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THE
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JULY, 1914

VOLUME XXXVI
NUMBER 1

THE NEW YORK COURT HOUSE
AND ITS SITE
BY MONTGOMERY SCHUYLER

The present flurry of discussion about the plan for the new Court House of the City of New York ought, in the first place, to fill New Yorkers with gratitude that there should be a tangible design, of which everybody has already some picture in his mind, for a "new" Court House. For nearly forty-five years that designation has been invidious. For, during all that lapse of time, it has been applied to a monument of political corruption, the sight or the thought of which has necessarily brought a sense of civic shame to all such New Yorkers as had any sense of civic pride. Upon the whole, perhaps, it was fortunate that there was nothing in the architecture of the pile which encumbered and defaced City Hall Park which was calculated in any degree to reconcile the judicious beholder to the huge frauds committed in its erection. There is, one hastens to say, in justice to the memory of a bad architect, but doubtless an honest man, no suspicion whatever that the architect was concerned in the frauds. In fact, there is every reason to believe that the political thieves who profited by the frauds for a season would have excluded him from personal participation in their profits, even if he had desired a share in them. Absurd as it may seem now, John Kellum was chosen to design the building, because, according to the estimate of those politicians who had the awarding of such matters, long before such a thing as a jury of experts was thought of in connection with the design of a civic building, he was the "leading architect" of New York. His reputation rested mainly upon the work he had done for A. T. Stewart, whose complete confidence he commanded, and as a man of business very likely deserved, and A. T.
REVISED ELEVATION OF THE NEW YORK COURT HOUSE. GUY LOWELL, ARCHITECT.
Stewart was in those days one of the largest builders in New York. Two of the works executed for him by Kellum remain to excite the wonder of the present generation that the previous generation should have admired them. They are both of cast iron, in that imitation of masonry which, in the days of Stewart and Kellum, and before the costly lessons of the Chicago and Boston fires, was held to be an efficient and economical substitute for the real thing, and especially to be “fireproof.” They are what was originally known as “Stewart’s uptown store,” covering the block bounded by Broadway, Fourth Avenue, Ninth and Tenth Streets, and the Park Avenue Hotel, projected by Stewart as a charitable “home for working women” but after his death promptly commercialized. Quite as ugly as either, though of really monumental material, and really remarkable for its massiveness of construction, was the “palace” the millionaire merchant built for himself at the corner of Fifth Avenue and Thirty-fourth Street, then the very heart of the most fashionable residential quarter of the city, the
building occupied for some years, after
the death of the widow, by the Manhat¬
tan Club, and finally demolished to make
room for the building of the Knicker¬
bocker Trust Company, which has never
for a moment had the effect of making
anybody regret its predecessor. A fourth
of the monuments of Kellum was archi¬
tecturally much more seemly and decent
than any of the other three. This was
the edifice at the corner of Ann Street
and Park Row, built for the New York
Herald, and occupied by that institution
until its migration to “Herald Square.”
Then this suffered the general fate of
buildings in the commercial quarter of
New York, being pulled down to make
room for the St. Paul. Even in this case,
the demolition could not excite reason¬
able regret, for, though the old Herald
building was Kellum’s masterpiece, so
ridiculously to put it, it was of little
architectural account. A cynical archi¬
tect when it was new, observed upon
it that “Kellum had a better draughts¬
man than usual that year” and further
commented that "though mean, it was not infamous" and "did not show the same nasty mind" as its professed author's previous productions.

It happens that the cynical commentator was afterwards called upon to devise an addition to what was still "the new City Hall," and that this addition gives the monument of civic shame the only architectural interest it possesses. As everybody knows, its architecture is entirely incongruous with that of the building to which it is adjoined. It is in fact an emphatic and truculent protest against that architecture, outside, and more particularly inside, where the straightforward and structural treatment of the brickwork puts to shame as it was meant to do the collection of quite meaningless members in cast iron into the midst of which it is intruded. Nevertheless, the honest development of the construction gives a considerable architectural interest to the apartments of the extension in which it is employed, and which do not have to be seen in conjunction with the conventional metallic decoration very ill done, as in the rotunda.
Such as it is, the interest of this extension, it may be repeated, is the only architectural interest in the "Tweed court house," and furnishes the only occasion for regret, on any grounds whatever, when the time comes, one hopes soon, when the whole monstrosity shall be torn down and make room for a fair green stretch of turf. But, after all, the Tweed court house is not conspicuous for badness among the civic relics of its time, or even of a later time. It is not so aggressively impertinent and incompetent as the later building of the Criminal Courts in Centre street. In truth, between Mabini's City Hall and Mr. Withers's Jefferson Market, the City of New York hardly erected a decent building for any one of its civic purposes.

This brings us to the value of "expertise," and the folly and presumption of the untutored layman who happens to be intrusted with the execution of important public works in trusting to his unaided judgment of the designs for them, whether by "direct selection," as in the case of the Tweed court house, or by choice among a number of competitive plans. For it would be too humiliating a reflection that, at the very worst of our architectural "period of darkness" there were not in New York architects capable of better things than the city produced in its public buildings. As a matter of fact there always were such architects, producing things immeasurably better, things which to the expert would have marked them as worthy of larger opportunities than they had enjoyed. But, although it would now, thanks to the Institute, be impossible to induce reputable architects to enter a competition in which they were not assured beforehand of the award of expert judgment, the controversy which for a year or more has been raging over the design of the new court house shows that there remains an obstinate disinclination to accept the verdicts of such a tribunal, when they run counter to the prepossessions of the layman.

This is really a very serious and significant social symptom, especially when it is manifested, as in this case it has been, by picked persons, supposed to be aware of the untrustworthiness of their own judgments in special matters upon which they have no special claims to speak with authority. It must be remembered, in the first place, that the jury of experts which found Mr. Lowell's design not only the best practical solution of the problem presented by the conditions of the new court house, but what seemed to their unanimous judgment nearly an ideal solution, was a very special jury indeed. It would have been impossible to name a jury of three whose names would more completely have commanded the confidence of the profession and of that small section of the public which takes any intelligent interest in such matters. In fact, it is not very rash to conjecture that Mr. Lowell may have been emboldened by the guarantee of open-mindedness conveyed by the names of the jury of experts to submit a scheme of striking novelty for this purpose, instead of submitting a more commonplace and to him less satisfactory solution.

Wherefore, it was particularly disappointing that the committee of Justices of the Supreme Court should have reported against the plan of Mr. Lowell when experts had reported unanimously in its favor. It is depressing. For the committee of the Judges was also in its way a very "special jury." It was a committee of experts. According to the luminous exposition of the leader of the American bar, the late James Coolidge Carter, in his lectures on the unwritten law posthumously published, a judge, in the last analysis, is an expert, "an expert in custom." He is not and cannot be familiar with the customs of all trades and businesses, but when a custom in any one of them is shown to be the prevailing custom, he allows full weight and authority to it. That is a judicial function in which the committee of the Justices of the Supreme Court manifestly failed, when it condemned what the authorities approved. Of course, it is natural to expect that the committee of the judges should invoke expert advice, or advice that the members of the committee supposed or assumed to be expert; and, one may say, for obvious reasons. It is rather odd
that one of the primary requirements of the committee of Justices should have been that a court room should receive light from the outer air on at least two sides. One wonders whether, in the multitude of competitors, there was any one whose design fulfilled that condition, in the bewildering aggregation of court rooms for which the conditions of the program called. It was, we believe, only after rendering its adverse judgment on the plan commended by the experts in architecture that the "experts in custom" had compunctious visitings, and really decided to take architectural counsel.

All the same, the adverse decision of the committee of Judges was a considerable blow, not only to those who were struck by the novelty and ingenuity of the design accepted by the experts, but also to those who were impressed by the authority of the experts, and disposed to consider their decision as authoritative and final. For such persons could not help considering that Judges also when rendering decisions in their judicial capacity, are given to hold those decisions authoritative and final. Such persons could not help knowing that the Judges also hold that, for special emergencies and occasions, there is need of a "special jury" to decide questions not within the ordinary purview of the common run of mankind. The question of the most suitable design for the Court House of New York was eminently such a question. It was a question for a special jury. But a very special jury had already been empanelled to consider it and had returned its verdict. For what one may call without disrespect a common or promiscuous jury, even composed of Justices of the Supreme Court, to undertake to reverse this verdict without any pretence of an expert authority equal to that by which it was rendered, was a very rash and temerarious proceeding. The discreet and circumspect proceeding would have been to reinvoke the counsel of the experts upon such points as seemed to the learned Justices questionable. No doubt the experts would gladly have put their special knowledge at the service of the learned Justices. In that case, there would have been avoided the spectacle of the "experts in custom" being arrayed on one side and the experts in architecture, including the practical detail and application thereof, upon the other. Such a confrontation would have avoided what the Judges seem to have invited; that is to say, a situation in which a public approval of the action of the Judges could not be prevented from having the appearance of the "recall of judicial decisions." It is, of course, true that this decision of a committee of Judges was not a judicial decision, in the sense that it was rendered in the ordinary course of judicial duties, or that it was reviewable by a higher court. But all the same a Judge who exhibits, outside of his strict business, unjudicial qualities injures himself with the judicious and exposes himself to what may fairly be called contempt of court. In fact, it is contempt of court in a real sense which he commits. In this matter, the real tribunal is the body of instructed opinion, and in this case unusual pains had been taken to secure the verdict of that body. No particular harm is done when the man in the street compares one of the court rooms shown in the accepted plan to "a piece of pie" and imagines the case to be settled by that facile witticism. What the witticism shows is that, even apart from the pains which have been taken to reduce the court rooms to absolute rectangularity by supplying subordinate uses for the wedges between them, the wit, or rather the wits, for there must be nearly as many of them who hit upon this identical pleasantry as there were incompetent and immodest inspectors of the published plans, had no notion of "scale," and were unable to appreciate the slightness of the curvature resulting in one of the segments of a great circle which constitutes the exterior wall of a court room, from striking that circle with a radius of 200 feet. But for a committee of the Judges to overlook so essential a fact, and to treat the segments as if the radius from which they were struck had been a tenth of what it in fact was, and the annular court as if it were of the dimensions of a light shaft in a common apartment house, instead of being of the width of the roadway of an
ordinary street, this can only be described as an inexcusable oversight on the part of persons responsible for the judicial exercise even of their exceptional function, and a rejection of one of the fundamental maxims of the law, viz.: "Cui ilibet in arte sua perito credendum est."

Still, "all well that ends well," as the immortal Shakespeare has it. Whether the learned justices have been led to retract their opposition by the weight of the technical authority arrayed against them, or whether they have gracefully receded from a position they found to be untenable does not particularly matter. The plan which came to them, and for that matter to everybody else, in "such a questionable shape" now awaits, as this issue goes to press, only the sanction of the Board of Estimate and Apportionment to become the adopted plan for the new Court House. There is no more contradiction between the competitive plan and the plan as it now stands and is in the way to be executed than might reasonably be expected from the opportunity the architect has had in the mean time to re-study his design. The modifications between the two are not very important in practical aspects. In the architectural aspect, they are of no importance whatever. The criticism of the judicial committee will leave no mark at all on the completed building. It was the essential scheme to which they objected, and the essential scheme becomes the basis of the building, in spite of their objections.

It were idle to deny that the novelty of the design makes it in some sense experimental. The precedents for a circular or "ovoid" great building date back, for the most part, before Christianity or in its earlier centuries, "when the smoke of sacrifice rose from the Pantheon, and when camelopards and tigers abounded in the Flavian amphitheatre." There is, of course, one essential distinction to be drawn between the ancient prototypes and the "modern instance." It is that in the ancient examples the circular or elliptical form connoted an amphitheatre, a huge enclosed central space, with a comparatively narrow fringe of building all around, which was furnished with seats and staircase as an "auditorium," or, as the old Romans had it, as a "spectatorium." The most impressive modern instance of a great circular building, the Albert Hall in London, has the same essential requirements as the Roman theatres. This also is a fringe of building, including seats and boxes for the accommodation of the audience, surrounding the central well, which is the nucleus and primary object of the design. On the other hand, in the present case, in which the circular form has been chosen for that of a court house, what we have been calling the fringe of building is the primary object of design, being on the important floors, subdivided into court rooms and the subordinate apartments depending upon these, while the central well is in effect a mere light shaft, and exists entirely for the benefit of the court rooms and their dependencies. It is not to be wondered at if even the experts who recommended this novel plan of a court house should await with a certain anxiety the test of practice in the completion of the building, notwithstanding all their theoretic faith in the soundness of the architect's solution. Yet, let no one imagine that the architect had adopted the circular form only through an admiration of the circular buildings of the Romans, that he had violently squeezed or stretched the requirements of modern courts of justice into conformity with that consecrated shape; such an imagination could not survive a real study of the competitive drawings, and ought not to have survived the favorable report of the experts. It is extremely interesting to note that this circular form was experimentally arrived at as presenting a solution of the problem involved most economical of space, best assuring perfect accessibility and the least likelihood of congestion in public corridors. Mr. Lowell's design is the logical result of working out the floor plan in the most obvious way to meet the requirements of the court room unit program. In other words, the needs of the building came first, the floor plans second and the circular exterior followed as a consequence and was not contem-
plated as a primary consideration. The whole scheme developed from the inside to the outside and the exterior is, therefore, not the outcome of fortuitous choice, but a consistent expression of basic structural demands of purely utilitarian nature. In so successfully combining interior practicality with exterior charm, Mr. Lowell has displayed a rare union of mechanical sagacity and artistic insight.

As to the exterior, in the matter of "scale," a matter which may be charitably supposed to have misled those of the Judges who were not judges of architecture, as, indeed, there is no reason to suppose that any of them were, this new project yields little to the Roman precedents. It yields, indeed, in area to the Colosseum, the "Flavian amphitheatre." The Colosseum measures 620 feet along its longer axis and 513 along its shorter, and the extreme height of it, in its present condition, is 157 feet. To these dimensions the new circular court house undoubtedly yields, excepting possibly in the dimension of altitude, its diameter being 400 feet; arithmetically, as one is told, 390. Even so, it is in the same class with the hugest of all amphitheatrical remains. Of the others, all, as perhaps the name of them imports, elliptical and not circular, that of Capua was 558 by 460, and its external height 95 feet, and that of Nimes 430 by 378, and its external height 72. That of Verona, which Ruskin calls "not the largest, but the most perfect and intelligible Roman amphitheatre that exists, still unbroken in circle or step and strong in succession of vault and arch," measures 502 by 401, and is 98 feet high. So that the modern instance, though exceeded by the ancient examples, cannot fairly be said to be outclassed. Probably the architect would be reluctant to have the ultimate effect of his building judged by his drawings. Devices and expedients as yet unthought of will no doubt occur to him before the plan is executed. In particular, some device for avoiding the feeling, in a circular building, that its "features" might as well be on any other points of its periphery as where they in fact are will be apt to engage his attention, although this is a matter with which the treatment of the surrounding grounds has as much to do as the treatment of the monument itself. The critic ought to proceed still more warily than the architect, and to abstain from committing himself, on the evidence of the drawings, to criticisms which the completed building may render "incompetent, irrelevant and impertinent." Such a modest withholding of one's first impressions is particularly "indicated" in a scheme like this, for the effect of which in execution one has no precedents, as in more usual and conventional forms of construction he has. All that he can say with confidence is that if the indications of the design are faithfully and skillfully followed out, there is good reason to hope that the result will be that the City of New York will find itself in possession of one of the worthiest as well as of the most striking, of the civic monuments of our generation.

At any rate, there is no longer any serious question about the design. It is fortunate that the flurry of discussion to which we referred at the outset of these remarks is, to all intents, transferred from the question of plan to the question of site. Even so, it looks like a one-sided discussion, so one-sided that there is every prospect that it may be closed before this article comes to be read. Mr. McAneny has rendered so many important services to the city of New York in the line of that he is endeavoring to render now, that his name carries, when the question is one of a plan of public improvement, something of the professional authority which as we have been pointing out, belongs to such a jury of experts as that which informed the public that the original location of the court house was a mistake, for reasons which he proceeds frankly to communicate, the public is inclined to defer to his matured judgment without further inquiry. Nor, indeed, has any opposition developed except upon minor matters of detail. The contention that borings should be taken to ascertain the
most feasible sites for foundations is such a minor matter, and one is inclined to agree with the President of the Board of Aldermen that, however reasonable it may appear, it should not be allowed further to delay the execution of a project which everybody concerned agrees is of the utmost urgency. No doubt Mr. McAneny, like everybody else who has had occasion to consider large schemes of civic improvement, regrets the failure of the amendment to the Constitution of the State of New York, which aimed to enable any municipality about to take land for municipal purposes to take more than was needed for the specific purpose in view, and to sell out the same after the improvement was completed and pocket for itself the profit accruing from the enhancement of the value of such land, instead of allowing that profit to be absorbed by private speculators. The failure puts a municipality at a serious disadvantage, when large improvements are in question, compared with a private corporation. It was a happy thought to establish a “civic centre” upon ground much cheaper than any other ground in its neighborhood, upon ground which the establishment of such a centre would inevitably raise in price. The Pennsylvania road got the advantage of its providence in acquiring the land for its station. So did the Central when it executed the improvement involved in building the Grand Central Terminal. But from this source of recoupment for its outlay the municipality is legally debarred. It is true that one seems to detect some intention of securing such a recoupment, of whipping the devil of reimbursement round the stump of legal prohibition, in the project of creating a “park” around the new court house. Sure enough, the surrounding land should and even must be so laid out as to give the new building every chance in the way of visibility and slightly conspicuousness. Even this is not enough. The peculiar shape of the new monument renders it inevitable that the circular street which is to surround it shall be lined, on the concentric circle of a larger radius to be struck outside of the court house, with a new frontage, of which it ought to be a condition that its architecture shall so conform to that of the court house as to enhance its attractive and imposing qualities. In cities in advance of New York in this point of “civics,” this would be enforced by municipal regulation, and, moreover, the profit of the entire operation of improvement would accrue to the city. That cannot be hoped for in the present case. But the more nearly it can be attained, the better for the city of New York and for every taxpayer and every inhabitant of the same.

In connection with all the work of the Court House Board preparatory to arranging for competitions and selecting a Jury of Award, due recognition should be given to the Consulting Architect, Walter Cook, whose fund of information and advice was always at the service of the board members. It is not to be understood, of course, that Mr. Cook had anything to do with the selection or appointment of the jury, for he had not. That matter rested entirely in the hands of the board. Indeed it would have been an invidious thing for any architect to be obliged to choose a jury under the circumstances.

In this particular, his function ended when he had submitted to the board a considerable number of possible names from which a choice might safely be made. It is necessary to be thus explicit owing to an impression that seems to have gone abroad to the effect that Mr. Cook was responsible for the personnel of the jury. His work, however, has been invaluable, and the Court House Board and all others concerned have abundant reason for deep satisfaction at the outcome of the confidence reposed in him.
“SPIRIT OF THE GREAT LAKES.”
LORADO TAFT, SCULPTOR.
LORADO TAFT
INTERPRETER OF THE MIDDLE WEST
BY ROBERT H. MOVILTON

LORADO TAFT is a sculptor of power and genius who has worked faithfully at his art for many crowded years. He has produced groups and single figures which have made him recognized as one of the foremost of contemporary sculptors, and when he has not been chiseling virile life into marble or molding it into clay he has been lecturing on his own art and on art in general.

Yet it is not alone as a lecturer that Lorado Taft has exerted a wide and lasting influence. As an author he writes brilliantly of the aims and ends of his craft, and as a teacher he has left his impress on hundreds of students. For twenty-two years, from 1886 to 1907, he was instructor of modeling in the Art Institute of Chicago, and many of the most successful artists of the Central West are his pupils—men and women who have already taken their places worthily in the ranks of professional sculpture. From 1892 to 1902 he was a lecturer in the extension department of the University of Chicago, and for many years has been actively identified with the work of the National Sculpture Society, the Society of Western Artists, the Chicago Society of Artists, the Municipal Art League and Municipal Art Commission of Chicago.

For his work in the world Mr. Taft had a solid foundation. There is nothing fortuitous about his mastery over marble, save for the genius which impels him. He was the son of a professor at the University of Illinois, and in 1879, at the age of nineteen, he was graduated from that college. His father encouraged his ambition, and in order that he might work out his career, sent him, in 1880, to Europe, where he studied in Paris and Rome, and completed his education with travel.

His first great success was the commission for two groups at the entrances to the Horticultural Building of the World’s Columbian Exposition. These, “The Sleep of the Flowers” and “The Awakening of the Flowers,” attracted wide and favorable attention.

Two analogous groups, “The Mountain” and “The Prairie,” made for the Louisiana Purchase Exposition, at St. Louis, were part of his most conspicuous work in the next decade, although it was his “The Solitude of the Soul” which won for him a gold medal. In “The Solitude of the Soul” there is beauty united with the intellectual, nor is there the slightest hint of pedantry in his delicate application of the most profound principles of art. It embodies every perfection of loveliness, majesty and power.

His “The Spirit of the Lakes,” a won-
derful fountain, is the first purely ideal work erected in the New World, and the fountain stands a thing apart, unsurpassed in American sculpture.

Lakes Superior, Michigan, Huron, Erie and Ontario are artistically represented by five beautiful female figures, built upon a rocky base at relative elevations. A stream of sparkling water rising in the basin held by “Superior” overflows into the shell held by “Michigan,” and so on from shell to shell until “Ontario” surrenders her pleasant guardianship over the unpolluted waters of the greatest fresh water lakes in the world to the rough keeping of the turbulent St. Lawrence.

“The Spirit of the Lakes” was the first purchase by the trustees of the Art Institute of Chicago from a fund provided by the late Benjamin F. Ferguson to commemorate in sculpture persons and events in American history. Recently the trustees commissioned Mr. Taft to start work on the great “Fountain of Time,” designed for location at the western terminus of the Midway Plaisance.

The commission, aside from being an important event in modern art history, means the definite start, expected to be continued without interruption until its final completion, of one of the greatest civic projects for beautification ever undertaken by a city. Income from the Ferguson fund, amounting to more than $30,000 a year, is available for carrying the plan through, and it is expected that the entire undertaking can be brought to its consummation without relying upon public funds for more than the superstructures of three small bridges. Incidentally, Mr. Taft sees his dreams of years—a marble midway—taking form. The Chicago sculptor has offered to devote the remainder of his life to transforming the South Side’s great parkway into the most beautiful boulevard in the world.

In result the project will carry into permanent effect of a mile-long vista of water, lawn, trees and sculpture such as has never been approached, except in the temporary structure of the World’s Fair.

At present the Midway is a grassy strip a mile in length, and about 1,000 feet wide, connecting Washington and Jackson parks. It has always been the intention of the South park authorities to extend the depression of the Midway from the lagoons of Jackson park to the small lakes of Washington park, thus forming a waterway from park to park. Mr. Taft’s plan presupposes this straight and formal canal, which is to occupy the present depressions at a level lower than the street.

The canal bisecting the Midway will fill the present central depression and will be about 100 feet wide. It is to be spanned by three white marble bridges, monumental in design, dedicated to three great ideals of the human race—science, art and religion. These will be known as the Bridge of Sciences, the Bridge of Arts and the Bridge of Religions, respectively.

At half-block intervals, along the elevated strip of land some distance back from either side of the waterway, are to stand bronze statues of the world’s great idealists.

Probably the most artistic work of the general scheme will be two large fountains erected in the lagoon at either end of the Midway moat. At the east end will be “The Fountain of Creation,” and at the west end “The Fountain of Time.” The former takes for its subject the origin of the race, the latter mankind’s spectacular journey from life to death.

“The Fountain of Creation” will illustrate the old Greek myth of Deucalion and Pyrrha, expressing by successive clusters the idea of evolution. The legend tells us that Deucalion and Pyrrha, his wife, were the only mortals saved from the flood, and that when their frail craft rested on the summit of Mount Parnassus they hied themselves to an oracle to help them in the restoration of the human race. The goddess commanded them to cover their heads and to throw the bones of their mother over their shoulders. Interpreting this to mean mother earth, they cast stones behind them, which immediately took life and assumed the forms of men and women, who were to re-peopled the earth.
There will be twelve groups in this fountain, containing in all thirty-six figures ten feet in height, arranged in ascending plane. Looking eastward from the Bridge of Sciences, one will see near the water’s surface rough boulder-like forms, showing only partial development into human shape. Gradually these figures will assume a more human aspect, but still vague and groping as they emerge from the rock; then with a look of dawning consciousness, and finally full-grown men and women, striving and yearning with hope and ambition. The marble will typify the evolution of the spiritual from the material.

Between each of the twelve groups of figures there will be small waterfalls, which will splash into the circular basin around which the fountain with its statuary is to be constructed.

“The Fountain of Time” will be erected just west of the Bridge of Religions. It will show a great procession of humanity passing in review before a craglike figure of Father Time. It was suggested to Mr. Taft by Austin Dobson’s lines:

“Time goes, you say? Ah, no.
Alas, time stays; we go.”

The throng of pushing figures passing as in review under the eyes of Father Time, each aiming at some individual goal, will show a wavelike suggestiveness typical of the unsubstantial and ephemeral nature of human life. Actual waves will carry out the idea. In the foreground will be two figures representing the fear of youth and the joy of old age in death. The youth struggles to escape from the remorseless waves of eternity that are closing about him. The old man, with a happy smile, stretches out his withered arms to welcome the end.

“The Fountain of Time,” though yet only in the sketch form, leaves a powerful impression. The instantaneous appeal of this truly wonderful conception is obtained by its simple dignity and preservation of ideas in the mass, though
GLOBE OF THE WORLD.
Lorado Taft, Sculptor.

"ONTARIO"—FROM THE GREAT LAKES GROUP.
Lorado Taft, Sculptor.
COLUMBUS MEMORIAL FOUNTAIN, WASHINGTON, D. C.
LORADO TAFT, SCULPTOR.
it is hard enough to define in exact terms. This fountain will be eighty-two feet long, with the figures ten feet high, except the central one, which will be about fifteen feet. Father Time’s massive form will tower to a height of twenty feet.

The Bridge of Arts will mark the heart of the Midway and be the center of the whole scheme. This roadway will be slightly larger than the other two, and will be decorated somewhat more elaborately. Such artists and sculptors as Michael Angelo, Raphael and others will be represented by life-size statues along its side.

The Bridge of Sciences will carry figures representing the various departments of science, together with statues of the world’s greatest men, who from the earliest times have contributed toward the advancement of science. This will be a broad, massive, arched structure, constructed of concrete, and the statues will be made from Georgia marble of close grain and extreme hardness.

The other great element of the world’s thought, religion, will be represented by the third bridge, the Bridge of Faiths. This bridge, crossing the Midway near the western end, will be constructed along the general lines of the other two. The greatest religious thinkers or the founders of the great world religions will be reproduced in statuary along its balustrades.

The one hundred bronze statues that are to dot the greensward at intervals will be of men who have made themselves famous in Art, Science and Religion.

Mr. Taft’s most scholarly admirers readily accord his group entitled “The Blind” first place among his most important works. His inspiration for this work was found in Maeterlinck’s imaginative and stimulating drama of the same name. This masterly group represents the crucial situation in that play; where a company of sightless men and women, who have long...
been the wards of a venerable priest, realize that their leader is dead and that their only hope for guidance rests with the little child around whom they group. There is a note of despair in the group, yet the dominant motif is faith and trust—the hope that "a little child shall lead them." The conception, the grouping and the delineation of the grouping, huddling, sightless ones is marvelous.

Of late years Mr. Taft has shown a disposition to turn to sculptures heroic both in spirit and substance. He has a vigor and sweep of execution as heartening as the breezes from the western plateau. He is a man of big conceptions and ideas, and he works them out with wealth of labor and material.

One of his most recent creations, the statue of Black Hawk, commemorating the American Indian, is an excellent illustration of this virility of his genius. The statue in question is of noble proportions, being fifty feet high, and stands on the highest point of a lofty promontory overlooking the picturesque Rock River, near Aurora, Illinois.

Wrapped in his long blanket, with arms folded on his chest, this heroic figure stands erect, calmly surveying the vast expanse of meadow, hill, forest and river. The dignity, the stoicism and the bitterness of a vanquished leader are there, and the great figure is a fit memorial of a race that has passed from power.

Behind the building of the Black Hawk statue lies an interesting little story. Several years ago Mr. Taft was watching some workmen build a concrete chimney at the Chicago Art Institute, and there came to him his great idea of the means for making an enduring statue. With the process in mind, it was not long until an adequate subject presented itself. For fifteen years Mr. Taft has had his summer home and studio at Eagle's Nest Camp, the summer seat of the Chicago art colony. Standing for the hundredth time at the highest point of the cliff, he never failed to remember that it was from here that Black Hawk was finally driven from Illinois. So he decided to bring back the famous Indian chief, and now in concrete he again surveys his former domain.

The statue is not placed with the idea of its being a popular attraction. On the contrary, the sculptor has purposely sought a location somewhat remote from inhabited sections and apart from the beaten highways of travel; such a spot as the Indian himself might have sought from which to greet the dawn or sunset or hold communion with the Great Spirit. No
formal approaches mark the way to the statue, nor are there any other conventional signs of civilization. The natural growth of surrounding trees and shrubbery forms the most appropriate setting.

Mr. Taft, in carrying out his conception, did not study any one type or race of Indians. It is a composite of the Foxes and the Sacs, Black Hawk's own tribes, the Sioux and the Mohawks, and was intended to represent the general Indian personality. All of the usual Indian trappings, such as the feathers, buckskin and other conventional signs, have been left off.

From the standpoint of construction the statue presents a very interesting departure from the usual methods employed in sculpture. Heretofore immense figures of this kind have been executed in bronze or iron, as is the case with the Goddess of Liberty in New York harbor. However, Mr. Taft, following the tendency of the times to erect structures of various kinds in concrete, has used this material exclusively in the erection of Black Hawk. Concrete when properly set is practically everlasting and indestructible. This, together with the deep and carefully laid foundation resting on ledge rock, makes it certain that the monument will endure. It is solid concrete except for a hollow perpendicular shaft in the center terminating just above the folded arms. This shaft is large enough for an observer to be elevated and peer out over the valley from a little window in the head of the statue. The statue, exclusive of the foundation and low pedestal on which it stands, weighs approximately 300 tons.

The erection of the Black Hawk statue was accomplished only after nearly three years of hard work. The original figure was modeled by Mr. Taft in life-size form. This was enlarged by careful measurement to a frame of scantlings around an "elevator shaft." When the entire figure had been framed in lumber the surface was made by stretching wire netting over the timbers and then nailing burlap over the forms. Next a three-inch mold of plaster was placed over the burlap. Over three tons of plaster were required for this coating, and many timbers to support it. Finally everything was taken out of the mold and
STATUE OF BLACK HAWK, NEAR AURORA, ILL.  
LORADO TAFT, SCULPTOR.
the entire space, save for a seven foot shaft, filled with concrete. The pouring of the concrete required ten days and two crews of fourteen men each working in day and night shifts.

Mr. Taft's latest work and the one which will, perhaps, be seen by the greatest number of people is the sculptures for the Columbus Memorial, which was dedicated in Washington last summer. The memorial consists of a semi-circular fountain, seventy feet wide and sixty-five feet deep, adorned with a great statue of Columbus and other appropriate sculptures. It stands on the plaza in front of the Union Station at the National Capitol, and was designed to harmonize the station and its environment by its architectural and artistic treatment.

The principal feature of the rear of the fountain is a stone shaft about forty-five feet high surmounted by a globe of the world. It forms the background of a statue of Columbus, who is represented as standing on the prow of a ship, with arms folded in an attitude of meditation. While the statue is severely plain, the sculptor has imparted to the figure a peculiar dignity by throwing about it a great cloak, impressively draped.

Just below the statue of Columbus is the figurehead of a ship, a beautiful female figure of ample form and dignity, interpreting "The Spirit of Discovery." The basin of the fountain is immediately beneath this figure and is in itself most interesting with its abundant flow of water.

On either side of the stone shaft is a massive figure portraying the sculptor's idea of the New and the Old World. The New World is represented by the figure of an American Indian reaching over his shoulder for an arrow from his quiver. The Old World is represented by the figure of a patriarchal Caucasian of heroic mold and thoughtful mien.

The globe at the top is intended to suggest the influence of Columbus on the growth of popular knowledge of the shape of the earth. It is supported by four American eagles, which stand at the corners of the top of the shaft, with wings partially extended.

The rear of the shaft carries a medalion representing Ferdinand and Isabella of Spain, and the group of figures is completed by two enormous lions which occupy the ends of the balustrade running from the center to the sides of the fountain.
In this article, the third in the series, Mr. Beach speaks of certain evils that persist mainly because of the layman's unfamiliarity with practical affairs in relation to building and with the demands of professional conduct in architecture. Later articles will deal with “Associate Architects,” “Specialists” and “The Consulting Architect.”

By natural progression the next step from the professional architectural business getter leads us to the building broker. This party may be a real estate agent, a mortgage broker, a banker’s assistant or merely an indigent architect out of a job. Whoever or whatever he is, he gets to a prospective owner before such owner has interviewed an architect and professes to be able to assist to a considerable degree in financing the enterprise.

It is this phase of the broker’s professed service which particularly appeals to the intending builder, who has discovered an initial difficulty in disposing of a first mortgage. He has learned that the large loan companies will not make an examination of a building project except on an architect’s drawings and specifications. Instead of getting such assistance (which does not mean complete service) in a straightforward way from a reputable practitioner, who would probably be willing to share the risk with the owner to some extent, the cautious party allows himself to be inveigled by the “broker,” whose work is then easy. From a risky architect he gets the required drawings and description after promising him the job on a split fee to be partly paid in stock in the building company. A friendly contractor offers to take the work at cost-plus-ten-per-cent and accept all or part of his pay in stock, of which he will also give the broker a share. The enterprising promoter then takes the scheme to a loan broker, if he be not himself in that business, and again arranges a split commission. As to the loan itself, if it can be made at all, it is probably a very simple matter, which the owner could have readily arranged without assistance, and at what a saving!

Due to the intervention of the broker, the owner finds himself paying six per cent to a three per cent architect; paying ten per cent (and something more concealed in rebates) to a five per cent builder; and paying one or two brokerage fees on top of all. Much of this “overhead expense” could have been saved and a better building secured, if the owner had gone directly to the best architect available and secured his assistance to do nearly all the building broker did and that without paying more than the regular architectural commission plus the loaning company’s mortgage fee.

The building brokers’ “graft” appears to flourish to a larger extent in the East than in the West, but it can be successfully worked wherever an owner will allow himself to be misled by the promise of prelimi-
nary service that will be rendered free in case the project does not become a reality. It can be assumed that it is intended that such service will be paid for several times in the event that an actual commission results. And the broker reaps the benefit without assuming any risk and with very little effort.

One of these investments has been figured in detail as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td>$250,000</td>
</tr>
<tr>
<td>Building</td>
<td>350,000</td>
</tr>
<tr>
<td>Total</td>
<td>$800,000</td>
</tr>
</tbody>
</table>

It will be observed that the owner got his building without the investment of any cash, assuming that he had the property clear of incumbrance. Naturally, this was quite satisfying to him. But he never knew that the actual overhead charges on the building were fully fifty thousand dollars higher than necessary and that this fifty thousand and interest thereon will ultimately have to be paid out of the earnings of the property.

An analysis of the cost of the building discloses the fact that the net expenditure for labor and material was about two hundred and fifty thousand, leaving nearly one hundred thousand overhead expense. This was apportioned among the interested parties (interested in fleecing the owner) in the following manner:

<table>
<thead>
<tr>
<th>Party</th>
<th>Cash</th>
<th>Bonds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor</td>
<td>$9,750</td>
<td>19,000</td>
<td>$28,750</td>
</tr>
<tr>
<td>Architect</td>
<td>7,975</td>
<td>13,000</td>
<td>20,975</td>
</tr>
<tr>
<td>Loan broker</td>
<td>3,000</td>
<td></td>
<td>3,000</td>
</tr>
<tr>
<td>Sub-contractors</td>
<td>9,000</td>
<td>18,000</td>
<td>27,000</td>
</tr>
<tr>
<td>Mistakes, etc.</td>
<td>10,000</td>
<td>10,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Interest, etc.</td>
<td>2,775</td>
<td></td>
<td>2,775</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$50,000</td>
<td>$50,000</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

These figures are interesting only as typical of such a transaction, each grafter in it naturally getting all he can. Such deals are not as unusual as might be supposed. They are frequently resorted to by dishonest agents in charge of property held in trust. One broker has been heard to say that, although he always charges in six per cent for architectural service, yet he seldom pays even three per cent. It is difficult to find any legitimate excuse for the business of these “brokers.” Their machinations can and should be avoided by the client going directly to the architect and receiving simple instruction on how to be his own broker.

**COMPETITIONS**

Much has been said and written on the general subject of architectural competitions. Much has been orally expressed that would be unprintable. Mr. Cass Gilbert, at one of the conventions of the American Institute, voiced the sentiments of many architects when he prefaced his remarks on this topic by saying that his opinion of competitions was identical with that made famous by the late General Sherman on the subject of war. He added that only his gambling instincts impelled him to enter even formal competitions—and assuredly no game of chance is more uncertain.

It is argued in favor of competitions that

1. They are absolutely demanded in connection with large public work.
2. They inspire ambitious architects to their best efforts.
3. They afford opportunity to the young practitioner to show his ability and thus improve his status.
4. They are of considerable educational benefit, both to the public and to the profession.
5. They have a certain advertising value for the entrants.

As to the first argument, it is not altogether conclusive, as will be pointed out later.

The second argument is admittedly true, but the working out of this effect is not as praiseworthy as it should be for argument’s sake. Ambitious architects are inspired to exert their best endeavors, but, unfortunately, not to their own idea of the best solution of the problem to be developed. They are prone rather to gauge as nearly as they can the manner of solving which will find favor with the known predilections of the judges. It is hardly possible to conceive that an ar-
The architect will deliberately offer a design which he considers best, if he knows it is foreordained to failure.

As to the third argument, the present formal competition has evolved into a thing so unwieldy that only the largest work, public and semi-public, or monumental structures of importance, are so awarded. Young practitioners are not invited into these and would not be allowed to execute the work, if they did happen to get in and win.

The educational benefit must be considered with a large question mark. Judging from what the public has had served up in the daily press anent the New York Court House competition, it must be pretty thoroughly at sea as to what constitutes architectural design and what are the aims of the Institute. Competitions are no doubt of great benefit, educationally as well as financially, to draftsmen; but, as far as the layman is concerned, it must be borne in mind that architecture is a living thing, expressed in buildings, not in pictures. It is not demonstrable that, to date, the general average of our buildings of any type has been improved because of competitions. Architects who have won in such events and have built accordingly have oftentimes been heard to express regret that they could not have assisted in the preparation of the program or, at least, have been allowed their own interpretation of the problem, instead of having been forced to do certain things, to them objectionable, in order to secure the privilege of performing the service.

As to the advertising value of competitions, the winner certainly gets this in full measure—or would, if the disgruntled ones would quietly take their medicine and not attempt to tear him down. In excuse for these complainers, however, it must be borne in mind that, averaging all competitions, the formal and informal together, probably only a very small proportion are actually fair to all concerned. It is this condition that once led an engineer to exclaim, "Well, of all the inconsistent fools, commend me to these architects! They rush into these so-called 'competitions,' knowing there will be nothing fair about them, and howl because they are unfair. I have precisely as much sympathy for them as I have for the young idiot who expects to beat a roulette wheel which he knows is fixed."

While we will admit that the winner may get honor and fame out of his good fortune, it is hard to see the advertising benefit to the losers who must so greatly outnumber that winner. Misguided competitions have frequently served to indicate to the laity that some real ignoramus far outshone his professional confrere.

The abuses attendant upon competitions led the American Institute some time ago to an exhaustive study of the subject, especially in its relation to important work. After many changes, the Committee on Competitions, with the ratification of the Institute, issued a fourth edition of its circular on the subject in January, 1913, in which there is much of interest that the public could well afford to digest. It first expresses the "Attitude of the American Institute of Architects to Competitions," with a statement of some of the evils attendant thereon.

"Since its foundation more than fifty years ago," we quote, "the American Institute of Architects has given much attention to the conduct of architectural competitions. These contests, generally needless and always too numerous, were for many years conducted without proper regulation and often in disregard of the interests both of the
owner and the competitors. The owner, totally unfamiliar with the intricacies of the subject, assumed, without skilled assistance, to prepare the program, laying down, or more frequently ignoring, rules to govern procedure.

"Architects were led by many reasons to enter such competitions. Some needed work and were compelled to take any chance to obtain it. Many enjoyed the contest, some the exercise of solving an interesting problem. Architects have, however, learned that the outcome of a competition is largely a matter of chance and that the method rarely produces results in a building better than those obtained by direct selection. The owner has, to be sure, a choice of designs, but he is no more likely to make the wisest selection or to obtain the best building than if he selects his architect directly, guided by the results previously achieved by the men he is considering."

There follows a statement of the four chief essentials to a proper competition: that there should be a program, clearly stated; that the competency of contestants should be considered; that there should be a definite agreement between these and the owner; and that the judges should be technically competent.

"Fifteen years ago," the circular continues, "many competitions had none of these provisions and few had all of them. The commonest form of competition was one that was open to all, had a program prepared by a layman, was judged by the owner without professional assistance, contained no agreement, and made no provision to eliminate the incompetent.

"With the growth of the country, the increase in expenditures for public and private buildings, and the increase in the number of architects, all the evils of ill-regulated competitions become more marked and more burdensome.

Programs varied from loose and careless forms difficult to understand and often open to suspicion that only the initiated knew what they meant, to over-elaborate ones necessitating useless study of details and needless drawings. Those instituting the competition often had no legal authority to pay any of the competitors, still less to employ the winner. There was great economic waste, the total cost of participation exceeding the total net profit accruing to the profession from work secured through competitions.

"All this demanded correction. The Institute seeking a means of reform, perceived at once that its relation to the owner could be only an advisory one. It might urge him not to hold a competition or it might advise how to hold one, but it could go no further. To architects in general the Institute could scarcely presume to offer even its advice but, being a professional body charged with maintaining ethical standards among its own members, its duty was to see that they did not take part in competitions that fell below a reasonable standard.

"The Institute, therefore, as a first step, put itself squarely on record as opposed to competitions on the ground that they were uncertain in their results and wasteful in time and money; but since they are sometimes necessary, it was voted in convention that members should be free to take part in them when their terms had received the approval of the Institute.

"The position thus taken by the Institute is by no means an arbitrary one since it governs the action of none but its own members. To the owner, its service has been of great value in giving him information and useful advice and in saving him from the delays, cost and disappointment incident to the
amateur conduct of a competition. The owner who disregards the standard set by the Institute finds it increasingly difficult to get men of standing in the profession to enter. He who raises his program to that standard has no difficulty in securing the services of architects of greatest ability.

"Even in the few years since the Institute made its firm stand against the abuses of competitions the effect of that action had been far greater than could have been foreseen. It has not altogether eliminated ill-regulated competitions, but it has greatly reduced their number, and it is safe to say that no competition of prime importance is now conducted except in accordance with the principles stated in the following Circular of Advice."

The foregoing merely hints at the "evils" of informal competitions. Their actual extent could not possibly be over-estimated, even today, in spite of the complacent assurance in the last paragraph quoted. It must be noted that this assurance applies only to those competitions "of prime importance." Those that are of lesser magnitude sail merrily ahead in the same old way despite all that the Sub-Committees on Competitions can do to prevent. The last thing wanted by those conducting such competitions is outside assistance—professional interference. The following is a specimen of the kind of invitation that is being continually sent out by school house and court house building committees the country over:

"Dear Sir:—I am enclosing herewith preliminary specifications for a proposed High School Building at this place and invite you to submit a sketch, etc., of a building that would meet our requirements; however, this is to be done without expense to us, for while we do not mean to ask free work, yet we prefer to have submitted an outline by different architects and when all is considered we will employ some one to prepare the plans in detail. It is possible that some of the outside architects will submit stock plans that would be entirely satisfactory; that remains to be seen. At this time we are lined up with no one, but want to get the most for the money we have to expend."

Of course, the requirements and appropriation are quite incompatible; but, needless to say, that Board found architects willing to throw away their time and money in the venture. Indeed, it is doubtful if other professional men are expected to do so much for so little as is the case with architects.

The treatment accorded contestants on such an occasion is bad enough when the members of the committee are trying to do their best, as witness the following:

A committee of fifteen most prominent citizens was appointed by the governor of a state to take charge of the erection of a state building. This commission appointed a committee of five of its members to select and recommend an architect for the work. One of the other ten discovered that the architects in his community were being ignored. He influenced the committee to declare a competition and a program was accordingly issued, though it was said that the favored architects had already prepared their preliminaries. The entire fifteen acted as judges, scorning technical assistance. When the award was made to the architects who were originally "slated for the job," the objection was raised that these architects had made practically no attempt to comply with the instructions set forth in the program.
"What program?" asked the president of the Commission. "We decided before we began looking at the sketches that the sub-committee had exceeded its authority in issuing that letter, so we just ignored it and made the selection which the majority thought best for the good of the State."

Thus were the dozen other architects and their wasted efforts carelessly brushed aside—and by men of the highest type in their community—"for the good of the State." How then, if the judges be of commoner clay?

The Board of Directors governing an "Exposition" in a small city appointed a Building Committee from their membership. An architect in a neighboring city, who was invited by this committee to submit sketches, declined with thanks, saying that the chance of winning would not be enough to pay for the effort. To this they replied that inasmuch as his previous work in their town had been so very satisfactory, they thought he ought to be a candidate for their show building. They added for his encouragement that only two others would be considered, one local and the other remote, and intimated that the "competition" was really being arranged as an excuse for selecting the man they wanted. And, further, they would agree to reimburse him for his sketches if he was not chosen.

Sometime after the drawings had been entered this architect called upon the committee and inquired as to the outcome. He was informed that they were awaiting the arrival of the drawings of a fourth competitor, naming a notoriously unethical personage. Our friend then announced his withdrawal from the contest, giving as reasons: first, that the committee had changed his theoretical chance from one-in-three to one-in-four; second, that the new entrant was not bound by the same conditions as the others and would undoubtedly submit water color drawings; third, that he would further change the elements of the competition by cutting his price, if necessary, to get the work; fourth, that he was not in good standing in the profession and therefore not a proper candidate.

The committee appeared greatly surprised at the stand thus taken but, after consulting together decided that the architect was justified and told him they would at once adjudge the three sets of sketches. Later in the day they advised him that his drawings had been given preference and that he would be employed provided he would make certain changes in plan and submit new drawings more complete for approval of the entire Board.

A week later these revised drawings were forwarded; but, before hearing directly from the committee, the architect had the pleasure of seeing published water color drawings by the fourth man who had been awarded the work. The Board had set aside the recommendation of their sub-committee "for the good of the community" and because the celebrated shyster had personally appeared before the Board and offered to undertake the commission for a very small fee on account of the "advertising" he would get out of it. Incidentally, it may be remarked that it was the only work he ever did in that city.

Recourse to the law by the abused party in a case of this kind is scarcely advisable for, as was pointed out by influential business men, not on the Exposition Board, the disappointed architect would have been "queered" in that city for all time, if he had attempted by such method to get justice. He must simply take his medicine and smile. This is not to say that there are no fair competitions.
OF all the types of architecture developed by the early colonists of America, none stands apart so individual and so unrelated to the rest as the domestic architecture of the Dutch settlers around Manhattan. This type has been called the "Dutch Colonial," a very misleading term for the style. Manhattan ceased to be a Dutch Colony in 1664, long before any great architectural development began. Those earliest houses on Manhattan Island have disappeared and were evidently either primitive cabins or straight copies of the houses of Holland. The distinctive style of architecture developed slowly, as we shall see, reached its early maturity by the middle of the eighteenth century and did not attain its height until after the Revolutionary War. The best interiors seem to have been built, all of them, after Manhattan was no longer an English colony and had become good United States ground.

Still further, the great vitality of the style and the force of local tradition prolonged it almost unmodified until after 1830. Then the so-called "Classic Revival," together with changes in modes of life, caused modifications for a few years more until the final demise and descent into the inferno of Victorian horrors at the middle of the nineteenth century.

How inappropriate, therefore, is the name "Dutch Colonial," even from a strictly American point of view. But there is a Dutch Colonial style, the true Dutch Colonial architecture of the Dutch, or Boer, settlers of South Africa, developed when the veldt was still under Dutch rule. It is a very simple style, to judge from cuts in English works on domestic architecture—of broad, low walls and simple openings, recalling somewhat the early Spanish work in California.

But if the term "Dutch Colonial" be unwelcome and already copyright in addition, "Georgian" will not do, either. These simple one-storied houses with peculiarly beautiful gambrel roofs bear no relation to anything Georgian. This is not strange when we consider that New York in those early days was as separate from New England and Pennsylvania as Berlin is today from France or Germany. The Dutch settlers held slight communion with their English neighbors, and were possessed of a very well-marked, tenacious individuality, but little influenced from outside. Wherever the Dutch settlements ended there is a sudden change in the type of house. For instance, in Newark fifteen miles west of New York, where the English settlements began, there are a few houses slightly Dutch in appearance, while further on, at Elizabeth, the structures may be recognized at a glance as of the Philadelphia type. The same is true east and north of New York, where there is a sudden change from Dutch architecture to the New England Georgian.

Therefore we cannot trace three well-defined periods of English Georgian influence, as Mr. Eberlein has done for Philadelphia architecture. That is why this Dutch work is so distinctive; it is a slow, steady, local development, unmodified by outside contact, lasting about a century, until the Revolution. The Revolution made the colonies more aware of each other's presence, and the Dutch builders began to borrow from their English neighbors, but for the interiors only. The exteriors were but little modified. Georgian forms, very much changed in expression, if not so much changed...
in form, were used to embellish apartments hitherto severely plain, though very homelike and livable in character. However, even with these modifications, we cannot call the style Georgian.

But if neither of the terms "Dutch Colonial" or "Georgian" apply, what may we use? A difficult question. Would not "Dutch-American" suffice, just as we say "German-American" or "French-Canadian"? Or might we borrow the fine old phrase of Washington Irving's, "Knickerbocker"?

Leaving this academic dispute over terminology, let us consider the architecture. Unfortunately much of the early work has disappeared, especially in the immediate neighborhood of New York, though a few fine examples of wooden architecture are left in eastern Long Island. It is in a district beginning some fifteen miles northwest of lower New York, in Bergen County, New Jersey, and stretching north along the valley of the winding Hackensack River from the town of Hackensack to the New York State line, that we find the most important groups of Dutch houses remaining. Some two hundred of them there are, many, alas, much damaged and altered. It is of these houses in Bergen County, New Jersey, that the present study has been made.

The local history of this region is soon sketched. Owing to troubles with the Delaware Indians, among whom was a tribe called the Hackensacks, the country was not finally settled till the last quarter of the seventeenth century. By 1670 John Berry, an Englishman, and Demarest, a French Huguenot, were each granted a large tract of land comprising the present town of Hackensack and the surrounding country. These tracts were soon occupied by Dutch settlers from Holland and Manhattan, who had long been covetous of the rich New Jersey valleys. Church records in Hackensack date back to 1686, when the community began to take shape. By 1700 it must already have achieved the transition from a pioneer outpost to a well-rooted community of busy farmers, entirely Holland in blood, speech and modes of life. The few Huguenots who came with Demarest were soon absorbed into the Dutch population.

These New Jersey settlements waxed fat with prosperity and increase. They were fully able to supply their own wants and by means of their river held commerce with the rest of the world. Slaves were early introduced to supply labor under a decree of 1664 of the Lords Proprietors of New Jersey, whereby each settler was granted a bonus of 75 acres for every slave he brought into the colony. Bergen County
ORIGINAL DEMAREST HOUSE, BUILT EARLY IN THE EIGHTEENTH CENTURY. TYPE OF OLDER DUTCH HOUSES IN NEW JERSEY.
VANDERBEEK HOUSE, AT HACKENSACK, N. J. BEGUN ABOUT 1717.

ACKERMAN (BRINCKERHOFF) HOUSE. THE LARGE STONE SEEN THROUGH THE VINE AT THE HEIGHT OF THE WINDOW HEAD IS DATED 1704.
VREELAND HOUSE, AT NORDHOFF, N. J. BUILT IN 1818.
was the largest slave holding district, and the Census Reports show 2,300 slaves in 1790 and 1,683 slaves in 1820. This fact of slavery is very important, for without such plentiful labor those massive stone walls could never have been built. Endless good timber was at hand, but the people preferred stone.

The first houses were primitive one or two-room cottages, rough stone walls, thatched roof of flat gable without the wide overhanging eaves so noticeable later on. Naturally, very few remain today. One of the earliest of these, the Kipp House, built by Hendrik de Kype, was burned down only a few years ago. The Winter’s Homestead and the Terhune House, Wykoff, about 1700, shown on page 32, are types of this early house. The small “wing” of the Ackerman House, on Polifly Road, shown on page 38, is probably contemporary with this group. The original Demarest house, by the riverbank near the River Road, north of Hackensack, is a well-preserved example of a slightly later type, but it affords a good idea of the first dwellings. These early structures have all the charm of the tiny cottages of Europe. It is difficult to think of them as native to America.

These simple cottages continued to be built for some time, always more carefully and with better workmanship, the stones laid in courses and roughly faced. This stone is called “brownstone,” but it is very different from the gloomy material used in New York City. It is a local sandstone, found on almost any site, and ranges from the light or dark tan of the Hopper House to the beautiful light brick color of a house at Dumont, owned by Mr. J. S. Mountfort. It has great variety of hue and texture. The walls are eighteen inches, more or less, in thickness, rarely less, and form inside fine deep window reveals. Some even are two feet six inches thick.
BOARD-ZABRISKIE HOUSE, ON PARAMUS ROAD, NEAR HACKENSACK, N. J. DATED 1790.

HENDRICK BRINCKERHOFF HOUSE, ON TEANECK ROAD. INTERIOR UNTouched. DATE UNCERTAIN.
ACKERMAN HOUSE, ON POLIFLY ROAD, HACKENSACK, N. J. WING IS PROBABLY ONE OF THE OLDEST SURVIVALS IN BERGEN COUNTY.

DEMAREST HOUSE—REAR VIEW—ON THE SADDLE RIVER, 1837.
DEMAREST HOUSE, AT RIVER EDGE, N. J. PARTLY DEMOLISHED "DUTCH" OVEN AT END WALL OF WING.
As time went on the stonework was more carefully cut, until in the nineteenth century, we have the precise jointing and smooth tooled finish on the fronts of the central portion of the Hopper House, 1818 (see elevation drawing on page 47), and Demarest House by the Saddle River, shown on page 38, 1837. But this formal stonework is rather insipid compared to the preceding eighteenth century work. No more charming stonework exists than that of the sides of the central part of the Hopper House, and the front of the south ell, shown on the elevation on page 46. Here the contrast of very long and very short stones laid in the seven inch courses common to all the structures gives great life and scale to the wall. The rear and end walls were usually very rough, with the stonework at the corners carefully jointed—a pleasing effect on the whole. It is curious to know that all these walls, even the later ones, are laid in a binding material of ordinary clay from the fields mixed with straw. This is not nearly so crude as it sounds, for the New Jersey soil yields a red clay that is nearly impervious to moisture, the same clay used by the terra cotta companies. Were this a faulty use of binding material the window sills could not have been made in two or three thin pieces of stone without causing damage. In later years the walls have been pointed on the outside with mortar, giving the bright white joints seen in the accompanying photographs. Originally the joints could not have been very noticeable.

Though this clay mixture keeps out moisture, the rain would tend to wash it out of the stones on the outside of the wall. And herein is explained the mystery of the wide eaves that overhang the walls three feet or more without support, which have so bewildered and enchanted beholders: they were built to throw the rain water out from the walls and to prevent the clay from washing out. The end walls were not so easily taken care of. Therefore they were not carried up to the peak of the gable and...
ZABRISKIE HOUSE, 1752, HACKENSACK, N. J.
ALSO CALLED BARON VON STEUBEN HOUSE.
the space between framed in wood covered with shingles and sometimes with clapboards in the nineteenth century. This construction left only a short space of stone wall which needed occasional repair. In some houses, notably the Ackerman House on Polifly Road (see page 38) and the Brinckerhoff House on the Teaneck Road, this overhang was carried around the end of the gable to protect those walls likewise. Thus the varied use of materials in these houses often remarked upon, came about in an entirely natural way. Sometimes the houses had a front wall of brick, or of stucco covering a real half-timber construction, but these cases are rare.

Once the overhang was established, the projection was curved to keep the roof from coming too close over the windows and to avoid a top-heavy, clumsy appearance: Possibly, also, to cast the rain-water further out from the walls. Whatever the cause, the result is one of the loveliest effects of roof architecture known. Not only does it soften the severe expression of angles and planes found in almost any roof, but its lines combine beautifully with the slopes of the site in the foreground and the hills of the rolling country in the distance. Mr. R. A. Cram has journeyed to Japan to find wondrous refinements in the roof curves of ninth century temples there. But he need not have gone so far. He need only have taken the trolley into New Jersey to find something just as rare.

These roof eaves are sheathed underneath to form a box cornice five to seven inches deep at the outside edge. On the gable ends in later times was a delicately moulded skirt boarding and sometimes an exquisite row of dentils found in the Ackerman House (nineteenth century) on the North River Road, or else the half-round modillions of the Terhune House, owned by Mr. T. J. Palmer, in Hackensack, almost the sole use of mouldings on the exterior besides door
and window architraves. These projecting roofs became universal early in the eighteenth century and where they are not found a careful inspection will show that they have been cut off in later times. The wooden Dutch houses of Long Island have similar roofs, though with a slightly flatter, easier curve that begins its sweep further up the slope, and is perhaps not so firm as the New Jersey variety.

When the original cottage grew too small for its owners, a second larger house was built against one end and became the main portion of the house, the original building now changing into a kitchen “wing.” Then frequently a second wing, more or less like the first, was added on the other end of the building to accommodate a married son who used the living quarters of the main house with the rest of the family. Thus the symmetrical house plan of centre and flanking wings was not at all a formal conception carried out at one time, as we build houses today, but was simply the result of a natural growth in the prosperity and wants of the family. There is a curious house in Midland Park, showing three houses in a row, the larger two of which were additions to the original part, an extreme case in point. Later on, houses were built with main part and one wing at one time, but usually they just “grew” as described.

This larger central portion of these early Dutch houses was roofed by a beautiful low gambrel roof distinct from any other type and unknown in Holland. Its origin has caused much anguish to critics. It is better to do as Monsieur J. Guadet did in speaking of a certain feature of the Doric Order and acknowledge at once that we know nothing whatever about it. It is hard to say just when in the 18th Century this form of roof became general. A worthy local custom in building a home was to select a stone in some conspicuous part of the outside wall and cut upon it the date, and usually the owner’s initials (see the photograph on page 44). This gives us the date of many houses, but we must not be deceived; it often fixes only the age of the original “wing” and tells nothing of the time of subsequent additions or changes which were constantly taking place. Sometimes when the wall where the datestone was set was torn down, the datestone was inserted in the wall of the newer part, to cause further confusion for the antiquarian.

The gambrel roof was known in New England even earlier than 1670. In Bergen County the Dutch form of gambrel roof must have been well established by the middle of the 18th Century at the latest.

This local type of gambrel is much more beautiful than the New England variety, hugging the walls more closely, and once met with, like the song of the rattlesnake, can never be mistaken for anything else. The steeper slope is about 45°, or slightly less, and quite long. The top slope is less than 25° and quite short. The measured drawing of the end of the Hopper House on page 46, is a splendid example which shows slopes of 44° and 23°, respectively. The combined slopes and overhanging curves of the eaves of the Dutch roof make it the most beautiful gambrel known—compact, with extraordinary harmony of the relations of angles and curves to each other and to the wall below. Many examples are shown in the accompanying photographs. This roof is found everywhere with but slight variation in its elements. Evidently the Holland farmers appreciated its rare quality, for they used it in smaller structures where a plain gable could have spanned the walls almost as well.

There is still another curious feature about these houses that is unique. If it is not speaking disrespectfully of fine things, they were the first American bungalows of importance. All the living rooms were on the ground floor. The usual plan is a centre hall through to the rear wall with a “Dutch” door at each end separating two larger rooms on the front, which were the living rooms, and two smaller bed rooms at the rear (see measured plan). The stairs in this wide hall led up into great lofts left unfinished, very picturesque in their fine old pinned trusses of oak. The larger farms had many hundred acres and several slaves, a little community in itself, self-supporting and carrying on the vari-
ous household industries universal in the Colonial countrysides. The lofts, therefore, served as great storehouses and workshops for weaving and spinning, etc. They were lit at each end by three windows, above these at the top of the gable a small square window, which later became a semi-circular one. Sometimes rough partitions by these gable ends formed primitive bed rooms for children or slaves. The old Ackerman house on Polifly Road, shown on page 38, has a gambrel attic with the partitions still left. People yet alive remember the unfinished lofts, and furthermore the difference between the woodwork itself of the first and second stories furnishes complete proof of their original character. Dormers were never needed and were not found, all such being later additions when people desired more space and finished up the loft, leaving a small secondary attic at the tip of the gable.

At Rutherford, seven miles south of the town of Hackensack, where the English settlements began, is a large stone two-storied house, built by the Kingsland family, bearing the date 1670. It is really an English manor house, except for the huge gambrel roof like that of the Berdan house, shown on page 45. If we may take the datestone at its face value, we have in the Kingsland house the oldest gambrel in the country, which may have been copied by the adjacent Dutch builders when they built the larger additions to their small houses. Still, this stone may have been moved from the wing—which has been torn down—to the present portion of the house, which would therefore be newer. The wing itself could hardly be older than 1670, for it was in that year that Major Kingsland received his great grant of land—the Kingsland patent—which opened up the country around Newark for settlement.

All this lengthy explanation is necessary to understand the unusual character of the Dutch houses in New Jersey, and we are ready to summarize the standard type of country house. It was a low stone dwelling usually with one wing, and sometimes with two, a “Dutch” door in the middle and oblong fanlight above, two windows at each side bare of columns or any other architectural features—only a simple platform with plain side railings in front of the door—the walls carrying low unbroken gambrel roofs with eaves curving out three feet more or less to protect the stone walls—the whole in exquisite scale and proportion, with an extraordinary expression of strength, austerity, harmony and comfort.

The wings were lower and covered with a plain low gable, usually with the curving overhang. Big chimneys there were, usually of brick brought from Holland or the Barbadoes. This type of house, which we may call the “classic type,” remained unaltered until the so-called period of “Classic Revival” brought so many changes—which have continued to the present day—that it is difficult to extract the old places from the debris that encumbers them and show them as they were in the beginning.

The best house of all remaining unchanged, both inside and out, is the Hendrick Brinckerhoff house by the car line on the old Teaneck Road, and I have selected this as the one typical above the others. Its date is doubtful, but it is old among these houses. Charmingly situated as it is, with end towards the road, on the hillside, with a fine view over the marshes of the Overpeck Creek, may nothing ever occur to disturb its ancient serenity! Other houses press it closely, however. There is the old Ackerman House on Polifly Road of much the
same type (see photo on page 38), and the Demarest house at Riveredge, begun probably early in the 18th Century (see photo, page 39), and now slightly altered, has perhaps even more quaint charm than the other two. A house at Dumont may be mentioned as another well-preserved example. Of the later and larger 19th Century houses, the Demarest house across the Saddle River (see photo of the rear on page 38), west of Hackensack, is a perfect example. It shows the strength of the local tradition when we realize that this house was built as late as 1837, almost without change from the earlier types. The front of the Hopper house, 1818, has been sadly mutilated, but the restoration, shown on page 47, is exact, for the overhang on the rear was never touched, neither was the south wing.

These later houses stand higher off the ground to give more light in the cellar. The earlier ones are set with the first floor only a step above grade. Of the smaller houses, none is more charming inside or out than the well-known "Brinckerhoff" house—it was built by an Ackerman in 1704—by the Essex St. Station in Hackensack owned by Mr. J. S. Mabon (see photo of side and front door). The stone wing is gone, and has been replaced in late years by a wooden addition.

The dormers were built later, and the two white columns and seats were added only several years ago and are not unattractive. Very effective additions of
square posts to form porches are found in the large Vreeland house at Nordhoff, contemporary with the Hopper House, (see photo on page 47), and, even better, the Westervelt house at Cresskill, the main portion of which was built in 1808. A perfect little house (shown on page 34) is the one behind the Hackensack Post Office, begun by a Vanderbeek about 1717, which has a stucco front.

A curious variation is found in the house by the bridge at North Hackensack, called the Baron von Steuben house, built by a Zabriskie in 1752 (see photo on page 41). It was presented to the celebrated German by the State of New Jersey in acknowledgment of his services in the Revolution. But he sold it immediately afterward and never lived in it. Here the original house was enlarged by adding another portion of about the same size against the rear wall, thus doubling the depth of the house. The outside slope of the original simple gable was used as the lower one of four slopes for a very flat gambrel. This achieves a beautiful effect outside. Inside, the stairways with landings at the rear caused the builders to place the rooms in the new portion at the landing level, half way between the floors, giving a charming variety of plan. The roof trusses resulting from this alteration are very curious and help tell the story of the change. Incidentally, this roof shows almost the only successful use of dormers that I know of in this region.

The Terhune house, mentioned above, has this same curious alteration and an even flatter gambrel than the other. This house is at least two centuries old and its first known owners were the Terhunes (see plate).

There is an exquisite little house by the Anderson St. Bridge, Hackensack. It was supposedly built by the same Terhune family who owned the other house nearby, and is at least 150 years old. "Classic Revival" additions have not injured it in the least, with its white painted wood walls. Overlooking the river from behind the gigantic tree which really was a part of the "forest primeval" it forms as dainty and cozy a picture as one could see.

But of all the places in this old countryside, none is more delightful in itself and in its situation than the Board-Zabriskie home on the old Paramus Road, northwest of Hackensack (shown on page 37). It was begun in 1790 by a Zabriskie. The house stands at right angles to the road and the end of the nearest wing strikes one at once with its two little oval windows set diagonally in the gable and its perfect detail. The rest of the structure has been often added to, but not in such a way as to harm its picturesque effect. It forms one of those groupings that dazzle the architect who would like to create them all at once, whereas he should give some fifty years to the work. A great lawn, with beautiful trees and shrubbery, stretches away from the rear of the house, and in front, across the driveway, is an old "Colonial"
garden carefully laid out with paths and boxwood hedges, spanned at intervals with charming little arches and trellises. Nearby is an old barn, with great timber work that reminds one of the ancient structures of Europe.

It is worth while to mention several houses of the town type of two-storied house still remaining on Main Street in the town of Hackensack. The best one is the house built by a Berdan in 1762, once used as an inn, shown on page 45. It has a good gambrel roof without the overhang, which would have looked clumsy, perhaps, on a two-storied building. The interior remains, with many interesting details. The other houses have been altered outside, but retain good interior details, notably the Peter Wilson house, built in 1783, and the Anderson house. This group of town houses gives some idea of the sort of dwellings built in New York City about the time of the Revolution.

In all this rather intricate discussion of the Dutch country house in New Jersey and its curious features, a few salient facts should be briefly emphasized to avoid confusion. First of all, these houses form a distinct unvarying type that stands absolutely apart from all the other types of architecture of Colonial America. The primitive or pioneer stage of its development runs through the last quarter of the Seventeenth Century, and is typified in the simple cottages of Jack Terhune and Demarest described above. As the district prospered in the Eighteenth Century, larger and more substantial houses were built and the gambrel roof and overhanging roof appeared; but no additions of porches or columns of any kind were permitted to relieve the austere proportions of the exteriors. Thus through gradual development a "classic" type was reached by the middle of the century, of which the Hendrick Brinckerhoff house is the most perfect and most perfectly preserved example. Later on, after the Revolution and in the Nineteenth Century, larger houses were built, but never better than the home of Hendrick Brinckerhoff. Sometimes, indeed, they fall short of its standard. Of these later houses, we have the Board-Zabriskie, the Hopper and Demarest houses by the Saddle River, all three showing traces of Georgian influence exteriorly, and plenty of Georgian characteristics interiorly. We must consider the addition of columns or posts under the overhanging eaves to form a porch across the front to be a departure due to late Georgian or "Classic Revival" influences—a variation best exemplified in the Vreeland and Board-Zabriskie houses.

To appreciate these old homes at their best, one must view them set in their native landscape, amid the rolling slopes and soft, luxurious meadows of New Jersey. As a rule, their general setting is rarely harmonious, especially among those in the open country. In some cases, however, they lack the precisely
wrought planting immediately about them that we admire so much in English cottages, and this want of carefully composed foreground sometimes makes it difficult to show them at their best in a photograph.

This finishes the account of the history and development of the Dutch country houses in New Jersey. A consideration of the interiors remains for another article, which will appear in the next number of The Architectural Record.
MANTEL DETAILS IN THE HOPPER HOUSE
HACKENSACK N.J.

SCALE: $1\frac{1}{2}'' = 1'-0''$

THE ARCHITECTURAL RECORD
DETAIL PLATE NO. 30

MEASURED & DRAWN BY
JOHN T. BOYD JR.
MANTEL MOULDINGS

21. CAP OF LONG SPINDLE-DINING R'M MANTEL
22. CAP OF ALL SHORT SPINDLES
23. BASE OF ALL SHORT SPINDLES
24. BASE OF LIVING R'M MANTEL
25. TOP OF LONG SPINDLE IN DINING R'M

ARCH DETAILS

27 & 28. MOULDINGS BETWEEN UPPER & LOWER SPINDLES
35. TOP OF KEY-BLOCK OF SEMI-CIRCULAR ARCH
36. BED-MOULDING OF ARCH PIER 6 OF BED-ROOM MANTEL
37. BED-MOULDING OF ARCH IN HALL
39. SECTION OF CORNICE OF DOOR ENTRANCE
40. CORNICE OF PILLASTER IN HALL

STAIR NOSING & PANEL

33. SECTION OF MANTEL SHELVES
34. LABEL MOULDING AROUND PLACE OPENINGS

MOULDINGS IN THE HOPPER HOUSE
HACKENSACK N.J.

THE ARCHITECTURAL RECORD
DETAIL PLATE NO. 31

MEASURED & DRAWN
BY
JOHN T. BOYD JR.
Once the love of the soil gets into a man’s heart, there is no turning his back on it, for just as sure as opportunity offers he is some day going to shake the dust of the city off his feet and enjoy to the full all those delightful sensations which, since the days of his boyhood, have been latent in his subconsciousness.

Such was the experience of one big financier who recently bought a farm in Westchester, built a house upon it, and dubbed it Haymount, in memory of a dear old home in Virginia. It might have been the ancient orchard, in the midst of which the house is set, which took him back to his youthful days. It might well have been the superb view which, from the 600-foot elevation above sea level, overlooks, toward the west, the stately Hudson as it pursues its course to the sea, or, to the east, commands a view of the Berkshires as they pile, mound on mound, until lost in the haze of the blue horizon.

Whatever the reasoning, the house is in perfect sympathy with its environment and the simple dignity of Colonial architecture absolutely fits the site. Then, too, the Southern type of plantation home suited the taste of the man, who is a Virginian by birth, while it also adapted itself to the business aspect of his life, which is now that of practical farming.

Haymount is by no means an experiment; neither is it a hobby, in the light in which most rich men’s estates are generally regarded. It is a very practical stock farm—fitted with the most up-to-date equipment and run on scientific lines to be an active paying proposition.

Many interesting problems have been worked out in the development of Hay-
mount. The splendidly laid macadam driveway which winds in and out, up and over steep grades, through the two hundred-acre estate, is the first thing to stimulate the imagination after passing the gate lodge with its picturesque rubble stone lower story and green shingled roof, broken by dormers above. Incidentally, it furnishes the keynote of the place, rugged honesty of purpose.

Next to catch the eye is the staunch masonry of rubble stone used for the massive walls flanking the main portions of the driveway and in the construction of many of the buildings. The unusual treatment of the big boulders (which, taken from an old stone fence on the place, are beautifully colored, in many cases moss grown); and the matter of binding them together in such a stable manner, must prove a source of unfailing delight to artist, artisan or layman.

Finally, the house itself, a fine type of old Colonial mansion, designed by Arthur T. Remick, splendidly conceived and happily executed, illustrates the supreme problem of all, that of providing a practical farm home for a retired business man of means, blessed with a large family and a deep love of nature.

Houses, like persons, have individuality. The distinctive note at Haymount is hospitality, which is as it should be, since the owner cherishes all those delightful traditions of men born in the South and is never so happy as when he can entertain his friends.
MAIN ENTRANCE OF HAYMOUNT, WESTCHESTER COUNTY, N. Y. ARTHUR T. REMICK, ARCHITECT.
THE ARCHITECTURAL RECORD.

BREAKFAST ROOM AT HAYMOUNT, WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.

DINING ROOM AT HAYMOUNT, WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.
A COLONIAL MANTEL IN BEDROOM AT HAYMOUNT, WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.

BEDROOM AND BOUDOIR AT HAYMOUNT, WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.
To further symbolize the thought, the architect has brought forward the wings in a friendly inclusive fashion. He also served another purpose in resorting to this little artifice by foreshortening the view toward the long side of the house. Then, by handling the plans and elevations in such a manner, he was able entirely to overcome the appearance of a hostelry, which a Colonial house of between sixty and seventy rooms must inevitably present.

Mr. Remick broke up the long and monotonous halls, and, introducing steps and occasional flat ceiling beams, further counteracted the "hotel" effect. Another point to be considered in the creation of the plans was that the owner originally expected to occupy the house only in the summer time, and that he would be there in the winter only for a day or so at a time; and for this reason it was necessary to work in a bed room and bath on the first floor and to arrange the heating system so that only certain sections need be in operation.

In the stately entrance at Haymount, with its four majestic Doric columns upholding the portico, all the beauty and inspiration of the Georgian spirit are manifest. The dignity of the Colonial idea expresses itself in the simple doorway, with its panels and moon-shaped overlight of leaded glass, in the treatment of the cornice, purposely kept simple to correspond to the facade, and in the attractively designed balustrades of balcony and loggia. Two fine old elms, sentinel-like, guard the entrance, and with the gnarled old apple trees supply that mellow atmosphere which time alone brings.

The house is painted white, with green blinds; and the roof, stained apple green in accord with its arborial setting, is pleasantly broken here and there by quaint dormer windows. It is covered with shingles, although the cypress strips, cut three feet long, planed smooth and laid twelve inches to the weather, give the impression of clapboards. This method has the advantage of reducing the scale of the house. For the same reason, the exterior walls were broken up and varied by the introduction of several bay windows, affording some charming views of the Hudson and surrounding country.

It is said there is nothing new under the sun, but Mr. Remick has lived to refute the old saw, so far as architectural planning goes. The main floor plan of Haymount testifies to this, for he has very cleverly introduced a double row of corridors, supplying the visitor quite a new sensation as he enters.

Just inside the main doorway a transverse corridor connects a small reception room on the left with a ladies' retiring room—very convenient in time of house parties—on the right. A few steps lead up to the main corridor, which runs par-
THE STUDIO AT HAYMOUNT, WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.

NORTHWEST EXPOSURE OF STUDIO AT HAYMOUNT, WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.
allel with the first and connects with those of the wings. From the main hall on this level a pleasing double staircase with a charming Colonial balustrade ascends to the upper floor. Out of it the living room opens.

This living room is reached through a Colonial archway, and is down a short flight of three steps. Directly opposite the entrance, exterior glass doors command a view of the Hudson. A room one has to step down to enter possesses a certain comfortable quality, frequently absent in those on the same elevation. As the family room should do, it speaks rest to the weary. The big, roomy library chairs, upholstered in the soft tones of antique tapestry, seem actually to yearn for occupancy; and their inviting appearance is shared by the well filled book shelves. A big open fireplace and tall branched candlesticks electrically lighted, contributing warmth and illumination, add yet another element in creature comforts which this modern farm so generously affords.

One seems suddenly transported into the open on entering the dining room, which gives off to the right, for the scenic wall cover, with its extensive vistas and tropical luxuriance, lends a decided *al fresco* air, a characteristic emphasized by the sunny breakfast room to be seen through the glass-paned doorway beyond. This is, consistently enough, a continuation of the long and ample porch and, like it, paved with lovely green faience. Hepplewhite furniture completes a picture of restful simplicity.

To the left of the living room is the den, or office, arranged, as is the breakfast room, so that one may enter or have access to porch or lawn, without having to pass through any other portion of the house. Next comes the owner's suite and at the extreme southern end is the morning room, pleasantly secluded and giving upon a spacious sunny loggia, leading by way of a broad flight of steps to the pleasance below.

The entire northern wing is given over to the service plant. It contains pantry,
cold storage, servants' dining room, hall and porch and trunk elevator. All the rest of the house is devoted to sleeping accommodations.

Ample opportunities for hospitality are afforded in the eleven bed rooms, boudoir, eight bath rooms and linen closets on the second floor, with fifteen bed rooms and four baths on the third. The main wing rises one story higher than the rest and contains two large bed rooms, a trunk room, cedar closet and extensive storage space.

The woodwork throughout the house, except in the morning room and the den, is white enamel with mahogany doors. In the morning room chestnut is effectively used to panel the walls, the beam ceiling being stained a soft brown. In the den, hazel wood in its natural color wainscots the walls and composes the ceiling beams.

A distinctive color scheme has been followed in each room; but throughout there is a welcome simplicity, and English chintz and pleasing materials in plain colors have been largely employed for draperies and upholstery materials. Two of the bed rooms are done in old ivory, one in dull blue, another in gray and a suite in old rose. The walls of the reception room are hung in panels of pale green textile in the shade harmonious with ivory paint.

In nearly all cases the decorations are made to harmonize with the mantel facings, which, by the way, as they are so numerous and varied, deserve a chapter in themselves. Nearly all the rooms on the first and second floors have fire places. Faience in brown, blue and green or combinations of these colors, with now and then tapestry brick in soft dull red, depicting landscape scenes, in some of which farm life is illustrated, was introduced to establish individuality.

The treatment of the bay windows has contributed as much beauty and comfort to the interior of the house as they have variety to the exterior. Low, deep comfortable window seats have been built in and not only afford delightful lounging places but also conceal the radiators. In
rooms where the seats were not used, the radiators have been enclosed in the window stool, the heat passing through a plain bronze lattice design register at the top.

Colonial side lights are used almost exclusively, and miniature Empire shades the color of the decorations have been used with, in some instances, girondels to make them more effective.

In the basement of the house the equipment is identical in scope, if not in extent, with that of a modern hostelry. Except for a suite of rooms designed for the butler and second man, all the space is devoted to household needs. First of all, there is a large and very complete mechanical laundry, operated by electricity, a wine cellar, vegetable and grocery rooms, storage and boiler rooms.

From this level is operated an electric master clock, supplying motive power to all timepieces throughout the house. A telephone system with intercommunicating 'phones over the entire estate is in operation, with long-distance connections in each room.

Just below the main entrance, low walls, granite capped, enclose the fountain and lawn adjacent to the house, and incidentally mark an architectural feature that adds not a little to the beauty of Haymount. Passing by the garden where roses and all the tribe of the old-fashioned sisterhood will reign a little later, below a fine green-house now in process of construction, the garage is reached. For a utility building it is a most attractive one, following the simple lines of the main building.

Once more Mr. Remick has employed the plan of bringing forward the wings to break the line of the broad facade, this time by the addition of a brick wall very conveniently creating a courtyard about the automobile entrance. A distinctly "homey" air is supplied by the nine-room cottage terminating the western end of the garage and the two housekeeping suites for single men and visiting chauffeurs on the eastern end. An octagonal tower, introduced between the cottage and the garage proper, further breaks the monotony and adds a picturesque note to the front elevation.

Haymount has a fine water supply. It comes from three artesian wells, two of them constantly flowing, situated about midway between the residence and the gate lodge. The water is pumped by gasoline engines and air compressors into a large reservoir containing more than 300,000 gallons, from which it is forced over the place, the buildings below this
SUPERINTENDENT'S COTTAGE AT HAY- 
MOUNT, WESTCHESTER COUNTY, N. Y. 
ARTHUR T. REMICK, ARCHITECT.
point being supplied by gravity. Fire stations are located at convenient points fitted with a complete fire-fighting apparatus.

Hidden away among the magnificent old forest trees, on a knoll half way down the hill, is a charming woodland nest. It is a lovely studio of stone and shingles, built for a younger daughter of the owner primarily as a workshop, but where after her subsequent marriage the first summer honeymoon was spent.

From the heart of the woods entrance is had by way of a wonderful rubble stone veranda to a delightful reception room, whence one gets a view of the studio below. Beyond it is a small suite containing bedroom and bath, while to the right of it is a balcony, running the full length of the building. This overlooks the studio. As the original plans contemplated an atelier simply, a little kitchenette was introduced by enclosing a veranda on a lower level, which, on account of the steep grade, opens directly to the ferns and flowers.

A few rods further down the hill is the superintendent's cottage, very cosy and comfortable, with its stone chimney, its vines and flowers. In close proximity to the stables and dairy, and not far from the lodge entrance, it yet commands a view over practically all the cultivated portions of the estate.

In the stable all the latest scientific methods of caring for farm animals are in operation, and every provision for the efficient dispatch of farm work made.
STABLE AT HAYMOUNT, WESTCHESTER COUNTY, N. Y.
ARTHUR T. REMICK,
ARCHITECT.
The stable is built with wings that extend back on either side of the center where are sanitary accommodations for horses, cows, sheep and pigs. A courtyard is enclosed at the back by a brick wall connecting the wings, affording a temporary corral for the animals being turned out to pasture. Inside, the stable is paneled with white glazed tile and the ceiling done in white enamel.

Provision is made also for farm trucks and wagons. Not the least of the stable conveniences is a fully equipped carpenter shop with forge and lathe. A system of overhead trolleys carries the hay from room to room until it is finally hoisted to the extensive loft.

For the comfort of the farm laborers there is a pleasant reading room for the men, with all sorts of farm papers and periodicals. There are sleeping quarters for single men, with housekeeping accommodations for married couples and nice baths for both.

If it turned out that all this perfection of detail was merely a matter of professional skill or lavish expenditure, a visit to Haymount would lose much of the satisfaction it now affords when one realizes that it is all a part and parcel of a big practical working plan.

The owner has aimed to bring every department to a state of economic perfection by utilizing every bit of machinery in such a way as to produce the greatest efficiency concretely. He has afforded a splendid illustration of the adaptation of modern methods to practical farming.

On the other hand, he has done much more than that, for he has shown how the true spirit of the home is not incompatible with the development of a business enterprise of this sort, for there is everywhere manifest the domestic note, whether in the luxurious fittings and furnishings of the "Great House" or in the thoughtful arrangement of accommodations for the help.
RESIDENCE OF MISS HELEN SIMPSON. HARTSDALE, N. Y. HORACE WELLS SELLERS, ARCHITECT.
RESIDENCE OF MISS HELEN SIMPSON, HARTSDALE, N. Y. HORACE WELLS SELLERS, ARCHITECT
"Simplicity is an untrammeled idea." The above example of suburban architecture is quite untrammeled in its simple, clean and direct development of the problem in hand. It is an interesting illustration of the success of democratic directness, unhampered by any effort at pretentious display.
There is an interesting note in the half-timber treatment under the small gables and in the lattice work.

Perspective and plans of a suburban house at Brookline, Mass.
Benjamin V. Proctor, Jr., Architect.
THE LIVING ROOM—HOUSE AT BROOKLINE, MASS.  
BENJAMIN V. PROCTOR, JR., ARCHITECT.
This residence was contracted for at $6,500. The foundation is of concrete. The construction of the superstructure is stucco on metal lath. The entrance door is surrounded with rich green tiles, six inches by six inches in size. The first floor interior trim is chestnut, stained brown; the floors are of oak. The second floor finish is based on the general treatment of white trim and mahogany doors.
Note.—The display of merchandise at night is an important problem which every merchant must solve. Frequently the tenant of a new building is confronted with lighting arrangements that are opposed to the requisites of attractive display lighting. In this article the author discusses the subject with reference to the design and to the modification of equipment that will give permanent satisfaction.—Editor.

ONE of the fundamental principles of good lighting is that light must be on the object, not in the eye. This is particularly significant with respect to the lighting of display windows, since exposed lights dazzle the eye and distract attention from the merchandise displayed. With window lighting, as with every other form of public lighting, it is the rule and not the exception that the window which is so lighted as to be different from the commonplace is the window which attracts; and without attraction the space occupied by a display window becomes a liability, instead of an asset, to the tenant.

Look at the window lighting in your vicinity. The first thing about it to impress you will be its similarity and monotony. Here is a window with bare strip lights on both sides, producing such a glare that the merchandise is concealed in a blur of light. There is a window containing a fixture, from the cross arms of which dangle two large lamps wasting their useful horizontal light on the side wall, where no merchandise is displayed. This window is one of twenty in a row of buildings designed by an architect, who could have exercised his authority regarding the window-lighting arrangement had he considered this detail deserving of attention. Hence Fig. 1 represents an average condition which can be influenced by the architect through his attention or inattention. The arrangement on the left shows the effect of one 100-watt tungsten lamp in one of the two sockets attached to the cross arms of the fixture. On the right the fixture has been removed by a progressive tenant and two 40-watt tungsten lamps in opaque, silver-coated reflectors of a concentrating type have been hung close to the ceiling, their position being concealed by a strip of oilcloth, which was removed from one of the counters. The window on the left costs one cent an hour, and that on the right eight-tenths of one cent an hour. Both windows were photographed on the same plate, so that the photograph represents conditions as they appear to the eye. If the architect had specified close-ceiling outlets, the tenant would have been saved the expense and annoyance of removing and storing a fixture; and the initial cost, or installation cost, of the window lighting would have been greatly reduced.

The fact that windows of varied heights and varied depths can all be lighted attractively from outlets placed near the ceiling of the window, and the glass, makes the designation of such outlets a simple matter. To meet the varied requirements of tenants, there should be two circuits with outlets spaced on twelve-inch centres. Displays of dark merchandise require more light than white merchandise; hence, an arrangement which enables the tenant to vary the intensity of light by cutting out half his lamps when displaying white goods saves energy and money. It is strange that manufacturers of various reflectors
for window lighting do not mention such conveniences in their commercial literature, instead of devoting their attention exclusively to a consideration of photometric data, which are misleading and of no interest to the layman.

The defect of exposed glaring lights is by no means limited to applications such as represented by Fig. 1, which may quite appropriately be designated as "the average." Fig. 2 represents a condition where, in a building costing over one million dollars, the lighting arrangements failed utterly to satisfy either the utilitarian or aesthetic requirements, the lighting of the large display window being so abominable that at night from across the street one could but guess at the kind of merchandise displayed.

Fig. 2 represents a condition where, in a building costing over one million dollars, the lighting arrangements failed utterly to satisfy either the utilitarian or aesthetic requirements, the lighting of the large display window being so abominable that at night from across the street one could but guess at the kind of merchandise displayed.

From an inspection of Fig. 2 it is apparent that a "row" of lights above the window is the sole source of illumination, the same being placed within opal cylinders, closed at the base and of exactly the same type as those commonly used to outline a marquee. If for no other reason, this should have precluded the use of such equipment as a part of such a building. Furthermore, owing to the small size of the lamps and the enclosing glassware employed, the valuable horizontal light of the lamps was wasted, without dispelling the gloom below, a condition clearly evidenced by the photograph. In correcting this condition, every third outlet was utilized. Silver-plated reflectors of the extreme concentrating type were used; and the consumption of energy was reduced one-half, while the intensity of light in the window below was increased 500 per cent., this improvement being plainly shown by Fig. 3. In order to conceal the reflectors from view, a strip of valance was designed and hung as indicated, while roller shades, placed behind the reflectors, conceal them from within. These curtains may be seen hanging below the strip of valance, owing to the carelessness of an artist desiring to pose as a window trimmer.

While the architect cannot predetermine the color requirements of a display window, he can at least specify an arrangement which will permit of color modification. Anything which is good in decoration suffers by what decorators have termed the "white light effect," or, in other words, the unmodified light of modern illuminants. Pianos in rich mahogany, ebony and early English finishes lose their depth of tone and warmth of color beneath a white light, whereas beneath an amber light they appear to their best advantage. Similarly the most expensive rugs and tapestries look like crude and cheap imitations unless a white light is modified towards amber.

In this instance the change of color was accomplished by "dipping" the tung-
sten lamps in coloring solution, but this means is not satisfactory unless a well-ordered organization insures proper attention to maintenance and renewals. However, when outlets for display window lighting are specified close to a ceiling, tenants can place a row of hinged color-frames below the reflectors, enabling them to obtain their color modifications in a practical, inexpensive manner. Experiments can be made with gelatine film and then thin colored glass can be substituted. The rest is just a matter of cleanliness, referred to the janitor's department.

As to the choice of reflectors, this is largely a question of permanence of reflecting surface. Many make the mistake of using a steel reflector with an inner aluminum because it is "cheaper" than one of glass, coated with pure silver. With the same size of lamp in reflectors of the same size and shape, the silver-coated reflector will reflect double the light of the aluminum one, a fact which can easily be verified in twin windows, on either side of an entrance, by comparing two, four or eight lamps with four, eight or sixteen, depending upon the size of the window, fitted, respectively, with steel reflectors, having inner aluminum reflectors, and glass silver-plated reflectors. The significance of this is that on first installation costs great savings can be made by specifying half the number of outlets; in instances where

**FIG. 2. LIGHTS PLACED IN OPAL CUPS LEAVE THE MERCHANDISE IN ALMOST COMPLETE DARKNESS.**

**FIG. 3. IMPROVEMENT EFFECTED BY UTILIZING EVERY THIRD OUTLET, WITH SILVER-PLATED REFLECTORS BEHIND A VALANCE.**

**FIG. 4. POLISHED WOODWORK CAUSES GLARE AND REVEALS THE LOCATION OF LAMPS AND REFLECTORS.**
equipment has been installed the energy cost is reduced one-half by eliminating half the number of lamps, and the resultant saving pays for the reflector installations in a few months, with clear profit after that.

From a strictly utilitarian viewpoint, the object of display window lighting is to illuminate the merchandise, not the ceiling. Therefore shades or reflectors, such as prismatic glass, which allow a large part of the light to be transmitted toward the ceiling are wasteful—Fig. 5. The only excuse which can be offered for their use is that their wasted light serves in some instances to illuminate a transparent sign at the top of a window. Such procedure has nothing to recommend it, since lamps of one-quarter the size in opaque reflectors, supplemented by one small lamp placed within a box, painted white inside and built to enclose the transparent sign, will illuminate it far more effectively and with greatly increased economy.

The same objection applies to trough, or “gutter pipe,” reflectors. As these are usually placed, there is generally a great waste of light between lamps and the backing of nitrate of silver solution, or “quicksilver,” is of a non-permanent nature.

This question of the most efficient reflecting surface in opaque reflectors does not admit of any argument, pure silver being admittedly the best reflector of light. Highly polished silver reflects 92 per cent. of the indirect light; mirrors silvered on surface, 70 per cent. to 80 per cent.; white blotting paper, 82 per cent. From this it is evident that pure silver is the best reflecting surface obtainable from a theoretical viewpoint. Pure silver is, of course, expensive and oxidizes and tarnishes. Hence its use in the form of reflectors is restricted to laboratory applications, where the usual precautions are taken to eliminate dirt and all other vital factors of depreciation and maintenance, which precautions are invariably associated with practical working conditions. Even if thin forms of silver, so light in weight as to be inexpensive, could be moulded commercially in reflector form, the blackening and tarnishing of the metal would prohibit their use.

This difficulty has been overcome by manufacturers who have deposited pure metallic silver on the back of a thin glass form, over which is placed a thick coating of enamel at a very high temperature. In other words, the pure metallic silver is enclosed between a protecting film of glass on the inside and a coating of enamel on the outside, rendering it impervious to atmospheric changes or variations in temperature from the lighting and extinguishing of lamps. I have personally

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**Fig. 5.** Shows waste of light in upward direction from translucent reflectors of clear or ribbed glass.

**Fig. 6.** Flatness at center due to illuminating from above and from below.
tested reflectors made in this way which have been in constant use for ten years and have found absolutely no deterioration in reflecting power or in continuity of surface.

Fig. 7 is an excellent example of effective window lighting with gas, there being only one criticism which could be made—the visibility of the reflectors. Window lighting equipment is at best unornamental and should never be exposed to view. Place your thumb over the lights in Fig. 7 and note how much better the effect is without the spots or blotches of light, which are expressive of the typical procedure of the illuminating engineer, with his disregard for every detail which contributes toward "effect" or "appearance."

It is a great mistake to place lights in a display window as footlights are placed on a stage, owing to the effect of "flatness" which results from light impinging on an object from above and below. This condition is clearly illustrated in Fig. 6 by the head in the centre of the group, which receives light from above and below.

Another condition utterly neglected by those selling lighting equipment is associated with polished surfaces on woodwork within display windows. Fig. 4 shows the glare resulting from the highly polished surface of the cabinet work, which reveals, mirror-like, the images of the reflectors placed behind the silk curtain. This line of glaring spots of light detracts from the effectiveness of the window. The remedy lies in depolishing the woodwork, or in placing a curtain behind the reflectors, which should be adjustable, accommodating various heights of "trim."

While a book might easily be written about the concealment of light sources in display window lighting and the influence of such procedure in increasing the "attraction factor of a window, it is not always within the power of the architect to introduce such refinements, whereas he can generally control the location of outlets and their auxiliary equipment. As regards the high window, the preliminary location of ceiling outlets need not seriously inconvenience the tenant who displays only "low trim"; it is a comparatively simple matter to install a conduit, with outlets attached, which can be hooked to the false ceiling and connected by reinforced cable to the permanent outlets above on the ceiling proper. Similarly with gas lighting, reflex lights with pilots on eighteen-inch drop pipes attached to one large pipe can be installed quickly and with a considerable saving over a clumsy and inconvenient fixture.

The location of remote control switches should be conveniently placed, so that, if necessary, automatic time clocks can be installed at exactly that point for winding and regulation.

Fig. 7. Lamps should be concealed by a valance.

Fig. 8. Illustrates inefficiency of the trough reflector for display window lighting.
A PIONEER IN APARTMENT HOUSE ARCHITECTURE
MEMOIR ON PHILIP G. HUBERT'S WORK
By G. Matlack Price

In the onward march of building progress, in which new methods or innovations in construction rapidly appear, it is, perhaps, almost inevitable that the names and works of certain pioneers in the field should fail to be duly recognized by the men of today—themselves engrossed in the study of the building problems of the future. Today, when civic legislation is concerned with the regulation of building heights exceeding that of the Woolworth Building, it is a little difficult to hark back to the days when the ten or twelve story fireproof apartment was reckoned an achievement of no small note.

It is to be submitted that some interesting forecasts of the future might be made on the basis of advance in building methods in the last fifty years. What will the next fifty bring? When Mr. Hubert's more noteworthy achievements were conspicuous among contemporary buildings in New York, it would have been difficult, for example, to foresee the Woolworth Building, or, in admiration of the innovations and facilities of the Hotel Chelsea, to foresee the possibility, through evolution, of the new Hotel Biltmore.

Let us, therefore, pause a moment, in our breathless piling of story upon story, in our amazing development of innovation after innovation in building methods, to acquaint ourselves with the work of a building pioneer, and to appreciate the fact that while certain architects' names loom large in the public eye today, no achievements, either present or future, can take away from the pioneers one particle of the credit or importance which are their due. Today their works may appear to be inconsequential beside the monuments of later years—perhaps in qualities of superficial architecture—detail, and the like—those early works were far inferior. Nothing, however, should be judged excepting in terms of contemporary enlightenment, and if the average draughtsman of today is better versed in architectural forms than the practicing architect of fifty years ago, we have only to thank the betterment of the schools and the general advance and development of the profession which have made this possible.

Few architects of two generations ago "built better than they knew"—most of them would seem not to have built as well as they knew, and yet the dearth of esthetics in architectural knowledge then would be almost inconceivable today. To those architects who built as well as they knew, especially in structural work, is due great recognition as pioneers—as the men who laid the foundations, and made possible the achievements of today.

We are in possession of certain interesting data relative to the work of Mr. Philip G. Hubert, of the firm of Hubert & Pirsson—an architect who designed a number of important city buildings in New York—buildings overshadowed, indeed, by subsequent progress, but remarkable in their day for their marked advance in building methods and practical conveniences.

Mr. Hubert, who died in November, 1911, in his eighty-second year, is remembered by his profession as the pioneer architect of the ten and twelve storied apartment house, and the originator of the co-operative apartment house in this country, as well as the inventor of many devices and innovations widely used in such houses. Being a man of action, as well as the possessor of an original and inventive mind, he carried his ideas into practical execution which many inventors never attain.

Mr. Hubert was born in Paris, in 1830, the son of Colomb Gengembre, coming to this country with his parents in 1849
and settling in Cincinnati. There Mr. Hubert took up the teaching of French, writing his own text-books, which were published and widely used in the schools of that time. In 1853 he was called to Girard College in Philadelphia, then recently opened, as its first professor of French and history. In 1859 he went to Boston, where he became known as the leading French teacher, being offered a professorship by Harvard, which he did not accept, as his taste for invention was leading him gradually to give up teaching and turn to work more definitely constructive.

Continuing the resume of this interesting career, 1865 found Mr. Hubert settled in New York and commencing the practice of architecture, which he had studied with his father. He organized the firm of Hubert & Pirsson, which lasted until the death of James A. Pirsson in 1885, then became Hubert, Pirsson & Haddick, Mr. Hubert retiring in 1893 to make his home in California.

During his thirty years of activity as a New York architect, one of the most important works of Mr. Hubert was the group of apartment houses on Seventh Avenue, at Fifty-eighth and Fifty-ninth Streets, known as the Central Park or Navarro Buildings.

At the time of their erection, in 1882, these apartments were said to be the finest and largest of their type in the world, and remain today as models, in many respects, of what a luxurious and well-appointed apartment home should be. In point of spaciousness of rooms, the better apartments of that time were far preferable to many of today—the interior decoration and architectural mannerisms which seem to us quite impossible, being nothing more than contemporary colloquialism.

The group of eight buildings, twelve stories high, cover a plot of ground 200 by 425 feet, and, with the ground, represented, even in 1882, an investment of nearly five million dollars.

Among the co-operative apartment houses planned by Mr. Hubert are the Hawthorne (ten stories: 75 by 90 feet); the Hubert (ten stories: 75 by 90 feet); the Rembrandt (ten stories: 50 by 90 feet); the Milano (seven stories: 75 by 90 feet); the Chelsea (twelve stories: 80 by 175 feet); the Mount Morris (nine stories: 50 by 100 feet); No. 80 Madison Avenue (nine stories: 90 by 100 feet), and No. 125 Madison Avenue (twelve stories: 100 by 125 feet).

The Chelsea, on Twenty-third Street, is one of Mr. Hubert's most interesting buildings, representing, at the time of its opening, the most luxurious type of residential hotel in New York City. The hotel prospectus furnishes a quaint commentary on the shifting of the city's life, for the Chelsea then boasted that "the location is very central," and "near the shopping district, the theatres and churches."

In many of these houses Mr. Hubert used his system of "duplex" planning, by means of which the amount of space available for kitchens and bedrooms was virtually doubled.

These houses also featured the first generally recognized introduction of fire-proofing, and thoroughness in this matter was a subject to which Mr. Hubert devoted much attention. His aim was to devise an apartment house so nearly fire-proof that the entire contents of a single apartment might burn to ashes without endangering, or even disturbing the rest of the building. He was the first to devise the sheathing of wooden or steel beams with fire-proof plaster blocks, or with cement.

In the Sevilla, in Fifty-eighth Street, an apartment "intended to meet the wants of people who desire to combine the freedom from care of a hotel life with the comforts and privacy of an individual home," Mr. Hubert did away with wooden floors, using a cement composition throughout. This was also the first hotel in which each apartment was provided with a refrigerator cooled from a central plant, and in which the tenants were provided with running water, cooled and filtered for drinking.

It must be remembered that at the time these houses were built, the exodus from individual homes to apartments had barely begun, and the companies promoting the latter were constrained to issue elaborate pamphlets extolling the advantages of apartment-house life over the cares of the house-holder. These pamphlets make interesting reading in these days when safety from fire, good
sanitation, ventilation, convenience and
"elegance" are taken for granted, for
the apartment house prospectus of the
early "eighties" took deep concern in
reassuring the prospective tenant on
these momentous questions.

Other important buildings beside
apartment houses, of which Mr. Hubert
was the architect, were a number of
churches, the old Lyceum Theatre at
Fourth Avenue and Twenty-third Street,
and the Shoreman Hotel in Washington,
one of the first buildings in which the
modern system of steel construction was
used.

After his retirement from the active
practice of architecture, Mr. Hubert took
out a number of patents upon devices
for making housekeeping easy, among
which were improved oil and gas fur-
naces, a fireless cooker, and, during the
last six months of his life, he was busy
with a device for supplying hot water
more quickly and more cheaply than by
means in present use.

Outside of his business, Mr. Hubert
was devoted to his books and to travel.
Had he not chosen architecture as a pro-
ession, he had undoubtedly become a
writer of note, for, as a young man, he
contributed a large number of short and
serial stories to magazines—of a versa-
tile turn of mind he took a vivid interest
in many things, and conversed with keen
intelligence and originality upon politics,
social science, invention and literature.

Today other names occupy public
thought—new buildings rise to over-
shadow those of little more than a de-
cade ago, but it should certainly form a
very significant part of our study or esti-
mate of current achievements to look
back a few years at the careers of such
architects as Philip A. Hubert, and to
realize that these men made possible the
architecture of today.
The following paragraphs contain a brief résumé of facts in the story of the movement for a new Court House for the County of New York. So much time has elapsed since the inception of the project and so many issues have arisen that the course of events and the exact nature of questions involved have become confused in the public mind. The confusion may be dispelled by tracing developments in chronological order.

As early as 1900 agitation for a new building was a-foot among judges and lawyers because of the crowded and unhealthy condition of the “Tweed Court House.” In consequence a bill was introduced at Albany and on May 6, 1903, the Legislature passed an act creating a Court House Board, empowered to select site, construct building and arrange approaches. The Commissioners of the Board, appointed by Mayor Low, were Messrs. Bull, Cohen, Peabody, Purroy and Sheldon. Their term of office was unlimited.

Between January, 1904, and March, 1909, the Board selected and reported on five sites. The Board of Estimate and Apportionment rejected every site proposed and in one instance delayed their decision for more than a year (Jan., 1904—July, 1905). Owing to their inability to select a satisfactory site under the law, the Commissioners of the Court House Board resigned on January 10, 1910, and on January 24 Mayor Gaynor appointed as new Commissioners Messrs. O'Brien, Kellogg, Grout, Potter and Strauss. Mr. Strauss resigned and Mr. Steckler was appointed in his place. The personnel of the Board is unchanged.

On February 17, 1910, the law was amended to permit park land to be selected and on the 28th the Board chose a site in City Hall Park, reporting on April 15 “that the site in City Hall Park, at present occupied by the Court House, enlarged as recommended, was under all circumstances the most desirable and that the building might be erected thereon at a cost not exceeding $10,000,000; but that if any of the other sites under consideration were taken the city would be required to devote to this purpose, in addition to the estimated cost of the building, a sum of $15,000,000, or more, for the cost of land, which expenditure would be incurred principally to avoid occupying any part of the present City Hall Park for Court House purposes.”

On October 12, 1911, as a result of general public opposition to the continued occupation of City Hall Park for building purposes, the law was amended (amendment introduced by Senator Stilwell) to prohibit the Court House Board from selecting a site in a park and, at the same time, to give the Board of Estimate and Apportionment sole power to select a site within a period of six months. After conference with its Corporate Stock Budget Committee, to whom the matter had been referred, and with a Committee of the New York Chapter of the American Institute of Architects (consisting of Messrs. C. Grant Lafarge, Walter Cook, Grosvenor Atterbury, William M. Kendall, H. V. B. Magonigle and Egerton Swartout), the Board of Estimate and Apportionment in January, 1912, selected a site bounded by Leonard, Lafayette, Baxter and Park streets. On February 21 the Board amended its resolution by excluding from the area selected the street and park areas previously included, leaving six parcels of land, separated by three important streets, encumbered by two street railways and a subway opened to the public shortly thereafter. On April 29 a map of the site was filed; on May 24 Commissioners of Estimate and Appraisal were appointed; on July 30 and August 5 the report of the
Commissioners was confirmed, fixing awards at $6,243,668.35, and title to the six parcels was vested in the city.

In January, 1913, a general scheme of grouping public buildings about the Court House site, involving a much larger area, was considered. Pursuant to this scheme in June sketches for a Civic Centre plan were submitted by a Committee on Civic Improvements of the New York Chapter of the American Institute of Architects, and by Mr. Lowell who in April had been appointed as architect of the new Court House Building.

In November, 1913, a final plan for a modified and extended site for the Court House was prepared, obviating many traffic and engineering difficulties and incidentally much expense. This plan was submitted to the Board of Estimate and Apportionment on December 31. On May 9, 1914, the Committee on City Plan published a memorandum on the proposed modified site and a public hearing was held in May at which it was generally approved. No action has been taken since that date by the city authorities to complete the acquisition of the site.

On May 10, 1912, the Court House Board chose Messrs. R. S. Peabody of Boston, Frank Miles Day of Philadelphia and J. L. Mauran of St. Louis as an Architectural Jury of Award in the competitions to select an architect. In October, 1912, ten designs were chosen in the first competition and their authors invited to enter the final competition along with twelve other invited competitors.

On April 10, 1913, the author of the successful design selected by the Jury of Award in the final competition was appointed as architect of the building by the Court House Board and found to be Fay Lowell, Esq., of Boston.

The Court House Board approved the general design on May 20 and on May 24 submitted it to the Justices of the Supreme Court for approval (as required by law). On May 26, 1913, the Justices appointed a special committee to consider the matter and certain objections were raised to the circular plan. After considerable demur the judges agreed with the Court House Board to take expert advice regarding questions of lighting, ventilation and plan, and Messrs. H. J. Hardenbergh, Bertram Goodhue and G. Homer Woodbridge were called in. As a result the Justices withdrew their objections to the design on March 27, 1914.

On April 14 the preliminary plan of the new building with general specifications was approved by the Court House Board, two days later by the Justices of the Supreme Court and on May 11 by the Municipal Art Commission.

On April 17, the day following approval by the Justices, the preliminary plan was submitted to the Board of Estimate and Apportionment and is, at this writing, awaiting their action.

The Plan for the Court House.

It was only last year that Sulgrave Manor, the ancestral home of the Washington family, was purchased and made "a public monument to the ties of blood, history and friendship which unite the two great English speaking peoples on opposite sides of the Atlantic" in connection with the celebration in England of the one hundredth anniversary of peace among English speaking peoples. Sulgrave, which is a fine example of the best type of old English stone manor house, was erected in the middle of the sixteenth century. It is in an excellent state of preservation, both inside and out. With the exception of some few partitions which have either been added or taken away the interior is believed to be just as it was when the ancestors of George Washington lived there some 375 years ago. Sulgrave is to be preserved as a place of pilgrimage for Americans in England and will presumably also be used as a museum of Washingtonia.


"Original" Architecture but its Reproductions.

Perhaps there is no artist to whom a thorough knowledge of all that has gone before is of so great importance as it is to the architect. Indeed, few persons will deny that all meritorious design is more or less a recasting or adaptation of certain well established and defined forms and details, most of which have been in general use for centuries. But this privilege of adaptation should never be abused. A building—one does not say design—that is obviously a copy of something else naturally suggests a whole series of questions—pertinent ones, too—as to the ethics involved in thus appropriating a design with, perhaps, only minor changes, and of the propriety of making so free use of the best work and thought of former designers.
A case at point is a recently completed residence in New York. This particular building, beautiful enough and well executed as it undoubtedly is, seems immediately so strikingly like the house that Andrea Palladio built for himself in Vincenza that no shadow of doubt passes through the mind of those who are familiar with the house of Palladio as to the origin or "inspiration" of the New York design. In some instances one would be willing to say that it is, perhaps, better to make a reasonably correct copy of a good building than to originate a poor one, but in the present instance any suggestion of this sort is quite out of place for the architects who are responsible for this residence are capable of doing, and have done time and again "original" work of the very highest order.

It may be that this particular copy was made necessary by some whim of the owner. It is to be hoped that that is the case. If it is, one may well sympathize with the architects, for it is obviously unfair to them to be thus compelled to produce a building that puts them in a position where they might be accused of the most barefaced plagiarism.

In New York the Tiffany building on Fifth Avenue, the tower of Madison Square Garden, the Metropolitan tower—and even in a sense the Woolworth building—are examples of the most commendable adaptations. In each of their details and even schemes of composition have been adopted with so much skill that the adaptation does not force itself upon the beholder; but in the residence in question there is apparent none of this skill in adaptation. It seems to be what is known in the draughting room as a "dead crib."

The Italian Pavilion at the Panama-Pacific Exposition show a marked departure from the "showy" sort of building generally erected at expositions of this sort. Instead of a building of the modern kind Sig. Piacentini is reported to have made an effort "to animate the Italian pavilion with every sign and sound of Italian life—the splashing of water from many fountains, the ringing of bells, the flying of pigeons, fluttering flags and music." The group is to consist of a number of separate buildings in the various Italian styles of architecture—Classic, Italian Gothic, Renaissance and modern—arranged around two courts or squares joined together with arcades and porticoes, and giving more or less the appearance of a small, old Italian town.

The Italian exhibits will consist of typical Italian industries—faience, mosaics,
hammered iron, glassware, etc., and a mov¬
ing picture apparatus is promised—to "il¬lustrate the natural and artificial beauties of
Italy, her archaeological treasures and an¬cient and modern buildings and monu¬ments."

Even though the ac¬tual work has been fin¬ished for so long that it has passed out of the province of really "cur¬rent work," it is a pleas¬ure, nevertheless, to be able to record the re¬storation by Joseph Everett Chandler of the historic Paul Revere house, in the month that is so closely connected with the events that lead up to that eventful 4th, or, if we are guided by historians who insist upon strict accuracy in the matter of dates, the 2d of July, 1776. Referring to this work, a writer in the Boston Transcript says: "The architect who undertook this work knew the type characteristics of the seventeenth century house in New England. The job became one of inference. From a lower sill, scraped by the opening and shutting of a frame-work, it was clear that the original windows had been casements, swing¬ing outward. From extant mouldings it was possible to reconstruct the interior woodwork; from half a dozen authentic clapboards of a design obviously authentic, the whole exterior was clapboarded with an effect of texture (in its ogee mouldings and scarfed ends) which places the aspect, at a glance, as previous to the eighteenth century.

"The detection of these details was due to the painstaking inspection of every foot of wall in the old building as it was opened by Joseph Everett Chandler, the architect in charge. He discovered, for instance, a fragment of wall paper bearing an archi¬tectural design which was plainly of the period previous to 1790, when the Revere occupancy of the house began, and this pa¬per, reproduced, was used for the rest of the lower floor room. The new beams are shaped, like the old ones, with molded "stops," resting on shouldered posts. The wall construction, as may be seen in an opening left for that purpose, is of brick between the studs. It is even thought pos¬sible that the original design had been to build of open brick and exposed beams in the English manner, until it was seen that the New England climate was unsuited to such construction.

"There was for a time a question in the mind of the architect whether the "ell" was not the older part of the house, a question raised by certain details of the construc¬tion; for one thing, the "ell" with an over¬hang is a rarity, and the beam-ends pre¬sented certain puzzles, but it seems more likely that the part fronting on the square is either synchronous or the earlier portion of the two. The overhang on the North square frontage is undisputably the original form. It was remarked by the architect that had relic hunters realized that the ex¬posed beams were a part of the house as it was when lived in by Paul Revere, with the "drops" merely sawn off, restorers might have whistled for these relics in vain. As it was, they established the certainty of the overhanging second story and those picturesque wooden knobs or "drops," which hang like big water drops, ready to fall.

"The interior of the house is rich in sug¬gestion of the antique and the picturesque. More than any other of the group of houses restored by Mr. Chandler's skill and schol¬arship, these rooms manage to create an "atmosphere." They do not look lived in, according to a modern sense; but they do look as if the occupants of that elder day had gone off in hot haste, leaving all their belongings pretty much as they happened to lie."
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DINING ROOM MANTEL—HOUSE OF JAMES PARMELEE, ESQ., WASHINGTON, D. C.
CHARLES A. PLATT, ARCHITECT.
THE successful inhabitants of a new and a rich country usually seek above all to achieve the characteristic which is most difficult for them to obtain—the characteristic of being mature and complete and authentic. The craving for some such achievement has never had much influence upon Americans in relation to the practical aspects of their business and political life, but it has always exercised a profound and in the older parts of the Union a determining influence upon their art, their culture and their social forms. As we all know, it has been peculiarly influential in American architecture, and perhaps most influential of all in relation to domestic architecture. The quality which almost all the owners of elaborate and costly country houses particularly desire in their new residences, is the quality of age—the quality of confirmation which a building obtains from having been lived in for some generations, until nature and human usage have served to tie it into the countryside and to an established social order.

An instinct of this kind lies at the root of the preference which Americans have shown for houses which conform to an historic domestic style. The American architects who have obtained the greatest reputation for their domestic work, have been particularly successful in imparting to modern reproductions of historic models some of the mellow quality of the original; and it should be added that very few really brilliant successes have been won in this particular field. Any well-trained architect can, of course, design a house which is copied from Georgian,
Louis XVI or Italian Renaissance models, but it takes much more than schooling, experience and historical accuracy to impart to a modern residence the real flavor and dignity of a Georgian mansion or an Italian Renaissance villa. It requires both a sympathetic historical imagination and an equally rare gift of "seeing" the particular kind of a house which is demanded by the conditions of a particular site.

Of late years the new houses designed by Mr. Charles A. Platt have been obtaining more and more the characteristic of becoming mellow in an astonishingly short time. The house of Mr. Harold McCormick at Lake Forest, near Chicago, although the work on the grounds still remains incomplete, creates the impression, not of being a copy of an Italian model, but of being itself an old Italian building which had been weathering for a few hundred years, and which from the level of its maturity could look down with something like scorn on the raw crudity of a modern American residence. The Pratt house at Glen Cove, Long Island, although it has been built only a few years, looks already as if it had been constructed during the third quarter of the 18th century. Finally the Parmelee house on the outskirts of Washington is even a more remarkable example of the same kind. It has only just been completed. Of course the new planting in the immediate vicinity of the house does not yet succeed in softening the break between the landscape and the building, but the Parmelee residence, after the new shrubs and trees have had the benefit of the growth of two summers, will look as if it had occupied the site for many generations and had settled down into the landscape. It does not need to grow old and to take on the adventitious charms of usage and association. Like all successful works of art, it is born complete. It was matured on the day that it was finished; and it will still look fresh and young on the day that it is torn down.

Mr. Platt has been so peculiarly successful in quickly reproducing comparatively ripe architectural fruit that an analysis of the causes of his success should have a certain amount of interest. Of course such an analysis cannot go very far toward explaining the secret of his rare achievement; but in so far as the analysis is a faithful account of what he actually does, it may at least help to prevent misinterpretation. Work such as Mr. Platt's is peculiarly liable to misinterpretation, because it is wholly lacking in particular "features" which an analysis can distinguish and fasten upon as peculiarly characteristic of his method. His effect is created by the whole building in the completeness of its relation with the entire surrounding landscape.

In the case of the Parmelee house, Mr. Platt enjoyed one advantage which an architect cannot always expect to enjoy—that of an excellently selected and prepared site. This site included a spacious hill, with interesting outlooks in several directions and covered with a growth of comparatively old trees. It is scarcely necessary to point out the importance for an architect who wants to give maturity to a new residence of dealing with a site which already contains a good growth of timber. He can improvise many necessities and conveniences of a complete country residence. He can even improvise trees which are old and big enough to give shade to a driveway. But he cannot improvise trees which are tall and spreading enough to afford a background for a spacious three story building. In this and certain other cases the trees which a complete house usually needs in its immediate vicinity were provided; and if they had not been provided, it would hardly have been possible to have created the effect of maturity which is so characteristic of the Parmelee house and of so much of Mr. Platt's best work.

Many architects have built houses in the neighborhood of a thrifty growth of trees, but very few of them have been able to make the house look, a few years after it was finished, fully as old as the trees. The most obvious explanation of Mr. Platt's ability to impart maturity to his buildings, is that he possesses an historical imagination and can endow his buildings with the same feeling for beauty and style as that possessed by the architects of the original Georgian models.
THE CAUSEWAY, HOUSE OF JAMES PARMELEE, ESQ.,
WASHINGTON, D. C. CHARLES A. PLATT, ARCHITECT.
TERRACE FRONT, HOUSE OF JAMES PARMELEE, ESQ., WASHINGTON, D. C.
CHARLES A. PLATT, ARCHITECT.
SOUTH FRONT, HOUSE OF JAMES PARMELEE, ESQ.,
WASHINGTON, D. C. CHARLES A. PLATT, ARCHITECT.
He is not copying an old building. He is thinking over again the architectural ideas and values by which the earlier work was determined; and thinking of this kind contains as large an element of originality as is possible in any but great periods of architectural innovation. Mr. Platt's buildings are mellow and matured because they are born of a matured architectural conception rather than because they are associated with forms of social expression which are older and more complete than those which obtain in contemporary American life.

In the case of the Parmelee house, for instance, Mr. Platt has been true to the better spirit of Georgian domestic architecture, while at the same time he has broken away entirely from its specific forms. This particular residence is not in the least reminiscent of any specific Colonial or Georgian mansion. In certain essential respects it differs from those Colonial and Georgian mansions which are called up in the majority of minds when those terms are used. The later phase of Georgian architecture, which was transplanted to the American colonies, was the expression of a fundamentally timid and literal state of mind, whose greatest merit was that of unpretentious good taste, and which was extremely reticent, in all its expressions, because it had very little self-confidence. A man capable of any real boldness of architectural thinking could not accept the restrictions of such a style. He was bound to go behind its precise and timid forms and seek the larger and better style, of which it was a decadent phase. That is precisely what Mr. Platt has done. The Parmelee house is not Georgian. It belongs rather to the much larger and freer period of the early English Renaissance. It is the expression, not of the studious reticence of the Georgian mental attitude, but of the more positive and more self-confident architectural spirit of the late 17th and early 18th century in England. This earlier English Renaissance had preserved some of the imaginative freedom which was characteristic of the better Renaissance domestic architecture in other countries. The Parmelee house is sufficiently English to satisfy a preference for an English domestic atmosphere; but its architectural substance is much more than English. It is a broad and fine expression of the humane and liberal architectural traditions which is known by the general name of the Renaissance.

A building does not, however, obtain maturity merely because it is a well-considered re-expression of a mature but vital architectural style. Its maturity must depend as much as anything else upon its local propriety. It must be the kind of building which a particular site demands. A house which was inappropriate in the beginning may gradually be made to take a dignified and self-possessed place in its immediate natural surroundings as a result of ingenious contrivances and much usage. Its inaptitude can be mitigated by artful planting which will conceal original errors and open up novel and charming relations with its surrounding country. Almost any building, except one that is essentially harsh and ugly, can by some such means be subdued and be made to look appropriate—after people of taste have lived in it for a generation. But a building which is to acquire maturity in a few years must be started right. It is obliged to travel a long way in a short time, which means that it cannot afford to be burdened with many encumbrances and drawbacks. The drawbacks which are most difficult to overcome are, of course, glaring errors of scale—such as those of putting an ill-shaped building on a particular site, or one which is badly scaled in relation to its surrounding of trees. Landscape architecture, like all architecture, is fundamentally a matter of filling spaces with forms which bear a pleasing supplementary relation one to another. In the case of a country house the whole group of surrounding natural conditions tend to demand a building of a certain length, height and texture, which is approached in a convenient and entertaining manner and which offers to its inhabitants the most interesting views of the surrounding country.

One of the chief reasons why so many of Mr. Platt's houses come quickly to look as if they had occupied their sites for
LIBRARY, HOUSE OF JAMES PARMELEE, ESQ.,
WASHINGTON, D. C. CHARLES A. PLATT, ARCHITECT.
CONSERVATORY, HOUSE OF JAMES PARMELEE, ESQ., WASHINGTON, D. C. CHARLES A. PLATT, ARCHITECT.
DRAWING ROOM, HOUSE OF JAMES PARMELEE, ESQ.,
WASHINGTON, D. C. CHARLES A. PLATT, ARCHITECT.
DINING ROOM, HOUSE OF JAMES PARMELEE, ESQ., WASHINGTON, D. C. CHARLES A. PLATT, ARCHITECT.
LOOKING INTO THE HALL FROM DINING ROOM, HOUSE OF JAMES PARMELEE, ESQ., WASHINGTON, D. C.

CHARLES A. PLATT, ARCHITECT.
generations is simply the fact of their apparent inevitability. A house that is designed with an alert sense of responsibility to all the demands of its environment becomes mature with comparatively little assistance from time and usage.

The Parmelee house has in all essential respects been started right. It crowns the hill on which it stands so successfully that it looks quite as much as if the site had been intended for the building as the building for the site. The human habitation dominates, as it should, its immediate natural surroundings; but it does so without committing any violence on the proprieties of nature. The design is both broad and simple in expression. It has the largeness of style, which is essential to any successful embodiment of the Renaissance architectural tradition, but it is entirely lacking in the tendency to overemphasis which later Italian and French phases of Renaissance architecture assumed. Its architectural manners, that is, are irreproachable. They are as free from nervous self-distrust on the one hand as they are on the other from boisterous self-assertion. They attain the composure of complete self-possession and an equally complete harmony with their environment.

The interior of the Parmelee house possesses the same kind of merit as the exterior. It is Georgian in character, but it is entirely separated from the literal Georgian convention. Take, for instance, the library, which is the best room in the house. It has been designed to harmonize in detail with an exquisite Adam mantelpiece. It resembles consequently an Adam room, but the adaptation is so free and is so emancipated from accustomed precedents that the room itself is exhilarating as only a fresh, sincere and successful work of art can be. The Adam precedent has not been followed in the other rooms, which cannot be labeled as anything but Renaissance in general character, and which combine something of the large simplicity of Italian interiors with something of gay precision of the French. The group of apartments on the ground floor are unusual, because the wood-work in all of them is white and because consequently the architect could not distinguish the library or the dining-room from the drawing-room by means of color and texture. The means which he has used to distinguish these three rooms one from another are well worth careful analysis by a student of architectural design.
STREET FRONT OF THE NEW YORK CENTRAL STATION AT UTICA, N. Y. FELLHEIMER & LONG AND ALLEN H. STEM, ASSOCIATED, ARCHITECTS.
We are all possessed of a truly Athenian curiosity to see or hear something new. Novelty of itself attracts attention, and if the new thing, whatever it be, is thoroughly examined, there is often a valuable lesson to be learned. The newest urban railway stations offer no exception to this rule.

In every American city where a new railway station has recently been built, or where it is proposed soon to erect one, its exterior design and interior plan are subjects of widespread interest. The architect and the layman with a broad sense of appreciation are both, of course, critically alert; but, in addition to them, each member of the community is concerned to some extent, at least—each member, that is, who has reason to use the station either habitually or even only occasionally, for personal comfort and convenience are affected by the plan, though architectural aspect be wholly unheeded.

Most of the railway stations erected within recent years in American cities have some lesson to teach, some phase of transit conditions or social and economic development to mark. By comparing the mistakes in the plan of one with the excellencies in the scheme of another we can trace the progress made towards attaining a standard of requirements that should be met in every case.
COLONNADE IN WAITING-ROOM OF UTICA STATION
LOOKING TOWARD TICKET OFFICE. FELHEIMER &
LONG AND ALLEN H. STEM, ASSOCIATED, ARCHITECTS.
The New York Central Stations at Utica and Rochester, but lately completed, have come so near the ideal in efficiency of plan and their scheme of arrangement has proved so successful in practice that the railroad authorities have cause for profound satisfaction with the result. The engineering department of the railroad has worked in conjunction with the architects—Claude Bragdon for the Rochester Station and, for the Utica Station, Fellheimer and Long and Allen H. Stem, associated—and consequently both engineering and architectural aspects of station planning have been harmoniously combined and brought to the most recent stage of progress. The officials, therefore, it is understood, will regard these latest achievements as models and standards for requirements for other city stations which they may in future erect. In considering these structures it will be desirable to note the excellence of one or the other, or both, in the following points: (1) Maximum of efficiency at minimum cost, both initial and for annual maintenance; (2) Convenience of arrangement; (3) Economy of space, both cubic and areal; (4) Directness of communication and ease of circulation, thereby saving time and annoyance to patrons. Other recent urban railroad stations, also deservedly claiming attention, have been erected in Minneapolis, Kansas City and Detroit.

However, before we can appreciate the full significance of these newest phases of station architecture, we must trace briefly the course of developments that have led up to their conception, the lessons by which their architects have profited, based upon the experience of others. To this end, therefore, it will be necessary to take a cursory glance over the field, especially in its later aspects.

The architecture of urban railway stations is still in the making. Whether we realize it or not, the process of evolution is actively in progress. Station building, indeed, is our newest form of architectural activity, if we except hangars and landing stations for aeroplanes and dirigibles, or modified show houses for "movies." It is a form of structural expression that was left for the nineteenth century to originate, and for the twentieth century to bring many stages on the road to perfection. All other edifice types have centuries of architectural precedent back of them—theatres, libraries, churches, collegiate groups, banks and even hotels, whose most modern developments have been both indirectly and directly due to the influence of railroads.

This dependence on the workings of evolution and timely adaptation of traditions is sane and natural, just as much in architecture as elsewhere. All our best work in any field of human enterprise must necessarily have a foundation on which to build, a fruitful soil of tradition from which it springs. Originality cannot be made to order. The man who
GROUND FLOOR PLAN OF UTICA STATION.
FELLHEIMER & LONG AND ALLEN H. STEM, ASSOCIATED, ARCHITECTS.
MEZZANINE FLOOR PLAN OF UTICA STATION. FELLHEIMER & LONG AND ALLEN H. STEM, ASSOCIATED, ARCHITECTS.
ENTRANCE LOBBY IN UTICA STATION, SHOWING LOCATION OF TICKET OFFICE AT THE DOOR.
Fellheimer & Long and Allen H. Stem, Associated, Architects.

CIGAR STAND IN UTICA STATION, SHOWING GLASS SCREENS SEPARATING ACCESSORY ROOMS FROM WAITING-ROOM.
Fellheimer & Long and Allen H. Stem, Associated, Architects.
deliberately sets out to be original, who willfully casts aside tradition and ignores the experience of his predecessors and contemporaries, who says, "I am going to do something quite new and unlike anything that has ever been done before," generally succeeds in doing something quite asinine and hideous. Abundant examples of distressing gaucheries, inspired by this insensate mania to do something merely different, are not wanting in the world of art and elsewhere. Originality, that is, sane originality, is a growth and must come through the reasonable combining, adapting and modifying of well-known forms, as commonsense and the obvious exigencies of the occasion demand; and that is precisely the way it has come in the instances now claiming our attention.

From the very nature of the problem, a large element of pure engineering is necessarily involved in station planning and hitherto much actual progress has been achieved both in respect of engineering and architectural excellence, for which due praise is to be meted out severally to architect and engineer. Within recent years this advance has been conspicuously marked. With the completion of each newest station of importance, the public is apt to feel that the goal has been reached, the perfect ideal realized; and then, within a few months, perhaps, or years, comes some radical change, due to electrification of motive power, subway arrangements or what not, and we find the erstwhile paragon full of imperfections and unsuited to altered conditions. At any rate, no absolutely fixed, distinctive type has yet been evolved and theories, while not altogether in a state of flux are, nevertheless, not fully established.

Certain principles of station design, however, have been gradually gaining clearer definition and more general acceptance and render it possible to establish special canons of criticism applicable to station architecture. Because of the large proportion of purely engineering work involved in their plan, it becomes necessary to regard railway stations, more than almost any other class of buildings, in their dual capacity, as, in the first place, satisfactory solutions of wholly practical requirements, and, in the second place, fitting embodiments of artistic conceptions.

The solely practical requirements for a modern city railway station may be broadly classified under the two comprehensive heads of (1) cost and (2) efficiency. In considering the former it is well to make two divisions, the initial cost and the cost of upkeep. Under initial cost will be included the outlay for real estate and all expenses contingent upon the purchase of materials, the erection of the fabric and the installation of all equipment. Under the head of upkeep are to be counted the charges for heat, light, cleaning, service and various sundries. Railroad treasuries are not inexhaustible mines of wealth and the cost of buildings and their maintenance has to be counted beforehand, just as carefully, and planned with as much re-
gard for economy as in the case of private individuals or small corporations. Inasmuch as the maintenance of a railway station is accounted a part of the company's fixed administration charges, and the first cost should represent not an unbusinesslike and capricious bit of extravagance but a part of the railroad's permanent capital investment, from which the stockholders are justified in expecting a reasonable return, the principle of close economy—this does not, however, mean narrow-minded, pinchbeck parsimony—and avoidance of unnecessary expense should be observed as one of the first essentials in making preliminary designs.

A second important principle, the principle of direct communication and facility of circulation, is to be deduced upon the score of efficiency. The intelligent observance of this principle will preclude congestion in handling passenger traffic, the congestion that too often occurs in passage to and from trains or through the mingling of waiting passengers with those passing quickly in or out.

A third principle, also ranged under the head of efficiency, stresses convenient arrangement and economy of space. Conscientiously following its lead, the architect will endeavor to place all the facilities for the accommodation of patrons as close together, and as near the central part of the station, as possible, so that they may be readily accessible. He will also endeavor to make the distances to be traversed by the incoming or outgoing passenger, between trains and exits or entrances, as short as may be. Plumbing, ventilation, light and a hundred other details, while they are to be largely considered under the distinctly practical side of the work, have no especial bearing upon the essential requirements of plan.

We pass now to the purely architectural requirements of urban railway stations and the noting of another set of principles concerned therewith. If any reader is disposed to cavil at placing architectural considerations second in order, let him remember that this order is strictly logical, that the plan with all its efficiency and engineering problems must be satisfactorily developed first before the skeleton can be clothed with a form of grace, and that a departure from this method of procedure almost invariably spells failure. Such failure, too, is more noticeable in a station than in any other building because of the constant emphasis placed upon practical requirements by the conditions of daily usage. It would not be a hard matter to point to cases where the logical method of working seems to have been forgotten at times and with the result that might naturally be expected. If the axiom that the exterior of a building should express
VIEW OF WAITING-ROOM IN ROCHESTER STATION LOOKING TOWARD TICKET OFFICE. CLAUDE BRAGDON, ARCHITECT.
its purpose is conscientiously observed, it is obvious that the desired correspondence can be achieved only by working outward from the interior plan which may be regarded as the visible embodiment of the purpose. Any other method is architecturally dishonest.

From an examination of the trend of station architecture in past years one may trace the growth of at least three well defined principles. The first of these is architectural responsibility on the part of the railroad to the public. This recognition of responsibility on the part of railroad management is to be interpreted not merely as a concession to public taste, but as a desire to bestow worthy treatment, suitable to the dignity of the community, upon a building that is in effect the gateway to the city.

Next comes the principle of just expression of architectural purpose in form of structure, involving the adaptation of a style to manifest needs, the achievement of a somewhat monumental effect in accord with the building’s importance and, finally, the elimination of all inappropriate or meaningless detail.

Last of all is the principle of congruity with surroundings which demands that a railway station, which affords a large latitude in the choice of architectural type, should be in keeping with the other representative buildings of the community in which it stands.

Summing up then, we have six principles to be considered in making the plans and design for a station: (1) close economy; (2) direct communication and facility of circulation; (3) convenient arrangement and economy of space; (4) architectural responsibility; (5) just expression of architectural purpose; (6) congruity with surroundings. It is germane to our purpose in noting the genesis of the foregoing principles to call attention to some instances where the absence of one or another of those principles has occasioned inconvenience or necessitated a change where the disorder was sufficiently acute.

One station, perhaps, is architecturally so satisfying that it is something of a shock to be told that several principles of good planning are transgressed in its design. Nevertheless, a candid examination reveals the fact that economy of space is a nonexistent quantity. The various facilities for patrons—restaurant, barber shop, telephones, newsstands and the like are so scattered that much space is traversed and much time consumed in going from one to the other. The chief defect arises from a violation of the principle of direct communication and facility of circulation. It is an easy matter to consume nearly five minutes—a serious thing if one is belated and has to make a train by a narrow margin of time—in passing from the main entrance, making a wide detour to the ticket office and finally reaching the train level. Still worse is the congestion and consequent delay occasioned by inadequate exit stairs from the train platforms. Anyone having occasion to use the station frequently cannot fail to be impressed with this defect.

Another big station, perchance, owing to its elongated frontage and great breadth of train shed, also suffers from prodigality of space. At times it seems almost like the Desert of Sahara and the facilities are so scattered and concealed that one is tempted to call them “futilities.”

Then, again, in a third city station so much congestion is caused during rush hours at the exit of the most used stairway into the concourse of the train shed that the opening has to be enlarged to remedy the trouble, while the concourse of the train shed in still a fourth also becomes congested at rush hours and circulation is impeded and likewise confused by cross currents, so that relief has to be sought by widening the concourse.

The defects of plan in the foregoing instances are alluded to merely to call attention to the inconveniences that arise when fundamental principles are not observed and, above all, when facility of circulation is not assured. Too careful provision cannot be made for unimpeded circulation if thorough efficiency is to be secured. In every large railway station there is a traffic problem that cannot be left to chance for settlement. Every week day between
the hours of 7.30 and 9.30 in the morning sixty-five trains, bringing about 17,000 people, come into the Grand Central Station in New York; and between 4 and 6.30 in the afternoon there are sixty-two outgoing trains, carrying 20,500 people. If there were not direct communication and facility of circulation, intolerable congestion would result. In Broad Street Station, Philadelphia, in the morning rush hours forty-two trains pour over ten thousand people into the heart of the city and forty-two trains carry them out again in the afternoon. The suburban traffic is so heavy that until new plans can be perfected for relief it is necessary to keep as many of the through trains out of the station as possible. It is evident, therefore, that facility of circulation is a consideration of such paramount importance that an appreciable modification of plan is not too high a price to pay for it. The question of circulation in large buildings has never been so fully studied as in the last year or two and, it is instructive to note, the circular plan of the new Court House for New York is in part due to that study.

And now, after this general analysis, we come back to consider specific instances. The ground floor plan of the Utica Station is rectangular in shape.
The ticket office is immediately at the entrance. In axis with the ticket window an arched colonnade, occupying the central portion of the general waiting-room, with seating lobbies on each side, offers an unobstructed and direct passageway to the ramp going down to the subway that connects with the several track platforms. The advantage of this arrangement is that a passenger entering the station may purchase a ticket at the door and pass without interruption directly to his train. His course is likewise the shortest distance between two points. The ramp connecting with the subway is a desirable feature because it is less fatiguing than steps and experience has shown that the majority of people would rather walk than wait for an elevator. At the street-end and the train-end of the waiting-room are cross colonnades. Reference to the plan will show how compactly the seats in the waiting room are placed. They are quite out of the way of circulation and yet it is perfectly possible for people sitting there to see or to be seen by friends whom they are expecting.

Likewise it will be seen that all the facilities are conveniently and compactly arranged about the waiting room so that they are readily accessible. To add to the attractive air of openness and space, the various rooms surrounding the waiting-room are cross colonnades. Reference to the plan will show how compactly the seats in the waiting room are placed. They are quite out of the way of circulation and yet it is perfectly possible for people sitting there to see or to be seen by friends whom they are expecting.

In the Rochester Station, also, the ground floor plan, so far as the passenger is concerned, is rectangular. All the various facilities are so conveniently arranged about the main waiting room that their location is obvious and access to them quick and unimpeded. One has to go but a step out of the way to check a bag or buy a paper and the restaurant is near enough to the trains so that a necessarily hurried meal is not made still more distressing by having to calculate to a nicety just how long it will take to get from the table to the train. Another excellent feature is that the passenger upon entering the station may pass at once by a broad aisle across the breadth of the waiting-room to the concourse and subway to trains. Nothing could be more direct. The ticket sellers' windows are in an arched alcove with ample space before them, ensuring ease of circulation and freedom from congestion. The train announcer's balcony and the official clock are above the exit to the concourse and subway to trains and directly opposite the entrance. In both the Rochester and Utica Stations the waiting-rooms are practically at street level. In planning both stations a fineness of economy and close adherence to the principles previously outlined have been achieved.

Architecturally both the Rochester and Utica stations possess no mean degree of merit. The Rochester station is peculiarly interesting because of its color qualities—a welcome feature in our ordinarily uncolorful public buildings. Its manifestly Byzantine affinities lend themselves well to chromatic treatment, both in the ground work of brick and tile and the courses of faience embellishment. In the Utica station, too, in its prevailing Tuscan expression, the opportunities offered for pleasing color combinations have not been neglected. The arched colonnade in the Utica waiting room is peculiarly beautiful with its pillars of Vermont marble in soft gray and green veinings. In the coffers of the ceiling, the background and moulded enrichments are judiciously emphasized in color and gold. At Rochester the architect has achieved distinction by a wise use of colored and relief enrichment, while at Utica the architects have secured quiet elegance and dignity by a pleasing quality of restraint and reliance upon agreeable structural lines.

In the various facilities for the comfort and convenience of patrons and in the numerous provisions for perfect sanitation both stations are models worthy of careful study. At Utica the appointments compel admiration, from the kitchen and bakeries, lined with vitrified glazed white tiles and the glass lined refrigerators, to the women's room, at-
STREET FRONT OF THE KANSAS CITY UNION STATION. JARVIS HUNT, ARCHITECT.
tractively curtained and furnished with willow furniture, while at Rochester the green-shaded lights in the waiting room and the floors with rounded angles convince the visitor that due thought has been paid the most minute details conducive to health and comfort.

Of the group of Western stations, that at Kansas City, designed by Jarvis Hunt, is architecturally the most interesting. It is consistent, dignified, sufficiently monumental and massive to be worthy of a great city and absolutely free from meaningless and finicky adornment of any sort. The massing of the "head house," with its triple-arched façade of bold proportions and its well balanced wings, is peculiarly satisfying. In this "head house" are the great lobby and ticket office and all the various facilities. The waiting-room, which does not show from the approach to the buildings, is placed directly over the tracks and is exceedingly unpretentious in treatment and architecturally accordant with structural conditions. Its proportions are pleasing and its unassuming character is, perhaps, its best feature.

In the "head house" and its wings one naturally finds the fullest satisfaction. All the detail is so well adjusted to the scale of the building that there is an aspect of perfect repose and the ornament is so judiciously managed as to convey that most desirable impression of elaborate simplicity. The interesting device of square, block-like corners to the wings ingeniously adds weight and ties the massing together.

The great lobby, which occupies virtually the whole interior of the central, triple arched portion of the "head house," is less austere in conception than the exterior. Its proportions are full of dignity and its embellishment of fluted pilasters, bold entablature and deeply coffered ceiling is agreeably consonant with the whole genius of the structure. It is, in fact, so pleasant that one rather regrets that the same general architectural mode could not have been maintained for the waiting-room where the feeling of steel framing can hardly be said to add to its convincing quality.

One unusual feature in the plan of the
ENTRANCE TO KANSAS CITY UNION STATION. JARVIS HUNT, ARCHITECT.
GREAT LOBBY AND TICKET OFFICE IN KANSAS CITY UNION STATION. JARVIS HUNT, ARCHITECT.
WAITING-ROOM OVER TRACKS IN KANSAS CITY UNION STATION. JARVIS HUNT, ARCHITECT.
BIRD'S-EYE VIEW OF KANSAS CITY (MO.) UNION STATION, SHOWING GREAT TRAIN SHED, WHICH COVERS ABOUT SIXTEEN ACRES. Jarvis Hunt, Architect.
WAITING ROOM IN MICHIGAN CENTRAL STATION
AT DETROIT. REED & STEM AND WARREN
&WETMORE, ASSOCIATED, ARCHITECTS.
Kansas City Station ought not to be passed without notice. That is the location and arrangement of the waiting-room. Placed as it is, a great economy is possible in floor space and in the distance a passenger must traverse in going from the street to a train. As a reference to the accompanying diagram of the building and track lay-out will show, the waiting-room is a long corridor-like apartment directly above the tracks. Over each track an exit permits egress and descent to the corresponding platform. Of course this scheme is open to the objection that the waiting-room is thereby practically made a long corridor broken by numerous cross passages and that the seating capacity is, at the same time, appreciably reduced. While this is true, there is a gain in directness of communication and, still further, there is the easy possibility of extension, as occasion may require, with the addition of more tracks.

The exterior of the Detroit Station presents an extraordinary lack of continuity of conception. Seen from a distance, the casual observer, unless otherwise informed, would never take the two parts of the station to be portions of one and the same building so utterly different are they. Each part taken separately might be good. Joined together, they are architecturally incongruous. The fore part of the building is well proportioned and possesses a degree of classic distinction, but the great wall of office building at the back overshadows and spoils it and yet, at the same time, the broad scale, visibly substantial structure and innate dignity of the smaller pile make the taller edifice, despite its lofty stature, look flimsy and insignificant. The difference is further intensified by diversity of material, but it is, perhaps, better that this should be so and that any attempt to yoke the two warring elements together should be frankly abandoned. One cannot help regretting, however, that a building with as much character and inherent pleasing quality as the front part of the station undeniably possesses, may not be viewed to better advantage.

On entering the waiting-room the difficulty of reconciling two insistently diverse features disappears in the satisfying contemplation of modest restraint and excellent proportion. Unfortunately, the architectural character of the interior soon changes to match the structural character of the tall exterior and we find the train lobby reflecting the same unsympathetic angularity of the office superstructure whose only excuse and raison d'être must be that of urgent expediency. Divorced, the separate parts of the Detroit station would be excellent; inseparably coupled, the combination is unhappy.

The urgent expediency alluded to is probably the desire or necessity to provide a large amount of office room. This office room may be designed for the accommodation of the various administrative departments of the railroad or else it may be intended to be let. If the former, it is eminently right and proper, of course, that a railroad’s offices should be adequately housed under the same roof with a great station; if the latter intent supplied the general idea of combining station and tiers of offices, it must be conceded that the desire to include within the station limits such a quantity of rentable space as may yield a decent revenue is reasonable. A station with enough revenue derived from this source is either a self-supporting or profitable and independent business concern, and, theoretically, it is not then necessary to make the traveling public defray the cost of erection by a small pro rata tax reckoned in the amount of each ticket purchased. In either case the principle of incorporating station and offices in one structure is admissible. Granted, however, that the principle is admitted and its embodiment determined upon, there seems to be no good inherent reason why the dual functions of the building should be so visibly dissociated in its exterior aspect at the cost of architectural congruity. An architect who could design the front of the building is certainly not to be accused of lack of ability. One can, therefore, only deplore the exigent circumstances, whatever it may have been that dictated the unfortunate arrangement.

Much, very much, more might be said
in favorable architectural criticism of all the foregoing stations, but the purely utilitarian aspects of station planning seemed so insistent that their claims, for the nonce, outweighed artistic considerations.

We have at least seen that in the most recent stations the principles of both practical plan and becoming design have been set forth conspicuously as high standards by which to judge and test all future performances of a similar character; and of such performances we shall undoubtedly witness an increasing number. Many of the larger stations are unable to meet the traffic demands imposed upon them; and, besides, modern industrial conditions require closer coordination than has obtained heretofore between transit systems which, although under separate managements, constitute a single utility. The expert study that is being given to the “transportation problem” throughout the country will assuredly bring about the rebuilding of many existing railway stations.
PASSENGER STATION AT QUAKER RIDGE, N. Y., ON THE NEW YORK, WESTCHESTER & BOSTON RAILWAY
Fellheimer & Long, Architects; Allen H. Stem, Associated.
The time is happily past when the directing powers of public utilities corporations either desire or dare to impose upon the people of urban or rural communities ugly buildings of barrack-like aspect. Within the past quarter century architectural appreciation has so generally increased and architectural taste has so commonly improved that railroads and other corporations that have occasion to erect structures through the length and breadth of the country display a noticeable and gratifying readiness to make those structures accord with the demands of present standards.

In no one particular is this tendency more in evidence than in the change of style manifest in suburban railway stations. A distinct process of evolution has been in progress which we may readily trace from the hideous wooden shanty, still to be seen far away from city centres, to the well-designed building of brick, stone or concrete now almost universal within the ever-widening radius of suburban traffic.

This widespread improvement has come so gradually that we sometimes fail to realize its full significance or give due credit to those who were pioneers in the effort for better suburban railroad architecture. Pioneers there were, however, and their achievements deserve to be gratefully chronicled.

It would be too long a story to rehearse the steps of progress in every instance, but, as an example of the way in which the betterment was effected, we may cite one case which is typical enough to show in part how the change came. To the energetic editor of a daily newspaper, a leading railroad line in New England owes much for starting a comprehensive effort in the artistic treatment of its stations and their surroundings. When the question of a new station for one of the Boston suburbs arose,
the aforesaid editor urged upon the directors of the railroad that instead of having the stereotyped wooden structure, the station and its surroundings be given an artistic character, expressing the standing of the suburb as a progressive and cultivated community.

The directors acquiesced in the project and promised support and the problem was accordingly laid before two of the editor's friends, one of them the leading architect of his day, the late H. H. Richardson, and the other a great landscape architect, the late Frederick Law Olmsted. Their co-operation produced results picturesque and delightful, and the stations and grounds which they planned have been models, and even to this day, as the illustrations show, they are as attractive as when first built, while their surroundings increase in beauty every year.

The point of view of these two famous artists was most interesting. The architect held very properly that rural way stations were not for show. Ostentation, therefore, was to be avoided. Their chief purpose was to provide comfortable and pleasant shelters for passengers while waiting for their trains. Accordingly they were designed with simple, wide, overhanging roofs, and broad platforms on all sides of the structure, while the substantial walls of local stone gave an air of permanence and stability.

The stations erected by that New England railroad under the guidance of Messrs. Richardson and Olmsted have a quiet picturesqueness. Of one general type, they vary sufficiently for individual treatment. They have, furthermore, set an example that has furnished a style very widely followed in all parts of the country which might justly be considered a truly American style in suburban station architecture.

The charm of the stations at Wellesley Farms, Newton Highlands and Chestnut Hills has been greatly enhanced by the admirably designed surroundings. These stations were given ample grounds, laid out with pleasant modulated surfaces of turf, ornamented with diversified shrubbery disposed in masses and in such a way as to give most pleasing impressions. The illustrations show how carefully paths and driveways were studied with reference to local conditions in order to provide convenient approaches. The shrubbery was selected with a view to a pleasing effect not only through the growing part of the year, but as far as possible through the winter months as well.

The unsightly objects that often offend in the neighborhood of a railway
were hidden with trees and all embankments were planted. The scars left where the railroad ploughed through a picturesque landscape and the cuts where gravel and rock were left exposed were covered with vegetation. Ledges and retaining walls were adorned with climbing plants and vines that produced a natural impression consistent with conditions of a certain rustic formality.

Local landscape features often invited individual and pleasant treatments. Adjacent water, for example, as at Wellesley Farms, where aquatic plants could be naturally disposed along its margin, was made the most of. The railroad has been well repaid for the first cost of this work, as the current expense is small for the maintenance of the grounds, consisting only in the care of the turf, shrubbery and paths. As to the pleasure and satisfaction such gardening gives to its patrons, nothing can be more delightful than glimpses caught of these stations; people arrive and depart over picturesque walks and drives which take the city workers to their homes from stations which are veritable gateways of rural beauty.

In the treatment of the suburban stations and their surroundings that were first built near New York City, with possible exceptions in the case of one road, little or no consideration was given to the streets crossing the right of way.

The recent substitution of electricity for steam by a number of the suburban lines and the demand by the Public Service Commission for the elimination of grade crossings have made the treatment of the station and its surroundings a new problem, and a rather serious and difficult one where the grade of the railroad tracks can not be materially changed. It becomes necessary in such cases for the streets to be tunnelled under the tracks or to have bridges built over them. Where there is a public square with business buildings adjacent, as at Bronxville, New York, it has taken years for property owners to decide which is the better plan to adopt to save the picturesque beauties of the place.

An attractive station of the English cottage type at Scarsdale, in its sylvan setting, is not improved by the recent overhead foot bridge crossing the tracks, nor is a similar solution of the problem in the new stations built along the Hudson at Riverdale and Hastings of more comely aspect. The plain, large plate girders spanning the tracks may be economical and practical, but they certainly are not graceful, and one feels that one
would like to see a bridge more in harmony with the station building and the tower which it connects.

The stations at High Bridge and University Heights are frankly structural iron affairs, or rather iron bridges built over the tracks, beside which is built the station with street in front of it. This seems a logical design that at least possesses unity. The plate girder is ungraceful, but it is not as objectionable as it might otherwise be since the width of the station and street make a wide soffit, and it is greatly relieved by the station building above.

The stations designed by Stem & Fellheimer for the new line of the New York, Westchester and Boston Railroad, a portion of which has been completed, afford excellent examples of the most recent phase of evolution in suburban station architecture. Contrasted
with the old wooden lean-to or packing box type of station, prevalent not so many years ago, the advance in standards seems almost incredible, and speaks volumes both for the advance in popular taste and the intelligent satisfaction of its demands.

In most instances along the Westchester division, concrete has been used and the surface bush-hammered except on the mouldings. The utmost simplicity of treatment, both in general design and ornamental detail, characterizes all the structures, and the Florentine type chosen is exceptionally frank and sincere in its freedom from meaningless ornament.

The Quaker Ridge Station, shown in one of the accompanying illustrations, is impressive for its bold lines, its restraint and its quiet dignity. Although in reality a small building, the entire absence of fussy detail and the scale of its proportions give it an unusual presence and make it appear far larger than it actually is. Besides holding fast to their ideal of simplicity, the architects have emphasized another favorite device by throwing as much of the wall area as possible into arches and filling the openings with glass, thereby creating a sense of lofty space and airiness.

Some of the other stations on the Westchester road, designed by the same architects, frankly suggest garden pavilions or shelters, as they were doubtless intended to do, and it must be admitted that such a conception of a suburban station—merely a temporary shelter in a rural spot—is eminently reasonable.

These most recent achievements in suburban railroad architecture possess a subtle charm that cannot fail to make itself felt. Their well-balanced proportions, their chaste lines and the effective use of some charming bit of detail in a telling situation make the observer conscious that it is, indeed, a far cry to the old wooden stations that these shapely structures have replaced, and that even the most commercial and utilitarian buildings may now be instinct with grace.
ST. AMBROSE CHAPEL, FROM ALTAR—CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK.
CARRÈRE & HASTINGS, ARCHITECTS.
ST. AMBROSE CHAPEL
WHITING MEMORIAL
IN THE CATHEDRAL OF
ST. JOHN THE DIVINE, NEW YORK
CARRERE & HASTINGS, ARCHITECTS
PHOTOGRAPHS BY B. C. MITCHELL

ST. AMBROSE CHAPEL, Whiting Memorial, built through the munificence of Mrs. George L. Rives, invites attention as a noteworthy example of the use of the Renaissance style to express devotional feeling in design. It is the work of Carrère & Hastings, whose architectural creed it may be said to embody; and will no doubt be widely studied in connection with the address which Mr. Thomas Hastings read before the Royal Institute of British Architects in May of last year.

In accordance with the thesis therein upheld, the Renaissance style represents the main line of evolution in the architecture of Greece and Rome, the sources of the essential elements of modern civilization; while the Gothic style was an evolutionary incident, an outcome of the evanescent morbid spirit of devotion peculiar to mediæval life.

During the Renaissance period, Mr. Hastings contends, the forms of mediæval architecture became inadequate to meet the demands for greater refinement of thought, for larger truthfulness to nature, for less mysticism in religious expression, and for greater convenience in practical living that came into existence through the revival of learning and through radical changes in economic con-
ditions. Since the period of the Renaissance, in his judgment, there has been no departure in the progress of civilization of sufficiently fundamental character to give rise to a radical change in architectural style; and we are consequently still living in the Renaissance age.

Therefore, "whatever we now build, whether church or dwelling, the law of historic development requires that it be Renaissance; and, if we encourage the true principles of composition, it will involuntarily be a modern Renaissance; and with a view to continuity we should take the eighteenth century as our starting point, because here practically ended the historic progression and entered the modern confusion" — the confusion, namely, which has been brought about in architecture by indiscriminate borrowing from past styles.

The design of St. Ambrose Chapel exemplifies the reasoned conviction of the architects in the matter of style; and a reasoned conviction is conducive to logical conception, coupled with freedom of treatment.

The altar and retable are of white alabaster. There are three gold ornaments on the face of the altar, the central one being a lamb with the cross; and at the sides are angels swinging incense.

Back of the retable is a carved wood reredos, treated in antique gold.

Directly above the retable, in a niche at either side of the reredos, stands, on the right, St. Ambrose and, on the left, St. Francis, the central space being filled by a triptych.

In the niche at either side above St. Ambrose and St. Francis is a kneeling angel; and in the space between these niches are six smaller niches, in which are placed the figures of St. Benedict, St. Agnes, Dante, Fra Angelico, Galileo, and Savonarola.

Above the central portion of the triptych occurs a canopy surmounted by a spire, the central motive being a cross, above which are the symbols of the Holy Ghost and God the Father, the spire being surmounted by a figure of the reigning Christ.

The whole has been treated like an antique gold Italian reredos, enhanced with color.

The steps are of Cenere marble, while the center of the floor is of gray Sienna and red Verona marble.

The walls are of Rosato marble. The lower portions of the walls are treated with carved stalls of Italian walnut with a rich treatment of marquetry in pear wood.

One enters the chapel through a wrought-iron Italian screen. Above the center gate stands the figure of St. Ambrose, facing the altar; and a series of seven groups represent incidents in the life of the saint. In the first group St. Ambrose is depicted as a child; in the second he is settling the dispute which arose upon the death of the Bishop of Milan between the Catholics and the Aryans concerning the succession; the third represents his baptism; the fourth, or central group, of which the dominating figure forms the central motive, depicts him as preaching to monks and nuns; in the fifth the Emperor Theodosius is in the act of making public penance for his sins before entering the church; the sixth recalls the laying the cornerstone for St. Ambrogio Maggiore at Milan in 387, and the seventh represents the death of St. Ambrose, surrounded by angels.

These pictures are surmounted by architectural ornaments, which form sockets for seven candles, at either end of which stands an angel. The chapel is naturally lighted by three large windows, and there are four beautiful antique silver lamps. The ceiling is modeled in low relief.

To borrow from the language of Dr. J. J. Burnet before the Royal Institute of British Architects in the discussion which followed the reading of Mr. Hastings's address — language applied generally to the work of Carrère & Hastings — the design of St. Ambrose Chapel is characterized by "culture, mastery of detail and true breadth of grasp." The chapel expresses its relative value as a small element in a great architectural unit, and is in full accord with the dominant feeling of the cathedral interior, yet exhibits a marked individuality entirely its own.
GENERAL INTERIOR—ST. AMBROSE CHAPEL, CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. CARRERE & HASTINGS, ARCHITECTS.
DETAIL OF MARQUETERIE—ST. AMBROSE CHAPEL, CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. CARRERE & HASTINGS, ARCHITECTS.
ALTAR AND REREDOS—ST. AMBROSE CHAPEL, CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. CARRÈRE & HASTINGS, ARCHITECTS.
SCREEN AND GATES—ST. AMBROSE CHAPEL, CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. CARRERE & HASTINGS, ARCHITECTS.
ST. AMBROSE CHAPEL, CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. CARRÈRE & HASTINGS, ARCHITECTS.
ORIEL WINDOW—DEANERY AT CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. CRAM, GOODHUE & FERGUSON (BOSTON OFFICE), ARCHITECTS.
The Bishop's House and Deanery, at the Cathedral of St. John the Divine, New York

Cram, Goodhue & Ferguson (Boston Office). Architects

West Elevation Bishop's House
SALLY PORT—BISHOP'S HOUSE AT THE CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. CRAM, GOODHUE & FERGUSON (BOSTON OFFICE), ARCHITECTS
STUDY—BISHOP'S HOUSE AT THE CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK.
Cram, Goodhue & Ferguson (Boston Office), Architects.

DINING ROOM—BISHOP'S HOUSE AT THE CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK.
Cram, Goodhue & Ferguson (Boston Office), Architects.
DRAWING ROOM—BISHOP’S HOUSE AT THE CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. CRAM, GOODHUE & FERGUSON (BOSTON OFFICE), ARCHITECTS.
CHOIR SCHOOL AT THE CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK. WALTER COOK AND WINTHROP A. WELCH, ARCHITECTS.
In this article, the fourth in the series, Mr. Beach continues the discussion of architectural competitions which he took up in the July number. Constructive suggestions are made for eliminating the waste and injustice incident to the majority of competitions, both formal and informal, as at present habitually conducted.

COMPETITIONS

There is, of course, merit in the argument that, if competitions can be fairly won, by deserving contestants, they are thereby fully justified. Perhaps this might be true, if it could be proved that more than half the competitions were fairly judged. The doctrine of the survival of the fittest can well be applied to any profession. But it must be remembered that good drafting is not necessarily good architecture. Many offices, capable of excellent designing and of turning out first class working drawings, are in no wise equipped for preparing competition drawings, which are very largely the work of draftsmen who specialize in this field.

When the final word has been said, it will be that the only good excuse for continuing to hold competitions is the avoidance of “favoritism” in the selection of an architect for a public or semi-public structure. It is not apparent why this should be avoided except by committees whose status is not sufficiently high to escape the suspicion of “graft.” But, sad to say, many alleged competitions have been proved to be merely a cloak for that very favoritism.

The files of architects are choked with the records of “competitions” unfairly awarded on account of the personal predilections of one or more of the jurors. One architect, winner of many informal contests, gives it as part of his “system” never to enter such an affair unless he knows in advance that he will win, because, if he has not that certain knowledge, he can safely consider that some other candidate has.

It has been said that there is much to be gained, especially through formal competitions, by the criticisms they evoke. No doubt, there is much scholarly criticism expressed, both favorable and unfavorable, which would be helpful if it reached the contestants; but, unfortunately, no carefully prepared analytical critique is given the losers. The best they are granted is a statement of why a certain design was awarded first place; sometimes not even that is vouchedsafed them. Too often it is impossible for the losers to convince themselves that they have received fair treatment, no matter how impeccable the committee of award. It will be found that the accepted design either exceeded the cubic stipulated; or some of the drawings bore prohibited washes; others carried this or that violation. Nevertheless the award is made to the design considered best in spite of the injustice to others.

And quite naturally, a de-
designer whose previous efforts have met with such successes as to warrant a fair amount of self-confidence will, after a thorough study of the problem to the exclusion of all that he considers unfit, arrive at his final solution with much faith in its excellence. It is hardly to be expected that he can at once agree with those judges whose view point cannot be exactly the same as his own. Especially is this the case when the program is not sufficiently definite in its qualifications to prevent a broad interpretation and a wide divergency in schemes submitted.

But the criticisms. If it were only a prize at stake, it would not be so bad. But it is more than a prize for many; it is bread and butter and a few other necessities to existence. So the losers, who so greatly outnumber the winners, are apt to be sore and bitter and prejudiced and sarcastic, instead of honestly critical. They are human. Few of us are capable of exhibiting that broad-mindedness which prompted an architect, when twitted because a younger firm had beaten him, to say "And what makes it worse, they did it fairly, with a better design than mine. I regard that designer as nothing short of the spirit of Palladio, reincarnate."

The most prevalent kind of professional criticism brought forth by competitions is that from which the layman is led to believe that there are no fixed principles of architectural design, absolutely nothing pertaining to the art of architecture on which its exponents can agree. Far too seldom does he hear an architect giving unstinted praise to the work of another. Quite too apropos was the query of an architect’s stenographer as to whether "rotten" was essentially an architectural term, explaining that it appeared always to be used by architects and draftsmen when referring to the work of other designers.

The seal of disapproval which the Institute ostensibly sets on competitions in general is too greatly offset by its code of approved competitions. The insistence between precept and practice is too noticeable. The effect has apparently been to limit the game to offices of large practice and to men outside the Institute. One of the latter remarked that the stand taken by the Institute had proved a fine thing for himself in keeping so many good men out of the informal affairs.

Vast good might be accomplished if those having in charge the selection of an architect could, at the beginning of their task, be prevailed upon to read the Circular of Advice; but it is to be feared that, even when copies are sent to the proper parties, they are generally consigned to the waste basket as too involved and technical for complete perusal. The result is that the recipient concludes that the Institute does approve of competitions, though he be too careless to discover how extremely circumscribed is that approval. Nor can he believe that the disapproval is founded on anything but the objection in the profession to the expenditure of time and money by such process.

Those practicing in the larger cities do not appear to appreciate the fact that the "big" offices design a very small proportion of the nation’s public and quasi-public structures. Many of these are built in comparatively isolated communities in which "architecture" has been previously unknown or, at best, only a thing of pictures and travel—perhaps classed with other fine arts as an adjunct of effete "culture" that is not especially to be desired.

The erection of these buildings is entrusted to committee men, most of whom have never previously encountered an architect. Before any one can inform them as to the best means of choosing a designer, they have set a time for applicants to come before them informally—and the mischief is done. Any attempt to render the matter formal would be futile—perhaps under present Institute conditions, too long and tedious for most buildings of moderate cost.
For the benefit of these committees, nevertheless, it may be most emphatically stated that, with all the objections to competitions offered in behalf of the profession, there are even more to be stated on the side of the owner—that is, if the prime object of such affairs is the selection of the best architect to the end that the best possible structure within the means of the appropriation may be evolved. The following objections apply to all informal competitions and in some degree to those more formal:

1. The owner would be most benefited by choosing an architect before deciding upon anything else connected with the building project and thereby gain the benefit of professional and technical experience in all features of the problem.

2. The selection of a design should not be limited to the few that a competition will bring forth. The owner and his architect should carefully consider all prototypes accessible.

3. The designs submitted by an architect for a building should contain that architect's best ideas on the subject—should not simply be those which he thinks would catch the attention of a committee and "get him the job". Moreover, if an architect has more than one good solution of any feature, the owner may be the loser if all such ideas be not presented. Too many competitions are judged on the basis of the winner getting a valuable prize, jealously guarded by the judges, instead of solely for the good of the building itself.

4. Inasmuch as the functions of an architect are many and varied, he can better be judged by his completed work than by preliminary sketches which represent merely one of his minor duties.

5. In deciding upon an architect by means of a competition, the judges find it difficult to dissociate the excellence of the design and that of the drawings, or to determine to what extent the architect who owns the drawings is responsible for their merit. The preparation of these drawings is so easily assigned to specialists that it is often absurd to judge architects thereby.

6. It is impossible for any committee to weigh the relative merits of prejudiced contestants by hearing them present their own claims for consideration.

7. It is equally impossible for a committee to properly weigh the relative merits of preliminary sketches, rapidly reviewed, at the few sessions ordinarily allowed to the task.

8. It is well-nigh impossible for a candidate for architectural service, appearing in competition, to withstand the temptation to promise more than can be performed in the way of securing a desirable structure at a given price. Inasmuch as all owners want the most that can be had for their appropriation, that candidate who will lie the most convincingly is too often the successful man. His inability to make good manifests itself too late.

9. The date set by a committee for holding a competition may be one unavailable to the best possible candidate, whose employment is thereby eliminated.

10. Of the several better class candidates, it may be that not one cares to devote the time and expense necessary to the competition; hence the selection is limited to the less capable, but really needy.

11. Different architects place different values on their services. The best is likely to be the highest priced. This further confuses the committee, which is too likely to give undue consideration to the saving found possible in the employment of inferior talent.

12. The planning of a building is a process of evolution. It is practically impossible for an advance program to be an absolute guide to the best eventual scheme. Nothing but the full working out of the problem will produce this. The data compiled by an architect for such a purpose may be quite different from that which would
suggest itself to an inexperienced committee. Even technical judges have made awards to architects whose final drawings bore small resemblance to those accepted, perhaps had more features of some of the other entries.

Inasmuch as the formal competitions are practically limited to efficient practitioners who are prohibited from "blowing their own horns" to the judges, it can be seen that many features inimical to the best interests of the owner can really be obviated and a competition still be had. Some objections cannot be thus set aside.

From the architects' side there are two other major and unavoidable evils attendant upon any competitions, in addition to that of the continual state of incipient warfare thereby engendered, and which the good-fellowship of conventions and other gatherings cannot mitigate. One is the enormous waste of time and money expended in these abortive endeavors. Certain offices can selfishly assert that they have made, rather than lost, money in this sort of business; but some must lose. It has frequently been shown that, in important formal affairs, the expenditures by all entrants far exceeded all fees paid by the client. Obviously the profession at large foots the bill, pays the deficit. The only advocates of competitions are those who profit by them. Thus to make them desirable all around, they should be limited to those who average a profit by them; those who do not, to be willing to allow the best commissions to be diverted that way—a condition scarcely conceivable.

As competitions are to-day conducted (in every kind and form), the man of business cannot be expected to believe a whole profession to be so foolish as is actually the case. The fact that some profit by the game conceals the other truth that more are impoverished by it. These may be considered fanatics, or they may be found to be plain gamblers or, perchance, artists who in the sheer joy of bringing forth a beautiful set of drawings, are satisfying an aspiration, selfish or altruistic, which needs no further recompense.

The general public knows nothing of this and stands aghast at the enormous sums paid to the winners of prominent competitions, utterly oblivious of the fact that these commissions have still to be earned. The sensational press calls especial attention to this phase of apparent extravagance with public funds and charges the American Institute of Architects with being a dangerous "trust" and extorting fabulous fees. Nothing is ever said of the losses of the losers or the probability of what the net fee might be.

This was notably the case in the recent New York Court House competition in which not one of the competitors made any apparent attempt to confine his expense to the stipend by which he was remunerated. It has even been declared by those capable of forming a proper estimate that Mr. Guy Lowell, whose design was awarded first place, will find difficulty in deriving any profit whatever from his fees, on account of the unusual nature of the drafting necessitated by his design.

The other evil mentioned is, perhaps more of a conjecture than a certainty. It lies in the possibility that too often architects spend time in competitive work that rightfully belongs to existing clients. In general an architect must perforce take all the work he can get and apportion his time and effort to the best advantage—some distributed in the manner described by Mr. Prior. But when an architect who is not habitually in the business of competitions undertakes to enter one of any extent, he is liable to upset the entire morale of his office organization and leave neglected some duties to which he is ethically obligated. Again the public loses.

In the aggregate it is, of course, difficult to say whether the public or the
profession is the greater loser by this wasteful method of assigning work. Some claim that, if all competitions were done away with, architects could profitably return to a five per cent basis. While this is doubtful, it is unquestionably true that there would be immense saving—enough to warrant a rather extensive sliding scale having a minimum of five per cent (possibly four) for certain classes of work.

But, it is argued, no other than the competitive method can be evolved which would be considered proper for public buildings. This is puerile. Such work is daily being directly assigned, for the very reason that this is the only absolutely sure way of guaranteeing best results. By a simple process of elimination the candidates for any given work can be reduced to those who are really fit and then the favored individual determined by vote or by lot. This would be fairer to both sides than a majority of the so-called “competitions” of the present day.

Or, in larger work, the structure can best be erected by an architectural commission which will nominate one of their number (or an outsider) to take direct charge of the work and devote his entire time to maintaining an independent office for the purpose. The commission would devote as many hours per day or per week as their duties would require. This should serve to knit architects together, as was the case at the Columbian Exposition, instead of driving them apart, as is too much the effect of competitions.

Finally, as to the claim that the best excuse for competitions is that they give the young practitioner a chance to show his ability, which opportunity he can gain in no other way. As we look about us, we cannot help but realize that the young practitioner has had altogether too much opportunity to show what he can (or cannot) do—and he will continue to have, so long as the public continues to be attracted by a cut commission or by certain importunate methods of business getting. But we will take up the problem of the young architect in another chapter.

That there is grave doubt that the Institute's attempted control of competitions has accomplished anything except with the larger affairs is evidenced by a recent report of a Competitions Sub-committee. This states that, in the entire field of the Chapter of this Sub-committee, there has not been, since the Institute sought to control competitions, a single competition so conducted that members of the Institute could properly participate. There has, however, been no apparent reduction in the number of informal competitions in that territory, but rather an increase, in spite of the Sub-committee's "campaign of education."

Thus is it more or less evident that the small percentage of the profession which is especially equipped for competition business and which wins individually more than it loses, favors the continuance of a policy which will license such contests; the other and larger portion of those practicing would like to see all competitions done away with and the acquisition of new work put on a sounder and more businesslike basis, but is at loss as to how this may be done.

One of the simplest schemes for avoiding a competition on any given project is that of persuading the owner or committee to adopt some method (not difficult) of narrowing the number of candidates down to two, three or four, according to the size of the building, and then having these individuals or firms act as associate architects on the work. This has frequently been successfully accomplished. It will be more easily effected in the future if members of the profession become better acquainted through their societies and social affairs, instead of allowing themselves to be continually forced further apart by competitive petty warfare.
WHAT may be said for the interiors of the old Dutch houses of New Jersey? Are they as individual and as characteristic inside as they are outside? Often as this question must have been asked, no great amount of data has been furnished so far; and it is just this lack of information that this study is designed to meet.

Let us first take up the plan. As mentioned in the first article, the very earliest structures were humble stone cottages of two or three rooms, as cozy and home-like as one could desire, and probably quite comfortable in comparison with the average dwelling of the American pioneer. With low ceilings of rough hewn oak beams, walls bare or covered with clay or wood, small windows with deep reveals, and the low wide fireplace—all had a rough charm that we associate with the ancient cottages of Europe. The original Demarest house still guards something of this early quality and we meet it often in the older wings of other houses—though here, of course, the walls have been carefully furred and plastered. In these early buildings the stalwart Dutch farmers simply embodied their ancient European traditions of hearth and home. They maintained this tradition in full force until well into the nineteenth century; early and late, large or small, the houses have exactly the same character of broad low rooms with undecorated walls, of windows with deep reveals and great fireplaces and chimney breasts. With the Revolution
came contact with neighboring colonies and borrowing of Georgian details, but the new Georgian draperies never concealed the Dutch body which they clothed, paradoxical as it sounds.

As the eighteenth century progressed, the houses changed little. Simple planed trims were introduced, the walls were more carefully finished, but there were no architectural "features" of any kind. The mantel was probably a rough oak plank shelf. These trims were sometimes cut with a good simple moulding, and we notice the use of beads to form corners, which continued throughout the style. This plain woodwork is extremely satisfying and shows what can be done without mouldings and ornament of any kind. Unfortunately the oak beam ceilings have nearly all been plastered over since. By the middle of the century, when the larger houses were added to the first "wing," the window openings were sometimes cut down inside, either to the floor to form a panelback, or part way to form a cozy seat. The ceilings were still low, eight feet or less.

The plan of this newer portion has been explained—almost always a wide central hall running through to the rear, with a "Dutch" door at each end, a square room at either side on the front and an oblong bedroom either side at the rear. The arrangement is seen in the plan of the Hopper house, on page 48, except that this house has the convenience of the transverse central passageway, which is not usually found in other houses. In the smaller homes one square room was a dining room and the oblong room behind it was the kitchen. This arrangement persisted throughout the style. The old wing was used for living quarters of a married son or for slaves. The stairway was never the elaborate feature it often became in American-Georgian houses; for, as we have seen, it led only to an open loft in the
STAIR DETAIL—BOARD-ZABRISKIE HOUSE.
ENTRANCE HALL IN ZABRISKIE
(BARON VON STEUBEN) HOUSE.
INTERIOR DOOR IN THE HOPPER HOUSE.
gambrel roof above, and was merely a service stairway, some three feet wide. The handrail was mahogany set on thin plain uprights, with simple square posts, sometimes tapering at the top—a delicate and dignified treatment well shown in the stair detail of the Board-Zabriskie house on page 151. This rather narrow stairway against one wall of the wide entrance hall leaves open a large space from one Dutch door to the other, and adds to the effect of generous proportions as one enters the house. The stairway of the Hopper House, 1818, and that of the Brinckerhoff House on page 150, somewhat earlier, are typical examples of the Dutch hall. The front door had usually an oblong fanlight above the top, which lined up with the tops of the windows on either side of the door at the front. Only very late, in a few cases, does one find the Georgian entrance with elliptical fan and sidelights of leaded glass, as in the Hopper House. The interiors of the larger of these earlier houses were probably furnished from the craftsmen’s shops of Manhattan or direct from Holland, and must have presented a quaint Dutch appearance.

The kitchens would interest the housewife, and some of them come down to us practically unchanged. There is the kitchen with paved floor of the Board-Zabriskie house and the kitchen of the Baron von Steuben house. Best of all is the one in the Nicholas Haring homestead on the main road to Tappan, near the New York State line, shown on page 148. This fine old kitchen with the typical hewed timbers, “Dutch” oven and cupboard has not been changed in over a hundred years. There is the inevitable tradition that during the Revolution British soldiers pried open with their bayonets the cupboard at the right of the fireplace in search of food. The Harings were prosperous farmers, noted for the
FRONT DOOR—INTERIOR OF THE HOPPER HOUSE.
DETAIL OF PANELBACK IN LIVING ROOM OF HOPPER HOUSE.
fine quality of their butter, and their descendants still cure hams in the ancient way by smoking them over hickory wood in the old fireplace. All the details of this great open fireplace are typical— with its cranes and pots, and the large stone Dutch oven with arched opening three feet or so above the floor, a restoration of which is shown on the plan of the Hopper house. In all but few instances these Dutch ovens have been removed, but the place where the stoves were fitted in may usually be seen.

With the latter half of the eighteenth century came contact with surrounding English colonists, and the Revolution found staunch supporters among the Bergen County Dutch. By this time the English speech was pretty well understood in the region. Furthermore, the hard work in the fruitful soil and the thrift of several generations had brought prosperity to the countryside, and the people were everywhere building the larger additions to the earlier homesteads.

They proceeded to draw freely from Georgian precedents for interior details and furniture. Just when this occurred is not clear; nor is it quite clear just what part contact with English neighbors, and what part the increase in wealth and ideas of comfort played in this borrowing. There is only slight evidence in the matter: a tradition has been handed down in the Meyer family on Polifly Road that when their house was finished in 1783 the interior work in it was far ahead of anything else in the district and people came from miles around to admire it. Often such stories are worthless, but the work itself seems to bear out this one. The mouldings are heavier and stockier than much of the work of a few years later and not so perfectly profiled. This house contains a mantel that seems to be the prototype of the beautifully fantastic mantels with enframements of spindles so characteristic of the Dutch-American work. Altogether, the woodwork of this
house has an archaic or transitional quality which rapidly grows less in the houses built only a few years later. It looks as if capable men learning new things had done it, and makes plausible the tradition in the family.

The houses following this date have beautifully profiled mouldings, more delicate in scale than those in the Meyer house, but the proportions keep something of the same naive charm. A very good example of this is the mantelpiece and overmantel in the Terhune house, shown in plate 34 (inserted opposite page 176), and the similar mantel in the Baron von Steuben house; and let me say that they are much better even in execution than on paper, as is often the case with craftsmen’s art.

More architectural features soon came in. In the dining rooms very perfect little china closets with glass doors were built next the dining-room fireplace or across one corner of the room as in the house at Dumont and the room in the Baron von Steuben house, just mentioned. Often bedroom closets were built with nicely panelled doors and panels above to the ceiling. The Baron von Steuben house has also a low-panelled wainscot in the hall, shown on page 152. However, this treatment of panels, etc., was never carried far. Invariably the taste was for a plain wall surface crowned in several places with a slight wood cornice, as in the Ackerman house on Polifly Road and the Peter Wilson house in Hackensack; All “architecture” was concentrated on mantels and door and window openings.

Towards the end of the eighteenth century and through the first quarter of the nineteenth the local craftsmen had become adept in Georgian forms and the most perfect interiors were built at this time. It is evident, also, that many of the delicate mantels and other features found in the earlier houses were added during this post-Revolutionary period. Those familiar with details of the various types of American Georgian work in New England, New York and Pennsylvania will recognize familiar elements in this Dutch work in New Jersey, but they will realize nevertheless, that the Dutch builders carefully selected these elements according to their own taste and thus established what may well be considered a distinct type.

This post-Revolutionary culmination, where outside influences of American Georgian work appeared in these Dutch interiors of New Jersey, to enliven and enrich their sturdy personality, forms one of the most fascinating aspects of the whole style, and holds a practical value for the architect of today who seeks to embody in his own work some of the traditional ideals of American architecture. Accordingly, a detailed description of this phase of the style is reserved for another article, which will appear in the September number of the Architectural Record.
PORTFOLIO OF CURRENT ARCHITECTURE

ENTRANCE—RESIDENCE OF A. B. SPRECKELS, SAN FRANCISCO. KENNETH MACDONALD, JR., ARCHITECT.
FIRST AND SECOND FLOOR PLANS—RESIDENCE OF A. B. SPRECKELS, SAN FRANCISCO.

Kenneth MacDonald, Jr., Architect.
DINING-ROOM—RESIDENCE OF A. B. SPRECKELS, SAN FRANCISCO.
Kenneth Mac Donald, Jr., Architect.

SALON—RESIDENCE OF A. B. SPRECKELS, SAN FRANCISCO.
Kenneth Mac Donald, Jr., Architect.
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SKETCH FOR BRIDGE PYLONS, "CITY ENTRANCE," ALBANY, N. Y. ARNOLD W. BRUNNER, ARCHITECT.
THE complicated task of evolving what one might call a "city beautiful"—if it were not that he prefers to have his work identified with the more straight-forward term of "town planning"—that shall be practical, as well as architecturally "good," out of a city that has grown up in the haphazard way typical of most American cities has been undertaken by Mr. Arnold W. Brunner with some exceptionally fortunate results for the city of Albany, New York.

In April, 1912, Mr. Brunner, whose name it will be remembered has already been connected with many important city planning movements, was requested to prepare sketches for the improvement of Albany generally, and especially to suggest a solution for carrying out certain improvements that were at that time being agitated. The problem undertaken was by no means an easy one. It called for a thorough knowledge of what was to be expected of the future development, as well as of the conditions which have led to the past development of Albany. It called no less for the remodeling of certain parts of a large existing city, without unnecessary expense or annoyance to its citizens, than for the pre-arrangement of much of the surrounding territory—now suburban—into which the city will grow in the near future.

The growth of Albany during late years has been exceedingly rapid. But it has often been more hasty than fortunate, and even much of the best effort by public-spirited citizens to make it a more satisfactory or beautiful city has produced most unfortunate results. To remedy mistakes that have already been made, and to guard against future errors of the same kind, the city has turned to an architect for advice and assistance in re-arranging the present city and in anticipating and guiding into proper channels its future growth.

The improvement that is perhaps the most important of all, the creation of a new plaza opposite the State Capitol, at the end of State Street, is already well under way. State Street, one of the most important and impressive streets in the State of New York, leads from the Capitol down to the Hudson River; and is 100 feet wide at its narrowest point. To-day, however, the view from the Capitol, looking in the direction of the river is extremely unsatisfactory for the street literally "goes to pieces" at its lower end in a tangle of mean streets and wretched buildings. The simple, direct way in which this condition is to be remedied is typical of the manner in which all of Albany's most urgent problems have been solved by Mr. Brunner.

To make a termination worthy of so important a thoroughfare, several blocks of buildings are now being cleared; and the large space shown on the plan here reproduced is to be created, while the street itself will remain practically unchanged. The only alteration will be in the curb line, and the lines of trees shown are to be planted. After trying other, more ambitious, schemes, including a number for parking in the middle and at the sides of the street it was finally decided that the purpose of the improvements was after all, primarily "to make Albany more Albanian" if possible; and that it would be better, therefore, to preserve the present character of the street and simply improve it. In the numerous discussions that were held about the treatment of the lower end of the street there was at first a strong desire to secure a view of the Hudson River; but it was discovered upon investigation that the view would not be one of the river at all, if the street were "opened up" to the water's edge, but of a large railroad yard with passenger and freight yards, instead. Because of this it was finally decided to create the plaza and to build around it a group of buildings that would effectively screen these activities from sight. The buildings of the eastern side of this new plaza were designed along lines suggested by Mr. Brunner to harmonize to some extent.
with surrounding buildings and to accommodate themselves to the form of the plaza. Their final design and construction is in charge of Mr. Marcus T. Reynolds, architect for the railroad which will erect the buildings. A picturesque tower—also most interesting when seen from the riverside—which is placed on the axis of State Street, is the most important feature of the design, and it will form a termination to the street itself and close the vista at its eastern end in character with the beautiful prospect at the west.

Of equal importance will be the "city entrance." Mr. Brunner says: "While the railroad station has generally taken the place of the city gate, and is usually the only approach to the modern city, Albany possesses not only a splendid water front but a real city entrance. The bridge from Rensselaer is the natural approach from the Albany Post Road. This is said to be the most heavily traveled road in the State, perhaps in the Union. Accordingly, the entrance to Albany by automobile or carriage should be worthy of the State highway and worthy of the city that it approaches."

Immediately in front of the bridge which constitutes the "city entrance" of today a most deplorable state of affairs prevails. There are a dangerous grade crossing, bad roads, and a complication of tracks, freight yards and unsightly warehouses. In fact there is, as some one has said, "nothing but ugly ugliness everywhere." Mr. Brunner proposes, besides the possibility of a handsome and dignified bridge termination with stone pylons surmounted by groups of sculpture, a wide roadway dividing into two parts after it leaves the bridge. The road to the north skirts a masonry wall which will be built for the purpose of screening and supporting the railroad tracks, and passes by the new Riverside Park until it reaches Broadway in a safer, and certainly more dignified way. The portion of the wall immediately in front of the bridge is to be raised above the wall on either side to a height sufficient to emphasize the axis of the bridge, with some architectural treatment that
STUDY FOR PLAZA AT FOOT OF STATE STREET, ALBANY, N.Y., AS SUGGESTED BY ARNOLD W. BRUNNER, ARCHITECT, AND CHARLES DOWNING LAY, LANDSCAPE ARCHITECT: DESIGN OF TOWER AND BUILDINGS BY MARCUS T. REYNOLDS.
will serve as a setting for a large group of monumental sculpture. Riverside Park is slightly raised above the water line on a series of terraces, and it will be provided with large playgrounds, a pavilion and a wading pool.

The entire question of parks, both here and in the entire city, has been given careful consideration. There are to be formal parks and sunken gardens where there seems to be a need for them, but esthetic feeling has not been allowed to interfere with their practicability when practical, useful parks and playgrounds are needed.

Owing to its extremely uneven surface, the city of Albany calls for a distinctly informal, picturesque treatment. Mr. Brunner says: "It would seem a calamity to attempt to formalize the city of Albany or to try to change its plan to make it resemble those stately cities where the architecture is formal and where the streets all cross each other at right angles and where steep hills do not exist," and steep hills and deep valleys certainly do exist in Albany.

The result of two years' study of the situation by Mr. Brunner, with the assistance of Charles Downing Lay, landscape architect, and in consultation with the Corporation Council, the Commissioner of Public Works and the City Engineer, was formally submitted in a report to the Mayor of Albany on June 12 of this year; and is arranged for distribution to the public in a carefully compiled booklet entitled "Studies for Albany."

Other improvements, besides those already mentioned here, include the creation of a number of new and the improvement of existing parks, the extension and improvement of the river front and the enlargement of the Albany Market Place; replanning the surroundings of the railroad station and the creation in part of it of a formal park, as well as the re-planning of the approaches to the Soldiers' and Sailors' Monument; numerous changes of curb lines, etc., the enlarging of present and the creation of new streets. Sheridan, Riverside and Swinhurn Parks are to be improved in a way that will give them a place among the most important and up-to-date parks in America.

Much of the work in Albany is either under construction or entirely completed. The improvement of Clinton Square is finished and so is the new State Street Pier. The improvement of the waterfront has commenced and work on several parks is progressing rapidly.

Accordingly, Albany is to be congratulated upon the acquisition of a systematic plan upon which work may be carried on either in a large, rapid way or more economically, a little each year—a plan that will make the city a better working machine and incidentally a more beautiful place of residence.
In announcing the retirement of James Knox Taylor from the Department of Architecture of the Boston Institute of Technology, President Maclaurin also announces that the chair will be filled by Ralph Adams Cram. Prof. William H. Lawrence, a graduate of the Institute, who has for many years been professor of architectural engineering in the department, will take the position of chairman of the Department of Architecture, and will be responsible for the administrative routine. Mr. Cram will continue the active practice of his profession.

Perhaps there are few architects at the present time who are as familiar with and as well prepared to take up the problems of architectural education as is Mr. Cram. Six years as chairman of the committee on education of the American Institute of Architects has kept him in close touch with the trend of teaching conditions in this country. He has also been in many important places in public work; for example, the chairmanship of the Planning Board, of Boston. He is president of the Boston Society of Architects, fellow of the American Institute of Architects, associate of the National Academy of Design, and a member of the American Federation of Arts. Mr. Cram is a member of a number of foreign societies, among which may be mentioned the Royal Geographical Society, the North British Academy of Art, and the Architectural Association. He is one of the few American honorary corresponding members of the Royal Institute of British Architects.

The history of Mr. Cram's firm, and of his own work, is well known to readers of the Record. Mr. Cram was born, at Hampton Falls, in 1863. He received an honorary Lit. D. from Princeton in 1910. He has published many valuable books, among which are "Black Spirits and White," "Church Building" (1901), "The Ruined Abbeys of Great Britain" (1906), "Impressions of Japanese Architecture and the Allied Arts" (1906), "The Gothic Quest" (1907), "Excalibur," and, latest from the press, "The Ministry of Art," an extremely important book. Mr. Cram, of course, has in addition been a frequent contributor to magazines and professional publications, and has lectured extensively on architectural subjects.

In entering his profession twenty-five years ago, Mr. Cram was associated with Mr. Wentworth, and five years later Mr. Goodhue became a member of the firm. When Mr. Wentworth died Mr. Ferguson took his place. Last year Mr. Goodhue withdrew and the firm now stands as Cram & Ferguson.

Among the more important ecclesiastical works of Mr. Cram and his associates are many notable edifices. For two years he personally has been the consulting architect of St. John the Divine. Buildings especially well known are: The nave of the Cathedral, the Synod House, Bishop's House, and Deanery; St. Thomas's, the Halifax Cathedral, Detroit Cathedral, the Pro-cathedral, Havana, and now under construction the Cathedral at Toronto. Besides these are Calvary Church, Pittsburgh, and Presbyterian churches in Cleveland, Chicago and St. Paul, and the Chapel of the Intercession of Trinity Parish, New York.

It will be of interest to note that the majority of the teaching staff of the Department of Architecture in the Massachusetts Institute of Technology are graduates of the l'cole des Beaux Arts or of the Institute itself; and the department has carried on the best traditions of the famous French school, with such modification as was necessary to meet the needs of
this country. Mr. Cram's appointment will enable students of architecture to see certain of their problems from a point of view somewhat different from that of the majority of the faculty.

At one time a critic of the Beaux Arts educational system, Mr. Cram, it is said, has of late years come to be in sympathy with the aims and methods of the French school, without abandoning what was stimulating and valid in his criticism. An experience or development of this sort should make for that independence and definiteness of educational theory which any educator must have in order to add strength to an already strong teaching staff.

The Architect as a Minister of Art.

Mr. Cram's influence as an educator will, without doubt, embrace a spiritual element of the highest aspiration, an inference which one is justified in drawing from his introduction to "The Ministry of Art," just issued from the press of the Houghton-Mifflin Company. "By the words 'the ministry of art' I mean," he says, "that function which I think art has performed, and always can perform, as an agency working toward the redemption of human character; and in this aspect (which is, of course, only one of several) it takes on something of that quality which characterizes the ministers of the Christian Church."

"... the ministerial quality is not monopolized by the divinely established orders, but reaches out in weakening degree amongst many classes of men, whereby they themselves are, or may become, 'ministers' in potency and in fact. And this I conceive to be the highest function of the artist and the art that is his agency of operation. Not that I would for a moment make this an exclusive property; art has sufficient reason for existence in its quality as a creator of simple, sensuous joy and refreshment; as a beneficent force expressing itself through—and absolutely restricted to—pure beauty. As, however, each material thing in the universe has its sacramental quality, expressing a secret spiritual grace through an outward and visible form, ... so abstract art may do more than make life beautiful (at times), in that it can act symbolically, tropically, sacramentally, and so become the supreme means of expressing, and of inciting and exalting, those emotions which transcend experience and may not in any degree find voice through those channels of expression which are entirely adequate for the purposes of the intellect. ... So, in a sense, the artist stands as a minister in minor orders."

Lectures on Town Planning in London.

That Town and City Planning has passed beyond the experimental stage has already been demonstrated by the numerous foreign "garden cities" and by the equally numerous and successful re-planning projects. The interest that has always been taken in city planning by the English is again demonstrated by the announcement of a course of lectures on Town Planning that will be held by the University of London during August, 1914, in the new School of Architecture at University College, where, by the way, it is intended to establish a Department of Town Planning in the near future. It is announced that Raymond Unwin, F. R. I. B. A., architect of the Hampstead Garden Suburb, and special lecturer in town planning in the University of Birmingham, will lecture on the practice of town planning; Prof. Adshead of Liverpool University, and L. P. Abercrombie, lecturer in civic design at Liverpool University, will deal with the foreign and historical aspects of city planning, while the legal side of the matter will be intrusted to Mr. E. R. Abbott, clerk to the Ruislip-Northwood District Council. Two lecturers are promised who will deal with the engineering matters, both of whom are actively engaged with town planning schemes. These are G. L. Pepler, F. S. I., and Charles J. Jenkins, M. Inst. C. E., etc. Dr. Brinckmann, professor at Carlsruhe, will speak upon the practice of town planning in Germany. A lecture by H. V. Lancaster, F. R. I. B. A., is also announced, in which he will deal with "Tradition and Civic Development."

A Correction.

In the July number of the Architectural Record, under the illustration of the residence of Albert C. Ayers, at Hartsdale, N. Y., on page 65, the architect's name was erroneously given as Joseph P. Walther, instead of John P. Walther.
DETAILS OF A MANTEL ETC. IN
HACKENS

DETAILS OF TOP OF MANTEL AT “A”
PROFILE OF MOULDING AT “B”
PROFILE OF PANEL AT “C”
PROFILE OF BASE AT “D”

Scales: 1 1/2” = 1'-0”

THE ARCHITECT
Two door trims on first floor

Moulding across top of lower half of Dutch door outside

Profile of panel in exterior of Dutch door also in interior door

The Brinkerhoff House
Sack, N.J.

Measured & drawn by John T. Boyd Jr.
INTERIOR ARCHES IN THE HOPPER HOUSE - HACKENSACK N.J.
Scale: 2" = 1'-0"

ROUND ARCH IN DINING ROOM

ELLIPICAL ARCH IN HALL

ARCH VOLT 1'-6" Radius

FLOOR LEVEL

SOFFIT OF ARCH

WOOD STONE

THE ARCHITECT WORKS OF GEORGE STEVENS
DETAIL
MANTLEPIECE
THE TERHUNE HOUSE
HACKENSACK N.J.
Scale: 1"=1'-0"

MEASURED & DRAWN
BY
JOHN T. BOYD JR.

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FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.
America is the land of sects, and hitherto little success has been met in planning a church building which shall adequately represent the genius of Evangelicism. Indeed, few attempts have been made, architects generally being satisfied in creating a building which shall keep out the elements and keep in the artificial heat, and at the same time furnish happy acoustic properties.

Wherever, on the continent of Europe, the state religion happens to be Protestant, the government has simply seized the existing church buildings, and the same condition obtains in Scotland. In Ireland and Wales the non-conforming bodies have very unpretentious houses of worship, while in England, where these bodies are possessed of considerable wealth, the buildings are more ornate, but such are generally poor copies of the Established Church architecture, or are plain structures with elaboration, fantastic when taken in connection with the genius of the structure.

America, however, is in an entirely different situation and has much greater possibilities. Of course in considering these possibilities, the Roman Catholic and Anglican communions will have to be thought of as matters apart from this generalization. Each has a peculiar genius, and to be true to it, the architecture must represent a devotional idea already fittingly exemplified in Norman or Gothic, Romanesque or Byzantine lines. For all other Christian bodies in America the problem is intricate. The multiplicity of differing phases of dogma and discipline and the absence of any state religion have brought about an architectural hodge-podge in buildings for public worship ranging in design and
style from the “little red schoolhouse” variety to structures of pure Gothic or stately Norman exteriors with bare assembly hall interiors—the inside stultifying the outside, or the outside promising what the inside fails to produce.

This condition makes the Fourth Presbyterian Church of Chicago, which with its auxiliary buildings and manse is the combined work of Cram, Goodhue & Ferguson, of Boston and New York, and Howard Shaw, of Chicago, as associated architects, more of an achievement even than would appear to the lay observer who simply sees and marvels at the grace, beauty and dignity of the plant. It is a living, breathing spiritual thing, representing exactly what it is, an Evangelical house of worship, not affecting some tenuous relationship with the Roman or Anglican faith, but honest and frank, a pioneer in the new movement back to Christian unity. This movement is a marked one and a tour of inspection over the drawing boards of architects who are prominent as church builders, will show the increasing tendency among Presbyterians, Baptists and the like to return to Catholic lines of architecture. Of this tendency the Fourth Presbyterian Church is a notable illustration.

Regarding the designing and planning it is hard to say where the ideas and architectural impulses of the associated architects began and ended and how they
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Associate Architects.
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Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.

ENTRANCE TO MANSE AND CLUB BUILDING—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
Cram, Goodhue & Ferguson, Boston, and Howard Van Doren Shaw, Chicago, Associate Architects.
were merged. The formal division of the work was that the Boston firm was responsible for the church proper and the cloister, with the Chicago architect's endorsement; and the manse, Sunday school building and club rooms were planned in the Chicago office, with the Boston firm's endorsement. As a matter of fact there was no hard and fast division.

The church and group of buildings have been erected at a cost of between $400,000 and $500,000. Structurally it is as real as the old cathedrals of England, being built on the same genuine plan as was St. Thomas' Church in New York City. It is not a steel-frame structure, with a veneering of stone or other plastic material, but is real masonry and genuine to the last degree. Where there is design it is carved in the solid stone. Throughout the entire construction this plan of genuineness has been insisted upon—with the hearty cooperation of the building committee of the society for which the church was erected.

Following the idea of erecting something distinctive the architect of the church proper has abandoned what might well be termed the "Protestant scheme" of placing the organ in the chancel. There is always a jarring effect, upon entering a church, and before one may have a chance of feeling the devotional spirit, to have a set of organ pipes—generally more or less gaudily decorated, glare blatantly at one—practically declaring in the gilt, red and black coloring that the world, the flesh and the devil are the trinity to be worshipped in that building.

Instead the "east end" has a magnificent composition of communion table, pulpit, reading desk, and choir gallery. Here again the plan of realness is very marked. The communion table is frankly that and nothing more. It does not pretend to be an altar, and there is nothing in design or placing which will permit of such a misconception. It is raised two steps from the level of the nave, and occupies a space equal to the width of the central passage up the church. Immediately behind it is a row of seven seats, built sedilia-like, their high backs forming a parapet to the clergy stalls. The sedilia are simply panelled, as to the two groups of three on either end, with more elaboration in the carving of the central seat. A carved border, surmounts the sedilia, done in a grape design, suggesting the promise of sustenance from the Valley of Eschol, which Jehovah promised his faithful, and particularly appropriate as a symbol for the communion.

The central seat is surmounted with a baldachino which, at the same time, serves as a base for the reading desk in the parapet before the clergy stalls. The carving along the front of this desk is so delicate that each of the symbols of the three theological graces, Faith, Hope and Charity, stand out boldly in the cross, anchor and heart done in high relief.

Back of the lectern, in the clergy pave, which has been reached by six handsome marble steps, is the pastor's seat, an exquisite bit of handicraft. This also is surmounted by a baldachino, which in its turn conceals the consol for the magnificent organ. The parapet behind the clergy stalls forms the front of the choir loft, while the organ is let into the solid masonry on the south wall of the chancel.

On the opposite wall, and leading from the clergy pave, is the entrance to the pulpit, which is set just outside the chancel arch, on the "east" wall of the pave. This entrance, which is let into the masonry, consists of a flight of granite steps, the recess containing them being set off from the chancel by a simple but dignified stone screen, and leads up to a piercing in the wall behind the handsome stone pulpit.

This is octagonal in shape and is mounted on a pedestal of similar arrangement. The panels of the pedestal are composed of deep beadings topped with flattened Gothic finials with a border of conventionalized leaves on their stems carved in the stone. Each of the panels of the pulpit proper contains a blazon on a simple shield, with the symbols of archangels, and the four evangelists surcharged, the whole series being
VIEW FROM GALLERY OVER NARTHEX—FOURTH PRESBYTERIAN CHURCH OF CHICAGO. CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VAN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.
laid over a high relief design, the prevailing item of which is the Tudor rose. Around the whole top is a strip bearing the same decoration as that which is carved in wood above the communion pave sedilia.

An important feature in such a chancel arrangement as that which has just been described is that it eliminates, as said before, the aggressive organ pipes, and makes possible the display of one of the most beautiful "east windows" anywhere to be seen in the Middle West. This window is, first of all, an achievement in deep, true tones of pure color, a luminous blue predominating. The rich vibrant quality of this color is accounted for in great part by the fact that glass, made in heavy slabs, as was the famous thirteenth century glass, has been used. The substantial lead lines, well distributed, and the use of heavy iron bars greatly enhance the jewel-like decorative effect. The window throughout is a consistent decoration, as distinguished from those treated pictorially.

It contains three large lancets with tracery, and was designed to symbolize the redemptive power of Christianity. The central theme is announced by the figure of Christ in the upper part of the centre lancet, and from this figure rays in warm greens and golds radiate, entering the other lancets, thus adding to the coherence of the group as a whole.

Underneath the figure of Christ are the words "And I, if I be lifted up, will draw all men unto me," and the lower portions of the three lancets contain groups illustrating the far reaching import of these words. In the left lancet are figures representing different nations of the earth, richly robed in glowing colors; in the centre a family group, and in the right hand panel figures suggesting different stations in life, the king, the soldier, the working-man, and the beggar. Angels in adoration occur in the upper parts of the left and right lancets.

In the upper centre quatrefoil of the tracery is the descending dove, symbolizing the Holy Spirit, while cherubim and stars occur in quatrefoils and other tracery.
In the bases appear figures of Moses, Saint John the Baptist, and Isaiah, whose teachings and prophecies paved the way for the Divine Consummation suggested by the window as a whole. Practically all the other windows in the church, being harmonious parts of the lay-out, and all of one composition, are of a beautiful grisaille.

In general arrangement church, manse and other buildings are most ingeniously laid out. The lot is a truncated right-angled triangle and the church is situated in the right angle. This brings the rear of the building against the hypothenuse and advantage has been taken of every bit of ground. The choir-room extends nearly thirty feet beyond the "east" wall of the chancel, giving ample space for this room and allowing for a wide entrance for the singers, who may reach their places in the choir loft by a concealed stairway without passing through the church proper.

As one approaches the west or entrance end of the church, the beautiful facade gives promise of artistic satisfaction which more intimate inspection fully carries out. The receding buttresses, each capped with a fleche-like capital as course after course sinks back into the harmonious whole of the facade give an impression of delicacy coupled with strength.

The vestibule is particularly chaste and dignified. Three niches are provided on either side and the sacred number is completed by a niche in the door post which separates the two double-door openings at the entrance. Upon the lintel is charged the legend, quoted by one of the sisters of Bethany to the other "The Master is here and calleth for thee." In the conventionalized Gothic pediment above the lintel is a group particularly striking in its mystic significance. In the center is a figure representing the super-sacerdotal office and the two hands raised in blessing reach to the apex of the triangle. On either side are standing, bowing and kneeling figures, all in attitudes of supplication and adoration.

The approach to the church is by a narthex, which is slightly wider than the
PULPIT—FOURTH PRESBYTERIAN CHURCH OF CHICAGO.
CRAM, GOODHUE & FERGUSON, BOSTON, AND HOWARD VANN DOREN SHAW, CHICAGO, ASSOCIATE ARCHITECTS.
lateral dimension of the nave proper and which is separated from the church by a beautifully executed wood screen, pierced for glass lights. Above the narthex is the west gallery from which the best ensemble view of the interior is accorded.

Standing in the center and by the gallery parapet, the eye of the experienced beholder is first struck by the richness of the color. Instead of the monotone or even monochrome ceiling, there is on the contrary such a wealth of bloom that one instinctively feels a similar sensation as when suddenly let into a beautiful garden, where nature is presenting her loveliest to God. If "the heavens declare the glory of God," equally does the loveliness of this ceiling bespeak His fairness.

Caps of the twelve massive and severely plain masonry pillars which support the roof and divide nave from extremely narrow aisles are each mounted by carved figures, representing the celestial choir, and who stand in front of the basis of the six roof arches. Elaborately carved and colored medallions are placed in each of the arches—the medallions in pairs and bearing, taken together, two angels and the sacred letters "Alpha" and "Omega." Upon the arches themselves and upon the angels at the pillar caps, as well as upon ceiling and rafter, Mr. Frederick Bartlett of Chicago, a local artist of reputation and distinction, has evolved a decoration that is equal to the best of the mediaeval Gothic era. The reds, yellows and greens so extensively used are pure and rich, making the whole roof a mass of delightful low-toned color. This richness is in keeping and harmonious with the color scheme of the whole interior, including woodwork, stone, glass, and walls.

Coming out from the transept entrance one is led into the spacious en-
closure or garth. Around three sides of this church and buildings stand. The street side is bounded with a low, but stately, cloister connecting the narthex with the manse, which stands on the other end of the lot.

Before noting the calmness and beauty of this garth, with its greensward interrupted with granolithic walks and with a lovely fountain in the center, one will miss much by not turning and studying the exit from church to garth. A narrow niche divides the window on the second floor which runs from church gallery to a gallery on the same level in the Sunday school building, and this niche is surmounted with a tiara-crowned baldachino carved delicately and with light tracery in the stone. A blazon is charged on a stone shield on either side of the base of this niche, while smaller niches of generally similar design, but sufficiently independent in character to give an idea of slow development, such as old world churches show, stand at the point of juncture of the arch at the doorway, and the exterior walls.

Bisecting the garth diagonally, and passing a beautifully carved stone fountain—the gift of Mr. Howard Shaw, one of the architects who is also a member of the society which built the church, one comes to another entrance which is equally pleasing. This leads directly into the manse, the arrangement of which on the ground floor is admirable. A passage runs along the rear wall of the manse, from which stairways, up and down, lead off, and connects the garth entrance with the street entrance.

From the end nearest the garth entrance one enters the library. This room is about 20 by 25 feet with a deep bay window, and is similar to the dining room at the other end of the hall, even to the wide, deep fireplaces. Between these is a spacious reception hall.

The street entrance is from the side of the manse. It is placed so that the street door is directly against the rear wall, while three arches and a stone half-screen shut off the sidewalk from the recessed entrance. A bent metal gate half fills one arch, and this opens into two thirds of the recess, and leads to a stone flight of steps up to the door. The rear wall of the manse comes all the way down to the foundation, shutting off the other third of the recess which forms the vestibule into the administration building.

The ground floor of the latter building contains two very spacious ladies' parlors, with trustees' and board rooms and the pastor's public and private office on the street side. On the side facing the garth and separated from the other rooms by a narrow passageway are the guild rooms. The men's and women's clubs, and the young people's societies each have their separate headquarters on the upper floors of this building. The men's club has a separate entrance from Chestnut street, farther from the corner.

In the arrangement of this public building Mr. Shaw has shown particular aptitude. With the exception of the space occupied by the chancel end of the church, the whole hypothenuse is taken up with the Sunday school building. As the whole building squares with the others, as it faces the garth, and as all the space up to the lot line is utilized, the architect placed the rooms in the order of their relative size in a logical approach to the truncated end of the triangular plan thus necessitated.

The primary departments are therefore placed on the Chestnut street end, allowing the junior department, which requires more space, to have a larger floor plan and leaving the largest area for the prayer meeting and Sunday school room. This is practically an assembly hall with galleries. The roof is open beamed and has a big skylight in the center. The galleries are supported by a series of square posts, between which heavy portieres slide, shutting off spaces for individual class rooms or permitting the whole area to be used for a single assembly.

Such is the new Fourth Presbyterian Church of Chicago, a combination of the new and the old—of the best of architecture in times Christian, an achievement in that it is American, Evangelical, an exemplification of the religious genius which will be followed in its use
HOUSE AT CHESTNUT HILL, PHILADELPHIA. CHARLES WILLING, OF FURNESS, EVANS & CO., ARCHITECTS.
PEOPLE and the houses they live in are comparable in more ways than one. It is the people of average comfortable means, of average intellect and education, of average endowments generally, who create the prevailing tone of the environment in which we live. It is the houses of average size that determine the architectural character of a community or of a country. Palatial establishments, created at a vast outlay of money, are often highly interesting for their style and manner of execution or for the excellence of their gardens, but cannot be said to afford a thoroughly representative exhibition of national domestic building.

Because the majority of houses must of necessity be of moderate size and moderate cost there is no inherent reason, however, why the individual house should be at all lacking in distinction. At one period, indeed, easily within recollection, the average house did lack distinction, but considering the type of domestic architecture then prevalent, it is well that the common jejune and banal mode was not ordinarily accentuated by particular instances of quintessential mediocrity.

Fortunately that day is past. Anyone who has closely watched the architectural trend for the past fifteen or twenty years cannot have failed to be impressed with the steadily increasing betterment taking place. We have by no means reached a stage of perfection, but we have attained a point whence we may look back at the uphill course of improvement with reasonable satisfaction.
and some degree of pardonable pride. One of the surest indications of healthy development is presented in houses of unpretending dimensions. While many, of course, still rank in the "decently inoffensive" class, not a few have assumed a strong individuality and well-poised bearing, free from eccentricity or mannerism and happily fused in an air of quiet distinction—a result inevitable with a quickened architectural conscience and sharpened perception among laymen and the present realization by architects that such dwellings afford opportunities well worthy of their mettle.

Of this ilk are both the houses in the following discussion, conceived in different vein and therefore the more broadly indicative of the promising conclusion alluded to. The first is at Chestnut Hill, Philadelphia, and was designed by Charles Willing, of the firm of Furness, Evans & Co., and the second, at Ardmore, within the bounds of the old Welsh barony, just outside of Philadelphia, is by Evans and Warner, of the same city.

Honest structures, built of honest materials native to the neighborhood and displaying traditional local features for which there is historic precedent and background, always command more respect and interest, a more normal interest at least, than exotic creations shaped in an alien style and fashioned out of stuffs fetched from afar. Whatever their shortcomings, the former possess the sterling merits of congruity and individuality, while the latter can never quite escape from the taint of affectation and pretense.

By way of example, we are all ready to admit that one of the chiefest charms about English cottages is the fact that they are a simple, straightforward expression of local conditions, both as regards pattern and the materials; local feeling and native materials have indelibly stamped the fabric. We instinctively recognize the fitness of all this and yield respect and admiration.

On our own side of the Atlantic, also, we expect to find architecture, especially domestic architecture, tinctured by a vernacular expression; and we wish to have it so. In New England we look for certain distinctive characteristics of line and detail, in New York we look for others, while in the Middle and Southern States we are sure to find others still, all in their own proper territory for which they are best fitted and where their evolution has been determined by local traditions and expediency.

We should be surprised and perhaps a trifle shocked or annoyed to come suddenly upon a dwelling of an unmistakably local stamp set amid surroundings with which its whole spirit was obviously out of keeping. The local fitness of architecture does impress us strongly whether we are fully conscious of the impression at the time or not.

In the house at Chestnut Hill, by Mr. Willing, of Furness, Evans & Co. of Philadelphia, this local fitness has been regarded and local traditions have been adhered to in structure and fabric. Grey Chestnut Hill stone has been used and the architectural mode chosen is Pennsylvania Colonial. The term Colonial is used advisedly and not in the mistaken application used to denote the Georgian style. The house is the legitimate child of the Pennsylvania Colonial style and has nothing Georgian about it save the treatment of the doorway.

For the satisfactory texture of its masonry this particular part of Pennsylvania has always been noted and the subject under consideration affords an admirable example. The rubble walls are of quarry faced stone and have an especially good color, thanks to the diversities in the stone. When this Chestnut Hill stone is taken from deep down in the quarries it presents a cold, monotonous grey, but where the upper strata have been somewhat subjected to the action of the elements through faults and seams, delightful variations of warm color appear. In the present instance stones from the upper strata have been chosen and the chromatic result is particularly satisfactory. Together with the varied hues of the stone the shadows of the rough surface produce an agreeable softness.

The sharp pitch of the roof follows an early precedent, as do also the extreme-
ly simple barge and eaves cornices. Departures from the early Colonial prototype are noticeable only in the doorway, the bow window on the first floor, the casements in the dormers and the porch at one end. All these departures, however, have been so managed that there is no suggestion of incongruity to disturb the rigid purist. Rather are they indications of wholesome growth and elasticity. After all is said and done, slavish copies may be punctiliously accurate and highly interesting from an antiquarian point of view, but they can scarcely be expected to possess much vitality. Any architectural style that has outlived its elasticity and is no longer susceptible of acceptable adaptation to the needs of present generations does not commend itself to favorable consideration.

The Chestnut Hill house and many others of similar type emphasize the inherent vigor of the Pennsylvania Colonial style and the readiness with which it lends itself to the most varied of modern requirements. The peculiarity of the site on a steep hillside made it desirable to stress the horizontal lines. This was successfully done by the introduction of a penthouse between the first and second floors. The use of the penthouse is simply a return to an early Pennsylvania practice. It also brings down the height of the structure and helps to tie all the structural lines more intimately to their setting. The complete simplicity of the whole house and the avoidance of all effort at effect endue it with a presence both dignified and convincing.

On surveying the house as a whole one might perhaps take exception to the dormers, not on the ground of architectural precedent, but on the score of symmetry. Expediency, of course, often demands them, but they are always dangerous to the repose of a small roof. A large roof can stand them with less disastrous results, but the balance of a
small roof is seriously jeopardized by their presence. A comparison with houses of like style where the dormers have been omitted will convince the reader of the justice of this observation in favor of unbroken roofs. It should be conceded, however, that the two dormers in question have been treated as unobtrusively as possible and do not present a very serious ground of cavil.

The problem of the suburban house of moderate size is not always one of easy solution, particularly if there is any tendency to indulge in ambitious flights of fancy. Here no flights have been attempted. From ground to ridge pole, sober common sense and restraint are the dominating characteristics, and though this mode of architectural expression may not appeal to some, all will agree that the quiet refinement and dignity of the structure are bound to wear well and command universal respect.

Oak Lodge, at Ardmore, designed by Evans and Warner, is fitly so named from a veteran oak tree that stands not twenty paces away from the north front of the house and casts its shade over the roof. The pleasantest outlook is towards the north and the house faces in that direction.

Glancing hastily at the contour of the structure, without stopping to take in the details, the mass seems to be a rectangular truncated cone. On closer inspection its closest architectural affinity is quite patently with the small English country house of modern date, a general type that has much to commend it—of course, with necessary local adaptations—to the favorable consideration of many suburban dwellers. The dwelling of this stamp has reached a fuller and more mature development on British soil than among us, and it is the realization of this fact that has caused so many of our American architects to study with deep interest and often with profit, the performances in this direction on the other side of the Atlantic. It is not that our own architects lack either ability or invention, but it is natural for them to regard attentively the growth of a domestic type overseas that did not, for many years, receive in America the full share of attention that its importance merits and was consequently in a backward condition until a recent date. The marked progress achieved in this field by American architects within a brief period is full of encouragement, and justifies the expectation of rich and creditable results in the near future.

The objection may, perhaps, be raised that it is a mistake to transplant and adapt types so obviously without native antecedents when we have so many fully developed forms supported by the long standing sanction of local precedent and tradition. The answer must be that in the rapid growth of so many vast suburban areas a strict universal adherence to forms of architectural similarity would inevitably result in wearisome monotony, and any sane and reasonable method of effecting differentiation between the units of a suburban community, within the limits of permissible variety, is to be viewed with favor rather than suspicion.

Oak Lodge is full of singular individuality that predisposes a visitor to examine structure and setting closely and try to determine wherein lies the charm. Wholesome simplicity of aspect, combined with eminently practical provisions for compact comforts that make it an exceedingly "livable" dwelling, are two striking factors of its success. A peculiarity in the lines of the roof cannot fail to interest the observer, even though its purpose may not be altogether apparent. There is a curious double slant, the roof over each projection pitching at a sharper angle towards the ground than the roof over the body of the house. The effect is somewhat like the droop in the unpadded shoulders of an English cut coat, and one is inclined to suspect that the architect adopted this device partly to prevent the seeming spread of the house from being too great for its actual area. At any rate, the result is not inconsistent with any structural feature and is amusing and agreeable, and therefore worth while for that reason, if for no other.

The northeast projection contains part of the service equipment, which will be discussed along with the rest of the in-
HEDGEROW ALONG BELL'S MILL ROAD—HOUSE AT CHESTNUT HILL, PHILADELPHIA. CHARLES WILLING, OF FURNESS, EVANS & CO., ARCHITECT.
LIVING ROOM—HOUSE AT CHESTNUT HILL, PHILADELPHIA. CHARLES WILLING, OF FURNESS, EVANS & CO., ARCHITECT.
THE DINING ROOM—HOUSE AT CHESTNUT HILL, PHILADELPHIA. CHARLES WILLING, OF FURNESS, EVANS & CO., ARCHITECT.
terior. The northwest projection, containing the brick paved porch in its lower portion, exemplifies a commendable arrangement of incorporating that member within the structural lines of the mass and thus avoiding the disagreeable “tacked-on” appearance so many porches have, as though they were mere afterthoughts and had no real raison d'être other than the fanciful whim of a moment.

The line of the roof is not seriously interrupted by the round hooded dormers and presents an almost unbroken slope from the ridge pole down to the eaves. While on the subject of undisturbed and reposeful roof contours, it is worth noting that a sleeping porch has been ingeniously worked in at the southeast corner of the back, without seriously disarranging the outlines of the general mass and making its presence painfully obvious and distracting. It is always interesting to see how unobtrusively this bête noir of the architect can be managed and how nearly suppressed as an architectural feature. There could be no valid objection to recognizing it frankly as a necessary structural feature, if it regularly fulfilled the function for which it is designed, but in a great number of cases, after the client has satisfied the dictates of his obsession to have one, he goes right on sleeping indoors.

Whether or not the present popular predilection for sleeping on porches is a passing fad remains to be seen, and the designing of sleeping porches with a view to their possible future incorporation within the house walls has something to be said in its defense.

The walls are rough-cast in plaster of a light brownish grey, with the float marks left plainly visible so that an interesting texture has been secured. An agreeable note of color is added in the shutters, which are painted in light green, the hue of young, glaucous oak leaves. The house door, set between white pillars and beneath a shallow arched hood, is of a light green blue, while in the plaster, just beneath the arch of the hood, is set a large oval greenish tile bearing the device of a tree, the picturesque badge of one of the early Pennsylvania fire insurance companies. The color of the door and shutters, the white pillars and hood and the inset tile are all small things, it is true, but just such little things often serve to centre interest and enhance the character of a small building.

Unless an architect is willing to have his liberty of choice restricted in matters of design, and willing, likewise, to be fettered and circumscribed by trade standards of size and pattern, he knows only too well the difficulties he is likely to encounter when he tries to get doors and shutters for the doorways and windows he has planned. Any departure from stereotyped commercial conventions means that stock sizes and patterns will not answer; and if special orders for millwork have to be executed, there is usually a vexatious delay. In the case of Oak Lodge, the Gordian knot was quickly cut by making plain batten shutters out of V grooved pine boards, the battens on the inside. For a small house of studied simplicity, where the choice of material must be carefully considered in connection with cost, batten shutters and doors that can be made on the spot by any competent carpenter offer a welcome solution to an oftentimes vexing problem.

Oak Lodge sits down on the ground and there is no inhospitable ascent of steps at the house door. To preserve this agreeable intimacy of contact with the soil, the cellar has been kept below ground; and the windows, with their tops not quite up to ground level, are enclosed in grate-covered wells sufficient to admit abundance of light and air. The chief factor, however, in keeping the close relation between structure and site was the device of making the first floor rooms on different levels to coincide with the slightly sloping contour of the ground.

The practice of diversifying floor levels embodies a principle of which we might profitably take more account. Until very recent years an unreasoning prejudice against it seems to have existed in the lay mind and opposition has by no means yet disappeared. Of course, no one expects floor levels to be varied
HOUSE DOOR AT OAK LODGE, ARDMORE, PENN. EVANS & WARNER, ARCHITECTS.
INTERIOR OF OAK LODGE, ARDMORE, PENN. EVANS & WARNER, ARCHITECTS.
out of mere caprice; but where any reason exists for so doing, arising from either interior or exterior conditions, there ought to be no hesitation about making the break. One good and sufficient reason, as in the present case, exists where the site slopes. Under such circumstances, unless floor levels are varied in different rooms, either a great deal of expensive grading must be done or else a portion of the foundations will inevitably be visible, awkward and raw looking as one all too frequently sees them. It is surely better and more reasonable, where the style of architecture permits, to let site and structure grow together without disturbing natural conditions.

The interior plan is commendable for its rigid economy of space from bottom to top. There is no waste room, despite the fact of the long sloping roofs in which, apparently, so much of the house is contained and which in similar structural conditions one ordinarily associates with prodigality of space. The interior plan is also commendable for simplicity of arrangement, along with completeness in all essential appointments. Only what is necessary is included and all else has been dispensed with. A large living room, a dining room with a tiled porch that is a potential conservatory if it is ever deemed desirable to enclose it in glass, a pantry, a kitchen and a laundry provide all requisite comfort of arrangement for a small family. The servants' stairs go up from the pantry.

The second floor has four bedrooms, two baths and abundance of closet space while the third floor contains two maids' rooms, a store room, a bath and a deal of storage accommodations in places rendered impracticable for other uses by the slope of the roof. A hanging stairway from the second to the third floor is swung out in the hall wall in a rather interesting manner.

A special word is due the fireplaces. The living room, otherwise exceedingly simple in finish, is enriched with a fireplace of which the surrounds and mantel are executed in cast concrete in an
elaborate Byzantine pattern and the upper part of the chimney jamb is coved. The effect is excellent and attention is naturally centred on what is properly the focal point in a room of the sort. The fireplace and overmantel in the dining room, though interestingly wrought in faience tiles of varied design, is not so fortunate, owing to its bad location in a corner by the pantry door. All the bedrooms in the second floor have fireplaces and the white, pale blue or pale green matt-glazed tiles of quaint pattern add not a little to the distinctive character of each. The inclusion of a fireplace in every bedroom has much to be said in its favor, from a sanitary point of view as well as from considerations of comfort. The bedroom fireplace is associated with leisurely evenings and with mellow, bookish recreations conducive to wholesome slumber.

Where so much had to be included in a limited compass something had to be sacrificed, and this made it necessary to crowd the stairs into the least space compatible with comfort and utility. The arrangement is ingenious, and the greatest breadth of atmosphere possible has been gained by open partitions; but architecturally, one feels that a little more freedom and sweep would have been a desideratum. Barring this defect and one or two trifling matters that the hypercritical might be disposed to cavil at as "stuntty," the sterling merits of conception and achievement embodied in Oak Lodge entitle it to distinctly favorable regard among the houses of its type.
NÔTRE DAME, PARIS.
THE WEST FRONT.
THE conception of the oneness of the universe is nowhere better illustrated than in the oneness of art. Arts certainly differ greatly from one another; but in the main the same rules govern them all. While this is true only in a general way with regard to the analogy between poetry and sculpture, for instance, because it requires some effort of the mind to grasp it at once, it is not so with the analogy between architecture and its sister art, sculpture. The main phases of the evolution of sculpture we may trace also in architecture.

Sculpture in its origin was hieratic, symbolic. It was subjected to certain inviolable rules. The gods had their attributes, their consecrated forms. Never was any passion shown in their faces, though in mythology they had more than one serious disagreement with one another, and many a time with mortals. But—splendid models for our modern diplomats—they must not show any sign of anger, or of any other passion.

In the age of Pericles the emancipation of sculpture began; and not long afterwards the immortal Praxiteles and Scopas broke down hieratic principles, at least when representing profane subjects, and distinguished themselves by the strong expression of their works. Joy, sorrow, suffering and other passions found their way into the marbles of those masters.

As with sculpture, which lived for a long while under the strict rules of priesthood—some dictated by religious rites, others by tradition or by symbols—so was it with architecture. Most authors agree that it was the power of tradition that dictated to the architects of the Parthenon many of the ornaments that were only survivals of elements of construction in the wooden shrines. With the growth of rationalism, however, in the different branches of human knowledge, reason became a prevailing factor in architecture. This, far from removing beauty, on the contrary, considered aesthetics as an important need in human life. It was rationalism that ushered character into architecture.

That the public is looking now for expressive architecture, there is no doubt: many factors tend toward a more intelligent conception. The stage, for example, is doing much to train the public. Architectural scenery is designed not only in accordance with archaeology, but also in harmony with the character of the play. The masses are awakening to a fuller sense of the beautiful. People are no longer content with a profusion of columns and ornaments indiscriminately distributed. They care no longer for a fire-house built like a part of a French chateau or of an Italian villa. Above all, a fire-house must wear the look of what it really is.

The public is aware that the architects of the so-called Gothic period had no Renaissance examples to follow, yet they achieved great works, works of character, because truth was the basis of all their achievements. Every one is delighted when looking upon any ruined chateau under the light of history. They are thrilled. Every element of the dungeon helps to bring this sensation; but it requires some explanation. This means training. And indeed, why should the training to appreciate expression in art require no time or pains, since it takes years for the child to learn to read upon his relatives' faces the expressions of their different feelings? This is a fact we always forget. We call learning that only which has been given to us consciously upon the benches of the school; but what has taken years of observation on the part of the child we disregard. This has been our mistake for years; but now we are beginning to realize,
thanks to the thorough studies of psychology, the importance of the unconscious training of the child.

The public argues that the artist should create things that anyone may grasp. But, then, every one should be trained, so to speak, from his childhood, to appreciate the expression of a work of art just as he learns to read.

We feel the need of training everywhere; fully to appreciate a sonata we must have been initiated to its beauties, both emotional and intellectual. What a joy when, to the delight we get from the purely beautiful sounds, we add the intellectual part, which allows us the loosening of our imaginations. The trained man is no less in rapture when he can fully enjoy the difference of expression between the different classes of buildings and architectural works in general. While this is true, on the other hand, the idea that each conception must have a definite expression of its own is yet very vague. Let us analyze the way in which the attempt is made to instill character into architectural work.

Here, for example, is a Masonic temple. The traditions of this secret society, freemasonry and its rites, surround it in the mind of every one with the idea of mystery. How do they try to express it? They simply differentiate it as much as they can from other buildings. They say, "A house has a porch; therefore to differentiate our building, we will have no porch in it. Further, a house has windows on the front; our building shall not have such windows." This is all very well; but in not doing this or that we have simply negative characteristics. In this way we may only emphasize the absence of those elements which would make our building look a perfect house.

But where are the positive characteristics, those which belong to the Masonic temple and to no other architectural work, those features which have their origin in a need and which tradition handed down to us? Here is the problem. This is precisely the point where we may draw a line between an architect and a contractor. For, if it were enough to scatter indiscriminately orders and architectural ornaments, what easier than to take a Vignola or some other hand book, and content ourselves with making our structure as different as possible from some other class of building?

We may safely say that we are passing this stage. Mere Vignolas and other sorts of formulae are no longer sufficient to make of any structure a real work of art. What, then, is to be done? Here is the point where we may derive valuable teaching from sculpture.

Suppose a sculptor intends to represent happiness. His work is completed and you are invited to visit the exhibition. Whatever the efforts of the artist were, you will not say that his work is a success unless it carries to your mind the sensation of happiness. Let us assume, for the glory of the artist and for your delight, that it does enraptured you. Now, passing to another part of the same exhibition where the same artist has striven to represent sorrow, you will see very well, if the work is successful, that to achieve this the artist could not content himself with taking the piece of statuary representing joy and suppressing in it that which was the characteristic of joy; but he strove to find out the very essentials of sorrow. If joy is expressed by the image of a dance, sorrow may well be expressed by something like that of a mourner. The latter not only will not show signs of gayety expressed by special lines; but on the contrary, the expression of the face will be somewhat downcast, the head drooping and the aspect dejected. The difference between the two casts does not lie merely in the absence of certain details, but in the presence of the very silhouette. It is this outline that from a distance, when details cannot be detected, tells us of the sentiment animating this or that person; this or that cast. Details enhance our sensation as we come nearer; they complete it. The artist's work will impress us not only in proportion to his skill, but also in proportion to our own training and culture. The layman will be satisfied with being enthranced; the cultured person will find interest in every detail that the artist has borrowed, either from tradition or from history, in order to make his work still more eloquent.

Admitting, then, that, as Viollet-Le-Duc puts it, in the mouth of one of his
characters, "the absence of evil does not make good—" admitting the analogy between architecture and sculpture, we will naturally not content ourselves with having our works look "pretty," but we shall aim at something higher, the attainment of which requires deep study.

To begin with, we shall learn to read expression in architecture as we read books. We can easily attain this result by studying history. Thus we can better understand the meaning of the works of the past, the castles, for instance. Their battlements may have but little aesthetic beauty, but they have much expression! They express a stage of barbarism, of perpetual warfare.

Looking at the Palazzo Vecchio of Florence, under the light of history, we shall soon find out that this palace was not composed in a fanciful mood of the artist, between two bumpers. We see clearly written on its battlements, in the scarcity of windows, on the iron bars protecting them, and in the general military aspect of the whole structure, that it was built in this way to fill a purpose, to answer a need of the time in which it was erected, when the governor's palace had to withstand many attacks from the mob. This exterior, so severe, was to the interior what the thorns are to the rose.

So are many Italian palaces, frowning, as it were, on the populace. But cross the threshold and behold a change! It is the belligerent duke who throws off his coat-of-mail and whose garments display wealth and taste. The inside is in harmony with the man living there.

While the Palazzo Vecchio suggests constant warfare, the Italian villas, on the contrary, bear all the signs of free and enjoyable life. Not only is this obtained by more windows than there are in the military palace, by elegant arches and by the absence of suggestions of militarism, but the general lines themselves are more attractive, and the silhouette of a casino is as far removed from that of the castle as that of a young and elegant duchess is from that of a fighting amazon.

Is there need for a special formula? Is there any clearer and more efficient teaching than that given us by these structures? Can we not be our own teachers simply by developing our own observing power? Moreover, you no sooner subject art to formulae than you fetter it. No teaching can give talent, but teaching

BELFRY OF TOWN HALL AT BRUSSELS.
may develop it. One remembers the story of the artist and the layman. The latter in a mood of enthusiasm about painting, asked the master what was necessary to make a good picture. The master answered: "Not much. First you take a canvas, then a certain number of colors, and you mix them with very much talent. That is all."

The book of nature is open to all. Each one may learn to read it. The more he thinks about what he sees, the more will he reach to the roots of things, and thence derive inspiration, thanks to the principle of the oneness of creation and of art.

Assuming now that we are familiar with expressive architecture, how shall we apply these principles in the case of a hospital, for instance. At this point many will exclaim that beauty is useless in such a class of building; hygiene being the only essential need, the rest being immaterial in their eyes. Indeed, we do not necessarily mean to cover the walls with a profusion of ornaments, and we may well be satisfied that there should be no cornices nor pediments. But such details are not the essentials to be considered in architecture. There are far more important factors.

On this occasion it is not irrelevant to quote the late M. Guadet, who says in reference to this class of structures: "The middle ages hospital was a house where one could die with the help of religion." This last refuge to the dying man was given to the poor by charity. To-day we have other conceptions of our duties towards one another, and the hospital must be the place for healing; as such not only purely physical remedies are put to work, but also moral and mental remedies. Aesthetics is one of them. Beauty is an essential human need, and as such, it finds its place in a hospital as well as in a mansion. The question is how to give it the right measure. What most pleases the patients is not the frigid length of corridors in some public hospitals, but the impression of a homelike shelter. Superabundance of columns and ornaments does not contribute to healing as much as does the good log fire by its homeliness. Flowers are the natural ornament that you can, without fear, scatter all about you, in as great abundance and with as much taste as possible. The Solarium here is one of the essential features that contribute toward giving the hospital its modern, attractive character.

To ask more precision than this is equivalent to asking one to learn a language without a master. Ask some of the masters who have dealt with the question of teaching languages, and they will tell you that the best thing, if you are desirous to learn the Italian language, is to have an Italian master whom you may hear speak Italian. I should say the same with regard to architecture. Let us go and see the buildings and all sorts of architectural works; and see them at all times and in all kinds of weather, and you will not fail to draw some conclusions. Let us study the hospitals of some centuries ago in relation to the prevailing ideas of those times; and compare them to the modern idea of the oneness of humanity.

Let us see then, what are the common points between a hospital, a public building, and a home. Of course, a hospital should not express sadness. It should indeed wear an attractive look, yet quiet. As the watchful nurse helps by her gentle smile, so must a tint of cheerfulness, gay lines and colors, warm up the whole structure. There cannot be a formula for the solution of the different problems; the standard of human thought is rising every day and this involves art, which is nothing but materialized thought.

Any one entering a gallery of sculpture will stop to admire the expression of the bust of St. Francis of Assisi. This admiration is not that of the child before a rose bush; but of the cultured and observing mind. The observer stops to wonder by what prodigy the sculptor could impart so much spirituality and life to the rigid and cold marble—how the salient traits of a noble life could be engraved by the chisel. He now begins to consider this bust no longer as a vulgar exact image, but as a carved biography. Illumined with these thoughts, the same mind will consider the donjons, castles, buildings of all sorts, as eloquent though mute historians.

Unfortunately, while phonograph records give us the privilege of listening at
home to a wide selection of German, French or Italian singers, and while the museums give us, in faithful casts, reproductions of the most renowned plastic masterpieces, we can scarcely have more than mere fragments reproduced in architecture. Only once in a while do we see a full commemorative monument, a whole fountain, and we can never see a reproduction of a complete work of architecture otherwise than in photograph or in a small model. It naturally involves on the part of the person who has not seen those structure on the spot, some effort of imagination to have an idea of the scale. Yet, limited as these means of reproduction are, they go a long way in the education of the masses.

Even when seen in the monotone of a photograph, Nôtre Dame takes hold of the observer. The most ignorant person is impressed with the simple and austere grandeur of this monument. Where can the word expression be properly applied if not here? The front of Nôtre Dame, to confine ourselves only to this part of the exterior, expresses as much simplicity allied to grandeur, as one can read on the face of a prophet. Calm, truth, grace, power, these are some of the attributes of divinity expressed by the artist in this conception.

Will any formula help one to better religious architecture than the sight of this first among the masterpieces of its kind? Every one can see how the front grows more richly adorned as it rises as though it were the symbol of man growing out of the material into the spiritual. It is the apotheosis of a religion which never before was so visibly glorified. It is the expression of the triumphant Church, acknowledged as the common refuge of the people. On this front, more than in any obscure book of theology, are read the simplicity and greatness of religion; truth and aspiration, calm and confidence. Can one see this cathedral and not be penetrated with these feelings? The artist was certainly far ahead of his
time; for even now his stone glorification of Christianity is superior to many poems.

Now if we go from the cathedral to the town hall we shall, by the mere comparison, draw interesting conclusions with regard to the rules governing expression. The same principles were applied to both structures, but the needs were different; hence the difference in expression.

The late M. Guadet lays great stress, in his book, upon the word "Truth." If the art of the past is in any way educational, it is because it is truthful. No mask hides the deficiencies of the structure. No hypocrisy. In fact, one of the greatest beauties of Notre Dame is in the small material, stone or brick, that fills in the highest parts of the vault, between the ribs. It seems to symbolize to us the high importance given to the humblest members of society. Men are not what they seem, but what we make them. This is the teaching of the small unassuming bricks which fortunately the artist could not cover with paintings. A whole theory on society is here very simply materialized. In the face of such teaching, is the aesthetic alone to be our main quest, even to the detriment of expression? There are no ornaments on these vaults; but the simple filling with so humble materials as bricks is the more pathetic. It lifts the humblest to heavenly heights. The intellect is satisfied. What do we care for ornaments where the bare truth is so beautiful? There are legions of people who prefer Notre Dame to Saint Peter's of Rome; undoubtedly, truth is the first reason for this preference.

While calm majesty well suits the idea of religion as it is expressed in Notre Dame and many another church, the gayety of belfries is not less becoming to them. Look at several of them: Brussels and others. How cheerful they look. Their outlines are in perfect harmony with the gay notes of their chimes. Notice particularly the way the artist took advantage of the blue sky, to set it, so to speak, between the frail columns of the flourishing top. It is Prometheus stealing a spark from heaven to enliven man. There is nothing more cheerful than the sky and the colored clouds seen through the little arcatures of belfries, campaniles or spires. They, too, express the spiritual aspirations of society, by allying the terrestrial to the heavenly.

If one believes that a building has expression, whether the artist meant it or not, then a whole street, nay a whole town, must have its expression. What then should he think of our congested business districts and the jagged skyline? We hear people say now and then, "Oh, how much we prefer the even skyline of European towns!" They are right. They only forget one thing, and that is, that the city planning in the old countries is entirely different from ours. Each square being the rallying point of converging thoroughfares, there is generally a feature at its centre, whether it be a fountain, a triumphal arch, or a commemorative statue; it is immaterial. The fact is that this centre of interest is the converging point of all the cornice lines in the different streets. It expresses an aged society, where each member tries to curb his will to that of the majority. If the latter decided that the central feature is to be the dominant note, all will submit to this decision and none will build a structure conspicuous enough to mar the effect of the public monument. It suggests discipline.

Our towns, particularly our business centres, suggest an organic period full of promises. What could not be expected from wise building laws allied to a love of beauty. Furthermore, these buildings suggest to a high degree the triumph of democracy of individualism. Yet the time is not far remote, thanks to the rapidly rising standard of general culture, when any architect will gladly abide by the law requiring that any building above a certain height must offer aesthetic merits. Then, you will hear no more refined spirits object to the "awful broken line" of the "down-towns" of our cities, for these gigantic buildings shall form a splendid architectural museum that will bring honor to the artist and to the country.
MANTEL DETAIL IN WESTERVELT HOUSE ON TEANECK ROAD, 1763, NOW OWNED BY MR. C. H. LOVERIDGE.
THE first thing one notices about these details is their freedom. It is an architecture absolutely without the orders. In some rare cases there are mantels with little Tuscan columns, but they are not among the finest examples and are found side by side with freer forms. The overmantels in the Terhune house and in the Baron von Steuben house show a very rare use of fluted pilasters.

A freer and very exquisite channeling was often used which is found in many houses with slight variation. The theory of all these Dutch moldings is a series of many fine parallel lines and shadows made by hollows, beads and fillets, beautifully varied and proportioned, all very delicate in scale. This arrangement gives a striking effect of enframement to openings. It is the same idea that Whistler developed in designing the frames for his paintings. This parallelism is carried out in all the moldings, bases, chair-rails, cornices, etc. Further, the profiles used are very free and depart far from the conventional forms. They are well suited to the wood material and look better in execution than on paper. They remind one of the Gothic use of undercutting, hollows and rolls and also of the Greek flow and springiness of line. Admirable examples are found in the plaster cornices and wooden window architraves and in the bed moldings of arches and mantels. The fine scale of some of them is surprising; the panel moldings are so tiny that all the members cannot be drawn at the scale of one and one-half inch to the foot. No better effect for a small house could be obtained than in the trims of the Brinckerhoff house, which are only three inches wide. The average is four and one-half to five inches in most of the houses.

The deep reveals of the window openings afforded a fine chance for design of panels in the casings. In the Anderson house on the Main Street, Hackensack, the panel itself is channelled with vertical reeds in an interesting way. This house has finely profiled roll-moldings around the fireplace opening. The builders were very fond of this reeding and they used it most successfully in the baseboards of the Hopper house.

The two plates of moldings from the Hopper house published in July and the molding in Plate 32 of the Brinckerhoff house (August) furnish a fairly complete summary of early Dutch-American moldings. These profiles are found in nearly all the other houses with but very slight variations.

In the nineteenth century the doorways between the hall and principal rooms were often built with oblong transoms above them of simple sash-bar design, to give the same effect of openness that we seek nowadays with wide double doors. The old way is better, for the small door preserves the intimacy and individuality of each room which is lost when one compartment is hardly distinguishable from the next. These doorways are the cause of some fine designs, of which the arched doorway in the Hopper house is a good example. The
door itself was invariably panelled with two small panels above and four vertical panels below with a wide space between, in the middle, for the hardware. In the Hopper house this arrangement of panels is repeated in the Dutch door (where it probably began with the necessity for a larger division where the door breaks open), in the outside window shutters, and in the window casings—a remarkable refinement of design. The harmony of these houses is difficult to exaggerate.

But the great glory of the old Dutch-American interiors is the fireplaces and mantels. Free they always are, and unconventional often, with a very Elizabethan love for the odd and the playful. Yet many are as strictly designed as the most "restrained" purist could wish. The mantels stretch right across big chimney breasts that project well into the room, showing a big broad surface of wood with vertical reedings at the corners. This is a very strong treatment, and on this wood expanse the delicate proportions and detail of the mantel are splendidly contrasted—always the same sturdy old Dutch hearth. The critics who claim the Georgian work to be a little thin could never say the same of the Dutch interiors which are as sturdy even as the exteriors. A bold hand when strength is needed and a delicate hand when delicacy is needed; and the contrast emphasizes each.

The playful use of spindles has already been mentioned. They are always found under a frieze of gay "sunbursts," channels, etc.

Another type, less imaginative, is found in the exquisite mantel of the Vreeland house, and of the mantel in the Westervelt house on Teaneck road, dated 1763, owned by Mr. E. H. Loveridge. They are as perfect mantels as I have seen in all the district. The little figures...
DETAIL OF HALL ARCH CAPITAL IN THE HOPPER HOUSE.
and ornaments are of lead, set against the wood. There are also the two mantels from the Demarest house by the Saddle River, dated 1837, which are hardly less beautiful. Then the three mantel details taken from the houses of Mr. J. S. Mountfort at Dumont show a combination of the above two types.

Another simpler, but no less perfect, mantel is the one in the Brinckerhoff house with the vertical channelling under the shelf. There are still simpler mantels occasionally seen. A picturesque feature of these is a tiny closet fitted with shelves set in each side of the chimney breast, very like the medicine closets now built in our houses, but more sympathetic in design. Herein these old fellows kept their mellow Holland gins and cordials, their Curacaoas and, not least, their native applejack, a brandy distilled from cider, pronounced by certain connoisseurs to be of a quality equal to their architecture.

By this time toward the beginning of the nineteenth century the countryside had become pretty thoroughly American in its modes of life. The householders appreciated the refinement and elegance of the "Colonial" period, and filled their houses with fine models of the types of Sheraton, Chippendale and Hepplewhite furniture, many of which still remain. I have seen some extraordinarily tall clocks bearing the name of local clock-makers in Hackensack and Paterson. They must have been rarely charming, these stately old Dutch interiors. Some few examples of earlier Holland things are still left, notably some sturdy dressers of panelled oak, very mediaeval in character.

The Hopper house has often been mentioned in these pages, and its interior deserves some special notice. It was built during the years 1816-1818 to replace an older house across the road. Two skilled workmen, who came from
LIVING ROOM MANTEL IN THE HOPPER HOUSE.
MANTEL IN THE DEMAREST HOUSE.

MANTEL IN THE VREELAND HOUSE.
MANTEL IN THE WESTERVETL HOUSE.

LIVING ROOM MANTEL IN THE DEMAREST HOUSE.
INTERIOR DETAILS IN THE HOPPER HOUSE
HACKENSACK N.J.
outside the neighborhood, were in charge of slaves in the work. The south wing was built for members of the family but was used as a slave quarter within the memory of people still alive. This wing is very simple in character, with the low ceilings characteristic of the early dwellings. It is said to be later than the central part, and the tiny "lie-on-your-stomach" windows show the beginnings of the use of a second story, which came in the period of "Classic Revival." Still, the stonework of the front of this wing is unquestionably of older type than the central part and may easily have been taken from the original house across the road.

The front door is an example of the sturdy Dutch proportions set off by Georgian refinement. The enframement of this door is a modern restoration. Notice the ornament of fanciful lead details of flowers and beadings with the little lead female figure on top in the place of honor—all very "Adam" in quality. We have considered the mantels, trims, arches and doorways and must hurry on. The panelling is characteristic of the region, except for a little addition which I have noticed elsewhere in but few cases, though it is found in a house in Charleston, S. C., illustrated in the "Georgian Period of American Architecture." I mean the little strip of bead and fillet nailed on the face of the panel. The plaster cornices are also unusual, but they are found in the Ackerman home on the Hackensack River road, the details of which resembled those of the Hopper house very closely.

The whole effect of the Hopper house is one of rare spaciousness, comfort and delicate harmony. The ceilings are higher than some others—about nine feet five inches—and the details are fine, indeed. Very different it is from the humble Dutch cottages of the first settlers, but it bears with them the same spirit of the Holland home.

I have mentioned the Brinckerhoff
house on the Teaneck road, of uncertain date. Inside and out it has suffered almost no change—the most perfectly preserved of all the houses. Its details are exquisite. The Demarest house by the Saddle River has as fine an interior as any, with only the faintest possible indication in its trim of the “Classic Revival” style.

This period of the “Classic Revival” brought immediate changes in these houses. People wanted to live upstairs and added wooden ells and wings. This work is clumsy and heavy compared to the earlier work. The best it did was to add not ungraceful square posts under the overhanging roof to form a porch. The low second stories of wood, above the stone first story seen in some houses is a change of this period; the old roof has been removed or pushed up and the space between it and the stone wall timbered up—by this time there were few slaves left to cut and carry stones—to form a low second story with the quaint little “lie-on-your-stomach” windows before mentioned.

This raising of the roof—in both senses of the phrase—was done in the right wing of the Hopper house. The detail of wooden cornice and dormers, as well as of the inside trims, is much heavier and bolder than anything else in the house. The curved joints in the stones of the centre part of the house show clearly where the original roof of this wing joined the wall, and leave no doubt as to what happened. Sometimes these changes add a picturesque grouping that is quite effective. All these developments of the second quarter of the nineteenth century have been confusing to investigators. They have obscured actually and in the minds of many people the real Dutch-American house which is as standard and unvarying and simple in type as the Greek Doric temple. It is this standard, or “Classic” type which I have tried to extricate from the later changes that have almost buried it; and I have done nothing in these pages if I have not made this point clear. While we mourn these “Classic Revival” changes, they have a certain bald dignity about them that is not unpleasant—far better, indeed, than the horrible Victorian damage done lately.

This finishes the study of the Dutch-American houses. They are fascinating symbols of the idea of hearth and home, the old Teutonic traditions of northern Europe. I think it is valuable to know that the flame of this ancient hearthfire was carried to our country nearly three hundred years ago and burned for two centuries, undiminished and unclouded. It must have been a rarely picturesque countryside, this soft landscape of rolling hills and broad meadows dotted with these stalwart cozy stone houses of sweeping gambrel roofs. We regret that so little of it remains to us to-day.
ON a plateau just within the town of Lexington, commanding the entrance to the Shenandoah Valley, stands the Virginia Military Institute—a college accorded a more enthusiastic loyalty and looked up to with more pride than any other institution in the South. Incidentally, it is the oldest State military school in the United States, having been founded in 1839.

The visitor from the North leaves the train at Buena Vista and is fortunate if his impatience prevents his waiting there three hours for the branch train which would take him to Lexington. The alternative is a drive of nine miles over the Blue Ridge Mountains in the cool of the morning. It is a beautiful rolling country; some of it well cultivated, but much of it too rough for the plow, with here and there "befo'-de-war" log cabins set in acres of scrub. This long drive over the hills, in the fresh mountain air, cannot fail to put one in a receptive mood.

About two miles from Lexington a gap in the mountains opens the valley before you and shows, on the opposite slope, the Institute buildings gleaming white amid their trees. The great barracks dominate the group, and very severe and military they look standing out on an eminence as now and again you catch glimpses of them from the winding road. To reach the Institute grounds, after passing through the quaint narrow streets of Lexington, you cross the campus of the Washington and Lee University with its row of impressive Greek buildings, shaded by stately elms. Facing the main hall, there stands a small vine-covered chapel of somewhat severe design; and in answer to your question the driver tells, in a voice made soft by reverence, that within its walls is the tomb of Robert E. Lee. There is something in the man's manner which, Northerner though you be, causes you to uncover your head as your vehicle slowly passes the resting place of that great man.

A short street, not more than a city block in length, lies between the grounds of the "Washington and Lee" and the two simple brick gate-posts, mellow with age, which mark the entrance to the Virginia Military Institute.

A long drive bordered by a double row of maple trees leads to the barracks. On the left is the parade ground, a great open stretch covering the top of the plateau. Surrounding this plateau, like the walls of a huge amphitheatre, stand the rugged peaks of the Blue Ridge Mountains. Across the parade is a row of officers' houses—quaint buildings in the style of the early Gothic revival, harmonizing with the barracks. They are very charming and livable, especially the superintendent's house with its long enfilade of beautiful rooms so suggestive of Southern hospitality.

The barracks building forms the focus of the whole group. Severely plain it looks in the photograph, but actually it has a very real beauty and dignity of its own. Its walls are a warm, grayish salmon, mellowed and softened by age. Tradition says that they were originally gray, following the precedent of the buildings of the United States Military Academy. But, in spite of many efforts to preserve the original tone, the salmon brick of which the building is constructed has always stained it to the present color. At West Point the gray of the native stone buildings fits perfectly into the hill landscape, but in this less rugged setting such walls would be cold.

The four-story barracks building is so severe that, had it not been built by a
sure hand, it would have been merely a factory—a "barracks" in the ordinary homely sense. Grouping the windows of two stories into a single unit gives the building dignity. Otherwise it is severely plain, with just a battlement at the top. Yet the sally-port, with its flanking towers, is a really noble composition. In front of the barracks is the formation parade ground, where the cadets assemble many times daily to march to the mess hall, drills and parades. Opposite the sally-port stands Houdon's statue of Washington, which General Hunter took during his raid and sent into West Virginia. The bronze has a beautiful patina, the color of very old silver. In the new scheme this statue will remain in its present position, where, at the head of a long flight of steps, it will mark the axis of the new approach. On either side of the statue, along the crest of the hill, for the ground falls away here very abruptly, is a row of fine old English and French cannon cast in bronze, bearing coats of arms and having handles formed of twined serpents. These guns come down from the early French and English wars. They are not Institute trophies, its history dating back only to 1839, but were presented by one of the early Governors of Virginia.

In 1816 the Legislature of Virginia established an arsenal at Lexington. Its object was to protect the valley and to house about thirty thousand stacks of arms. A company of twenty-eight regularly enlisted men was maintained to guard it. Lexington then, as now, was a small quiet town and its citizens did not welcome this soldier element.

In 1835 it was suggested that the six thousand dollars a year which it cost the State to maintain the guard be used to pay the expenses of a military school, the cadets of which should guard the arsenal in return for the educational advantages received. This plan was adopted, though the funds available—the six thousand dollars a year—were absurdly small and the buildings were in such poor condition as barely to afford shelter.

There is not space to tell the story of the struggles and sacrifice of the first years. Through the heroic efforts of a few men, all obstacles were overcome and the future work of the school made possible. Officers and cadets bore privations and hardships with a spirit that has been an inspiration ever since, and which was a foundation for that spirit of self-relying independence which has characterized the Institute's history. For it has usually met its difficulties itself, succeeding whether help came from outside or not. The State has undoubtedly been generous, for it is proud of its school, but the Institute's achievements have been, in great measure, due to its own effort.

The formal opening was on November 11, 1839, when thirty-three cadets reported for duty. In a general way the course was modeled upon that of the Military Academy at West Point. The aims of the two schools, however, were very different. The curriculum at West Point was designed to give the cadets the best possible education to fit them for army officers. Here the aim was and is to turn out men capable and efficient in many walks of life, the military element being emphasized rather for its inherent benefits in the matter of discipline and health than as a training for future military leaders, although that consideration was by no means overlooked. Indeed, when the war broke out, in this latter field alone, the Institute amply justified its maintenance as a State institution. But, for years, its graduates as a class had done more important work than leading Virginia's armies. In the forties, the profession of a teacher in the South was held in slight esteem, its members were recruited almost entirely from failures in other professions. To meet the demand for competent instructors the Institute was created a normal school in 1842. This meant that each of its graduates bound himself to serve at least two years as a teacher. The cadets were drawn from the best stock in Virginia. As the result of their work the standard of education was raised greatly during the years immediately following. Another field of usefulness grew out of the introduction of a course in scientific agriculture. Here again the Institute was first in the field and won considerable fame through
NEW VIRGINIA MILITARY INSTITUTE, FROM THE ROAD INTO LEXINGTON. BERTRAM GROSVENOR GOODHUE, ARCHITECT.
THE COMPLETED BARRACKS, FROM THE PARADE GROUND, VIRGINIA MILITARY INSTITUTE, LEXINGTON. BERTRAM GROSVENOR GOODHUE, ARCHITECT.
BARRACKS AND POWER HOUSE GROUP,
FROM THE RAVINE OF WOOD'S CREEK.
VIRGINIA MILITARY INSTITUTE. BERTRAM
GROSVENOR GOODHUE, ARCHITECT.
PLAN OF THE NEW INSTITUTE, SHOWING THE PROPOSED CAVALRY AND ATHLETIC FIELD. BERTRAM GROSVENOR GOODHUE, ARCHITECT.
the experiments of Lieut. William Gil-lioian on soils and fertilizers.

The influence and importance of the Institute grew steadily; each year saw its members increase, its courses of instruction advanced until, at the outbreak of the war between the States, it had attained a standard of military and academic excellence second only to that of West Point.

With the war came an opportunity for its cadets and graduates to show what their training had really meant, and nobly did they respond. In 1861 the corps was ordered to report for military duty at Harper's Ferry and Richmond, where the Confederate forces were mobilizing. The cadets showed themselves most able drill masters in getting the unwieldy mass of volunteers in shape. The success at Bull Run has been attributed with much justice to the thoroughness of this work. Its graduates furnished the armies of Virginia with 811 officers and the Union armies with fifteen.

That this was appreciated in the North is illustrated by Lincoln's reply to an impatient politician who demanded to know why he did not crush the Confederacy and end the war. "I would, but that they have a school down there in Virginia that furnishes them new officers as fast as the old ones are killed."

In addition to supplying commissioned officers, the Institute furnished a host of sergeants, corporals and privates, thus gaining for itself the nickname of "The seed corn of the Confederacy." Perhaps most important of all was the part the Institute's ésprit de corps played in the brilliant career of Stonewall Jackson.

Major Thomas J. Jackson had been called to the chair of Natural and Experimental Philosophy in 1851. In the years that followed he had thoroughly won the confidence and loyalty of his students. When the war came, these very students formed not only a large part of the staff upon which he had to depend but they were also scattered through the ranks of his brigade. Jackson was noted for his ability to call forth the sympathy and enthusiasm of his men. In consequence, they responded to his orders as they did to those of few other generals. How much of this must have been due to the presence of the young men who idolized him! That he felt this is shown by his repeated public references to the part which the Institute played in his victories.

No one questions the brilliancy of Jackson's strategy and his fame has added lustre to the Institute that he loved, and where, in accordance with his wish, he is buried. He is a part of the great tradition of the school.

The cadets were present at three battles during the war, but only took an active part at Newmarket, where they won lasting glory. All through the winter of '64 the corps had been restless and eager to leave for the front—at one time going so far, in a mass meeting, as to tender their services as a body to General Lee. On May 11th, in the dead of night, the long roll was sounded; standing in front of the barracks the cadets heard, read by lantern light, the orders summoning them to the aid of General Breckinridge at Staunton. They started at six in the morning, and after a two days' march reached the regular troops. Like the English at Brussels the night before Waterloo the cadets, after dress parade, scattered to the dances in different parts of the town. All of the next day they marched through driving rain down the valley. After a night in the open field, the march was resumed for the fourth day, when the enemy was encountered at Newmarket and the front of the Confederate forces was driven back. On the following morning General Breckinridge took the offensive, although he had a considerably smaller force than the Federals; and, starting at dawn, marched his army back to Newmarket.

There are many accounts of the battle which ensued, all agreeing as to the gallant part played by the cadets. In the first part of the action they were held as reserves in the rear, but as the day advanced they were steadily moved forward.

By the middle of the afternoon, as Breckinridge pressed the Union forces, his right and left wings drew apart, leaving a gap in the centre of the line. The corps of cadets moved up into this gap,
and advanced under continuous fire for over half a mile, until they were well in front of the rest of the battle line, and drew up behind an old wall. The maintaining of this position drew upon them the concentrated fire of all the Union batteries. Noting that the Confederates were hesitating and wavering, and that the centre was weak, the Union general directed a charge against the latter point. Had the cadets not held their ground valiantly, the day would certainly have been lost. At the very time when their lines were being constantly opened to allow veteran soldiers—driven back by the heavy fire—to pass to the rear the command came to advance. Then began their memorable charge across a wide field of waving wheat straight at Von Kleiser's battery, which all the time kept up a furious fire. On they stormed until the guns were captured. Everywhere the Northern forces were fleeing and the day was won. After five days of constant marching, it was a splendid record for these young boys—on their first day under fire. That this was men's work is shown by the loss of 25 per cent. of the corps in killed and wounded.

The Union armies, however, were closing in on the Confederates and Hunter, marching down the valley, took, and afterwards destroyed, the Institute buildings; after several hours of bombardment the thick brick walls of the barracks still stood; he then applied the torch and left the Institute—a melancholy ruin. Every building was burned to the ground, except the superintendent's house, in which lay his daughter, too ill to be moved. It has always seemed a pity that, against the protests of his officers, Hunter should have destroyed the library, the scientific collections and the houses of the professors.

To men of less faith the end of the war would also have meant the end of the Virginia Military Institute. Its buildings in ruins, its credit gone, a heavy debt to face and the State government in confusion, there seemed little hope of the school's ever reopening.

But the same heroic story repeated itself. Colonel Smith, the superintendent,
immediately called the faculty together and outlined a plan for restoring the ruins. Work was started with private aid. But fifty thousand dollars was needed; and, as security for a loan of this amount, the faculty pledged a third of its salary yearly. With this money the Institute was rebuilt and the school opened.

In the struggle to rebuild the Institute—a struggle for actual existence—the difficulty was always to meet pressing needs, and questions of design and general plan were not too carefully studied. As a result, in several instances, buildings were erected only to be torn down soon after, or that are now waiting to be demolished, after a comparatively short time of service, because they were entirely unsuited to the needs of the growing school.

With the close of its seventy-fifth year a new era of expansion seems about to start. The Board of Visitors, feeling that adequate provision should be made at once for present and future needs, turned to Mr. Bertram G. Goodhue, whose large experience in academic problems, and especially his great work at West Point along similar lines, particularly fitted him, they felt, for the task.

The first requirement was an enlarged parade ground. To gain this end it was necessary to push back the present officers’ quarters to the edge of the ravine through which flows Wood’s Creek, and to relocate the road leading to them. This readjustment practically doubles the area of the field, though leaving it somewhat irregular in shape.

This portion of the work will be finished before the Institute opens in September. On this newly located road, beyond the superintendent’s house, three new houses for officers are building. These will be in character with the older houses, though somewhat less Victorian.

In November of this year will be celebrated the seventy-fifth anniversary, and before this reunion the committee hopes to have funds sufficient to carry out the scheme practically as shown. One of the reasons why, in the past, it was found difficult to place new buildings properly
was that the group had no unity—in a word, no general plan. Mr. Goodhue has established a major axis by creating a monumental approach from the main road into Lexington. This approach takes the form of a terraced flight of steps up to the main sally-port of the barracks, terminating at the platform on which stands the statue of Washington. The formation parade in front of the barracks will be widened; and lining this on either side of the stair, forming a great terraced forecourt, will stand, on the right, the large new Academic Building with its departments of mathematics, chemistry and others and, on the left, the new Jackson Memorial Hall, built to replace the present one, which, in turn, will give way to the new wing of the barracks. This building will contain, on the main floor level, a spacious memorial hall for reunions and great occasions of all kinds, as well as for chapel. In the story below will be a gymnasium, where the dances will be held, the running track serving for a visitors' gallery. Below the gymnasium, in the basement, there will be a swimming pool, baths, and so on.

Owing to the slope of the ground, each of the levels can be entered from the outside. Beyond each of these there will be later another large building.

On this axis, but across the road, it is proposed to place the Cavalry and Athletic Field, which, as its name suggests, will be used for drill, football and athletics generally. Into the hillside, at the back, will be banked the seats. In time, too, other buildings may flank this axis on the road. On the same side of the road, and between Jackson Hall and the entrance to the grounds, the alumni are to erect a building for their own accommodation on the occasions of their reunions.

The other axis runs through the barracks at right angles to the first, and in general follows the centre of the parade ground. Now it is marked by a rather trivial commemorative gateway, built to connect the present Jackson Memorial Hall with the barracks. This hall is a very unfortunate building, entirely lacking the dignity that a memorial to so great a man should possess. Its rebuilding into a wing of the completed barracks will therefore cause regret to no one. There will still be a Jackson Memorial Hall—the new building opposite the barracks—one much more simple and genuine, one more in sympathy with the heroic dead.

Originally it was intended to complete the barracks in the form of a hollow square. Now that additional quarters are necessary, Mr. Goodhue proposes to do this by carrying out the simple lines of the first scheme. The complete structure with the adjoining power house will make a very imposing mass rising abruptly from the ravine.

The present commemorative gateway will give place to a great square tower not high but strong. This will serve as a focus for the group when seen from the parade ground or from the entrance. Before this will stand the statue of General Jackson, as it does to-day, flanked by the famous guns of his battery.

Strong emphasis at this point of the plan is important for another reason. It has been proposed to connect the grounds of the Washington and Lee University with those of the Virginia Military Institute by means of a broad boulevard. Should this ever be accomplished the boulevard will enter the parade ground opposite this gateway.

It is pleasant to see any good school broaden its field of usefulness—especially good to see a Southern school developing, for the South has been handicapped in this respect—best of all is it to see a college with the Virginia Military Institute's record of efficient successful graduates take its rightful place among the great schools of the county; for we need strong men to-day, perhaps more than ever before in our history.
This installment of Mr. Beach's series deals mainly with a subject on which there is a lively difference of opinion. Mr. Beach has failed, he says, to discover marked evidence of any evolution of specialists in architecture; on the contrary, prosperous architects are witnessing the increase of their practice through the acquisition of work of every description.

THE SPECIALIST

It is quite the fashion to allude to the present as an age of specialized endeavor. We are accustomed to read and to hear that this or that avocation, formerly a single calling, is now divided into the several occupations of skilled specialists.

Perhaps the profession of the civil engineer serves as the best illustration of this modern trend. We all remember when the chief occupation of the civil engineer was land surveying. His more diversified tasks were semi-occasional ventures, not too confidently undertaken. The average engineer of that time, like the contemporaneous architect, was not overly well educated—had probably gotten his training by apprenticeship rather than through technical schooling.

To-day, engineering is a science of several branches, each of which offers opportunity for intensive specializing. The public has been told that this is also true in architecture. It may be difficult to appreciate readily why it is really not true at all, except in the one phase of architectural engineering, which latter is, of course, engineering rather than architecture.

But architecture itself, as practiced today, has not been divided among specialists. A little investigation of those who claim the contrary will convince one of the fallacies of their argument.

The fact is that the highest type of practitioner will put the best that is in him into each problem he attacks—at least to such an extent as his other duties will allow. The result is that the first endeavor of such an architect along any given line is begun with as complete an accumulation of data on the subject as has been acquired through all the several experiences of his "specializing" competitor. The latter admits that he did not so prepare himself, but chose to acquire his knowledge through his own experiences (at the expense of his various clients) rather than by an exhaustive study of the experiences of others. It is not difficult to determine which man is most to be depended upon.

Still, it is urged, a man must profit by his own experiences. This is true, but is quite another matter than the evolution of the specialist. Every building of a certain type executed in the office of an architect renders that office more efficient in the production of the drawings and specifications for such a structure. This is especially true of the specifications and details. Such architect can, therefore, produce subsequent service for structures of similar function at a much less office expenditure than was chargeable against the first. There is seldom much (if any) profit accruing to an architect from the production of the drawings for a building for which no previously planned prototype exists in
his archives. The first effort must bear all the expense of research, collecting and tabulating data, investigating kindred edifices, evolving particular details and otherwise serving to educate the designer and the draftsmen in the special phases of the problem.

Obviously, the conscientious practitioner cannot evade this expense and is, therefore, handicapped in competing for work against a "specialist" who can, if he chooses, offer to reduce his fee, knowing his advantage in the possession of considerable pertinent classified data. But such advantage is distinctly a matter of the architect's office economy and has taught to do with the client's affairs save only as it is reflected in the fee charged. And certainly the client who will favor a candidate under influence of a reduced fee is taking quite too much of a chance. Such saving is, in any event, exceedingly small compared to what may be lost by lack of proper attention by the architect.

It may be that, some time in the future, architecture will develop more or less specializing. We notice some indication of this in present day factory and railroad work, though much of this may truly be considered more as engineering than architecture. From which it may be deduced that, if specializing in architecture does come about, it will be by way of narrowing the field of architectural practice proper down to the province of the artist designer, who will have to do only with the plan and façades of a structure, and their correlation, leaving the structural and other engineering details to specialists, who will operate in limited and carefully developed zones.

On the other hand, there seems even greater tendency in the opposite direction. Prosperous architects witness the increase of their practice through the acquisition of work of every description. Some do more of one sort than another; but each undertakes practically everything offered, and performs his tasks well, according to his custom, and quite regardless, as a general rule, as to whether or not he has previously turned out similar kind.

The term "Associate Architects" is commonly used to describe the relationship of architects in connection with the work of a single structure, as distinct from a continuing partnership arrangement. The value of such association naturally depends upon its underlying purpose and the manner in which the service is performed by the associates.

In some cases, it is to be feared, it is merely a method of acknowledging the service of an obligation to some "business-getting" architect in using his influence toward directing the "job" into the office of his whilom associate, the latter performing the duties of the architect and paying the "steerer" a small commission.

Again, there is the case of the rapacious city architect, who covets some plum in the territory of his no less competent provincial confrere. In order to satisfy local loyalty and overcome the advantage of his rival's accessibility to the site, the city man enters into association with an incompetent (not otherwise in the running), who undertakes to handle the field work for a portion of the fee.

If those associated are practicing in the same locality, the work may be carried on in the office of either, or in separate chambers, independent of either office. The latter method is, as near as may be, ideal; has been proved so with several large structures. One of the associated architects, or a competent man selected by them, is detailed in actual charge of the men assigned to the work. The architects themselves confer as frequently as the necessities of the situation demand. There is no question but that "two heads are better than one." The client thus derives a considerable benefit. Incidentally, he should accordingly pay a larger fee than is charged for the services of a single architect. Such extra commission is too seldom provided. The result is that, although the associates have each spent as much time on the problem as either would have devoted thereto if operating independently, yet the individual profit is cut in two or, perhaps, three.

Here we have the chief objectionable
feature of such deals. Too often the arrangement is merely a matter of convenience brought about through the exigencies due to close competition for the work. Two friendly applicants may offer the combination of effort, calling attention to its advantages, and later discovering financial loss, rather than profit, in the bargain.

Notwithstanding the abuse of the scheme and the objections due to such improper operating of it, one must still admit its considerable advantages when properly handled. Architects are, however, quite at variance in their opinions on the subject. A certain firm of very high standing advised a remote practitioner, to them unknown, that they would gladly work as associates with him on a given work; all drawings to be made in the office of the latter and submitted to the other firm for approval and criticism before signatures were attached. For such service they asked a fee of one per cent of the cost. This proved quite sufficient for the few hours spent in reviewing and corresponding; but the amount should, of course, have been added to the fee charged by the local architect instead of being extracted from his remuneration. However, he was helped by the experience and probably considered it worth while, even though not financially profitable.

Contrast the attitude of these high class practitioners with that of another firm with a practice as large as the largest who, when a similar suggestion of association was made them, exclaimed "What, educate our competitors to our methods? No, thank you; we are not in that business."

Thus, there is great variety of opinion in the profession as to the propriety as well as the benefit of these temporary partnerships. But, even the real partnerships between architects are many times rather loosely held together. We see frequent instances of partners acting independently on specific work.

THE CONSULTING ARCHITECT

The term "Consulting Architect" does not bear an unfamiliar sound, yet there are not many individuals who have chosen to so style themselves. This may appear strange in view of the large number in the brother profession who practice as "Consulting Engineers."

But there is a considerable difference between the ethical standard of the engineer and that of the architect. An engineer can be a contractor and still retain his ethical standing. He is none the less an engineer, even though the major portion of his work may be commercial, rather than professional.

This is not true of an architect. According to present day ethics, a person ceases to be an architect as soon as he becomes a contractor. He can personally superintend building operations for an owner, employ labor and let sub-contracts; but, as soon as he assumes the responsibility of a contract, he loses his ethical standing.

In engineering, therefore, there are the two classes, equally ethical; the contracting engineer and the consulting engineer. Likewise there be those who combine both functions in a perfectly proper fashion.

In architecture, on the other hand, we have but the one class, the consulting architect. Hence the use of the descriptive adjective is superlative, and only adopted as a business catching expression in the same manner as "specialist" is often used.

An exception to this is the case of an architect who is actually consulted by another and does expert work on a project, work of such character that it is deemed more appropriate for him to affix his signature over the title "Consulting Architect" than to use "Associate Architects," as is more customary.

The consulting practitioner in any profession is necessarily a specialist. Both are lacking in architecture.
CENTRAL PAVILION—RIDGE SCHOOL, NEWARK, N. J. F. E. GUILBERT, ARCHITECT.
ANY things have combined to make the school house one of the most complicated of modern architectural problems. Not only are the usual appointments changed extensively from year to year, but the growing tendency to devote the school to the broader educational uses and to various sorts of social betterment and neighborhood work has also brought special problems; and each new use, whether educational or sociological, puts before the architect intricate questions of design to solve.

The multiplication of specialized uses, and of the consequent "specialized problems," has led to the development of specialized architectural firms, made up of men who have studied the school house problem from all its angles and who concern themselves more or less exclusively with school house design. Among these specialists there are, perhaps, few whose work, extending over a period of years, has maintained the high degree of excellence, both in planning and in exterior design—this latter especially—that is noticeable in the work of Messrs. Gilbert & Betelle, of Newark, New Jersey.

The importance of efficiency in plan, of providing a building that can be used for many purposes, both educational and social, and many of them at the same time if necessary, without these different uses interfering with one another; of good circulation, centralized administration and safety from fire and panic, combined with economy of maintenance and first cost, are features, besides the equally perplexing ones of the arrangement of the class rooms themselves, not to be overlooked and problems not to be underrated. Neither, in a modern school, are the idealities to be lost sight of, and for these manifold reasons, besides the fact that they are new, and that each was an attempt at ideal planning, the schools of the firm under consideration are well worth studying.

As an example, the Newark Normal School should be given first place because of its successfully designed exterior, as well as for its exceptional arrangement and size. The accompanying plans show the layout of the various rooms. Unusual features are the comparative isolation of the auditorium, an elaborately planned kindergarten "for observation" (this being, as you remember, a normal school), a number of class rooms that are also intended for observation, and a nicely decorated, though rather unfortunately furnished, rest room. In justice to the architects it should be immediately added that they had nothing to do with the selection of this furniture. In the kindergarten an inglenook with a fire place is provided. Conflicting sources of light, in spite of the prominence given to the bay window in elevation, have been obviated by the use, in the bay, of small oval windows. On this floor there is also a doctor's room.

In the basement are a gymnasium, a manual training room and separate lunch rooms for pupils and teachers. Between the girls' court and the teachers' lunch room is the entrance to the formal garden shown on the first floor plan and, in an undeveloped state, in the accompanying views. While perhaps not the largest, this is without doubt one of the finest of recent normal schools; and in its general design and notably in the arrangement of the auditorium it shows not only a marked ingenuity, but an equally marked degree of courage in so wide a departure from "the usual thing."
PLANS OF THE NEWARK NORMAL SCHOOL. E. F. GUILBERT, ARCHITECT.
The Ridge School is even more interesting from the point of view of exterior design. Here the problem was an entirely different one, and the solution bears witness to the changed requirements and to a distinct change in surroundings. Being in a high class residential district, it was thought desirable to make the building attractive to an unusual degree, but without additional expense in erection. On the first floor are five class rooms, an auditorium, kindergarten, the administration offices and a library. A rather unusual feature in an elementary school are the toilets on each floor. The best practice, excepting in high schools, is to confine these entirely to the basement, adjoining the courts or play rooms. Toilets distributed as these are, are used as emergency toilets and are closed during recesses. The arrangement of the auditorium, in its relation to the administration and to the stairs and exits is noteworthy. Used after school hours, the entrance, being directly opposite the main entrance of the building, could be effectively closed off by a temporary railing or screen from the corridors and stairs. On the second floor are the usual class rooms and in the basement a gymnasium under the auditorium, a cooking and a manual training room, besides the courts and the heating and ventilating apparatus.

The Washington School at East Orange is another example of an elementary school at its very best. Here, the auditorium is on the second floor, and the space on the first floor that is usually occupied by it is given to the kindergarten and the administrative offices. The exit from the auditorium is at either side of the room near a stair that leads immediately to the yard.

The arrangement of the kindergarten on the first floor of this school is unusual and in a sense ideal, inasmuch as it has direct access to the main entrance, and the exit can therefore be separated from the exits from the main school. This is an important feature, for it is usually found that when the kindergarten children use the same exits as those used by the older pupils, confusion results; even in the best managed schools, if the small children do not leave the building earlier than the others, various sorts of petty tyranny are assumed by the larger towards the smaller children. For this reason it is advisable to
place the kindergarten near some exit that is not used by the other children, or to give it an exit of its own.

On either side of the fireplace there are glass cabinets running from the floor to the mantel shelf and these are used for exhibiting the school's own local masterpieces of kindergarten achievement. In the window recesses, window seats are provided, and this, with the other decorations, give the room a decidedly homelike rather than school-like appearance. The room has its own toilet, equipped with a basin and a tiny drinking fountain.

It will be noted that in all the schools illustrated especial thought has been given to the arrangement of the kindergarten. The perspective view of an exterior garden or play yard is for one to be used in connection with the kindergarten in the new Lafayette School in Newark. The plan which accompanies it, however, is really for no actual school at all. It is simply an ideal plan, showing the necessary fixtures and their best arrangement, all in a way which Guilbert & Betelle, as specialists in that sort of thing, hope before long to put into actual practice. There is also illustrated a school room plan in which everything necessary is shown and in which the arrangement was not left to chance. This room is 22 feet wide and 30 feet long, exclusive of the wardrobe. Most of the class rooms shown vary from this size to 25 feet by 32 feet. Any room larger than this is found unsatisfactory. The size of desks, width of aisles, etc., are figured. The blackboards are at the front and on one side only. The wardrobes are at the rear of the room rather than at front or sides, to obviate the confusion and inconvenience on the part of the pupils of turning completely around in their seats to see a board at the rear. Unilateral lighting here, as in every modern school, is advocated. The Washing-
The color scheme is interesting. The walls are of a rough, irregular toned red brick, laid in white mortar with wide joints. The trimmings are of gray terracotta, and the overhanging eaves contain rafters rather brilliantly colored—as are also the soffit panels—in green, orange and brown. The windows are white and the entrance doors are brown.

Owing to the success of this building, and of others like it, Messrs. Guilbert & Betelle have, quite naturally, been appointed by the Board of Education of East Orange, where the Washington School is built, to design and construct all future schools erected there. Owing to the fact that Mr. E. F. Guilbert is the architect for the Newark school board, the firm—or at least Mr. Guilbert—also has complete charge of the design of all Newark schools. Besides this Guilbert & Betelle are doing all of the school work at the present time in Bayonne, New Jersey, and in Greenwich, Conn.

Of the work in Newark the School Board Journal says:

"The building activities of the Newark board of education during the past four years have been extraordinary when the size of the city is taken in consideration. Nineteen new buildings and additions have been undertaken, providing for nearly fifteen thousand pupils, in approximately four hundred class rooms. Included in the nineteen buildings are thirteen auditoriums and as many gymnasiums, which serve not only for the children enrolled in the respective buildings, but are also open for evening use. The total cost of these buildings is slightly less than $2,700,000, in itself a great sum of money, but not so large when the amount of accommodations provided with it is taken into consideration. For Newark is erecting high and elementary
schools at a general average cost of $180 per child. This record is very creditable when the cost in such neighborhood centers as Boston, New York and Philadelphia, which have similar labor and material markets, is considered.

"The entire work of planning and supervising the construction of all these buildings has been ably handled by the construction department of the board, under the direction of Mr. Ernest F. Guilbert, architect. Associated with Mr. Guilbert has been Mr. George W. Knight, the school engineer, who has designed and supervised the heating, lighting, ventilating and other engineering details.

"Of the nineteen new schools and additions, the most important building which has been undertaken is the Central Commercial and Manual Training High School. The school has a capacity of 1,200 pupils and is fully equipped for complete college preparatory, English, science and vocational courses.

"The exterior is a pleasing adaptation of Collegiate Gothic in brick, cut stone and terra-cotta. The most striking feature is the arrangement of the great terrace and outside stairways, leading to the main entrance of the building. The architect has here made the best possible use of a sloping site, not only for utility, but also for architectural beauty.

"The basement, which is largely above the level of the surrounding site, is devoted to locker rooms, foundry and forge rooms, stock rooms and space for the heating and ventilating apparatus. A large gymnasium is located below the terrace, outside the main structure. This portion of the building also contains the boiler and engine rooms and space for a mechanical testing plant.

"The first floor contains a machine shop one hundred feet long, three class rooms, a large reference library, administrative offices, a pattern shop, a sheet-metal working shop and space for wood-turning, joinery, masonry and wood-finishing. The auditorium, which has a seating capacity of more than 1,000 persons, is also located on the first floor.

"On the second floor are five standard class rooms, three rooms for business practice and typewriting, two chemical
PLANS OF THE WASHINGTON SCHOOL, EAST ORANGE, N. J.
Guilbert & Betelle, Architects.
laboratories separated by a lecture room, two sewing rooms, two millinery rooms, a room for dressmaking and a large study hall. The gallery of the assembly room is entered from the level of the second floor.

"The third floor contains eight standard class rooms, a music room, a biological laboratory, two kitchens, a laundry, a great machine drawing room, a freehand drawing room, two physics laboratories and a lecture room.

"The fourth floor is largely unfinished and will not be completed until the enrollment of the school demands additional classroom space. It contains at present only two lunch rooms, with a large kitchen between them, and a music room.

"The main portion of the building is square in shape with class rooms surrounding corridors on all four sides. Four sets of stairways are provided and three elevators have been installed.

To this it may be added that the music room is a feature worthy of reproduction in other large schools. In this case the room is an excellent model for reproduction. The acoustics are excellent. The auditorium is in the center of the building and is lighted by skylights in its ceiling.

Other buildings by the firm that may be mentioned, and some of which are represented here either by plans or exterior views, are the $250,000 East Side Commercial and Manual Training High School, similar in plan to the "Central High" but somewhat smaller; the Montgomery School, in which the unusual feature is an open air class room on the top story, of which an interior view is given, and a large playground on the roof. In this building are twenty-three class rooms and an auditorium to seat 875. The Webster Street School has sixteen class rooms, a gymnasium and an auditorium to seat 540. It is planned to make it double this size in the near future when the old building is razed.

The East Orange High School presented an unusual problem because of the fact that it was desirable to retain and use the old high school in connection with the new one. The elevation shown is that of the new building. The
PLANS OF THE HORACE MANN SCHOOL, BAYONNE, N. J. GUILBERT & BETELLE, ARCHITECTS.
NOTE:

ALL VERTICAL FIGURES READ FROM TOP TO TOP OF BRICK, STONE OR TERRA COTTA.

THE ARCHITECTURAL RECORD

Detail Plate No. 39

Guilbert & Betelle, Architects.
PILASTER CORBELS ON SIDE AND REAR GABLES.

TERMINALS ON SIDE GABLES.

DETAIL OF CENTRAL BAY—EAST ORANGE HIGH SCHOOL.

E. F. Guilbert, Architect.
SOUTH SIDE HIGH SCHOOL, NEWARK, N. J.

E. F. Guilbert, Architect.
PLANS OF THE CENTRAL COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J. E. F. GUILBERT, ARCHITECT.
old and new buildings face different streets and they are connected by a row of class rooms on the first floor and by an open air gymnasium or class room on the second. The old building is used for administrative purposes and for various social rooms—including some men teachers' club rooms, while the new one is devoted entirely to class and study rooms, etc. In speaking of this work, in its connection with exterior design, I may add that the Guilbert & Betelle elevations are of especial interest as illustrating an important feature of American architecture. The plants of this firm show a degree of skill and knowledge of school house problems that is not often met with and their schools have established precedents that will naturally be followed by other designers. But the elevations of their buildings have an interest and a wider significance than any plan could have, and even when the great importance of planning is taken into consideration the fact still remains that these elevations are of interest to every architect in or out of "school house lines." One might call them, and they would be called as a rule, "Collegiate Gothic." And Collegiate Gothic is used in school house work, among other reasons, because it adapts itself in a consistent way to the large window openings and small piers that are necessary to successful school house design. And yet these buildings that Guilbert & Betelle have designed are not, one is glad to say, strictly, or archaeologically, English Collegiate. Neither is the Gothic strictly French, English or Italian Gothic.

Looking, for instance, at the exterior of the Central Commercial and Manual Training High School, which title is familiarly shortened to "Central High" in actual use, you will notice that after all it is really not Collegiate Gothic at all. There are circular headed window openings on the top floor with Renaissance pilasters between. The terrace entrance is distinctly Renaissance and the heads
PLANS OF THE SOUTH SIDE HIGH SCHOOL.
NEWARK, N. J. E. F. GUILBERT, ARCHITECT.
MONTGOMERY SCHOOL, NEWARK, N. J.
E. F. Guilbert, Architect.

EXTERIOR OF THE SOUTH SIDE HIGH SCHOOL.
E. F. Guilbert, Architect.
PLANS OF AN IDEAL CLASS ROOM AND KINDERGARTEN.
Guilbert & Betelle, Architects.

PERSPECTIVE VIEW OF AN IDEAL KINDERGARTEN PLAYGROUND.
Guilbert & Betelle, Architects.
of the basement windows are arched in a distinctly modern un-Gothic way.

What does this mean? And is any especial meaning attached to the fact that you go through a carefully studied and altogether successful doorway that is "distinctly Renaissance" in the Newark Normal School, into an auditorium that is as successfully designed a "Collegiate Gothic" auditorium as there is in America, without any apparent feeling of the unfitness of going thus suddenly from Renaissance to Gothic and then from Gothic (if you leave by the auditorium entrance) to Renaissance again?

Just what it does suggest will naturally vary according to the person to whom the suggestion comes. To me it suggests a sort of echo of the motto over the Normal School door,

"Who Dares to Teach Must Never Cease to Learn,"

and I like to think that Messrs. Guilbert & Betelle, in their school work—perhaps without being conscious of it—are teaching us or at least showing us how we may learn to look away for a time from a too close dependence upon historic styles and to walk alone for a season into a more nearly American style of architecture.

As one looks at these schools, and at the work of many other contemporary designers, one feels more and more that American buildings are becoming so distinctly Americanized that, even though the designs are based upon historic styles, they would certainly appear out of place in surroundings that are not American. And one would not be apt to mistake these schools for anything but what they are—American public schools.

American architects, having no traditions that might be called national, must look to other countries for their primary inspiration; but, like every good artist, no matter in what material or medium he may work, the American designer will reach his own national expression by frankly accepting each new problem and by finding in it an inspiration for new solutions and new endeavors.
MODERN civilization may be said to lack quality. Many of the broad and generous convictions which characterized the generations immediately preceding our own have been abandoned, and the rich culture of other days seems to be passing.

Perhaps this lack of quality is creeping into architecture. In the rush of modern competition the architect is more or less at the mercy of the financier, and is yielding pre-eminence to the engineer of construction. He finds it difficult to maintain his standing as a scholar and artist.

The professor of an art so broad as architecture, so fundamental to human society, so necessary to the expression of the larger qualities of human nature, should himself be broad, many-sided and sympathetic.

The large and genial atmosphere of the older time has persisted in the personality of several men who are well within the field of our friendly recollection. One of these was Russell Sturgis.

The Architectural Record and its readers knew Mr. Sturgis well. He was one of the founders of the magazine, and was always in the background, and often to the fore, in the management of this journal, which has stood especially for scholarship in American architecture.

Sturgis was interested in everything which was interesting; in himself and in his own fine personality, in his home, in his house, in his library, in the astonishing little collections of all beautiful things, which his limited means permitted him to create, in every art, in the policies of city, State and nation, and in all questions of social import. He was a master of English style such as were few in his day and fewer still in ours. His phrase was rich, abundant, full of suggestion and wonderfully vitalizing. He was a good architect, much better than good at times; a master critic of sculpture and painting, and of all the various industries of the beautiful. All this varied knowledge and sentiment were ready at the call of an unusually lucid faculty of recollection.

Such another was Montgomery Schuyler, of the same generation as Sturgis, and intimately associated with him. He had the same large sympathies and the same breadth of knowledge. He had not the same incisive force, but instead a gentle and temperate quality of mind, which is perhaps quite as valuable. He was not a trained architect, as Sturgis was, but by much study and constant association with active men he became sufficiently conversant with detail. Perhaps the lack of more definite equipment made possible the broad and human point of view which he held better than any American writer on architecture.

Montgomery Schuyler was born at Ithaca, New York, August 16, 1843, and died at New Rochelle, July 6, 1914. His father was the Rev. Dr. Anthony Schuyler, of Ithaca. He belonged to the Arent Schuyler branch of this great New York family, which produced several men of much importance in the Colonial and Revolutionary period. He entered Hobart College in 1858, but did not graduate. At the close of the Civil War he came to New York and entered the profession of journalism, serving on the World until 1868, when he passed over to the Times. From 1885 to 1887 he was Managing Editor of Harper's Weekly and afterward served the publishers of that journal as reader until 1894. He retired from the service of the Times in 1907. Mr. Schuyler was one of the organizers of the Architectural Record in 1891, and his article on the Romanesque Revival in New York was the first contribution pub-
lished, following immediately Mr. Desmond's introductory note. He had the honor of being the first to enter this periodical, which has depended on him for much of its best matter.

Looking over the bibliography which is printed at the end of this article, it will be noticed that he was interested almost exclusively in the Americana of architecture. Except for the charming story of a trip to Mont Saint-Michel in volume xi (1902), an account of the "Architecture of Mexico City" in volume xxxii (1912), and an article entitled "Les Nouveautés de Paris" in volume x (1900-1901), every article in the nst is of American matter.

His writing is not even general in its application to architecture. The apparent exception, an article on the "Art of City Making," which appeared in volume xii of the Record (1902), begins with a broad appreciation of the subject, but soon changes to a fine special treatment of the two great city plans of Washington, by L'Enfant and the Burnham Commission of 1902. Mr. Schuyler's interest in American architecture was broad and deep. It is evident that his research in the archives was wide, and his accumulation of data extensive. The printed matter which he has left constitutes a sketch of a great work on the architecture of his own country, which he held before him as the objective of his life. Those who know the subject understand how noble a monument this work may still become if anyone is found with sufficient interest and genius to assume his task.

In his written work Mr. Schuyler has entered every portion of the field. In 1892 he published a preliminary book on "American Architecture" which recalls the crisp and formative period of the eighties and early nineties, when American art in all branches began to be conscious of itself and of the art of other people. At this moment Mr. Schuyler was mature, and had a large store of recollections of the past of American architecture. He was dominated, as Mr. Sturgis was, and all serious students of architecture were at the time, by the return which the civilized world was making to the method, the truth and the genuineness of medieval work. Everyone read Ruskin's books, which, with all their faults, had the heart of the matter in them; many passed on to the stronger scholarship of Viollet-le-Duc and the medievalists of France and Germany. The book of 1892 is full of the pleasant and human phrases of the day, which express the conviction that architecture, after all, is building, and that the verities of construction are fundamental to the normal development of style.

The medieval doctrine of that or, rather, of the previous period always tempered Mr. Schuyler's judgment, and made him amiably antagonistic to the results of the teaching of the classic school.

Since the publication of Mr. Schuyler's book in 1892, American architecture has expressed itself in a large way. It has been mainly classic, and true to the modern Parisian standards, and seems now to be making a healthy return to the arrested Colonial period.

In Notes and Comments of the Architectural Record for March, 1906 (vol. xix), there is an article by Mr. Schuyler on the "Education of a Colonial Carpenter," which is probably the only general treatment of this subject. It is invaluable as a sketch of the development and sources of culture of the people who executed the fine old American buildings, and leaves in the mind of the reader a keen regret that instead of two pages and a half of fundamental material Mr. Schuyler was not permitted to develop his information in a good octavo volume, which may now never be printed.

Farther treatment of the Colonial period is to be found in the "History of Old Colonial Architecture" in volume iv of the Record (1894-1895), the "Restoration of Fraunces' Tavern" in volume xxiv (1908), and "The New York City Hall" in volume xxiii (1908). An excellent example of the service which Mr. Schuyler was capable of rendering is the series of articles contributed to the American Architect in 1910 and 1911, en-
titled the "Old Greek Revival." This movement, based on Stuart and Revett's "Antiquities of Athens," which affected the entire civilized world in the early part of the nineteenth century, was most gratefully assisted by the excellent men who had been brought up on similar Colonial traditions. The list is headed by Benjamin Henry Latrobe, who is followed by Robert Mills, William Strickland, Charles Bulfinch, Ithiel Town and other clever practitioners of the time. In his treatment of this important period Mr. Schuyler is almost as sympathetic as he is in the discussion of the work of his contemporaries of the later Eidlitz period. Under his guidance one becomes enthusiastic about the Greek Revival, and is surprised to discover how valuable it is with its many fine monuments, and much good work, from the Treasury Building in Washington to the little New England churches with their wooden Doric columns.

Here again we have a sketch, suggesting a volume which Mr. Schuyler alone might have written.

There is danger of forgetting the excellent men of the generation between the Colonial and Greek Revival days and the modern, from whom Mr. Schuyler received his predispositions, and to whom he was especially loyal. He knew well Eidlitz and Renwick, Upjohn, Cady, Potter, Congdon, Wight, Harned and others; sound men of medieval training who have left good Gothic monuments in many large Eastern cities. The chief of this school was probably Leopold Eidlitz. In volume xxiv (1908) of the Record is a series of three articles by Mr. Schuyler on "A Great American Architect: Leopold Eidlitz" which reveals not only a great architect but a great critic as well. The career of Leopold Eidlitz culminated in his additions to the Capitol at Albany and especially in the Assembly Chamber. In this work he was associated with as interesting a group of men as ever were brought together in the construction of any American monument; William Dorsheimer, the Lieutenant-Governor of New York, Henry Hobson Richardson, William Law Olmstead and William Morris Hunt, the master painter, whose two lunettes on the north and south sides of the room were the most notable, as they were the earliest mural paintings of high quality in America. There are several records of this coterie, but the best is that of Mr. Schuyler, who was present at many of their conferences.

In his two articles on the Romanesque in New York and in America, published in the first volume of the Record (1891), he develops the thesis that there were "strong men before Agamemnon, and that Romanesque was not unstudied or unknown before the introduction of what everybody who is at all interested in this subject recognizes as the Richardsonian Romanesque." Appreciation of the round-arched styles came naturally at the end of the medieval movement to which we owe so many good Gothic buildings in the periods before and immediately after the Civil War; and the same men who accomplished sound results in the Gothic style were interested to rehabilitate the style from which Gothic architecture sprang. Mr. Schuyler mentions these earlier men, and discusses their work with evident sympathy. The list is headed by Leopold Eidlitz with St. George's Church and the Old Produce Exchange, in New York, and the Academy of Music, in Brooklyn. Eidlitz is followed by Renwick, Harney, Potter and others. Richardson was a great architect, certainly, but his towering personality was the major element in causing his success. Many of the leading architects of the day essayed the Romanesque style under his inspiration. How successful they were at times we may see in Mr. Schuyler's article and in the plates of the "New York Sketchbook of Architecture" (1874-6).

Richard Morris Hunt, the brother of the painter William Morris Hunt, and perhaps the largest figure in the history of American architecture, was of the generation of Eidlitz, Renwick and Upjohn; but as his training was thoroughly French and his convictions entirely in line with the conventions of classicism,
he is better placed with the later generation, which was evolved from Parisian training. It is characteristic of the loyal Americanism of Mr. Schuyler and of his sound medieval convictions that his appreciation of Hunt, expressed in his article in volume v (1895-6) of the Record, is not as keenly felt as is the treatment of Eidlitz and his work in volume xxiv.

Mr. Schuyler regrets in his amiable way that Hunt did not remain in America to assist his contemporaries in their attempts to revive medieval architecture.

The World's Fair at Chicago was the formal introduction of the new school of architects, who, trained in Paris, have done so much to bring us into sympathy with the École des Beaux-Arts.

Most of us have now pinned our faith to classicism in some form, and swear by Piranesi; but to all this Mr. Schuyler was temperamentally antipathetic. He treats the wonderful Chicago ensemble of 1893 in a characteristic manner; generously conceding the splendid results, but pleasantly suggesting the doubt, whether, after all, the result of this vast experiment will be permanently beneficial. We have gone far enough now with the classic movement to begin to consider whether our kind friend had not some reason for his fears.

The main interest in Mr. Schuyler's work centers in his large grasp of the principles and record of architecture in America. Within the limits of this article it is only possible to show the splendid sketch which he has left, and to express the deep regret that there is no hand with sufficient cunning to raise the pen which he has laid down.

How broad Mr. Schuyler's work really was, how keen his interest in the busy men of his time, may be learned from the bibliography, probably imperfect, which we are able to append.

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POST-ROMAN ARCHITECTURE.

By Montgomery Schuyler.


The student may not at first sight see the use of a new history of Byzantine and Romanesque architecture, so thoroughly have the styles that arise respectively from the division and from the disintegration of the Roman Empire been explored and explained already. But he finds that the present author has qualifications for his task which in their combination are peculiar. In the first place, he is a practical architect, which by no means every one of his predecessors has been. This means that he looks for his explanation of architectural forms where the origin of every true architectural form must be sought, in the practical problems of construction and the manner in which building materials are put together. In the next place, he is a scholar, who is capable of reading in the original tongues the history of the times and places in which his chosen architectures arose, and enough of a philosopher to apprehend the meaning of the political and religious movements, an understanding of which is as necessary to an appraisal of the monuments as is an understanding of the technical elements. In the third place, he is a traveler who has personally visited by far the greater number of the buildings he describes, and withal an excellent draughtsman, who can not only record the actual aspect of those buildings, but can make his pencil illustrate and emphasize the points made by his pen. The use of photographs is reduced to the minimum in the illustrations, to the comfort as well as to the enlightenment of the reader, who finds welcome the showing that the art of sketching is not and cannot satisfactorily be superseded by the camera. With such an equipment the author has produced a work which may be read with interest and profit even by the student who is most familiar with the wide field which he has taken for his province.

It is marvelous how the ruins of the Roman Empire underlie modern civilization in almost every phase. The succession is nowhere clearer or more important than in architecture. Byzantine and Romanesque are two divergent streams flowing from a common source. To be sure, the common source, when it is traced, is found to be Athens rather than Rome. It was from Athens that the Roman builders derived the decoration with which they overlaid the construction derived from their native Etruscan, insomuch that in the most ambitious monuments of the Empire there remains a contradiction between structure and decoration which justifies us in calling it a hybrid architecture. Yet from the Renaissance until the nineteenth century, or at least until the exploration and measurements and drawings of Stuart and Revett were published in the latter part of the eighteenth, the mixed Roman architecture was held to be pure and perfect and its remains were held up to the student as models, as indeed they continue to be even yet.

It is strange that we should be able to identify the very building in which each of the two divergent streams had its origin. No doubt there were domed churches in Asia Minor before St. Sophia. We are always to bear in mind the truth expressed by Mr. Statham in his recent "Short His-
tory of Architecture," that no building which deserves to be called a monument was ever erected except in succession to something less complete and successful which had preceded it. If Justinian's architects, who began the church and carried it to completion within six years (A. D. 532-537), had had no precedents, they would have worked a unique miracle. They came as near it as is permitted to mortals, in producing at a single stroke, a building which is still accepted as the model of its style, and which alone in the world has been in constant use as a place of worship, Christian or Mahometan, for fourteen centuries.

Viollet-le-Duc insists that the Byzantine architects were really "Greek Revivalists." It is likely that Greeks were employed in Imperial Rome itself to design the detail of the decorative trellis of the orders with which the arched structure of the Roman engineers was overlaid. But it was the engineer and not the decorator who was the real architect. At Constantinople the two capacities were united in the same person, as they always must be if anything lasting and vital is to result. The artist in the age of Justinian applied himself to rationalize and refine the expression of the arched construction, just as in the age of Pericles he had applied himself to rationalize and refine the expression of the construction of column and lintel. As has been said, the hybrid Roman architecture was a fetish from the fifteenth century to the nineteenth. Gibbon, writing in the middle of the eighteenth, remarks of Diocletian's palace at Spalatro, on the eastern shore of the Adriatic, erected early in the fourth century, that "we are informed by a recent and very judicious traveler that the awful ruins of Spalatro are not less expressive of the decline of the arts than of the greatness of the Roman Empire in the time of Diocletian," the recent traveler being very likely Adam, whose "Dalmatia" was published in 1764. In fact what in the eyes of the purists of that period constituted the decline of architecture exemplified in this edifice was that it disregarded the conventional hybridization of the Imperial Roman architecture and undertook to disengage its elements and rationalize its construction. It was the earliest building, according to M. Choisy, quoted in this present work, in which the column, in place of overlaying an arched wall with its accompanying entablature, was made to fulfill a structural function by actually supporting the arch, and a colonnade was made to carry an arcade. That rationalization of the combination of column and arch was the beginning of Romanesque architecture, and of the decline and fall of what Gibbon calls "the arts," but what Freeman, taking the bull by the horns, as usual, more accurately describes as "the Classical or Transitional Roman," which, in fact, it was.

Bearing in mind Mr. Statham's useful admonition, we cannot regard Sta. Sophia itself as springing like a Minerva full-armed from the brain of its progenitor, nor even the Byzantine style, of which it was the culmination, as original in the sense of being underived. The origin of the domed style, that is of the true dome as a circular superstructure on a rectangular base, is doubtless to be sought in the remains of the Sassanians in Persia. Except for containing this germ, those remains are of comparatively little architectural importance. It yet appears that it was from Persia that the domical construction made its way northward to Asia Minor and the European mainland. It almost equally appears that the Eastern Empire repaid its debt with interest in furnishing the model which afterwards became that of the Mahometan mosque. Although Sta. Sophia was nine hundred years old when the capture of Constantinople converted it from a church into a mosque, there was no such sense of incongruity on the part of the new worshippers as would have been incurred if it had been a Gothic instead of a Byzantine church. They found themselves quite at home in a building which had so much in common with the mosques of Egypt, of Spain, and of India, that it may well have seemed, and indeed may well have been, their prototype. For it is to be remembered that Sta. Sophia was completed before Mahomet was born. The Arabians had built nothing at home. When they began to rear monuments they were compelled to go abroad for models. As Carlyle has it, within one century after Mahomet's death, "Arabia is at Grenada on this hand, at Delhi on that: glancing in valor and splendor and the light of genius. Arabia shines through long ages over a great section of the world." Of the monuments of this Arabian architecture, at least of the domed monuments, while the germ came from the Persia of the Sassanians, in itself "post-Roman," the unequalled development of it at Constantinople may well have been brought to the notice of the Saracenic dome builders, and Sta. Sophia may be considered the ancestor of the Taj
Mahal as well as of St. Mark's at Venice. Byzantine made its way as far westward as southern France, where the domes of Perigueux are reminders of the Byzantine plan, and all the famous Provençal churches of Byzantine decoration. The style has special claims on American attention, since the detail of "Richardsonian Romanesque" is essentially Byzantine, while the plan of the Byzantine domed church has commend¬ed itself as more available than the plan of the "long drawn aisle and fretted vault" of the pointed Gothic for the purposes of a modern Protestant "auditorium church." Interesting essays have been made toward its adaptation to these uses, one of the most interesting being the admirable St. Paul's Chapel of Columbia University.

The history of Byzantine and Roman¬esque between them comprises the history of arched architecture, as that of the classic styles the history of columnar architecture. As our author puts it, "the vault is only the arch prolonged sideways, and the dome is the arch rotated on its axis." If the de¬tail of the chapters devoted to Roman¬esque are, upon the whole, of a less fresh and lively interest than those of the chap¬ters given to Byzantine, it is in part because the subject has been so thoroughly discussed by previous writers, and in part because it is, at least in some of its phases, of less intrinsic interest. Mr. Jackson ad¬mits that the "early Christian" architecture of churches of which the plan is derived from that of the Roman basilica, and in which the ambition of the builders did not go beyond roofing with timber a nave of moderate span, with a flat ceiling hung from the roof-timbers, makes a rather tedious and monotonous story. The most interesting of the churches of the early Romanesque in Italy are those which owe much of their interest to the influence exerted by the Byzantine architecture upon their detail and decoration. When the Romanesque builders had their ambition aroused to the point of covering, first the aisles and ultimately the nave, with a fire and time-proof ceiling of masonry, when they really tackled a new problem, then indeed the recital of the difficulties they encountered and of the devices they em¬ployed to overcome those difficulties be¬comes of great and increasing interest. Their efforts culminated in the groined vaulting of the thirteenth century, with its buttress system. But the expression of the resultant works was so entirely different from that of the preceding monuments of the Romanesque that that very judicious critic, Mr. W. P. P. Longfellow, has de¬liberately omitted Gothic from his consid¬eration of "The Column and the Arch" as being "out of line" with the general archi¬tectural development. Indeed, what may be called a Gothic development of the buttress system is as applicable to the domed as to the vaulted construction. Mr. Jack¬son points out that the huge outlying piers which take the thrust of the dome of Sta. Sophia are in their function flying but¬tresses. It would be most interesting to watch the progress of an effort to develop and refine what the Byzantine builders left as brute masses, in the spirit of the Gothic builders who insisted upon expressing and expounding every structural expedient they found themselves compelled to employ. But this achievement seems to have been left to the modern architect who busies himself with the revival of Byzantine, and if Byzantine comes into use for the pur¬poses for which it is "indicated," some revivalist may have courage and ambition enough to attempt that task.

However all this may be, Mr. Jackson's account of the Romanesque is as intelligent and as intelligible as his account of the Byzantine. There can be very few students who will not learn from his clear explana¬tions more than they knew before about the relations of the Romanesques of Vene¬tia, of Lombardy, of the Rhine, of southern France, and of northern France, whether in Normandy or in England. It is a book for which both students and practitioners have reason to be grateful.
Little has been said of late, for some unexplained reason, regarding the advantages or disadvantages of the adoption of some general practice to regulate the signing of buildings by their designers; but the subject is far too important to be dropped before a final decision is reached. While everyone acknowledges that a building is often as great a work of art as any painting or statue, it unfortunately remains that, although the latter are invariably signed, and a record of their creator thus assured, it is an entirely different matter when one wishes to ascertain the name of the designer of even comparatively recent buildings. Experience has shown that the best obtainable tradition in the case of designers is often unreliable when it relates to the work of even fifty or a hundred years ago.

Errors in attribution are due to a number of causes, among which are common carelessness or mistakes; but they are more often caused by family pride or the desire to connect one's property with some great name. A New York architect, not long dead, whose work had received nationwide recognition, was once walking through a side street in a large city and saw a recently completed residence that greatly interested him. Imagine his surprise, upon asking the name of the architect, at being given by one member of the family his own name as designer!

Instances of this kind are not rare and many well known designers are credited with much work totally unknown to them and to which they have no possible claim.

A case in point is the New York City Hall, built between 1802 and 1812, and of which a French architect named Mangin was the designer. It would seem that in this special case, the traditions are of a kind that no possibility of error would be imagined. But in spite of this, or because of it, a New York architect has found it necessary to spend some four years of careful and expensive research to substantiate with documentary and other contemporary evidence the fact that Joseph F. Mangin, and not John McComb, was the real designer of the City Hall, in spite of all family traditions in favor of McComb, to the contrary. With buildings, either American or foreign, of more remote periods the problem becomes, of course, a far more serious one.

Other precedents for an inscription stating the architect's name, and the date of erection, than the already well known arguments are hardly necessary, but an interesting example of the practice of "signing" among early architects is found in the following extract from "The Diary of John Evelyn, Being a Part of His Account of a Visit to Calais in November, 1640": "I remember there was engraven in stone on the front of an ancient dwelling which was shew'd us, these words in English, 'God save the King,' with the name of the architect and date."

John Evelyn has passed away these many years and the house he mentions has probably "gone to dust" as well—even his "Diary," his work on "British Architects," and his "Treatise on Gardening" are all but forgotten. But architects should appreciate his record of this bit of the architectural practice of the "good old days." The only possible fault that one could find with his account is that he did not record for us the name of that long gone English architect.
GOVER—Garden Detail, Residence of G. E. Proctor, Esq., Great Neck, L. I.

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WEST FRONT OF SHADOW LANE, RESIDENCE OF C. E. PROCTOR, ESQ., GREAT NECK, L. I.
LITTLE & BROWNE, ARCHITECTS.
THE MODERN COUNTRY HOUSE is a many-sided phenomenon. It is full of lessons for the observant student of men and things. It has become a vital element that must be reckoned in the scheme of our national life. In its several stages of past development it offers an epitome of the contemporary life of the nation, social, economic and artistic. In its current aspect it is indicative of important tendencies or accomplished facts that no intelligent person can afford to ignore—certainly, at least, no architect, no prospective home-builder, or present owner, and no well-informed observer who pretends to understand the vital conditions of his environment.

Various types of country houses exemplify different phases of this social or architectural tendency and development. The five following groups, ranging in character from the extensive establishment of formal port and elaborate equipment down to the modest and informal farmstead, have therefore been chosen to illustrate certain significant points from which the reader may either deduce conclusions or derive suggestions to be adapted according to his bent.

Within the past two or three decades the aspect of suburban America has undergone a complete change. The chief visible factor in effecting this revolution in the face of the land in the neighborhood of cities, and partly, also, in purely rural districts, has been the country house, the country house of the city family or the family whose interests and associations are chiefly with the nearest urban centre. During the progress of this evolution, the dwelling of the farmer has sunk into insignificance by comparison with the abode of his newer neighbor whose usually more abundant income is derived from other sources than tilling the soil.

The American country house, therefore, as we ordinarily think of it, is a distinctly modern institution. Its predecessor of Colonial and post-Colonial
days once made an impressive and worthy showing in the vicinity of our older cities, but the march of civic growth has swallowed up nearly all examples of this type so that they are now scarcely more than a negligible quantity. The major part of the nineteenth century was not prolific in the production of notable country houses and such survivals as we have from that singularly jejune and uninspired architectural epoch were best passed by without too close scrutiny.

The modern country house, then, the country house of a general type whose first representatives began to appear in the late ’80s, is an independent architectural manifestation, begotten and fostered in its growth largely by economic causes, and the course of its development affords an illuminating commentary on all the tendencies of the period, social and economic as well as architectural. Judged by the standards of today, the early essays in modern country house architecture were often bizarre, fantastic and crude and, while they usually achieved a goodly measure of solid comfort, their aspect, according to present estimation, was not infrequently gingerbreadly and sometimes deliberately "stunty."

Thanks to the steady and rational progress in architectural insight, along with a concurrent advance in sound judgment and improvement of public taste in such matters, and the consequent elimination of the frivolities and shortcomings of an earlier era, the later fruition of country house design, as evidenced in the performances of more recent date, is rich with promise and gives much ground for just satisfaction and pardonable pride. A critical examination of sundry phases of essentially modern work presents numerous points of significant interest and reveals the operation of principles and tendencies whose existence it is important for us to realize.

In the first place, the marked increase in the number of country houses within the past few years is indicative of a steadily growing movement away from the cities as permanent dwelling places for a substantial portion of every large urban community. Although these country house dwellers fully retain all their intimate city associations, in both business and social respects, they go out of town earlier and come back later every year and the period of boarded fronts or pulled-down blinds in the well-to-do residence sections grows longer each season. The business or professional man finds it desirable for the greater part of twelve months to pursue his vocation in the city but sleep in the country. In actual practice it usually works out that he concentrates his hours of close application, does as much or more work in a shorter time than formerly and spends a longer time at his home in wholesome outdoor recreation.

In not a few instances the "back to the land" movement has been exemplified in good earnest where families, after some years of periodic moving in and out of town, have found their country places so alluring that they have elected to stay there the twelve months through and find no inconvenience in so doing so long as access to the city is sufficiently easy and expeditious.

Neither of the foregoing conditions could have been possible of realization unless the country house had achieved a far higher stage of development than it showed fifteen years ago. The improvement in country house architecture, therefore, has been directly responsible, to a great degree, for two things—a more wholesome and agreeable mode of life for a great many people and a vast extension of spheres of urban influence.

The establishment of these country places ordinarily involves a considerable expenditure in the first instance and the upkeep entails no small periodic outlay. The large and always increasing number of country houses denotes, in the first place, a marked growth in general opulence and national prosperity. The more imposing places can only be created by means of vast wealth and for the average places comfortable affluence is a sine qua non. In the second place, the prevalence of country houses of all types denotes a common willingness to spend money for things worth while to
WEST FRONT—RESIDENCE OF C. E. PROCTOR, ESQ., GREAT NECK, L. I.
LITTLE & BROWNE, ARCHITECTS.
THE WEST PATH - RESIDENCE OF C. E. PROCTOR, ESQ., GREAT NECK, L. I. LITTLE & BROWNE, ARCHITECTS.
WEST WALL OF THE STUDIO—RESIDENCE
OF C. E. PROCTOR, ESQ., GREAT NECK,
L. I. LITTLE & BROWNE, ARCHITECTS.
RESIDENCE OF C. E. PROCTOR, ESQ., GREAT NECK, L. I.
LITTLE & BROWNE, ARCHITECTS,
reap the enjoyment from them and it also betokens a more genuine appreciation of country life and outdoor pursuits than was characteristic of an earlier epoch.

Incidentally the country house has wrought a change in social ideals and manner of living and brought in methods approximating those of the English country gentry. The proper maintenance of a country house necessitates a larger corps of servants than the town establishment of a family in like circumstances. The whole scheme of housekeeping is altered and often becomes more elaborate. Furthermore, entertaining is done in a different way and is apt to be on a different scale.

The beginning of this new country house phase of American life was made possible by the development of the suburban service of the various railroad systems. The evolution and expansion of this service has brought tremendously wide areas within the suburban zone which sometimes has a radius extending fifty miles or more from the civic centre. The work begun by the railroads has been perfected by the automobile and every portion of the country rendered readily accessible. So much for the purely social side of the development in which the country house has been so important a factor.

No discriminating observer can compare the earlier manifestations of the modern country house with those of later design without being forcibly struck with the frequent gaucheries and awkwardness on the one side and on the other the poise, the urbanity and well-mannered freedom from conscious ostentation that characterize recent structures in which purity of line, straightforwardness of plan and the frank accommodation of design to requirements have been held of chief consequence. Results all point to a sound trend and growth of public taste.
There is a type of country house more frequently found in Long Island than elsewhere, and particularly on the rolling, wooded sites of the North Shore, that combines every essential of comfort and elegance, and, at the same time, escapes the pretentious and almost palatial aspect that often stamps the large country house in some other parts of the country. To represent this type two houses have been chosen, one at Great Neck, designed by Messrs. Little and Browne, and the other at Glen Cove, designed by C. P. H. Gilbert, with interiors executed by William Chester Chase.

Shadow Lane, at Great Neck, the estate of C. E. Proctor, Esq., is agreeably situated on a well timbered site overlooking the Sound. On the east the land from the gate to the house is perfectly level while from the west front it slopes gently to the edge of a low bluff overhanging the water. A location more amenable to the purposes of the architect it would be hard to find. Every natural advantage of situation, pleasant outlook, water and woodland was present.

Shadow Lane began existence as an old shingled house, which was built around and gradually added to until it assumed its present aspect. Structurally
THE STUDIO—RESIDENCE OF C. E. PROCTOR, ESQ., GREAT NECK, L. I. LITTLE & BROWNE, ARCHITECTS.
it lent itself admirably to adaptation, so much so in fact that its original semblance soon disappeared in the practically new and far larger building of which it formed the nucleus. As Shadow Lane stands today the forecourt and entrance are on the east front, approached by a straight drive. The house door opens directly into a spacious living hall which extends the full depth of the house and has a length several times greater than its breadth. Directly opposite the entrance another door opens upon an arched loggia, beyond which is a broad flag-paved and balustraded terrace with a fountain at one end.

A suite of rooms opening from the north end of the living hall contains, among other apartments, the breakfast room and the dining-room, which in size is more like an old manorial banqueting hall. The breakfast room, with its Italian atmosphere, serves as a fitting antechamber to the dining-room where one finds a wealth of Renaissance color and detail. The most striking single feature is the massive but graceful Caen stone overmantel of the period of Francis I. The floor is paved with small quarry tiles. Old doors with richly painted panels add a pleasing note of color and interest while the beamed ceiling is embellished with a polychrome decoration of fruits and flowers.

At the south end of the living hall one passes into a music room and thence into the studio, which is quite the most unique feature of the house. Its inspiration came from a room in the Cluny Museum and how faithfully the spirit of the prototype has been followed the illustrations will show. It is deeply interesting in both structure and design. The walls and groined vaulting of the roof are apparently of stone. In reality they are made of concrete so ingeniously manipulated that the closest scrutiny is necessary to detect the difference in substance.

Many, doubtless, will object to this treatment as a piece of deception, making the walls appear like what they are not. It may be said in reply that the owner, who, by the way, is directly
WATER FRONT OF SHADOWLAND, GLEN COVE, L. I.
C. P. H. Gilbert, Architect.

PIAZZA AT SHADOWLAND, RESIDENCE OF DR. J. C. AYER, GLEN COVE, L. I.
C. P. H. Gilbert, Architect.
FIREPLACE IN LIVING ROOM—RESIDENCE OF DR. J. C. AYER, GLEN COVE, L. I. C. P. H. GILBERT, ARCHITECT. INTERIOR ARRANGEMENT BY W. C. CHASE, ARCHITECT,
LIVING-ROOM—RESIDENCE OF DR. J. C. AYER, GLEN COVE, L. I. C. F. H. GILBERT, ARCHITECT. INTERIOR ARRANGE- MENT BY W. C. CHASE, ARCHITECT.
CORNER OF LIVING ROOM—RESIDENCE OF DR. J. C. AYER, GLEN COVE, L. I. C. P. H. GILBERT, ARCHITECT. INTERIOR ARRANGEMENT BY W. C. CHASE, ARCHITECT.
responsible for this piece of work, spent far more time and effort in securing the desired effect, with all its irregularities of spacing and color, than would have been required to construct the same building five times over in stone. However one may view the matter on the score of aesthetics, it must be admitted that the result achieved opens up a new way of avoiding a bald and repulsive concrete surface, the only drawback being the difficulty, one might almost say the impossibility, of ever attaining a thoroughly satisfactory effect when such work is done on a purely commercial basis.

Some readers will doubtless unfavorably criticise the unmistakable mediaeval and early Renaissance proclivity manifest in the general conception of the studio. They will insist that it is unsuited to the genius of the modern American house, that it is, in short, un-American. These same ready critics, if closely pressed, might find it difficult to define exactly what is suited to the genius of the modern American house or to state what is American, once they pass beyond the bounds of either early Colonial or Georgian precedent. The truth of the matter is that the test of fitness for modern American use is to be found in the way a mode of architectural expression is employed rather than in the mode itself. The surest guide to judging architectural fitness will lie in cultivating a reasonable sense of discrimination and the ability to recognize and sift out the truly vital qualities.

To return once more to the specific instance of the studio at Shadow Lane which provoked the foregoing discussion, it is well to remember that we are not all mentally constituted alike and that individual taste is largely due to individual mental bias. The purely romantic type of mind, with its strong predisposition to mysticism, will always respond to the appeal of all that is in any degree mediaeval, whether in philosophy, religion or art. The classic type of mind, on the other hand, will be totally out of sympathy with what is dear to the romantic type. Just now there is a rather preponderating inclination towards the classic ideals. The studio at Shadow Lane, with its strongly romantic note, comes, therefore, as a timely variant and tonic in an era of classic modernism or modern classicism, whichever way one wishes to put it. It is due to say that it is exceedingly well and consistently executed in every particular.

In the exterior, which is of later period, a harmonious treatment has been skillfully observed which ties it satisfactorily to the rest of the house. The general French tone of the composition with the Norman candle-snuffer turret roofs is both distinctive and satisfying. The dormers have been so managed that they accentuate and add charm to the mass lines of the structure and their presence is a positive gain to the general good effect rather than a detriment, as it is so often apt to be. In the use of simple but striking details of design and the employment of treillage the architects have contrived to impart an unusual degree of interest to the exterior walls of stucco, a material that is too often allowed to be barren of charm.

The other Long Island house, at Glen Cove, also presents a stucco exterior, but quite different in texture and general aspect. Not dominated by any single set of architectural affinities, the structure shows a successful composite of several styles and in the blending maintains a satisfactory degree of individuality. The wall surface is especially worthy of note. Apparently the floats have been pulled straight away from the wet stucco, the suction producing sufficient roughness to create the relief of shadow and impart an agreeable texture.

The interior is equally composite in character and even more urbane in result. In the first floor plan everything is subordinated to the great living hall which occupies by far the largest portion of the water front. Any house, particularly any large house, presents problems in furnishing that must be carefully solved if justice is to be done the house itself. At Shadowland the arrangement of the rooms was entrusted to William Chester Chase, architect. This was but one instance of a practice now of common occurrence, a practice that has much to be said in its favor.
THE DINING-ROOM—RESIDENCE OF DR. J. C. AYER, GLEN COVE, L. I. C. P. H. GILBERT, ARCHITECT. INTERIOR ARRANGEMENT BY W. C. CHASE, ARCHITECT.
HERE is a time for all things and a place for all things, and there is a place for formality in the plan and general arrangement of certain types of American country houses and their settings, notwithstanding the fact that the note of informality is more usually emphasized instead. In some cases the proportions and plan are such that a house must present some measure of formality in order to maintain its dignity, while again, in other instances, the natural character of the site seems to invite or even compel a formal treatment. There are other circumstances also under which formality is called for, but the two following cases serve to illustrate the formal phase of domestic architecture sufficiently for the present purpose. The one house, Sunset Rock, by Messrs. Little and Browne, is at Prides Crossing, on the north shore of Massachusetts, and the other, by Charles Barton Keen, is Chestnut Wold Farm, at Devon, Pennsylvania.

At Sunset Rock the site presented two alternatives. The surroundings could either be left in native savagery and rugged wildness or else a portion of the immediate setting for the house could be transformed into a striking piece of formal arrangement—such was the lay of the land—while the rest, by way of contrast, was allowed to continue in its original untamed state. The latter alternative was chosen, so that the house and
SEA FRONT—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS.
Little & Browne, Architects.

TERRACES—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS.
Little & Browne, Architects.
FORECOURT—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS.
Little & Browne, Architects.

TRELLISED WALL OF GREAT ROOM—RESIDENCE OF W. S. AND J. T. SPAULDING.
Little & Browne, Architects.
SIDE DOOR—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS.
Little & Browne, Architects.

GARDEN DETAIL—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS.
Little & Browne, Architects.
TERRACE AND POOL—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS. LITTLE & BROWNE, ARCHITECTS.
its immediate environment had to be moulded into one congruous whole.

The result achieved is a conspicuous justification of the policy of having the architect not only design and supervise the erection of a house, but create the setting as well, or, at least, collaborate with a landscape engineer. Many a really good house misses half the distinction that of right belongs to it merely for lack of some unity and consistency of a general creative scheme embracing the most suitable treatment of the grounds as well as the design of the structure itself. The thoroughly successful house will be in accord with its setting and grow out of it and this desirable combination rarely occurs by chance, particularly if there is any attempt at formality, when the architect's work is terminated with the dismissal of the last mechanic.

A high bluff overlooking the water gave an opportunity for an impressive flight of terraces descending from the sea front of the house, leaving the forecourt and the house door on the opposite front facing the approach. The formal symmetry of these terraces on the sea front has given numerous invitations for interesting treatment of a decorative nature, particularly in respect to the placing of oil jars and urns or appropriate bits of sculpture. The sunk gardens flanking one terrace level contribute not a little to the striking composition.

In other parts of the grounds the arrangement of architectural features in connection with pools, terraces and arbors serves to carry out the formal tone impressed by the elaborately tiered sea front, while to one side of the house, where a steep path descends to the shore and boat wharf, the original wild growth has been left untouched. The balustrades, steps and arbors in the formal part of the garden are architecturally well considered and satisfying and their aspect is aided by the vines and shrubbery which have now had time to grow luxuriantly.

Before passing from the sea front, the observer notes several features with satisfaction, the chiefest of which is that all the architectural geniality is kept for that portion of the structure that is assured of privacy. The element of formality is not one whit abated thereby, for geniality and formality are by no means incompatible, but all unbending from an aspect of general reserve is wisely made in those parts of the house where the view and exposure are most agreeable and where it is reasonable to suppose that the occupants and their guests will spend most of their time. There we see the amenities of loggias, balconies, urned niches and balustraded copings on the wings, which sufficiently conceal without obstructing the dormers—a far better arrangement than the solid copings sometimes used for the same purpose.

The entrance front is fortunately so set that the natural conditions of the site seem to screen the forecourt. The house door is exceedingly dignified and simple in treatment and possesses the merit of not being effusive. An entrance that is duly expressive of hospitality is an excellent feature, but when the air of guarded reserve is sacrificed and it becomes architecturally effusive, it is quite as bad as a gushing stranger, whose sincerity one always mistrusts.

An octagonal, marble paved hall, of thoroughly formal stamp in both architecture and appointments, accords with the spirit of the entrance by presenting an aspect that is gracious but not effusive. At one side of this octagon a doorway opens into the staircase hall, while a corresponding doorway opposite connects with a side hall, giving access to the service department of the household. The note of formality is maintained in the interior plan by the arrangement of the dining room, gallery and drawing room across the whole sea front of the house, the triple arched loggia being in reality but a forward projection at one side of the gallery. The great room, which is interesting for its size, height and general method of treatment, was an afterthought and a later addition, and this fact explains the somewhat awkward approach to it through the billiard room, a mode of access to a room designed for after dinner use that seems a trifle incongruous in a house where formality is largely considered.
In the house at Chestnut Wold Farm the formality is more a matter of moods and inclinations than at Sunset Rock, where the formal note is permanent and indelible. The site of Chestnut Wold Farm does not present such uncompromising natural characteristics as does the site at Sunset Rock. Consequently it has been possible to temper the relations between house and grounds with a good deal of latitude in treatment. Formality and informality melt agreeably into each other without any perceptible line of demarcation. The intimacy between the structure and its setting quite does away with any obvious rigidity.

The mode of architectural expression chosen is thoroughly American in character and recalls the porticoed dignity of a familiar Southern type. The tone of formality is largely due to the extent, regularity and massing of the façade and the classicism of the central pillars and pediment. Something in this respect is also due to the broad extent of balustraded grass terrace extending the full length of the front, for a well placed tapis vert is always impressive in appearance and often serves very successfully as an architectural foil to accentuate the features of a structure.

The interior plan, while providing ample and spacious rooms, is so arranged and so proportioned that one is not conscious of any rigidity of style. Indeed, it is scarcely correct to call formality a dominant characteristic of the house at Chestnut Wold Farm. A more truly accurate term would be stateliness. This seems better to suit the type of mellowed formality expressed there. The contrast between the two houses here considered together is interesting because it exemplifies in one instance the incorporation of a strong Latin element into the architectural manner and its assimilation to American requirements, while in the other the predominating genius is rather of a classicism long naturalized on both English and American soils and there modified by centuries of adaptation to local practical conditions.
GALLERY—RESIDENCE OF W. S. AND J. T. SPAULDING, FRIDES CROSSING, MASS.
Little & Browne, Architects.

DINING ROOM—RESIDENCE OF W. S. AND J. T. SPAULDING, FRIDES CROSSING, MASS.
Little & Browne, Architects.
DRAWING ROOM—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS. LITTLE & BROWNE, ARCHITECTS.
GROUND FLOOR PLAN—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS.
Little & Browne, Architects.

FIREPLACE IN GREAT ROOM—RESIDENCE OF W. S. AND J. T. SPAULDING.
Little & Browne, Architects.
FIREPLACE IN GREAT ROOM—RESIDENCE OF W. S. AND J. T. SPAULDING, PRIDES CROSSING, MASS. LITTLE & BROWNE, ARCHITECTS.
WEST FRONT DETAIL—RESIDENCE OF C. HOWARD CLARK, JR., ESQ., DEVON, PA.
CHARLES BARTON KEEN, ARCHITECT.
WEST FRONT—RESIDENCE OF C. HOWARD CLARK, JR., ESQ., DEVON, PA.
Charles Barton Keen, Architect.

SOUTH END—RESIDENCE OF C. HOWARD CLARK, JR., ESQ., DEVON, PA.
Charles Barton Keen, Architect.
LIVING-ROOM AND GROUND FLOOR PLAN—RESIDENCE OF C. HOWARD CLARK, JR., ESQ., DEVON, PA. CHARLES BARTON KEEN, ARCHITECT.
DINING ROOM—RESIDENCE OF C. HOWARD CLARK, JR., ESQ., DEVON, PA.
Charles Barton Keen, Architect.

DRAWING ROOM—RESIDENCE OF C. HOWARD CLARK, JR., ESQ., DEVON, PA.
Charles Barton Keen, Architect.
HERE is an undeniable fascination in taking an old building and remodelling it, frankly accepting its inherent limitations and making the best of them. Quite apart, however, from the pleasure derived from the stimulus and exercise of ingenuity and the ultimate sense of satisfaction in achievement, there are very substantial and practical reasons for paying due heed to remodelling as a basis for evolving desirable country houses. Oftentimes there are advantages of site and planting that especially commend themselves. Again, old buildings that are structurally sound not seldom afford an exceptionally favorable base to work upon if one is fortunate enough to be able to visualize latent possibilities. Of the two remodelled buildings chosen for discussion, one was an old stone farmhouse at Paoli, Pennsylvania, and was expanded to its present form by Messrs. Evans and Warner; the other was an old barn at Dover, Massachusetts, and was transformed into a comfortable dwelling by Messrs. Kilham and Hopkins.

The barn at Dover had three excellent recommendations in its favor, an exceptionally agreeable site, well grown trees and sound structure. With these three features as a basis of operations, a creditable and roomy country house, as the illustrations show, has been evolved.
Everything was used practically as it stood in the old structure and there has been no radical change. Even the roof, which wears a different aspect from the covering of the erstwhile barn, is really the old roof truncated and the pitch is virtually unaltered.

The old stone wall of the cow yard has been retained to form a clothes drying enclosure. The piazza has been recessed on one side precisely in part of the space occupied by the hay mows in that section of the barn. The gallery running from the staircase hall and living room to the dining room is but the old driveway between the mows. All the old posts and beams have been left undisturbed and are enclosed and disguised in the panelling. All structural supports play exactly the part now that they did when the barn was first erected. The placing of doors and windows has been conformed to these constructive necessities and the result has certainly not suffered architecturally.

Viewed as a whole, the house is straightforward and unpretentious and yet it is by no means lacking in charm. The charm, too, is positive and not of the negative sort that comes from the avoidance of faults that it would have been possible to commit. In every line this reconstructed barn is plainly and unmistakably American. There is no disguising its ancestry. In this frankness and broad simplicity there is something highly pleasing and there is only one serious blemish in the exterior aspect, which, after all, is such an unusual thing that its existence may, perhaps, be condoned on the score of novelty suggested by expediency.

That single blemish is the chimney at the east end of the building. Its foundation is sapped by a window in the second floor and its truncated pyramidal base sits heavily on the eaves, where it seems to have no sufficient means of support. The lines of the base conform to the pitch of the roof. The device has the merit of being unusual and, doubtless, interior conditions demanded both a window and a chimney at that particular spot, so that the solution presented was an ingenious way of having two things occupying the same
GROUND FLOOR PLAN—RESIDENCE OF MRS. GENEVIEVE N. FULLER, DOVER, MASS.
Kilham & Hopkins, Architects.

MANTEL IN DINING ROOM—RESIDENCE OF MRS. GENEVIEVE N. FULLER, DOVER, MASS.
Kilham & Hopkins, Architects.
GARDEN FRONT—RESIDENCE OF MRS. S. BOYER DAVIS, PAOLI, PA.
Evans & Warner, Architects.

FORECOURT—RESIDENCE OF MRS. S. BOYER DAVIS, PAOLI, PA.
Evans & Warner, Architects.
GARDEN FRONT—RESIDENCE OF MRS. S. BOYER DAVIS, PAOLI, PA. EVANS & WARNER, ARCHITECTS.
DINING ROOM—RESIDENCE OF MRS. S. BOYER DAVIS, PAOLI, PA.
Evans & Warner, Architects.

GROUND FLOOR PLAN—RESIDENCE OF MRS. S. BOYER DAVIS, PAOLI, PA.
Evans & Warner, Architects.
Evans & Warner, Architects.

ENTRANCE TO FORECOURT—RESIDENCE OF MRS. S. BOYER DAVIS, PAOLI, PA.

Evans & Warner, Architects.

GARAGE—RESIDENCE OF MRS. S. BOYER DAVIS, PAOLI, PA.
space at the same time. However, one cannot quite reconcile the eye to the effect.

The windows are of generous dimensions and the tops of those on the second floor are wisely kept well up under the eaves. Absolutely in line with the upper windows, and of practically the same proportions, are the apertures of the sleeping balconies. The treatment accorded them is both agreeable to the eye and fulfills hygienic requirements, a feat that is not always achieved in the management of these architectural bêtes noirs.

Inside the house, the gallery that takes the place of the former wagon way is one of the pleasantest features. It is both broad and sunny and, being fully furnished, makes a charming place to sit in winter if one wishes to change from the living room for variety’s sake. Dining room, living room and billiard room are all pleasantly planned and executed and all have good exposures, while the second floor rooms partake of the same general character.

The farm house at Paoli had substantially the same features to commend it for remodelling as the Massachusetts barn. The site on the slope of a hill was peculiarly pleasant, there was old shade and an adjacent orchard, and the structure itself, what there was of it, was staunch and worth making full use of in the work about to be undertaken.

The compass of the old building was far too small, so that it could only be used as a nucleus to start from, but it lent itself well to incorporation in an expanded house and did not impose conditions difficult to be surmounted.

In the present scheme the dining room and hall, and the rooms above them, constitute the entire extent of the original dwelling and the rest of the rooms are in additions built on at each end and at different levels, owing to the contour of the ground. In the course of remodelling the plan of the parent house was wholly revolutionized and a wide fireplace changed around from one side to the other of a high stone chimney.

In the scheme of treatment many local traditions were preserved and were given fresh meaning and renewed vitality. Paoli is in the old Welsh Barony, beyond the borders of Philadelphia, and the countryside is full of local building peculiarities inherited from the early Welsh and English settlers. To mention only a few of these, there are penthouses and hoods over house doors, steep pitched roofs and arched lintels above doors and windows, to say nothing of the strongly individual character of the masonry. Furthermore, there is a practice, sometimes indulged in, of whitewashing the stone walls of farm houses and outbuildings.

In the remodelled and enlarged house
at Paoli we find penthouses, which accentuate the low, horizontal lines of the buildings; a hood over the house door, not, however, of the local traditional shape; depressed arches or arched lintels over triple instead of single windows; masonry laid in the time-honored way; and, finally, a glistening white coat over the stonework. Thus it is plain that the traditions of the neighborhood have been perpetuated and, at the same time, given a new application and combined with new features for which there was no local precedent as, for example, the long, sloping roof above the dining room piazza or the form of the door opening upon the terrace.

A remodelled house is apt to be true to local ideals and free from exotic impress, even though foreign features may be introduced here or there. The old is so marked in type that the remodeler is likely to feel that his pace has been set and his pattern marked out for him. It is then that his skill will be taxed in blending old and new so that, while tradition is not violated, there may be enough originality to give interest. In other words, the remodelled building must not be a slavish copy of something else, but must be free and full of vitality.

The house at Paoli fulfills this condition, for while many departures have been made from the letter of local tradition, it is true to the spirit and it is this quality that makes the incorporation of some pleasing English conceits at the same time so seemly. In the grouping and treatment of the out-buildings, also, not a little credit is due. They correspond in general character with the house and have been so disposed that they add both dignity and pictorial interest to the outlook. The suitable design and placing of out-buildings on country places is a matter of great import and might profitably be more considered than it often is and it is always pleasant to find an instance where due attention has been paid to this requirement, which has so wide a bearing.
The house of Harry L. Rice, Esq., at Dover, Mass., designed by Messrs. Kilham and Hopkins, affords an instructive study in the adaptation of certain English country house principles to the needs of the American country house builder. Adaptation is necessary, for no matter how closely our ways and the ways of our British cousins may resemble each other, it is safe to say that very few American families would find keeping house in a British establishment altogether comfortable and convenient without some preliminary readjustment, and it is quite certain that Britons would wish changes in our domestic order.

Notwithstanding our minor points of difference in household management, however, English country life is of so much longer standing and fuller development than most of our own that we are fain occasionally to draw bits of domestic architectural inspiration from across the water. The house at Dover exemplifies a rational manner of drawing from English sources without compromising our own national identity or jeopardizing the title to originality. As in many of the modern English country houses, Beaux-Arts conventions and rigid rules of axes have been cast to the winds and, in an independent spirit of freedom, the claims of expediency or of personal inclination have been heeded rather than stereotyped principles of classic balance and precision.

It is rank heresy, of course, in the eyes of many excellent people, both architects and laymen, to utter a word of cavil or dissent regarding Beaux-Arts proprieties, but, all the same, two facts confront us that must be reckoned with by all who keep their eyes open and think about what they see—first, those who follow with slavish zeal the carefully polished and precise precepts of present fashionable architectural orthodoxy are doing some deadly dull work, correct, to be sure, but quite without real vital interest or spark of originality; second, in domestic designing, the British architects who refuse to be bound by dead scholastic proprieties and, daring to think for themselves, have cast off the trammels of convention, have scored some of their greatest successes and that without making their work freakish. In large public work American architects far excel them, and that the English frankly admit, but in domestic architecture there is much that we may learn from our British cousins.
HOUSE DOOR—RESIDENCE OF HARRY L. RICE, ESQ., DOVER, MASS. KILHAM & HOPKINS, ARCHITECTS.
STAIRCASE—RESIDENCE OF HARRY L. RICE, ESQ., DOVER, MASS. KILHAM & HOPKINS, ARCHITECTS.
GALLERY—RESIDENCE OF HARRY L. RICE, ESQ., DOVER, MASS. KILHAM & HOPKINS, ARCHITECTS.
HOUSE OF HARRY L. RICE ESQ.,
DOVER, MASS.
KILHAM AND HOPKINS Architects

FIRST AND SECOND FLOOR PLANS—RESIDENCE OF HARRY L. RICE, ESQ., DOVER, MASS. KILHAM & HOPKINS, ARCHITECTS.
DINING ROOM — RESIDENCE OF HARRY L. RICE, ESQ., DOVER, MASS. KILHAM & HOPKINS, ARCHITECTS.
It was in this modern domestic British attitude of open-mindedness that the problem of the Dover house was approached. There was a site near a hilltop, there was an especially fascinating view in one direction and there was the fact that the sun rises in the east and sets in the west which caused certain preferences in the matter of exposure. These with some less basic but, nevertheless, important requirements supplied the premises on which to work. The solution of the problem brought a structure shaped somewhat like an irregular Y, not unsymmetrical but with ells and wings running off at obtuse angles, wherever there was any occasion for them to do so, to catch the sun or command a view or the like. The result is both satisfying and reasonable.

Monotony, the usual menace to the wall interest of the modern concrete or stucco house, has been wholly avoided by the judicious use of iron balcony railings, by countersunk, round-headed panels above the first floor windows, by treillage, door-hoods and penthouses, all of which contribute the relief of contrast, line and shadow.

Fenestration has been so dealt with as to ensure the greatest interest—French windows of ample dimensions for much of the ground floor and, on the second, wide, generous openings whose tops are just beneath the eaves cornice. The apertures of the sleeping balconies correspond with the window lines.

The house door opens into a broad hallway, flanked by twin staircases ascending to a junction at a landing. Critics with an obsession for space saving and heating the greatest possible cubic area with the least possible consumption of fuel, will object to this arrangement, on the score of waste room. In fact, one person of that ilk made exactly that criticism to the writer. But why stint room when there was no object in doing so? There was the whole countryside, so why work under constraint and spoil good effects by cramping? From the broad space at the stairs a long, and also wide, gallery starts at an oblique angle and runs nearly the whole length of the west front opening, at the farther end, into the living room, which is likewise set at an angle. Again the obsessed critic exclaims at the loss of efficient area due to long galleries and wings set anglewise; and again he must be reminded that, whatever the chief end and aim in planning a country house may be, it is assuredly not to attain the maximum of compactness at all costs and wring the highest degree of area efficiency from each square inch of brick or mortar. That is an engineer's job.
LOGGIA—RESIDENCE OF J. GRANT FORBES, ESQ., DOVER, MASS. JAMES PURDON, ARCHITECT.
EAST FRONT—RESIDENCE OF J. GRANT FORBES, ESQ., DOVER, MASS.
James Purdon, Architect.

DINING ROOM—RESIDENCE OF J. GRANT FORBES, ESQ., DOVER, MASS.
James Purdon, Architect.
HE two houses embraced in the last group present a strong contrast in every particular. The one, designed by James Purdon, is at Dover, Mass., and the other, designed by W. G. Rantoul, is at Topsfield, in the same State.

This contrast, by the way, may be illuminating not only from the architectural aspect, but from the social or sociological—one scarcely knows which word to choose in this case—point of view as well. Both types are substantially traditional, both are American, but both are not indigenous to New England where they both happen to be.

The house at Dover is patently of Spanish Mission parentage and in a rugged New England setting and rigorous climate can never be other than an exotic. Try as we may to naturalize the type and accustom it to its transplanted estate by every artifice ingenuity can contrive, one cannot escape the feeling that the style is not fully in accord with the genius of the countryside. Its characteristics are strongly defined and persistent and seem to defy attempts at compulsory acclimatization. The whole spirit of the type cries out for an arid climate, burning sunshine and the relief of an occasional dash of gorgeous-colored vegetation—the gold of allamanda blossoms hanging about the arches of the portico or the fiery crimson glow of cactus buds.
FLOOR PLANS — RESIDENCE OF J. GRANT FORBES, ESQ., DOVER, MASS.
James Purdon, Architect.

FIRST FLOOR — RESIDENCE OF G. H. SHATTUCK, ESQ., TOPSFIELD, MASS.
Wm. G. Rantoul, Architect.

HALL — RESIDENCE OF J. GRANT FORBES, ESQ., DOVER, MASS.
James Purdon, Architect.
SOUTH FRONT—RESIDENCE OF G. H. SHATTUCK, ESQ., TOPSFIELD, MASS.
SOUTH FRONT—RESIDENCE OF G. H. SHATTUCK, ESQ., TOPSFIELD, MASS.
WILLIAM G. RANTOUL, ARCHITECT.
On the other hand, the house at Topsfield is just as thoroughly in harmony with its environment, just as thoroughly indigenous, just as much part and parcel of the setting as the trees and birds and wild flowers because its architectural genius is of New England development, sprung from traditions brought thither from the mother country by the first settlers.

The American sense of appreciation, however, is broad enough to accept both types and find a proper place and use for them, although, naturally, individual preference will favor the one or the other according to individual temperament.

The house at Dover strikes the observer at first glance by its strong Spanish Mission affinities, but a close and more careful examination will reveal the leavening action of a good deal of adaptation to local requirements and conventions. The long extent of arcade piazza, while it determines in large measure the aspect and stylistic classification of the house, is not really so much of a factor in the structural organism as it appears at first to be. Indeed, it might be said not unreasonably that the piazza is intimately associated with the structure and colors its individuality, but is, nevertheless, not an integral portion of it. Severed from the piazza, the building itself presents a mass that might be susceptible of a variety of equally satisfactory, but wholly diverse, treatments.

After all is said and done, and we have sifted things to the farthest limit of analysis, it is possible to divide buildings into two classes—those in which the mass itself possesses such strong, inherent individual qualities that the architectural character is determined thereby, and, secondly, those in which variable features and details are wholly responsible for the tone of expression. Needless to say, the vast majority of buildings, public and domestic, will come under the latter classification, and the house at Dover is one of them.

An agreeable feature in the rear is the triple arched loggia or sun room, opening upon a terrace, obviously meant for winter use and justifying the infer-
FIREPLACE IN LIVING ROOM—RESIDENCE OF G. H. SHATTUCK, ESQ., TOPSFIELD, MASS. WILLIAM G. RANTOUL, ARCHITECT.
ence that the dwelling is intended for oc-
cupation all the year round and not
merely for summer tenancy, as the long
expanse of piazza on the other front and
sides might tempt one to believe. The
interiors exhibit some diversity in treat-
ment between Georgian modes and an
earlier English type of expression.

Taking it by and large, the house at
Dover presents not a few claims to fa-
vorable consideration and it has realized
distinctly pictorial and engaging quali-
ties as a composition that attract and elic-
it genuine admiration. One cannot help
questioning, however, the advisability of
employing to any great extent a strongly
pronounced mode of architectural expres-
sion that is so manifestly foreign in
genius to both the sentimental and physi-
cal environment in which it must be set.

This does not mean that we should be
narrow or permit individual bias to de-
termine our attitude, but it does mean
that, while we are and must be eclectic,
we should well and carefully consider
what qualities in any architectural type
under observation are most in accord
with local genius and most likely to blend
harmoniously with all the elements of
the local setting.

Our domestic architecture has not
passed the receptive stage and has not
become crystallized. If a form of ex-
pression is susceptible of successful and
harmonious adaptation to obvious re-
quirements, so that the charge of affecta-
tion cannot be imputed to it, there seems
to be no sufficient cause for refusing to
recognize it. We are a nation of com-
posite extraction and it is therefore not
unreasonable that the architecture of our
houses should betray some evidences of a
composite origin. A few of us, it is
ture, can point with satisfaction to Amer-
ican ancestry on both sides of our family
trees for two hundred years and more,
but because the majority of our com-
patriots are less fortunate, they are none
the less Americans, and it would be ex-
tremely unjust as well as snobbish to
deny them the title. It is precisely the
same with architecture. Strong, living
architecture will necessarily display as-
similative and naturalizing powers. It
must be remembered, however, that com-
posite does not mean conglomerate, and
while our architecture may dare to be
composite and even heterogeneous, it
must not become mongrel. And mon-
grel it may readily become unless we are
judicious in our eclecticism and guided
by common sense in measuring and
weighing suitability to requirements.

The Topsfield estate is known as
Grassy Hill Farm, and the occupants
wish their home to be known as a farm
and do not pretend that it is anything
else. Indeed, they emphasize the bucolic
aspect for the latitude and freedom it
affords. It is interesting, therefore, to
see how closely New England farmstead
traditions have been adhered to, even in
such matters as the placing of barn, sta-
ble and byre or the providing for a
ground floor bed chamber. And yet,
when it comes to kitchen, laundry, but-
ner's pantry and china closet, which last
is really a small room, the house at
Grassy Hill Farm is as modern as one
could wish.

Built on the shoulder of a long, ridge-
like hill, with far views to the north,
est and south, the low-lying gambrel-
roofed house and its adjoining farm
buildings seem to fit naturally into the
slope of the setting. The road, Wenham
Street, passes on the north and as the
visitor approaches he is somewhat per-
plexed as to which is the proper way to
make an entrance. One drive leads into
a grassy forecourt with a doorway al-
most hidden under a trellised and vine-
covered porch; it also leads more im-
mediately to the barn and kitchen and
the marks of its usage stop there. The
other drive, after passing around the
barn, ends abruptly in the lawn and
leaves a choice of entering the dining
room by a French window from the
porch or pursuing a further search for
various other doors. After achieving an
entrance, there comes a sense of satisfac-
tion at having found a house with many
doors but no "front" door. The door
opening from the grassy forecourt, with
its gnarled apple trees, on the north, does
admit to the hall, but is seldom used, as
there are sundry other doors that serve
better.

The north front, with its varied con-
tour and angles and the groupings of barn and sheds, is fascinatingly picturesque, but the south front, overlooking the grass terrace and a richly colored, exuberant flower garden, is more genial. The whole house is exceedingly simple and unpretentious, but the general massing and the fenestration are so calculated as to give it a maximum of interest. A sense of refinement and architectural good judgment is even more apparent indoors in various points of detail, but particularly in the woodwork and mouldings, as may be seen from the illustrations of the living room and dining room. There are not many rooms, but they are all thoroughly good and due balance of proportions has been preserved throughout. The gallery running along the north side of the second floor and opening into the bed chambers is a departure from New England tradition, but a justifiable one.

Considered in full, Grassy Hill Farm house in plan and design presents in an unpretentious way such a sane and acceptable blending of tradition and modern ideas that it is highly expressive of truly American domestic architectural vitality.

The great importance of the design of just such unpretentious and moderate-sized houses as that at Grassy Hill Farm, or the two instances of remodeling already discussed in the foregoing pages, can scarcely be overrated. The houses of medium size and moderate cost, from preponderance in numbers, must inevitably impart the prevailing tone to our suburban and rural domestic architecture. The larger establishments afford boundless opportunity for masterly architectural treatments and landscape engineering, and the achievements in that field are frequently full of inspiration, but they must always, of necessity, be far outnumbered by houses of less ambitious design. With the wider opportunity thus presented the large house is naturally an attractive problem for the able architect but the zenith of architectural excellence will never be reached until the small house is the object of painstaking skill.
THE LOCAL FEELING IN WESTERN COUNTRY HOUSES
BY HERBERT CROLY

The group of residences published herewith are typical of a certain quality of contemporary American domestic architecture in the Middle West. In the East the majority of architecturally interesting residences are built in the country on comparatively large estates. The well-to-do people who live in them usually own and occupy a city as well as a country house. They live the larger part of the year in the country, and spend a substantial part of their income on farming; and their country houses are adapted to the kind of life which has been led by an English country gentleman. But they also live for three or four months in the city. The men of the family often enjoy a certain amount of leisure, which enables them to get the benefit of their country residences.

The typical residence of better quality in the Middle West has to be adapted to a wholly different situation. The men of the average well-to-do family in that part of the country are still absorbed by their professional and business occupations. They have to be at their offices throughout the whole day for all but a few weeks of the year. At the same time they usually wish to bring up their children in the country. The result is a type of semi-rural and semi-suburban residence which is characteristically American, and which has become more than ever popular since the motor car has made distance from railway stations count for comparatively little.

This type of house is built within easy commuting distance from a large city, but it is sharply distinguished from the ordinary suburban residence. It is surrounded by sufficient land to enable its occupants to have a vegetable garden, a tennis court and playgrounds for the children. It is often built on a plot as large as ten or fifteen acres, which gives its inhabitants practically complete seclusion and the appearance of really rural surroundings. But the scale of the establishment is modest compared to the manor houses which are so frequently erected in the East. It is not adapted to a life of comparative leisure and to the entertaining of a houseful of guests. It is intended for city people who happen, for purposes of convenience, to be living in the country, and whose purpose it is to put their few acres to an immediately practical use.

Almost all the houses illustrated herewith are good examples of this type. They vary considerably in architectural merit and in the amount of original study which has gone into their design. They vary also very greatly in the sources
from which their forms are derived. One can distinguish reminiscences in them of Italian, Spanish, English, French and Colonial models. But these reminiscences are only suggestions. The designers of better American country houses have passed far beyond the stage of merely conscientious copying. These houses afford intimations of the past, but they are at bottom well adapted to prevailing American tastes and manners. At times they show a certain tendency to originality, but this originality is rarely pushed to the point either of real individuality or of actual freakishness. The great majority of them are conventional, but their conventionality is usually redeemed by good taste. The houses almost uniformly give the impression of being built for people of refinement who take a keen interest in making their homes attractive, and who have to that end sought the advice of competent architects.

One of the most attractive of these houses is that of Mr. W. Kozinski, at Highland Park, Ill. Its architect, Mr. Robert Seyfarth, has charmingly adapted the proportions and lines of an Italian villa to a contemporary American suburban residence; a formal treatment model has been converted into a comparatively informal modern residence, with a large enclosed porch and with none of the landscape gardening which is ordinarily needed to bind the house to the site. Another residence designed by the same architect and situated in the same place—that of Mr. George McBride—is more conventional, but its conventionality does not prevent it from possessing a pleasant combination of propriety and charm.

Some of the houses designed by Chat-ten and Hammond are also worthy of particular mention. The residence of Mr. Ira J. Couch is an attractive example of a general type of design, which was, we believe, originated by Mr. Howard Shaw, and which unites many advantages of architectural effect with equally desirable advantages of plan. On the other hand, the house of Mr. H. W. Armstrong is reminiscent rather of Mr. Frank Lloyd Wright's work and is in its character an ordinary suburban house, without any surroundings of its own. The residence of Mr. H. G. Phillips is also reminiscent of Mr. Wright, except for the arches, which make the design lean rather in a Spanish direction. Attention should also be called to the house of Mr. C. M. Parker, which is an excellent example of the best class of suburban wooden residence.

Probably the most interesting, however, of this group of residences are those designed by Marshall and Fox. The Upham residence at Glenview, Ill., is peculiarly characteristic and charming. It is picturesque and individual, without any tendency to mere eccentricity.

The Miller house, at Barrington, is less original and less charming, but it is none the less distinguished by its force and the realism of its treatment.

The McCauley house, at Highland Park, belongs to a very different type. Its general style conforms to the two-story and attic suburban Colonial residence which flourished chiefly near Philadelphia, but the enclosed modern porches have been placed on the front of the house rather than at the sides. It is an unusual arrangement, which might have been made architecturally more interesting in case the flat-topped porches had been added to flat-roofed building.
PERPECTIVE AND FLOOR PLANS.—HOUSE OF IRA J. COUCH, ESQ., GLENVIEW, ILL. CHATTEN & HAMMOND, ARCHITECTS.
PERSPECTIVE AND FLOOR PLANS—HOUSE OF H. G. PHILLIPS, ESQ., GLENCOE, ILL. CHATTEN & HAMMOND, ARCHITECTS.
SECOND FLOOR PLAN

PERSPECTIVE AND FLOOR PLANS—HOUSE OF C. M. PARKER, ESQ., HIGHLAND PARK. ILL. CHATTEN & HAMMOND, ARCHITECTS
PERSPECTIVE AND FLOOR PLANS—HOUSE OF H. W. ARMSTRONG, ESQ., EVANSTON, ILL. CHATTEN & HAMMOND, ARCHITECTS.
HOUSE OF GEORGE MCBRIDE,
ESQ., HIGHLAND PARK, ILL.
ROBERT SEYFARTH, ARCHITECT.
HOUSE OF FRED UPHAM, ESQ., GLENVIEW, ILL.
Marshall & Fox, Architects.

HOUSE OF A. A. SCHLESINGER, ESQ., MILWAUKEE.
Fitzhugh Scott, Architect.
REAR VIEW—HOUSE OF H. M. THOMPSON, ESQ.
Alex C. Eschweiler, Architect.

HOUSE OF H. M. THOMPSON, ESQ., MILWAUKEE.
Alex C. Eschweiler, Architect.
HOUSE OF CALEB E. JOHNSON, ESQ., MILWAUKEE.
FITZHUGH SCOTT, ARCHITECT.
HOUSE OF BENJAMIN ALLEN, ESQ., WINNETKA, ILL.
Marshall & Fox, Architects.

HOUSE OF JUDGE PETER GROSSCUP, HIGHLAND PARK, ILL.
Marshall & Fox, Architects.
HOUSE OF M. W. KOZMINSKI, ESQ., HIGHLAND PARK, ILL.
Robert Seyfarth, Architect.

HOUSE OF H. F. MILLER, ESQ., BARRINGTON, ILL.
Marshall & Fox, Architects.
HOUSE OF JAMES C. HAZLETT, MINNEAPOLIS.
Jackson & Stone, Architects.

HOUSE OF J. M. KEITH, MISSOULA, MONTANA.
Link & Haire, Architects.
GARDEN VIEW—HOUSE OF ELMER MURPHY, ESQ., EVANSTON, ILL.
Childs & Smith, Architects.

ENTRANCE FRONT—HOUSE OF ELMER MURPHY, ESQ., EVANSTON, ILL.
Childs & Smith, Architects.
FORECOURT AND ENTRANCE FRONT—RESIDENCE OF LEROY D. LEWIS, ESQ., SEATTLE.
WILCOX & SAYWARD, ARCHITECTS.
LOWER HALL—RESIDENCE OF LEROY D. LEWIS, ESQ., SEATTLE.

APPROACH FROM SOUTHEAST—RESIDENCE OF LEROY D. LEWIS, ESQ., SEATTLE.

Willeox & Sayward, Architects.
ENTRANCE DETAIL—RESIDENCE OF LEROY D. LEWIS, ESQ., SEATTLE. WILLCOX & SAYWARD, ARCHITECTS.
RESIDENCE OF W. H. DAVIS, ESQ., LOS ANGELES.
Hunt & Burns, Architects.

RESIDENCE OF MAX GOLDSCHMIDT, ESQ., LOS ANGELES.
Hunt & Burns, Architects.
GARDEN OF THE RESIDENCE OF J. H. BURNES, ESQ., PASADENA, CAL.
Myron Hunt and Elmer Grey, Architects.

RESIDENCE OF J. H. BURNES, ESQ., PASADENA, CAL.
Myron Hunt and Elmer Grey, Architects.
THERE are certain locations which demand that considerable study be given to the designing of a suitable style of home therefor. A hillside is one of them; and if given proper consideration, a hillside constitutes one of the most satisfactory building sites to be found, especially for the country or suburban home. This fact was well realized by the master builders of the Old World in mediaeval times, and largely because of their peculiar ability to adapt their styles of architecture to the particular sites selected our architects of today still derive much benefit from the study of their work.

The very attractive house here illustrated is of a style particularly suited to its location. It is patterned largely after the chalet of the Switzerland mountains, and the chalet is naturally well adapted to a sloping hillside, such as is here made use of. It is not often that one finds this style of architecture employed in the building of a house of this size, and therefore this home is especially interesting.

A hillside usually suggests rusticity, and few other styles of homes admit the introduction of a corresponding characteristic so readily as does the chalet. One living in the hills or mountains also frequently wishes to spend as much of his time in the outdoor air as possible, and a house of the kind here shown is particularly well arranged to meet such demands. Balconies always constitute a prominent feature of the chalet, and in this instance they are not only made inviting as outdoor lounging retreats, but for sleeping purposes as well.

In a few years this house will be entirely surrounded with trees—eucalypti, cedars, pines, palms, and so forth. There will also be a profusion of flowers and vines. With environments of
This kind, and being snugly nestled in a sort of nook in the hillside, it indeed will become a picturesque and charming home. It is located in the suburbs of Los Angeles, California—just far enough removed from the city to enjoy privacy and independence in its landscape gardening, and yet near enough to avail itself of all the city conveniences.

The main part of the house is two stories in height, but there is also a third floor which has two large sleeping rooms, almost entirely surrounded with small casement windows. Although quite irregular, its structural lines are graceful and well executed for this style of architecture and for this site. The roofs, all of which are covered with a gray composition roofing, are quite flat and have unusually wide overhangs. The framing and finishing timbers are square-sawed and undressed, and the siding is of sawed redwood shakes, laid with about twelve inches of their length to the weather and spaced one-half inch apart. The masonry work, including chimneys, porch pillars and pedestals, foundation, and even the flooring of all first-floor porches, is of brick, and is of excellent workmanship, executed to give an appearance of massiveness. There is an unusually large amount of this brickwork, and it is largely due to its liberal use and massive proportions that the house has been made so effective in its outside appearance.

There is a large number of porches and balconies, and all of them are especially roomy and located to good advantage. The front veranda is particularly effective, creating a charming entrance, and on the ground floor there is also a large pergola-porch, on one side, which constitutes an admirable outdoor retreat. Over the front veranda, on the second floor, is a wide balcony, which extends back a short distance along the side. A smaller balcony is located over the side pergola-porch, and in the rear is a third second-floor balcony. Both of these are so situated as to form excellent open-air sleeping porches.
The interior arrangement is especially good, as will be readily realized from a study of the accompanying floor plans. On the first floor are living room, music room, den, conservatory, dining room, breakfast room, kitchen, servants' room and a bathroom. There are several closets and many excellent built-in features. On the second floor are four bedrooms, each with a large closet, a sewing-room and a bathroom, and on the third floor are two more bedrooms.

Sliding glass doors separate the living room from the dining room, and only a broad open arch intervenes between the dining room and conservatory. Glass doors lead from the conservatory into both the front veranda and side pergola, and similar doors lead from the dining room and breakfast room into the latter. The living room contains a large brick fireplace, and the dining room has a very pretty buffet. Hardwood flooring is used in all of the first floor rooms except the kitchen. A very handsome staircase rises from a sort of inglenook off from the living room, lighted by numerous little windows. This nook also possesses a built-in seat.

The house has a large basement, access to which is had both from the outside and from an inside stairway in the rear. The furnace, which supplies heat to the rooms, is located in this basement. The total cost of the house was approximately $20,000. It was designed by Mr. E. B. Rust, an architect of Los Angeles, California.
Margarethenhöhe bei Essen -
The Krupp Foundation Suburb

By Elsa Rehmann

The suburb of Margarethenhöhe bei Essen is the newest of the Krupp Foundations, established in 1906 by Frau Friedrich Alfred Krupp. The gift consists of $250,000, about 125 acres of land for building purposes, and 125 acres of woodland to be kept free from building activities. The woodland, enclosing it on three sides, will keep the settlement suburban in character instead of later allowing it to be merged into the city by further growth. This thoughtful measure shows at the very start with what high ideals and with what sound knowledge of the fundamentals of town planning the Foundation was equipped.

Margarethenhöhe is a settlement almost entirely of small workingmen's houses. Simple as these are, built with no attempts at experimentation in new forms, but with a beauty inwrought in their form, they show a new conception of the esthetic value of the small house. Professor Georg Metzendorf, the architect, who had shown such an appreciation of the unity between the practical and beautiful in his workingmen's houses in Hessen and Darmstadt, was chosen to be the creator if Margarethenhöhe bei Essen.

Margarethenhöhe was not to be merely loosely connected groups of small houses, but a town for 16,000 inhabitants, with stores, schools, playgrounds, markets and churches and all that which contributes to the welfare of a community. In its development as a suburb, many city problems were avoided; but sanitation, traffic
facilities and other practical problems of town planning had to be considered.

Professor Metzendorf’s former work had never taken him into the sphere of town planning. But in the five years in which he has worked on Margarethenhöhe, and in which he has developed its plan, marked the town’s approach, solved in an original and skillful way the problem of the marketplace and given a definite character to the town through the first 250 houses, he has surpassed even the expectations of the Commission responsible for his appointment.

The recognition by the Commission of the fact that the esthetic development of the practical elements of town planning, to make them an artistic unity, ought to be placed in the hands of one man is a new thought in the garden city movement.

Margarethenhöhe is divided from Essen by a deep, wide valley. In making a suitable means of approach from the city of Essen, the importance of marking the entrance of the town in some characteristic way was immediately recognized. The valley was spanned by a bridge 580 feet in length, built of sandstone. The site of the town rises abruptly at the very end of the bridge. It was an engineering problem of dealing with a steep slope, coupled with an artistic problem of making the initial building of the settlement monumental enough to be in proper proportion to the bridge, yet in keeping with the rest of the town.

The elevated position of the building, the emphasis of the central portion and its archway, the broad effect of the roof line, the balanced arrangement of the little houses placed at either end, all unite in forming a building group strong enough to balance the long bridge. The broad flight of steps with the stone retaining walls on either side emphasize the dignity of the approach.

Two roadways, disguised by the retaining walls, curve in from the right and left to meet at the archway. This gives a glimpse of the main street, built upon the main axis line of the town. The heavy traffic and the electric car line are diverted to the broad street on the right, which runs practically through the middle of the town.

The separation of the traffic street from the main street is a point most worthy of note for the development of a suburb. It emphasizes the residential importance of the main street, frees it from the noise of traffic, makes it quiet and intimate in character and gives it a chance of expressing individuality.
The main street, die Steile Strasse, is a narrow, curving one. In order to conform as much as possible with the rising contours of the ground, so as to lessen the expense of road building, a slight curvature was advisable. This had the effect of gaining picturesque street views and changing vistas, which are a part of the charm of this settlement, as they are of older German towns. All the interesting elements of the older German street building, such as the continuous street effects and the closing of the street vistas, have been moulded quite naturally into this new settlement of small houses.

The market place, which die Steile Strasse passes on the way to the church site, is the nucleus of the town life. At one end is the cooperative store for Krupp workmen; at the other end is the inn, which contains club and entertainment rooms and is adjoined by stores. The booths which close in three sides of the square are new in the arrangement of the German market place, and the separation by them of the market place from the street offers most efficient modern traffic facilities. In spite of these new and ingenious arrangements, it still retains all the charm of the old German closed square. The closed effect is emphasized by the long buildings of the cooperative store and of the inn, and is not disturbed by the two parallel streets which pass in front of them.

The plan of Margarethenhöhe shows how the very newest ideas of spacing and placing of buildings, the most modern ways of grouping and arranging the houses to gain the most efficient land subdivision, have been utilized. Besides, in recognition of the fact that front gardens are for the most part but places for poor floral display, they have been avoided as much as possible, so that the additional space might be given to the back garden. These back yards are divided by low rustic fences, so that while they give each man individual ownership over his small plot of ground, the advantages of a broad outlook over an expanse of open green or gardens is shared by the whole block.

The settlement is built of houses in which only two types of plans are used. The one is a one-and-a-half story one-family house, the other is a two-family house. The one-family house contains,
A GROUP OF FIVE HOUSES AT MARGARETHENHÖHE.

on the first floor, a hall with stairs and a coat closet, a sitting room, a kitchen and a laundry; on the second floor there are three bedrooms. The apartment consists of kitchen and laundry, with two or three additional rooms.

The kitchen is considered the centre of family life. It is arranged to serve also as a living and dining room, and is always at the back of the house, with large windows facing the garden. The garden fronts of the houses are made as attractive as the street facades; German architects have long understood this point in house building.

The small room beside the kitchen is arranged to serve for laundry and scullery, in which much of the household work can be done which would make the kitchen untidy and uncomfortable as a living room. The kitchen often has white painted furniture and delicately tinted walls, and the tiled stove is no mean ornament.

The Foundation has become a free advisory bureau in all matters pertaining to household art. It interests itself in the smallest detail of window curtains and table runners, as well as in the most important matters of furniture design. Even the hastiest visit to the settlement, the merest glimpse in through the doorways, reveals the fact that the people have made ample use of this bureau, that they have appreciated the chance to surround themselves with beauty in the things pertaining to every-day life. This strikes a new democratic note in art.

In planning the houses, emphasis is laid on the importance of having for each house a heating and ventilating system, adequate plumbing, a bath and a garden.

Utility and cheapness are considered the two main essentials of the small house. What careful consideration each essential has been given is shown in the compactness of the plan, the simplified heating plant, the care taken in the ventilation, and the general east and west orientation of the houses. Further consideration of cost is shown in the limitations put on the choice of building materials, as well as in such details as window and door frames. Only one size of doors and four sizes of windows are found in all the Margarethenhöhe houses.
A GROUP CONTAINING FOUR APARTMENTS AND TWO END HOUSES.

A GROUP OF THREE HOUSES AT MARGARETHENHÖHE.
Manifold variety is shown in the grouping of the houses. Single houses are scarce. Double houses are frequent. There are groups of three, four, five and eight houses, either for one family or containing two flats. Not satisfied with these only, still other variations are found. A four-flat house will have a one-family house nestling up against it. Sometimes, in a four-house group, the two end houses will each contain two flats, while two one-family houses will be wedged in between. In such a group the facade has but two doorways. The end houses have the entrances on the side. This arrangement is not merely an aesthetic one; it has highly practical reasons in the arrangement of rooms for good size, correct ventilation and proper lighting. Such variations change the monotony of rows into fine street vistas.

Almost endless variations are found in the details of the buildings, in the arrangement and shape of dormers and gables, in the grouping of the windows in the gables, in the fenestration, despite the fact that there are only four sizes of windows, in the slight differences in the appearance of the front door, in ingenious window designs, in the use of lattice on the walls and seats beside the doors. Further variation is found in the fences, walls and gateways.

Stucco, shingle and tile, with occasionally rough stone for foundations and retaining walls, are the only material used. Many variations are made in the combination of stucco with shingle or tile. The stucco is applied in varying degrees of smoothness or roughness, and the combinations are interesting. The stucco is used in gray, yellow and soft pink tints.

It is these differences in details that give special individuality to each house. They not only show the ingenuity of the architect, but indicate his desire to help each family express its own individuality.

Great as this diversity is, it is dominated by the harmony of the whole. The work of one man, there exists a consistent style of architecture throughout the town. Professor Metzendorf has gained unity in his suburb through practically the same means as those used in the development of the old towns, namely uniformity of material and harmony of house forms. The frame of woodland emphasizes this unity.

Heretofore the Krupp colonies have benefited only the Krupp workmen. However, although the Krupp workmen are to receive special consideration, the gift of Margarethenhöhe by Frau Krupp was for the public at large.
A number of highly interesting and useful volumes have appeared upon the editorial bookshelf within the last few months, among them a group of works of English origin that will bear extended notice.

Mr. G. A. T. Middleton has added to his list of practical publications an altogether praiseworthy volume on The Evolution of Architectural Ornament (Francis Griffiths, London; large 8vo), a compact, well-written students' and laymen's book. He deals chiefly with an engrossing branch of the study of ornament, the phenomenon of type persistence. Intentionally disregarding the purely historical side of the subject, the author groups his forms according to source. Thus under the heading "Ornament with a Foliage Basis," individual chapters are assigned to extended studies of characteristic prototypes: the anthemion, the acanthus and other forms are followed in their many variations and modifications through the old Classic and Renaissance styles, as well as the Gothic in England and on the Continent. Later pages are devoted to ornament with a human, animal and linear basis.

This volume is bound to win recognition as an authoritative work. It does not insist upon positive derivations or hypothetical developments; but aims rather to present the case for ornamental forms in the light of simple growth and significance based upon the continuity of type. It is not a formulary, it does not bulge with expensive plates; therefore it is not a ready source of suggestion for those who have been driven to pattern books by paucity of imagination or neglected study. It is decidedly a work to inspire further research, which must of itself culminate in a more appreciative interpretation of the transcending or basic motives of ornament. The reader, if he is a student, will perceive the possibilities of development and enjoy the promise of free treatment of classical forms which it conveys.

Mr. Middleton directs our attention to an interesting characteristic of Gothic floral forms. The sequence of the seasons is represented in the motives produced during the Gothic centuries in
chronological order. Spring, summer and autumn verging toward winter follow each other in the work of the thirteenth, fourteenth and fifteenth centuries. Of course, no deliberate intention may be set down for such a succession of forms; and the author carefully points out the accidental nature of the case, although he laments the fact that it did not also occur to the clever technicians who executed the carvings of the Gothic Revival.

The various chapters of this book have appeared in essay form in the Architectural Record. The illustrations consist of photographs and pencil sketches by the author. He has likewise included a chapter entitled "Some Alexandrian Capitals," containing material completed after the volume went to press. If a little more attention had been granted to section and profile, the work would stand, in our opinion, without a single adverse criticism.

We are a little tired of the picture-book variety of architectural publications. Too often the illustrations are the pièce de résistance and the text is not of a corresponding substance and strength. Not that we wish to favor the old-time erudite treatise with the reader's power of visualization as the only illustrative material; on the contrary, we hasten to assure our publishers—careful and painstaking as they all are—that we fully believe in the well-illustrated work. Our only humble prerequisite is the presence of a vigorous and authoritative text. Such a text is notable in Mr. Middleton's book and also in Mr. Richardson's monumental volume on English Neo-Classic architecture, of which we shall have more to say later on.

Not unimportant, but of uncertain purpose, is Mr. Francis Bond's Introduction to English Church Architecture from the Eleventh to the Sixteenth Century (Oxford University Press, 4to). The process of introduction requires two heavy volumes and we look askance at 1400 illustrations in 986 pages of text. We find an excuse for the seeming lack of accord between cuts and letterpress in the author's statement that his mode of presentation will be found "more enjoyable than the unpalatable pemmican of a condensed text-book," and he says unblushingly that if the 'glossaries and indexes and the numerous excursuses in small type be omitted, the text proper does not amount to more than four hundred pages'; in other words, less than half the book and entirely "subsidiary to the illustrations." This is, then, not a critical work, nor a treatise bristling with technical terms, but a methodical effort to produce a good study of mediæval English building; so that the un­blessed Philistine who appreciates and loves and understands as well as he can, may be aided toward a comprehensive grasp of a highly interesting period of architecture. Perhaps the author has been slightly sidetracked in his purpose at times, for the intentionally popular treatment seems to be periodically forgotten. Copious illustrations are not in themselves sufficient to point a development for the lay mind. Another attractive feature not well maintained throughout, though promised at the beginning, is the attention to ecclesiology and the relation of plan to ritual. Above all, with the persistence of a splendid archaeologist to goad him on, the author cannot resist the introduction of a considerable modicum of archaeological history, which also he leads us to believe will be "as far as possible eschewed." No doubt we should measure the writer by his own rule, and justifiably so. Mr. Bond avowedly considers this work the complement of his Gothic Architecture in England, published in 1905 and since twice reprinted. Judged on this basis he deserves the utmost credit for unstinted effort toward the elucidation of his chosen period. His book is complete. Though closely analytic in spots, we do not tire of the detail, for the analysis in each case furnishes a point d'appui upon which we fasten our chain of progress until the next similar accent in development is reached. Two glossaries, English and French, have been prepared to help the "beginner," for whom Mr. Bond has much solicitude in his preface, over the hard spots.

The writer begins by explaining the
distinctive varieties of mediaeval English churches. The various types of that time, of which over 10,500 examples, exclusive of chapels, yet remain, have resolved themselves into two major classes, the parish churches and the cathedrals. In order to show how the various foundations were served, the author gives a concise account of the numerous monastic orders, monkish, friar, military and secular organizations. This historic material is followed by a good chapter on the requirements of a great mediaeval church, wherein it is attempted to demonstrate that “it is good . . . to know not only how a church was built, but why it was built, who built it, who served in it, who worshipped in it, and what manner of worship was theirs . . . .” This relation of plan to purpose is a most interesting feature of the ecclesiastic structures of the Middle Ages; what is more, it should form part of every thorough study of architectural evolution whatever the period treated. Sections are devoted to discussions of the origin, position, arrangement and purpose of the presbytery, choir, “the lay use of the nave, the number and sites of the altars, the use of the transepts, the requirement of chapels, the development of the chapels of Our Lady and the local saint . . . the crypt and the bonehouse, . . . chantries and chantry chapels.”

In the chapter on the planning of churches not less than thirty-eight large scale plans appear, and on each the various parts are indicated according to use. It may be interesting even for the old stager, grown gray in practice, to learn anew the position and purpose of the ‘slype’ or the ‘feretory’.

Most of us will be grateful for the author’s exhaustive study of parish churches. He has examined over two thousand, or fully one-fifth of the existing examples, and has written an excellent account one hundred pages in length of the strange and fascinating development of this neglected phase of English mediaeval buildings. Although not one of the larger churches “has a stone above ground earlier than the eleventh century,” he says, parish churches existed in the third century; probably built by Roman converts, while from the seventh century on the record of their erection is not encumbered by any historic uncertainty whatever.

Succeeding divisions of the book deal with constructive features. Vaulting, including an extended study of lierne vaults, is treated in another long chapter, in which fifty-seven vaults are analyzed. Mr. Bond is fully justified in considering this the “most comprehensive account of English vaulting that has yet appeared.” The abutment system is also carefully handled, although there is no new material here. Especially good is the author’s recapitulation of the whole subject of abutments in a series of eight numbered paragraphs at the end of his discussion.

We have been carried along buoyantly on the wave of Mr. Bond’s enthusiasm until our pleasure is somewhat dampened by a dry disquisition on walls and arches and timber churches. We find a little more of warmth and interest in the examination of pier design, but finally the writer is again himself in a masterly study of the lighting of mediaeval churches, regarded from the practical and quantitative standpoint, not from that of fenestration as a factor in design. This extended essay of about one hundred and forty pages is a commendable piece of work. Our only complaint is that it is marred by the author’s twenty page attack, thoroughly archaeological, upon a series of fourteen possible explanations for the Low Side Window. He annihilates thirteen of these in his best formidable manner and awards the palm to those who believe, with him, that this small troublesome opening had a direct connection with the high point of the service. He feels assured that a handbell was thrust through this tiny window so that those outside the church might receive due notice of the exact moment of the Elevation of the Host. An interesting account of tracery and especially of the supposed English origin of French Flamboyant tracery serves to bring the weight of less argumentative material back into balance.
The author does not dally long with the topic of doors and porches, but goes with vigor into that of triforium and bay design. He hopes that he has gathered into his discussion on the latter subject all necessary and pertinent information and rightly claims somewhat of a ring of finality for his words. A fine study of the roofing problem, from the beginnings through hammer-beam, tie-beam and cradle types, is followed by one equally fine on towers and spires. Both are fortified by an amazing wealth of good illustrations and both will serve to make English carpenters and masons proud of their sturdy antecedents that could achieve such triumphs as the roof of Bacton Church, Suffolk, and the tower of Southwold in the same county.

An appendix includes an examination of the time-worn but inexhaustible topic of the origin of the early Christian basilica, together with some notes on its orientation and deviation of axis. It is not until we are through with our last chapter that we begin to appreciate the real value of Mr. Bond's work. The actual meaning of the word "Introduction" in his title becomes clear when we have come to the realization that each chapter is a challenge, that the author introduces us to a field about which we claimed to know as much as an average professional person needs, but which, after we have read these volumes, seems yet to be a mine of unworked resource. It is only at the end that we fully absorb him of the grievous fault of not writing exactly as he promised in his preface, and we are not a little pleased that his zest at his labor has led him to produce a work even better than his best promise. We shall be glad to consider these volumes as books of reference, keeping them near our desk, so that if our knowledge of the English mediaeval church ever fails us, we shall have a ready means of "brushing up."

For the architect who has no time for detailed reading of history, nor yet to give attention to the intimate records of personalities that served to adorn many a great structure, Mrs. Louise M. Richer's book on Chantilly: Its History and Art (John Murray, London; 8vo) will prove an interesting work. The Petit-Chateau of Chantilly, it will be remembered, stands on an island in the Nonette, and was erected by Anne de Montmorency, Grand Constable of France under Francis I. The style is of the late transition and shows that the so-called Italian manner, which the wars of Francis together with royal largess and taste had brought to France, was soon translated into terms of a Gallic mode of expression. Of like character are Chenonceaux, Langeais, Azay-le-Rideau, and Chambord. It has been surmised that Jean Bullant was "consulting architect" of Chantilly, but we are inclined to give greater credit for the design to Pierre des Isles, who appears in the records as "maçon."

The book is written in an easy, readable style and will help to pull the professional mind out of the rut of technical or formal works. For those whose taste leads them into the field of early French painting, this volume will offer an added attraction, since a goodly portion of it consists of a descriptive account of the treasures in the Musée Condé, rich in fifteenth and sixteenth century works, Clouet, Perréal and Poussin among others. These were brought together chiefly by the Duc d'Aumale, a connoisseur of trained discernment, who presented the Château to the French nation. There are numerous half-tone and collotype illustrations. We should welcome further publications of a similar character in English.
In every country, where architecture is valued and a due regard is cherished for the preservation of historic monuments and works of art, the destruction of famous buildings in French and Belgian cities, especially in Louvain and Reims, is viewed with mingled horror and indignation. Their demolition constitutes an irreparable loss to the whole civilized world, a loss by which all succeeding generations must be the poorer. Their significance is more than national, they are a part of the world's cultural heritage. The exigencies of war excuse many things, but it is to be hoped that all the contending nations will hereafter find some means of sparing venerated architectural monuments.

The wholesale destruction of "colonial landmarks" on the eastern side of Varick street, New York, is now complete. With the exception of some few buildings at the southern end of the street, not one of the old houses that formerly made this one of the most interesting of the old New York streets is to be found. There is some satisfaction, however, in knowing that, because of the splendid efforts made by the Architectural League of New York, by the Fine Arts Federation and by many well known architects, painters and writers, St. John's Chapel will not be destroyed as a consequence of the widening. In making this one exception in the building line, allowing the porch of St. John's to project some twenty feet beyond the new line, and, more remarkable still, in spending some eight thousand dollars to protect the chapel during the construction of the new subway under the street, Hon. George McAneny, president of the Board of Aldermen, explained that the city recognized in St. John's an architectural as well as a historical monument.

The view on page 384 is of a house at No. 26 Grove street, New York, which Missrs. Blake & Williams have recently restored for their offices. This house, like many others of the same type, is in a rundown part of the city that is rapidly being given over to large manufacturing plants, and the consequence has been that many old buildings have been torn down to make way for new ones that are larger or more conveniently arranged for business.

This restoration may perhaps tend to show other firms that these old houses, with but a small amount of repair, are as well adapted to commercial uses as are more expensive new buildings, and that the old ones present, if restored in a consistent way, a far more pleasing aspect than most recent buildings of the same size. The house seems, from external evidence, to have been erected between 1812 and 1817. The detail is excellent and the building was found to be in excellent condition. Typical of the care with which the restoration was carried out is the fact that the original iron rail and newels were missing and work of the 1850 period had been substituted. This was removed and the present iron work, which is contemporary with the house, was found and purchased in a nearby junk shop.
NO. 26 GROVE STREET, NEW YORK CITY.
RESTORED BY BLAKE & WILLIAMS, AND
OCCUPIED BY THEM AS AN OFFICE BUILDING.
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CATHEDRAL OF REIMS, BEGUN IN 1211 AND DEDICATED IN 1241. DRAWING BY DE WITT H. FESSENDEN.
This charming old farm house was begun over a hundred years ago; tradition fixes the date as 1789. The early settler and, so far as we know, the first owner of the land built only the small narrow central section extending from the front door to the chimney at the right, including five of the small windows in the upper story. The house has been twice added to; once about seventy-five years ago and the second time in 1912, when it was remodeled and put in its present condition.

This remodeling was a very radical proceeding, as the old house had suffered much during its long existence. It had been sadly neglected by its many owners, till in 1912 it was nothing more than a leaky old ruin, charmingly placed, it is true, on the hillside and surrounded by fine locust trees and evergreens, but practically unlivable. The silver gray shingles flecked with soft moss and lichen were weather worn and in places so battered that one could see patches of sky through the roof. The floors were uneven and rotting from the water where the loose shingles had failed to protect them. Great patches of plaster had fallen from the unsteady lath. To the casual observer it was a hopelessly tumble-down shack fit only to be torn to pieces and used as firewood, and yet there were great possibilities in this rickety ruin. It had individuality, personality almost; and from the purely practical point of view the studs at least were good.

Countless farm houses have been remodeled on Long Island. Some of them have been sympathetically handled, but changing and rearranging an old house and keeping its peculiar charm present many unguessed difficulties. To achieve a good result an architect must have a fine understanding of the spirit and methods of his predecessors; he must have a keen sense of what their taste was as well as a feeling for effect, and he must be very sensitive to the unwritten laws of style and taste. He must also have
practical ability and ingenuity to adapt the old fabric to the complicated modern requirements. We have only to open our eyes on Long Island and look at the remodeled farm houses to see how many gables have been added that never should have been thought of, dormers that are out of key with roofs and cornices, windows that are out of proportion.

The handling of the little farm house of the accompanying illustrations has been unusually deft, and one cannot help but appreciate its picturesque quality. The original building, almost doubled in size, has been transformed into a thoroughly comfortable and delightful house, without losing thereby any of its charm. The character of the original has been successfully transfused into the two new wings, one at each end of the house, which has been brought up to modern standards of comfort by the addition of good plumbing, electric lighting, and a modern heating system.

The old part of the exterior is almost unchanged in design. The long low lines of the roof, contrasting so markedly with the tall straight trunks of the locusts and white pine, are still unbroken. The original front was very charming in its proportions, with the high windows in the first story and the small ones under the roof in the second. It needed very little change to make it delightful. But it was a bare old structure and it took skill and taste to realize the possibilities held out by the long roof line with the white fascia board just below it. The battered old porch, however, was not attractive. It was replaced by the unusual white hooded doorway with seats and lattices at either side. This is so good in character and proportion as to relieve and make interesting the rather long front. Another note that gives variety is the addition of the shutters of a bright blue-green color. The shutters are solid on the first floor and in their lower panel are the initials of the owner. They are held back by old-fashioned black iron shutter fasteners.

The windows are just as they were originally, hardly any two of them exactly alike in dimensions. They were made from trees cut on the farm, for the most part by the farmer himself, who was very free in his carpentry. Evidently an inch or two this way or that did not worry him in the least, and certainly the house lost nothing in its gen-
NORTHERN END—RESIDENCE OF JAMES M. TOWNSEND, JR., ESQ., MILL NECK, L. I.
HEWITT & BOTTOMLEY, ARCHITECTS.
eral effect through his rather sketchy methods of construction.

Most of the shingles have been renewed. A barn was found in the neighborhood covered with gray hand split shingles, in good condition. These were bought and transferred to the more battered parts of the house, where its own shingles were impossible. Every care was taken of the shrubs and vines while the building was under construction. Where it was possible the latter were left untouched, but the larger part of them were laid down on the ground while the shingles were being renewed and immediately afterward fastened back against the house.

The plan has undergone radical changes. For the most part the house is only one room deep. It is this which made it possible to leave the tiny windows in the bedrooms under the roof in the front of the house. Dormer windows were cut in the roof in the back and then at least one large window was placed in each room, securing ample cross drafts. The back was very rambling, and varied by projecting roofs and unequal arbors and porches, so that the dormer windows from the outside increased the charm of the back of the house as much as they would have impaired the effect of the front.

As has been said, two wings were added to the little farm house when it was remodeled—one wing, to the south, the other to the north. In the original house the kitchen and dining room were one, and there were two bedrooms on the ground floor in the northwest corner. All this has been changed; as may be seen from the plan, a narrow hall runs straight through the house with a door at each end opening under gnarled apple trees at the back and on a small stoop and brick path in front. To the right is a large living room 33x16, which in the original farm house was two rooms divided by a large chimney breast and some closets. These were removed and a large living room was made of what had been the kitchen and store rooms and beyond this an enclosed porch with a big fireplace made a very delightful addition to the living room, getting full south sun breezes. On the left of the hall is the present dining room, which has been very little changed. A shifting of the partition at the back of about six feet enlarged it and divided it from a pantry behind. Beyond this pantry, set back about 16 feet from the line of the front of the house, is the other new wing containing the kitchen, laundry, bedrooms, store rooms and three servants' rooms.
HOUSE DOOR—RESIDENCE OF JAMES M. TOWNSEND, JR., ESQ., MILL NECK, L. I. HEWITT & BOTTOMLEY, ARCHITECTS.
SOUTH BED CHAMBER—RESIDENCE OF JAMES M. TOWNSEND, JR., ESQ., MILL NECK, L. I.
Hewitt & Bottomley, Architects.

SUN ROOM—RESIDENCE OF JAMES M. TOWNSEND, JR., ESQ., MILL NECK, L. I.
Hewitt & Bottomley, Architects.
The two photographs of the interior show how unusually suitable the furnishings are. The old Colonial chairs and tables that have come from houses of a similar character, the sampler over the living room mantel, made by the grandmother of the present owner when she was a little girl of twelve, and the four silhouettes around it in black frames with the thole chestnut jars on the mantel in black and gold lacquer have a special fitness in this eighteenth century farm house. The walls are a warm light gray, and the chintz with bright flowers and foliage, with soft red predominating, give color and gaiety to the room.

The walls throughout the house are painted in neutral colors, gray or Colonial buff, for the most part, against which are hung quaint prints, sometimes black and white, but oftener done in color. The dining room wall is painted a soft Colonial buff and hung with chintz curtains, where rows of stiff little birds and primroses alternate with stripes of a brighter yellow tone than the wall. The large pieces of furniture in this room, such as the dining table and sideboard, are of old San Domingo mahogany and the chairs are farm house chairs painted dark green and ornamented with gold. Over the mantel hangs a flower piece on rich reds and browns.

As it originally stood it was a simple farm house, small and unpretentious but charming, and as it stands today the same adjectives describe it most accurately. Simple it is as it nestles on the hillside, 20 feet above the old Beaver Dam Road amid trees and shrubs almost as ancient as itself. A little larger than it was, decidedly more comfortable and livable, but essentially and apparently the modest farm house of 1789.
VESTIBULE—RESIDENCE OF HENRY FORBES BIGELOW, ESQ., BEACON STREET, BOSTON. BIGELOW & WADSWORTH, ARCHITECTS.
CURRENT tendencies in the arrangement of interiors indicate how great has been the progress within the past decade in decorative methods and ideals. They point to a wider and more wholesome and, it is safe to add, a steadily increasing appreciation of the essential factors that contribute so large a share to the material side of our domestic comfort and pleasure. Incidentally they afford some ground for agreeable gratulation at having escaped from the bondage of ugliness and banality that not many years ago formed the generally accepted order of the day. Far more important, however, than this evidence of quickened artistic perception, gratifying as it may be, is the lesson to be drawn from a careful inspection of the current tendencies and the trend of their working—a lesson which should reveal basic principles to guide us in a creative work that has by no means attained its full fruition.

The positive need of interior decoration is quite as urgent as the need of architecture. It may be good or it may be bad, just as architecture may be good or bad, but we cannot escape from it any more than we can escape from architecture. The furnishing and embellishment of our dwellings is not to be ignored or left to random experiments dictated by passing whims. Rather is it—or it should be—the object of consistent, consecutive planning, carefully worked out with serious thought and mature deliberation. Art ought to be, and the truest art is, the seemly clothing of utility. “Anything is to be held well worth while that will conduce toward making the intimate surroundings of our daily life more livable and attractive. It is a laudable desire to have everything about us dignified and beautiful, no matter how humble its use. The Greeks followed this principle, and the experience of many centuries has assuredly proved that they were fit patterns for emulation” in their rational and well-balanced appraisement of the complex values entering into the aggregate of human existence. We are psychologically so constituted that a large proportion of every lifetime is spent in the pursuit or enjoyment of sensations, and the attainment of gratifying material surroundings occupies a conspicuous share of our energies.

Of what quality interior decoration shall be—whether villainously bad or thoroughly good—is a matter of paramount importance to architects. No agency is more potent to ruin the interior aspect of a well-planned house than a poor arrangement of the furnishings. A well-known architect recently told a magazine editor that he had stopped having photographs taken of the interior of his houses after they were furnished because, almost invariably, the clients when left to themselves, as they generally were, spoiled all the good effects of his work by the unfortunate arrangement of their appointments. On the other hand, nothing will better serve to enhance architectural merit than well-considered interior arrangement.

Without further preface we shall pass to the examination of current tendencies in the work of furnishing, referring, for the exemplification of principles noted, mainly to the illustrations accompanying this article and making subsequently such deductions and application as may be warranted. The illustrations first in order are those showing the interiors of the house of Henry Forbes Bigelow, Esq., of the firm of Bigelow and Wadsworth, architects. The one view of the exterior is sufficient to indicate how in the process of remodeling the front was kept in harmony both with its surroundings and with the interior scheme determined upon.
All the interiors are deserving of careful examination, not only because they are particularly pleasing in general aspect, but also because they display sound judgment in method of arrangement and are thoroughly representative of several significant decorative tendencies. Beginning with the long, marble tiled vestibule, we find the walls hung with tapestries which form not only the sole decoration but an exceedingly full and effective decoration as well. The taste for tapestries as an adornment for the walls of our houses has arisen and attained a wide development and popularity within a comparatively few years. Along with the taste has come a surprising degree of popular knowledge about their history, variety and method of manufacture. This knowledge has unquestionably added to the enjoyment of their rich and mellow coloring and the keenness of our appreciation of their decorative value. Not only have people learned to use them but they have learned how to use them. A single tapestry will furnish a whole wall and oftentimes a whole room, imparting life and interest along with a sense of flexibility and the pictorial and color value. When a tapestry is used it is not only unnecessary but presumptuous and foolish to hang anything else on the same wall save under the most exceptional circumstances. Other attempts at mural adornment hung alongside must needs appear petty and ineffective, their own character and value being completely lost without seriously impairing that of the tapestry except by making the free wall spaces beside it fussy and fidgety. There is so much breadth and dignity of feeling in a good tapestry that a small piece will satisfy the needs of a whole wall and the free spaces on either side will convey no
HALL—RESIDENCE OF HENRY FORBES
BIGELOW, ESQ., BOSTON. BIGELOW
& WADSWORTH, ARCHITECTS.
STAIRCASE – RESIDENCE OF HENRY FORBES BIGELOW, ESQ., BOSTON. BIGELOW & WADSWORTH, ARCHITECTS.
sense of bareness. Indeed the tapestry centres the observer’s pictorial and color interest and the flanking open spaces serve as a foil. On the other hand, the whole extent of a wall may be covered by a tapestry without making the room seem crowded or oppressive. There is usually enough receding color to keep the design from obtruding into the room and the chromatic schemes are so marvellously harmonious and balanced that, like good Oriental rugs, they are adaptable and will go well in almost any surroundings. As a background for movable furniture no objection can be made to them. In the Beacon Street house we see them effectively used in both ways; in the vestibule they wholly cover the walls, in the drawing-room there is a wide free space at either side.

There is also another capacity in which tapestries may be employed—as a means of redemption and concealment for architectural shortcomings. Several of the latter illustrations exemplify this use. The present temporary residence of George Howe, Esq., of Furness, Evans and Company, at Chestnut Hill, Philadelphia, is a brutally ugly structure of the Centennial vintage. Fortunately, the rooms are large and the ceilings high so as to admit of hanging tapestries and bringing together a wide variety of equipment. Thus, by means of judiciously disposed and interesting furnishings collected abroad not only has an unpromising foundation been thoroughly concealed but interiors of real excellence have been achieved despite all architectural handicaps. The revival of the demand for tapestries has resulted in successful essays of American as well as European looms to produce acceptable fabrics inspired by ancient methods and patterns.

Another plainly evident and significant
EXTERIOR - RESIDENCE OF HENRY FORBES BIGELOW, ESQ., BOSTON. BIGELOW & WADSWORTH, ARCHITECTS.
tendency in the arrangement of interiors is the departure from straight period furnishing. A strict adherence to historical styles is desirable under some conditions and capable of eminently pleasing results but to stick to separate period precedents all the time without ever attempting any combination is like playing upon the various instruments of an orchestra severally in turn but never joining them in concert. This would be edifying so far as the quality of each instrument is concerned but would convey no idea of the wealth of tone and harmony when all were played together. For successful combination a knowledge of the period styles is essential, just as a knowledge of the tone, quality and capacity of each instrument is necessary for intelligent orchestration, but a wider range of possibilities to draw from immeasurably broadens the scope and opportunity of decorative treatment. The blending of elements taken from diverse sources requires far more skill and judgment than the execution of a one period scheme, and there is a mellowness and urbanity about a well done composite interior that amply compensate for any difficulty encountered in its achievement. There is flexibility and a degree of latitude for the introduction of many a delightful touch, thoroughly in accord with our cosmopolitan and complex culture, which a close following of rigid and somewhat arbitrary period conventions would altogether preclude. An Italian mantel, an old Dutch painting to be set in a panel, a Flemish tapestry and an ancient Spanish cabinet may all be agreeably assembled in a room of French architectural affinities but it requires taste and discrimination to make the heterogeneous gathering effective. A sense of congruity, of course, must guide the work of amalgamation. "The attempt to yoke a gilt Louis Quinze chair to a Jacobean carved oak settle, or to put a wicker chair beside a formal Adam console cabinet, can never be anything but shocking." This is an extreme example and an ordinary perception of fitness would avoid similar maladjustment, but for the best results the more subtle relations must be carefully studied. For an altogether composite interior, a sufficient binding note of unity may often be found in the architectural setting. Of this tendency toward composite furnishing, while the bond of unity is supplied by the architecture, many of the accompanying illustrations provide examples.

A third current tendency in the arrangement of interiors is observable in the practice of concentrating the decorative interest in spots and placing furniture in logical groups instead of distributing unrelated units in an almost random manner. Of course, units are used, but they are generally of sufficient importance, either in themselves or from the place given them to balance interest. We clearly see this tendency toward a logical grouping of furniture in the frequent arrangement of sofas, lampstands and small tables immediately around the fireplace, naturally the focal point of interest in a room. We can also trace discriminating arrangement in the general abandonment of the Victorian predilection for putting things in the middle of a room, around a centre table. Other examples, also, of a more thoughtful treatment might readily be adduced. The tendency toward logical arrangement brings in its wake the suggestion for restraint and elimination of whatever is not in some way essential to the scheme of decoration. People so often yield to their acquisitive instinct and allow their rooms to become crowded with non-essentials that the work of arranging interiors has become largely a work of elimination. The accompanying illustrations indicate the prevalence of this reasonable restraint which permits the good qualities of each piece of furniture to be fully appreciated.

In the two libraries shown, that of the house in Beacon Street, Boston, and the other at Cogshall, St. Martins, Philadelphia, the bookcases are built in and given an architectural treatment in accord with the architectural genius of the rest of the house, thereby exemplifying the tendency to make built-in accessories such as shelves, cupboards and closets, fill a distinctly decorative function consistent with the general scheme pursued.
GALLERY—RESIDENCE OF HARRY L. RICE, ESQ., DOVER, MASS. KILHAM & HOPKINS, ARCHITECTS.
If the reader will look carefully at all the pictures of the Beacon Street house, it will be seen that not a single picture is visible and yet the walls are not at all bare or unfurnished in appearance. This is partly owing to the use of tapestries and partly to the intelligent employment of mirrors and sconces. But more than all else the architectural embellishment of the walls is responsible for the interest attaching to them without the agency of pictures. This absence of pictures does not indicate any lack of appreciation of their merit or of their valuable decorative function, but it does forcibly point out, in this particular instance, the great importance that wall decoration of a strictly architectural nature is assuming in the modern scheme of interior arrangements.

The painting on the overdoor panel in the hall of the Beacon Street house amounts to the same thing as a picture in supplying a point of decorative interest, but its setting and method of application are wholly architectural. The four overdoor painted panels in the house at Mill Neck in Long Island are purely decorative and not pictorial in character and fulfill the function of embellishing and emphasizing the importance of an architectural feature of the room. The oval picture, set in the overmantel panel of the same room, has its own distinct and independent pictorial value, but yet, notwithstanding that fact, it also serves the architectural purpose of adding decoration to a prominent structural feature. In the placing of other empanelled pictures in similar positions much the same end is gained. Two birds are killed with one stone—the picture receives a worthy setting, dignified by architectural accessories, while it in turn contributes decorative interest where the architecture most needs it.

It is not to be inferred from the fore-
GREAT ROOM—RESIDENCE OF W. S. & J. T. SPAULDING, PRIDES CROSSING, MASS.
Little & Browne, Architects.

LIVING ROOM—RESIDENCE OF DR. J. C. AYER, GLEN COVE, L. I.
BREAKFAST ROOM FIREPLACE—RESIDENCE OF C. E. PROCTOR.
Little & Browne, Architects.

BREAKFAST ROOM DOORWAY—RESIDENCE OF C. E. PROCTOR.
Little & Browne, Architects.
MUSIC ROOM—RESIDENCE OF C. E. PROCTOR, ESQ., GREAT NECK, L. I. LITTLE & BROWNE, ARCHITECTS.
THE PICTURE GALLERY—34 QUEEN ANNE'S GATE, WESTMINSTER. BLOW & BILERY, GROSVENOR ROAD, LONDON, ARCHITECTS.
By Courtesy of Architectural Review, Westminster.
SALON IN A RESIDENCE BY SMITH & BREWER, LONDON, ARCHITECTS.

By Courtesy of Architectural Review, Westminster.
GALLERY IN A RESIDENCE BY SMITH & BREWER, LONDON, ARCHITECTS.
DRAWING ROOM FIREPLACE—RESIDENCE OF JAMES M. TOWNSEND, JR., ESQ., MILL NECK, L. I. HEWITT & BOTTOMLEY, ARCHITECTS.
DRAWING ROOM—RESIDENCE OF JAMES M. TOWNSEND, JR., ESQ., MILL NECK, L. I. HEWITT & BOTTOMLEY, ARCHITECTS.
DRAWING ROOM—RESIDENCE OF JAMES M.
TOWNSEND, JR., ESQ., MILL NECK, L. I.
HEWITT & BOTTOMLEY, ARCHITECTS.
LIBRARY—COGSHILL, ST. MARTIN'S, PHILADELPHIA.
Edmund B. Gilchrist, Architect.

STUDIO—COGSHILL, ST. MARTIN'S, PHILADELPHIA.
Edmund B. Gilchrist, Architect.
HALL—COGSHILL, ST. MARTINS, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.
going paragraphs that those who coincide with current tendencies of interior arrangement underrate at all the value of pictures or believe that the best mural adornments are achieved without them or that they should be kept altogether subservient to architectural exigencies. It is, however, to be distinctly understood that the best standards encourage the use of a few excellent and effective pictures in preference to a larger number of indifferent character. It is a grave mistake to have too many pictures, even pictures of unusual intrinsic merit, for pictures need room in which to be seen to advantage. Furthermore, it is unfair to a good picture to hang it in an unfavorable position, while to hang mediocre productions near a work of passing excellence is positive impertinence. In a word, modern standards preach quality rather than quantity, and also insist on quality being given a fair chance to be seen to advantage, whereas a less discriminating age, from which we have happily emerged, was not particular about quality so long as the quantity seemed sufficient.

The greater attention now bestowed upon panelling, carving, plastering and other forms of interior structural embellishment indicates plainly that we are coming into our own again, architecturally speaking. For a large part of the nineteenth century the interiors of most rooms were merely rectangular plaster boxes, whose apertures for doors and windows were edged with graceless and vulgarly moulded trims, oftentimes made of expensive wood. The panelling of the doors was banal and the glazing of the windows was ugly and uninteresting. The decorative opportunity of the walls was entirely missed.

Fortunately, we are now becoming more and more keenly alive to the riches of our architectural heritage. Whether we look at houses of the Tudor, Stuart or Georgian periods—the last named in either its British or American manifestations—we find a wealth of panelling and carving and, in much of the older work, decorative plaster craft, too, that gave the rooms interest and character and made them appear furnished without the addition of movable fittings. Mantels and overmantels, cornices, cupboards, doorways—all were treated with the architectural dignity due them. Of these possibilities we are now more fully availing ourselves to the great betterment of our interiors. In friezes and cornices, in refinement of mouldings, in overdoor and overmantel enrichments, in bookcases and cupboards and in panelling we are now quick to grasp and employ the varied resources afforded by carving, moulding and the grain and color of different woods when paint is not included in the scheme. The illustrations fully evidence this important tendency.

Another tendency that is to be clearly seen in the making of interiors is the disposition to employ more fully the decorative resources allied to architecture—metal work, wood carving, glass painting and kindred accessory crafts. A growing appreciation of the artistic possibilities in cunningly wrought iron work, for instance, has led to the frequent use of the ironworker's creations for the railings of staircases, the grilles upon doors, candelabra, chandeliers and sconces. Not only is the graceful and satisfying design of such iron work to be considered, but the opportunities for its chromatic embellishment as well must be remembered, for both paint and gilding may be made to enhance the charm of form and add the enlivenment of color. Carving in the modes of the seventeenth and eighteenth centuries is more and more made use of to adorn with its rich intricacy the interior woodwork of houses designed in Tudor, Stuart or Georgian styles. In this field the scope of legitimate adornment is almost limitless, for there is scarcely any structural member for which wood is customarily employed where the carver's tools may not create some point of special interest. In the matter of painted glass for domestic use we are overcoming the prejudice that for so long a time confined the products of the glass painters' art to ecclesiastical and collegiate purposes. Recent interiors have shown that the rich hues of painted cartoons are eminently fitted to supplement the decorative scheme in oak panelled rooms with leaded casement windows and may also be judiciously in-
DRAWING ROOM—OWN HOUSE, CHESTNUT HILL, PHILADELPHIA.
George Howe, of Furness, Evans & Co., Architect.

DINING ROOM—OWN HOUSE, CHESTNUT HILL, PHILADELPHIA.
George Howe, of Furness, Evans & Co., Architect.
It is a distinctly hopeful sign, auguring well for the future, that on every hand are to be discovered evidences not only of greater discrimination, but of a growing sense of composition and consistency in the planning of interiors. The relation of one color to another and the principles of successful combination, the harmonies of analogy and contrast in form and the general demands of a broad sense of fitness independent of a rigid adherence to period conventions, are considered with increasingly critical care.

While such critical attitude on the part of the individual may sometimes complicate the problems of an architect or decorator, it is, nevertheless, to be welcomed as indicative of a deeper and more healthy appreciation of the importance of interior arrangement than in the past and as stimulative of conscientious efforts for worthy results.

From the foregoing matter it is clear that three lessons are to be drawn to insure the successful fruition of the tendencies noted. First of all, we must recognize more generally the close and natural relationship and interdependence of architecture and furnishing. Second, in order to attain satisfactory results, we must study this relationship carefully in each individual case and accord to architecture and the art of decoration each their full scope and measure of responsibility, scrupulously observing the principle of congruity the while. Last of all, we must recognize the necessity of entrusting to one creative agency the general scheme for the house and its interior arrangements so that the architect may plan both or that there may be, at least, harmonious collaboration between him and those who execute the interiors, whether they be professional decorators or deeply interested clients themselves.
Of all the arts or crafts accessory to architecture none is richer in diverse possibilities of both color and design than that of tile making. There is almost boundless scope for the application of tile embellishment and, so far, the surface of opportunity in that field has been scarcely more than scratched. We are really in the period of infancy of an art susceptible of notable development.

There is no part of buildings, public or domestic, where tiling, in one of its many forms, may not be fitly used for decorative or utilitarian purposes or both in happy combination. A careful study of the architectural employment of tile in the past cannot fail to convince us that we are backward in tile appreciation and have not fully waked up to the realization of a valuable resource within our grasp. From an examination of the ancient buildings of Spain, Mexico and Persia we can learn much in the line of actual tile achievement by men who were masters in their application of the fictile art.

But archaeology or history are of little profit to us if they are merely retrospective and contribute no lessons of experience for our present guidance nor afford inspiration for new essays to be ventured upon by the aid of ingenious adaptation. The tile encrusted structures that excite our admiration for the labors of the ancient Persian, Moorish and Mexican craftsmen are invaluable examples of what the builders of other days could do, but, more than that, they are pregnant with suggestions of what we our-
selves may accomplish in a logical course of progress. Because tradition, perhaps, does not sanction the use of tile except as a floor pavement with some particular style of architecture, we should not permit our deference to long established usage to blind us to the opportunity for new adaptations of tile embellishment for the walls or roof. It is more reasonable and more in accord with the spirit of our age to gauge our endeavors in that respect by considerations of appropriate color and design united with their fitness for expression in a tile medium.

It is not the purpose of the present article, however, merely to direct attention to past glories of architectural faience or pottery, or to indulge in speculations regarding possible future performance, but rather to present a survey of actual present accomplishment in the field of architectural tile resources, resources that we may now readily avail ourselves of in the legitimate embellishment of both exterior and interior surfaces. Neither is it intended to dwell here upon the purely utilitarian aspect of tile possibilities. Tile embellishment is the item of chief present interest, and as the decorative phase of tile using, therefore, has first claim upon our interest, the utilitarian phase will be consid-

ered only in so far as it may be combined with the decorative. This highly desirable combination, however, may frequently be arrived at, for occasions constantly arise when sanitary requirements and artistic ideals may be simultaneously realized. This is particularly true with reference to color. Time and time again, where sanitary standards or convenience call for a smooth, flat, wholly glazed surface a strong note of interest may be added by the tone and variety of color. Then again in flooring where some special quality of surface is desired and it is not expedient to introduce specific decorative effects, an agreeable monotone in keeping with the environment can always be employed.

For exterior embellishment, the most essential qualifications for tiles to possess are proper color and durable glaze. Generally speaking, designs on tiles for exterior use do not constitute a consideration of great importance, for in the majority of cases the effect must be produced from a distance that would render complete patterns on individual tiles indistinguishable. Bandings or masses of tiles in one or two or three colors, if judiciously used for exterior ornamentation and relief, may be relied upon to produce a telling and agreeable effect, of
which much of the value will depend upon the manner of setting and the width of the mortar joints. Of course, for exterior use, the biscuit of the tile must be of such quality that it will not be affected by climatic conditions, and the glaze must present a durable surface capable of withstanding damage from the weather. If a pattern of any sort is required for outdoor purposes it will be visible and effective from a distance only if the several parts of the design are each composed of a number of tiles, the magnified pattern thus consisting of a large number of units in the manner of some of the old Mexican outdoor tile adornments. One of the accompanying illustrations shows how strikingly this method of treatment may be employed in the execution of a polychrome frieze for a large building.

But it is not only for decorative and pictorial friezes of this sort, on buildings of more or less architectural pretension, that varicolored tiles afford a valuable resource. A practicable and desirable possibility for their employment is in the redemption of factory chimneys and smokestacks from utter ugliness. There is observable in many quarters a tendency to improve industrial or essentially utilitarian architecture and impart to factory buildings what architectural grace circumstances will permit. In not a few instances this laudable attempt has achieved substantial success, but in one particular there is oftentimes a noticeable and unfortunate lack. Smokestacks and chimneys pierce the skyline, gaunt and graceless. By the addition of a moderate amount of tiling in bands or in some simple, bold design near their tops their whole aspect could be transformed at slight cost. The coloring need not be garish or obtrusive, and a modest effort in this direction will supply much needed relief, mitigate or destroy their unsightliness and give these present awkward structures something of the charm of minarets.

Another wide and welcome application of colored tile to purposes of exterior embellishment lies in relieving the monotony and baldness of stucco or concrete walls in domestic architecture.
From the nature of the materials and the necessary limitations of the usual methods of construction, it is a difficult matter, in erecting a concrete or stucco house, to get interest in the texture of the walls, add the relief of string courses or mouldings and avoid a degree of austerity and harshness of general aspect. The whole uncompromising tone of such walls may be changed and the "repulsive concrete surface" robbed of its asperity by merely introducing an unobtrusive tile string course or moulding of a contrasting but subdued color.

Here naturally occurs the question of the amount of color it is advisable to use for exterior enlivenment. The subject is broad and invites many points of view. We are unquestionably timid in our use of exterior color, and through our timidity doubtless miss many opportunities for employing chromatic relief to advantage. From a conservative attitude, however, it is safe to say that either a great deal of color ought to be used or else very little, and that where it will serve to emphasize structural lines. It is just this lack of emphasis, from which a great number of concrete buildings suffer, that properly disposed tile mouldings and string courses of subdued color are well calculated to relieve.

What was said in a previous paragraph regarding small patterned figures on single tiles for exterior use does not apply in cases where such tiles are to be used in an intimate way to lend a touch of interest to house walls, provided they are so placed as to be seen at close range. Devices of this kind are often both amusing and agreeably decorative in a perfectly normal and legitimate way.

On turning to consider the subject of interior embellishment with tiles we find an even richer field of decorative opportunity awaiting our examination. There is scarcely any place where they may not be used with telling effect—floors, steps, walls, ceiling or vaulting, all are susceptible of one form or another of tile enrichment. The foregoing is not a recommendation but merely a statement of possibilities.

Good judgment, of course, must determine in each case the amount of such decoration and the place in which it is to be applied. The wide variety of uses to which tiles may be put necessarily implies a diversity of sorts suitable to the several occasions of their employment and some of these kinds we shall now pass in review, first, however, making a few observations of a general nature applicable to all instances.

To begin with, it is of the utmost importance that the designer of tile decorations be thoroughly imbued with a tile or clay feeling, a feeling so sympathetic with and appreciative of the qualities of the materials that whatever he executes will inevitably be instinct with a vital quality that will insure its being an enduring source of pleasure and satisfaction. This clay feeling, this instinct for the fitness of things to be expressed in a tile medium, will avoid making attempts for the execution of which the material is unsuited.
BROCADE DESIGNS OF UNGLAZED TILES SET IN CEMENT GROUND.

MANTEL DETAILS, FILIGREE TILE—FONTHILL, DOYLESTOWN, BUCKS, PA.
BROCADE DESIGN OF UNGLAZED TILE SET IN CEMENT GROUND.

MANTEL OF GLAZED AND UNGLAZED FILIGREE TILE IN CEMENT GROUND.
FONTHILL, DOYLESTOWN, BUCKS, PA.
Furthermore, this respect for the genius of materials, and the concurrent realization of both their limitations and capabilities, will foster a sincere reverence for their real dignity and nobility as well as preclude the possibility of doing violence to the spirit of the craft. Closely connected with the sense of fitness in tile expression, with reference to material, is the sense of fitness in matters of color and design. And along with a due appreciation of the properties and application of color and design must go sufficient architectural knowledge to preserve a sound balance in placing and a just observance of fundamental architectural principles. The tile designer who possesses the fortunate union of the aforementioned qualities will in all probability be felicitous in the results of his work.

It is obvious from past experience that tiling for the embellishment of interiors may be fitly employed in three ways. It may form a complete encrustation of walls, and sometimes of floors and vaulting also, the tile surface either displaying a solid color or combination of several color masses or else an all-over recurrent pattern, varied occasionally, perhaps, if
inclination so dictates, by panels or cartoons whose continuity of design is carried out by the placing together of a number of specially executed single tiles. This latter method of treatment with all-over patterns or occasional cartoon variations follows Moorish and old Mexican precedents and is susceptible of wonderfully rich effects. Where a single color is used, or plain tiles in several colors, much of the interest will depend upon the surface of the tile and its finish.

The second way of using interior tiling is to apply it for the sake of decorative emphasis to structural lines and the third way is to employ it as an enrichment for panels. In all three particulars modern tile-makers have achieved notable results and the accompanying illustrations well exemplify all three treatments.

In one interior where the walls have been covered with undecorated tiles in several colors, marked interest has been imparted by judicious chromatic disposal and variety. The practice of encrusting pillars with tiles from base to capital can scarcely be commended, however, notwithstanding historic precedent for so doing. A pillar should convey the impression of strength and unity. Its structural value should be obvious and the consideration of ornament should be subordinate. For this very reason the objection to pillars, and even more to beams, encrusted with tiles is that they carry no structural conviction but fill the mind with architectural doubts. The untiled piers in the church interior offer a pleasing contrast in this respect. There the tiles are kept where they belong by nature and the effect is far more convincing.

The same interior along with one or two of the other illustrations exhibits the use of concentrated tile ornament to emphasize structural lines, a thoroughly legitimate and commendable prac-
MURAL EMBELLISHMENT OF POLYCHROME MATT GLAZED TILE.

The most interesting aspect of tile embellishment here shown, and the most significant from a decorative point of view, is its employment to relieve and adorn wall surfaces either in panels of considerable size or in small concentrated devices.

The newest developments in this last-named phase of mural decoration call for tiles of various shapes and sizes, determined by the design. In the brocade and filigree tiles at Fonthill a new principle is embodied. The decorative pattern alone consists of tiles, some glazed and some unglazed, moulded in varying degrees of relief and varicolored, while the ground is simply cement, either left its native gray or colored to suit the requirements of the occasion. In the brocade work the old Persian idea of flat painted tiles has been translated into a new form of expression and incidentally the relief of shadow has been gained, thereby increasing the vitality of the effect. In the filigree tiles, with their stiff, conventionalized subjects, the inspiration has been drawn from traditional sources and the designs adapted to expression in a new medium. With both the brocade and filigree tiles a maximum of effect is gained at a minimum of labor, as the whole wall surface is not covered with tile but only the portion actually occupied by the pattern itself, which may be as close or as loose as the designer chooses. Both the brocade and filigree tiles are purely decorative in spirit and no attempt is made to introduce a pic-
torial element with its perspective requirements, an attempt resulting from a misconception of the true function and genius of the material, which is fictile and plastic and not adapted to pictorial requirements.

So long as tile designs are confined to strictly decorative purposes the greatest latitude of execution is permissible. It is only when they trench upon the pictorial field that the limitations of medium at once become evident and create an impression of failure to attain the end aimed at. To hark back once more to precedent, we find in the most successful tile designs of the past that the purely decorative element and the presentation of conventionalized figures have been dominant and it is a sound principle to profit by the experience of earlier ages in the adaptations we employ in the work of today.

In the four decorative panels from the Women’s Luncheon Room of the Curtis Building may be seen the most recent expression of tile embellishment, so recent, indeed, that no name has as yet been given the method employed, although it might not improperly be called “stencil tiling” as the lines of cement separating the several tiles composing the design are like the bands of a stencil. Each bird, blossom or piece of fruit is a separate tile of distinct color. How rich, bold and lively is the polychrome effect the reader may readily imagine. This method of tile ornamentation is full of possibilities and promise for development and constitutes one more to be added to the list of valuable resources already enumerated which materially increase the potential store of our decorative wealth.
Both architectural needs and the requirements of interior decoration necessitate the reproduction of furniture in the styles of past mobiliary periods. It is manifestly impossible that there should be enough furniture remaining from bygone days to supply the enormous demand. Since a reproduction of the old models affords the only means by which this demand may be met, it is of supreme importance that the method of reproduction should be painstaking and accurate.

In most old furniture there is an inherent vital quality because it was well designed and honestly made, and hence its fitness is of a nature enduring far beyond the limits of the particular epoch when each succeeding manifestation was the "last cry" of changing fashion. Absolutely accurate reproductions share this vital quality which creates such a permanent taste for furniture in the several period styles of the seventeenth and eighteenth centuries for the adornment of our homes, whether the styles be used singly or judiciously combined according to their essential affinities.

The conscientious

Legitimate Uses of "Furniture Reproductions"

Reproduced Louis Quinze Dressing Table.
and accurate reproduction of old furniture for the needs of interior decoration is a perfectly legitimate and laudable thing, and reputable dealers will candidly tell their customers that such and such pieces are reproductions. Furthermore, reproductions of the best models by the master cabinet and chair makers of other days are much to be preferred for purposes of furnishing to some of the antiques that frequently obtrude themselves on the gaze. Not all the furniture makers and designers of the eighteenth century possessed the inspiration of a Chippendale, a Hepplewhite or a Sheraton. Some of the pieces produced by the lesser Georgian makers or, perchance, by country joiners, are graceless and clumsy and it would be a waste of money to buy such objects. The sooner they are consigned to oblivion the better, no matter what claims to antiquity they may have. To cherish them is simply to encourage a false taste for something that is artistically bad. In cases of this sort the general design, or, perhaps, under the circumstances, we had better say "scheme," may be the same as one sometimes used most successfully by Chippendale, but the proportions are faulty and ungainly, without balance and weak both structurally and from considerations of design.

The great danger to beware of lies in careless and inaccurate reproductions of which there are many. The surest safeguard against these is a thorough knowledge on the part of the purchaser of the style of furniture he is about to buy and such knowledge may be obtained by a careful study of reliable furniture books, by visits to museums and comparison with pieces in their collections, but, above all, by a habit of close and constant observation with due heed to contour and the minutiae of ornamental and structural detail.

There can be no valid objection made to honest and straightforward reproductions, but specious imitations made on purpose to deceive the unwary and undiscriminating are unfaithful and libelous to the patterns from which they purport to be copies and deserve the most unqualified censure. In order both to detect these pieces of dishonesty and to be able to appreciate fully the meritorious reproduction, it is necessary to study and observe widely and cultivate the habit of discrimination.
INTERIOR decoration, to be appreciated, must be seen; and at night artificial light is the revealing agent. The thing which we must strive to avoid in lighting is monotony. Of course good decoration prescribes a conformity with reference to period design in lighting fixtures; but it is not sufficient that a lighting fixture should harmonize perfectly with its environment, for if it is glaring and offensive to the eye, its relative value as a decorative symbol is destroyed. Fully eighty per cent. of fixtures which reveal the best work of the decorator are so offensively predominant that one is actually annoyed by their glare. This is because the manufacturers of lighting fixtures have failed to keep in step with the development work of the illuminant manufacturers, and by adhering to obsolete mechanical arrangements based upon the use of small-sized lamps have been greatly handicapped.

It is almost impossible to realize what tremendous improvements have been made, even within the past few months, in the way of obtaining more light without greatly increasing the size of the lamp bulb. This is graphically represented by the improved 500-watt mazda lamp; compared with a cluster of lamps, the one lamp gives as much light as forty-six sixteen-candle power carbon lamps, at five cents an hour, as against twenty-three cents. The particular significance of this to the interior decorator is that such a lamp makes it much easier for him to realize his ideals in the way of color of light, without exceeding the cost limit prescribed by those clients whose enthusiasm is restrained by economic considerations.
The purpose of this article is to describe a new method whereby any one can determine the most effective lighting for an interior before the lighting fixtures have been purchased. We must first review some of the conventional forms of lighting which are in vogue, so that the effectiveness and adaptability of the method may be fully appreciated.

The use of small lamps is almost entirely responsible for such lighting as Fig. 4. The designers seem to think that it is necessary to place a large number of small lamps in such a fixture (Fig. 4). Then, realizing that there will not be enough light, they use glassware which is too thin, causing over brightness, or else ground glass that reveals the location of every lamp by a bright spot. The result of the combination of small lamps with such glassware is a glaring, over-brilliant fixture, which is utterly incongruous and physiologically offensive. Such a fixture has neither beauty nor usefulness, and, owing to the lack of light where it is required, side lights are called upon to supply the deficiency. This they invariably fail to do, for if they are bright enough to contribute any useful light, their individual brightness is too great on account of their being directly within the visual field. It is only when the side light is shaded and so reduced in brightness that it can be regarded comfortably, that it possesses any value as a decorative symbol.

The correction lies in substituting one large lamp for the small ones and obtaining as a working base a tremendous quantity of light at a greatly reduced cost. It is then possible to surround the single lamp with a color modifying device in the form of a cylinder of colored glass, which will eliminate the harsh white light effect without reducing the quantity of light too greatly. As a result the lantern (Fig. 4) would give ample light without sacrificing the pictorial value of the side lamps, which would be restored by using very small lamps for the sole purpose of expressing the character of the glassware and fixture. Treated in this way, such lights contribute greatly to the effectiveness of a room, provided their arrangement is in sympathy with architectural conditions. In some cases it is necessary to effect a compromise between ceiling and side lights by an arrangement which is...
neither one nor the other (Fig. 1). Here, pendant globes are higher than side lights and lower than ceiling lights. Their beauty is greatly impaired by the noticeable placement of the lamp within. Being considerably smaller than the lantern of Fig. 4, these globes represent a class requiring special treatment; and here again the larger-sized lamps can be used enclosed within colored cylinders, ventilated of course. Such cylinders, which are closed at the lower end and perforated for ventilation, can be used in many fixtures to hide the lamps and give color modification and afford a permanent and flexible means of eliminating harsh, white light effects. All glass makers supply them.

Some fixtures require the use of small lamps, we are informed by the fixture salesman, and Fig. 10 represents such a type, the object of which is to illuminate the room in a general way. If it were not for the light walls and ceiling such a fixture would fail to do even this. I have succeeded in adapting large-sized mazda lamps to fixtures of such a type, so that the lamp is concealed within the central portion of the fixture within a reflector which directs the light upon the ceiling. Small cones of opal glass were placed within the outer globes and the light diffused downwards from the ceiling was in turn diffused from these cones and gave one the impression that the globes were actually lighted. In this way the objection which has been raised so frequently regarding the unnatural effect of a dark fixture hanging from a bright ceiling is overcome. It is to be hoped that manufacturers of indirect lighting fixtures will adopt this idea, offering as it does a radical departure from either the indirect or the so-called semi-direct lighting.

It is certain that no problem of interior lighting can be solved without at least two different lighting effects. In almost every room there are occasions when one desires to reveal the whole interior. At other times a touch of light here and there affords a welcome relief. The changes which have occurred in commercial lighting attendant upon the increased economy of illuminants have had a great deal to do with this necessity for subdued light, and table lamps afford the conventional means of obtaining it. When electric lamps gave a yellow light in the days of the obsolete and expensive

![FIG. 4. GLARING LIGHT MAKES IT IMPOSSIBLE TO SEE AND APPRECIATE HANDSOME LIGHTING FIXTURES.](image-url)
carbon type of electric lamp—the decorator had no difficulty with the table lamp or, as it is sometimes called, the portable lamp. Through the medium of silk or other material in the shade the color modification of light and contrast was effected, and the unmodified light directed downwards, below the shade, was of a warm yellow tint. Now the light below is as harsh and unfriendly to interior decoration as unmodified daylight, and yet no attempts have been made to supply table lamps designed to correct this defect. Possibly this neglect has been due to the inconvenience of silk disks on hoops placed at the base of shades, a time immemorial method of hiding the unattractive interior of lamp shades, particularly those formed of glass and metal combined. The best way is to dispense with the cluster of lamps and substitute one socket holding one lamp upright. About this lamp should be placed a bowl of glass in design to harmonize with the proper period, and with an inner surface colored to restore a light of mellow quality. This method can be applied to any table lamp having as a base a vase, jardiniere, urn, or pedestal; and there are something like five thousand designs in glass bowls to choose from, not imported.

It has been urged by many architects and decorators that the improved mazda lamps of the larger type do not lend themselves gracefully to fixtures of the indirect or semi-indirect type, owing to the projection of the lamp base and socket above the bowl of the fixture. This criticism is specious only with reference to lamps of the very largest size and to the special fixtures which have been designed to meet commercial requirements. A typical indirect fixture of a shallow bowl type is illustrated by Fig. 11, where the wires conducting the current to the lamps are stretched parallel with the chains. This arrangement is much preferable to the central drop cord terminating in a socket. The improved type of large mazda lamps will soon be designed so that they can be burned in an upright position, thereby obviating the necessity for the pendant socket, but in the meantime the drop cord, at least, can be eliminated by securing supporting arms of metal, placed edgewise so that no shadow is projected by them on the ceiling and secured or anchored to the interior of the bowl near the chains, intersecting and holding the socket firmly. The particular advantage with larger lamps is fewer fixtures and less monotony and expense.

The same applies to semi-indirect fixtures. Fig. 8 illustrates the perfect concealment of all wires and sockets; while, at the right, the smaller fixture is a glaring exception. Some fixtures must of necessity be so shallow that they cannot accommodate the improved type of lamps (Fig. 7), and in large rooms it is generally possible to supplement their light with other lamps concealed within cornices or other formations. Wherever white cloths are used on tables these aid
in bringing out the detail of opaque indirect fixtures, which is more or less obscure in rooms with dark floor coverings. In other words, with indirect or any other kind of lighting the light directed downward is redirected upward again by the floor; hence, the lighter the floor, the more light will be directed ceilingward. Practically the only kind of lighting which is directly exposed to the eye by the interior decorator in these days is the candelabra lamp. Even in such a room as Fig. 9, with no dark hangings it is inadequate, failing in its resemblance to a candle, and in its illuminating function.

In the glass of the door (centre) appears the reflection of the ceiling fixture. This is another case where a large lamp could be used to advantage, hidden in the body of the fixture and the candle lamps subordinated in size and given due emphasis by using very small lamps to give the impression of candles. These small mazda lamps can be used to give a delicate emphasis to certain objects of decoration. The old French clock (Fig. 3) affords an example of these possibilities which are only limited by one’s imagination. There is no fire risk in arranging lights in this way, for, like the very large lamps, the miniature ones have enjoyed the same improvement, and there are devices, known as transformers, which can be readily secreted and inexpensively installed. These reduce the electric current to such low tension that fine, silk-covered wires can be used to reach any point. Fig. 2 shows that sometimes a delicate touch of light which just barely reveals a painting is an agreeable change from a searching exposure, and another little lamp gives a touch of life to a sprig of blossom all creating atmosphere. The pleasing effect of subdued light is shown by Fig. 6, which should be compared with Fig. 5. The absence of a ceiling fixture is quite noticeable and agreeable. The table lamp supplies both the subdued and general lighting, the latter emanating from a reflector concealed within the lamp shade.

These two pictures decisively voice the necessity for at least two kinds of lighting in an interior. It is a mistake to attempt lighting which has as its object the perpetuation of daylight conditions. An engineer has been experimenting with the object of lighting a room at night as it is lighted during the day—through the windows. But instead of refining the light and softening it, he aspires to bring to an interior all the harshness of the mid-day sun. It is rather difficult in lighting or any other art to improve upon nature’s plan. We have day and night, and from a decorative viewpoint man should try to make a substitute for daylight at night, which aids in suggesting the element of repose; and it is futile to persist in turning night into a natural day.

All theory is more or less devoid of interest except to humorists, and the opinion which
The accessories are within the reach of all—an old tin pail, an improved mazda lamp (750 watts size), and last but not least several feet of electrical conductor lamp cord with a mogul socket at one end and an attachment plug at the other. In addition, supply yourself with some colored gelatine film, yellow, amber, blue and green. Take this outfit to some interior the

**FIG. 9. MINIATURE LAMPS IN IMITATION OF CANDLES FAIL OF THEIR PURPOSE.**

**FIG. 10. AN UNDESIRABLE FIXTURE WHICH CAN, HOWEVER, BE READILY IMPROVED.**

light in which is still an unknown quantity, although the character of the system may have been tentatively chosen. Do not begin operations until the interior decorations are complete except for the lighting fixtures. The object of the experiment is to determine what effect suits you best, and this is accomplished by placing the lamp in the pail (in its socket) and placing the pail at such a height that the lamp cannot be seen by a person of average height. Then plug in the socket at the other end and note the white light effect. The harshness and garishness of the thing will appall you. Try the amber and note the transformation. You may find the amber too full a color, and if so, try several folds of yellow. Try all the other colors too, and when you have attained the desired effect, take the film to the glass-maker and obtain glass plates or cylinders which, when placed over the lamps in your fixtures, will duplicate the result of your experiment. You may find, and probably will, that it is very pleasing to have some different colors in various parts of the room, and this can be accomplished by concealing your lamps and reflectors within urns, vases, or pedestals, in a way different from the purely conventional.

**FIG. 11. INDIRECT LIGHTING OF CONVERTED TYPE, WHICH TENDS TO BECOME MONOTONOUS.**
PERSPECTIVE AND FLOOR PLANS—HOUSE OF W. C. WALKER, HARTFORD, CONN.
A. Raymond Ellis, Architect.
THE PIPING BOY FOUNTAIN IN GARDEN OF MRS. JOHN HAYS HAMMOND, GLOUCESTER, MASS. MRS. GAIL S. CORBETT, SCULPTOR.
ALL SOULS' IN-THE-EAST, UNITARIAN-UNIVERSALIST MEETING HOUSE, SUMMIT, N. J.

Joy Wheeler Dow, Architect.
INTERIOR VIEWS, ALL SOULS' IN-THE-EAST, SUMMIT, N. J.

Joy Wheeler Dow, Architect.
The Public Fountains of Nuremberg
Survivals from the Middle Ages and the Renaissance Period

By John J. Klaber

The fountains of the middle ages and of the Renaissance had a far more important function than those of our own time. Instead of being purely monumental, they formed the main water supply of the people, for piping in houses is an altogether modern institution. Even today, in many communities a little off the beaten track, the public fountains are the only available water supply, and in the open markets of the cities of Europe this is almost invariably the case.

Nuremberg, in particular, possesses a remarkable collection of public fountains, including several of a type that is almost unknown elsewhere. These consist of a bowl, supported by a pedestal and surmounted by a high railing of wrought iron. In the center is a small figure, the source of the water. Alongside is a support for the vessels into which the water is to be conveyed. In order to make the supply of water accessible, without a continual overflow on the pavement, and without interfering with the railing, a very curious device is employed. This consists of an iron tube, mounted on a swivel, so as to swing in a vertical plane. The end inside the railing widens into a sort of scoop, upon which the water always flows. But the tube is so weighted that it points upward when not in use, and the water runs out by a hidden overflow inside the bowl. To draw water it is tilted down, and the water, falling on the scoop, runs down the tube and into the vessel placed to receive it.

The best known of the fountains of this type is the Gansemannchen, in the little goose market back of the Frauenkirche. In accordance with the nature of the market, the sculptor, Pancraz Labenwolf, represented the fountain figure as a peasant carrying a goose under each arm. Streams of water issue from the beaks of the geese, in addition to two spouts on the pedestal supporting the statue. Although this is a work of the sixteenth century, and altogether Renaissance in handling, its naïveté of spirit shows how closely it approaches the Gothic models. The railing, with its suggestion of buttresses, is somewhat more Gothic than the fountain itself, for while sculpture was one of the first arts where the Renaissance influence was visible in Germany, smithery was one of the last. One finds grilles of a decidedly Gothic design on seventeenth century buildings whose architecture is altogether classic.

The bagpiper fountain is very similar in design, although the ironwork of its railing is somewhat richer. The figure, however, is far from having the same charm.

The Hansel fountain, in the first court of the hospital, also belongs to the same type, although of somewhat larger size. Its elaborate iron railing is continued to form a canopy supporting a flag. Other fountains of the same type have been erected in modern times, the best of them being the vulture fountain at the west end of the town, designed by Leistner in 1906. The Grübel fountain, with a statue of that local personage, is decidedly less pleasing.

The versatility of Labenwolf is shown by the little fountain in one of the courts of the Rathaus, from his designs. This consists of a bronze bowl with a Doric column in the center, above which a group of marine monsters is surmounted by a bambino holding aloft a flag. The pedestal bears the date 1557, cast in the metal, and although this work is almost contemporaneous with the Gansemännchen, it represents a far more Italianized and less indigenous phase of the Renais-
The Hansel Fountain, Nuremberg.

The Hansel Fountain, Nuremberg.

The Hansel Fountain, Nuremberg.

Of the Gothic period Nuremberg contains few remains, and its generally Gothic air is due to the continuance of the tradition into the period of the Renaissance. The only Gothic fountain of any importance is the Schön Brunnen, in the main market place. This large and very elaborate work, of the fourteenth century, whose design is ascribed to one Master Heinrich, is adorned with a great number of statues, and the whole is painted in colors. This fountain has been entirely rebuilt in modern times, and the painting restored after a drawing of the sixteenth century. Whether or not this represented the original colors correctly may be questioned, for the actual color effect is hard and without brilliancy, and by no means in the tonality usual in the middle ages. It seems certain, however, that the fountain was painted in some manner, for traces of color may still be seen on the statues of the original structure, now in the Germanic Museum. The rebuilding was rendered necessary by the ruinous condition of the original, for the soft sandstone of which it was built does not wear well, and most of the Gothic and Renaissance monuments of Nuremberg have required restoration to a greater or less extent, including nearly all the foun-
tains. This restoration is, nevertheless, to be regretted, because of the inevitable loss of authenticity and the look of newness it produces.

The railing of this fountain is of later date than the structure itself, being sixteenth century in design, though partly restored in modern times. The water spouts, four in number, have the form of veritable swivel guns of the Renaissance, and are decorated with figures of children, similar in type to those at St. Sebald’s. It seems, therefore, altogether probable that the typical arrangement with iron railings and tilting water spouts was not adopted in Nuremberg until the period of the Renaissance. The absence of other Gothic examples, however, renders the demonstration of this hypothesis almost impossible.

The Tugendbrunnen, near the church of St. Lorenz, executed by Benedikt Wurzelbauer about 1585, suggests, by its pyramidal composition and its octagonal plan, a possible inspiration from the Schöne Brunnen, but its character is altogether different. Figure sculpture, of an advanced Renaissance character, plays a far more prominent part than in the earlier example, and the architecture that forms its setting is quite Italian. A low railing surrounds the fountain, but without means of drawing water, though these may have originally existed. Their omission is perhaps explained by the existence of two smaller fountains in the same square, which seem to be of an earlier period.

A point of detail worthy of note is the comparatively small scale of all these fountains. Even when the whole forms a composition of considerable importance, the individual figures are never life-size, being usually only from two to three feet high.

The Neptune fountain, in the market place near the Schöne Brunnen, is a modern copy of a seventeenth century original. This original, cast by Schweiger and Ritter, seems never to have been erected in its intended place. It is now in Russia, at the Peterhof palace near St. Petersburg as the inscription on the copy in Nuremberg relates. This fountain, whose green patina is very effective in its surroundings, completes most pleasingly the ensemble of the marketplace, dominated by the broad gable of the Frauenkirche and the more distant towers of St. Sebald’s.

While the Neptune fountain is Italian in design, it is by no means a copy of any particular fountain in Italy. It retains, moreover, in the details of its decoration, indications of a distinctly Northern influence. The Triton fountain in the Maximilianplatz, of a somewhat later date, is more foreign in character, being an obvious copy of Bernini’s Triton in Rome.

While the later Renaissance was a period of slight artistic activity in Nuremberg—a fact not altogether regrettable—modern times have witnessed a new prosperity. Among the best works it has here produced is the little fountain
THE SCHONE BRUNNEN, NUREMBERG.
THE GÄNSEMÄNNCHEN FOUNTAIN, NUREMBERG.
THE NEPTUNE FOUNTAIN, NUREMBERG.
THE TUGENDBRUNNEN, NUREMBERG.
THE BAGPIPER FOUNTAIN, NUREMBERG.
in the Heßnersplatz, erected by Meissner in 1905 as a memorial of Peter Henlein, the Nuremberger who is supposed to have invented watches, and who is thereon represented as a watchmaker in the costume of the sixteenth century, on a pedestal with a globe inscribed with the hours, and suggesting the form of the "Nuremberg eggs," the first watches of which a record has been preserved, and probably the first ever made.

Another example of the same date is the Minnesinger fountain, by Kittler, a remarkably quaint design, hexagonal in plan, erected at the entrance to the Prater, a little triangular garden, just outside the old city walls. The fountain is of stone, with figures and ornaments of bronze, and is altogether modern in spirit, except for the figure of the medieval musician which forms the crowning feature. The ingenious manner in which a very little water is made to produce a very great effect is noteworthy, all the water being made to serve three times.

The other fountains to be found in Nuremberg are of no great artistic merit. The monumental fountain in the Melanchthon Platz is more curious than beautiful, being triangular in plan, with a seated figure at each corner. The fountain in the Plärrer is even less meritorious, and the small modern fountains in the streets are purely utilitarian.

It is interesting, however, to note the distribution of the old fountains. Without exception, they lie near the River Pegnitz, which traverses the city, and are situated on low-lying sites. On the castle hill no fountains are to be found. It would seem that the water supply is such as to render their use impossible in this quarter, where the only remaining source of ancient origin is a well over three hundred feet in depth, cut through solid rock. If this was indeed the only water supply of that quarter, as well as of the castle itself, it is scarcely remarkable that the ideas of sanitation in the middle ages were not altogether in accordance with those of the present.
Suburban Houses
by Caretto & Forster

Detail—House of John P. Hoyt, Esq.
At Grenwolde, Great Neck, L. I.
REAR VIEW—HOUSE OF CHARLES W. BRAZIER, ESQ., GRENWOLDE, GREAT NECK, L. I.
Caretto & Forster, Architects.

HOUSE OF WALTER J. VREELAND, ESQ., GRENWOLDE, GREAT NECK, L. I.
Caretto & Forster, Architects.
ENTRANCE DRIVE—HOUSE OF CHARLES W. BRAZIER, ESQ., GRENWOLDE, GREAT NECK, L. I.
Caretto & Forster, Architects.

HOUSE OF CHARLES W. BRAZIER, ESQ., GRENWOLDE, GREAT NECK, L. I.
Caretto & Forster, Architects.
PLAN OF HOYT RESIDENCE, SHOWN ON PAGE 456.

PLAN OF VREELAND RESIDENCE, SHOWN ON PAGE 458.

PLAN OF BRAZIER RESIDENCE, SHOWN ON PAGE 459.
ENTRANCE DETAIL—HOUSE OF WALTER J. VREELAND, ESQ., GRENWOLDE, GREAT NECK, L. I.
Caretto & Forster, Architects.

SERVANTS' ENTRANCE—HOUSE OF WALTER J. VREELAND, ESQ., GRENWOLDE,
GREAT NECK, L. I.
Caretto & Forster, Architects.
WEST SIDE OF RITZ HOTEL,
LONDON. VIEW FROM GREEN PARK.
HOWEVER modern and luxurious a hotel might be, it would be unreasonable to expect it to meet the conditions which we usually associate with the word “home.” A well-organized private residence, with its individualistic atmosphere, due to pictures and books and the many other treasures to which the occupant and his family are attached, is one thing; a hotel, designed to satisfy the temporary and purely material needs of people in general, is another. Yet it must not be forgotten that they possess one very important feature in common—comfort; and in the newest hostleries of the world’s great cities the bodily requirements of sojourners are now so well looked after that we not infrequently hear it stated that, on the whole, hotel life is preferable to living in a private house, where domestic worries sometimes more than counterbalance the advantages of homely privacy.

Especially in London has a very high standard of hotel construction been attained, being notably exemplified by the Waldorf and the Ritz. Both are in very central positions; each possesses noteworthy features from the point of view of its exterior and interior architecture; and as regards the question of comfort each has such good points that the difficulty is to choose between them. One’s impression, indeed, after a careful study of these two hotels, is that the highest possible degree of excellence has been reached for the time being, and that further progress in the furnishing, ornamentation and general interior arrangements of the temporary homes of travellers must necessarily be very slow.

The Waldorf Hotel occupies one of the finest sites in London, the broad new crescent connecting the Strand with Kingsway. Its architects were A. Marshall Mackenzie and Son.

The facade facing Aldwych is of Portland stone, on a basement of Aberdeenshire granite, and it will be noticed that the style is that of the Louis XVI period. This style has, indeed, been carried out throughout the hotel. Architecture, decoration and furniture being all in the same style, there is a harmony about the Waldorf which is most pleas-
A BEDROOM IN THE RITZ HOTEL, LONDON.

ENTRANCE HALL FROM PICCADILLY, RITZ HOTEL.
FOUNTAIN IN THE WINTER GARDEN, RITZ HOTEL, LONDON.
TYPICAL FLOOR PLAN IN THE RITZ HOTEL, LONDON.

WEST TERRACE OF THE RITZ HOTEL, LONDON.
MARIE ANTOINETTE ROOM, RITZ HOTEL, LONDON.

GREAT GALLERY OF THE RITZ HOTEL, LONDON.
ing. On looking at the accompanying plan of one of the floors, it will be seen that the building is similar to a French private mansion, the Palm Court representing the courtyard. Around this are ranged the public rooms. A special feature of the ground floor is that there are no passages.

The Palm Court is 80 feet by 60 feet. The total area covered by the hotel is 180 by 180 feet; and I may mention, en passant, that the ground rent is a little under two dollars a foot per annum. It is rented from the Duke of Bedford on the usual ninety-nine years lease.

The building consists of a skeleton of steel standards and girders, with an outer shell of stone and brick. The floors are of ferro-concrete covered, with hard wood boards; the roofs are of the same fire-proof material, with a covering of lead and slates. In the case of the bathrooms the floors are covered with a new flooring substance which has the advantage of being warmer than marble or tiles and better as a non-transmitter of sound.

There are four hundred letting rooms in the hotel—bedrooms and parlors combined; and no fewer than one hundred and seventy-five bathrooms. On the York Street and Aldwych sides the streets are broad and extremely well lit; whilst on the Aldwych Theatre and Waldorf Theatre sides there are broad areas. Both these theatres are low buildings, so that next to no light is cut off from the rooms and apartments.

Considerable attention has been paid to the ventilation of the Waldorf Hotel. A 40-inch fan extracts the vitiated air from the grill-room, lounge, restaurant and other public rooms and carries it up a vertical shaft to the roof. The kitchen is similarly ventilated.

Having made a very careful inspection of the kitchens of the hotel, I can say without hesitation that they are the best lit and fitted up in London. The central range is one of the largest in the metropolis—24 feet long by 6 feet wide. The larders are separated from the kitchen by open-air passages, thus assuring perfect freshness of food supplies.

From the points of view of sanitation, heating and water-supply, the Waldorf leaves nothing to be desired. In each department experts have produced an installation that in every way accords with the latest scientific knowledge.

American methods of construction are now so frequently adopted in London that they are no longer a novelty. But at the time of the building of the Ritz Hotel they were not so well known; hence the very great interest shown by Londoners, when the first complete steel skeleton building was put up in Piccadilly.

The architects were Messrs Mewès and Davis, with Mr. John Bishop as consulting architect. The first named is a well-known Parisian. He drew up the plans for the Ritz Hotel on the Place Vendôme, and in 1900 designed the Palais des Congrès for the Paris Exposition.

The principal façade of the Ritz faces Piccadilly and is slightly over 231 feet in length. At one end the hotel is bounded by the Green Park, with a frontage of 87 feet; at the other by Arlington Street, with a frontage of 115 feet. The total area of the site is about 23,000 square feet. The Piccadilly front is furnished with an arcade somewhat similar to that in the Rue de Rivoli in Paris.

The walls facing Piccadilly, Arlington Street and the Green Park are constructed of grey granite as far as the first floor, and above of Portland stone. The granite was obtained from Norway and is known by the name “Standard Grey,” owing to its splendid wearing qualities, its fine surface and good color. About 17,000 cubic feet were used.

We will now pass through the main entrance of the hotel in Arlington Street and inspect its interior. In the basement is a large banqueting hall, with reception rooms and a private dining gallery. These are reached by a special staircase. Below are the kitchens and dependencies. On the ground floor are entrance hall, grand gallery, offices, restaurant, Marie Antoinette dining room and the lifts. The upper floors consist of suites of apartments—reception
ALDWYCH FACADE OF WALDORF HOTEL, LONDON.
A PRIVATE SITTING ROOM, WALDORF HOTEL, LONDON.
or sitting rooms and bedrooms. The suites, each of which is shut off from the main corridor by a private hall or lobby, comprise sitting-rooms, two bedrooms, and two bathrooms, with separate lavatories.

Every precaution has naturally been taken to guard against fire. All the floors and roofs are built of reinforced cement.

As in the case of the Waldorf Hotel, the whole of the interior decoration of the Ritz is in the Louis XVI style. On all sides the influence of Boucher, Moreau "le jeune" and St. Aubin is visible. The mural paintings in the restaurant, which will seat one hundred and fifty people, are inspired by De Neufforge; whilst in the case of the lustres the well-known print by St. Aubin, "Le Bal Paré et Masqué," has been followed. Green and gold, with panels framed in carved and gilded wood, is the color scheme of the charming Marie Antoinette room.

No two suites of rooms are alike in their ornamentation, but in each case the general scheme is the same, i.e., the walls and panelling are in white, the floors are covered with thick green and rose-colored Persian carpets.

A few words must be devoted to the Winter Garden. The walls are faced with greyish-white stone, surmounted by a cornice; whilst in the middle of the wall facing the entrance is a decorative niche and a Louis XVI fountain, with figures and ornaments in gilt "repoussé" lead. The subject is "La Source."

The inevitable impression left after a visit to the Ritz is that of sobriety and good taste in architecture, decoration and furniture. It is perhaps the one hotel in London which, in my opinion, approaches nearest to our idea of home.
WE heartily agree with Mr. Martin Shaw Briggs that the disrepute which characterizes the later or florid Renaissance in the mind of the architect to-day is not unmerited. And we further gladly commend his purpose in recording faithfully in his book on Baroque Architecture (Fisher Unwin, London; large 8vo) the history of this wholly disgraceful decline and disintegration of a splendid style. However amorphous its forms, there surely were some underlying principles to control them; the study of such principles must be of value, for it must point out the reason for the fall. Such a study will also vindicate to a striking degree the truth of Walter Pater’s philosophy, that good work has been done in all periods and that no style is irretrievably and completely bad.

Many of us have laid the blame for the beginning of this decadence at the door of Michelangelo, that giant-genius who stood with one foot in the growth of the Renaissance, the other in its decline, and carelessly straddled its zenith, allowing the current to pass, but not seriously affected by it. Mr. Briggs sees fit to consider Vignola and Palladio his accomplices in the awful work of destruction although he does not censure their buildings. Carlo Maderna is credited with the first Baroque work in Rome, shortly after 1575. Bernini, the dominant figure of the seventeenth century, is discussed at length; his work at St. Peter’s, the atrium, the Scala Regia and the baldachino for which the Pantheon had to suffer, as well as his churches, fountains and trio of important palaces (Barberini, Ludovisi and Chigi) all receive adequate notice. Extensive material is likewise given concerning the late Renaissance in Genoa, Venice, Naples, Milan, and Bologna, each chapter being supplemented by a full bibliography. The fine distinctions between the Baroque of northern and of southern Italy are carefully indicated, and the writer then proceeds to study similar manifestations of stylistic degeneration in Germany, Austria, France, Spain and the New World, his final chapters dealing with England.

We can readily forgive Mr. Briggs’ thrusts at Ruskin and Fergusson—it is an antiquated amusement; but we cannot fully accord with his assurance of the Baroque tendencies of Inigo Jones and of Vanbrugh. The York Water
Gate is classed as a Baroque work, comparable with the Medici Fountain at the Luxembourg and the Porta del Molo at Genoa; the west towers of St. Paul's are grouped in the same manner. He shocks us nearly into insensibility by unrestrainedly declaring the spires of Bow Church and of St. Brides, that we have long looked upon as proud evidence of the true English Renaissance, similar arch-offenders against architectural morality. Nor does he cease there, for he tracks down even Sir Christopher to his minor works; for instance, his reredos in St. Mary Abchurch, London. Finally we drop our pen in despair when good old Temple Bar is relegated to the same scrap heap of the effete decadents. Gibbs and Vanbrugh are treated as harshly as Jones and Wren. Poor Vanbrugh has been repeatedly assailed for his glorification of “mere bigness” and “colossal and overpowering scale.” Castle Howard and Blenheim are again cited as expressions of his megalomania. The author notes at least that the attempt to produce a national thankoffering of prodigious size controlled the scale of Blenheim, but he does not regard Vanbrugh as any the less culpable. We hope sincerely that critics will have done with the word “megalomania.”

The author sharply distinguishes between the methods of Borromini and of Churriguera, at the expense of the former. He will not find many supporters in this distinction, but we must acknowledge the truth of his argument.

The Baroque remains a style that builds churches without piety, that knows no spontaneity and that finds its best expression in sumptuousness and artificiality. It reminds us irresistibly of a self-conscious maiden lady making a brave effort at vigor, beauty and splendid growth. We must, however, give credit to the style for its war on copyism and the patient reproductions from the antique which engaged the time of a number of contemporary pedants.

It is well that the author explains at the outset that he does not attempt to create “a wholesale revival of Baroque architecture in England,” for we are certain that the whole of the English branch of the profession would at once set the latter day “Furies” upon him. English soil never offered good ground for the Baroque seed. On the other hand we do not hesitate to admit the “perfectly logical development from Michelangelo and Palladio to Bernini and Longhena,” although we do not feel that “the period has been put under the ban,” as the author claims in his conclusion.

Finally let it be said that Mr. Briggs deserves congratulation at once for his courage and his care. He has produced a good book, thorough and altogether adequate. What is more, he has seen fit to take a much abused period and, simply throwing on it the light of careful study, has considerably increased our understanding of its products. The book will not at once find its assigned place because the current against the Baroque runs too high. We have got out of the way of considering this period really a chapter in architectural history; we have regarded it too much in the light of an excrescence, a poisonous fungus growth on the main trunk of a fine style. This volume will clear the air on that head; at least it presents the whole matter in a much better form than it has yet enjoyed between two covers and it is the work of a gentleman well versed in his subject, for most of us will remember his earlier work, The Heel of Italy.

The Country Life Press announces Sir William St. John Hope's important work on Windsor Castle: An Architectural History. Sir William is an archaeologist and historian of recognized and commanding ability. His volumes on Windsor Castle, the result of twelve years' labor, are the culmination of a project launched in the fifties under Queen Victoria. It was at that time to be under the guidance of Parker of Introduction to Gothic Architecture fame. All those who had part in its inception have since died and the whole scheme lapsed until new data in the Record Office made the chronology more readily accessible. The book is now published by Royal command of King Edward VII and King George V and appears in two volumes and a portfolio of plates. Archi-
tects will be interested chiefly in the accounts of the Horseshoe Cloister and of King George’s Chapel erected under Edward IV and Henry VII.

A veritable master work of literary ability and restraint as well as of artistic bookmaking is Mr. A. E. Richardson’s folio volume on the Monuments Classic Architecture in Great Britain during the Eighteenth and Nineteenth Centuries, (Batsford, London), fully illustrated with sixty full page plates from photographs especially taken, and with 135 plans, text illustrations and reproductions from measured drawings. The author has been careful to state that it is not his intention to encroach upon the adequately covered field of the historical works. He purposes to treat only of those structures which may be rightfully called monumental and to emphasize chiefly that part of the Neo-Classic in England which follows upon the period of the architect of St. Paul’s; for it is at this time that the Classic spirit first came to its own, especially under the tutelage of Lord Burlington and the faithful efforts of the Society of the Dilettanti. The subject is comprised within four major headings: the Roman Palladian Phase (1730-1780); the Graeco-Roman Phase (1780-1820); the Greek Phase (1820-1840), and the Neo-Grec and Italian Phase.

Mr. Richardson pursues the Classic ideal as expressed in the monumental academic work through these successive phases, shows its growth and proclaims its ultimate victory,—not entirely assured at the moment but reasonably within reach. He declares the academic manner a paramount necessity in civic centres, which form natural points of distribution whence other less important centres, or perhaps even domestic architecture in a diminished degree, may receive properly controlled inspiration and precept.

At the outset the author gives due credit to Professor Cockerell and Harvey Lonsdale Elmes as the most sympathetic interpreters of the antique ideal in the Neo-Classic time. He shows that these men are exponents of a thoroughly English monumental tradition inaugurated by Inigo Jones and given a local habitation and a name by Sir Christopher Wren.

The Roman Palladian Phase was the early expression of a cultural interest in architecture on the part of the dilettanti among the English nobility. The chief figure was the Earl of Burlington, who was responsible for the presence of Giacomo Leoni in England. The Italian’s mission was to edit Palladio (1717). To this early phase belong the Mansion House by George Dance the Elder, the Bristol and Liverpool Exchanges by the Woods of Bath, Edinburgh University by the Adams, the Dublin Parliament House by Richard Cassells, a number of mansions by Vardy, Ware, Paine, Carr of York and G. L. Taylor, and Somerset House by Sir William Chambers. In all of these works the refining and Romanizing influence of Wren’s principles goes on apace. Piranesi’s etchings further assisted the progress of the monumental manner, while the establishment of the Royal Academy in 1768 and the travels of Robert Adam, with the consequent exposition of the details of Diocletian’s palace at Spalatro had their due effect upon the younger men whose best work was to greet the dawn of the nineteenth century. Chambers shouldered the burden until he well acquitted himself in the remodeling of Somerset House, ably seconded by George Dance the Younger, whose Newgate Prison was one of the most imaginative designs ever brought to execution in England.

Comes then the publication of the works of Stuart and Revett and the Graeco-Roman Phase. All is preparing for the apotheosis of Greek purity in the years following 1820. Stuart, practicing and preaching, scatters the seeds of Hellenism broadcast. Soon we have the writings of Winckelmann and Langhans’ Brandenburger Thor in Berlin. Greek refinement becomes the order of the day; every journeyman carpenter knows his classic forms. The closing years of the eighteenth century produce Sir James Wyatt and advancing purism has additional advocates in Holland, Harrison and Hardwick. Sir John Soane’s
Bank of England and the completion of Buckingham Palace, as well as the immense metropolitan improvements undertaken under the Regency by the indefatigable John Nash, fitly conclude a busy period of Neo-Classic work.

In the Greek Phase begins the rebound, the reflex of stylistic exaggeration. Hellenic purity becomes minute copyism, aided unfortunately by the era of commercial prosperity and increased building activity following the final expulsion of Napoleon from Europe in 1815. To this time belong William Wilkins, author of the National Gallery, Sir Robert Smirke, whose method is well illustrated by the British Museum, and Lewis Vulliamy, architect of Dorchester House; not to mention Thomas Hamilton, whose Edinburgh High School furnishes but another example of the Greek temple facade doing duty in a building whose purpose is foreign to the origin of the design. The final consummation in the Neo-Grec and Italian Phase finds expression in the work of Professor Cockerell, George Basevi, Sidney Smirke, Sir Charles Barry, James Pennethorne and H. L. Elmes. The issue is not a little clouded by the Gothic favoritism which soon threatens to overwhelm the Classic and even to supplant it completely. This opposition serves to swing the intensive and narrow Greek method back into the broader Classic track. The tradition has struck deep and the formal revival of medievalism does not gather sufficient strength to uproot it. Now it waxes stronger daily and Mr. Richardson’s book is no doubt but another of its assertions. Nothing better indicates the fundamental desire for monumental public building than the instructions issued to the disgruntled Sir Gilbert Scott to use the Classic style in the new Foreign Office. And this triumph was achieved in the heart of the Gothic camp. Through all the vicissitudes of the modern individualistic tendency, diverting influences of eclecticism, not to mention certain up-to-the-minute abnormalities, the Classic ideal still flourishes. “So strongly planted are the giant roots of the classic growth that they withstood the successive shocks and storms occasioned by the uncertain tendencies of the second half of the last century, and to-day the tree promises a renewed blossoming. The need for the steady influence of an academic style is more than apparent. There can be no question of revivals or revivification; such terms are erroneous, but in the continuance of the spirit of the classic tradition lies the greatest promise for the art of the future.”

Beyond this manful effort to impress upon us the value and continuity of the Classic, Mr. Richardson restricts himself to a purely uncontroverted and concise style. The volume fitly maintains the Batsford tradition of excellence and will form a fitting companion volume to take its place with Belcher and Macartney, Gotch, and Garner and Stratton.

A volume of broad utility and professional value is Mr. Charles Foulkes’ *Decorative Ironwork from the Eleventh to the Eighteenth Century* (Methuen, London; quarto). Mr. Foulkes has a sympathetic grasp of the artistic as well as the practical interest of his subject. He has been careful to consider ironwork but one of a number of crafts, dominated by certain broad-gauged rules of design or composition, to which technical skill must be subordinated. Individual chapters are assigned to topics such as “Hinges”; “Grilles, Railings, and Gates”; “Candelabra”; “Furniture”; “Locks, Keys and Bolts,” etc., and each topic is subdivided geographically. Exhaustive lists of examples are given under each heading and at the end is a roster of names of smiths and ironworkers, some of which are dated as far back as 1338.

The photographic illustrations are of excellent quality and there are also numerous cuts in the text. The book will adequately supplement Hermann Lüer’s *Geschichte der Metalkunst*.

Of course you know that most of us look upon the Architectural Record as a sort of evangel. It seldom if ever occurs to us to question its editorial dicta, its opinions or statements. Therefore, one of us at least feels a bit queer when in a quasi-editorial capacity Mr. Beach tells us, in the September number, that "consulting architect" is a misnomer. In one paragraph he gives the poor C. A. a straw to clutch at for existence; in the next he hustles him into a species of professional limbo, dark as the mischief. Incidentally he shies a rock at the C. A., saying that the latter "is lacking in architecture." Now, this last soft impeachment it would be immodest for me to deny; but I do most earnestly claim the right to exist.

Many architects are employed with other practitioners on special jobs, partners for a time, if you wish, but the former generally call themselves "consulting architects" in those cases. Again, others have given more attention to Y. M. C. A. or other classes of buildings and are hitched onto the local men given the commissions. For the time being they too, the former, may be deemed consultants, though I agree with Mr. Beach that "associate architect" is the more correct appellation.

But in my own case—and I know of no other architect in the country who gives his whole time exclusively to this sort of thing—I gave up active practice long years ago and under no circumstance have I competed or will compete with the regular practitioners in rendering regular architectural service. Nor do I claim to have specialized in any one class or character of construction. My services are at the disposal of architects in any and every class of work. I do my modest best to help them solve their problems, evolve their designs, revise or check over their plans, and they pay me my fee and I have nothing more to do with the building; being in no sense associated with them, I am certainly not an "associate-architect." And owners whose architects have not consulted me frequently submit their plans for revision and approval, much as a commercial house would have an independent audit of its books. In such cases Mr. Beach certainly could not call me an associate architect.

Now therefore, doing the class of work I do, doing it according to well defined and rather stiff ethics, and doing it well enough so that my clients, practicing architects, come to me again and again, some of them having done so for over twenty years, it would seem to me that I must be entitled to some qualifying label. I've been well satisfied with "consulting" for these many years, but now Mr. Beach comes along and ruthlessly casts doubt upon my very existence, my professional legitimacy. Won't you wrestle with him as Jacob of old wrestled with the angel and have him give me, if he still insists upon taking away the "consulting," some really euphonious, correct and fully qualifying adjective by which I, the goat, may be distinguished from among the sheep?

F. W. Fitzpatrick.

The Little Theatre and Egan School of Music, Drama and Art (illustrated on page 446) if I am not mistaken, marks the beginning of a new era as to the style of architecture best fitted to harmonize with the climate of southern California. Heretofore we have had what is known as the Mission style, started in California by the friars who built missions throughout the State, of adobe having a white finish, which at that time was the only material available. The missions have
formed the foundation for the style that has been used up to the last few years. This style harmonizes with the material available at the time of the friars, but with the progress of the country new materials have come into use: so why adhere to the Mission style in the present when form, light and shade, color and accessories are needed, which are to the architect as language is to the poet?

Frederick S. McCulloch.

With the passing of other impostures that flourished in our so-called Mid-Victorian period, went the gardens designed in the "Natural picturesque," the "Artificial picturesque," the "Natural artificial" and other equally meaningless styles, if they may be dignified as styles, of gardening. Books on gardening published thirty years or more ago are full of designs and descriptions that would not for a minute be tolerated today. But in looking back in this critical attitude at the work of yesterday, we may well stop for a while and ask ourselves: What will the critics of tomorrow say of the work we are doing now? Will it seem to them as devoid of all good taste, and even good intentions, as the work of yesterday seems to us? Of one thing we may be sure. It will be many years before the better class of present-day landscape architecture will appear as ridiculous as the Mid-Victorian "Natural artificial" manifestations seem to us today.

If any other proof is needed than the great number of splendidly designed country houses which are being erected at every hand, of the widespread reawakening of interest in "art for beautie's sake," whether in architecture or in the sister arts of painting and sculpture, which for a time virtually monopolized the entire field of American art, one need but turn to the recent architectural gardens in which sculpture is being more and more used as an important feature of design.

Among the artists who have furthered the work and made possible the combination of art and nature in garden work, appreciation is due Mrs. Gail S. Corbett of New York, whose fountains and sun-dials adorn many of the best recent landscape gardens. Mrs. Corbett was a pupil of Augustus Saint Gaudens and she has much important work to her credit. Her most recent productions include three unusually successful bronze doors, which have been placed at the main entrance of the Municipal group, Springfield, Mass., of which Mr. Harvey W. Corbett, with his associate Mr. F. Livingston Pell, were architects.

The fountain reproduced on pages 442 and 443 is in the garden of Mrs. John Hays Hammond at "Lookout Hill," Gloucester, Mass.

Rawson W. Haddon.

A Departure in School Architecture.

A one-story school, built in the form of a square around a court yard and so constructed that by raising a series of sashes it can be converted into what will be practically an open-air school, is the type of structure that marks a new departure in modern school architecture. It provides healthful surroundings for the children, keeps them near the ground, so that the danger from fire and panic is reduced to a minimum, and at the same time affords ample room.

A school of this kind is now being built at Garrett Hill, Pennsylvania, a suburb of Philadelphia, from plans by D. Knickerbacker Boyd. According to the plans, the first or front section of the building, will be 130 feet long. This will contain four class rooms, with cloak rooms and a retiring room for teachers. The open-air sashes face on an inner corridor, which will eventually form a sort of cloister around the court yard. As the needs of the community require, other wings will be added on the three remaining sides of the central square. It is expected eventually to have a gymnasium and swimming pool in a basement under the court yard.

Chas. R. Rosenberg, Jr.
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HOUSE OF RUSSELL A. ALGER, JR., ESQ., GROSSE
POINTE, MICH. CHARLES A. PLATT, ARCHITECT.
A WATER FRONT VILLA
THE HOUSE OF
RUSSELL A. ALGER J.R., ESQ.
CHARLES A. PLATT, ARCHITECT
BY HERBERT CROLY

ONE of the interesting phases of contemporary American domestic architecture is the treatment of sites which front upon the water. The problem has not been seriously and sufficiently considered, chiefly for two reasons. The great majority of American houses which occupy a piece of water-front property are situated on the ocean; and under American laws, the public has a right of way along the shores of bodies of salt water. The right is of substantial value to the great majority of the people, who cannot afford to own water-front property; but it does, of course, erect an almost insuperable barrier against the architectural treatment of land which faces on the water. Such treatment involves retaining walls and similar devices, which are meaningless except when the land so treated is rendered essentially private. The consequence is that in seaside resorts, such as Newport and the north shore of Massachusetts, in which the owners of water-front property have been able to afford large expenditures on the layout of the grounds, practically no examples can be found of an architectural development of the water-front which ties the space between the house and the water in with the surrounding land.

For the most part, however, it is not a matter of rigid and rebellious land laws. The American who builds a villa on the ocean usually cannot afford to spend very much money on the architectural development of the grounds; and even when he can afford it, the opportunity of increasing the interest and beauty of his place by such means usually does not ap-
peal to him. In the planning of water-front property the convention of extreme informality has been pretty well established. Particularly on a rock coast, the American idea has always been to build a picturesque shingle house, which is supposed to harmonize with the landscape; and the only object of the treatment of the land has been that of obtaining a certain amount of green grass and a level space sufficient for a tennis court or a croquet ground. Hence it is that even those opportunities for what may be called marine architecture which practical conditions permitted have been very rarely and inadequately used.

The legal barriers which have had something to do with the neglect of water-front architecture on the Atlantic Coast do not, however, apply to inland waters. The public possesses no right of way along the shores of inland lakes; and it might have been expected consequently, that the problem of the architectural treatment of water-front property would first be seriously considered in the case of lake rather than of ocean sites. Such, indeed, has actually been the case. It is true that the American convention in favor of the informal architectural treatment of water-fronts has prevailed in the enormous majority of cases; but of late years some elaborate and fairly successful attempts have been made to adapt water-front sites to human practical needs and aesthetic demands instead of subordinating human needs to what were supposed to be the exigencies of a marine landscape. Some of these attempts have been made on the shores of small lakes in the East. Others have been made by the well-to-do residents of Chicago who have their summer houses on the shores of Lake Geneva in Wisconsin. But the most successful of them have been made on the shores of the Great Lakes. The inhabitants of the large cities which are situated on the lakes are just beginning to wake up to the opportunities for marine architecture, which are offered by their proximity to large and spectacular bodies of fresh water. The plans for the improvement of cities like Chicago, Cleveland and Detroit all include elaborate schemes for the utilization of water and of the water frontage in connection with the architectural embellishment of the cities.

Even more interesting, because more completely carried out, have been some recent attempts to develop in a really architectural manner water-front sites for private houses on the Great Lakes. The most elaborate of these attempts is that of Mr. Harold McCormick’s estate at Lake Forest, Ill. In this instance the residence is situated on a high bluff overlooking Lake Michigan, while below the bluff is a small stretch of beach, which is used for bathing. The beach is connected with the house by an elaborate and substantial arrangement of walls, terraces and stairways which are designed to give architectural expression to the practical value of the beach to the occupants of the house. Another case is that of Mr. William G. Mather’s house, near Cleveland, on Lake Erie. In this instance the site of the residence is only thirty feet above the lake, and the beach is not available for practical purposes. The object of the architectural treatment was, consequently, chiefly that of bringing out the full aesthetic value of this particular piece of water frontage to the inhabitants of the dwelling. A retaining wall, following the curve of the frontage, was built along the whole property, and this wall was worked into the layout of the grounds, so that it afforded a most attractive addition to the garden. A third instance is that of Mr. Alger’s house at Grosse Pointe, near Detroit, which is illustrated herewith and which differs in an interesting manner from both the McCormick and the Mather places.

As the reproduction of the layout of the grounds shows, the Alger place consists of a strip of land about twice as long as it is wide stretching from the public road to the water. The surroundings are such that the only attractive view is obtained in the direction of the lake, and the layout has been arranged, consequently, to shut the place in on the landside and to open it up only in the direction of the water. The outer margin of the property is lined with heavy planting which is intended to isolate it, and to limit the inhabitants of the house
to what they can see on their own land. On one side a service road has been built, which runs by the garage and kitchen garden to a service court. Somewhat further along is the main entrance and road, which also makes a straight line for the spacious forecourt of the main house. This road is bordered with a row of trees on each side. The forecourt is provided with an entrance into the flower garden on the right and into the service road on the left. The house, of course, shuts a visitor off from any view of the water.

The peculiar interest of the layout consists in the treatment of the water side of the property. Mr. Alger's land, unlike that of Mr. McCormick or Mr. Mather, is situated at only a comparatively moderate altitude above the level of the lake. The ground floor of the house is approximately ten feet above the water. But the architect did not place the building on or near the water. He needed a good deal of space between the house and the shore of the lake for the purpose of giving the inhabitants of the house an attractive and useful approach to the water. In order to reach the lake one must descend from the terrace of the house to a spacious stretch of lawn, which is about five feet lower than the rest of the property and whose outer margin is the retaining wall, which protects the bank from crumbling away under the action of the water. This stretch of lawn is admirably designed for the purpose of enabling the inhabitants of the house to enjoy the full aesthetic advantages of water frontage—which, in the case of this particular property, are unusually fine and varied.

The house itself is designed in a style which cannot be described as anything but a kind of Platt Renaissance. It is a plaster building, as are the McCormick and Mather houses, but it is not as specifically Italian in feeling as is the former, nor is as specifically Georgian as the latter. In truth, the architect has derived his forms from any source he pleased and has grouped them into a whole which is expressive chiefly of his own taste and individuality. The facade, which faces the forecourt, is of unusual distinction and beauty. It is Italian in its repose and its easy self-possession, and, of course, the tiled roof gives to the whole edifice a strong Italian accent; but the pediment of the central division of the facade is not at all Italian, either in convention or detail. It is, if anything, English; yet its Anglicism is very much modified by the extreme reticence and simplicity of its ornamentation. All the ornament is concentrated on the entrance doorway, the window above and the oval in the pediment. The treatment of the doorway is not entirely satisfactory. The architect has tried to emphasize the entrance by using for its construction heavily jointed stone-work. He has succeeded in getting his emphasis; but he has obtained too much of it. The entrance doorway counts too strongly in the general effect of the facade. On the other hand, the treatment of the window and the oval are admirable in the scale and the vivacity of the ornament. It is extraordinary how helpful in increasing the interest of the design are the two black spots on both sides of the oval. The apertures which they make in the wall may not be very successful as windows, but the depth of the reveals converts what might have been a blemish on the composition into a most valuable accent.

The facade on the water side of the house is of similar interest. At present it looks a little bare because the vines which are intended to soften the effect of the wings and give them their proper value in relation to the neighboring foliage, have not yet obtained a sufficient growth to give one any idea of their ultimate effect. But if the reader in looking at the illustrations of this frontage will exercise a little imagination and clothe the pergola and the wings of the building with the raiment of green, which it will obtain in a few years, he will better understand what the architect was trying to do. The whole space between the water, the banks on the sides and the house is to be conceived as an outdoor room, partly enclosed by building and partly by trees, which will enable the inhabitants of the house to get the full advantage of the lake. This room will
literally be lived in during the warm weather, and it has been designed to serve its practical purpose, to have the seclusion necessary to a private apartment, and at the same time not to lose the open-air feeling proper to an out-of-door room by an over-emphasis of the architectural features. The facade of the building has, consequently, been kept almost devoid of ornament. It will eventually be partly covered by vines, particularly on the ends, and will in this way become very much more a part of the landscape than it now is. It should be added that this particular facade is more Italian in feeling than is the one on the other side of the house; and this Italian character will only be emphasized when the planting has obtained its full growth. The Italians excelled in the art of laying out their grounds formally without sacrificing by so doing a genuine naturalism of effect. Mr. Charles Platt, more perhaps than any other American landscape architect, has inherited their ability to design formal layouts and gardens without violating the feelings proper to open-air architecture. It is at least worth considering whether his early training as a landscape painter is not partly responsible for his success in this respect.

The reader will observe that the flower garden has been made an integral part of the general landscape plan. It is situated on the right of the forecourt, from which it can be entered, but from which it is also screened by a wall. A visitor entering from the court would find himself in a symmetrical arrangement of flowerbeds, the main axis of which would lead him on the one end to the tennis court and on the other to a pergola which could be reached from the living room of the house. The pergola is intended to enclose the end of the garden and to provide a place from which the waterscape of the lake can be seen to advantages. It should be added that on the main axis of the garden is a flight of steps leading to one end of the enclosed outdoor room on the lake frontage.

It is very much to be hoped that architects and well-to-do people interested in architecture will study closely the examples of marine domestic architecture which have been mentioned. American designers will have an extraordinary opportunity to accomplish original results in this branch of their professional work. The great European cities are almost all situated on rivers and their inhabitants have not built to any considerable extent on water-front sites. The early American cities were built usually near the ocean, but the ocean was not a pleasant place to live upon except in summer, and for reasons already given, there were serious obstacles to the architectural treatment of the salt-water frontage. But the American cities which have been growing up on the Great Lakes have near them bodies of water which are as spectacular as the Atlantic Ocean, and which can be lived upon without discomfort, even in winter. As soon as these advantages are appreciated a rapid and most interesting development of this particular phase of domestic architecture is bound to take place, and the work which Mr. Platt has already done has broken the ground and should be extremely useful to other architects who are confronted by similar problems.
DETAIL OF MAIN ENTRANCE—HOUSE OF RUSSELL A. ALGER, JR., ESQ., GROSSE POINTE, MICH. CHARLES A. PLATT, ARCHITECT.
ENTRANCE DOORS—HOUSE OF
RUSSELL A. ALGER, JR., ESQ.
CHARLES A. PLATT, ARCHITECT.
VIEW FROM POOL—HOUSE OF RUSSELL
A. ALGER, JR., ESQ., GROSSE POINTE,
MICH. CHARLES A. PLATT, ARCHITECT.
VIEW FROM THE GARDEN—HOUSE OF RUSSELL A. ALGER, JR., ESQ., GROSSE POINTE, MICH.  CHARLES A. PLATT, ARCHITECT.
HALL FIREPLACE—HOUSE OF RUSSELL
A. ALGER, JR., ESQ., GROSSE POINTE,
MICH. CHARLES A. PLATT, ARCHITECT.
DINING ROOM FIREPLACE—HOUSE OF RUSSELL
A. ALGER, JR., ESQ. GROSSE POINTE, MICH.
CHARLES A. PLATT,
ARCHITECT.
DRAWING ROOM—HOUSE OF RUSSELL A. ALGER, JR., ESQ., GROSSE POINTE, MICH. CHARLES A. PLATT ARCHITECT.
DINING ROOM—HOUSE OF RUSSELL
A. ALGER, JR., ESQ., GROSSE POINTE,
MICH. CHARLES A. PLATT, ARCHITECT.
A CEILING IN THE VILLA MADAMA, ROME.
Undoubtedly the magnificent villas which the Renaissance gave to Rome during the early half of the sixteenth century represent the genius of that truly wonderful age. Time and the elements, greatly aided by man, have done much to impair their one time splendor, and yet after a lapse of four centuries they are unrivaled among the pleasure palaces of Italy.

That this should be is but a logical consequence of the conditions that then prevailed. The ruins of ancient Rome were at hand, furnishing a vast quarry of materials, a wealth of splendid models and a great number of statues. Recall that this was the age of Raphael, Bramante, San Gallo, Michael Angelo and Peruzzi, to say nothing of a number of lesser artists, anyone of whom might have been great in another age. Recall, too, that this was the age of those famous Italian families, powerful and ambitious, which play so important a part in the history of the Renaissance and that the villas were built for men who were not only members of those families but also, with very few exceptions, cardinals of the church and aspirants to the papal throne; and the villas were erected primarily to represent and symbolize at Rome the power and ambition of those families throughout Italy.

Of these Roman villas none is more characteristic of the period or more charming in its decorative parts than the Villa Madama. It is situated to the north of Rome, on the slopes of Monte Mario, not far from the Porta Angelica, and is built on a natural plateau over the ruins of the Baths of Agrippa.

This princely habitation, now in a lamentable state of dilapidation, was designed by Raphael for Cardinal Giulio de' Medici, who was afterwards elected pope (1523), and ascended the papal throne under the official title of Clement VII. It was but natural that the cardinal, who was a Medici and cousin to the reigning pope, Leo X, desired to furnish his new residence with beautiful apartments, gardens and all that could be conceived to embellish a palace for an aspiring member of the hierarchical aristocracy at Rome.

The Cardinal de' Medici had been a constant patron of Raphael and that this great master made the original drawings for the villa, the grandeur of the loggia alone would be almost ample proof. But a letter from Count Baldassare Castiglione to Francesco Maria, duke of Urbino, together with a number of drawings, still extant, establish beyond a doubt the fact that the original plans were his. It is known that Antonio da San Gallo worked on the sketches and on the working drawings, but the plan of the villa and the general scheme of the loggia were Raphael's, while such renowned artists as Giulio Romano and Giovanni da Udine were employed to carry out the decorations.

When visiting the Villa Madama it is interesting to institute a comparison between the arabesques of the ancients and those of Raphael's time, for the decorations of the loggia show in a way what an overwhelming importance the antique works took on at the beginning of the sixteenth century, and the direct influence of the general resurrection of ancient masterpieces which took place during the Renaissance. But before attempting to describe the villa itself, it may be well to mention some of the more pertinent facts in regard to those most intimately concerned in its building. Chief
among these, of course, is Raphael Sanzio of Urbino (1483-1520). His life is so well known that it will be necessary only to recall a few incidents connected with those wonderful years at Rome when he was at the height of his renown and the favorite of popes and princes. He was called to Rome during the Summer of 1508 by Pope Julius II, and during the remaining years of his life he made that city the scene of his splendid labors. Prior to his residence in Rome Raphael had made no serious study of ancient works; but here, while in the flower of his youth and genius, he became an enthusiastic admirer of the pagan heroes, and thenceforth classic antiquity had no champion more ardent than he.*

In August, 1515, Leo X issued a papal brief appointing Raphael to the office of Inspector of Antiques in Rome and carrying the provision that the finding of ancient buildings, statues and fragments was to be reported to him within three days after their discovery. The master eagerly availed himself of the opportunities thus afforded to study the ancient remains that were being brought to light almost daily.

This search for ancient works of art was inaugurated by Cardinal Giovanni de' Medici, who had acquired a passion for collecting art treasures from his famous father, Lorenzo the Magnificent.† By the cardinal's directions excavations were made on the site of the Baths of Titus, or "Golden House of Nero," and besides the finding of many valuable statues—the Apollo Belvedere and the Laocoön group, now in the Vatican museum, among the number—it was discovered that the walls were covered with fine paintings and delicate stucco work, of which nothing had been known before. The discoveries here, with those on the Quirinal, the tombs on the via Latina, the houses of Pompeii and the ancient mo-

*In a letter written to Count Baldassarre Costigliene in 1514 Raphael says: "I wish to discover the beautiful forms of the ancient monuments, but know not if my flight shall be like that of Icarus. Vitruvius gives me much light, but still not enough."

†Giovanni de' Medici acted upon the advice of his father Lorenzo, who said, "Do not array yourself in silk and jewels, such things are not for you—the collection of ancient art and rare books becomes you better."

saites and numerous fragments of Greek and Roman ornament found in and about Rome strongly influenced Raphael and his pupils, among whom were Giulio Romano, Giovanni da Udine, Perino del Vaga, Andrea Sabbatini, Palidoro da Caravaggio and Francesco Penni.

The influence of these discoveries upon Raphael, says Mentz, can be traced in three distinct ways—by change of his style, by his direct imitation of ancient models, paintings, bas reliefs and statues, and by his choice of subjects borrowed from Greek and Roman mythology and history.

Although in Raphael the painter eclipses the architect, he was nevertheless a great builder, and beyond doubt the Villa Madama was the work of architecture best suited to his genius. Here he carried the grace and poetry which were the foundations of his character into the smallest and most purely architectural details and showed that he could unite imagination with simplicity and create a rich and serious effect without evident effort. Indeed, one is amazed on examining the decorations of the villa at the simplicity of such apparently intricate work. Much credit must be given, however to Giulio Romano and Giovanni da Udine for the unrivalled stucco decorations which they executed after Raphael designs.

Giulio Romano (Giulio Pippi de' Gianuzzi, 1492-1546) was the principal disciple of Raphael and the continuer of his works. He imbibed all his master's energy of character and possessed a wonderful knowledge of mythology and history. It was his services of which Raphael availed himself on all occasions of especial importance. After the death of Raphael the villa was brought to its present, though incomplete state, by Giulio Romano and Antonio da San Gallo.

Giovanni da Udine (1487-1564) excelled in the art of stucco decoration. He made a thorough study of the ancient buildings with their minute decorations in very low relief and was so impressed by them that he devoted himself thereafter wholly to the study of stucco ornament and brought it to a state of singular perfection. The Cardinal de' Medici was
INTERIOR OF LOGGIA LOOKING WEST—VILLA MADAMA, ROME.
so delighted with the work of Giovanni da Udine in the Villa Madama that he rewarded him with a rich canonry and heaped benefits upon the artist’s relatives. Although Vasari says Morto da Feltri was the real inventor of arabesque, we know it was Giovanni da Udine who first succeeded in producing stucco decorations equal to those of the ancients. This refers not to the stucco as commonly used, but to the white stucco-duro, the secret of which had been lost. The inferior material had long been known to the Florentine artists and was in daily use for works of minor importance. There was more of the ancient stucco work found in Rome than anywhere else in Italy and although there is but little of it left we still find the best there.

The construction of the Villa Madama was begun about 1516 and was continued with some interruptions until 1523. At the death of Pope Leo X the work was discontinued for a time, for when Pope Adrian VI had been chosen pontiff Cardinal de’ Medici returned to Florence. At another time the villa was set on fire by the troops of Cardinal Pompeo Colonna in revenge for the burning of several of his castles by Clement VII. It was known at first as the Villa de’ Medici and got its present name from Margaret of Austria, duchess of Parma, who was popularly known as Madama d’Austria. She was the natural daughter of Charles V, who was crowned at Bologna by Clement VII, being the last emperor to enjoy the honor of coronation by a pope. Left a widow at an early age by the assassination of Duke Alexander de’ Medici, Margaret of Austria married (1538) Ottavio Farnese, duke of Parma and Piacenza and nephew to the reigning pope and bore to him a son, the celebrated general, Alexander Farnese. The Villa Madama became her residence after her marriage to Ottavio. It had been acquired after the confiscation of the Medici possessions in 1537 and, with the rest of the Farnese property, it came down by inter-marriage to the crown of Naples, who allowed it to fall into complete neglect and abandonment to the extent that at one time cows were kept in the villa and permitted to graze in the gardens before the loggia.

After the death of the last king of Naples it passed into the hands of the Duke of San Martino di Montalbo, and finally became the property of Count Coserta and Princess Maria Theresa of Hohenzollern-Sigmaringen.

This villa, so little taken care of, was at one time important as a model for the arrangement of gardens in Italy and even now, in its picturesque decay, presents a scene of no ordinary attraction. The undulating lines of Monte Mario, clothed as they were with magnificent pines, must have formed an imposing background for the villa and its gardens, which were situated in such a way that the natural rise and fall of the ground was skilfully utilized to contribute to the general effect. These are among the earliest Roman gardens of which a description has been preserved, the earliest being those at the Vatican by Bramante; and no gardens subsequently constructed are comparable to what those of the Villa Madama would have been had they been completed as originally planned.

Of the original gardens there may still be seen two terraces, one above the other; and it is evident from the treatment of these that they constitute but a fragment of a great scheme. The upper terrace, on a level with the loggia, offers a striking panorama of the Tiber’s winding course and of the Campagna beyond. At the end of this terrace, opposite the entrance to the loggia, is a large gate flanked by two colossal statues, and in the retaining wall along the side of the hill is an exquisite fountain by Giovanni da Udine. In speaking of this fountain Vasari loses himself in admiration; he tells us it is in imitation of a temple of Neptune, which had been discovered a short time previously among the ancient ruins of the Palazzo Maggiore. The temple was decorated in stucco with marine monsters and other aquatic animals, and Giovanni da Udine copied these decorations and added shells and similar objects in great numbers and made the water flow from the mouth of an elephant. On the lower terrace there still exists a large basin or pool once fed by the waters from a grotto; within this grotto are the remains of fine mosaic decorations.
EXTERIOR DETAIL—VILLA MADAMA, ROME.
FRIEZE IN ONE OF THE ROOMS—VILLA MADAMA, ROME.
It is always with something of regret that we look upon these once unrivalled gardens. The statues, vases, balustrades and the fine trees that once adorned them are gone, and they are today but lovely somber ruins, their marbles mossy and lichen grown; their fountains, silent and overrun by wild flowers, are now the homes of basking lizards. It is as if nature, left to her own methods, had set to work in her quiet way and made herself at home.
The present-day tendency to devote the schoolhouse to larger and broader uses has had a remarkable effect upon the plan of the entire building. The introduction of courses in manual training and the household arts, to cite but two of many possible instances, has had a marked effect on the general plan; and these, with what someone has called the humanization of the school, that is, the policy of throwing the building open to various social and community uses, have revolutionized school planning in a way that leaves the most successfully designed schoolhouses of comparatively recent years, with some few remarkable exceptions, hopelessly out of countenance when really modern planning is under discussion.

This “open-door” policy has led as well to the inclusion in the plan of the better type of building many unusual or special rooms; and with these, after the problem of the usual rooms has been solved, the architect’s most difficult task often lies.

For this reason the architect who is confronted with the problem of designing an even approximately ideal school will find but little help in textbooks or indeed from any source of information other than that found in an examination and comparison of the plans of the few really well-designed schoolhouses scattered here and there over the United States. This is true, not because of any lack of schoolhouse literature, but because of the many remarkable advances.
made during recent years in school design, construction and, most important of all, elementary and advanced school education itself.

At the very start two of the most important usual details of design are more or less standardized, though not finally settled. The first, after the number of rooms has been determined upon, is the plan. Of the various possible types a few have proved more naturally adapted to schoolhouse uses than others. The plan of which the Westport school, at Westport, Conn., the Guilford school, at Cincinnati, Ohio, and others, are examples, consisting of a wide central corridor running the entire length of the building with rooms on either side, is generally found most satisfactory for buildings on a large open space with light on four sides. Several variations of this general scheme are illustrated. These include the Thorndike school, at Cambridge, Mass., the Westwood school at Cincinnati, Ohio, and the Mozart school, in Chicago. The last mentioned is perhaps the best example of the type, for the reason that the corridor ends are not blocked by staircases. Public school No. 23, Rochester, N. Y., is planned on the same general lines.

The Eagle school, at Cleveland, Ohio,
which, by the way, is one of the most highly specialized schools in the United States, is built around three sides of a small hollow square, with the auditorium projecting beyond the main building at the rear. The interesting Cordaville school, near Boston, though small, is really unique. It makes an ideal plan for a village school. Other plans, of which the West End school, at Lexington, Ky., and the East Avenue school, at Kalamazoo, Mich., are examples, belong to no definite type but are feats of planning to meet unusual circumstances. The East Avenue school illustrates, at the present time constructing a group along slightly different lines, of which the accompanying plan—the Fairmont school—is the first unit.

This group is to be built around three sides of a hollow square. At the right will be the elementary school building, of which a plan is reproduced; at the left a high school building with a large gymnasium, and at the rear of the group an auditorium entirely separated from either school but connected with both by a covered walk. The economy of space in plan and the saving in annual running expense with this scheme is obvious. One audit-

PLAN OF BASEMENT—PROPOSED SCHOOL AT WESTPORT, CONN.
Frank Harper Bissell, Architect.

the same time an excellent solution of the problem of an irregular plot.

Entirely different from the foregoing plans is the "group plan" type. This is illustrated by the model school and recreation centre designed by Messrs. Dillon, McLellan & Beadel. Besides the main school building, the group includes a gymnasium, manual training building, open air playrooms and a large playground. Although the school illustrated was not built, it is not extravagant to look forward to the day when schools of this kind will actually be erected instead of remaining, unbuilt, on paper. In fact, Messrs. Dillon, McLellan & Beadel are orium for both schools saves space in the buildings that is usually taken from the classroom space for auditorium uses, and its complete isolation makes possible its use for outside purposes during school hours without causing confusion in the schools. Another important feature is the generous playground space. Especially in cities this latter provision is of importance, and it is to be hoped in the near future that the grouping of school buildings in this way will help toward making the provision of playgrounds more general and at the same time more generous.

It is due the architects that mention be
FLOOR PLANS OF THE GUILFORD SCHOOL, CINCINNATI, O.
Garber & Woodward, Architects.
made of the fact that the plan of the Fairmount school given here is not the one furnished by them. At the last minute it was found that the drawing furnished could not be used for reproduction and the accompanying plan was hastily traced over it.

But, in spite of the ease with which it is possible to arrange the plan according to types, the final scheme is largely a result of circumstances. Surroundings, size and necessary accommodations will vary so greatly with each new school that a standard plan for all seems hardly possible or desirable. A single point in favor of standardized planning is that it would, if correctly executed, make impossible costly errors so often made by incompetent architects with the approval of equally incompetent school boards.

The plans reproduced here are examples of unusually successful planning; and each would form an excellent basis upon which other plans could be designed, but each would require slight modifications to meet changed local requirements.

The classrooms are the second detail of schoolhouse plan mentioned above, as having been more or less standardized. They are naturally the unit around which the building is designed and the primary requirements in elementary or advanced schools are the same, although in high schools the conditions governing the various laboratories, etc., are apt to vary considerably. The ordinary room consists of desks, blackboards, wardrobe and so on, and each must be carefully placed with thought to its relation to the entire room. For reasons of discipline the entrance door to every classroom should be at the end at which the teacher's desk is located; the wardrobe at the end facing the teacher. This, with the arrangement of the desks indicated and with the aisles figured, was shown in plan on page 262 of the Sept., 1914, issue of The Architectural Record.

Professor Fletcher B. Dresslar, Special Agent United States Bureau of Education,* concludes that the size of the

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*Social Centre Features in New Elementary School Architecture, by Clarence A. Perry, published by the Division of Education, Russell Sage Foundation, New York, and Prof. Dresslar's American School Houses, published as Bulletin No. 5, 1910, whole number 444, by the U. S. Bureau of Education, are the two standard books on the new school architecture. School Hygiene, also by Prof. Dresslar, contains chapters of interest to the architect. The American School Board Journal, published monthly, prints accounts of the best current work.
A classroom for elementary school purposes should be approximately as follows: "It should be sufficiently large to seat properly from 40 to 45 pupils, and at the same time have sufficient space left for aisles and the requisite furniture and apparatus. This is based on the theory that no teacher ought to be asked to teach more than 40 or 45 pupils, even under the most favorable circumstances."

A room that is twenty-four feet wide and thirty-two feet long will comfortably seat this number, allowing space for the necessary number of seats with space for aisles, room in front of blackboards, and for any incidental furniture. Leaving an aisle three feet wide behind the last row of seats, the pupils furthest from the teacher would in this room be well within hearing and seeing distance of teacher and blackboards.

In the District of Columbia the classrooms of schools erected during recent years are between twenty-four to twenty-five feet by thirty-two to thirty-three feet. Ceilings are thirteen feet high. In Boston the standard is about twenty-six by thirty feet and thirteen feet high, with desks for 50 pupils. The classrooms in the Eagle school, in Cleveland, average twenty-five feet by thirty-two feet and seat about 42 pupils.

Under no circumstances should the room be so long that a pupil sitting at the extreme rear will have difficulty in seeing easily or hearing distinctly what is happening in the front. Interesting examinations made some years ago revealed the fact that a surprisingly large part of incorrect work done in the classroom is due to these causes and that a great deal of bad spelling is due to poor hearing. It has been ascertained by specialists that the distance at which a normal eye can see well-written figures or letters an inch and a half high, is not more than twenty-nine feet, and that the average speaking voice will not carry properly beyond thirty feet. From this it will be seen that any room in which the last seat is more than twenty-nine feet distant from the blackboard or in which the teacher's desk is more than thirty or thirty-two feet distant from the last line of desks is too large for satisfac-
tory use, and any space over such distance is therefore wasted. In the Mozart school the rooms are unusually large, thirty-four by twenty-four feet, but the other plans show rooms that are seldom more than thirty feet in length and twenty or twenty-two feet wide.

The width of the room where unilateral lighting is used, and every State should require that no classroom be lighted from more than one side of the room, should never exceed twice the distance from the floor to the top of the windows, and when exterior conditions are unfavorable for good light even this width, Professor Dresslar learned after examination, is too great. Thus, it will be found that the most satisfactory size for a classroom is not more than thirty-two feet long, twenty-four feet wide and from floor to ceiling not less than twelve and a half or thirteen feet.
FLOOR PLANS OF PUBLIC SCHOOL
NO. 21, ROCHESTER, N. Y.
J. FOSTER WARNER, ARCHITECT.
PLANS OF EAST AVENUE SCHOOL, KALAMAZOO, MICH. J. D. CHUBB, ARCHITECT.
These dimensions, however, apply only to the regulation room used both for study and recitation. Recitation rooms, when a study hall is provided, as in the East Avenue school, Kalamazoo, where the auditorium is used for this purpose, may be smaller than this standard size. High-school rooms, will also vary in order to meet the requirements of different classes; for instance, a class in Latin may require a much smaller room than a class taking a commercial course. Questions of this sort can only be settled by consultation with teachers and the school board.

Every classroom, except in high-schools, should be provided with a cloakroom that is well lighted and ventilated. Entrance should be from the room and not from the hall or corridor. It should have a window to outside air. In high-schools the cloak lockers are often put in the basement.

With regard to lighting of classrooms the New York State law requires that the windows in all study rooms and recitation rooms be so arranged that the main light will come from the pupils' left and any supplemental light from the rear.

The windows should be grouped together as nearly as possible on the pupils' left, so that the light may be massed, thereby furnishing a comparatively even distribution of light and minimizing areas of light and shadow.

The windows should extend as near to the ceiling as the principles of construction will admit, and should be without transoms or any other unnecessary framework. Any considerable area on the side of the room to the left of the pupils that is without window openings should be opposite the space in front or rear of the pupils' desks.

In this connection it may be added that the ratio of window to floor surface should be one to five. If the main light comes from the north or from a side of the building which is well shaded, the ratio should be one to four.

Another satisfactory method of determining the necessary glass area is to provide for one-quarter to one-sixth as much glass surface as there is floor surface in the room. Thus, the room already found most satisfactory (twenty-four feet by thirty-two feet) would require from one hundred and twenty-eight to one hundred and ninety-two square feet of glass when conditions are favorable to good direct light. In smoky cities, or when the school is surrounded by tall buildings, hills or other obstacles liable to cut off the direct light, the glass surface should be larger. Local atmospheric conditions should also be taken into consideration before enlarging or reducing the size of windows.

In New Jersey the law is practically the same. The required space for each pupil is eighteen instead of fifteen square feet and there is a requirement that all school buildings shall have an approved system of ventilation by means of which each classroom may be supplied with fresh air at the rate of not less than
thirty cubic feet per minute for each pupil. The New York State law makes the same requirement.

Conservative investigators are inclined at the present time to discredit the entire success or usefulness of artificial ventilation. An efficient ventilating plant is extremely costly to install and often most expensive to operate, while its usefulness is easily spoiled by a slight miscalculation in the location of outlets and inlets. If these are incorrectly placed, a large amount of heated air, according to the word of a well-known firm of ventilation experts, may be introduced into the rooms and allowed to escape without proper circulation. “This not only fails to heat and ventilate the rooms, but consumes much fuel for which no practical benefit is received.”

For this and other reasons, there is apparent a rapidly growing feeling against the use of artificial ventilating systems. In a large school now being erected in New York City the architects decided, after much deliberation, to depend entirely upon window ventilation, and in a part of the building already completed and in use the results have been most satisfactory.

The kindergarten is larger than the ordinary classroom, and it should be located on the ground or first floor, conveniently near an exit, but not in the basement. Some of the kindergartens shown are extremely elaborate and the best modern tendency is to lay more and more importance upon good, simple decoration for this room. As the importance of good surroundings in the school becomes more generally acknowledged, schoolrooms are becoming noticeably more and more decorative. But, most of all, the decorations of the kindergarten are of importance in accustoming the children as early as possible to a cheerful and esthetically good environment. In modern schools kindergartens are decorated in many cheerful and lovely ways. Well chosen pictures are the rule and, in not a few, fireplaces and even conservatories are found. A school to be erected in Newark, N. J., of which Mr. Ernest F. Guilbert is the architect, will have in connection with the kindergarten a separate play-garden with a decorative fountain. Fixed furniture is seldom used, small movable chairs and tables being preferable; and the kindergarten invariably has, or should have, its own separate wash and toilet accommodations, the latter with especially designed fixtures.

In connection with the decoration of the school it is pleasant to note how really general the appreciation of its importance is becoming. As an example the corridor of the Webster school, in St. Louis, Mo., of which Mr. W. B. Ittner was architect, should be pointed to. The decoration of otherwise blank spaces in this way is, as Clarence A. Perry says in his *New School Architecture*, a “cultural influence that is increasing the art assets of many neighborhoods.” The initial cost of good plaster-casts and reproductions of fine pictures is small, but the value of early familiarity with the fundamental motives of decorative design and the salient characteristics of the historic styles of art is of a kind not to be estimated in terms of dollars and cents.
REREDOS—CHRIST CHURCH, NORFOLK, VA.
WATSON & HUCKEL AND FERGUSON, CAL-ROM & TAYLOR, ASSOCIATE ARCHITECTS.
The adaptation of the sixteenth century Gothic seen in the new Christ Church, at Norfolk, Virginia, accords well with the traditions of a historic parish which derives its origin from the Established Church of England. The choice of style was appropriate, too, for a house of worship to be situated in a well-to-do residence quarter, and on a site insuring a rich, picturesque setting.

The grounds are at the head of a lagoon, a branch of the Elizabeth River, and are flanked on one border by a fine parking. The church, parish house and rectory occupy three sides of a rectangle, the church being placed at the junction of two avenues.

The feeling of spiritual opulence conveyed by the design is emphasized by the quality of the materials employed. The church exterior is of Port Deposit granite, with Bedford stone trimmings; and a characteristically warm, mellow tone has been imparted to the interior by the free use there of the latter material. The aisles, laid down in reinforced concrete, are carpeted with tile. The altar, parclose screens, sanctuary rails and pulpit are of Caen stone, and are memorials; the morning chapel, being the gift of one family, has been dedicated as the Seldon Chapel.

The scheme of glass is very comprehensive and fine. The aisle windows carry scenes in the life of our Lord, the East Window being a Te Deum, while the great West Window is devoted to the Messianic prophesy. The drawing throughout is in small scale and is sufficiently archaic to possess the medieval feeling and charm, and the coloring is rich and well distributed. The clerestory windows are geometrical and rich in color. The church is approximately orientated, giving full value to the play of color as it falls on the soft warm tones of Bedford and Caen stone. The glass was executed in Munich.

Altogether, Christ Church, especially as to its interior, possesses that elusive quality, religious feeling, which is so readily discerned, but which escapes when one attempts to define it.

The reredos takes its motives from the
late fifteenth and early sixteenth century work in England. It is sixteen feet eight inches by twenty-two feet ten inches in extreme dimensions, and is divided into five main divisions. The end sections, flanking the altar, carry two canopied niches super-imposed; the middle section has one canopied niche. The intermediate sections are divided into twelve niches, the six upper of which are finished in rich perforated tracery; the whole being surmounted by bands of carving and cresting. This arrangement surrounds the altar, over which “The Last Supper,” in bas-relief, is superimposed.

The main lines of the reredos lead up to the fine East Window. This is a part of the architectural composition, giving a splendid focal effect to the church, which consists of ten bays of fourteen feet—one hundred and forty feet in all of interior length.

The niches contain seventeen figures, the central figure being that of Christ as the Good Shepherd. The smaller statues are those of the fathers and bishops of the church from apostolic times down to the establishment of the church in Virginia. Two double-canopied niches have also been placed on the east wall of the choir, containing statues of the four evangelists, beautifully executed in Caen stone at Philadelphia, under the supervision of Watson and Huckel, who with Ferguson, Calrow and Taylor, were the architects of the church.

The nave is thirty feet wide and approximately sixty-five feet high. The south aisle is fifteen feet, and the north, widened to twenty feet, forms the morning chapel and baptistry. The square of the tower is twenty-six feet, the height about one hundred and thirty feet.
THE NAVE—CHRIST CHURCH, NORFOLK, VA.
WATSON & HUCKEL AND FERGUSON, CAL-
ROW & TAYLOR, ASSOCIATE ARCHITECTS.
THE PULPIT—CHRIST CHURCH, NORFOLK, VA.
WATSON & HUCKEL AND FERGUSON, CALROW & TAYLOR, ASSOCIATE ARCHITECTS.
THE BISHOP'S THRONE—CHRIST CHURCH, NORFOLK, VA. WATSON & HUCKEL AND FERGUSON, CALROW & TAYLOR, ASSOCIATE ARCHITECTS.
THE SELDEN CHAPEL—CHRIST CHURCH, NORFOLK, VA. WATSON & HUCKEL AND FERGUSON, CALROW & TAYLOR, ASSOCIATE ARCHITECTS.
A BAY OF THE PARCLOSE—CHRIST CHURCH, NORFOLK, VA. WATSON & HUCKEL AND FERGUSON, CALROW & TAYLOR, ASSOCIATE ARCHITECTS.
THE NEW PUBLIC LIBRARY AT ST. PAUL, MINNESOTA
ELECTUS LITCHFIELD, ARCHITECT

The new Public Library in St. Paul is to consist of two separate structures—one the Public Library building proper, erected by the city, and the other Mr. James J. Hill's Reference Library, which he is building for the benefit of the city of St. Paul, the two buildings being so designed and grouped as to count as one harmonious structure. The original sketches provided for direct inter-communication between the two buildings, the main reading room of the Public Library opening off the vestibule of the Hill Reference Library, and in addition a cloister being provided which connected the central lobbies of the two buildings on the southern facade of the Public Library building.

As the Hill Reference Library is to be separately endowed and separately operated, in the final plans the inter-communication between the two libraries has been omitted. The keynote of the design of the building, both in its exterior expression and in its arrangement of plan, is directness and simplicity. As the funds available for the erection of the Public Library were limited, an effort was made to so design the building that there should be the minimum amount of waste space and of unnecessary ornament, in order that, without overrunning the appropriation, it might be possible to use the highest grade of structural and finishing materials throughout. Particular attention has been given to expressing upon the exterior the main uses and architectural elements of the building.

By careful planning it was found possible to build the entire structure, from the ground to and including the cornice, of light pink Tennessee marble, a material which becomes lighter as it grows older, and which, owing to its very high degree of non-absorptiveness, retains its brilliancy notwithstanding the smoky atmosphere of the Middle West towns, where so much soft coal is burned.

The two buildings together occupy an entire square in the heart of the city of
THIRD FLOOR PLAN OF THE PUBLIC LIBRARY, ST. PAUL, MINN.
Electus Litchfield, Architect.

FIRST FLOOR PLAN OF PUBLIC LIBRARY AND HILL REFERENCE LIBRARY, ST. PAUL, MINN.
Electus Litchfield, Architect.
St. Paul. The north or main front faces on Fourth Street and Rice Park, towards the United States Post Office. Third Street, which bounds the library property on the south, is at the crest of the steep bluff at the foot of which flows the Mississippi, and it is intended eventually to park not only the open court between the wings of the library building but also the top of the bluff on the south side of the street. The exterior of the building has been designed in the general spirit of the Italian Renaissance. One
of the interesting features is the treatment of the stack room windows, which, while adhering to the general architecture of the rest of the building, are unmistakably stack room windows and provide thorough illumination between the book stacks.

The disposition of the various functions of the library was planned by Mr. Litchfield in collaboration with the late Charles C. Soule, known as an expert...
in library planning. It was something of a hobby of Mr. Soule that a great public library building should have a large and most convenient room for light reading, in which would be all of the magazines and books of frequent reference that would interest the man in the street. In the St. Paul Library this room occupies the entire first story of the central part of the building, and is lighted on both sides by the seven large arched windows which express so definitely the library character of the structure.

Entrance is had to this room from both the Third and Fourth Street sides of the building through the central lobby, and from this lobby opens a large and well lighted delivery room in which are to be placed the open stacks of recent fiction and other books of general interest. Immediately back of the delivery desk is the great stack room, providing accommodation for about one half million volumes. The stack room is to be built complete at the present time, but owing to the disposition of the various functions of the building, it is necessary to carry the full height of the stacks only such distance into the stack room as is required by the number of books at present owned by the library. As the library grows, additional stacks will be added, without in any way requiring additional structure or interfering with the orderly operation of the library. This is possible owing to the fact that the different functions of the library which require direct connection with the stack room are directly over one another and adjoining the stack room at the same end. In the basement are the packing and shipping rooms; on the floor above is the main delivery room; immediately above, in the mezzanine, the accessions room; above that the room for serious reading and reference, and above that the cataloguing room, these various departments of the library work having ample connection by means of stairs, elevators, and dumb-waiters.

On the ground floor are the children's room and children's auditorium, with a direct entrance from the street; in the second story are the rooms for the special collections; while the third story is devoted to study rooms and to the offices of the officials of the library, and to the necessary study, work, and rest rooms for the staff. This grouping of all the working functions of the library in the third story is rather unusual, and will have advantages in the way of light, air and economy of operation.

As previously stated, the Hill Reference Library is to be separately endowed and separately operated. In its simplicity, directness and undoubted efficiency it will be characteristic of the generous citizen who is building it for the use of the people of St. Paul. Immediately opposite the entrance to the building and opening directly from the entrance hall or vestibule is the office of the Librarian, who is to be an expert guide in the paths of knowledge. The visitor is to consult with him as to the subject to be investigated and the authorities to be used. Adjoining the Librarian's office, and opening also from the entrance lobby, is the great book room, about which is to be grouped a unique collection of the foremost authorities in the varied branches of knowledge. Passing through the book room the visitor will be directed to one of the many small study rooms, which will be temporarily assigned to him for his use, and to him will be brought the various books which he may wish to consult.

In the treatment of the exterior of the St. Paul Public Library, Mr. Litchfield has given us another example of his skill in handling the motives of the Renaissance and adapting them to modern uses.

The Palladian motives at the entrances are an unusual and pleasing feature, and the omission of a colossal order, necessitated by considerations of economy, is a welcome variety from the usual handling. The pilaster strips which punctuate the facade serve in grouping the windows, whose irregular spacing, due to the disposition of the interior, demanded some such treatment to prevent loss of unity. Particularly notable are the manner in which large and small windows have been grouped into a harmonious whole, and the simplicity of the means by which this has been accomplished.
WO large groups of houses of the cottage flat type recently erected in the city of Toronto afford concrete evidence of the successful working-out of a scheme of housing reform devised by the legislators of Ontario. This scheme, put into effect by an act of the legislature passed in the spring of 1913, is in one sense at least quite unique. It combines in an entirely satisfactory way the benefits of municipal housing with the advantages of private management. Without requiring a city to do more than pledge its credit for eighty-five per cent of the outlay, it yet gives the municipality an important stake in the enterprise and virtual control of most of the details of construction.

While the act was passed to encourage housing undertakings in general, it really came as a timely measure of assistance to the Toronto Housing Company, which had been formed two years before to grapple with the problem in Toronto. The company was the direct outcome of an agitation which had been started by members of the Civic Guild, who, with the support of the Board of Trade and the local branch of the Canadian Manufacturers’ Association, had been searching for means to prevent the further development of slum areas. A joint committee considered ways and means, representatives were sent to various conventions in the United States where the question was discussed, and finally it was decided to incorporate a company which would undertake the construction of model workingmen’s houses in different sections of the city.

There was no thought when the company was formed that it would be necessary to seek municipal assistance in carrying out its programme. The original intention was simply to raise some working capital by means of a stock issue and then, by means of mortgages on the property acquired, finance the balance of the expenditure. Those interested in the project did not experience much difficulty in securing about one hundred thousand dollars through subscriptions to the stock. Most of the public-spirited men of means in the city purchased shares and even the women, under the leadership of the wife of the Lieutenant-Governor, did their part in obtaining support for the undertaking.

Plans were prepared and property purchased for the first group of houses, but simultaneously two influences caused the promoters of the enterprise to pause.
One of these, and a direct source of trouble, was the opposition of a certain element in the City Council, which viewed the movement with suspicion. This was shown concretely when the company applied for permission to divert two unimportant streets crossing their property. Their application was rejected by a narrow margin. Then, about the same time, it became evident that the proposed method of financing was not going to provide adequate to meet the growing needs of the situation.

As a happy relief, the Housing Act of the Provincial Legislature was warmly welcomed. It made it possible to raise the needed money cheaply and expeditiously. The act provided in brief that where a housing company was formed in any town or city in the province for the bona fide purpose of providing working-men's dwellings at a moderate rental and not for money-making purposes, it would be entitled to seek and secure the guarantee of the municipality on bonds to the value of eighty-five per cent. of the total amount to be expended in the undertaking.

In a young country like Canada where a great deal of capital is required for development purposes and the extension of public works, the problem of raising funds for any venture is a difficult one. For years to come it will be necessary to borrow extensively in outside money markets. A company such as the Toronto Housing Company, with its programme of modern dwellings at low rentals and not for money-making purposes, it would be entitled to seek and secure the guarantee of the municipality on bonds to the value of eighty-five per cent. of the total amount to be expended in the undertaking.

The guarantee is necessarily hedged about with conditions. Those who framed the act meant to leave no loophole for the artful promoter to wiggle through. Thus, not only must the bona fides of the housing company be established, but the city council must first give its approval to the plans of the company, both as regards location of property and type of dwelling to be erected, before any guarantee is granted. The council is further entitled to representation on the board of the company and that without any of the qualifications required from an ordinary director. Access to the books of the company is at all times to be freely accorded to the duly accredited inspectors employed by the council.

In order to insure against the company's becoming a source of undue profit to its shareholders, it is enacted that no dividend in excess of six per cent. on the paid-up capital can be distributed in any year. If less than six per cent. is paid, the balance bringing it up to that amount may be allotted in subsequent years.

There are really two steps to be taken by the company in securing a municipal guarantee. First of all, the council of the town or city must pass a by-law agreeing to the granting of the desired assistance and then, prior to the actual signing of the bonds by the mayor and treasurer, the council must bestow its formal approval on the location and plans of the company's proposed houses.

In the case of the Toronto Housing Company, which is the first company to come under the jurisdiction of the act, both the by-law and the approval of the plans were passed without any difficulty. The by-law authorized the guarantee of $850,000 worth of the company's bonds and the approval covered a sufficient amount to finance the first two groups of buildings.

In so far as the details of construction are concerned the Toronto scheme differs in no very marked particular from other undertakings of a similar character. The object in view is to supply comfortable and convenient buildings fitted with modern appliances and surrounded by neat gardens and grounds, which can be rented at an attractive figure to artisans. This is about all that can be said of any of these housing plans. The special interest in the Toronto case is financial and economic rather than architectural.

The first group of buildings to be completed and occupied is known as Spruce Court. Here there are thirty-eight dwellings, of which thirty-two are cottage flats...
TYPICAL FLOOR PLANS OF TORONTO HOUSING COMPANY'S COTTAGES.
RIVERDALE COURT, TORONTO. BUILT BY THE TORONTO HOUSING COMPANY
and six self-contained houses. The second group, called Riverdale Courts, consists of 118 cottage flats, arranged in three sections, each with its central court. The flats vary in size, there being at least six standards of construction.

Each building in the housing company’s system contains from two to nine houses and each house contains two cottage flats, one downstairs and one upstairs. Construction is of solid brick with cement basement, wooden veranda and balcony, and shingle roof. Every room throughout opens to the air and sunlight. Interior finish is of Georgia pine, stained in the living-room and finished in natural color in the other rooms. Most of the floors are hardwood.

A central heating plant in each court supplies steam for heating and hot water for washing to every flat. There is a separate bathroom, separate balcony and separate basement for each dwelling. Gas stoves, electric fixtures and window blinds are installed by the company, and in every kitchen there is an enamelled combination sink and laundry tub.

The smallest flat contains a large living-room, a small pantry-kitchen, a bedroom and a bathroom. The second smallest flat is situated just above the smallest flat and is of precisely the same dimensions, except that a large bedroom on the second floor goes along with it. Each flat has its own entrance.

The third style, all of which are on the ground floor, differ from the first in having an extra bedroom. The rooms are, generally speaking, larger, and the pantry-kitchen is much more commodious. Above these are the flats of the fourth variety, in which the attic floor is utilized to give two additional bedrooms. The fifth style is the largest of the ground floor flats. It has a large living-room, a commodious pantry-kitchen, three bedrooms, bathroom, veranda and basement. The largest flat, on the floors above, has the advantage of four bedrooms and can easily accommodate a good-sized family.

The popularity of the accommodation is so great that the flats were filled up just as soon as they were completed and the company has a lengthy waiting list of applicants for space. This has enabled them to demand special guarantees of character and suitability from their tenants, only people who can furnish two references of their worth being accepted. This is quite in keeping with the public service idea back of the movement. The promoters of the housing company are not out to make money but are endeavoring to raise the general standard of housing accommodation by placing here and there examples of what good housing should be.

So far no other company in Ontario has undertaken to imitate the activities of the Toronto Housing Company. Meetings of those interested have been held at several points, and doubtless were it not for the upsetting influence of the European war some steps would have been taken before this to start housing companies in other industrial centers. The Ontario Plan, as it has come to be called, has attracted attention in both the United States and England among those concerned with housing reform, and very favorable comment has been made on its special features.
In his essay on "The Landlord," Henry D. Thoreau remarks that, "Perhaps to the eye of the gods the cottage is more holy than the Parthenon, for they look down with no especial favor upon the shrines formerly dedicated to them, and that should be the most sacred roof which shelters most of humanity."

Thoreau doubtless used the word "cottage" in the sense in which it is commonly used in this country, thus giving it a meaning somewhat different from the original, a meaning that marks a distinction between the cottage and the mere hut or cabin or "shack." While there has been, since his time, a considerable change in the percentage of dwellers in cottages, in its relation to the total of those who live in houses, an important part of the population of the United States, and perhaps an even larger part of the population of most other countries, are in the cottage class, using the term as descriptive of those whose homes are of a single story in height, the modest but comfortable homes of the farmer and the villager. There seems to be no other term properly applicable to such structures, and common use has given it a fairly well understood meaning.

A cottage is, after all, only a rectangular box, or a group of such boxes in contact, with a sloping cover. From the Zulus with their kraals, the wandering Arabs with their tents, and the Eskimos with their igloos of snow and ice, to the builders of stone huts, log cabins and "dugouts," primitive man has used for his shelter the material most convenient for his purpose. In the Lady of the Lake, Scott refers to a lodge

* * * strange of structure and device,
Of such material as around
The workman's hand had readiest found;
Lopp'd of their boughs, their hoar trunks bared,
And with the hatchet rudely squared.

Of that type is the little cabin in Middleway (see illustration), with its generous chimney and its overhanging roof. Aside from their use by loggers and campers, log cabins have almost entirely disappeared in the North, although there are thousands of them still to be found in the Southern Blue Ridge and Alle-
gheny mountains. A step beyond the log cabin with its clay-filled chinks was the cabin with its outer wall coated with clay, and another step was the use of weather boards. The influx of settlers brought the sawmill and the frame house with its almost endless possibilities in the way of architectural deformity. It is probably true, and, if it is true, certainly much to be regretted, that the tendency of cottage builders of the present time is away from the picturesque simplicity that characterizes so many of the cottages of an earlier time, and toward a more or less tawdry pretentiousness, toward an attempt to "put on style" in a manner that results in a total loss of style. Even where, in these modern structures, a general simplicity is imperative through lack of money to pay for what is supposed to be ornamental, there is in most cases a lack of the charm that usually attends the old-time cottage.

The point may be controversial. It is as possible to select attractive modern structures for comparison with unattractive structures of a much earlier date, as it is to reverse that process. It is even quite probable that age itself is an appreciable factor. Let any of the houses shown in the accompanying pictures be exactly duplicated in design and size on a town lot or a country farm and the result would probably be disappointing. Moreover, it may be that the local carpenter who, rather than the professional architect, is responsible for the design of most of the cottages of both earlier and later periods, was, in the earlier time, blessed with a keener eye for lines and a more acute sense of proportions than are the great majority of his successors. The opportunity for variation in these rectangular boxes would seem to be limited, but that is not at all the fact. There are even clearly distinct types. In our own country the type of the old-time cottage in the Northern States differs materially from the type in the Southern States. Given fifty pictures of such structures from each section, and anyone familiar with both regions would separate them with almost absolute confidence of accuracy.

There are, of course, individual exceptions, but the general rule obtains. For instance, the gambrel roof is quite common in the North and quite unusual, though not unknown, in the South.
There are those who do not know the origin of that term, "gambrel" roof. Oliver Wendell Holmes gives it in his poem on Parson Turell's Legacy:

"Gambrel? Gambrel?" Let me beg
You'll look at a horse's hinder leg,
First great angle above the hoof,
That's the gambrel; hence gambrel roof.

Another distinctive feature in cottage architecture, North and South, is the location of the chimney. In the Northern cottage it is almost invariably in the middle of the house; in the Southern cottage almost invariably at the end, and usually large central dormer flanked by two of much smaller size. The cottage, like all except one or two of those here exhibited, is an old one, not less and probably much more than a hundred years old. The most careful examination possible indicates that the dormers are as old as the house. The building originally had three outside end chimneys. One has fallen, and its stump, about on a line with the eaves, is braced by a pole. Moreover, this combination of dormers is on the rear of the house.

It is even possible to go somewhat further in this distinction of types. A

WELLS, MAINE.

outside the wall. Not infrequently it is a huge structure, built of stones, and seeming entirely out of proportion to the house. Another broad distinction in types is the use of the dormer window, general in the South and unusual in the North. This refers to the older buildings. Happily, the Northern builder is beginning to see the convenience and, let us hope, the picturesqueness of the dormer, and its use is becoming more frequent in that region. One of the illustrations used herewith shows a somewhat uncommon type of this feature, so uncommon that it has excited no little curiosity on the part of architects to whom it has been submitted. It is the little study enables one to locate different types, for instance, in particular parts of the Northern States, to recognize, say, the Cape Cod type as distinct from the Maine type. The former, for more or less obvious reasons, quite suggests the compact cabin of an old-time merchant ship, or whaler, or fishing smack. From the outside it appears quite small, but on the inside one is amazed at the number and even at the size of the rooms.

No doubt, much of the charm of the old-time cottage lies in its surroundings, in what may be called its setting. John Burroughs has said that "the older the house the more genial nature looks about it." In his Sartor Resartus, Carlyle re-
fers to a “roomy, painted cottage, em-
bowered in fruit trees and forest trees,
evergreens and honeysuckles.” A
“roomy, painted cottage” may be built
in a few weeks, but the huge elm to
overshadow it, the maples or the apple
trees to surround it, and the woodbine,
the ivy or the roses to spread themselves
over its outer walls require time. It
might perhaps be urged that the longer
the house and the trees and shrubs and
vines live together the greater is their
harmony, the more charming their en-
semble. In his Essay on Building, Lord
Bacon remarks that “houses are built
to live in, and not to look on.” The
soundness of the assertion may be ques-
tioned. The prime requisites of a house,
whether it be a cottage or a palace, may
be its interior comfort and convenience,
but those qualities are not at all incom-
patible with an outward attractiveness.
Moreover, the builder does owe some-
thing to the community, and something
even to the casual passerby, that he shall,
least, not offend artistic sensibility.
The house itself may be of the simplest
possible design, a mere box with a slop-
ing cover. Take the picture here shown
of the old house in Wells, a rude, un-
painted structure, that, without its over-
shadowing and sheltering elms, might
almost be selected as a model for a
monument of desolation. The addition
of a few shrubs and bushes about it and
some vines to clamber over it would make
it at least attractive and perhaps quite
charming. Take the cottage in Williams-
burg, a simple box, although somewhat
relieved by its dormer windows. With
its vine-covered walls and chimney and
the old mulberry tree in front of it, there
is given to it a distinct atmosphere of
rest and comfort, of grace and home-
peace. It becomes a house both to live
in and to look on. So, too, with the
little stone cottage in Montgomery Coun-
ty, Maryland, a modification of the Dutch
type so common in parts of Pennsyl-
vania, New Jersey and New York. Lack-
ing its surrounding shrubs and climbing
vines, it would be bald and cheerless al-
much to offensiveness.
“For you understand,” wrote Bayard
Taylor, “a house implies something
more than—a house.” And it is, after
all, no difficult matter to make a
house, even of the plainest, simplest,
least expensive type, the mere rectangu-
lar box with a sloping cover, suggest
something more than a house, particu-
larly if the designer, whether architect or
town carpenter, has given fair heed to
his proportions.
PORTFOLIO OF CURRENT ARCHITECTURE

MCMXIV
LOBBY—THE HOTEL STATLER, CLEVELAND, OHIO.
Geo. B. Post & Sons, Architects.

PRIVATE DINING ROOMS—THE HOTEL STATLER, CLEVELAND, OHIO.
Geo. B. Post & Sons, Architects.
DETAIL IN MAIN DINING ROOM—THE HOTEL STATLER, CLEVELAND, OHIO.
GEO. B. POST & SONS, ARCHITECTS.
REAR VIEW AND PLANS—"CORNER COTTAGE," CAZENOVIA, N. Y.
J. V. VAN DUZER, ARCHITECT.
HOUSE AT BEECHMONT PARK, LARCHMONT, N. Y.  P. J. ROCKEL, ARCHITECT.
FIRST AND SECOND FLOOR PLANS—HOUSE AT BEECHMONT PARK, LARCHMONT, N. Y.  P. J. ROCKER, ARCHITECT.
PLAN OF THE GROUNDS—HOUSE AT BEECHMONT PARK, LARCHMONT, N. Y.
P. J. Rocker, Architect.

HOUSE AT BEECHMONT PARK, LARCHMONT, N. Y.
P. J. Rocker, Architect.
DINING ROOM—HOUSE AT BEECHMONT PARK, LARCHMONT, N. Y.
P. J. Rocker, Architect.

HOUSE AT BEECHMONT PARK, LARCHMONT, N. Y.
P. J. Rocker, Architect.
HOUSE OF PHILIP R. MALLORY, RYE, N. Y. UPJOHN & CONABLE, ARCHITECTS.
DETAIL AND FLOOR PLANS—HOUSE OF PHILIP R. MALLORY, RYE, N. Y. UPJOHN & CONABLE, ARCHITECTS.
HOUSE OF PHILIP R. MALORY, RYE, N. Y. UPJOHN & CONABLE, ARCHITECTS.

For explanation of damp proof construction, see p. 576.
HOUSE OF K. L. Ames, Evanston, Ill.
Ernest A. Mayo, Architect.

HOUSE OF Rollin A. Keyes, Evanston, Ill.
Ernest A. Mayo, Architect.
We note with pleasure the increase in the number of volumes issued in this country upon the general subjects of architecture and the allied arts. These publications indicate the steady growth of the demand for information along lines not hitherto found so interesting by the American public. Perhaps we are slowly shaking off the Herculean embrace of what the European world calls the blight of commercialism; perhaps we are acquiring by infinitesimal advances that poise and circumspect grasp of life which characterizes the older civilizations and gives them time for the careful preparation of publications of weight and authority. At any rate, the volumes reviewed below, together with many others, are the forerunners of greater works, and we may at last reasonably expect contributions to the literature of art and of architecture in particular of a value and calibre approximating that so long established in the press of England, France and Germany.

In *Athens and its Monuments* (Macmillan; large 8vo; $4.), Mr. Charles Heald Weller promises us a "brief untechnical account of the topography and monuments of ancient Athens." The work is a commendable attempt to do the impossible. Books that undertake to give such concise accounts invariably fall into either of two difficulties: they become dry guide books or they fall so far short of the ideal of completeness or proper selection as to be practically useless. A writer who produces a brief book on ancient Athenian monuments must of necessity disregard a great measure either of their fabulous beauty or of their number, in order to keep his work within the compass of some four hundred pages. As Mr. Weller aptly indicates, the middle course between doubt and dogmatism must be devious, leaning now to the side of uncertainty, now to that of pedantic assertion. For that reason we hesitate to welcome short studies in these rich fields. We prefer terse volumes dealing as far as possible with absolute certainties, following somewhat of a dictionary arrangement, or, on the other hand, the extended investigations of Curtius and Adler or of Perrot and Chipiez. In these at least we may expect the omission of "probably" or of "perhaps," the use of which is made imperative in the shorter work to avoid the
printing of much controversial material. We are pleased to find Mr. Weller adopting in general the topographical method of Pausanias. Few methods of any kind have so well withstood the test of time and varied usage. The whole discussion is preceded by a preliminary chapter concerning the sources of our information on the subject: the monuments themselves, including architecture, sculpture, numismatics and inscriptions on the one hand; treatises, histories, descriptions and incidental references in the work of orators, dramatists and philosophers on the other. Succeeding chapters are devoted to a general treatment of the monuments, beginning with the situation, environment and history of the city, and handled in greater detail in separate discussions of structures in the immediate vicinity, the walls, gates, etc., and culminating in the works on the Acropolis itself. The volume is well written and fully illustrated with small cuts in the text. No doubt it may very well serve the general purpose of a school library reference book.

It is rarely that an author so well recognizes his own shortcomings and diffidently proclaims them, as does Mr. S. C. Kaines-Smith in Greek Art and National Life (Scribner's; 8vo; $2.50). And again it is rarely less necessary for an author to plead for critical mercy than in the case of the book before us. The volume is concrete enthusiasm, and has the usual defects to which so many things called 'ism fall heir. Exactitude, historic correctness are lost in the fervor of the author's desire to depict the past for present eyes. The author projects his modern senses into the classic Greek environment; nor does he sleep as his bed is made, for he is constantly pulling about his Greek marionettes on a stage of his own setting, and the artificial light thrown upon the figures casts faulty shadows.

Enthusiasm, however, has been the engine of much educational progress, and with only a little pruning of his study of Aegean culture, Mr. Smith's book might serve as a basis for fairly advanced study. We cannot avoid the impression that the field of the so-called Homeric age is not fully understood by this author. At any rate, where detailed knowledge is incomplete or uncertain, it is safe to generalize, or worse yet, to speculate. Therefore, when this period is under discussion, Mr. Smith draws no fine line of distinction between its earlier and later Argive phases, but boldly removes a mass of material from both and deposits it with the Cretan type of that early civilization. Perhaps Sir Arthur Evans will have something to say to that. We should have preferred to see this matter of the early developments restricted to but a single chapter, for we are not as yet well enough acquainted with that age to reconstruct it so readily.

Just the reverse is true of the Greek culture in full flower, the fifth and fourth centuries preceding our era, and especially the Periclean, Alexandrian and Hellenistic manifestations. We can more readily visualize our figures here; our archaeologists have been busily restoring, in model and drawing form, a number of the old city states and religious centres. The Athenian Acropolis, Delphi, Olympia and a number of other groups, as well as individual buildings may be rebuilt to-day in practically perfect imitation of the originals. We have come to be deeply read, and we have studied costumes and governments, art and athletics as represented in the monuments of these times, actual and literary. Therefore, the figures are imbued with a life in our imagination; they move about in their splendid structures and we enjoy a fairly keen understanding of their motives. Not so the Minoan, even the Mycenaean period. Of this we know too little to breathe life into the ruins, for it is true that as our knowledge of ancient buildings increases, we likewise rapidly approach a faithful restoration of the activity that went on within them.

The period of the zenith of Greek culture Mr. Smith treats admirably. Yet even here he paints pictures a bit too vividly. His representations are perfect in detail, like the illustrations of André Castaigne; but somehow we feel that the characters must speak English.

At the beginning of his book the author states that the literary balance between
the didactic and what he calls the "missionary" works gradually has been rendered untrue. The handbooks, the controversial and archaeological books have increased apace, but the books which set out to bring modern life to an understanding of the life of the past have been all too few. It is among the latter class that Mr. Smith counts his own work. We give him full credit for a manful effort and a good result. We soon feel with him that "antiquity is nothing... Perikles... lived once, not a name, not a shadowy figure of history, but a human being." And we are assured of the truth that "to proclaim the Greeks the greatest artists of all time is cold gospel; they were so, they are still, not because they are so long dead, but because they were once so intensely alive. It is their eternal modernity that matters.

Nor is Mr. Smith alone in his preaching. He is ably seconded by that sterling scholar, Mr. Percy Gardner, whose Principles of Greek Art (MacMillan; 8vo; $2.25) is a broad and thorough survey of the field. Certain of our students of past life are gifted with an uncanny ability at breathing renewed vigor into the stark forms of antique art. Too often, when the life is gone, the art which it brought about gradually assumes a foreign, distant, and inscrutable aspect. We admire it in so far as it conforms to our present standards of beauty, but we fail to see circulating about it the civilization whose expression it is. Mr. Gardner has a pronounced talent in reconstruction. We know that he can visualize, make actual to his eyes, the Greek in his daily round of existence. In the present volume much of this quality is set forth to advantage and we grow more and more familiar with the world of wonder that surrounded the dweller in Attica or in Thessaly, the direct outcome of his throbbing, active and nature-loving life. Mr. Gardner's book is at points a bit strained and in general much more of an uncompromising text-book than that of Mr. Kaines-Smith noticed above; but it is a volume that may be relied upon absolutely, a work of reference and an authoritative resume of a subject which reflects a brilliance from many facets. There are chapters on the architecture, sculpture, painting, costume, vases and theology of the Greeks in their various relations to one another, as well as a very good discussion on "Naturalism and Idealism in Greek Art." The first chapter on the "Grammar of Greek Art" recalls an earlier work with the same title, issued in 1905, now rewritten throughout and greatly increased in scope.

A very well printed but somewhat heavy volume is Professor Alfred M. Brooks' Architecture and the Allied Arts (Bobbs-Merrill; crown 8vo; $3.50; School Edition, $2.50). This book presents, with many illustrations, a general study covering the Greek, Roman, Early Christian, Romanesque and Gothic epochs, treated impartially in a very readable style. The point of view is distinctly non-technical; this is fully explained in the opening chapter on the "Significance of Art," which will bear several readings. For the general student this volume will prove one of special value; it is a college text-book in a cultural field, and we cannot have too many text-books in this country bearing upon the cultural aspect of the fine arts.

In connection with this volume might be mentioned another, entitled The Two Great Art Epochs, by Emma Louise Parry (McClurg; small 8vo; $2). Who shall finally define the great in art? Critics have repeatedly proclaimed the classic ideal; latterly it has been called—in architecture at least—the academic ideal and a national and civic necessity. And what of the romantic time, the age of fine religious ardor and ascetic frenzy, of a much maligned feudal system, and a chivalry of questionable morality? No doubt Amiens and Chartres and Notre Dame, Canterbury, Westminster Abbey and York are but interlopers disturbing a substantial continuity of classic expression, Viollet-le-Duc to the contrary. We must contend that it was just this formative, vault-building time that gave shape and substance to the civilization of northern Europe. But then, this author would say that this is not among the "great" periods under discussion, despite the re-
strictive effect of the definite article in the title. Yet we might beg a single chapter to show the golden thread in its course; as Tennyson writes: “through the ages one increasing purpose runs.” Unity is indeed the watchword of all succeeding stages of life; perhaps universality will ultimately be chosen as a more expressive name for this unconscious world-purpose.

We do not agree that this volume fully portrays what the writer calls “the deeper beauty of faith and worship, of enthusiasm and endeavor”—which all humans hold in common—if the classic in its various forms alone receives consideration; for to the great world of fervid medieval Christianity this was pagan and beyond the pale.

We gladly welcome a sixth edition in English of Maspero’s *Manual of Egyptian Archaeology* (Putnam; small 8vo; $2.25). This has been newly translated by Miss Agnes S. Johns, the retranslation being rendered necessary by the rapid accumulation of new data, accruing almost weekly in the archives of the Egyptologist. Gaston Maspero’s position and previous works are of such importance that a detailed notice would be gratuitous. His *Manual* is a book of tried value, and with such books the preparation of a new edition requires simply a slight modernizing to include recent discoveries, for the fabric is of permanent merit. We humbly recommend, however, that the next edition—for many another will yet be demanded—be favored with better illustrations.

Architects are prone to regard askance any publication concerning their chosen field written by one not of the professional tribe. For that reason few readers of these pages will avail themselves of such a volume as *The Practical Book of Garden Architecture*, by P. W. Humphreys (Lippincott; Square crown octavo; $5). This volume would readily demonstrate that the man in practice may occasionally profit by the incursions into his technical sanctum undertaken by a rank Philistine. Some of us will, no doubt, at once relegate this volume to the limbo usually assigned to the much despised “popular” book on professional subjects. But the book of popular appeal need not be superficial, even though, as in the case in hand, the whole is the aggregate result of much writing for the magazines. So-called “garden architecture” is not synonymous with landscape gardening in its finest developments; perhaps a better term should be chosen, preferably one omitting the word architecture. At any rate, suffice it to say that this type of architecture is distinctly the layman’s contribution in many cases to the success of the architect’s conception, that through its good effect an insignificant structure has frequently been rescued from hopeless mediocrity. So perhaps, in the end, a quantum of positive benefit may be derived by the technician from the book which offers him the point of view of that plebeian among artists, the layman; architecture is a broad-gauged profession, its problems cannot be regarded from too many aspects. The volume under discussion presents the valuable aspect of the man who pays for services rendered.

*Storied Windows*, by A. J. deHaviland Bushnell (Macmillan; 8vo; $4) has been called a traveler’s introduction to the study of old church glass. We make bold to declare it a useful architect’s and decorator’s handbook. The volume adequately represents the Macmillan tradition in book making. It is illustrated with about forty very good plates, contains six introductory chapters concerning materials, colors and historical periods, and thirty-two chapters in part purely descriptive and in part historical covering the whole field thoroughly. French glass is treated with the special care it fully deserves, and individual sections are assigned to discussions of important storied windows, such as those of Chartres, LeMans, Auxerre and Troyes. There are also two maps indicating the chief centres, a good bibliography and detailed index. The book will prove an excellent reference work and a fit companion for the architect on his next *Wanderjahr*, especially in northern France. We cannot help wishing that the author had attempted to present at least two or three color studies, even though only of details, to assist us in
understanding the depth and splendid chromatic value of the old glass. In an octavo volume this is a somewhat thankless task, yet sooner or later the question of the proper reproduction of the colors of stained glass must be settled and the more attempts in that direction the better. We can but refer our readers to the two painstaking volumes on the early English glass published by William Fowler in 1804.

Mr. Arthur H. Collins' work on the Symbolism of Animals and Birds Represented in English Church Architecture (McBride, Nast; 8vo; $1.75) is all too brief to do justice to such a fascinating subject. For a volume of such small compass, the field is fully covered; the short but substantial letterpress and numerous illustrations might serve as a model to indicate the proper proportion of text and plates for works dealing with architectural details. The book will take its place with certain others on the English Gothic churches, notably that by Bond reviewed in the October issue of the Record, to form in the end a complete compendium of the ecclesiastic of the period.

The author begins with a good account of the general and particular sources of animal symbolism. He places first among these the old bestiaries or books of natural history, concoctions of actual, imaginative, historical and mythical material, often illustrated with illuminated miniatures and invariably ending in a careful explanation on the comparative basis demonstrating the precepts and lessons to be gathered from animal life and conduct. These books were more generally available than any others, excepting the Bible, and so may be considered influential elements in the life of the time, forming familiar material for the church carvers and decorators, in color, metal, wood and stone. The chief benefit derived from these books, from the point of view of the early English artist, Mr. Collins points out, was that future generations would find instruction in the decorative scheme as did their predecessors, and the eyes thus served as able adjuncts of the ears in grasping the gospel truths expounded by the preachers.

The earliest bestiary was called Physiologus, the Naturalist, probably of Egyptian provenance. This becomes even more obvious when we remember the highly developed type of zoalatry practiced in the land of the Pharaohs before the Roman conquest. The Physiologus is crowded with generalities and inaccuracies, indicating an imaginative and altogether unscientific mind, entirely foreign in character to our careful generic arrangements and dockettings. Legends and myths have always played an important part in the growth of religion and so also in the early educational methods. In such accounts inaccuracy is not a blemish, if only the proper effect is conveyed. Even sober Caesar records that elks have jointless legs and are thus compelled to rest by leaning against trees.

The old work mentioned above Mr. Collins refers to an Alexandrian origin. Alexandria was at once the home of learning and of superstition, producing the translation of the Bible into the Greek of the Septuagint, as well as Origen's mystic and symbolic interpretations. It was the combination of truth and fiction in Alexandrian writing that brought forth the earliest bestiary, and the general translation thereof into the languages of the nations of Europe accounts for the appearance of eastern animals in western church decorations.

Another cause for the prominence of animal figures in church decoration was the prevalence of symbolism in the early Christian centuries. We are all familiar with the diatribe of iconoclasm and the contemporary differences resulting in the final schism into the Roman and Greek divisions of the Catholic faith. Iconoclasm was in great measure responsible for the presence of animal forms in ornament. Other reasons are also apparent. The persecution of the Christians, the uncertainties of a Constantine or a Diocletian, would naturally lead them to conceal the open indications of their faith. Mr. Collins gives yet another cause: the intellectual tendencies of the time. Symbolism was rife and permeated life as did the reviving spark of the culture of the antique at the outset of the Renaissance. "No one believed in the old or official re-
ligion just before or after the time of Christ, and in their weariness of it all turned to the newly conquered East, where they found some of the relief they needed in the mysticism and allegory, and bold theories as to the origin of the Universe so common there. What was obvious was now discounted; while that which symbolizes something deeper than itself was more satisfactory to the mind. As Christianity grew it made its appeal to men just through that symbolism to which they were growing accustomed."

Of course, the field of symbolism and of the resultant interpretation is open and free; some have found it a grateful subject for speculation. This speculation has at times crystallized into a broad and inclusive symbolic meaning for the whole structure of a church. "It has often been surmised that the whole fabric of a church signifies the human soul, and the good and the bad animals carved inside and out represent the good and evil present in the soul... The evil beasts carved outside... are a warning to the worshipper to leave his evil passions outside, or again they... are the forces of evil escaping from the holy structure."

Later pages are devoted to detailed considerations of the symbolic significance of individual animal forms and groups. We do not hesitate to accord all praise to Mr. Collins for a concise and thoroughly useful work.

NOTE.—We neglected to state in the review of the British publications that Middleton's "Evolution of Architectural Ornament" may be had of the J. B. Lippincott Company, Philadelphia; Richardson's "Monumental Classic Architecture in Great Britain During the Eighteenth and Nineteenth Centuries," as well as Bond's "Introduction to English Church Architecture from the Eleventh to the Sixteenth Century," may be had of Charles Scribner's Sons; and Briggs' "Baroque Architecture" of McBride, Nast Company.
BOOKS RECEIVED FROM PUBLISHERS

DEALING WITH ARCHITECTURE AND ALLIED ARTS


Luca Della Robbia. By Allan Marquand, Prof. of Art and Archaeology in Princeton University. 4to., 325 p., index. An illustrated catalogue raisonne of the works of Luca della Robbia. Princeton: Princeton University Press. $7.50.


Inside the House That Jack Built: The Story, Told in Conversation, of How Two Homes Were Furnished. By George Leoland Hunter, author of “Home Furnishing,” etc. With 36 illustrations from photographs. New York: John Lane Co. $1.35.


Chats on Old Copper and Brass. By Fred. W. Burgess, author of “Chats on Old Coins,” etc. Ill., 8vo., 400 p., index. New York: Frederick A. Stokes Co.


A Model Housing Law By Lawrence Veiller, author of “Housing Reform,” etc. (Russell Sage Foundation publications.) Ill., 331 p., index. New York: Survey Associates, Inc. $2.


The house at Rye, New York, illustrated on pages 564 to 566, designed by Upjohn and Conable, has several unusual features of interest. The exterior timbers, 6 inches by 8 inches, of solid hand-hewn material, are mortised and tenoned together, and are fastened with wooden pins. The spaces between the timbers are filled with common brick, laid in garden bond on the first floor and in varied patterns on the second floor.

The usual objection to half-timber construction, that water is apt to get behind or around the beams and rot them, has been overcome in an interesting way. The brick is set one inch away from the face of the sheathing, leaving a clear air space behind. The horizontal members are flashed with copper and each bay and each panel is wrapped with tar paper around all sides and over the flashing. The paper is held in place by means of lath at the ends which are cut to key with the mortar at the ends of the brick. When all the paper and laths were in place the entire panel was swabbed over with damp-proof paint. The brick are held away from the backing by means of metal bonds.

In plan, the main entrance of the house is at what Colonial architects called the “rear front,” thus leaving the main or lawn front free for lawns and gardens. The plan is so arranged that the service and master’s portions of the house are separate and distinct from the rest of the house.

To avoid any sound passing from the upper rooms to living rooms the beams were covered with a rough floor, followed by two layers of sound-proof paper and on top of this 2-inch by 3-inch sleepers, staggered so as not to come directly over the beams. The space between the sleepers was then filled with sawdust and followed with a second rough floor, then came two more layers of sound-proof paper and the finished floor. This floor has been found most satisfactory and has an additional advantage in that its thickness above the beams allows the plumbing pipes to pass without cutting the beams.

The recent competition for a model farm house, held under the auspices of the Minnesota State Art Commission, and won by Messrs. Hewitt and Brown, is only the beginning, it appears, of a general artistic movement in that State. The Art Commission proposes to bring home to the people of Minnesota the value of art to the community, and the attempt is the more praiseworthy in that it seems to be the first effort on the part of a State in this direction. Mr. Maurice I. Flagg, Director of the Commission, in an address on “The Dollar and Cents Value of Art,” published as a bulletin, attempts to explain the enormous importance of art to the life of a people, and many of the points he brings out are of very great interest.

Mr. Flagg quotes, in particular, from the Consular Reports to show the industrial value of art to Europe, and our own backwardness in many lines. For instance, “such products as china and pottery, manufactured in both Austria and Germany, to the export value of $8,000,000, came to the United States last year. The latest trade review says that the American manufacturer cannot compete at the present time with foreign-made work. Our product lacks quality because we have not the right kind of clay. Also we do not put beauty into our designs. The report is not altogether optimistic. It adds that there is little hope for American competition because in this
country we have not the skilled workmen who have been trained, as in foreign countries, from generation to generation."

England, too, we learn, suffers from this cause by comparison with Germany. According to the report of a Royal High Commission, "Germany produces no better raw materials than England. The prices are no lower: the quality of the product is no better, but the German design had added sufficient intrinsic value to the appearance of the package or article to make German exports in certain lines exceed the combined exports of other countries."

The cause of this, as Mr. Flagg points out, is intelligent co-operation and definite-ness of purpose in Germany, which elements are lacking in English-speaking nations. "In Germany a properly planned city for both use and beauty is the background for industrial development. Germany has not only realized that beauty is an economic resource, but she has come to see that her greatest asset is her people. She reasons briefly: better houses, better towns, better cities, community interest, civic pride, better people and better products. It is a perfectly natural sequence, and the results in Germany in a few short years are living demonstrations of Germany's industrial success."

Mr. Flagg speaks also of the economic value of landscape and of its defacement by advertising billboards, whose detrimental effect is certain and whose advertising value to their promoters is, to say the least, highly problematical. In other countries, he tells us, this form of advertising is controlled or prohibited by law. "England permits no billboards outside of her cities. Her landscape is one of her chief assets and one of the most beautiful in the world. Germany controls her billboards. So does Italy." Whereas in America any person of the slightest artistic sensibilities is constantly shocked and annoyed by these hideous disfigurements. It is, perhaps, to the railroads that we must look for an abatement of this nuisance, and Mr. Flagg proposes another means by which the railroads can be made to help the cause of art. He says: "I have a plan which I want to suggest—a number of cars properly equipped with overhead lighting, and a complete exhibit of fine and industrial arts. Let us take this train throughout the country in quite the same way as the trade excur-

sions and farm school trains. This is quite as much a part of the life of our citizens as the exploitation of three crops of alfalfa."

The suggestion is an excellent one, and we shall welcome the news of the first State that actually adopts it, for it might well be tried elsewhere than in Minnesota, and one can scarcely imagine a method of bringing art to the notice of a larger section of the community than by such a means as this.

The difference in the point of view of the American and the German manufacturer, on this question, is well illustrated by a typical anecdote. An American artist, traveling in Germany, had occasion to question a Munich tailor with regard to the posters made for him by Ludwig Hohlwein, one of Germany's leading industrial designers, who, we are told, was originally an architect. "Of course," said the American, "you suggest the subjects for the posters." The German was horrified. "What! I give suggestions to Hohlwein? I shouldn't think of such a thing." But our American manufacturers imagine that, because they pay for advertising, they are capable of judging the merits of the designs used. In fact, it is typical of them to consider the design as their own, and the poster artist as a mere machine that puts it on paper.

Surely there is a lack of sense of proportion in paying ten thousand dollars for the space to display a poster, and refusing to pay more than fifty dollars for the design. By their niggardliness at this most vital point they drive out of the field of industrial art those who could most benefit it. I have spoken particularly of advertising. The same is true of all phases of the minor arts. Many a young artist who would be glad to design for the manufacturers, if given a trifle of encouragement, prefers to follow the more uncertain career of a painter or sculptor because there, at least, he is not hampered by constant interference. The well-known case of St. Gaudens and the United States Mint shows how universal is the tendency of the so-called "practical man" to regard himself as an arbiter in a field where he would show real intelligence by stepping aside and leaving the artist a chance to show what he is capable of producing.

JOHN J. KLABER.