above Chippendale's level. So far we may set it down to a matter of taste. There are, however, certain fundamental principles of design that are as inflexible as the notes of the scale, and the designer who proposes to ignore them invariably goes astray.

These basic principles have to do with line, proportion and ornamentation. There is a rhythm and harmony of line which is as elementary as that of poetry and music. It is something that can be understood only through studious observation. Sheraton, for example, never used strikingly different forms of the curve on the same piece; while Chippendale did not hesitate to place a back full of sweeping and reversed curves upon a chair with almost clumsily straight, square legs, and he produced a discord. There is a criterion of pro-

portion, too, which some experts have endeavored to express in mathematical terms, but which must be appreciated with the senses rather than measured with a rule if we are to understand it fully. The fact is that certain proportions of length, width and thickness produce a pleasanter impression on the human eye than do others, just as certain color and sound combinations are pleasanter than others. The masters had a feeling for this, and proportion is a criterion of excellence in all furniture design. As for ornamentation, it is partly a question of quantity. The over-elaborate has always been bad. Ornament should never obscure line or proportion. Yet ornament, finely conceived and wrought, adds to furniture beauty and softens the harshest lines. It is where cabinet makers have forgotten the principles of line and proportion in their desire to decorate that we have the ornateness that characterizes many of the decadent periods.

Let us now examine the historic styles and discover, if we may, how and where



Fig. 18. Hepplewhite, at his best, had a fine feeling for line and ornament.

these principles are manifested. It is not surprising to discover in the furniture of the Greek an Attic perfection of line and proportion, and that grace and restraint of ornament which characterized Greek architecture and which causes us ever to hark back to it when we feel the need for a draught of pure inspiration. The best of the furniture of the Italian Renaissance, while sometimes clinging to stiffness of line, exhibits beauty of proportion and the feeling for the skillful placing and execution of ornament. The same is true of the best of the Gothic. During the period of the late Renaissance there may be detected a tendency to greater freedom of line, but this was counter-balanced by the taste for over-ornamentation, and the popular appreciative faculty suffered a decline.

In Tudor England harsh lines persisted after the craftsmen of the period had begun to display a feeling for proportion and ornament; during the Jacobean period the lines became gradually freer and more graceful. The Restoration brought almost a superabundance of ornament and a tendency toward unusual proportions, particularly in the high-backed chairs; but there was a certain excellence in the carving and a certain grace of line which saved the period from decadence. To a certain extent this is true of the William and Mary period that followed, when the beds, for example, were smothered in a superfluity of draperies. But the Queen Anne period followed promptly to save the day, and here a softening domestic element crept in to lay a restraining hand on the tendency to exaggeration, and in ornament Greek elements were introduced, as in the broken arch pediment.

The cabriole leg was graceful in itself, and Chippendale developed and perfected it. He had a wonderful feeling for ornament, and he knew where to borrow the best that was to be had, but he overdid his borrowing. He not only produced in some cases a sad mixture of Dutch, French, Chinese and Gothic elements, but he confused his lines and proportions as well. At his

best he was a master of the art; at his worst, to my way of thinking, he verged dangerously close upon the decadent.

But again the impulse of a classic revival, fostered by Adam, stepped in to preserve the dignity of English furniture design, and England held true to its conservative principles until the nineteenth century, when even Sheraton went mad and Hope introduced his atrocious novelties, and line, proportion



Fig. 20. The American Windsor chair is sometimes remarkable for the grace of its lines and proportions.

and harmony of ornament all went by the board.

In France a steady development of ornament is to be detected from the time of the Renaissance. The Louis XIV style was dignified and even majestic; but the Louis XV style mixed its curves, gloried in lack of symmetry, and sought for the appearance of luxury in gilt and rococo over-ornamentation. The Louis XVI style was a sharp reaction from this, and the principles of good proportion, moderate ornament, and simple, graceful lines were restored. The Empire style was a strange mixture of excellences and defects, and it ended in decadence.

American furniture styles reflected so closely those of the mother country that they need not be considered separately, with one or two exceptions. Here we developed the wonderfully graceful Windsor chair, with its often perfect lines and proportions, through some remarkable genius of the Yankee craftsman. Here, too, Duncan Phyfe kept alive the Sheraton tradition after Shera-



Fig. 21. In America Duncan Phyfe held to the best traditions of Sheraton and the French Empire.

ton had lost his grip. Here we softened the asperities of the Empire style through the medium of a sort of domestic moderation. And here, finally, we fell into our own forms of decadence in the black walnut and Japanese and Eastlake periods.

Thus, throughout the history of the development of the furniture styles, we can trace waves of taste, a curve sometimes ascending, sometimes descending, now gradual, now abrupt, but always coincident with the state of popular taste and the artistic aims and ideals of the craftsmen. There were times when men followed false gods, forgetting the fundamental principles of design and seeking for novelty and deceptive elegance. And there were times when men shook off convention and fashion and false standards and got back upon more solid ground.

To me it seems perfectly clear that the spirit of the Greek, the original discoverer of the principles of design-of line, proportion, and ornament-runs like a musical motif through it all. And wherever it is most in evidence, there we have the high points on our curve. It was the classic spirit that invigorated and dominated the Renaissance movement. It was a revival of the classic spirit that produced the Louis XVI and Georgian periods. In this classic instinct a wonderful vitality has ever resided. It is this classic factor in the evolution of the period styles that has served as the sure foundation for our artistic faith throughout the centuries, and whenever man has turned aside from it he has failed.

There is a lesson for us in this consideration of history. Today we stand at the parting of the ways. There is a school among us that demands novelty, that affirms that the past is dead, that calls for an American style based upon a new national consciousness that should be creative, that would cut loose forever from the trammels of tradition. If this movement is successful it will run counter to all the teachings of history, for it has been the collective experience of mankind that the worthiest and most permanent developments of decorative art have not arisen at the call for novelty. like the late lamented L'Art Nouveau, but have invariably been built upon the solid foundations of the past. The classic factor has been weighed and found not wanting. It will persist and survive; we cannot get away from it. And if now, after the war, we are to experience a new Renaissance, it is my belief that it will be but another classic revival. And in that case our study of the historic furniture styles, our effort to appreciate their merits, and our recognition of the classic factor inherent in them will not have been in vain.

# SLAV TEMPERAMENT

# BY LEON V. SOLON

H ISTORY shows civilization following the sun in its progress from east to west; its illumination, however, has not shone with the same impartial prodigality. From the Orient, the land of genesis, it spread with infinite slowness westward, skirting great tracts in fickle progress, which it left fallow amidst neighboring luxuriance. Russia for centuries was such a tract, in comparatively close proximity to the highly matured cultures of Greece, Byzantium, Persia and Mongolia.

During the latter half of the nineteenth century we became conscious of the power and subtlety of the Slav temperament in music and literature, when, satiated by the stilted works of wouldbe classicists, and surfeited with the forced efforts of the Romantic School, the study of psychology became the directing impulse in certain phases of imaginative art. We found Scandinavians and Slavs masters where we were students, through their racial habit of introspection.

In the order of our enlightenment, Slav music preceded their literature; possibly because so many virtuosi were of the race, or because no translation is necessary to make Slav music intelligible to other races, a uniform system of structure governing all European music.

The subsequent translation of the great Russian authors created a deep impression and a vogue among intellectuals almost equal to that of Slav music among musicians; Turgenief and Tolstoy influenced the direction of a new school in writing as radically as Chopin and his followers had done in music. In European music, previous to the Slav influence, the emotions chosen for harmonic expression might be designated as the "elementary sensations"; with the new basis of psychic selection, infinite new gamuts of human vibrations were revealed for symphonic interpretation.

The literary world was correspondingly fascinated in seeing the psychic problems of life handled with the fatalism, susceptibility to color, and ruthless dramatic instinct of the Orient; the musical world heard for the first time, in tones and semitones it could not comprehend, the songs, passions and plaints of the East. It was a revelation to discover the arts of a nation exercised primarily for their capacity to express sensuousness-to find purely intellectual objectives subordinated to uncurbed racial instincts which had developed during centuries, untouched by our standards of taste and morals.

The general and professional public has a casual acquaintance with Russian craftsmanship and would experience no hesitation in identifying the enamels, metalwork, embroidery or jewelry; the architecture, on the other hand, is a closed book to the majority, who would probably dismiss it from consideration as a type of bastard Turkish, with gaudy buildings surmounted by gaudier cupolas.

The scarcity of data on the subject, the many calls on the traveler's attention in more easily accessible lands, may account for past indifference towards a strongly characteristic and original method of construction and design, although a simple and obvious deduction should have produced the inference that the strong racial temperament which we find so deeply impressed with such true artistic judgment in literature and music, would reveal itself in some unforeseen manner in buildings.

The greatest enthusiast for the various Slav manners of architectural treatment could not state with truth that any one ranks with the fine types of Greek, Roman or Gothic; they contribute, however, a number of interesting and characteristic features which our racial instinct and our history would prevent us from evolving spontaneously.

The Slav made his debut in building as a pupil of Byzantium, the influence of which, although it left an indelible stamp, was submitted to the modification occurring in the architecture of all northern races when finally freed from the Roman domination, namely, the instinctive tendency to build in height rather than in breadth.

In conformity with the tradition of the Aryan races, the early Slav buildings were made of wood; this continued until the tenth century. In the eleventh century dressed stone came into general use, and vaults constructed with it were inspired by the Byzantine, but the plan of the churches conformed to the type created by the Greek Christians of Peloponnesus. One of the earliest stone churches is that of the Intercession, built in the province of Vladimir in 1165, the central cupola of which rests on four massive columns.

The Tartars, who had conquered and ruled the country previous to this, left no mark upon the arts, adhering to their invariable policy of non-interference in the national customs of subjugated races, exacting heavy tribute only. Slav builders trained in Byzantium were in great request with their conquerors, and together with their brother craftsmen were sent for periods to the Khan's court in Asia, to execute work; those who returned to their native land are credited with introducing a part of the Oriental character prevailing in the later Slav buildings.

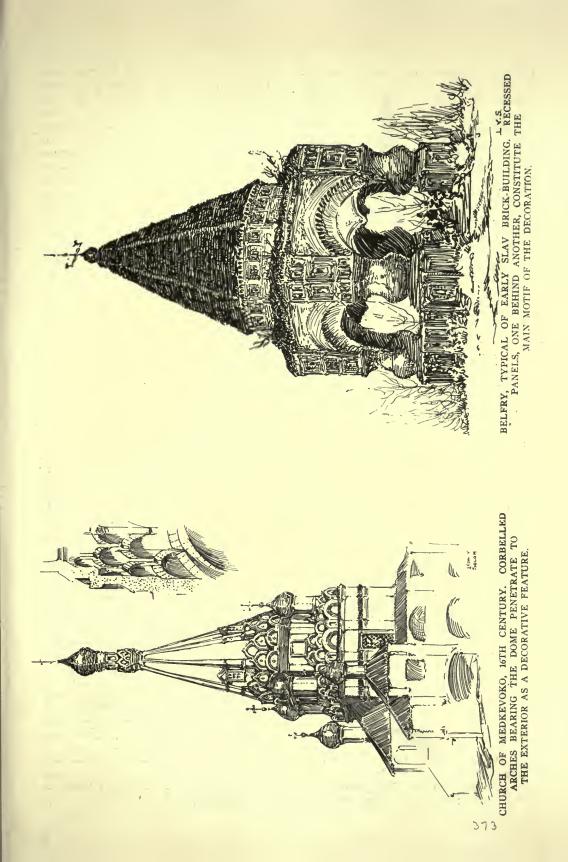
It was only in the fourteenth and fifteenth centuries that the Slavs made contact with the influence that proved most fertile in stimulating their inventive

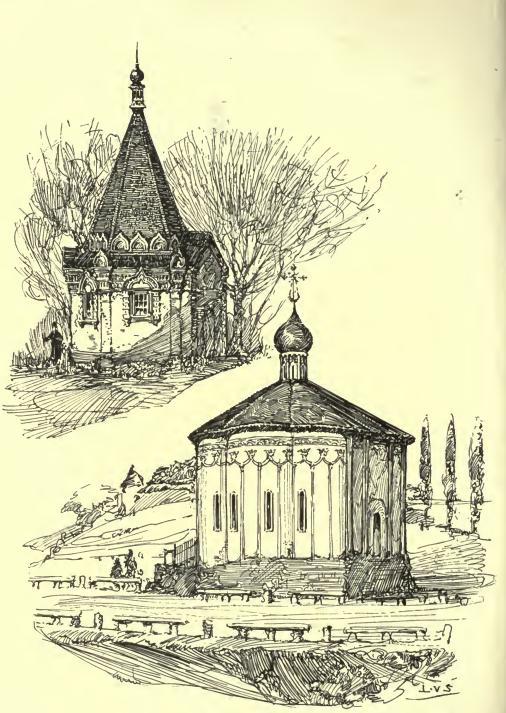
faculty. At that period Persian and Arab civilization was reaching its apex, and the Slavs, fascinated by the tours de force performed by those great builders, learned certain systems of construction which ultimately became the keynote of their style. The construction of the cupola consisting of superimposed tiers of arches built out on corbels, attracted them most; but their adoption of this principle was not a literal copy. Instead of the plain, unbroken surface of the exterior finish of their masters. they saw great decorative possibilities in making these tiers of arches penetrate to the exterior, which developed into their most characteristic feature. To this origin we can trace the friezes of arches of varied types which cluster round the roofs, and in a variety of other places where their appearance is often justified only by their excessive popularity.

A good example of the almost affectionate use of this feature is seen in the church tower of Medkevoko, in which the arches cluster even round the base of the lantern. It will be noted that two types of arches are combined, the semicircular and a type of ogival arch, essentially Slav, differing in combination of curves from the Gothic ogee. The oblong windows in the tower are characteristic and are always placed in effective contrast to the arches and tapering spires.

During the seventeenth century Slav ingenuity developed a new treatment of the penetrating arch, a typical example of which is illustrated in the Church of the Ascension at Kolomenskoe. Here this treatment of the arch is made a prominent feature in the general scheme; the alternate sides of the octagon are squared in a very ingenious fashion.

The use of bricks was productive of much individual work unlike that of any other race or nation. The belfry sketch represents a type of design created for execution in that material, which is most impressive in scale and proportion; a great decorative quality is extracted from the brick, and an added richness of color obtained by the simple method of recessing a number of panels, on.





CHAPEL OF THE CONVENT OF ST. NICHOLAS, 17TH CENTURY. THE STRUCTURE AND ARCHITECTURAL MEMBERS ARE OF BRICK.

CHURCH OF THE PRESENTATION OF THE VIRGIN, 16TH CENTURY, IN ENVIRONS OF MOSCOW. IT IS DECORATED WITH POLYCHROME FAIENCE, COMBINED WITH STONE EMBEDDED IN STUCCO.



CHURCH OF THE ASCENSION AT KOLOMENSKOE, 17TH CENTURY. SHOWING A LATER DEVELOPMENT OF THE PENETRATING ARCH. within the other. The great balustre shaped columns at the angles are admirably designed for execution with small units. In this and in many other brick structures there are unusual arrangements of the units which it would well repay the designers of brick buildings to study.

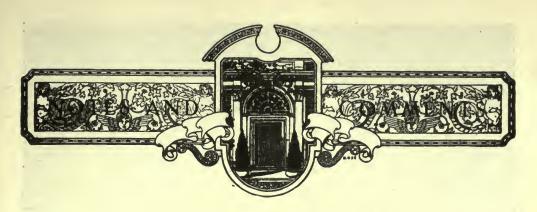
The Chapel of the Convent of St. Nicholas is a much later brick building, dating from the seventeenth century. It is typical in detail and general treatment, though it would be difficult to find any two churches which nearly resemble each other. The frieze of arches still survives, but another type is used over the windows, composed of two sectors of a circle penetrating a right angle. This style of opening is found in a considerable number of edifices.

Another type of structure is shown in the Church of the Presentation of the Virgin, built in the environs of Moscow in the sixteenth century. A polychrome frieze of birds with outstretched wings girdles the building, perched on inverted stone arcs which are supported on long bands of stone simulating pilasters, all on a stucco field; a polychrome band of faience ornament runs below the roof. The builder succeeded in doing without any rows of penetrating arches in this instance, but was faithful to the bulbous

dome, which is surmounted in the usual Russian manner with the emblem of Christianity reposing snugly in the crescent of Islam.

From the aspect of polychrome architecture, almost all Russian buildings are of interest, more for the lavish use of vari-colored materials to produce a gorgeous result than from any scientific principle underlying their disposition. The domes were of copper, frequently gilt. Tympanums, soffits and corbels were treated in color, both on the exterior and interior. Mosaic on gold ground, polychrome, faience and paintings of ornamentation and symbolic figures were lavishly used.

This brief glance at Slav architecture touches a very few of a great assortment of varying types, nearly all of which embody peculiarities differing greatly from our routine of practice. In such subjects our appreciation is handicapped, accustomed as we have become to submission to set canons; long ago we signed our indentures of apprenticeship to the workshop of method, and see precedent rather than digression. Precedent is the aesthetic insurance against errors of taste; but creative power depends for its stimulation on an element of novelty, be it from the unknown or from an unaccustomed angle of consideration in the familiar object.



Daniel Chester French's New Lincoln. For several years there has been under construction on the banks of the Potomac in the National Capital an imposing marble structure of Greek design, the work

of Henry Bacon. This is the National Memorial to Abraham Lincoln, an edifice so vast and splendid as to evoke the admiration of all who delight in classic perfection, so admirable indeed that it vies in architectural excellence and impressiveness with the Capitol itself and the Washington Monument.

Many have been the speculations regarding the character of the statue which is to be the chief sculptural feature of this magnificent edifice. Little, however, could be learned concerning the work. It was stated that to Daniel Chester French, foremost of American sculptors, had been entrusted its execution.

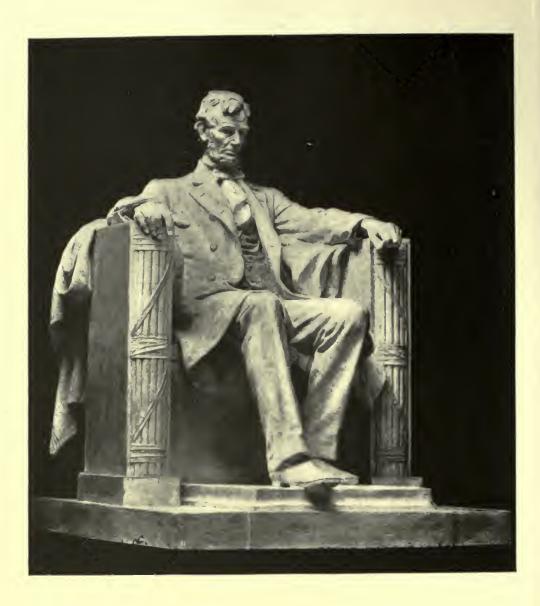
Owing to very strict rules laid down by the National Committee in charge of the work, it was a long time before any one was even permitted to see the preliminary studies in the artist's studio and all requests for photographs of the statue were refused. During the war the work on the Lincoln Memorial was largely suspended and owing to the extreme difficulty of importing huge blocks of marble, there has been some delay in completing the statue. Now, however, the ban has been lifted and photos of the statue are for the first time released for publication.

What shall be said of this latest interpretation of Lincoln in sculpture? In these days, after nearly two hundred statues of him have been created, when the man has been depicted in practically every phase of his eventful and picturesque career, it would seem that anything approaching originality must be manifestly impossible. And yet we feel fully convinced that in this, which is certainly the most imposing of all his creations, Daniel Chester French has accomplished the impossible and given us a new Lincoln thoroughly original and quite unlike any other statue. Lincoln is presented to us at that moment of his life most appropriate to be represented in the splendid structure which shall for all time shelter it. "Lincoln Triumphant" is one title suggested for it.

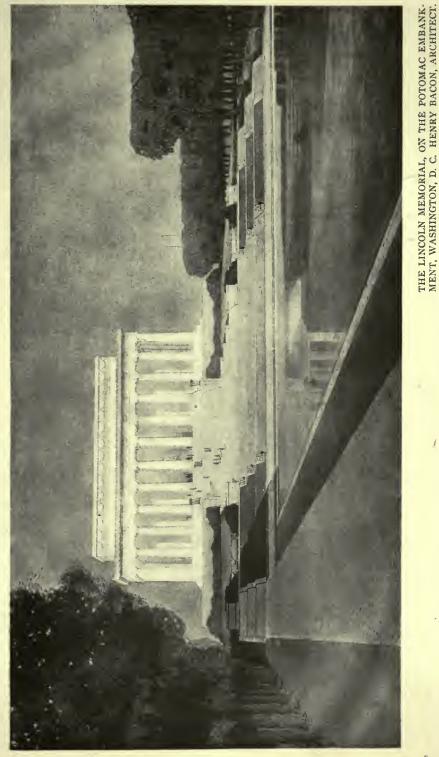
Mr. French is the author of two statues of Lincoln. Unstinted has been the praise of his earlier work "Lincoln in Thought," which adorns Nebraska's Capital City. In that statue the president is portrayed in deep meditation, perhaps a bit perplexed. But in the latest creation there is nought of perplexity on that calm benign countenance. This is not the triumph of a Marcus Aurelius extending an imperial scepter over the Roman populace. This is the great President and Executive, a reformer rather than the Commander-in-Chief of armies. who having accomplished his epoch-making task, sits down at last, weary but satisfied, to contemplate the tremendous work which he has wrought. This is the triumph of the prophet who realizes the fulfillment of his dreams.

The lover of good sculpture will revel in the fine pose of the majestic figure. He will study the masterly handling of its planes and lines. Most of all he will enthuse over the marvellous technique of the surface modeling and those remarkable hands. The lover of Lincoln will feel a thrill at the depth of feeling which emanates from this great statue, from the face so full of contentment yet bearing the deep furrows wrought by a tremendous struggle.

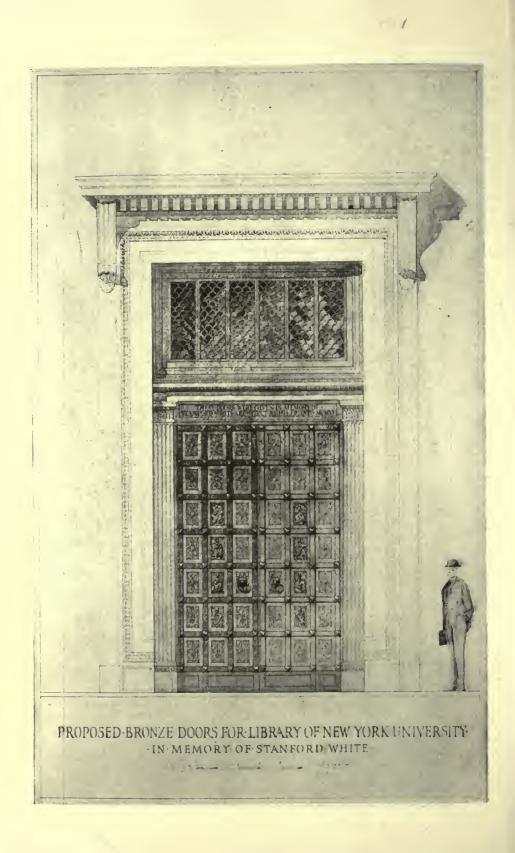
The casual observer will of course be impressed by its huge bulk, for this statue is a veritable colossus. Although it represents the seated figure, the head is nineteen



STATUE OF ABRAHAM LINCOLN, IN GEORGIA MARBLE, OCCUPYING THE CENTER OF THE LINCOLN MEMORIAL, WASHINGTON, D. C. DANIEL CHESTER FRENCH, SCULPTOR.



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feet above the pedestal and thirty feet from the floor. It was utterly impossible to take from the quarry, much less to import, a block of Carrara large enough for the entire work. The piece from which one leg was cut weighed between twenty and twenty-five tons. The head is five feet from the chin to the top. French's "Lincoln Triumphant" is probably the largest marble statue ever carved. Its very magnitude alone impresses one. The carving was done by Piccirilli Brothers.

Mr. French has given the world such a vast and varied number of estimable works of art that it would require a masterpiece indeed to add anything to his fame. In "Lincoln Triumphant," however, he has added to his fame a transcendent work of art worthy its creator, worthy the unsurpassed locality where it stands, and we believe more nearly representative of America's present conception of Abraham Lincoln than any other statue hitherto created.

FRANK OWEN PAYNE.

Stanford White

The memory of the late Stanford White is to be perpetuated through the Memorial at New erection of a pair of York University. bronze doors which the friends of the distinguished architect and art

lover will present to the New York University. The memorial will be installed at the entrance to the Library of the University, which was designed by Mr. White. The trustees of the University have formally signified their acceptance of the gift and the Committee in charge of the memorial will begin at once the work of collecting, subscriptions to cover the cost. It is the purpose of the Committee to appeal for funds from the friends and admirers of the late architect; and subscriptions from the general public, while they may not be refused, are not desired.

As a delicate attention from the men in charge of the memorial, the work of designing it has been entrusted to the son of Stanford White, Mr. Lawrence Grant White. The doors will be of bronze, and will be unique in that they will contain a number of medallions, symbolizing art, the originals of which will be contributed to the memorial by eight or ten sculptors formerly associated with Stanford White. It is the purpose of the Committee to have the doors ready for dedication on the opening of the academic year, this autumn.

to W. Francklyn Paris, 7 West 43rd street, New York,

## Literature and Sworn Testimony.

Spanish civil architecture during the late Gothic and early Renaissance periods was the subject of my proposed researches. I had gone at it valiantly, undaunted by the warning Mr.

Royall Tyler sounds in his Spain: Her Life and Arts. His is a good-natured complaint, but much to the point, as all will agree who have had to rely for their data on the writings of Spanish archaeologists. "To take advantage of the writings of these diligent men," says Tyler, "is quite a different affair from pillaging the Englishman Street with his terse style and careful index. The Spaniard who has spent fifteen or twenty years in unearthing and deciphering documents does not propose to leave the fruit of his toil within the reach of every passer-by. He writes a book, yes; but he makes it as long as possible, never by any chance includes an index, suppresses all page headings that might give a clue, and, when he has spun out as much artistic rhapsodizing as he has in him, leads one an endless game of hide-and-seek before he will relinquish the architect's name and date-if he really has them. His idea is that anyone, who wishes to use his book shall have to work as hard as he did to write it."

There is, however, one important, even monumental, work recently written on Spanish architecture that is all one could desire in conciseness and arrangement (except for the index). It is neither poetry nor "fine writing"; just a straightforward exposition of the theme; but that theme happens to be religious, not civil architecture. As to this latter, the author himself could refer me to nothing more concrete than the occasional articles that had been published in various periodicals, especially in the Bulletin of the Spanish Society of Excursionists. Now, a bulletin being, ac-cording to Webster, "a brief statement of news to the public from one specially authorized," and the Excursionists being the most noted archaeological body in Spain, the humble searcher is justified in expecting a rich haul. For years it had been the custom of these learned gentlemen to make a monthly trip to some historic monument, of which one of their number then published an account.

Funds for the memorial may be addressed

"Excursion to Alcalá" was the first title that attracted the eye on turning over an early number of the Boletin. Knowing that in Alcalá Cardinal Cisneros built a great university, and Archibishop Fonseca, the princely art-patron of the early sixteenth century, an episcopal palace, I began eagerly. The excursionists, I find, met on the morning appointed in the railroad station; they bought their tickets; they took their seats in the train; the train pulled out; they conversed en route; they were received in Alcalá by the priest of the Collegiate Church, whose courtesy is extolled to the skies. Then, with one bound, the chronicler informs us that "beautiful portals, splendid patios, artistic stairways, a magnificent sepulchre with beautiful recumbent statue" (I knew he meant that of Cardinal Cisneros), "all served the sculptors as a field in which to leave the stamp of their various impressions." And after these edifying lines we learn that "there was also time to dedicate to exhausted nature, and in the beautiful residence of Senor F. the Excursionists recuperated from the deep emotions produced by the sight of so many artistic jewels. The lunch table was presided over by Miss F., as pretty as she is educated, and in whose consummate discretion could be divined, from the first moment, a young lady of great culture who had visited the principal countries of Europe and had lived in England, appropriating all that was best and most noble in said countries."

To encounter the foregoing in the most serious journal of art and archaeology was amusing, but also a bit disheartening; one began to understand what Tyler meant by Spanish rhapsodizing; but perhaps the Excursionists had been particularly unlucky that month in their chronicler. Let us see if next month's outing will be better reported. On that occasion they went to Guadalajara. We had read elsewhere that the feudal lords of that place, the mighty Mendoza family, built there one of the most sumptuous Renaissance palaces in Spain. We glow in anticipation. The writer appears to be a man of sense, for he wastes no time in tiresome preliminaries of ticket-buying, etc., but puts us at once "We visited first the suin medias res: perb palace erected in the last years of the fifteenth century" (he could hardly have avoided the date since it is inscribed in the patio) "admiring the pomp and splendor of its facade and its principal patio, where the exuberant ornamentation of the Gothic

decadence still boldly held its own. The magnificent alfarjes (decorated carpentry ceilings) of the various salons also enchanted us, recalling: first, the beautiful assembling of Saracenic geometric interlacings, so exquisite and varied; second, those stalactite ceilings whose entirety, so rich in lovely effects, is nevertheless composed of three simple prismatic elements whose lower portion, cleverly perforated, gives place to seven stalactite elements with which are produced combinations as elegant and diverse as those obtained in the most sublime melodies by means of the seven notes of the musical scale."

From this poetic simile we drop abruptly to the vulgar: "Physical necessities obliged us to suspend the contemplation of so much beauty and we hurried to the Casino, where an excellent and economical lunch was served to us and in measure as we repaired our lost bodily force we consecrated our conversation to an exchange of impressions on the history of Guadalajara." (If anything of historical value was said the author carefully omits it.)

"Our comfortable lunch terminated, we visited the superb mausoleum erected by the Duchess of S—, etc., etc." (Let us interject that this is an atrocious modern work.) "The visit to this splendid pantheon accomplished, and the hour for the departure of the Madrid train approaching, we took leave of our kind guide and returned to our homes joyous and satisfied, but regretting that our worthy president had been prevented by his many occupations from accompanying us."

Thus ended the story of Guadalajara and its palace, and I was none the wiser. Not even the name of the genius loci had been mentioned. Fortunately I had known it beforehand, as already stated, and it recalled to me that another member of this same Mendoza family had built a Renaissance palace near Granada. For this information I was indebted not to a Spaniard, but to the German, Professor Carl Justi, who had gone to Genoa and unearthed contracts and correspondence between Don Rodrigo de Mendoza, natural son of the Great Cardinal, and his Genoese architect. Surely, with this preliminary drudgery done by an interested foreigner, some Spaniard must have devoted himself to the same subject. Yes, the Bulletin contained an article on the Castle of Lacalahora (which the present owner, by the way, insists on calling the Castillo de la Monclova). The author of this article is really instructive, but alas! he does not love us, for he opens with a Bolshevik cry of rage against the Yankees and their money.

"In 1890," he says, "the enthusiasm of Professor Justi induced certain Spaniards to visit LaCalahora and publish articles on it." (Innocent omission!) "On learning of its worth there rushed to buy it one of those Yankee millionaires who corner the historic and artistic glories of other countries because they have none in their own; and when the sale was nearly consummated, a Spanish nobleman who has united to the prestige of distinguished birth that acquired by his own personal effort" (the gentleman has a popular brand of wine on the market) "succeeded in preventing this iniquitous despoiling of our country and thus saved for Spain the jewel of La Calahora."

He who wrote the above is the same who recommended the Bulletin to me. He knows well the vast sum of American money spent in reclaiming for Spain historic monuments which the natives themselves have shamefully maltreated. Likewise he knows that if Spanish art is sold out of the country it is Spaniards themselves who implore foreigners to buy it, charging, always, a fantastic price for their wares. As for the "Jewel of La Calahora," which is, on the exterior, a bare-looking dungeon, the only part of artistic merit is the patio and stairway, carved in Genoa and sent piece by piece to Granada in the early sixteenth century. The titled wine merchant, we have heard recently, is about to remove the carved doorways and balustrade and bring them to Madrid to be incorporated in his house here; in which case the so-called jewel will be bereft of all its lustre.

Happily, spite is not a prominent Spanish characteristic, and most of the Bulletin's articles are amiability itself. The Excursionists invariably shower gratitude on the cura (village priest) who meets them at their destination and shows them his historic church; or if it is an ancient palace, still inhabited, that they inspect, its owner is made immortal in the printed pages. "The possessor of all these artistic treasures received us in that house which, more than house, is a veritable museum, and did the honors like a person perfectly familiar with the uses and customs of high society. For each one of us he had a charming phrase pronounced with his exquisite courtesy, and he never tired answering our many questions." Could any host ask more than to have it set down, for all time, that he is

"familiar with the uses and customs of high society?"

Always on their way back to Madrid the Excursionists indulge in poetic reflectionschiefly on Spanish grandeur that has been, for that is the traditional ideation of the race. Seldom does it occur to the chronicler who tells all this to mention one pertinent fact concerning the monument visited-date, architect, subsequent modifications, or whether it is of real merit. And if the place of pilgrimage lies off the railroad, of course he scorns all mention of the manner of reaching it. We turn dejectedly from these earnest but prolix Pickwickians, and their "publication of news to the public." Much valuable information it undoubtedly contains, but Spanish information is like Scotch humor-it must be dug out. Perhaps the imposing row of volumes entitled "Spain and Her Monuments" will be better. The first that comes to hand treats of Catalonia. The author is himself a Catalan, one of that hard-working, methodical race despised for these very qualities by the lofty Castilian. (Without which qualities, incidentally, the national treasury would not be so full.) In antebellum days, the Castilian used to say scornfully of the Catalan that he was the German of Spain; but when the war came it was the Castilian who hugged the Teuton to his heart, while the so-called German of Spain went valiantly to the battlefields of France to fight for the Allies. But this is a digression. Let us see what we can learn about architecture in Catalonia.

The first sentence that greets us, on the first page, shows that when it comes to his own native soil, the shrewd Catalan is as abstract as the more poetic Castilian, the only difference being that he warns us, in the first breath, not to expect mere facts. "In the articles on monuments and famous works of architecture, our observations are made principally with relation to the poetic and philosophical aspect of the subject." Even our Catalan is hopeless.

We recall how, once in Salamanca, which is the Renaissance city, *par excellence*, of Spain, we were ransacking the University Library for data, when a distinguished member of the faculty offered a pamphlet written by himself. "But where did you get your information?" we asked innocently. "We have perused every available document without discovering a single fact, except in the case of the Cathedral, and its history has been published." "Information?" he repeats with hurt expression. "Facts? Why, this is a literary appreciation of our beloved Salamanca."

Clearly, to the Spanish author, literature and facts are as opposed as the two poles. He believes, with Augustus Birrell, that literature is one thing and sworn testimony another. How different from Carlyle, who spoke of his love of facts as his "stubborn realism," and who said of Harriet Martineau's book on American travel that her one page on the way Daniel Webster used to stand, hands in pockets, before his grate fire, was worth all the poetry, politics, philosophy and economics in the many remaining pages. "Give Carlyle a fact," it has been said of the great historian, "and he loaded you with thanks; theorize or indulge in abstractions and you were rewarded with the most vivid abuse." One dreads to think of the malisons the choleric Scotchman would have heaped upon Spanish rhapsodists and theorists had his fate been to prepare a history of Spanish architecture, gathered from Spanish sources, instead of a history of Frederic the Great, gathered from German. MILDRED STAPLEY.

The Old West Church. In looking up some material in regard to the Charles Street Meeting House, Boston, I came across some notes on the West Church, which was built at about the same time. In "The Georgian

Period" the authorship of the West Church is attributed to Asher Benjamin, and in the reprint of Asher Benjamin's work is a design almost identical with the façade of this edifice. I referred to this in a talk I was giving on architecture and architectural books at the Public Library, and shortly afterward Mr. Buckley, of the Library, brought me a copy of the Columbian Centinel (spelled with a C!) of Nov. 29, 1806, referring to the laying of the corner stone on April 4 of that year, and to the completion on November 27, giving the names of the building committee, and Asher Benjamin as the architect.

The Charles Street Meeting House was built in 1807, but so far I have been unable to find the name of the architect, although it is a simple and good example of the style used by Charles Bulfinch and Asher Benjamin. FRANK A. BOURNE.

Artificial Daylight Achieved by a British Invention. According to the American Chamber of Commerce in Londou, a light has been perfected in Great Britain which surpasses, any existing arrangement of artificial light; and is a very close

approximation of actual daylight. The apparatus consists of a high-power electric light bulb, fitted with a cup-shaped opaque reflector, the silvered inner side of which reflects the light against a parasolshaped screen placed above the light. The screen is lined with small patches of different colors, arranged according to a formula worked out empirically by Mr. Shoringham, the inventor, and carefully tested and perfected in the Optical Engineering Department of the' Imperial College of Science and Technology.

The light thrown down from the screen is said to show colors almost as they appear in full daylight. A test was made with such articles as colored wools, Chinese enamels, pastels and color prints, each being subjected successively to daylight, ordinary electric light and the new Shoringham light. Under the new light delicate yellows were quite distinct, indigo blues were blue, cobalts had their full value, and violets lost the reddish shade which they display in electric light.

The American Chamber in London says a great future is expected for this invention in such uses as the lighting of show windows and art galleries, studio work of all kinds, dye-works; tea and tobacco blending, and many other industries. Color photography will also probably benefit. As is to be expected, a proportion of the illuminating value is lost in the process, and higher candle power has to be used, but 60 candle power bulbs were satisfactory for the experiments mentioned.

The memorial flagpole base illustrated on page 121 of the February issue is in Duluth, Minn., not in Minneapolis, as stated in the caption.

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