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OCTOBER, 1922

CURRENT TENDENCIES IN
COUNTRY HOUSE DESIGN
IN THE EAST

By Aymar Embury II

The most important thing about recent American country house architecture, especially along the Eastern coast, is the very great improvement in the average quality of the work. This has been brought to my attention during the past few weeks in two different ways. I have saved, ever since I began my work, illustrations of houses which seemed to me to possess genuine quality, and have filed them in rough accordace with their several styles. Some ten days ago in looking over the files, I found that nine-tenths of the material which I had collected prior to 1912 was of no further value to me, because even the average of today is better than what I once considered as the best. The second thing which struck me particularly, is the fact that of the great number of photographs sent to the Architectural Record for possible use with this article, there was none which was not of sufficient interest to justify its publication. In fact, the selection of photographs to accompany this article has been a very difficult task because so much deserving work had to be omitted. It is most interesting to note, not only that the general average of all work improved, but also that the men who are doing country house work and doing it well are much more consistent than they once were. Any architect who has done a considerable number of buildings knows that among them there are a certain number in which he has failed to realize the quality of design which he attempted to achieve, and while I have no doubt that the architects of most of the houses submitted, feel that
these houses fall short of complete perfection, to the man who did not design them they seem to be of extraordinarily high quality, not only in pure design, but also in taste.

After all, the greatest advance that has been made during recent years has been in the matter of taste as opposed to pure design. I believe that in domestic architecture, especially, there are two independent factors which need consideration. First, the pure design of the building; that is, the proportions of its mass and the relationship between its subordinate features and that mass. Second, the quality of taste, by which I mean the choice of material, the choice of color, and above all, the choice of texture of the wall surfaces as well as the design of moldings and ornaments. Certain architects are very able designers without having much taste, and some architects of great taste have little ability as designers. The work of today, however, seems to indicate that most of our successful practitioners have both. Twenty years ago when I was beginning work, this was not true; taste was a feature which was very little considered and I think that it was due more to the work of Mr. Charles A. Platt than to that of any other architect that our designers of country houses began to realize that a successful country house must be successful in both these ways.

I do not think that the best modern work is any better than the best work of fifteen years ago. I do not recall any recent country house more beautiful than McKim, Mead & White’s Breese house at Southampton, or Charles Platt’s Manor House at Glen Cove or Harry Lindeberg’s Stillman house at Pleasantville, or, among the lesser houses, any finer than the Olcott house at Saratoga Springs done so many years ago by

two hundred fifty-two
RESIDENCE OF MRS. MARY McKELVEY,
SPUYTEN DUYVIL, NEW YORK CITY.
JULIUS GREGORY, ARCHITECT.
RESIDENCE OF MRS. MARY McKELVEY, SPUYTEN DUYVIL, NEW YORK CITY.
Julius Gregory, Architect.

FIRST FLOOR PLAN
SECOND FLOOR PLAN

RESIDENCE of MRS M. McKELVEY at SPUYTEN DUYVIL - NEW YORK CITY

Julius Gregory, Architect. as n Samsy. NYc
RESIDENCE OF MRS. MARY McKELVEY,
SPUYTEN DUYVIL, NEW YORK CITY.
JULIUS GREGORY, ARCHITECT.
Keene and Mead. It is invidious to speak of the very many expensive and magnificent country houses built between 1900 and 1910, which were fifteen years ago considered of great excellence. Many of them are and will remain good examples of architecture; many of them have gone into the discard, but the small country house of excellence simply did not then exist, with the exception of a very few scattered examples. Mr. Joy Wheeler Dow had done a few which were and remain genuine contributions to the art of architecture. Mr. Frank E. Wallis had been a pioneer in reviving interest in the Colonial style as opposed to the architecture of columns and cornices which generally passed as Colonial, but these examples had no immediate effect upon the mass of American country house work, and it must not be forgotten that the architecture of any country will be judged not upon the few high spots of its art but upon the general average—the mass of all the work. Today we find that the average real estate operator builds houses with considerable attention to design. In many cases he even believes it desirable to pay fairly high fees for the services of architects of ability and to advertise the fact that the goods he has for sale are by competent makers. The small house is beginning again to tend toward the general high average of design which has made objects of pilgrimage of the few remaining towns in America where much Colonial architecture still exists.

Colonial architecture, like the Greek, was confined within very narrow limits; the designers contented themselves with endless repetitions of substantially the same motive with very slight changes in the treatment of the entrances, cornices and porches, and with such variations in mass as were required by the plan and the purse of the purchaser. Even irregularities of land influenced Colonial design to a comparatively small extent; if the property was too steep for the square box of the Colonial house, one end of the cellar was built up out of the ground; yet the remaining collections of Colonial houses, as for example, Litchfield or Nantucket, are neither monotonous nor stupid. So in the current work we find again a tendency toward uniformity of design without monotony, although nowadays this applies rather to the treatment of the detail than to the mass of the building.

The illustrations of current work in the East show that the eclecticism of the architect of fifteen years ago has, to a large extent, disappeared. We find fewer houses derived from strange traditional styles. The bulk of the work, especially the work which is generally regarded as of high quality, is derived either from American Colonial and English Georgian, or from the English cottage type of architecture. The vogue for French architecture of the epoch of Louis XIV and XV has pretty well disappeared. We find few Italian or Spanish houses, and the traditional styles still less appropriate to American methods of living are conspicuous by their absence: in 1908 and 1909 I wrote a book about country houses in which I included examples of houses derived from Japanese sources. I haven't seen a single recent American house of Japanese origin in the East. American architecture seems to be settling down; the stunt is no longer desirable per se and the architects seem to be finding out what they should have known all along, that there is an infinite opportunity for variation and change within the comparatively narrow limits of the Georgian and English styles. I am inclined to think myself that even the English cottage style will merge gradually with our own Colonial and will add to it a flexibility and ease which the traditional Colonial did not possess.

This confusion of styles is especially noticeable in the treatment of windows. Grouped windows were almost unknown in Colonial work, while they were the rule rather than the exception in the traditional English rural type of house. Among the illustrations we find grouped windows used in houses which are otherwise of purely Colonial origin, yet their presence is not felt as an anachronism. Conversely, in many of the small houses of English derivation we find single double-hung windows in openings of distinctly classic proportion. The roofs in our modern houses of both classic and English origin have often about the same
GARDEN LOGGIA FROM UPPER WALK—RESIDENCE OF F. S. McILHENNY, ESQ., CHESTNUT HILL, PA. MELLOR, MEIGS AND HOWE, ARCHITECTS.
RESIDENCE OF F. S. McILHENNY, ESQ., CHESTNUT HILL, PA. MELLOR, MEIGS AND HOWE, ARCHITECTS.
pitch, and there is a tendency to depart from the strictly classic cornices of the Georgian period, toward the crown molds at the eaves and rake molds on the gables which are suggestive of English cottage work rather than of Georgian or Colonial. Things of this kind appear constantly in the modern house. It is probable that few genuine Colonial houses had dormers at all, and I do not recall any in which the dormers broke through the cornice line. Yet we find very often in modern Colonial work the cornices stopped each side of a dormer, containing a window partly above and partly below the plate line. The rigid and invariable character of Colonial work is constantly becoming freer; the masses are less formal; there is less insistence upon the dominance of a single mass; and there is a tendency to compose the elements which make the country house in a rambling and picturesque fashion rather than with the prim sobriety that distinguished the old Colonial days.

Modern work is very distinctly modern in spite of the obvious derivation of almost all of its examples from classic forms, and yet within the family group of houses around the east there is evident considerable sectional variation. A study of current work will show that our modern houses, derived from the traditional Colonial, possess considerable local flavor and that around Boston the typical New England house continues to prevail, while the Philadelphia houses of today exhibit very strongly the characteristics of the old Pennsylvania work; in the neighborhood of New York we find country houses obviously derived from Colonial English sources, and others which follow the Dutch farm house precedent.

It seems almost impossible to write an article like this without including in it photographs of the best of the modern work of Boston architects and by men from Baltimore and the other Southern cities, but none are at hand and the illustrations are, therefore, perforce confined.
to the work of New York and Philadelphia men. This should not, however, be taken to mean that I believe that all of the finest work is being done by New York and Philadelphia architects, but only that New York and Philadelphia men are doing very fine work and that a sufficient selection of illustrations can be made from these sources to illustrate the point to which American architecture has progressed at this moment, and to indicate its probable future development.

It will be noticed that the illustrations include a larger proportion than usual of houses of masonry construction, and it seems likely that in a not very distant future wooden architecture in the east will become a thing of the past. The expense of wooden construction is now not far below that of masonry, and while I think it unlikely that more beautiful houses can be designed in masonry than in wood (or perhaps even more durable houses), it is none the less true that the fire hazard is an element which leads toward the use of masonry when prices are about equal; also our country house architects have been compelled so long to design in wood that they find it somewhat more interesting to use other materials, either singly for the entire surface of houses, or in combination for different portions of it. They are learning daily how different materials can best be employed, either for artistic or for structural effect. Stucco surfaces are no longer covered with cracks; stone houses no longer leak; brick houses no longer look like sheets of cast iron with joints painted on the surfaces, and with the growing knowledge of materials themselves has come a greater freedom in their use.

Fifteen years ago, the “Colonial” house had to be of wood painted white with green blinds, an “Italian” house had to be of stucco with a tile roof and the “English Georgian” house had to be of brick. We know our styles better today. We know not merely the historic forms, but appear to feel the sentiment of the designers by whom these forms were originated, and as a consequence, our use of traditional styles is much freer in actual line than was the case some years ago and yet far closer in spirit to the old work. I venture to say that there was not a single house built between 1890 and 1905 which would have fooled any one into thinking it was an old house. It was obviously a new house of the general shape, size and color of the older houses; the ornament was exactly duplicated and it lacked only one thing that the old house had—charm. Today, a very large proportion of our work would pass for old, even in the midst of old work, and that not because of any exact adherence to precedent but because our work, even with the plaster fresh on its walls, has the quality of charm which the earlier American designers sought to create by careful adherence to precedent. To take a case outside of the country house field: Charles Klauder built at Princeton a group of dining halls and dormitories in what is roughly called the English Collegiate Gothic style. If the drawings are examined, or if the buildings themselves are closely studied, one is aware that neither the mass nor the detail is English or Gothic, but is derived from English precedent and is an advance upon that precedent; yet the group would not be out of place in Cambridge or Oxford, and even in Cambridge and Oxford would be regarded as one of the finest if not the finest of the colleges. Yet this work of Klauder’s was done without any tricks of artificial aging and without any manufactured imperfections; so in country house work we find many houses which appear in general to be of purely Colonial or Georgian or English precedent, although few indeed are literal transcriptions of old forms either in their mass or in their detail.

At times, I am inclined to think that the effort to produce texture in the country work has proceeded somewhat too far. There exists a craze for reproductions of antique work in furniture, hangings, wall paper, tapestries, etc., which has been reflected in the architecture of the houses to contain these objects, and there is a nebulous border line (often overstepped) between what seems a justifiable treatment of material to produce texture, and the creation of stage scenery by an imitation of the defects of old work. It will
RESIDENCE OF C. M. BROUN, ESQ., GERMANTOWN, PA.
Carl A. Ziegler, Architect.

RESIDENCE OF EDWARD BROWNING, ESQ., DEVON, PA.
R. Brognard Okie, Architect.
RESIDENCE OF C. M. BROUN, ESQ., GERMANTOWN, PA.
CARL A. ZIEGLER, ARCHITECT.

two hundred sixty-two
be remembered that some years ago the imitation of thatched roofs in steamed and bent shingles was exceedingly common. Now the imitation of the effect of one material by the use of another has been an architectural device from the earliest times and cannot in itself be considered as unjustifiable, but when such imitation in a house intended for comfortable and durable housing has these elements sacrificed to the scenic effect, it seems to me that the border line has been overstepped. Probably no one has used the imitation thatched roof more successfully than Mr. Harrie T. Lindeberg, and yet Mr. Lindeberg himself feels today that he was proceeding in the wrong direction when he attempted to get texture and picturesque in a roof surface by means of a device which was neither logical artistically, nor practically durable and permanent. To use another example, in the recently constructed Harkness Memorial Buildings at Yale, the entire exterior of the building has been subjected to an artificial aging process; the architect has consciously produced the effect of repaired work. The mullions of the windows have been chipped and rubbed, stone walls have been apparently repaired with brick, and even the glass in some of the windows has been broken and releaded. There is no question that the Harkness Memorial Buildings are very beautifully designed, interesting in color, comfortable and durable, but to me such tricks were not only unnecessary, but cheapen the quality of the whole structure. The architect was not dependent upon such features to add to the interest of his buildings, for the design itself was fine enough. It is one thing to soften the moldings—that we have learned to do almost as second nature, but quite another to break pieces out of them. It is all very well to so treat the surface of a stone wall that there is a delightful play of light and shadow upon it, and another thing to consciously imitate the defects of old work in an effort to reproduce its charm. Our modern architects are temporarily suffering from a reaction against the hard, wiry, literal adherence to old forms. No doubt eventually the happy medium will be found, and the elements of design and taste will be balanced in their proper proportion.

We are on the whole, doing work of
greater excellence than we have ever done before, largely because we have at length learned that the architect cannot hop about from style to style and produce a masterpiece at every hop. One has to be pretty thoroughly soaked in historic forms before he can be sure that his results will be successful; not because he must copy these forms literally, but because the old work was the patient evolution of many men's work for a long period of years, by which unpleasing or incongruous elements were eliminated. We are now endeavoring to find our own limits, and in so far as the old formulae govern the work of today, we must be aware of them; for the most part this knowledge has been gained, and at last the American architect appears to be thoroughly equipped for his by no means easy task.
RESIDENCE OF I. WISTAR MORRIS, ESQ., CHESTNUT HILL, PA.
R. Brognard Okie, Architect.
RESIDENCE OF DAVID S. BALL, ESQ., RIVERDALE, N. Y.
JULIUS GREGORY,
ARCHITECT.
RESIDENCE OF DAVID S. BALL, ESQ., RIVERDALE, N. Y.
JULIUS GREGORY,
ARCHITECT.

two hundred sixty-seven
RESIDENCE OF DAVID S. BALL, ESQ., RIVERDALE, N. Y.
JULIUS GREGORY,
ARCHITECT.
RESIDENCE OF DR. MALCOLM McBURNNEY, 
ISLIP, L. I. DELANO AND ALDRICH, ARCHITECTS.
RESIDENCE OF WINCHESTER FITCH, ESQ., GREENWICH, CONN. GODLEY AND SEDGWICK, ARCHITECTS.
RESIDENCE OF WINCHESTER FITCH, ESQ., GREENWICH, CONN. GODLEY AND SEDGWICK, ARCHITECTS.
RESIDENCE OF HERBERT E. GUNNISON, ESQ., PURCHASE, N. Y. WESLEY SHERWOOD BESSELL, ARCHITECT.
MAIN ENTRANCE—RESIDENCE OF HERBERT E. GUNNISON, ESQ., PURCHASE, N. Y.
WESLEY SHERWOOD BESSELL, ARCHITECT.
RESIDENCE OF HERBERT E. GUNNISON, ESQ., PURCHASE, N. Y.
Wesley Sherwood Bessell, Architect.

PORCH—RESIDENCE OF HERBERT E. GUNNISON, ESQ., PURCHASE, N. Y.
Wesley Sherwood Bessell, Architect.
RESIDENCE OF E. R. HOOKER, ESQ., NEW HAVEN, CONN. DELANO AND ALDRICH, ARCHITECTS.
RESIDENCE OF GEORGE WHITNEY, ESQ., WESTBURY, L. I. DELANO AND ALDRICH, ARCHITECTS.
RESIDENCE OF BURTON ETHERINGTON, ESQ., GERMAN TOWN, PA. CARL A. ZIEGLER, ARCHITECT.
RESIDENCE OF PAYSON McK. MERRILL, ESQ., WOODMERE, L. I. DELANO AND ALDRICH, ARCHITECTS.

two hundred seventy-eight
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RESIDENCE OF MALCOLM McKay, ESQ., TENAFLY, N. J.
Frank J. Forster, Architect.

STAIRWAY, RESIDENCE OF MALCOLM McKay, ESQ., TENAFLY, N. J.
Frank J. Forster, Architect.
RESIDENCE OF MALCOLM McKay, ESQ., TENAFLY, N. J.
Frank J. Forster, Architect.

GARAGE FOR MALCOLM McKay, ESQ., TENAFLY, N. J.
Frank J. Forster, Architect.
RESIDENCE OF DR. RALPH PEMBERTON, PAOLI, PA.
R. Brognard Okie, Architect.
ALCOVE BOOK ROOM—RESIDENCE OF STANLEY BRIGHT, ESQ., READING, PA. R. BROGNARD OKIE, ARCHITECT.
THE GARDEN—RESIDENCE OF COL. G. W. FRENCH, DAVENPORT, IOWA. HOWARD SHAW, ARCHITECT.
MR. ROBERT ATKINSON, R. I. B. A., in a recent report (to his confrères at home) on architectural conditions in the United States, makes the statement that a defect in American architecture is a certain sameness of style and treatment, a lack of stylistic variety, and that this plastic monotony extends all the way from the Atlantic seaboard to the Golden Gate. Behold a distinguished British architect, critic, and educator saying, in effect, that here is an American style too homogeneous to express our national characteristics, environment, and aspirations. Had he asked American architects, "What is the matter with architecture in the United States?" he would have been told by nine out of ten of them that there were too many styles, too much variety, too little expression of the national genius. I should have said off hand that Mr. Atkinson was wrong, and I still say, on reflection and with qualifications, that he is wrong, and yet when one tries to contrast, by searching out the stylistic differences, the country-houses of East, Middle West, and Far West, the fact that Mr. Atkinson is not far wrong is brought home to one. When we think of the East we think of the Colonial, which we are informed we should call the Georgian style; but, scattered from Chicago to Lake Forest, on the bluffs of Lake Michigan or on the borders of the Skokie marsh, are Colonial houses, lots of them, sufficiently correct in detail (and the best of them sufficiently incorrect), to grace the shady lanes of Duxbury or the forgotten reaches of the James or the Maumee. Twenty years ago, when the Middle West was mentioned, the brilliant and original ornament and philosophy of Louis Sullivan, the long, low casemented houses of Frank Wright, the enthusiastic and courageous work of the other members of the Chicago School arose before one’s eyes, but no longer is this typical. The effort
to create an American style has proved a failure. Many of the youngsters who saw in the golden arch of the Transportation Building the rainbow promise of an American style have, as middle-aged architects, been won over to eclecticism, or few in numbers are practicing with a clientele, not of the general but of the liberated few who share with them their architectural convictions. So no longer can it be said that the Chicago school is typical of country-house architecture in the Middle West. Only when some watcher of the styles surmounts the Rockies and with eagle eyes stares at the Pacific, or, more correctly, at the charming settlements bathing their white feet in its waters, does any distinctly local architectural type swim into his ken. Many houses there may be whose twin brothers and sisters you can find in Des Moines or Cleveland or Cambridge, but there are enough of such as Mr. Grey describes in another part of this magazine to justify the generalization that the Pacific Coast has developed a local school of rare excellence.

One might think that even if the foreigner or domestic critic is disappointed in not finding a strong architectural contrast between what he believes to be the peculiar culture and leisure of the East and the equally suppositious wooliness and feverishness of the West, that differences in environment and particularly in building material would supply the difference in style for which his soul craves. But this is emphatically not so!

The elaborate villa on the prairies of Illinois and in the rocky foothills of the Adirondacks both look to Bedford, Indiana, for their building stone. They are both roofed with heavy and variegated slate from quarries of Vermont. Their oaken floors, trim and exterior woodwork come from the forests of the South. Face brick of all colors and textures comes, much of it, from Ohio and

two hundred eighty-six
RESIDENCE OF COL. G. W. FRENCH, DAVENPORT, IOWA
HOWARD SHAW, ARCHITECT.
RESIDENCE OF HAROLD CLARK, ESQ., EVANSTON, ILL.
LOWE AND BOLLENBACKER, ARCHITECTS.

two hundred eighty-eight
RESIDENCE OF CHARLES B. PIKE, ESQ., LAKE FOREST, ILL.
DAVID ADLER AND ROBERT WORK, ARCHITECTS.
RESIDENCE OF CHARLES B. PIKE, ESQ., LAKE FOREST, ILL.
David Adler and Robert Work, Architects.

RESIDENCE OF CHARLES B. PIKE, ESQ., LAKE FOREST, ILL.
David Adler and Robert Work, Architects.

two hundred ninety
RESIDENCE OF M. R. SHUMWAY, ESQ., ROCKFORD, ILL.
Chatten and Hammond, Architects.

RESIDENCE OF CHARLES B. PIKE, ESQ., LAKE FOREST, ILL.
David Adler and Robert Work, Architects.
is freely shipped from state to state. There are certainly no local characteristics inherent in paint or plaster or glass, and when these country houses are designed by men educated for the most part in the same institutions and all looking to the old world as the procreator of taste, how can we expect fundamental or even superficial differences? There are no local schools in automobiles, in golf clubs or even in clothes. Local schools where they exist are therefore purely intellectual and factitious, limited to a town or two, and run a brief course. They almost invariably cluster about the work of some particularly strong designer who does work sufficiently distinguished or commanding to attract a following which conscientiously or unconsciously imitates him.

Especially significant were the houses hand picked for the critical inspection of the visiting delegates of the American Institute of Architects held last spring in Chicago. Were they examples of the Chicago School? Were they specimens of architecture that would be something new under the sun to the architectural Brahmins from Boston and New York? They were not. They were houses so cosmopolitan in type that each could have smiled forth just as confidently from among the maples of Newport or the laurels of Fiesole. Each was distinguished in its locality for its impeccable discrimination, and together they formed a most illuminating school of comparative taste.

The first was a pure example of exoticism, an eighteenth century gardenia transplanted from the banks of the Loire and doing very nicely on the shores of Lake Michigan. The second, by a famous Eastern architect, was a pure but not simple Italian villa, rather sophomoric in its rarified company. The third was the only one that dared, most
successfully, a touch of Shavian originality. The fourth, illustrated in this article, of no distinctive style, had drawn in the milk of architectural beauty of several ages and climes. It perhaps best typifies the prevailing ideal.

Taste; the sense of absolute pitch in architecture, the flower on the topmost bough of the tree of knowledge, is the leit motif of the country house architecture of today. Twenty years ago it was correctness of style, ten years ago fashion, but today (I am speaking only of the best work) there is no insistence on style, nor is there any sheep-like following of any latest mode. But sense and sensibility in architecture, decoration and landscape gardening, is required and delivered. There is nothing heroic about this savor of the beautiful, this taste, but there is nothing heroic about country houses. Nevertheless, an instinctive perception of the beauty and fitness of all that goes with the building of the house is the brightest flower, the sweetest fruit, so far, of eclecticism.

One of the encouraging symptoms of this present and coming era of taste is a better rapport between architect and decorator. Their conflict, like that between dogs and cats and nature and a vacuum, is proverbial, dating back as it does to the family row among the arts in the sixteenth century, when Architecture, Painting and Sculpture, having been operated on by Drs. Brunelleschi, Da Vinci and Donatello, became endowed with a new vigor and decided to go it thenceforth "on their own." The architect has been in the habit of regarding the decorator as a necessary nuisance, a man without artistic conscience and devoid of any appreciation of the dignity of architecture. That he
would, if given the opportunity, cover the walls of the Pantheon with a *chic* wall paper or hang chintz curtains over the windows of Amiens, the architect had not the slightest doubt, but the decorator in the last ten years has seen a great light. No longer is architecture created as a background for an all over splurge, no longer does the decorator begin where the architect left off. Yesterday decoration was largely a matter of covering walls and ceilings and working out color schemes for various rooms. The hangings he provided but the furniture and pictures "came from the old house." Today the house is decorated before the decorator begins, and he has become largely a furnisher and an antiquarian. The walls and ceilings require no coverings or color scheme, at least in the principal rooms, but great skill and experience is required in the selection of hangings, of furniture, rugs, pictures, tapestries, etc. The architect has learned, too, from the decorator. He has seen even in imitation and sham a means of getting certain decorative and joyous effects impossible in the true and rigorous material. Thus plaster and wood crudely painted in imitation of marble may in some places bring back the quaint charm of 18th century artificiality. I have seen a linoleum floor elaborately painted with lozenges and circles of verd antique and sienna which was warmer and more home-like and certainly less slippery than its marble original. The lamp of truth is not going to be extinguished because its flame glows rose red occasionally and even sputters a bit, nor is Diana's authority lessened if some of her handmaidens be less chaste than herself; but over these examples of architectural wantonness, of these strayings from Phidian paths, taste must rule with an iron hand.

If sameness of type is a defect, our two hundred ninety-four
gardens are in worse case than our country houses. The only national style of gardening we ever had flourished fifty years ago. The hard smooth lawn, the canna and geranium flower beds cunningly fashioned by the German gardener in the shape of stars, crescents, anchors, etc.; the cast iron dog; the bright green fountain with the white storks of the same rigid material as the dog and drooling a stream of water as feeble and futile as the whole layout, are fortunately gone. No, the principal defect of landscape gardening in the Middle West is that there is so little of it. The profusion of beautiful gardens in Lake Forest, Illinois, is the exception. Here as elsewhere in the Middle West and in the East the estate in general follows an informal or naturalistic type of development including a formal garden, usually small in scope, laid out in a modified Italian manner and located on the axis of one of the principal rooms of the country house. Owing to the calcareous nature of our soil, we are at a disadvantage with our eastern cousins. Such decorative plants as laurel, rhododendrons, and English ivy will not grow successfully with us, and in most localities abrupt differences in grade can only be obtained artificially. Gardening with us is in its ‘teens, but is rapidly coming on. Such organizations as the Women’s National Farm & Garden Association with its local garden clubs are doing a splendid work. The influence of Jens Jensen—an apostle of natural planting and informal arrange-
THE ARCHITECTURAL RECORD for OCTOBER NINETEEN TWENTY-TWO.

RESIDENCE OF E. L. KING, ESQ., HOMER, MINN. GEORGE W. MAHER, ARCHITECT.
ment, and of the development of the "Prairie Line"—has been considerable and beneficial. The Friends of Wild Flowers, The Forest Preserves and the examples of such gardens as Mr. C. L. Hutchinson's at Lake Geneva have encouraged the development of wild flower gardens. Dry wall planting, heretofore thought to be impossible, has been proved extremely practicable, and in this feature, together with the use of perennials for borders and backgrounds, we see the influence of William Robinson, the English formalist, and Sir Edwin Lutyens.

In many respects the trilogy of the country house—the house itself, its decorative contents, and its use of nature for a setting—is the best thing that American architects have done. The writer was told last spring by an English architect after a little journey that took us from Hampstead Heath to Threadneedle Street, and comprised most of the important work done in the last ten years, that the principal architectural influence in England today was the United States. We undoubtedly have taught her a great deal in the planning and construction of monumental buildings, and have left traces of our fine Italian hand in her architectural design, but if we tried to teach old England how to build country houses we would be assuredly sending coals to the well-known city on the Tyne!
RESIDENCE OF FRANCIS PARKER, JR., LAKE FOREST, ILL. CLARK AND WALCOTT, ARCHITECTS.
RESIDENCE OF FRANCIS PARKER, JR., LAKE FOREST, ILL. CLARK AND WALCOTT, ARCHITECTS.
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RESIDENCE OF MARK ROSS, ESQ., FLOSMORE, ILL. PURCELL AND ELMSLIE, ARCHITECTS.
Simmons Residence, Kenosha, Ill.
N. Max Dunning, Architect.
HOUSE IN EVANSTON, ILL.
Clark and Walcott, Architects.

HOUSE IN WINNETKA, ILL.
Clark and Walcott, Architects.
RESIDENCE OF JUDGE STEPHAN FOSTER, WINNETKA, ILL.
Tallmadge and Watson, Architects.

three hundred five
RESIDENCE OF J. O. EATON, ESQ., AMBLER HEIGHTS, CLEVELAND, OHIO.

Frank B. Meade and James M. Hamilton, Architects.
RESIDENCE OF J. O. EATON, ESQ., AMBLER HEIGHTS, CLEVELAND, OHIO.
Frank B. Meade and James M. Hamilton, Architects.

three hundred seven
RESIDENCE OF D. L. JAMES, ESQ., CARMEL HIGHLANDS, CAL. CHARLES SUMNER GREENE, ARCHITECT.

three hundred eight
SOME COUNTRY HOUSE ARCHITECTURE IN THE FAR WEST

By Elmer Grey

If the style of country houses were more generally measured by the degree to which they fit their environment, instead of by that to which they coincide with those of distant countries, the much discussed problem of architectural style would be greatly simplified. If this factor of adaptability to environment is borne in mind when considering the country house architecture of the Pacific Coast, some of it may be better understood. The Pacific Coast, like our country as a whole, is divided into sections, the architecture of each influenced by certain marked conditions. Some of these involve the juxtaposition of neighboring countries, while others, in some cases more important, have to do with climatic or topographical characteristics. On the south is the architecture of Southern California, influenced by the proximity of (Spanish) Mexico and by a climate and topography similar to that of Spain, Italy and Sicily; on the north is the architecture of Washington and Oregon, influenced by the proximity of (English) Canada and by a climate and arboreal growth not unlike that of some parts of England. Between these two, and of course merging more or less into them, is the architecture of Northern California, affected somewhat by the influences to the north and south but also in certain districts and in some instances by marked topographical characteristics of its own.

I feel that too much emphasis is often placed upon the architecture of distant countries in considering the style of country houses, and far too little given to the idea of making a particular home fit its particular environment; and this truth could not be better exemplified than by considering a certain stretch of country situated about one hundred miles south of San Francisco, in connection with a very notable country house recently built there. To make this point clearer it is necessary to say something descriptive of the particular stretch of country in question. I shrink from this task because I know that no words of mine can begin to do it justice. I am ashamed to say that I lived in Southern California for something like fifteen years before I discovered one of the most beautiful sections of coast and mountain scenery in the world—rivaling the Italian Riviera with its Amalfi and the eastern Sicilian shore with its Taormina—and that so beautiful a spot was as near my home as this section on the Pacific Coast, south of San Francisco, called Carmel Highlands.

The shore line at this point is very high and rocky and is indented with many bays and small inlets. Into these inlets ocean swells roll and dash and surge, and here and there fields of seaweed, clinging tenaciously to half submerged rocks, are wafted to and fro like miniature forests. Above the roar and spray rise the rocky walls of cliffs whose jagged faces have been seared and broken by the constant pounding of the waves, and whose brilliant color has afforded endless inspiration to artists. On top of the cliffs the country in some places is thickly overgrown with pines and the gnarled shapes of Monterey cypress, while at others are open fields interspersed with massive boulders and occasional trees and often dotted with the white and black or reddish brown spots of grazing cattle. The inlets referred to must have been ideal places at one time for smugglers and buccaneers, and some of their landing places may still be located by much corroded iron rings here and there, evidently driven into interstices in the rock ages ago. Back of the cliffs there rise in some places towering mountains of majestic outline, while at others peaceful
valleys wander inward, inviting exploration and promising further delight to the appreciative eye of the seeker.

It is amidst such wild and beautiful scenery as this that Mr. D. L. James undertook to build a home.

He chose as his architect Charles Sumner Greene, of Carmel-by-the-Sea, and he could not have done better. Mr. Greene has been excellently trained; it has been said that an artist should learn the rules of his art and then try largely to forget them, and Mr. Greene has been as good a forgetter of this kind as he has been a scholar. The rules of art, like our laws of justice, are made to cover generalities; and just as there are doubtless many miscarriages of justice in consequence, so in art, when great fundamental conditions of suitability to marked scenic characteristics overtop in importance rules which were made to cover generalities, it is too bad that more architects are not able to sense the more important conditions and discard the rules. If Mr. James’ house follows any historical style I have yet to know just which one it is; there are features about it which recall the Spanish, there are others which are not Spanish at all. The general effect of the house is not recognizably Spanish. The house appears to me as though by some species of spiritual affinity it had alighted upon the rocky bluff and stayed there, or else that by some peculiar generating power it was born upon the rock itself. This is not an attempt at flowery language; it is as near as I can get to describing how it actually impressed me. Laymen will timidly ask architects their opinion of it, hoping for commendation but dreading lest its very unusual quality be considered by those better qualified to judge sufficient cause for shattering their admiration of it. Yet with all this unusual quality it is not ostentatious. Its unusualness does not shock by any violation of good taste, but rather surprises by a rare suitability.

The material of which it is constructed is practically the same rock as that upon which it is built. The long narrow pieces of this stone have been cut into horizontal fissures by very deeply struck joints of uneven width. This gives the same general worn-by-age appearance as that of the cliffs. The color aspect of the stonework is saved from sameness by a tile roof of a delightfully faded old rose color—and the tiles are distributed around in just the right proportions, some on top of the chimneys and other bits elsewhere, so as to form a proper color balance. They were not laid in geometrical lines either vertically or horizontally. Nine architects out of ten would have laid them that way, but this is an instance where not only were rules forgotten but where the architect went out of his way to violate them. The ridge lines roll up and down with delightful waywardness, and the vertical lines of the tile appear and disappear as their usual course has been intentionally broken. The way some of the main lines of the building grow out of the rock and huge boulders upon which they are built, their foundations often beginning many feet below and gradually working upward in sympathetic conjunction with the native cliff rock, has been managed so skilfully that it is impossible in some cases to tell where the one ends and the other begins. This kind of work is not architecture as architecture is now commonly known—it favors of a more plastic art, of the building of a home in thorough keeping with its rugged site. Ordinary present-day architectural methods did not prescribe the rules for its expression. In fact, I doubt whether the same result could have been achieved by ordinary present-day architectural methods. The work was done on the percentage basis and changes were made from the original plans as seemed advisable as the work progressed. I am not championing this method particularly, because I believe it has its disadvantages as well as its merits, but I mention it because it explains how some of the remarkable results here obtained were accomplished. To quote Mr. Greene: “Ordinarily, when plans are made for a house, after careful study they are practically final, and the specifications minutely exact. These are turned over to a contractor who by contract produces the completed product. Whether he does the work by percentage or a stated sum doesn’t matter, he directs the work. Now

three hundred ten
three hundred eleven
RESIDENCE OF D. L. JAMES, ESQ., CARMEL HIGHLANDS, CAL.
Charles Sumner Greene, Architect.
RESIDENCE OF D. L. JAMES, ESQ., CARMEL HIGHLANDS, CAL. CHARLES SUMNER GREENE, ARCHITECT.
ELEVATIONS, RESIDENCE OF D. L. JAMES, ESQ., CARMENT HIGHLANDS, CAL. CHARLES SUMNER GREENE, ARCHITECT.
the James house was not built that way. The architect hired the men and directed the work personally; except for plumbing, electric wiring and tiling, there were no contracts.

"Here is the difference; prevailing custom is system of administration by recorded instruction; mine is not any system, but personal direction on the job. The first is fixed, the second is elastic, yielding to contingencies, open to inspiration."

I don't know who was the first to recognize that in a spot of such romantic beauty it was due the countless thousands who would afterward view the place, to build something there that would not detract from the original aspect of the scene; whoever it was, the obligation was wonderfully met. Too often in a place of great natural beauty, people will build that which for generations afterwards will be nothing short of an offense to the eye. There ought to be some kind of censorship at all such places, which would see to it that only such buildings were built there as would harmonize with Nature's original plan. Such a censorship has been tried and has been a success. At St. Francis Wood, an outlying suburb of San Francisco, the land was sold on the condition that all plans for buildings to be erected thereon would have to meet the approval of an architect engaged by the sellers for such a purpose, and just as a monetary building restriction operates to deter some from buying but attracts others of a higher class, so did this quality censorship operate ultimately to enhance the value of the property. Of course, it took courage to do it, but what is the use of living if not to attempt to do things worth while. Adjoining Carmel Highlands, there is some-
thing like twenty-five miles of country to the South which is of the same class of rare scenic beauty and which undoubtedly will some day be opened to the public for residential purposes. If the sellers of such beautiful stretches of coast line would look far enough ahead and control the quality of the houses built thereon, what might they not do for posterity?—yes, and also for themselves! For what is it but beauty that causes tourists to flock to the Italian and French Rivieras and spend their money there? What is it but the lack of such beauty that causes other districts of Europe to be scarcely visited by money-spending tourists at all? And what constitutes the attractive quality of the former popular resorts, but the charm of what man has added to them in the way of well-designed architecture? There is no question or doubt but that uniform good taste displayed in buildings in such a coast district as that of Carmel Highlands and the country south of it, secured by some sort of effective censorship, would make of it one of the most valuable resorts in the world.

Carmel Highlands itself has so far been rather fortunate in this respect on the whole. There are a few houses there which, if it could only be done without hardship to their owners, might well be engulfed by a tidal wave, but for the most part the homes are inoffensive and a few are charming.

The one hotel, Carmel Highlands Inn, is a structure that fits its surroundings beautifully. It is built of native rock, and so far as I know no architect was employed to design it; nevertheless, whoever did it had a sympathetic appreciation of the beauty of the site and planned in accordance therewith in a way that is entirely satisfying.

Near the hotel on the side of a bluff, is another house of appropriate character, the home of Mrs. Charles Bigelow. It
RESIDENCE OF MRS. CHARLES BIGELOW, CARMEL HIGHLANDS, CAL.
PATIO, RESIDENCE OF HENRY W. SCHULTZ, ESQ., PASADENA, CAL. ELMER GREY. ARCHITECT.
RESIDENCE OF HENRY W. SCHULTZ, ESQ., PASADENA, CAL. ELMER GREY, ARCHITECT.
RESIDENCE OF HENRY W. SCHULTZ, ESQ.,
PASADENA, CAL. ELMER GREY, ARCHITECT.
RESIDENCE OF HENRY W. SCHULTZ, ESQ., PASADENA, CAL. ELMER GREY, ARCHITECT.

three hundred twenty-one
PLANS OF FIRST AND SECOND FLOORS, RESIDENCE OF WILLIAM M. LADD, ESQ., PORTLAND, ORE. LAWRENCE AND HOLFORD, ARCHITECTS.
RESIDENCE OF WILLIAM M. LADD, ESQ., PORTLAND, ORE.
Lawrence and Holford, Architects.

RESIDENCE OF GEORGE T. COOK, ESQ., PEBBLE BEACH, CAL.
Pierpont and Walter S. Davis, Architects.
RESIDENCE OF GEORGE T. COOK, ESQ.,
PEBBLE BEACH, CAL. PIERPONT
AND WALTER S. DAVIS, ARCHITECTS.
RESIDENCE OF GEORGE T. COOK, ESQ.,
PEBBLE BEACH, CAL. PIERPONT
AND WALTER S. DAVIS, ARCHITECTS.
RESIDENCE OF GEORGE T. COOK, ESQ.,
PEBBLE BEACH, CAL. PIERPONT AND WALTER S. DAVIS, ARCHITECTS.
HALLIDAY HOUSE, SANTA MONICA, CAL.
PIERPONT AND WALTER S. DAVIS, ARCHITECTS.

three hundred twenty-eight
HALLIDAY HOUSE, SANTA MONICA, CAL. PIERPONT AND WALTER S. DAVIS, ARCHITECTS.
HALLIDAY HOUSE, SANTA MONICA, CAL.
Pierpont and Walter S. Davis, Architects.

three hundred thirty
LOUGHLIN PARK, HOLLYWOOD, LOS ANGELES, CAL.
WILLIAM M. CLARKE, ARCHITECT.

three hundred thirty-two
stands somewhat below the level of one of the main roads and since one thus looks down upon it, the appearance of its roof became an important consideration. This fact was duly recognized, a hint was taken from the proximity of the giant redwood forests, and the roof was accordingly covered with huge slabs of redwood put on as shingles and averaging perhaps two inches in thickness at their butts. The resultant effect is not only unusual, but harmonizes exceptionally well with the tall pine trees abounding in the neighborhood and with the general rugged character of the surroundings. A lovely garden of equally suitable design forms an acceptable accompaniment to this house. It consists of well proportioned paved spaces situated upon different levels, of flights of steps built of rough stone connecting and binding the different levels together, of enclosing walls of the same yellow colored rock, of quiet pools and of native plants and flowers growing contentedly in and among the crevices of the rocks.

Even a portion of a house (the studio of Mr. William Ritschel, to be enlarged later on), although at present but a cube in shape, fits its environment better than do some of the more pretentious houses there, simply because of the sympathetic manner in which the texture of its stone walls was handled.

A few miles north of Carmel Highlands, at Carmel-by-the-Sea, is El Carmelo Mission, and a short distance still further north is the old city of Monterey where are still standing many original Spanish buildings. There is, however, all around this district a climatic suggestion of the northern part of the Pacific Coast. Fogs are more or less prevalent and consequently a much richer vegetation is noticeable than is to be seen further south in California. Two influences
are thus at play there, the Spanish buildings more typical of the south, and a touch of the more vivid greenery characteristic of the north. These two influences find their expression in the architecture of the district somewhat, and it is right and proper that they should. Just such influences as these, properly sensed and heeded by those who build, give architectural individuality to a place. Some may question this and others may even say, "Why not build anything one wants anywhere and in any style one wants?" but the answer to such a query is so conclusive and contains such important truths that we may well consider it for a moment.

Most people when they build hope to please that part of the public possessed of the best taste—and those who don't surely should! Now the principles governing the best taste are fixed; it is only their application that varies. These principles were enunciated over a century ago by Sir Joshua Reynolds in his Discourses on Art. He applied them to the art of painting, but they are equally applicable today, with but slight variation, to the art of architecture.

"In all cases," Sir Joshua wrote "in the lightest amusements as well as in the most serious actions and engagements of life, we must regulate our affections of every kind (that is, our tastes), by that of others. The well disciplined mind acknowledges this authority, and submits its own opinions to the public voice." Then he goes on to speak of the "deference which we owe" to such previous character of architecture, and that "deference" it seems to me is the root of the whole matter. A man hasn't a right to come to a new country and build anything he likes there regardless of its character or previous architecture, simply because such an act would be a bull

RESIDENCE OF W. S. MORSE, ESQ., PASADENA, CAL.
Reginald D. Johnson, Architect.

three hundred thirty-four
in a china shop procedure. People of the best taste do not like it, and it is not logical. "An affection to old habits and customs is a predominant disposition of the mind, and novelty comes as an exception; where all is novelty the attention, the exercise of the mind is too violent," Sir Joshua also wrote. The weakness of much of the present architecture in Southern California consists of just such a condition, namely that building companies and real estate men, and even some architects, have crowded certain suburbs with every conceivable kind of architectural innovation in a frantic endeavor to secure novelty, and the result is that "the exercise of the mind is too violent."

What is needed there is more of the atmosphere of some portions of Philadelphia or London, where a uniform similarity among the buildings creates a quiet, satisfying harmony. Just now the general character of the architecture in Southern California is too much like a fancy dress party. I once knew a firm of architects of whose work a criticism was overheard in a street car. The remark was, "Oh, yes, I know of them, they are the plain architects!" What Southern California needs now is more "plain architects"—architects whose buildings do not cry to high heaven for recognition but, like well-dressed men on the street, are willing to conform to an established convention. Fortunately there are tendencies working in that direction. The present craze for the Spanish is teaching the value of plain wall surfaces and of interesting wall textures, and although many of the plastered surfaces of Spanish houses in Southern California have been done poorly, and some even grotesquely, the good examples ought finally to have the stronger influence through selection and process of
elimination. Even the attempts of the Hopi Indian may not be without their value; for they show how much more pleasing is the undulating wall surface than the absolutely straight surface on a plastered wall. Some instances of houses done after this manner have been well composed and relieved by foliage and have produced charming effects.

It is not only to the architecture of the immediate locality in which we build that we owe such a deference as Sir Joshua speaks of, but we also owe a lesser one to that of more distant neighbors. That is the reason why, in building in Southern California so near to Spanish Mexico, we should by some sort of recognition in our design, however slight, respect the Latin architecture so close by. That is the reason why in building in the state of Washington some regard for the architecture of our Canadian neighbors is due. It does not follow that we must build exactly like the Spaniards when we build in Southern California, nor exactly like the Canadians when we build in the state of Washington, because we have our own individuality to express as well as theirs to respect, but nevertheless, the two styles situated so near each other should be brought somewhat in accord.

This can be and is being done in various ways. English houses built in Southern California look better when covered with stucco rather than with face brick—probably because most Latin houses there are of stucco—and many of them appear quite at home when done that way. Colonial houses whose detail has been merged into the Italian appear better there than such houses whose detail is strictly Colonial—and why should they not, since the Colonial and Italian detail both came from the same root, while most of the Colonial style, as a whole, was born in a northern clime. Whatever in this manner tends to harmonize styles whose home environment was quite different, but which undertake to come mingle in the Far West, seems to be a help.

And why should it not, for still another reason? When a painter paints a picture he must unite the various parts of his subject into a unity of composition if he is to create a work of art. When a writer writes a story or an essay he must make of it a unified conception if it is to be a work of real merit. Why should not the greatest composer of all, who uses the inspirations, the characters and the talents of men as material out of which to mould the architectural styles of countries, and who takes generations of their lives in which to accomplish his purpose, work in like manner?

Those who come to the Far West come from all over the world, bringing with them likes and dislikes that are radically different, and while undoubtedly it is asking too much to expect that they should part with such accumulated associations altogether when they move West, yet certainly they should be willing to meet the West half way. I once had a client who intended to build in Coronado. He was a middle-westerner, but nevertheless, he realized that he was about to build in a country whose traditions and climate were totally unlike his former place of residence, and one of the first things he said was, that he did not wish to do anything in his building operation that would not conform with the architectural spirit of his new environment. If more people who move to the Far West had that idea, it would be better for the country.

Perhaps it is inevitable that there should be a jumble of styles in the West for quite a while to come; with all the different tastes that are constantly arriving there perhaps it cannot be otherwise, but certainly these must eventually be harmonized if ever they are to be welded into a homogeneous style or styles characteristic of its various sections. To be sure, a lot of such harmonizing will have to be done to accomplish such a result—but I have wondered at times what London looked like when it was as new as Los Angeles!

To a greater degree than England ever was is the Far West a kind of alembic into which have been poured the architectural aspirations of multitudes of dissimilar people. Something of a distilling process even now is undoubtedly going on. After it has been under way for a few more generations perhaps it will

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yield something in the way of architectural style that will be really creditable. The Far West has not been unlike all of America in that respect. Our country as a whole has been a melting pot for the architectural styles of Europe. In the West, the raw metal has had less time to cool. Some day it must cool and only then can the quality of its architecture be thoroughly and fairly assayed.
LOGGIA DETAIL, "A" HOUSE, MARAVILLA CO., OJAI, SANTA BARBARA, CAL.
GEORGE WASHINGTON SMITH, ARCHITECT.
NORTH FACADE, "B" HOUSE, MARAVILLA CO., OJAI, SANTA BARBARA, CAL. GEORGE WASHINGTON SMITH, ARCHITECT.
SOUTH FACADE. "B." HOUSE, MARAVILLA CO., OJAI, SANTA BARBARA, CAL. GEORGE WASHINGTON SMITH, ARCHITECT.

three hundred forty-two
three hundred forty-three
ENTRANCE DETAIL, "B" HOUSE, MARAVILLA CO., OJAI, SANTA BARBARA, CAL. GEORGE WASHINGTON SMITH, ARCHITECT.
Now that so much of our furniture for modern homes is being designed and built in the English period styles, a critical, comparative estimate of the merits of those styles becomes a matter of ordinary business prudence to the purchaser. With the styles of three centuries to choose from, the discriminative faculty must needs be exercised. In cases where architecture determines the furniture style in advance, the choice is easy, but not so for the average householder.

While the Elizabethan, Jacobean, William and Mary, and Queen Anne styles are receiving increasing attention from manufacturers, the styles of the Georgian period have by no means been abandoned. Indeed, there is plenty of evidence that American purchasers still harbor a preference for eighteenth century mahogany. It is for this reason that a critical and appreciative study of the work of the Georgian cabinet makers is especially timely.

Thomas Chippendale has long enjoyed the reputation of being the greatest of the Georgian designers and craftsmen, and for many years the American purchaser has believed that in owning a Chippendale chair or a worthy reproduction thereof he has secured the very best that the past has to offer him. It is difficult to unsettle so long established a belief. It is, indeed, based upon a solid foundation, for at his best Chippendale was a master. But not all of his chairs had delicately fashioned backs of satisfying proportions and graceful cabriole legs. Some of his chairs were coarse and clumsy, and his straight, sturdy, square leg is usually quite lacking in style or grace. Any carpenter could have made it. Moreover, Chippendale was prone to slip into the fantastic and to mix his Chinese, French, and Gothic elements until the hybrid resultant will hardly stand the test of the analytical criticism of the modern expert.

Sheraton, again, has always been the artist's artist. The simple chastity and perfect proportion and workmanship of his best designs, while they lack the popular appeal of the more showy Chippendale, have always held the highest place in the estimation of the connoisseur.

Between these two lies Hepplewhite, always mentioned with them, always given a place with the Great Three, but often failing to receive his full meed of appreciation. Hepplewhite was not a greater artist than Chippendale or Sheraton. But there is an element in his work that should receive fuller recognition and that should make his designs more popular in modern homes—the element of sanity.

Both Chippendale and Sheraton went oft astray after false gods, as did Manwaring and the other lesser lights. Hepplewhite, while he never reached the heights of excellence to which the genius of Chippendale and Sheraton occasionally brought them, never allowed himself to be lured by mere novelty or to depart from the orthodox canons of design into the field of the bizarre. He was not a classic scholar like Robert Adam, nor did he ever quite achieve the perfection of delicacy which distinguishes Sheraton. On the other hand, he combined a true sense of design with balance, restraint, and common sense, and he avoided the ultra-fantastic of which neither Chippendale nor Sheraton were guiltless. He was more thoroughly British than they—a straightforward business man rather than an eccentric artist, who yet knew how to produce original ideas of standard excellence.

R. S. Clouston, the English authority, says: "I am unable to rank Hepplewhite with Chippendale on the one side, or Sheraton on the other, either in construction or design, yet there is an indefinable charm about his work, even when faulty by rule, which, like some old song, touches a higher and more human note than can be attained by mere correctness."

I can hardly agree with Mr. Clouston's disparagement of Hepplewhite's "correctness," for he was no careless designer, and he knew his trade. If the author had substituted the word
"novelty" or even "originality" for "correctness," the point would have been better taken. It is what Mr. Clouston calls the "human note" in Hepplewhite's work that appeals to us—that domestic element that all good household furniture should possess. That is what I mean by the sanity of Hepplewhite's designs. They can be counted on to satisfy, to react pleasurably on the senses, to wear well, and to serve their utilitarian purpose with elegance and a measure of distinction.

Thomas Chippendale's biography is the story of a brilliant success; Thomas Sheraton's that of a somewhat erratic and embittered genius with lofty ideals. George Hepplewhite has no biography. Not enough is known about his life and personality to furnish even a brief notice for the "National Dictionary of Biography." Perhaps he was a very commonplace man, with no outstanding qualities worthy of notice and with a career devoid of adventure. Even that somehow suggests sanity. And his work was not commonplace. That forms his true biography.

Of his birthplace and the date we have no record. It is said that he learned his trade with the Gillows at Lancaster and that later he started in business for himself, appearing at length with a Gainly establishment in Redcross Street, Parish of St. Giles, Cripplegate. He probably died in 1786, for the records show that on June 27 of that year, the administration of his estate was granted to his widow, Alice Hepplewhite. He left a profitable cabinet-making business and property of considerable value. After his death the business was carried on by his widow and partners, trading as A. Hepplewhite & Co., and it is their name which appears on his posthumous book of designs. The first edition of "The Cabinet-Maker and Upholsterer's Guide" was published in 1788, the second in 1789, and the third in 1794. It was a businesslike book for the trade and the most notable of several similar works published by various cabinet makers at about the same time. The designs contained therein are not of uniform excellence, but they are none of them extreme in type, and it is safe to say that Hepplewhite's own furniture was better than that shown in his book.

Hepplewhite was probably less an original creator of styles than the best living exponent of the fashions of his day. Those fashions developed naturally, assisted by the classic interest fostered by the Adam brothers. After Chippendale, whose books were published in the fifties, came a number of imitators of inferior ability—Thomas Johnson, Matthias Lock, Robert Manwaring, Ince & Mayhew, and others. Of these, Manwaring exerted possibly the widest influence. They all followed Chippendale to a greater or less degree, or at least their designs followed the same style tendencies, not omitting the extravagances. That was the fashion of the day, Chippendale being only one, though the foremost one, who made it his business to follow it.

Then, more or less gradually, the fashions changed. The public was getting tired of the curves and excrescences of Chippendale's disciples. Robert Adam's chief activity as an architect and designer came between 1765 and 1780, and though he was more fully responsible for Sheraton's style than for Hepplewhite's, his influence on the general popular taste was marked. The Gillows began making a more formal, more restrained line of furniture and during the eighties the work of other designers and cabinet makers came into vogue.

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George Hepplewhite was one of these. He founded no school, perhaps, but he produced the best designs that the fashion of the decade demanded. His first book, "The Cabinet Maker's London Book of Prices," was not published until 1788, but Hepplewhite undoubtedly had been making furniture in this style for some years before. Then again the fashion changed to the styles of Sheraton and the Adam-classic school.

Just how far Hepplewhite was a leader and how far a follower in the matter of style development it is difficult and, indeed, unnecessary to decide. Others made furniture in the now so-called Hepplewhite style. It was the style of a period rather than of one man, perhaps. But Hepplewhite was always just a little in advance of his day, just a little stronger than his contemporaries. His work bears the touch of a master hand. He was an individual, not an intangible influence. His was a personality that unquestionably impressed itself on the taste of his day.

Like Chippendale, Hepplewhite borrowed freely, both from France and from England. He and Sheraton were fortunate in coming after furniture-making had been established as a profitable business as well as one of the arts, and there was a mass of material for them to draw upon.

Hepplewhite did not follow the classic delicacy of Adam in all its purity, but it was to Adam that he owed his greatest debt. It was apparently Hepplewhite's aim to break away from the Chippendale tradition and to combine elegance with lightness and restraint, and in the Adam introductions he found the most available material for this. From Adam he took the tapering leg which he did most to popularize, the oval chair back, and painted ornament. He nevertheless did not scorn, as did Sheraton, to retain such of the Chippendale manner as seemed to him good, though he was gradually weaned from it. At the outset he abandoned most of the curves of the Chippendale-Louis XV type.

Though not a thorough-going classicist, Hepplewhite absorbed much of the classic feeling. His style may be said to possess classic refinement without severity. It shows the influence of the Louis XVI, like all the English styles of the period.

The popular taste at this time was veering away from solid mahogany, and lighter woods, such as satinwood, tulip wood, chestnut, sycamore, and stained woods were coming into vogue, each being used to a considerable extent for painted furniture. Hepplewhite made use of this diversity of rare and decorative woods in his inlay, but he clung to mahogany far more consistently than did Sheraton, and in this he again displayed his solid common sense. For however beautiful satinwood furniture may be in itself, it lacks that quiet charm for domestic purposes that men have always found in mahogany. He used satinwood and rosewood moderately to meet special demands. His chairs were mostly solid mahogany, his sideboards sometimes veneered. He occasionally painted or japanned his furniture after the Adam manner, but he seemed to realize the lack of durability in finish of this sort and never followed this lead to the extent that Sheraton did.

Hepplewhite, though not a master carver like Chippendale, used carving with greater restraint and most effectively. His low relief carving of flutes, wheat ears, etc., was exceptionally good. It was in inlay, however, that he excelled, and he produced some of the most refined and tasteful inlay to be found on English furniture. It never verged upon the florid exuberance of Dutch marquetry. On the doors of wardrobes and the fronts of
drawers he used a veneer of the beautiful curl mahogany that came into favor about 1760, while on the fronts of his solid mahogany tables, sideboards, and bookcases he substituted for carving an inlay of low-toned contrasting woods in simple patterns. The legs of his tables and sideboards were frequently ornamented with delicate vertical patterns in sycamore and tulip wood. He was fond of using narrow lines and bands, herringbone patterns, the meander pattern, and the Greek fret, while the wheat ear appears constantly in his carving and inlay. His finest and most elaborate inlaid work, perhaps, is to be found on his table tops.

In the matter of furniture legs, Hepplewhite's work marked a distinct departure from Chippendale. The cabriole leg he abandoned entirely. He also departed from Chippendale's square leg with parallel sides and introduced the tapering square leg, usually ending in the spade foot which added a needed look of strength. He also used to some extent the turned leg, not to be found in Chippendale's work. On some of his larger pieces he used the short bracket foot. His favorite, however, was the square, tapering shaft.

Hepplewhite's furniture was unequal in quality, but his chairs, sofas, sideboards, and bedroom furniture were among the best ever made in England, and he is remembered chiefly for them. Modern designers of chairs probably owe more to Hepplewhite than to any other one designer. Like Chippendale, he devoted his best efforts to the chair. Hepplewhite chairs are refined and elegant in proportions and are almost always stronger than they appear. The designs are structurally sound. Though never commonplace, they are always sane and practical.

Hepplewhite's chairs are best known for their shield-shaped, heart-shaped, or oval backs and their straight, square, tapering legs, often ending in the spade foot, though he also designed chairs with rectangular backs, both pierced and solid, and chairs with turned legs. The typical Hepplewhite chair back is a thing of rare beauty of curve and proportion. It was rarely upholstered, but formed an open frame surrounding a central design, carved and pierced, which exhibited an infinite variety of graceful detail. These included curving upright bars, often spreading fan-fashion. and single pierced central splats, nearly always delicate and exquisitely carved in low relief. The designs include simple flutings, classic details, representations of urns with drapery or festoons, the husks and ears of wheat, and the three feathers of the Prince of Wales.

The shape of the shield-back varies from three hundred forty-eight
round to pointed, but the top is nearly always a graceful, swelling curve, sometimes called camelback. The shield rests on upright supports at the sides, which blend gently with the curve of the back. It is said that the Gillows may have originated the shield-back, but Hepplewhite was at least its most consistent and successful user, and most of its details were certainly original with him.

Hepplewhite's arm chairs were, for the most part, similar to his side chairs, with the arms attached half way up the back and curving with a graceful sweep throughout their length, with all harsh angles avoided. His chair seats were most often upholstered in colored and figured haircloth, held in place by straight or waving rows of brass-headed nails. These chairs were generally of solid mahogany, depending for decorative effect on line and carving. Occasionally, however, he used a satin-wood inlay, and a few of his later chairs were japanned or painted with musical trophies, floral motifs, etc.—elegant and pleasing but not permanent.

Hepplewhite's sofas were graceful, their general treatment suggesting Louis XVI. They were usually upholstered, with serpentine, convex curved, or straight backs. His only open-back design was the bar-back or four-shield sofa, its back like a row of chair backs. He also designed window seats, similar to Adam's Louis XVI in type, elegant in their simplicity, with no backs and with the ends or arms rolling gracefully outward.

Next to his chairs, Hepplewhite's fame rests largely on his sideboards. He did much to develop this article of furniture for use and beauty. Adam and others had designed serving-tables, flanked by pedestals used as cellarettes and plate warmers and surmounted by hot-water urns. Knife-boxes were used on the tables and a girandole often suspended above. Hepplewhite (or Shearer, of whom I shall speak presently) combined these into one piece. Cupboards and drawers were first built into the ends of the table to contain silver, and the knife-boxes were abandoned. Then the table and pedestals were united in a single piece.

Hepplewhite's sideboards are distinguished by their beautiful serpentine fronts. These differ from Sheraton's in that the end curves are concave, while Sheraton's are convex. There are four legs in front and two or four in back. These sideboards were often embellished with fine inlay of satinwood, tulip wood, sycamore, ebony, rosewood, maple, yew, holly, etc., with little or no carving.

As a matter of fact, however, credit for the introduction of the sideboard is due less to Hepplewhite than to his friend and collaborator, Thomas Shearer. Even less is known about Shearer than about Hepplewhite. He may have been employed by the latter. At all events, his fame was overshadowed by that of Hepplewhite. He was very likely Hepplewhite's leading designer, and it would be hard to say how much of the development of the Hepplewhite style was due to him. Of the designs in "The Cabinet-Maker's London Book of Prices and Designs," Shearer signed his name to eighteen plates. Hepplewhite to six, and W. Casement to five. In this book, over Shearer's signature, appears the sideboard which Hepplewhite further developed. Shearer's sideboard was admirable and he was also strong in bookcases and small tables. He was also responsible for the screen writing-case. We have no evidence that Shearer designed chairs, apparently leaving that field to Hepplewhite. Both men designed bureau bookcases, wardrobes, writing and dressing tables, ladies' work tables, etc. They appear to have worked together with good judgment and the best of results.

Shearer had a keen eye for simplicity of design and delicacy of proportion. Some of his pieces are unsurpassed for dainty and slender elegance. His use of inlay was graceful and restrained, and no one ever used the curve to better purpose. His ingenuity of arrangement was often equal to Sheraton's. In general he was inferior to Hepplewhite only in carving and the use of ornament.

Hepplewhite's bedroom furniture was charming, with beds, wardrobes, commodes, dressing tables, etc., more complete, more practical, and less heavy than they had been previously. He designed a variety of exquisite dressing tables, many of them with the serpentine front and with heart-shaped mirrors. His bedsteads were handsome, with carved and reeded pillars, and his wardrobe supplanted the old highboy.

Hepplewhite's small tables are always a joy, no less than Sheraton's. There were Pembroke tables with two hinged leaves, card tables, and pier tables with semi-circular tops. His desk-and-bookcase was a noteworthy piece, though perhaps rather severe.

Hepplewhite, for all our lack of definite knowledge about him, must have been a man not without force, imagination, originality, and artistic resources. He had an eye sensitive to design, and he must be given credit for the general high level of his work in line, proportion, ornament, and workmanship. Lightness, delicacy, grace, and refinement characterize his style, and that balance and restraint that I have attributed to his innate sanity. He never fell into those pitfalls which the popular demand for novelty ever sets before a designer.
He was a practical cabinet maker of independent ideas rather than a man of genius, and he exhibited a better balanced mind than either Chippendale or Sheraton.

These things being so, it is no disparagement to the genius of Chippendale or Sheraton to offer the suggestion that, for purposes of modern reproduction, Hepplewhite is the safer lead to follow. His designs, his style, seem admirably suited to modern uses. In the modern home of the ordinary type it would be difficult to improve upon a Hepplewhite dining-room, with shield-back chairs and serpentine sideboard.

The Hepplewhite sewing-room or boudoir, or the Hepplewhite bedroom are hardly less satisfactory. There is beauty and elegance in this style, practical usefulness, a lack of dangerous decorative elements, and that imponderable quality that gives permanence of satisfaction—all of which testifies to the sanity of Hepplewhite.

WALTER A. DYER.

One of the interesting developments in recent American design is the prominent part which women have played in landscape architecture. Mr. Royal Cortissoz, in commenting on the exhibition of the Architectural League of 1921, noted that interesting fact, and spoke especially of the work of Mrs. Shipman, Miss Coffin and Miss Dean. Miss Dean, after a course in the University of Chicago, worked for a long time in the office of Jens Jensen of Chicago and followed this up by working in the office of other landscape architects and architects—feeling that a knowledge of architecture from the point of view of the architect was essential to the development of the proper setting for architecture. Her independent work from the start has been almost uniformly successful in this respect and, due to her training, she has avoided the usual controversy between the landscape architect and architect as to where the work of one begins and the other stops. She is a little better able to think in the terms of the architect than are many landscape architects and has a just appreciation of the fact that the purpose of landscape work is twofold; that it must not only be beautiful in itself, but must also afford a proper setting for a house, or rather furnish an intermediate step between the purely artificial structure of the house and the native character of the surroundings.

The success of Miss Dean's work has been as much due to her knowledge of what she had to work with, as it has been to her architectural knowledge, and probably none of the landscape architects practicing today can show more successful planting or more careful and harmonious combination of art with nature than that illustrated in these pictures.

Take, for example, the illustration of the garden wall for Mrs. D. E. Pomeroy. The admirable quality of the stucco of this wall and of the simple brick capping is very greatly enhanced by the delicacy of the foliage forms which grow in front of it and fall over it in such apparently unstudied fashion. It has long been the habit either to treat walls with vines which tend to cover up large portions of the surface, or to use them as a background for more or less regular planting. There a wall is partially obscured, partially revealed in a way which adds to the interest in the architectural feature, while still permitting it to serve as a background or setting for the planting. Similar intelligent choice of plant material in combination with structural work is evidenced in the photograph of the pool in the Prosser garden. The mason work surrounding the pool, the walls and steps, has been so carefully thought out that it appears entirely unstudied, and especially because it embodies forms of foliage which not only combine pleasantly with each other but are also entirely appropriate to their positions. It must not be thought that results of this kind are obtained haphazard or that there is any set rule by which iris planted beside a pool or high bush cranberry behind a wall will inevitably pro-

GARDEN OF MRS. DANIEL POMEROY, ENGLEWOOD, N. J.
Ruth Dean, Landscape Architect.

three hundred fifty
GARDEN OF ARTHUR SCHIEREN, ESQ., GREAT NECK, L. I.
Ruth Dean, Landscape Architect.

GARDEN OF MRS. SEWARD PROSSER, ENGLEWOOD, N. J.
Ruth Dean, Landscape Architect.

GARDEN OF ARTHUR SCHIEREN, ESQ., GREAT NECK, L. I.
Ruth Dean, Landscape Architect.

three hundred fifty-one
duce the proper result, any more than white painted walls and green blinds will make a Colonial house. The proportion of objects, one to the other, and the relative scales of the foliage and the colors of the plants are susceptible of infinite variations, no two of which will be similar in effect and no two of which will be equally appropriate to any positions.

The architectural features in garden work, walls, gates, arbors and garden houses of various kinds are always critical points in the contact between the architect and the landscape architect. Each feels that they justly come within his province; too often the architect is prone to regard these details with the single thought that they must be appropriate adjuncts to the building, and the landscape architect to feel that they must be appropriate to the setting regardless of their harmony to the architecture of the building itself.

Our landscape architects have been rather divided into two classes; those who follow the form and manner of the Italian precedent and those who endeavor to work along entirely naturalistic lines in an endeavor to produce the happiest of nature's own landscape work. Miss Dean appears to follow neither one nor the other of these classes, but to plan around axes and to develop vistas in accordance with the Italian manner, and to treat the planting itself in a rather freer way than the Italian style. This appears to be the method which the best of our American landscape architects have employed, and it may be that just as our architects are by a combination of old precedents producing work which is distinctly American in quality, so our landscape architects, and among them Miss Dean, not the least, are developing a school of landscape architecture which is better adapted to our needs than the traditional European styles or than the work of the purely naturalistic designers.

RUSSELL P. WHITEHEAD.

Starting with the well established fact that a great many fireplaces have a tendency to allow smoke from the fire to escape into the room instead of carrying it up through the flue, we note the further fact that this tendency, as a rule, appears most pronounced on damp and chilly days in the fall, before the heating apparatus has been started and after it has been allowed to go out.

By the rules governing the design and construction of open fireplaces as presented in handbooks and the professional press, a fireplace of a certain width requires a certain corresponding height, depth, throat, and size of flue, calculated according to a fixed scale.

The correctness of these rules, or at least their general applicability, is, I think, very doubtful and the different dimensions indicated in many cases do not coincide with those which I should adopt in the light of my own experience and observation.

Moreover, a great many of the old fireplaces both here and in other countries, which have an excellent draught, certainly are not designed according to our handbook rules, while, especially for larger fireplaces, the flues indicated by the rules seem much too large.

However, my chief objection to the rules referred to (which in all likelihood represent common practice) is their disregard of what seems to be the main point of the problem. Evidence of this was furnished when fireplaces properly designed under the rules and well constructed, actually did smoke in spite of the fact that the rules were all followed.

On the other hand, I gradually became convinced that the design of the fireplace throat and the insertion of a smoke chamber above it were of far greater importance than any of the dimensions of the fireplace itself, including the extra depth which many insist on.

In order to establish reliable data on fireplace design and construction it is necessary to study the fire itself as it appears at starting and during further progress until finally allowed to die out. Furthermore, one must analyze the air currents feeding the fire, those produced by the fire itself, the escaping smoke and other gaseous products of combustion as well as air currents in the room—for instance, from stair wells, etc., which I have often observed as main or contributory causes of smoking fireplaces.

The whole problem being generally one of dynamics of gases, it is essential that we ascertain the strength and direction of the different forces actually at work.

The problem of producing an open fireplace which draws well without smoking, means, then, to design a fireplace and flue with a draught sufficient to carry off the smoke and other products of combustion in spite of the adverse currents which nearly always exist—at least to a certain extent. Most of our houses have large doors, generally open; they have large open stairways leading to upper stories, where doors and windows also are frequently left open, and the air currents up the stair wells in particular are likely to be both strong and of considerable volume.

The general proposition of draught in an open fireplace and flue is illustrated in Figure I. Cold air from the leaks around doors and windows as well as the air cooled by contact with walls and windows, becoming heavier by

three hundred fifty-two
cooling, drops to the floor. When a fire is started in the fireplace, a current of air warmed by the fire along with the gaseous products of combustion, ascends towards the open flue, leaving a partial vacuum underneath the fire into which the cool air along the floor is drawn.

The size and intensity of the fire and not the size of the fireplace opening determine its lifting power, and our main concern is to guide this upward air current with the accompanying smoke into the flue instead of into the room.

A large fireplace will permit a larger fire than a smaller one, and the flue must be large enough in all cases to carry off the gases generated by the combustion. We must also reckon with the comparatively slow combustion in an open fireplace as compared with a stove or boiler, and the considerable amount of smoke generated at the starting of the fire. On the other hand, the capacity of a flue depends upon the velocity of the upward draughts quite as much as upon the area of the cross section.

As a matter of fact, many fireplaces of the open throat design (Figure II), which is the common one, fail to draw and throw the smoke back into the room. The reason in most cases is probably that the open throat interposes no bar to the rolling back of the smoke when meeting the cold air in the flue, especially if the latter is a large one, while the lifting power of the heated gases of combustion, especially at the starting of the fire, and when it is burning low, proves insufficient to produce a proper draught. Enlarging the flue aggravates the evil instead of curing it.

Moreover, when fireplaces of this design draw well, and especially when the flue is large, a very considerable body of air must necessarily be rushing from the room through
the fireplace and up the flue. A person sitting in front of such a fire will find it warm at his head, but pretty cold and very draughty about his feet.

Great stress is laid by some authorities on arranging a comparatively narrow throat. This would seem to imply a considerable widening immediately above the throat, which really means a smoke chamber. Possibly the importance of this widening may have been underestimated.

A tapering throat immediately above the fire would necessarily cause a very considerable increase in the velocity of the gases of combustion, and an ample smoke chamber immediately above the throat would collect such a body of heated gases that a lifting force of very considerable power would be produced almost immediately. This body of heated gases would then start a strong draught in the flue, and, judging from my own experience, this seems to be the fact. A design on the lines indicated is shown in Figure III and Figure IV.

It will also be noticed that this velocity would be attained without requiring any increase in the body of air necessary to produce the draught, and therefore without making it uncomfortably draughty in front of the fire. Conversely, the question may properly be raised as to whether a large flue would not tend to produce unpleasant draughts in front of the fire.

Assuming for the purpose of illustration, an open fireplace say 36" wide and 2 feet, 4" high as shown in the accompanying sketch (Figure V), we have, when a fire is burning in the fireplace, the heated air, smoke, and other products of combustion ascending towards the open flue at a velocity equal to V at the point A, being the top of the fireplace opening. Approximately, the clear horizontal opening at A equals 36" x 12" or 432 square inches.

If a throat is formed by inclining the front and back surfaces at an angle of approximately 60 degrees to the horizontal, and the sides at a slight incline to the vertical until the four sides form a slot 2 1/2 x 28", then the area of the slot is equal to 70 square inches at B. The area of the horizontal opening at B is thus approximately one-sixth of the area of the opening at A.

The effect of this reduction, according to the laws of dynamics should be to increase the velocity of the ascending gases, from V at A to 6V at B.

Assuming, further, that a large chamber is arranged immediately above the slot B, the
smoke will pass into this chamber at a velocity of 6V. The velocity of the rising smoke is thus gradually increased like the velocity of water when forced through a nozzle.

We must bear in mind, however, that the velocities we here are dealing with are low, and the surfaces of the fireplace necessarily rough, causing considerable friction. The increase in velocity is probably much less than the theoretical one above calculated. For this reason the throat should not be too high, and I have suggested inclining the front and back at an angle of approximately 60 degrees to the horizontal, leaving a slot 2½" wide.

If a fireplace designed and constructed as described fails to draw properly, and the flue is tested, found clear and not subject to down-draughts caused by surrounding buildings, then the cause of the trouble is likely to be found in some strong current of air in the room itself, and most frequently from open stairways.

If, however, the failure is due to down draughts from surrounding buildings, they may generally be detected by testing the flue with burning paper at different times when the wind and other atmospheric conditions differ, and keeping records of the observations.

When the wind is reflected from large surfaces, for instance, of walls and roofs, partial vacuums are created which again cause air currents, of which some may have a direction often nearly opposite to that of the prevailing wind itself and the resulting effects on chimney draughts are often very puzzling.

No part of the brickwork of a building requires more careful watching than that of the fireplaces and flues, especially since the use of tile lined flues became common. Bends in the pipe are often carelessly made, some with joints left open, others obstructed by parging mortar, and when the "topping out" is finished, the bricks and mortar remaining on the scaffold are only too often dumped down the flue and found sticking there when the flue is tested.

The open spaces between a round flue and the brickwork are filled with brick and mortar, and it is therefore to be preferred to a square flue because the joints are more likely to be tight—besides, it is a better form generally.

The best material for fireplace and throat linings is firebrick or similar materials which resist high temperatures without cracking and scaling off. Cast iron requires an airspace behind it.

The back of the fireplace is occasionally designed on a curved or broken line, the break being arranged some 15" above the hearth (Figure V, A and B).

While I have never tried this design in practice, I am inclined to consider it unnecessary and ugly. It may even have a tendency to throw the smoke past the throat and into the room, as indicated on the sketch.

Lord Rumford warns especially against too large fireplaces, but occasionally they are insisted on, and the warning must be disregarded.

In one such instance, when altering an old residence, I found two small flues some two or three feet apart, and connected both to the smoke chamber with satisfactory results. Yet their combined cross-sections represented a mere fraction of the area indicated by the handbook rules.

The fireplace should, for architectural reasons, be so placed as to provide space for the proper placing of furniture, and out of the lines of travel indicated for the ordinary routine of domestic life. It should also be located as far away from doors and windows as possible and especially remote from stair wells where there always are strong draughts, especially when doors are left open on the upper floors. An inside wall is undoubtedly best for a fireplace, and if an outside wall for other reasons is selected, then a southerly or westerly exposure seems to be preferable.

On the upper floors the choice of location for the fireplace is necessarily limited, because the chimneys are placed mainly according to the requirements of the main rooms on the first floor. However, as fireplaces in bedrooms are generally expected to serve mainly for general heating and ventilation purposes, their precise location is, as a rule, less important.

As an added precaution towards insuring a perfect draught in fireplaces, the flue may be located in any chimney likely to be kept warm during the cold season by a boiler flue or the like.

Where back draughts in flues are caused by the nearness of chimneys to high buildings, large sloping roofs and other unfavorable surroundings, there is, as a general rule, no other cure than carrying the chimney up beyond the reach of the objectionable air currents.

While fireplaces may be considered useful as adjuncts to the regular heating apparatus, and for the purpose of removing the chill from the atmosphere of the living rooms in the spring and fall of the year, they are also important as means of ventilation. For the proper functioning of any indirect system of heating, the fireplace is indeed almost indispensable, while from a sanitary point of view, the importance of fireplace ventilation cannot be too strongly emphasized, especially since the metallic weatherstrip seems to threaten us with airtight homes.

We have only to consider the cubic contents of an ordinary room in connection with the
fact that the hourly requirement of fresh air for an adult is from 3,500 to 4,000 cubic feet in order to realize the danger of oxygen starvation to a very large portion of our population. No wonder sleeping porch advocates are able to show good results.

In conclusion, I cannot deny myself the pleasure of mentioning a case of confirmatory evidence as to the efficacy of smoke chambers which was given me by Mr. F. A. Williamson, a technical expert to whom I happened to show the manuscript of this article.

Mr. Williamson mentions several cases in which the smoke pipes of boilers had been connected to flues of insufficient size, with the result that the efficiency of the boiler had been seriously reduced.

By removing part of the masonry and building a smoke chamber of sufficient size where the smoke pipe enters the flue, Mr. Williamson succeeded in obtaining the proper draft in all cases where the flue was otherwise reasonably straight and true, and properly constructed.

Arne Deili.

Viollet le Duc's observations and deductions on Medieval Polychromy

(Continued)

Viollet le Duc lays constant stress on the value of tradition in shop-practice during the Middle Ages. He points out that results were uniformly produced, of such excellence that the majority were worthy of attribution to men of a mental calibre that is rarely duplicated in a century. This was undoubtedly the result of the perpetuation of progressive experience engendered through the apprentice system. He refers to his discovery of traces of polychromy in lime-washed village churches, which revealed a degree of artistic discrimination equaling that displayed in the coloring of the Sainte Chapelle, though the former were probably decorated by the painters of the locality, and the latter by cultured monks.

There is little evidence in his writings of scientific investigation on the subject of color, which he treats exclusively from the archaeological and decorative angles. This is particularly noticeable in his remarks upon chromatic classification: he describes red, blue and yellow, as "positive" agents in decorative effect, and black and white as "negative." With apparent ignorance of Sir Isaac Newton's discoveries, he describes white as "colorless" light, and black as absence of light. He gives red, blue and yellow as the only primaries, for the reason that these are the bases from which composite tints are produced in the mixing of pigments; such inaccuracies do not, however, depreciate the value of his writings or diminish our interest in or appreciation of the extremely instructive views which he propounds on the subject of decorative effect; one must remember that he make no pretension to a scientific attitude.

Viollet le Duc observes that black and white were used in the Middle Ages to raise or lower the general tone of colors in groups; that is to say, the addition of black to a color scheme would tend to raise apparent tone values, whereas white would lower them, by reason of the contrasting tone values of those colors. With regard to black and white, which are the two most debatable points in the scientist's chromatic plan, he makes the rather wild statement that white is a radiant color, but that black is a reagent which stimulates radiation in other colors.

The great interest which he displayed in architectural polychromy throughout his career, was actuated in a great measure through the theorist's enthusiasm, rather than that of the colorist. It is impossible to form an equable appraisal of the true value of the color expressions in the minor arts of a comparatively recent generation, owing to the invariable divergence in sympathies which prejudice the succeeding generation; if we compare the color quality of the decorations which Viollet le Duc has left with good examples of decorative coloring of almost any period, there is no doubt that he was deficient in what is termed color sense.

In a preceding number I commented upon a method of his whereby certain colors were given numerical denominations, presumably corresponding to their radiant properties; their allotment to ornamental spaces of varying areas was governed accordingly. To recapitulate, yellow and red being relatively valued as 1 and 2, they were allotted to ornamental spaces of correspondingly proportioned areas in inverse order; that is to say, the less radiant color was placed upon the larger area, and the more radiant on the smaller area; but when blue, for instance, was added, the complications began. To maintain the proportional method it became necessary either to increase the red and yellow areas, or to introduce new tones of the requisite denominations, such as green or purple, in the proportions respectively of 1/4 and 1/5 of the total area. The modern system of art education, being the antithesis of those
which attempt to regulate any phase of imaginative effect, does not predispose us to regard with favor a plan which presumes to construct color effect by geometry; but, if we give the Gothic plan impartial consideration, is it not possible that in the comparatively simple problem of pattern coloring, some such systematic method of procedure will accomplish those chromatic adjustments which we strive to bring about blindly through following the impulses of an erratic color sense? The fact, which Viollet le Duc vouches for, that this method constituted the fundamental principle of color adjustment in architectural polychromy throughout the Gothic periods, compels our serious consideration. The men of that period were evidently better able to regard colors in their true light than we; they considered colors as specific decorative forces, to be administered most carefully in definite proportions; it is chiefly our inability to regard color from that angle which hinders the more general and successful use of color on architecture to-day.

Viollet le Duc expresses emphatic opinions as to which colors may be harmoniously associated, and those which cannot be used together. He states, for instance, that blue and yellow are an impossible combination; also, that the use of blue in conjunction with red precludes the possibility of acceptable results: in these opinions he reflects the sentiments of his day on the subject of color harmony, which opens an interesting field of thought on the prevalence of certain influences which have been controlling factors in color expression in Europe. From the commencement of the Gothic form of expression to the second half of the XIX century, it is very doubtful that any Asiatic color sentiment left a permanent impression upon the spontaneous European impulse in color adjustment: this opinion is tendered with a clear vision of the art of the Moor in Spain. During the latter part of the XVIII century the art of China became an important inspirational factor in the fine and applied arts of Europe. It enjoyed a short lived vogue, with such brilliant offsprings to its credit as the "Chinoiseries" of Boucher, Watteau, and other accomplished artists; the cabinet-work of Boulle; wonderful weaves of silk and brocade, and the daintiest of porcelains. In all these works it is remarkable to find that interest was centered upon the Oriental detail, but that the Oriental scale of color harmony was not reacted to; and in those comparatively rare instances where we find it followed, it is in work made with the fraudulent intent of meeting the existing demand for an imported rarity with an imitation of home manufacture. If we analyse the predominant influence which has actuated the most radical changes in color expression during the last forty or fifty years, I think that in the majority of cases the Oriental is the source of inspiration, and that the foremost and most far-reaching has been the Japanese.

The influence of the Japanese decorative colorists started in Paris, somewhere about 1865; it was introduced into artistic circles in that city with a bomb-like éclat; the circumstances were told me many years ago by my father, who was living in Paris at the time, and was well acquainted with all the persons connected with the incident. A French engineer, whose name I no longer recall, had been resident in Japan for a number of years, occupied in the construction of the first Japanese light railroad. He was a man of artistic sympathy, great culture, and considerable means, who, seeing a vast profusion of beautiful works of art of an unfamiliar character, made a very fine collection. On his return to Paris he decorated his house with these rare objects, which he displayed to the artists, dilettanti and critics, at a series of receptions.

As his acquaintance included many of the younger men who were identified with the newer movements, the exhibits had an enormous educational value, and an influence which reflected itself almost immediately in the subsequent Salons and other Exhibitions, by the evidence of a new quality in color harmony directly attributable to the Japanese coloring. The extent to which Whistler was affected by this new inspiration is too well-known to justify comment, save as a corroborative instance. A very exclusive "Japanese" society was formed, named "Les Jinglars," the name being formed of the initial letters of the names of the founders; the purpose of this body was the promotion of interest among artists in Japanese art, but principally in its color quality; a purpose which they most successfully realized.

When we call to mind the gorgeous effects produced by the Japanese artists by combining yellow and blue, or red and blue, in paintings, textiles, or color prints, after reading in Viollet le Duc that the artistic union of those colors is an impossible achievement, we pause to realize that the expression of our most sincere aesthetic convictions may become the evidence upon which the succeeding generation will con-
demn us—if we matter sufficiently to be judged.

Leon V. Solon.

The Master School of United Arts

Last January, for the first time in the history of American art, a movement was inaugurated to unite all the arts under one roof and to found a temple where every branch might be taught. To this institution was given the name of the Master School of United Arts, and although it started its career unobtrusively, the impetus lent by its inspired purpose has already made it an established influence.

The idea of the Master School was first set forth by Nicholas Roerich, the Russian painter and one of the greatest figures in contemporary international art. To him such a school was not merely a vision but a reality, for in Russia he had organized and directed the greatest of art schools under the patronage of the Czar—a school with an annual enrolment of 2,000 free scholars.

In founding the Master School in New York, Professor Roerich had the assistance of a faculty of artists in every field, men and women who were able to appreciate the ideals of the school. In music, besides Mr. and Mrs. Lichtman, the faculty included Deems Taylor, Edward Krener, Felix Salmon, and others; in ballet, Adolph Bolm; in painting, besides Professor Roerich, there was Henri Caro-Delvaille, the Basque artist; Norman-Bel Geddes, one of the best known of Americans, and the late Hamilton Easter Field. For sculpture, Robert Laurent was invited. In architecture, Alfred Bossom and W. E. Virrick; for drama, Ossip Dymow. Numerous other lecturers in every field were enrolled, including Oliver Saylor, Dr. Christian Britton, Professor Alexis Kahl, Lazare Saminsky, Ridgley Torrence, Count Ilya Tolstoy and others. Already the school has found it necessary to increase its faculty and this season, by courtesy of the Cleveland Institute, of which he is director, Ernest Block, the Swiss composer, is to give a course of lectures on musical form.

The aim of Professor Roerich and his associates is to establish eventually a great endowed institution where all may come and study free in every branch of art. In its first five months of existence the school taught forty-two scholars free of charge. Already, too, scholarships have been given to the school, the Letz Quartet last season having given a concert for the purpose of establishing a scholarship. Other artistic organizations have already expressed their willingness to contribute and a series of scholarship fund concerts is being planned for the coming year. This season more whole and partial scholarships are to be given.

Believing that the art of clock designing has failed to keep pace with the general advance in decorative and commercial art, awards amounting to $1,200 are being offered by the Cloister Clock Corporation of Buffalo, N. Y., for the best designs of clock cases in three general classes. A distinguished jury has been selected to make the awards in the competition. It consists of Charles Dana Gibson, Richard F. Bach, Metropolitan Museum of Art; Albert M. Kohn, jeweler; C. Matlack Price, editor and art critic, and Russell F. Whitehead, secretary of the Architectural League.

The fact that the clock designs of the Willards and Eli Terry, who completed their work over a century ago, are still recognized as supreme in the field of clock design in America, makes it apparent that clock designers have not developed their art on a plane worthy of the inspiration and impetus so early given. The donors of the prizes in the present competition believe that this has been due to lack of incentive rather than the exhaustion of the field or a lack of ability on the part of designers to produce new and finer conceptions. Their purpose, in the competition, is to supply this incentive.

The awards include three first prizes of $250 each, three second prizes of $100 each, three third prizes of $50 each, and nine honorable mentions. The prize winning designs become the property of the Cloister Clock Corporation, which also reserves the right to purchase at a fair price any designs which do not win prizes. The competition closes October 23.

One set of prizes is offered for an upright mantel clock case of wood, greater in height than breadth, and another for a case of the same general proportions, in metal. The third set is offered for a mantel clock case of wood greater in breadth, at the base, than in height. The cases must have a minimum inside height of seven and a half inches, an inside breadth of four inches, and an inside depth of four inches.

While open to every one, the competition is expected to be of particular interest to artists, architects, designers and craftsmen, and should result in some very handsome examples of design as well as a renewed interest in a somewhat neglected form of decorative art.

Three hundred fifty-eight
Contest in Small Hospital Design

To obtain for the typical small community in America a hospital building which is at the same time efficient in arrangement and creditable in architecture, a leading journal in that field, The Modern Hospital, has recently issued the formal program of a prize competition, open to all architects.

Prizes amounting to $1,000 are to be given to successful contestants, and although certain definite requirements are set forth in the program, the avowed intention of the competition is to bring out new thought in hospital construction.

The Illinois Chapter of the American Institute of Architects, to which the general program of the competition was submitted, has approved it as to form and method of procedure. Richard E. Schmidt of the firm of Richard E. Schmidt, Garden & Martin of Chicago, is the architectural adviser. The jury of award is to be composed of two architects, two hospital superintendents and a graduate nurse who has had experience as superintendent of a small general hospital.

Official announcement of the competition was made at the recent annual conference of the American Hospital Association held in Atlantic City, N. J. Three cash awards of $500, $300 and $200 and two honorable mentions are to be given. The prize-winning drawings, according to the rules of the contest, become the property of the publishing company, but the author is not prohibited from making any individual use of his designs.

The competition calls for a set of plans of a general hospital of from 30 to 40 beds. Registration for the contest must take place on or before November 15, 1922, and the final date for submitting designs is January 15, 1923.

The general program of the contest may be had by addressing the Chicago office of The Modern Hospital.

Mr. Alfred C. Bossom, architect, of New York, has just sailed for Europe. When in Scotland he will be for a part of the time the guest of the Forty-second Highlanders or Black Watch, at their headquarters in Perth, and will present the regiment with a record of the work of the restoration at Fort Ticonderoga, where the Royal Highlanders covered themselves with glory in 1758. Mr. Bossom was the architect for this work.

While Mr. Bossom is abroad he will invite the Royal Institute of British Architects, on behalf of the Architectural League of New York, to send an exhibition of drawings here for the League's annual exhibition, which takes place early in 1923. Mr. Howard Greenley, president of the League, has just returned from France, where he made a similar arrangement with the French architects.

Mr. Bossom has also been invited to judge the drawings submitted in a competition for a large commercial building in London, for which a gold medal is to be awarded.

Better Homes in America

With the endorsement of President Harding, a call is going out to American communities to devote one week—October 9 to 14—to demonstrate the advantage of building homes and better homes.

The Advisory Council contains the names of Vice-President Calvin Coolidge, Herbert Hoover, Henry C. Wallace, James John Davis, with many other men of note. An article in the Plan Book (for the use of communities and individuals who purpose to take active part in the movement in the form of a Demonstration Week) signed "Calvin Coolidge," says in part: "Under present conditions any ambition of America to become a nation of home owners would be by no means impossible of fulfillment. The land is available, the materials are at hand, the necessary accumulation of credit exists, the courage, the endurance and the sacrifice of the people are not wanting. Let them begin, however slender their means, the building and perfecting of the national character by the building and adorning of a home which shall be worthy of the habitation of an American family, calm in the assurance that the gods send thread for a web begun."

Full details of the plan may be obtained from Mrs. W. B. Meloney, Secretary Advisory Council for Better Homes Campaign, 223 Spring Street, New York.

Short Bibliography of City Housing

The shortness of this list of American writings, and their recent dates of publication, are clear evidence of the scantiness of the literature on city housing of the apartment type, as compared with the extensiveness of the bibliography of the individual housing type of town and village.

The great need in housing literature is thorough studies of the costs of home-owning to the individual of the different types of housing, individual or row or apartment types.

The articles are arranged in the order of the dates of publication.

Three hundred fifty-nine
Garden Apartments in Cities. John Taylor Boyd, Jr., Architectural Record, July and August, 1920. Reprinted by the City & Suburban Homes Co. [A full treatment of the architectural principles of design of apartment houses, together with a detailed comparison with individual and row or group types, illustrated with plans and diagrams; evolution of city housing from earlier types, showing the growth of open planning and the economics of percentage of site occupied by building; legal aspects; relation to city planning; finance, management, maintenance.]

Is It Advisable To Remodel the Slums? Andrew J. Thomas, Architectural Record, November, 1920. Reprinted by the National Association of Settlements. [This article is a profound study of the economics and the financial sides of city housing, and may be regarded as fundamental in establishing the basis for city housing. The idea put forth in the closing paragraph, which seemed visionary at the time it was written, has been completely realized in every feature in the Metropolitan housing, especially the cooperation of labor and capital and the cooperative ownership of apartments.]

Some Recent Developments In Housing Finance. John Taylor Boyd, Jr., Architectural Record, November and December, 1920. [Economics of tenantry and homeownership; financial, psychological, and social factors; reasons why industrialism has transformed the majority of Americans into tenants; labor turnover in housing; financial bearing of zoning and city planning on homeownership; financial principles to be employed in making homeownership compete successfully with tenantry.]

A Short Bibliography and Analysis of Housing. John Taylor Boyd, Jr., Architectural Record, February, 1921. [The bibliography, which is intended as a working bibliography for architects, as pointed out, shows the one-sidedness of housing literature, since up to the time of publication, nearly all American housing literature had dealt only with the individual or row types of the small towns and the suburban districts of the cities.]

Cooperative Homes For Europe's Homeless. Agnes Dyer Warbasse, American Review of Reviews, February, 1922. Reprinted by the Co-operative League. [Although the paper is written by one who is evidently a partisan of co-operative housing, it is nevertheless, a very interesting account of a significant after-war movement in Europe.]

The Phelps Stokes Fund Tenement House Competition. Frederick Lee Ackerman, formerly Chief of Design, Housing Division, U. S. Shipping Board war housing. Journal American Institute of Architects, March, 1922. [A thorough technical analysis of the relation of architectural design and finance in city housing and the bearing of the percentage of lot occupied by the building on cost and income of the property.]

Tenement House Planning. Architectural Forum, April, 1922. Written by Frederick Lee Ackerman. [Another similar technical treatise on design and finance.]

Tendencies In Apartment House Design. Frank Chouteau Brown, Architectural Record, Series, June, 1921; May, 1922, unfinished. [A comprehensive analysis of apartment house architecture. See particularly part XI, May, 1922 issue, for analysis of the principles of planning.]

House Design. Andrew J. Thomas, Proceedings of the American Society of Civil Engineers, for March, 1922, page 434. [One of a series of papers and addresses read in the Housing Conference, held by the American Society of Civil Engineers, New York City, January, 1922.]

Business Aspects of a Successful Cooperative Apartment Development. C. Stanley Taylor, Associate Editor Architectural Forum, March, 1921. [Detailed treatment of the finances of tenant-ownership in apartments.]

The Chateau Apartments. Architectural Record, June, 1922, Editorial. [Although dealing with a more expensive type of apartments, this article treats of the principles of the tenant-ownership plan as the American solution of cooperative ownership, and as the only means of combating tenantry among the mass of the population of the cities. The Metropolitan Life Insurance Company has publicly announced its intention to apply a similar plan to its new model housing for wage earners.]

Housing Project for the Metropolitan Life Insurance Co. American Architect, August 2, 1922. See also Architecture, August, 1922, issue. [This article contains a complete description of the design in all its features, including the typical domestic arrangements of the apartments.]

A Departure In Housing Finance. John Taylor Boyd, Jr., Architectural Record, August, 1922. [This article brings up-to-date the principles of city housing, as illustrated by the Metropolitan Life Insurance Company's model housing; historical evolution of housing finance; the principles of appraisal, the least known factor in housing finance; the great economic waste in housing due to defective appraisal.]