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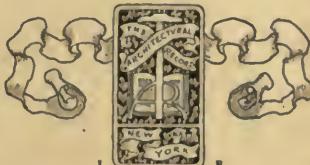
THE FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON, ARCHITECTS.

THE ARCHITECTURAL RECORD

SEPTEMBER 1912

VOLUME XXXII

NUMBER III



The FIRST BAPTIST CHURCH PITTSBURGH PA. By A. G. BYNE..

Cram, Goodhue & Ferguson, Architects
Photographs by Julian Buckly

To discuss good modern Gothic is, practically, to discuss the work of Messrs. Cram, Goodhue & Ferguson; and this has been so recently done in THE ARCHITECTURAL RECORD that only something of decidedly new aspect in their productions—some note at once arresting and highly personal—would be presented now to our readers. This we have in the latest edifice designed by Mr. B. G. Goodhue—the First Baptist Church of Pittsburgh.

It is an intelligent digest of English and Continental Gothic, and exhales a certain mellowness of conception which would have been impossible to the builders of the very period itself, since only a generous retrospect could produce it; and being a digest, it is pleasantly tantalizing to classify and analyze. *English Perpendicular*, is the verdict, for in-

stance, on looking at the window tracery; but straightway the great over-shadowing window arches with their deep reveal increased by buttresses to give one an impression of enormously thick walls—these are assertively French; and crowningly French is the slender *flèche*. But, if all these are French, where then are the accompanying pinnacles and facetious detail? Their conspicuous absence takes one back across the Channel to the sober little English minster churches, and one sums up this effort at classifying Mr. Goodhue's edifice, by saying that it has all the structural beauty and composition of Continental, along with the undecorated severity and economical design of Insular Gothic.

No piece of Gothic merely archaeologically correct would answer the requirements of a modern evangelical re-

formed congregation, whose prime demand is for a large hall from every corner of which their preacher may be heard and seen. Certain liturgical customs whose needs the finest Gothic prototypes answered perfectly are obsolete today; but something not unlike our modern requirements were demanded centuries ago by the Benedictines and Dominicans who went preaching through Southern France; hence their so-called "Hall" churches, still Romanesque in plan but ever working towards Gothic in their solution of vaulting and roofing. In these churches, the aisles which were to become such a feature of fully developed Gothic were of minimum width and served merely as passages. The nave, however, was very wide and open without obstruction from front to back, forming for all practical purposes a great hall. Another expression of the same idea, but even more rudimentary, is the early Gothic chapel of the English Universities; a "Hall" in the very English acceptation of the word, and making no attempt to express the true church plan, and its contribution, therefor, to modern church building would be more apparent in the New England Meeting House. Of the Continental Hall-churches, one of the finest structures was the Church of the Cordeliers, at Toulouse. It no longer exists, but in the modern adaptation under consideration we see its lineal descendant—a cruciform plan with all the parts inherent to such a building adapted and altered to suit present needs. The nave is of four bays (short and somewhat broad); at either side of the nave are the low passage aisles, which open into shallow transepts, and beyond the transepts is the chancel one bay deep. This plan therefore solves the fundamental requirements of a modern "reformed" congregation and like many foreign churches has in addition to its cruciform plan, an adjoining Parish House.

The most striking feature of its interior, and one that has largely determined its exterior aspect, is the manner of vaulting. Vaults were the trouble, torment and delight of the ancient builders as we all know—their patient and profound study, that is how to roof a

large space with fireproof material. Their first solution was the groined vault; but this was not satisfactory since its great weight demanded massive and obstructing piers; moreover the groins were themselves difficult to construct; so there was devised an immense improvement in the shape of the ribbed vault. This improvement revolutionized the history of Mediæval Architecture, for once the self-supporting ashlar ribs were set, the builders could then devote themselves to the question of filling them in with as light a web as possible. The farthest their ingenuity carried them was to the use of thin shells of cut stone or brick for the web—by which process they could reduce their piers to as little as one-ninth part of the girth of the heavy Norman pier. This lighter vaulting naturally reduced the wall construction and buttresses also, and was a saving from every point of view; yet even at its lightest it still required a wall that we of to-day would characterize as *thick*, thick even where flying buttresses did a large share in resisting the thrust of the vaulting. All this would have been avoided by the use of tile for the webs; for tiling is so bound together as to be homogeneous and produces no appreciable thrust; furthermore it is fireproof which heavy stone is not. Yet the Gothic builders seem to have forgotten the tradition of its use, which fact has made it possible for our own race and day and generation to make this contribution to the construction of high vaults in fireproof churches.

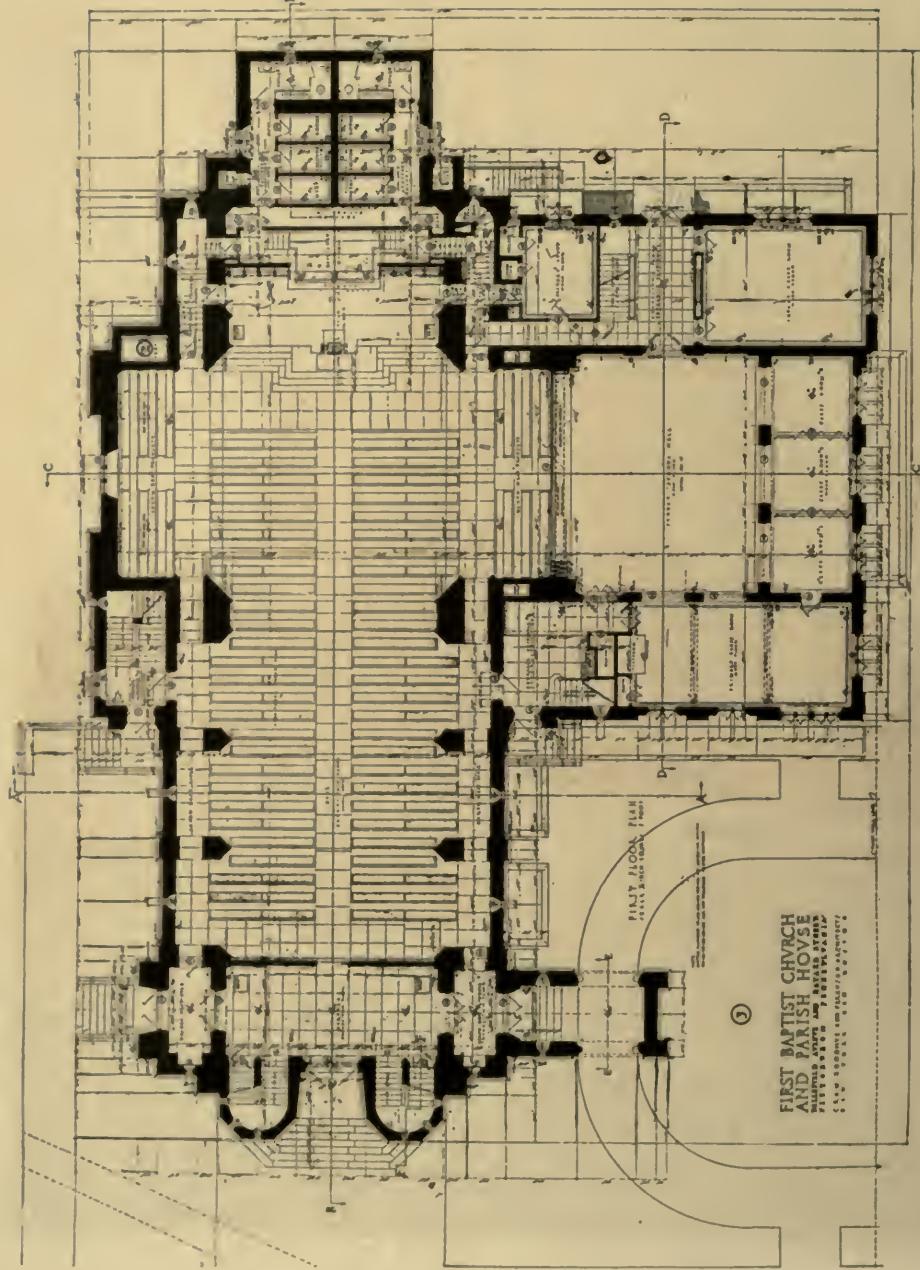
And so in the quadripartite vaulting of this new American Gothic church we find the webs filled with tiles. In the laying of these a choice had to be made between the French and the English methods of filling in; for although the adhesion between the tiles is so perfect that any fanciful patterning might have been tried, it was thought desirable to retain the logical relationship between ribs and filling, as developed in France rather than in England. In France the ridge of each vault showed a series of clean straight joints; in England the stone courses met at the ridge diagonally, to conceal which the ridge rib had to be in-



THE FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON, ARCHITECTS.

THE FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON, ARCHITECTS.

First Floor Plan.





THE FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON, ARCHITECTS.

vented. The example before us uses the former method, and by doing without the additional English ridge rib maintains its appearance of simplicity—of systematic elimination of unnecessary features. The ridge rib seen over the crossing, where the vaulting changes from quadripartite to the more elaborate tierceron, does not belie this observation, since here it is a necessity.

It will be noticed that the vaulting springs from high up in the vast clerestory, which makes it possible to place the apex of the vault at a higher point than the side walls. Upon a careful study of the theories obtaining at the height of the Gothic development it is evident that the aim of the builder was to stilt the springing plane of the vault—both to add to the beauty and soaring quality of the vaults themselves and to concentrate the thrusts. "Probably no one matter in Mediæval design was, from an artistic point of view, of such overwhelming importance as the combination of a towering clerestory and a high set vault," says a great authority on Gothic (Francis Bond). Except for the tile webs this vault is like any other Gothic vault, built just as it might have been built in the Middle Ages, with ribs conceived within the body of the pier, to be gradually brought forth until they are fully exposed, when they separate and swing superbly each to its appointed place. Examining the walls below this point, it will be seen that the buttresses of the exterior appear to be thrust through the wall to form the pier and in the aisle space are pierced with low arches to admit of passage. These piers rise from the floor to disappear in the spring of the vault, while the little aisle arches die down on the splayed jambs of the piers.

Passing from structural peculiarities, triumphant peculiarities, we find that the whole interior of the edifice is austere simple. There is no abundance of elaborate mouldings or carvings, but rather an abundance of broad flat surfaces. Only in the arches has this plainness relaxed, in favor of rich mouldings that give a delicate play of light and shade—just that touch of grace and fancy neces-

sary to contrast with the massiveness of the abutments and the general outspoken honesty of construction.

In the church furniture are considerable color and animation—a chancel floor of intricate tiling approached by steps of green slate; a baptistery of Tennessee marble with variegated marble inlay, all backed by oak panelling and shut in by a double curtain of rich green and gold silk; a lacy drop cresting across the tall oak stalls; a gallery front painted with symbol representing various events in the life of the Saviour; and most sumptuous of all the organ.

This organ takes up the entire chancel end above the stalls, an admirable way in which to treat this otherwise difficult wall. For the great windows commonly found in English chancels are sometimes a strain on one's eyes during a non-liturgical service. Certainly this organ answers every decorative requirement, the clustering of the pipes is singularly in keeping with the Gothic spirit while its carving, coloring and gilding offer a pleasant contrast to the surrounding stone. It is an imposing piece of design, and the broken play of smoky-blue light from the window back of it adds to its beauty.

Underneath the whole church extends a basement or undercroft ceiled with a segmental barrel vault of tile. The bases of the piers above form deep recesses along its sides in which are set the windows, these are so low down as to be negligible from the outside—a superior bit of construction—as all of the congregation will admit who may have visited the dark and gloomy crypts of foreign churches.

The basement of the parish house together with this undercroft is put to many good uses—a great hall, spacious kitchen, dining room, cloak rooms and class rooms. On the main floor perhaps the most noticeable feature, since it is an exigency of the Baptist faith, is the arrangement for total immersion, being so planned that the Catechumen may enter the water on one side and out again on the other, avoiding passing through the church and the splashing incidental to such a ceremony. By this arrange-



MAIN PORTAL—FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON, ARCHITECTS.



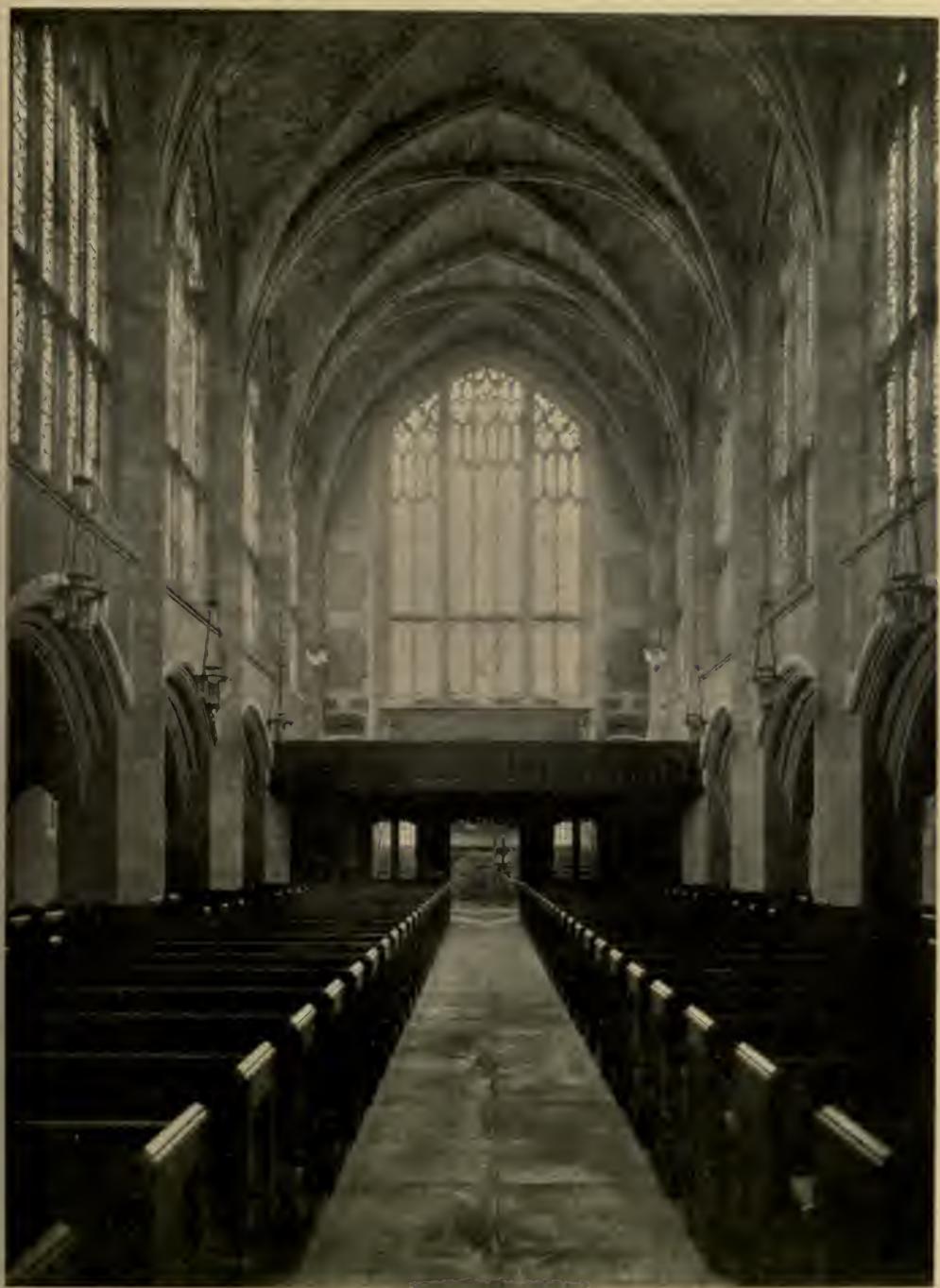
THE CARRIAGE PORCH—FIRST BAPTIST CHURCH,
PITTSBURGH, PA., CRAM, GOODHUE & FERGUSON, ARCH'TS.



THE BRIDE'S PORCH—FIRST BAPTIST CHURCH,
PITTSBURGH, PA., CRAM, GOODHUE & FERGUSON, ARCHTS.



INTERIOR LOOKING TOWARD CHANCEL—FIRST BAPTIST CHURCH,
PITTSBURGH, PA. CRAM, GOODHUE & FERGUSON, ARCHT'S.



INTERIOR LOOKING TOWARD ENTRANCE—
FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON, ARCHTS.



ORGAN DETAIL—FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON, ARCHITECTS.



MANTEL IN PARISH PARLOR—FIRST BAPTIST CHURCH,
PITTSBURGH, PA. CRAM, GOODHUE & FERGUSON, ARCH'TS.

PARISH PARLOR—FIRST BAPTIST CHURCH, PITTSBURGH, PA.
CRAM, GOODHUE & FERGUSON,
ARCHITECTS.



ment all things are done in seemly fashion, still leaving the actual baptism visible from every part of the church.

Turning into the Sunday School we find it is two stories high, lighted from above, surrounded on three sides with class rooms open to it but shut off from one another by folding doors. The fourth side has a similar screen on the wall space above which is to be painted a great symbolic map of Biblical lands, and

ing to the parlor for the ladies of the congregation. This is an elaborate room with fine panelling done in the old English way—that is, the panels are put together with oak pegs and the mouldings are run on the styles and rails leaving the ends square so that they butt together without mitering. This panelling, absolutely unvarnished, is beautiful; but it is the ceiling of the room by Bankart which is its chief call for no-



THE ASSEMBLY ROOM IN BASEMENT— FIRST BAPTIST CHURCH, PITTSBURGH, PA.
Cram, Goodhue & Ferguson, Architects.

opens into the church providing seeing and hearing space for an overflow on crowded occasions. At the point of juncture we find another entrance to the church and a staircase of carved and linen-panelled oak, with solid balustrade. At the top this takes the form of a screen of three bays reaching to the ceiling and having in its head pierced tracery panels, very interesting and curious.

At the rear entrance is another lead-

tice. This enthusiast has given us for the first time in centuries that delicate beauty and personal touch which used to characterize the craft of the plasterer, when England was enriched by such ceilings as the well known Globe Room in the Reindeer Inn at Banbury and others of its day.

The foremost impression of this church is its soaring quality—its "romantic" dignity. Its height, to which the low lying parish house gives scale, its

heavy walls skilfully created by the system of piers and buttresses, the unusual gable end, and the squat, blunt exterior treatment of the aisles—all these show how far it has departed from traditional Gothic. A parallel can hardly be found for the treatment of the outer aisles; they seem to have almost a suggestion of the simple directness of the work in Central Syria.

One is tantalizingly tempted to decide whether the work has more of English or French feeling. It is impossible to conceive such tracery as this of the clerestory on French soil: for the Latin mind preferred flowing joyous forms. Simplicity and solidity were qualities that appealed rather to the Britisher: and the fact that this sort of tracery was structural as well as ornamental was not to be despised. It has been said by some that the passing from flowing tracery to the rectilinear forms marks the degradation of English taste. This is one of the many sweeping statements that we feel

justified in rejecting; for certainly the Parish churches of East Anglia, and the cathedrals of Gloucester, York and Norwich, are England's most precious heritages of Mediæval art; and of sufficient beauty to warrant the repetition of their spirit here without any tinge of degradation. These clerestory windows occupy the whole bay as do those in fully developed *Isle-de-France* Gothic, and for exactly the same reason. Neither English nor French, but wholly modern, is the way in which the wall arch of the vault and the inside arch of the window are fused together carrying Gothic construction to its logical issue, a stage rarely reached in England. But then again the square *bema* or chancel end has always been peculiar to Anglo-Saxon Christianity and was rarely met with on the Continent. In short, the church before us is somewhat of all Gothic; of all countries; of old and new. It is a distinguished success, even in the annals of a firm known for Good Gothic.



STAIRCASE IN PARISH HOUSE—FIRST BAPTIST
CHURCH, PITTSBURGH, PA.
Cram, Goodhue & Ferguson, Architects.



"THE WITTELSBACHER BRUNNEN," IN MAXIMILIANS-PLATZ, MUNICH.

The NEW DEVELOPMENT in GERMAN ARCHITECTURE

By Francis R. Bacon

WHEN SOLOMON made his oft-quoted remark about the novelty of things under the sun, we wonder if he really intended the phrase to be as pregnant with prophecy as many seem to have understood it, or whether he was simply lamenting his contemporaries' paucity of ideas. If the latter were his intention, we can have no possible quarrel with him,—the historian is of all men most entitled to our gratitude, save only those whose worthy actions he records for us and posterity. There is something oracular about such generalities, an exasperating enigma for critics to wrangle over while the Israelitish oracle sits in his temple and metaphorically laughs up his sleeve. Had the craftsmen of later ages been convinced of the universal and eternal truth of the oracle's state-

ment, all their latent powers of initiative and invention would have been crushed by despair. Were it so, the art of Michael Angelo would be comparable to the decorations of Karnak, and the cathedral of Notre Dame at Paris a replica of the Temple at Jerusalem. Though there be nothing that has sprung from the "nowhere" into the "here," yet problems and conditions are always changing and the arts develop to solve and meet them.

A most interesting graphical study of this development of architecture can be made within the limits of a few days' vacation travel. The journey may begin, as ours did, in Southern Italy, with a visit to Paestum. Here the Greek temples, notably that of Neptune, dating from the sixth century B. C., though shaken by earthquakes and blasted by

explosions, yet raise their bold outlines against the blue Italian sky, impressive in refined simplicity and dignity. They are not the summation of Greek endeavor; but represent a pioneer stage necessary to the evolution of that highly finished art embodied in the Parthenon about a century later.

The architects of imperial Rome, following Greek precedent, but freely changing and adapting its forms and methods of construction, designed the domed Pantheon, the vaulted Colosseum, the Forum Romanum; they built temples

churches contemporary with the work of Gothic architects in France. By the end of the Quattrocento, the Italian Renaissance, deep-rooted in classic antiquity, reached its full growth, and in every branch were men who could express the event of a new day more fluently than ever before.

Driven from Florence by the oppressive heat of a record July, we enjoyed the salt breezes of Venice almost as much as the gilded glory of St. Mark's, or the fanciful façades of her palaces. Here the classical Renaissance was tinged



"THE NORNEN-BRUNNEN," A STREET FOUNTAIN IN MUNICH.

for their gods, magnificent palaces for their emperors and circi for the people. The refined simplicity of Greek work becomes more ornate, its architectural forms more plastic under the direction of Roman craftsmen, and the muse of Architecture with her increased vocabulary, becomes more eloquent and expressive.

Going northward again, we saw in Florence the fruits of Mediævalism, the Bargello castle, the Vecchio palace, the Loggia dei Lanxi, and beside them Sta. Croce, Santa Maria Novella, and other

with Byzantine influence and hinted at the barbaric mysticism and the magic of the far East. Before long, however, our imaginations failed to convince us of the reality of the sea-breezes, and we again followed the North Star to Munich.

Munich's architecture reminds us of a middle-aged farmer's criticism of Shakespeare. Upon his introduction to the dramatist's works, he was disappointed in finding that they consisted so largely of quotations. Among her architectural "quotations" Munich includes



THE "NEUES RATHAUS"—THE NEW TOWN HALL IN MUNICH.

the Feldherrnhalle, repeated from the Loggia dei Lanzi,—her Königlichen Residenz, adapted from the Pitti Palace,—her Beaux-Arts Palace of Justice, and in the near vicinity the Castle Herrenchiemsee, a highly-prized copy of the Palais of Versailles! King Ludwig I of Bavaria announced, "It is my resolve to make Munich a city such that none can say he knows Germany who does not know Munich." How well he has succeeded in this ambition, every loyal Bavarian will testify, for Munich's Hofbräuhaus, her schools and her museums are each typical of German perfection. In the new town hall we find a very interesting expression of German Gothic as applied to municipal buildings.

Architectural Munich represents the several periods of a race on emerging from the shadows of Mediævalism into the full dazzling light of Modernism. First was the age of picturesque architectural barbarity. Then began the slavish copying of foreign monuments, a period of archaeological imitation; then the application of other methods and details to peculiar requirements. The Palace of Justice and the new Town Hall are contemporary examples of this period of adaptation—each represents a well-defined style and neither is logically native to the soil.

Within the past decade a new era of development has claimed the craftsmen of Munich. Not content to translate, however, freely, the architectural lore of Italy or France, they have attracted the attention of free-thinkers by a totally unexpected show of initiative.

When a few years ago it was decided to span the Isar by a new bridge, the architect turned for inspiration, not to the Pont des Arts or to the Pont Sant' Angelo, but—where? No one had seen just such a bridge: it was neither Greek or Roman, neither Gothic or Renaissance, so the Wittelsbacher Brücke was assigned to the all-inclusive pigeon-hole marked "*l'art nouveau*." The sarcastic may remark that there isn't much about it to criticize. The studied simplicity of its lines, the broad easy sweep of its gray stone arches, spanning the river in

four equal reaches, the intermediate piers accented by simple vertical motifs—the bridge excites attention if not universal admiration. The one piece of ambitious decoration is the equestrian statue of Otto von Wittelsbach. The conventionalization of the horse recalls the Assyrian manner and is quite in harmony with the rest of the structure. Other bridges of similar type have been built since, and others are being planned to cross the Isar, but the Wittelsbacher is interesting as a pioneer in the tendency toward a changed architectural expression.

Of the several fountains in her parks and plätze, two stand pre-eminent in this new style. The Wittelsbacher Brunnen in the Maximilians Platz seems to grow up naturally from the native rock, not geyser like, but with a restful restraint and dignity. The principal basin, fed by two jets of water and by the overflow from smaller basins in the center, discharges its water through the mouths of a score of grotesque creatures into pools at the street-level. At opposite ends of the large basin, buttressed by rough native rock are sculptured allegorical groups representing "water in action" and "water at rest." The first group pictures a spirited horse, head thrown up, nostrils distended, bearing on his back an athletic youth with all muscles tense, about to throw a large boulder into the basin. The other group, "water at rest," is a figure of a bull in repose, expressive of great potential energy, bearing on his back a woman's draped figure.

The Nornen-Brunnen is another interesting example of the new development. Its gracefully flowing lines, its freshness and vigor of design and execution are a pleasant relief from the "intensive cultivation" of the traditional styles.

It is true that this most recent expression of German architecture has not yet "arrived," as a Frenchman would express it. When a race has attained the full height of civilization and culture, its individuals delight to revert sometimes to the haunts and habits of primitive

man—to heed for a time the call of the "red gods." Amid the environment of half-tamed Nature, he lives his life, not as his primitive fathers lived it, but against the background of a highly developed culture. Under such conditions come thoughts and feelings and developments unshared by his brothers who have remained in the glare of city life. So too, in this return of the craftsmen to first principles, working with the acquaintance of a fully developed art, may

we not expect a really new version of architectural lore?

A score of centuries passed from the building of the Greek temples at Paestum to the flowering of the Renaissance in Italy. The "new" architectural expression has begun its career moderately. The future lies before it, and we have cause to expect very interesting developments from our German brothers if, only, we do not hurry them with a too-swift sword of judgment.



THE "WITTELSBACHER BRUCKE"—THE NEW BRIDGE OVER THE ISAR.

THE CATHEDRAL OF MEXICO CITY (COMPLETED 1667),
PEDRO DE ARRIBA, ARCHITECT.



The ARCHITECTVRE of Part I. MEXICO CITY

By Montgomery Schuyler

FOR A STUDENT of American architecture who for the first time has had the opportunity of seeing Mexico, the conclusion that every budding American architect ought to do the same thing while there is yet time is quite irresistible. It is not risking very much, at any rate not too much, to say that some patriotic Pan-American would do a very great service by instituting a "Prix de Mexico" as offset and counterbalance to the Prix de Rome. For one thing, the student can get out of accessible books what a sojourn in Rome has to give him much more readily than he could get the same thing in the same way out of what a sojourn in Mexico has to offer him. For another and even more important thing, the natural environment of Mexican architecture has far more to offer him that is congruous with his own problems than the environment of the architecture of Italy. To begin with, Mexico is cisatlantic. This is also the "New World," as we are so fond of pointing out in reference to the artistic crudities and shortcomings of our own country. True, the Mexican settlements are of a much greater antiquity in fact than any of the "Norte Americano." Jamestown itself is of yesterday compared with the scenes of the conquest of Cortez. Where our colonial antiquities are at the utmost of the late seventeenth century, Mexican monuments of the sixteenth abound. But that is by no means the whole story. It is necessary to supplement the dates by explaining that the Mexican pioneers began to build monuments before our own New England ancestors, if we happened

to have any, had any notion beyond that of pitching shingled tents for their own shelter. The communal idea was before the eyes of the settlers of Mexico as the individualistic idea was before those of the early settlers of English or Dutch descent. The "civic centre" is the latest fad of American municipalities. Yet it is impossible to find an ancient Spanish settlement which did not begin with this to us novel notion as a primary essential of its existence and growth. The earliest layout of the place was a triumph of "collectivism." Within the present limits of the United States, New Orleans still shows the advantage of having been founded and laid out by people to whom the good old Anglo-Saxon rule of everybody for himself and the devil take the hindmost had no binding force. Everywhere you find in the Spanish settlements the civic centre or central Plaza; everywhere the "Alameda," or public garden and place of recreation. All this ought to instruct while it shames us. And even this is not the worst of it. From the earliest settlement down to the present day, the Spanish settlements show immensely more of artistic sensibility than the English settlements. It is true that they supervened upon semi-civilization instead of upon rank savagery. We of the United States have no more remains of the art of the Toltecs and the Aztecs than we have of that of the Incas. The aboriginal and always prevailing part of the population of Mexico have continued to hark back to the monuments of Uxmal and Palenque, as witness the recent Aztec monuments in Mexico City,

where that hostility to the Spaniard which has never ceased since the days of Cortez, and which has been so very powerful a factor politically, is-expressed artistically not only in the "phonetic" decoration of the incidental sculpture, but in the recall of autochthonous motives in the purely "technic" decoration of the monument. The descendants of the Aztecs have inherited artistic sensibility. It is manifested in their music. The Mexican military bands are among the best in the world, even if their native compositions are of no great interest. It is manifest to-day in their pottery and their textiles. Mexican Indians are different from North American, even though they are no cleaner and even less honest. Clarence King used to say: "There is much villainy in Mexico, but there is no vulgarity." For that matter, there is no vulgarity about the North American Indian in his native and uncorrupted state, if you could catch him in it. But of course the aborigines are immeasurably more important as component parts of the population South of the Rio Grande than North of it, where indeed they are the most negligible of all the races and tribes of mankind whose composite the North American is tending to become. The common and vernacular building of the Mexican Indian you may see all over Mexico, while "building" is hardly the word to apply to the hasty and casual shelter which the Northern nomad furnishes for himself in wigwam or tepee. The journey South from the Texan border to Mexico City is intensely interesting though rather depressing to the Northerner who takes it, outside of the short rainy season, by reason of the aridity of the land. There is nothing green to be seen, excepting the wide and glossy leaves of the maguey; hardly a blade of grass. But the native habitations are very much in evidence. These abodes are merely shelters, as humble as possible, never of more than one floor, hardly ever of more than one room and that not much bigger than a "hall bedroom," the walls of sun-dried mud, the roof of what branches can be obtained for a framework in this treeless land, wattled and filled with the material of

the walls. No chimney, no window, the one orifice for the admission of light being the door. No human abode could be humbler. One perceives that it is a mere shelter, and also a shelter mainly from the sun, which is the chief enemy of man in these tropical regions. Shade and coolness are his primary requirements. The absence of openings secures the former; the thickness of wall necessitated by the material the latter. There could be nothing "vulgar" about a habitation enforced like this, which is reduced to its very simplest expression, and admits no superfluities. But neither, for that matter, could there by any architecture.

The old text-books all began with the "hut" and figured the monuments as somehow evolved from it, a higher power of the vernacular construction. Examples of historic architecture, and remains of prehistoric, by no means confirm this view. The first requisite of a building projected as monumental is that it shall be durable. On the other hand, the abodes of primitive peoples are transient shelters, not intended to outlast their builders. As Sir Thomas Browne has it about the builders of the pyramids "the oldest of human monuments and also the most permanent":—"of their living habitations they made little account, conceiving of them but as hospitia, or inns, while they adorned the sepulchres of the dead, and, planting thereon lasting bases, defied the crumbling touches of time and the misty vapourousness of oblivion. And as with tombs, so with temples." The remains of Uxmal and Palenque can have had very little to do with the abodes of the men who built them, abodes which vanished in the generation after they were built, leaving no remains from which they can even conjecturally be restored. For duration, stone is the one material all over the world, where it can be obtained. Where local conditions prevented its employment, works intended to be monumental have failed of their primary requisite of permanence. According to the Greek accounts the building of Babylon outrivaled that of Nineveh, but it has vanished, leaving no trace behind. "It seems nearly certain," says Fergusson, "that no stone was used in

their construction." On the other hand, "it is the employment of stone alone which has enabled us to understand the arrangements of the Assyrian palaces." Hardly anywhere in the world is stone the vernacular material of housebuilding. It is too costly, in time and in labor, to be available for that purpose. Consequently, when it is imposed as the necessary material for structures meant long to outlast their builders, it involves a

one material to another, an aggregation having the same probative force in art as the like series of transitional organisms in nature which shows the evolution of the hippocampus into the horse. To the same effect are the bundles of reeds reproduced in the stone columns of the Egyptian temples. But these instances by no means invalidate the rule that when a monumental material is adopted for monumental purposes, its



THE CATHEDRAL AND SAGRARIO.

(Sagrario Built 1750).

Lorenzo Rodriguez, Architect.

new construction, instead of that commonly employed. True, decorative and even structural details devised for other materials are apt to survive in it. Omitting the mooted question of the lithic or wooden origin of the Doric temple, even those who maintain, like Viollet-le-Duc, that it was devised for a construction in stone admit that the Ionic volute was originally a member carved in wood, and in fact adduce an almost complete series of capitals denoting the transition from

architecture is developed out of its own requirements and has very little in common with the vernacular building in less permanent and costly materials.

However, this is not an archaeological article and the interest of the remains of the primitive monuments of Mexico is almost exclusively an archaeological interest. It is quite possible, indeed it is likely, that the adobe huts of rural Mexico to-day are exactly as they were before the Spanish conquest of nearly four

centuries ago. But what there has been of architecture in Mexico since has been strictly colonial and Spanish. It is difficult to find in it any trace of native influence, even though the artisans employed were, as in almost all cases they must have been, Mexicans of native or of mixed stock. The colony has reflected the fashions of the "metropole" as distinctly as our own architecture reflected current English fashions from the earliest settlement down to the architectural declaration of independence, made just about a century after the political declaration, when Richardson betook himself to Southern France for

signalize his viceroyalty by some monument. Every bishop had the same ambition with respect to his diocese, almost every priest cherished it with regard to his parish. With the steady output of the precious metals the possession of which was the sole motive, except the propagation of the faith, in the Spanish schemes of conquest and colonization there was far more wealth in Mexico than in the English colonies to the northward. The separation of church from state was theoretically complete in New England, albeit in fact there was never anywhere a more strict theocracy than that of Massachusetts Bay or of New



LOWER PART OF CATHEDRAL AND SAGRARIO.

his prototypes, so soon after which the increasing number and prevalence of the graduates of the Beaux Arts reduced us, as Johnson apprehended that the English authors of his time might be reduced, "to babble a dialect of France." But the conditions in New Spain were far more favorable to an impressive display of architecture than the conditions in New England, meaning the entire extent of the English settlements. For three of the four centuries since the conquest, Mexico was under the rule of Spanish viceroys, sixty-two of them in all. Almost every one of them was anxious to

Haven. The Pilgrims at any rate founded, as Rufus Choate said, "a church without a bishop and a state without a king." But the union of church and state in the Spanish colonies was complete and avowed. The rearing and decoration of churches were the care of the government. What wonder that the Mexican monuments of ecclesiastical architecture for those three centuries when Mexico was under Spanish domination should have been a hundredfold more interesting and impressive in what is now the Republic of Mexico than the like development in what is now the

room, but every one of them is furnished with its miniature dome and its miniature campanile. Terry's excellent guide is silent about these, and the North American Pullman porter unsatisfactory and clearly inauthentic. "Well, you see, there was a saint come along here one time, and every place he stopped he built one o' them churches." There is hardly a provincial capital in Mexico which has not a church superior in antiquity, in costliness and in architectural interest to the corresponding edifice in any of the "old thirteen" of the United States.

But naturally Mexico City, as the seat



BELFRY OF THE CATHEDRAL OF
MEXICO CITY.

United States. At any rate that is the case. Coming down from the northern frontier to the capital, not a town but shows at least one church impressive by its magnitude and its massiveness, and commonly by more artistic qualities as well. The cupola with its ribbed rotundity of glossy tiles is an invariable feature, yet not more invariable than the square campanile alongside, with its dead wall of lower tower, its open belfry stage, and commonly its cupolated or bluntly pointed lantern. Sometimes, as in the cathedral of Puebla, the towers are many-staged and crowned with four-hipped roofs, recalling the Lombard Romanesque. In any case, you have to note the absence of the French flèche, or English spire, disparaged by Mexicans as "the Protestant needle." On the road southward from Laredo, one passes at intervals for most of a day a curious series of little churches, apparently votive chapels, of which the interior is no larger than that of an ordinary bed-



CORNER DETAIL—CHURCH OF SAN
HIPOLITO.



THE CHURCH OF SAN HIPOLITO (1602).



Photo Copyright by C. B. Walte.

FRONT OF LA SANTISIMA, CITY OF
MEXICO.

of the viceroyalty, is the centre of the architectural activity of the colonial days. They say there are a hundred churches in it, and you can readily believe it. Among them, these reflect every architectural fashion that prevailed in the Peninsula during those three centuries of the colonial period. Our architectural as our sartorial fashions change much faster than those of Europe, particularly than those of Spain. But this was hardly so in the provincial period. What we have to show in colonial architecture, so far as it is entitled to be called architecture at all, is pretty much all of a piece, the British modification of the Italian Renaissance that was fashionable and current from the time of Sir Christopher Wren to the coming in of the Greek Revival in the first quarter of the nineteenth century. Mexican architecture antedates ours by a full century, and Mexican colonial architecture continued until the separation of

Mexico from Spain in 1821, which was just about the time when our own "Georgian" gave way to the Grecian brought in by the publication of the "Antiquities of Athens." But during this period Spanish architecture, and by consequence Mexican architecture, underwent grave and radical modifications. The Renaissance of Palladio and Vignola has never taken real root in Spain or its dependencies. From the Moors the Spaniards inherited an impatience of its formulae, a wilfulness and an individuality which are far from scholastic. In certain edifices of great importance the Greco-Roman which prevailed throughout the rest of Western Europe



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THE FRONT OF THE CHURCH,
TEPOZOTLAN, MEXICO.

was imported into Mexico. The Cathedral of Mexico, as the largest and most costly and monumental, as the "Metropolitan" church, followed the general European fashion. Completed in 1667, the huge edifice dominates the square which it fronts, and the whole old quar-

posed in elevation and not in perspective. The interest is considerable on account of the magnitude. For the rest the architecture consists in the "features" of the usual superposition of the three orders. This is managed in a scholarly and grammatical manner enough, but the



CHURCH OF SAN FERNANDO (1755).

ter of the city of which it is the centre. It would dominate them still more effectually if the crowning member of the church had been, as so often, so almost invariably in lesser churches, a dome in due proportion to the total area. As it is, the interest of the front is the chief interest of the building. It was com-

general effect is dull and heavy. One is obliged to the architect mainly for the manner in which he has made his front fill the eye of the beholder on or across the great square which is still the "civic centre" of Mexico City, and also from the lateral glimpses one gets of the belfries down the streets which were open-

ed in order to show them or down which they were established in order to be shown, as the case may have been.

What the cathedral suffers from the want of such a crowning feature may be seen from the illustration of the emergence from above "the purple crowd of humbler roofs" of the dome of the much smaller but certainly much more artistic and equally academic church of San Ildefonso. This, one says, is what that was meant to be, but lost its way. With a cupola which bore the same relation to its mass and its front that this smaller cupola bears, the cathedral would be worthy of its preëminence of magnitude and costliness and position, as it cannot be said to be so worthy now.

There could not be a stronger contrast than that of the tame correctness of the cathedral with the wild and fantastic irregularity and profusion of the "Sagrario Metropolitano" which adjoins it, but which architecturally seems to take a pride in having nothing to do with it. The very material proclaims the intention of difference. The cathedral is of gray sandstone relieved, not unpleasantly, with wrought work in weather-worn marble originally white. The Sagrario is of a deep red stone, the possession of which is one of the architectural advantages of the Republic which has been employed to the uttermost. There are, in fact, two sandstones of reddish hue quarried within an accessible distance of Mexico City, apparently in unlimited quantities. There is this crimson variety and another of a bright pink. Both are used in profusion in important buildings and both are freely imitated in the staining of the plaster fronts which are the staple of the visible building in the older parts of the city, and which are washed with white or red or green or yellow or blue with a very enlivening and gay effect. It is characteristic of Spanish and consequently of Mexican architecture to have some rich and conspicuous central feature brought into prominence and made still more conspicuous by the blankness of the flanking walls. But the architect of the Sagrario has chosen to assume that the front of the cathedral is his blank en-

closing surface, and to convert his entire front into a feature of profuse carving. The effect is of a wonderful richness, undoubtedly a barbaric richness, but not in the least less attractive on that account to the Indian population which forms so much the majority of the faithful of Mexico. The Sagrario shows an equivalent facade on the east side to that on the south, which is the main front and ecclesiologically the "west front" of Cathedral and Sagrario. It has a particular interest as being the most elaborate and ornate specimen that Mexico has to show of the Churrigueresque, called from Churriguera of Salamanca and his two sons, who in the last quarter of the seventeenth century and the first of the eighteenth, by themselves and their disciples and imitators, so greatly influenced and perverted Spanish architecture.

The present example is rather belated, which may be due to the fact that it is colonial. The elder Churriguera died in 1725, and the fashion he set did not long outlive him. To the rationalist and the classicist alike, Churrigueresque is abomination. Reason, the logical development of architectural forms according to the mechanical purposes which they subserve and express, is thrown to the winds. Equally thrown to the winds are moderation and discretion and all that we mean by "good taste." The attempt is to stun and bewilder the beholder by the accumulation of features and details, features which are not parts of a countenance and details which belong to no ensemble. It is in fact a revolt against the academic, and its success in its time was because of that. It "touched a chord." If some Churriguera should arise in these United States to proclaim with equal sonority and emphasis that the architecture of the Beaux Arts was "all rot," would he not have a fair chance of inducing a multitude to follow him to do evil, that is, some other kind of evil? Such are the reflections that the wildness of the Sagrario Metropolitano is adapted to elicit. For, note well, inspite of its outrageousness and its irresponsibility, there are in this work vigor and life, and much knowingness

and skill about the carving, in design as in execution. The next most noteworthy specimen of the style in Mexico City is perhaps the front of the old church of San Francisco. This is withdrawn some hundred feet from the sidewalk of one of the busiest streets in the city, so that it is hard to make out its detail through the gateway and across the garden, and the photograph can do it no sort of justice. It is forty years later in date

permitted Spanish architecture at times to degenerate into a riotous irrationality, has never allowed it to shrink and wither into mere formalism. Technically, the Moorish influence is no doubt responsible for the importation into Spain and thence into Mexico of the dome, which is the most marked and prevalent feature of Mexican ecclesiastical architecture, old or new. It is by no means the Italian dome of the Renaissance



THE CHURCH OF SAN ILDEFONSO.

than the Sagrario, and, perhaps correspondingly, more refined. At any rate, it has, where it stands and as it is seen, a charming and romantic effect.

There is another Spanish style equally exemplified in Mexico, and that is the Mudejar, the style derived from the Moors, whose influence is almost as plainly as in their own monuments of Cordova and Granada to be traced in the succeeding Christian building of Spain. That influence, it may be, in cooperation with the Spanish character, which, if it has

which was thus imported. That correct example already cited of that type of dome, which might have come from the Salute in Venice, is very exceptional. The Mexican dome is the Oriental dome, covered with the tiles, glittering from afar, which are also a Moorish bequest to Spain and Mexico. Perhaps as complete and admirable an example as one can cite of the Mexican dome is that of the Holy Well at Guadalupe Hidalgo, the Mecca of Mexico, of the Mexican Indians above all, for it was an Indian



THE HOLY WELL OF GUADALUPE HIDALGO. (1771-91).

Madonna who wrought the miracle that hallows the place. The suburb is only half an hour from the plaza of the Cathedral by a most interesting trolley ride. The church itself, which Mexican piety has enriched to an extent hardly rivalled in the Cathedral itself, dates from 1709, and is, in its interior, from the "architectonic" point of view, one of the most interesting buildings in Mexico. It is rather Romanesque than Gothic, and the indications of the roofing in the sections of the nave piers form an admirable example of the structural logic which is by no means a common characteristic of Mexican architecture. The holy well has also a logical enclosure. No form could better express the purpose of enclosing and protecting it than that which recalls the general structure of the baptistery of Pisa, but was evidently devised for its own place and its own purpose. The walls are of the crimson already mentioned, a characteristic Mexican material, with very richly carved and quaintly shaped window-frames, the

entrance of an elaborate richness much less barbaric than might be expected, while the dome is roofed with blue and white tiles of Puebla and the ribs are in tiles of chrome yellow. The whole effect is highly Oriental and highly artistic.

As unmistakably Moorish is the church of San Hipolito. It stands upon a site memorable both to Spaniards and Mexicans as that of the "Night of Sorrow." When the Mexicans rose against the invaders for the last time, with results so terrible, the Spaniards promptly began a commemorative church on the spot, but the present edifice dates only from 1602. The front is as you see a



ENTRANCE TO "THE THIEVES MARKET." (Mercado del Volador).

very interesting composition in the Spanish Renaissance of the early seventeenth century. It owes very much of its interest to its being enclosed between walls almost entirely blank except for the decoration of red and yellow tiles; and this enclosure is of course entirely

Square Garden tower, evidently in a different manner and of a much later date than the blank mass of tower below. This front, flanked at it is, is one of the most picturesque things in Mexico, and its interest is much enhanced by the monumental erection at the outer



THE OLD CHURCH OF SAN FRANCISCO SEEN FROM AVENIDA SAN FRANCISCO
THROUGH COURT YARD.

Moorish. Apparently both flanking towers were intended to be surmounted by clock faces and lanterns, but the intention was fulfilled only in one. That one is, as in the case of the Giralda of Seville, the prototype of the Madison

corner of the atrium. The carving of this object illustrates an Aztec legend of the conquest, although surmounted by an orthodox Madonna. This is thus one of the very few exceptions to the rule that the native Mexican element has

nothing to do with the ecclesiastical architecture of Mexico. One imagines, in this case, an indigenous and patriotic parish priest conniving with a native sculptor at this architectural inconsistency and sculptural protest against the alien domination. In any case the total effect is very picturesque and very charming.

Only a few steps away is the old

is to understand that these examples of its ecclesiastical architecture are by no means the only notable churches among the hundred of the capital. There is hardly one of them that has not its individual interests. If we were to consider the interiors also, there would be no end to this article. The illustrations already given seems sufficient to convince every North American architect of



THE JOCKEY CLUB. REAR ELEVATION.
Formerly the Casa De Los Azulejos.

church of San Fernando. In its actual environment this old pink and brown front has a melancholy and neglected air. It is partly dismantled and looks dilapidated; all of which is to the enhancement of its undeniable picturesqueness. There is hardly a trace in it, in spite of its date, of the Churrigueresque degeneration.

The reader who has not seen Mexico

an artistic turn of mind that there is something in Mexico very well worth his while.

As has been said already, the secular architecture is inferior in interest to the ecclesiastical. Nevertheless, there are secular buildings antedating the nineteenth century which are very well worth study. Many of the fronts now secularized were originally appurtenances



STREET FRONT—AVENIDA BUCARELI.

of monastic establishments. That is probably the case with the front illustrated in the Avenida Bucareli, which is highly characteristic. The lowness, the expansé, the confinement of the ornament to the central entrance and the punctuating piers, and the refinement of the ornament itself, puts this front entirely out of comparison with anything of its own date which was erected between the Rio Grande and the Great Lakes. The Casa De Los Azulejos, now

the home of the Jockey Club, is one of the most conspicuous as well as one of the most attractive of the old buildings still remaining in the commercial quarter of Mexico City. The photograph is not of the main front on the Avenida de San Francisco but of the less pretentious rear elevation, on the Avenida Cinco de Mayo, which was added only in 1906. This, however, is an absolute facsimile in detail of the main elevation. Like the other, it is faced completely with blue



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SALTO DEL AGUA—FOUNTAIN END OF AQUADUCT. (1779).

and white Puebla tiles. These, according to tradition, were bestowed upon the original structure early in the seventeenth century by an extravagant representative of the local gilded, or more probably silvered, youth.

A relic of old provincial times is the entrance to what is locally known as the Thieves' Market, not because it is or ever was supposed to be a resort of the criminal classes, but because the things for sale there were of a cheapness which was supposed to be unaccountable, ex-

cept upon the supposition that they were stolen goods.

Finally, to conclude with these relics of Colonial Mexico, there is the terminus of the old aqueduct, completed in 1779. It was long since abandoned as the water supply of the city or any part of it, but it will be agreed that this monumental terminus, with its twisted rococo columns, its heraldic emblazonments, its sculpture and its decorative detail, was well worth preserving as an ornament of this charming and romantic town.



THE CATHEDRAL. LOOKING DOWN AVENIDA CINCO DE MAYO.

STONINGTON CONN.

Where the Colonial Atmosphere is preserved to a marked degree

By M.W. Pentz
Photographs by G^{eo}. A. Hyde

IT HAS BEEN SAID that happy is the nation which has no history. If this were true we Americans should be the happiest nation in the world, yet as it is the universal weakness of mankind to covet what they have not, we long for a past with a passionate eagerness which seems almost incomprehensible to the foreigner. America was discovered only a little over four hundred years ago, and our history as a nation does not cover much more than one hundred years. We can take only a languid and second hand interest in the past of other nations, nor does the pre-Columbian period concern us even as deeply as English history, since while we possess the land of the mound builders their traditions have vanished with the race.

Our earliest real history dates only from the settlement of Jamestown by the English, and its visible expressions in houses and monuments are barely two hundred years old. As the remotest past which we can logically call our own is that of Colonial days, our keenest concern is centered in that period, and was never before as intense as it is to-day. The universal desire for Colonial furniture, Colonial silver, Colonial houses attests this; every one wants to see Colonial public buildings, Colonial towns. The relics left by our ancestors are lamentably few. Europe has village after village and city after city in which the old work predominates, and Rothenburg and Nurenburg, in Germany, Nancy and Carcassonne in France, and Pavia and San Gemignano in Italy, are only a few of thousands of towns in which the life

of the Renaissance or the still more distant middle ages, could be reconstructed without any other change than the garments of the inhabitants.

Centuries of warfare in Europe have wrought less of destruction and reconstruction than a hundred years of natural development in the United States, and in those of the Colonial centers which have become the cities of to-day there exist only a few scattered landmarks of the old work, as for example, Independence Hall, in Philadelphia, and the City Hall, in New York. The only places where enough exists to give us a fair idea of the life of that time are in the scattered backwaters and eddies of civilization, towns whose early importance has been destroyed by the building of railroads which have made them merely way stations between the enormous cities which constitute at once the crown and the reproach of our civilization.

A hundred years ago things were very different; methods of communication were so poor that each little seaport city acted as a sort of metropolis for the country immediately surrounding it, and in speaking of the Atlantic Coast one thought not only of Boston, New York and Baltimore and Philadelphia, but also of such towns as Castine, Charleston, New London and Stonington, which, with New Bedford, New London, Newport and others of the sound ports, fitted out fleets of ships for the seal and whale fisheries.

These have become places of pilgrimage to architects, historians and antiquarians, and their number is lament-

ably few. Castine in Maine, Salem in Massachusetts, Germantown in Philadelphia, Charlottesville in Virginia, and Charleston in South Carolina are all places of this sort. They were all formerly of considerable importance, Salem and Charleston trading ports, Castine a ship building town, and Germantown and Charlottesville then, what they still remain, beautiful residence villages. Even in these there has been so much new work built around and on the sites of the older buildings that much of their early character has been lost.

There remains as far as I know only a single place which has preserved to any marked degree its Colonial atmosphere, and that is Stonington. Here progress has been asleep, its population has barely doubled in a hundred years; its old sea trade is dead beyond hope of recall. Grass grows in its streets; its wharves are tenanted only by a few motor boats and unused steamers of the Sound lines; its glory has departed. It is kept alive by a few textile factories and a great machine works, but its principal industry is summer boarders, fortunately not so numerous as to change its ancient tone. The resident population, aside from the descendants of its original settlers, is composed largely of Portuguese from the Azores Islands, descendants and relatives of the daring sailors who once formed the crews of its fishing vessels. Here they furnish the factories with labor and form an element both picturesque and useful.

The original settlement was made by William Chesebro, of Plymouth County, in 1649. He unquestionably showed intelligence in his choice of site. The village is on a high and rocky peninsula, excellently situated for defence, since it is separated from the mainland by a narrow and marshy neck, once crossed only by a single causeway, now drained and filled until it forms the site of the new portion of the town. Its names have been many, and their memory still is preserved by local titles of various parts. First called Paucatuck, when chartered by Massachusetts, in 1658, it became Southerton; annexed to Connecticut in

1662, it was named Mystic, and finally its present title was fixed in 1666. Chesebro's original settlement was for farming, and in 1650 one Thomas Stanton procured a license to erect a trading house and the exclusive right to trade in that region for three years. Gradually others joined the colony. The first meeting house was built in 1659, and in 1668 the total population had reached forty-three. The manner in which real estate transactions were handled in that day may be of interest now. A home lot was given to each inhabitant on condition that he build upon it within six months, but the title only passed to him after he had dwelt there for two years. However, he could not sell the land until he had offered it to the town and they had refused to accept it. A very exclusive little place.

During King Philip's War the remnant of the Pequot Indians still living in the town remained faithful to the English and were of great assistance during those dangerous times. Its development from then on was steady, and new houses were built, old ones repaired, the town became wealthier, and it was as flourishing and prosperous a little city as the colonies could show.

In the early days of the Revolutionary War it was bombarded by Commodore Wallace, who had heard that the Continental forces had there gathered considerable forage and munitions of war, including a large number of cattle from Block Island, which had been previously sacked by the British. The Americans replied with a battery of long sixes and nines, and one eighteen-pounder carronade mounted in an earthwork on the point beyond the light house. No damage was done to either party. The town had another taste of warfare of the opera bouffé order in August, 1814, when Admiral Hardy (the same Hardy who, as a captain, received the dying words of Nelson) with a really powerful fleet attacked the town. His headquarters had been at New London, and the inhabitants of Stonington had grown accustomed to British war vessels on blockade duty passing up and down Long Island Sound, too accustomed indeed to

take any precautions. When he approached close to the town there was naturally great excitement. The only defenses were a battery consisting of two eighteen-pounders and a four-pounder, the old battery used thirty-five years having been allowed to sink in the

to move out of town." They, in quite as elegant language, replied: "We will defend the place to the last extremity. Should it be destroyed, we will perish in the ruins." It must have seemed a good deal of a joke to Admiral Hardy to receive such a reply from a little town of



THE BANK.

ground. The messages between Admiral Hardy and the town were grandiloquent in the extreme, especially when viewed in the light of results. Hardy sent word "Not wishing to destroy the unoffending inhabitants of Stonington, one hour is granted on the receipt of this

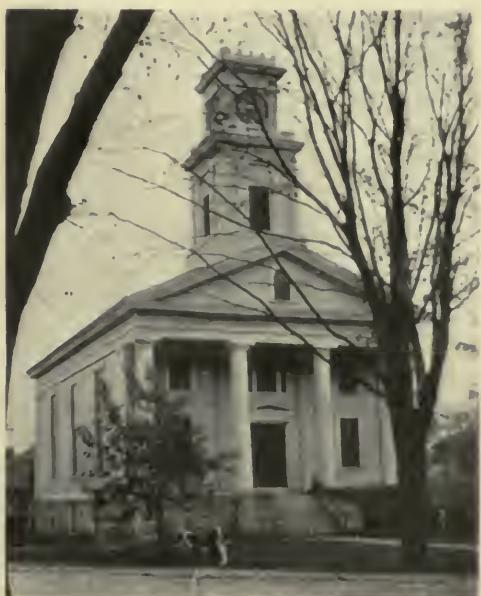
wooden cottages, defended by such a ridiculously small armament, and he commenced heavy firing about four in the afternoon from his fleet of five war vessels, the flagship of which was the Ramillies, a ship of the line of seventy-four guns. The American defenders,



THE LIGHT HOUSE.

only about forty strong, replied from their battery, sent messengers throughout the country for militia reinforcements, and hastily commenced digging out the Revolutionary cannon. The bombardment continued until eleven that night, the enemy throwing solid shot, explosive shell, Congreve rockets and carcasses, a species of bomb weighing two hundred pounds, and filled with combustibles. Fire was started in a dozen places, but fortunately the Americans were able to extinguish it before it did any damage. The action was renewed the next morning, and the sloop of war "Despatch" was severely injured and towed out of action. The American gunners were commanded by a sailor who had been impressed on an English ship and had gotten his knowledge of gunnery there. By three in the afternoon the powder of the Americans ran out and they spiked their guns and aban-

doned the battery, but securing six more kegs of powder, they returned to find the British not landed, so they got a blacksmith to drill the spikes out of the guns and started firing again. Admiral Hardy got his boats out to land, but found the militia had been coming in until five or six hundred men were in town, and decided not to attempt it. After bombarding for another day, still with no effect, he retreated. The English were reported to have fired over fifteen tons of round shot into the town, much of which



THE SECOND CONGREGATIONAL CHURCH.

was picked up by the Americans and sold in New York. The total American loss in this memorable action was none killed and one injured (not very severely, however), and on the British side twenty killed and fifty injured. The Americans saw at once how big a joke it was and one of the papers published a poem about it from which the following two stanzas are copied:

They killed a goose, they killed a hen
Three hogs they wounded in a pen
They dashed away—and pray what then?
That was not taking Stonington.



THE CHESBRO STORE.

Then shells were thrown, then rockets
flew
But not a shell of all they threw
Though every house was full in view
Could burn a house in Stonington.

After the war the town continued to flourish peacefully until the advent of the railroads, from which time until the present the town has practically stood still. I suppose the trees have grown up, some houses have been re-shingled, a few new shops have been built, but in the old

occasionally run some cars, but it is probably done in the middle of the night, when everybody is asleep and there is nothing else to do.

The approach is by a typical country road running up a sharp hill to the square. There are only a few houses before you reach it and once there you find yourself removed to the eighteenth century. Great trees fill the square and border streets whose stillness is only broken by an occasional passerby or the automobile of some explorer from the



THE CUSTOMS HOUSE.

portion of the town so little has been changed that the effect is precisely what it must have been a hundred years ago. The railroad station is on the neck of land which separates the old town from the mainland, no trolley passes through the streets and only a couple of side tracks to the unused pier of the steamship company exist to change its appearance. Even these wobble around so unobtrusively through the back yards that they are almost invisible, and I have never seen a train upon them. I suppose to preserve the franchise they must

outer world. A glance at the map shows better than words can tell the shape of the place. Two streets, Main and Water Streets, converge from the square on the landward side of the peninsula to the tiny green near the point. On one side of the square are a pair of beautiful old houses: the Hancock house and its neighbor, the Williams house. They are typical village residences of the best type, big, square and simple, beautiful in detail, colored the prevailing white and green. While the roadways and sidewalks alike are sprouting grass the place has



NUMBER 118 WATER STREET.

a singularly well kept air. The lawns are neat and trimmed, the tiny front yards are bright with flowers, the



NUMBER 75 WATER STREET.

fences are in repair and the houses freshly painted. The old town has somewhat the effect of a museum of



NUMBER 51 MAIN STREET.

antiquities and has every requisite of a complete little city; dwellings, a couple of churches, a light house, factories, a bank, a customs house, stores and a city hall all can be found, and each is a worthy representative of the times of



NUMBER 33 WATER STREET.

the Colonies or the early nation. A theatre naturally enough is lacking: our ancestors did not believe in diversions of that sort, but their diversion, the



A HOUSE ON MAIN STREET.

drinking place, is now conspicuous by its absence. Wherever one walks one finds the old work. Passing down the right of the green along Water Street you find yourself in the business district,

such as it is, on which are the meat market and the grocery store illustrated here, the latter kept by one Chesebro, perhaps a descendant of the first settler. The meat market is probably not very old, yet the force of tradition has been strong enough to compel its design along

Water Street and from the Sound side by a stone pier which can hardly have been touched for a hundred years. The building in which the machine works is housed itself invites attention, so different is it from the modern factory. Its granite walls are pierced with windows



NUMBER EIGHTY-FIVE WATER STREET.

the lines of the older work; and the grocery store is a delightful example of how business was subordinated to family life, the store being conducted in the basement under the piazza, which entered at one end forms the entrance to the house itself. The machine works have their landward entrance from

filled with small panes, and its water tank is concealed in a tower like that of a Colonial church and covered with a little dome. On the green is the First National Bank, also of granite with wooden columns and entablature and facing it is a monument to the defenders of Stonington flanked by a couple of the



THE ARCADE MARKET.

guns which formed part of the battery, now (alas) with their muzzles pointing toward the bank!

Immediately beyond the green is the south end of the point, a grassy, quiet place with a lovely view of the water on three sides and the delightful old stone light house in the center. This is a splendid place to sit and dream and if you try hard enough you can easily fancy Admiral Hardy's ships fighting away without doing any harm except for what a modern lawyer would term the damages for mental anguish of the inhabitants; who, after all, do not seem to have been much alarmed. In the harbor not far from the point is a monument which marks the corner between the states of Connecticut, Rhode Island and New York, and as a small boy I went out there and sat with my legs curled around it "In three states at once."

Turning back from the green toward the square, on Main Street, one passes more exquisite examples of the old work, of which the most charming is the house known to the youngsters as "Miss Katty's" and the Wayland residence which in some ways is the show place of the town. Almost opposite the Wayland house is the old library, a typical house of the early times, when two-story houses were taxed by the King and when one-story houses went free. Still on Main Street is the Second Congregational Church, an interesting example of church architecture of the early nineteenth century, although not in detail as good as the earlier work.

Several cross streets connect Main and Water Streets and where there is width enough little side streets project like spurs from them, each lined with residences, quaint or dignified as the fancy of the owner dictated. The customs house still flies the flag of the Revenue Service, and I suppose the collector has occasionally something to do, yet looking through the window one sees only a couple of old gentlemen half asleep over the newspapers and a collection of dusty and mildewed leather bound books.

Peace and a certain sleepy dignity are the characteristics of the old town. It is unable to get much excited about anything; changes and advances in civilization are infrequent; the authorities there appreciate the loveliness of the place and are anxious to keep it as untouched as possible. Sometimes this is carried to extremes. I was in the drug store one day looking over some post cards of the town, and two or three men were sitting around the soda water counter behind which the druggist, an enormously stout old chap, was polishing glasses. Turning to one of the men the druggist said, "Mayor, I see you have started mowing South Street, and high time it is, too." "Yes," answered the Mayor, "ever since that confounded kid got lost in it there has been so much kicking that finally I had to have it attended to." This is an epitome of the present day in the forgotten town.



MISS LUCY HANCOCK'S.

"BUILDING THE HOUSE OF MODERATE COST" The Fourth Article

By Robert C. Spencer Jr. F.A.I.A.

BEFORE GOING FURTHER with this little serial treatise on house building as a fine art, let us consider in detail a most troublesome question which must be discussed and answered in some way at the first interview between client and architect.

It is the question of *cost*, already touched upon in earlier articles, but not considered in detail.

For months—perhaps years, you and your wife, or rather, your wife and you, have been laboring over those home-made sketches, which yesterday you modestly, but with ill-concealed pride, unfolded upon the long oak table in your architect's private office. They were really very well done, considering, and very well *considered*—all but the cost of *building* them. Both of you, but particularly your wife, gave them much study of winter evenings under the library lamp and when the last closet had been squeezed in and even a space provided for some sort of a staircase, you drew them over again at scale, only forgetting that walls and partitions are thicker than lines. But that was excusable—many country carpenters draw "plans" in the same way. You naturally felt that little remained for the architect to do but to enlarge them to the usual working scale of a quarter of an inch to the foot—design the elevation on the simple Colonial lines upon which you had set your hearts and dash off some specifications. You thought that he really ought to knock off a good fraction of his fee for the labor you had already saved him. But you encountered trouble immediately at the first interview. Your appropriation has seven thousand dollars. At a pinch you might

be willing to spend eight, but eight was and is the absolute-final-ultimate limit.

Your first floor plan shows a hall 9x12, living room 18x23, dining 13x17, kitchen 12x15, maids' dining room 8x9 $\frac{1}{2}$, service pantry 7x8 $\frac{1}{2}$, cook's pantry 5x8, entrance porch, kitchen porch and entry and a screened porch off living and dining room 12x17 inside. On the second floor you have three roomy bed rooms, two baths, a dressing room, a small study, or "den" and a linen room. In the attic two servants' bed rooms with closets and a bath. There is but one staircase, however. Your plan, allowing for thickness of walls and partitions is a rectangle about 52 feet long and 24 feet wide to which is added the large porch, the dining room wing 7x14, the stair bay 6x9, the modest entrance porch and the service porch and entrance. It is about the size of the house your Cousin Jack built twelve years ago for eight thousand—it certainly is no larger.

You mention your appropriation and your architect looks like a man about to break a piece of bad news as gently as possible. He asks you if you are averse to rather low ceilings—say 8' 6" for the first story and 8' 0" for the second. You are not. Then he begins to do some figuring, while you wonder why he doesn't say at once that your appropriation is ample. "Well," he finally says, "we ought to build on the lines you have indicated for about ten thousand dollars, including everything necessary to make the house complete, but not including grading and planting-walks, or architects' fees."

"These are the rough figures: ground area about 1,500 sq. ft., mean height, allowing for a roof of minimum pitch

to accommodate rooms in attic, 32 feet, cubic contents, therefore, above basement floor level 48,000 feet worth \$9,600.00 at 20 cents per cubic foot. Allowing about \$500 for porches and service entrance extension it totals ten thousand one hundred. For a well built 'frame and stucco' house out there on the river road twenty cents is as low a cubic foot cost as it would be safe to allow. You may get somewhat lower bids and you will certainly get higher ones. We planned several houses which were built there last year costing from ten to fifteen thousand, and they averaged twenty cents. Twelve years ago you might have built the same thing in the same neighborhood for sixteen cents."

And the little class for the study of the high cost of living is discussed an hour or so longer in a new modern house of one's very own while you hope that your architect-instructor is somehow a mistaken pessimist, although it will doubtless be best to figure on putting in the additional two thousand, as a last resort—rather than give up that perfect plan for a perfect house, which can't be cut down anywhere and still remain worth building on that *beautiful* lot.

The Johnsons, who built on the next piece last year can't afford any better house than you, yet theirs is larger. You simply can't cut yours down, and besides you really expected to spend at least nine thousand, and Aunt Susan has promised to help you out if your building fund runs short. But, of course, you didn't say anything to your architect about this reservation. It wouldn't have been business-like nor safe. Why, it was only this morning in the smoker of the "7:43" that Jackson warned you against letting Bozart (the architect of your choice) or any other of those other "cutthroats" know the full extent of your appropriation.

"Whatever you tell him, he'll get gay and make you spend thirty per cent. more before you are through with him. They all do, and besides the contract prices—you'll have a lot of extras to pay for before everything is settled up."

The fact is that Jackson is building a house that cost him over twenty thousand, had been "stung"—or felt that he had, which amounts to the same thing.

He went to a young fellow who has turned out some very good small houses, but hasn't practiced long. Used to be a designer in a New York office, and when Jackson went to him with a twenty thousand dollar program and a twelve thousand dollar appropriation, his inexperience with prices, his optimism and his desire for the "job" led him to encourage the idea that while twelve thousand was hardly sufficient, *fifteen* ought to be enough with economical planning and not too expensive construction. A case of hoping against hope, or, rather against the cold facts of the building market.

Jackson put off building until he was in a great hurry to break ground, allowing too little time for the preparation and study of the preliminary sketches, and so busy with affairs at his factory, while the madame was working overtime at auction bridge, teas, and receptions, that the working plans and specifications were only hurriedly looked over before being pronounced satisfactory.

As the house went up they both began to think of things they wanted and that *must* go into the house. One little instance:

All the interior partitions were in place, and the plumbers busy "roughing in," when they concluded to have transoms over all the bed room doors and all the framing about them was ripped out and done over. After many of the rafters were up, they wanted a roof of heavy green glazed tile instead of shingles, necessitating heavier main rafters, the lighter ones coming down, and most of the roof being reframed. Altogether, including the tile roof, there were over eighteen hundred dollars in "extras" on top of the original contracts, aggregating nearly twenty thousand, which by the way, was really about what he had meant to spend. Some of these extras were due to haste or carelessness on the architect's part in preparing the plans. Others were due to the desire for a "swell house" which grew as it took definite shape above ground. Others



BRICK AND HALF TIMBERED STUCCO GIVING MORE FREEDOM OF SECOND FLOOR PLANNING THAN ALL BRICK CONSTRUCTION.

might have been avoided by due preliminary co-operation and consultation with the architect, a few others were fairly chargeable to the inexperience of a young practitioner.

Jackson is sore. If a "Booster's Club" is ever organized to help along young Hardmuth's practice, he will certainly not be a member. Of course, Hardmuth can't shift all of the blame for not making a firm friend of his client. He should have told the hard truth about cost as soon as rough sketches offered a basis for a cost-per-cubic-foot estimate, or he should have refused, as some wise architects do, to make even an approximate statement as to the cost of a sizable house. Perhaps an honest or intelligent guess as to cost would have sent Jackson to some other architect willing to cast any sort of a horoscope to please and hold a prospective client, but it would not have made him an enemy in particular and a detractor of architects in general. And it *might* have made him a friend.

Take the case of "C" who went to "D" for sketch plans of a "positively not more than five thousand dollar" house. To satisfy "C," "D" not only made sketch floor plans and a perspective, but also four elevations to scale and secured approximate figures from contractors. These went to six thousand. "C" paid "D" for the sketches, saying that five was his limit, and that moreover, Mrs. C. was very much prejudiced in favor of Z's unique ideas in domestic architecture. C. built Z's design, complete in every detail, including a massive garden wall and spent twelve thousand on his bungalow house.

Before it was finished he advised several friends who intended building to go to D—who had lost a small job, but had made a friend. This is not a "fable in slang" or otherwise, but it has a moral. We may always not be quite frank and square with the other fellow, but he ought to be square with us.

The fact is that architects are so seldom dealt with frankly and fully on the question of building appropriations for private work that they get into the rather bad and unbusinesslike habit of judging

ing a man's real appropriation by what he says he *wants* in a building—rather than by what he offers to spend.

Like the old oriental system of haggling over a bargain—the seller too high—the buyer too low, until a mean closing price is reached, this method is bad and ought not to be considered necessary by a practical people who are in the habit of buying goods at plainly marked prices.

Let the owner say to his architect in the beginning, before a line has been drawn: "*You* know and *I* know that it is not customary for clients to be frank about their house building appropriations. The average client is afraid of the proverbial extravagance of architects.

"Of course, I understand that most of you try to see that your clients get as much as possible for their money. Your reputation is helped that way. But your tendency, since every artist is somewhat of an optimist, is to *overdo* it. You count too much on these low bids from reliable contractors that seldom come when most needed. And we who are about to build naturally *want* more than we are able, or at least more than we are willing to freely pay for. We have a hazy feeling that the system of letting contracts to the lowest competitive bidder on a set of plans and specifications, may bring us a piece of something for nothing. So we name a low price and you don't tell us flatly that it's too low, unless it's absurdly so, even though you know it without putting pencil to paper. Your experience with past clients tells you that every intelligent owner must or *ought* have a fair idea as to what he must really spend before he is through, and that he will finally build what he *wants*, more or less regardless of any stated cost.

"One man in twenty, however, usually limited in his resources says what he means and sticks to it until his house is built, and you can't always recognize him before it's too late. A careful architect should always be prepared for this twentieth man. I am he. If I expect too much for my money, give me your honest opinion, and try to work out a scheme more modest that will give us as

far as possible the essentials of the sort of house I have tried to describe. Of course, our appropriation *can* be stretched, but don't stretch it too hard. Try first to meet my *appropriation* in your sketches—then my program, as you call it, if you can't do both at the same time."

Are you one of these successful moneyed men who is amply able to pay if he chooses for a house of more than moderate cost? When you go to your architect, surprise him by saying: "Now,

ingless features, or for 'loud' effects, or to waste it any way. We simply want a fine, clean-cut, livable house that's good to look at and built to stay and save repair bills. We know such a house costs money, and we are ready to spend it. I've practically decided to build on a percentage, or 'cost-plus-fixed sum' basis, and the foundations can be started as soon as your plans are sufficiently complete for approximate estimates of cost." Many house builders are, however, "between the devil and the deep



THE KNOTS IN UNDRESSED AND STAINED WIDE LAPPED BOARDS RATHER ADD TO THEIR EFFECTIVENESS AS AN INEXPENSIVE EXTERIOR COVERING.

that's about what we think we want. Go out and take a look at our property and make some sketches. Doubtless you may suggest some additional features, or perhaps an altogether different scheme, and perhaps some other material.

"We want a well-built house, suitable to our property and neighborhood, and the way we live, and the cost is a secondary consideration. We don't want a *larger* house, and we don't want to spend money for unnecessary and mean-

sea." They are like the fellow who wants to own a touring car on a run-about income. They want better and costlier houses than present means or certain future prospects warrant. You can hardly expect them to be frank with an architect, because they *think* they mean what they say as to ultimate *cost*. But yet, in the case of each, the new house *must* somehow be a next year's model, seven passenger, four bathroom affair, fully equipped with hot water heat, indirect electric illumination, vac-

uum cleaning system, fireless cooker, inter-telephones, etc., etc., or the fair *chauffeuse* will never smile again. The architect is sought as a possible worker of miracles.

These are the people who discount the future, and find when all the bills are paid that they have spent rather more than they could well afford. It is they, rather than their architects, who are ex-

plan to build without regular architects' services. Simply compute the cubic contents or "cubage" of the building, and multiply by an assumed cubic foot price. The accuracy of the result will depend on the degree of accuracy with which this cubic foot price has been guessed.

For all estimates, except those based on actual bids from contractors are merely *guesses*. And so wide are the varia-



THE NATURE OF THE SITE AFFECTS COST. FOR THIS SMALL ALL-SHINGLED HOUSE AT BATH, ME., THE CELLAR WAS BLASTED OUT OF A GRANITE LEDGE AND WALLED EXPENSIVELY WITH LARGE DRESSED GRANITE BLOCKS.

travagant. They are the American spenders. They are the people who mortgage their homes to buy and run automobiles.

As already suggested, there is a rough and ready method of estimating the approximate cost of a house from the simple outline floor plan sketches which you evolve at home or from the published plans which you buy before you seek an architect, or from which you perhaps

tions between contractors' bids, on completed drawings and specifications, that these often appear to be guesses, rather than the careful, expert computations of men thoroughly familiar with current prices in their special lines.

So architects often find that their rough estimates based on assured cost per cubic foot are nearer the true contract cost than many of the actual proposals which they receive.

AN EIGHT THOUSAND DOLLAR HOUSE IN BRICK,
STUCCO AND STAINED WOOD WITH HEAVY CON-
STRUCTION. BOSTON, MASS.





THIS WELL BUILT FRAME AND STUCCO HOUSE COST ABOUT SEVENTEEN CENTS A CUBIC FOOT FIVE YEARS AGO AT HINSDALE, ILL.

In no branch of building is the unit price more difficult of accurate assumption than in residence work. Not only is cost largely influenced by *locality*, including the local material market, wage scales, working hours and efficiency of mechanics, but it varies with the type of plan and design, while the character of construction and materials remain unchanged.

If the cost be estimated according to cubage for a certain construction and finish, it may be modified by percentage factors to determine roughly the cost of different materials, workmanship or equipment.

The larger and more elaborate the house, the more difficult it becomes to assume a cubic foot price. For the house of moderate cost, however, fairly trustworthy data can be given, remembering that they vary with locality, size and construction, and that the tendency of all forms of *wood* construction and *wood* finish it to *gradually increase* as our forests continue to dwindle.

Twenty years ago good small frame houses were being erected in Chicago's fashionable suburbs at *seven and eight cents a cubic foot*. The same houses now cost more than double. Five years ago a good frame and stucco house costing ten to fifteen thousand could be built in our western suburbs at seventeen cents,

but would now cost twenty—probably more. The same type in our more expensive and remote North Shore suburbs would average about twenty-two cents.

A few years ago solid brick walled and shingle-roofed houses of good size could be built at twenty-five cents. The price of brick has since increased materially, but local wage scales are higher, and the wood framing, floors and finish more expensive. Each year, too, the standard of quality demanded is higher, particularly in the matter of equipment. Wiring for electric lighting, formerly largely done in the cheapest way—is now run in metal conduits. The bath room floors must be of tile instead of wood. Piping for vacuum cleaning must be installed, and maids' quarters must offer the equivalent of good hotel accommodations, so acute has grown the servant problem. The old-fashioned, wide open porch is now a sort of over-windowed annex to the living room and must not only be glazed with sliding or casement sash, but provided with enough radiation to render it livable all winter. When ten years ago there would have been no stable or other out buildings, there must now be a small garage.

For small frame houses, wide, sound, tight, stained, lapped, knotted boards, ship-lap or boards tongued with rebated

battens to shed rain are the most economical exterior covering over sheathing and waterproof building paper or "quilt."

Shingles have nearly doubled in cost in the past twenty years, but still cost no more than the thin, painted, lapped "siding" or "clap-boards" which for more than a century have been the standard covering for the American frame house. Hard, painfully neat, thin and flimsy looking, without variety of color or texture, and requiring paint every few years to prevent a worn and shabby appearance—they have seen their day. In the long run, if of clear lumber and counting the cost of frequent repainting over the life-period of the average house, they are no cheaper than stucco on metal lath.

Simple brick houses will average not more than twenty per cent. more than frame and "stucco."

The combination wall of brick for the

first story and stucco or stucco and stained wood above will cost usually nearly as much as the all-brick building, but has a picturesque and lively quality, which renders it suitable to some sites, while the frame walls of the second-story may be readily extended in the form of bays, overhangs, or upper porches, allowing greater freedom in planning the upper floors.

In some localities where gravel or crushed stone are close at hand, hollow cément block for outer walls, including foundations, compete in cost with ordinary frame construction, but are unsightly unless cast without facing and the walls "rough-casted" all over. Hollow terra cotta blocks similar to those used for the partitions of fireproof buildings take and hold cement rough casting well, but the cost is so variable at the present time that the writer would hesitate to name a cubic foot price for the Chicago suburbs with which he is familiar. For



SOLID BRICK WITH STONE TRIMMINGS AND SHINGLED TILE ROOF, DESIGNED BY SPENCER & POWERS AND COSTING LESS THAN 25 CENTS PER CUBIC FOOT IN 1909 IN A WESTERN DISTRICT OF CHICAGO.

the construction of a simple, square cottage costing \$3,500 at Concord, Mass., the architect states that it cost but eight per cent. more than a shingled frame wall construction, according to comparative bids received.

Our own practice recently indicated on a fifteen thousand dollar hollow tile and stucco finished house (the work being done largely by day labor and bids having been received for the same house in frame and stucco) that 3 cents a foot added to 23 cents for the latter covered the difference in cost.

In any locality where this type is new and unfamiliar, only comparative bids on two sets of plans for the same house, will clearly show the difference. To a certain extent this also applies to other materials, but is particularly true of hollow tile at the present time.

It is not advisable to dispense with wood furring and lath for the inside of

exterior tile walls. The 26 cent house had no furring or lath. The furring will almost save its cost in the labor of cutting for pipes, conduits, etc., but the lath, preferably metal is, of course, an added expense.

We have had tile cottages built as low as fifteen cents, and I quote Mr. Lawrence Buck's published statement that his own charming story and a half hollow tile walled house at Ravinia cost but eighteen cents, including a roof of heavy interlocking red tile.

Brick veneered houses are warm and durable, and in most localities cost somewhere between the price of frame and solid brick. On one eight thousand dollar house we found a saving on comparative bids of only one hundred dollars in favor of brick veneers, so naturally used solid brick.

Stone is seldom used for wall construction in the house of moderate cost,



A SIMPLE, INEXPENSIVE TYPE OF STUCCOED FRAME HOUSE AT BROOKLINE,
MASS., DESIGNED BY KILHAM AND HOPKINS.



A HOUSE NEAR EAST ST. LOUIS, PICTURESQUELY DESIGNED BY WALTER BURLEY GRIFFIN. THE FLOATED STUCCO IS ALMOST PURE WHITE.
A MORE EXPENSIVE DESIGN PER CUBIC FOOT THAN
THE BROOKLINE HOUSE.

although in many localities, it will compare closely in price with brick.

Chicago, for example, has vast beds of excellent building limestone under and around it to the west and southwest down the Des Plaines Valley, yet it is little used in suburban residence work, except for basement walls. The writer found that a fourteen thousand dollar house at Riverside within a few miles of a good quarry could be built, including a roof of red shingle tile, and quarry and tile mosaic finished flooring over wood throughout the first story for 23 cents a foot. The stone, varying from cream to gray, was laid with very wide warm gray joints, with numerous long, narrow pieces and slanting instead of vertical joints, to give a pleasing, horizontal texture, most of our local work being built in a hard and too accurate bond, which lacks entirely the charm of the old Pennsylvania stone houses or the old heavily mortared boulder walls of New England.

[In the vicinity of Philadelphia brick and stone are both readily obtainable, and

the question of expense involves only the cost of material and laying, eliminating distant transportation. But in Rhode Island, for instance, where all brick must be transported by barge from New Jersey, the total cost of the all-brick house would far exceed the cost of a field-stone house, even if the field-stone cost more to lay up. The following quotations, based on prices obtaining in the neighborhood of Philadelphia, show the comparative costs of various kinds of masonry, and illustrate the differences which must be allowed in "cubage" estimates for different localities.

A brick wall, laid, costs twenty dollars per thousand brick, twenty brick to a cubic foot. A field-stone wall, laid, costs from five to six dollars a perch, which is twenty-two cubic feet. In country houses of moderate size, brick walls are usually thirteen inches thick, and stone wall eighteen inches. At the above rate one hundred square feet of surface work in brick costs forty-three dollars and thirty-four cents, and in field-stone, at five dollars a perch, thirty-four dol-

lars. Hollow tile and concrete walls in this Philadelphia locality cost about the same as brick but necessitate the additional expense of stucco finish.—*Editor.*]

The cost of foundation material is decidedly a local question as between brick, rubble stone or concrete. For a small house hollow tile or hollow concrete blocks are strong enough and sometimes cheaper.

The cost of a good shingle roof covering is roughly from 7 to 8 cents a square foot, or \$7 to \$8 a square, as builders estimate it. Shingle tile are worth from sixteen to twenty dollars a square, including trimming and flashing depending upon the character and size of the surfaces to be covered. Slate costs somewhat less—varying with quality and surface exposed to weather.

And so we might go on through the list of comparative cost questions commonly put to architects by the men of moderate means who want to build well, if the expense is not prohibitive.

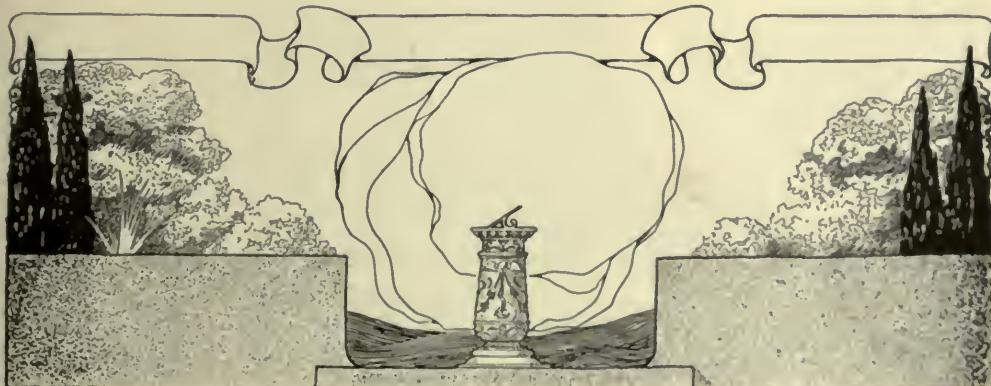
The cost question, however, can be better disposed of and with more direct application in the several articles which

are to follow, concerning the various cardinal features and elements of house building.

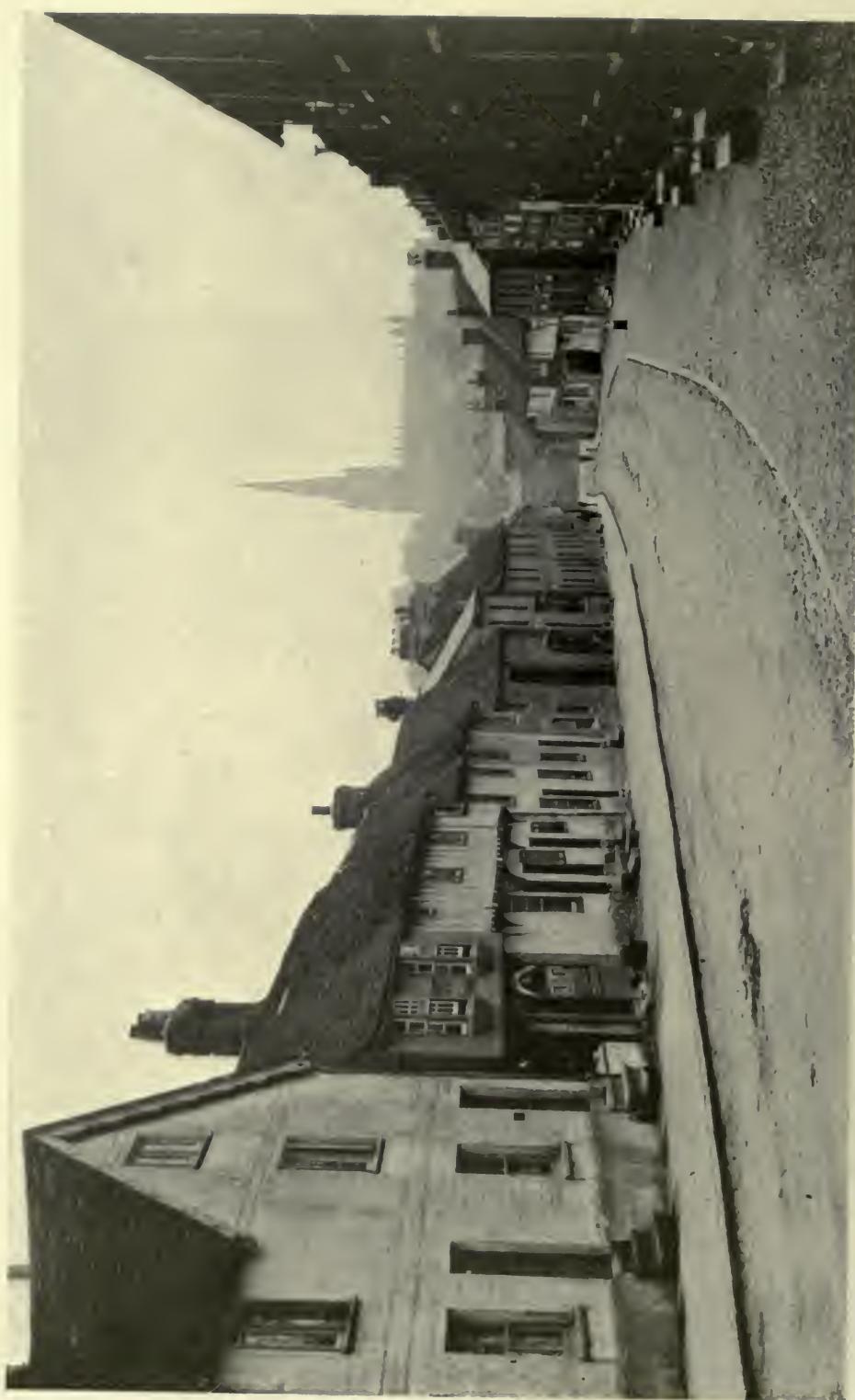
None of the cubic foot costs enumerated make allowance, either for architects' fees or the work which must be done upon the grounds about the house.

And in attempting to use them to wet-blanket your hopes for that ideal little house, please remember that prices vary with locality, with building activity and with *design* as well as with materials, and that you will in the end have to pay not always merely what it actually costs your several contractors to do the work, plus a fair profit for their time and pains, but whatever the lowest trustworthy bidder equipped to do work in your particular locality is willing to accept, and that sometimes, if he is very busy, he wants a stiff premium for his services, unless you are willing to wait until his work is "slack."

Also remember that in the country and in small towns, ordinary builders' work, particularly carpentry, plastering, painting, etc., is from ten to twenty-five per cent. cheaper than in large cities and suburbs.



A VILLAGE STREET OF PLASTERED HOUSE-FRONTS, SAFFRON WALDEN, SUSSEX, ENGLAND.



EXAMPLES OF ORNAMENTAL PLASTER WORK of the ENGLISH LOWLANDS

By Duane Lyman
Photographs by the Author

SOME OF THE QUAIEST and most unusual ornamental plaster work of England is located in the little town of Saffron Walden in the county of Essex.

This exterior plastering or "parge-work" plaster as it is called in England is confined almost entirely to the lowlands occurring very seldom in other parts of the country.

These plastered buildings were probably built in the seventeenth century, although the dates 1625 and 1600 in the plaster, may, of course, refer to periods of redecoration.

They were built in the usual manner of buildings of their period of English Architecture, with gable roofs, overhanging second story carried on quaintly carved brackets or pilasters, and casement windows in groups. Contrary to the usual custom however, they were not half timbered but nearly the whole exterior of the building was covered with plaster.

The ornamentation of the plaster is confined entirely to the second story as is the ornamental woodwork in the half timber style and is either in a design in panels which repeats all over the plaster surface, or in more elaborate designs in which occur flower patterns, quaint birds,

and even in one case human figures. These designs are raised on the surface of the wall and are not necessarily symmetrical but are worked in wherever there is a blank space to be ornamented.

One of the illustrations show a gable ornamented with a slightly flowing design of flowers and birds, another shows a space between the first and second story windows filled in with a quaint coat of arms.

The next gable to this bears a date with a grotesque head above. Still another illustration shows a gable over a gateway to a courtyard which is ornamented with the figures of two men, the one with chain and armor, a great sword, and a shield and the other wearing different armor and carrying a huge club. Between the two figures is a sun-dial. The second floor over this gateway is carried on beams with plaster between.

Part of this interesting group of buildings is called The Old Sun Inn and was used at one time as a hostelry, but now it is a private house and shop.

These specimens of parge-work plaster are among the most interesting in England and show clearly the very unusual originality of the period in which they were executed.



"ALL-OVER" ORNAMENTATION IN PLASTER IN A CORNER
HOUSE, SAFFRON WALDEN, SUSSEX, ENGLAND.



ORNAMENTAL PLASTER WORK IN
SAFFRON WALDEN, SUSSEX, ENGLAND.



DETAIL OF RELIEF FIGURES IN PLASTER, OVER COURTYARD ENTRANCE, SAFFRON WALDEN, SUSSEX, ENGLAND.

ORNAMENTAL PLASTER GABLES,
SAFFRON WALDEN, SUSSEX, ENGLAND.





Photo by G. P. King.

THE FIRST CHURCH, SPRINGFIELD, MASS.

EARLY AMERICAN CHURCHES

Part X
By Aymar Embury II

THE FIRST CHURCH

Springfield, Mass.

THE FIRST CHURCH in Springfield, Massachusetts, was also designed by Isaac Damon and is a much more elaborate piece of work, although the building committee in the instructions which they received on appointment were required "to procure plans for a church with a decent plain front." This architect, Captain Isaac Damon, was one of the most interesting figures in the architectural world of the early part of the 19th century in this country. The first church building which he constructed was at Northampton, which was begun in 1811 and finished in 1812. It was the largest and one of the most elaborate in Massachusetts, but unfortunately was burned in 1878. At the time of his first commission he was twenty-eight years old and is reported to have studied architecture under Ithiel Towne, who was the designer of the Center Church at New Haven, and the old Customs House which preceded the one now used by the National City Bank, New York. His early training in architecture was apparently as a draughtsman in Ithiel Towne's office, and he was called to Northampton from New York, both to make the plans and direct the work of this church, which if not the only commission he had at the time, was certainly the most important, and in the manner in which his time was devoted to it, reminds us of mediaeval methods. From

1812 on until his death he was constantly engaged in public or semi-public work, and in addition to designing buildings, acted as a sort of overseer or general contractor without assuming the financial responsibility of the general contractor. His drawings were very well executed, much better in fact than most of the contemporary architectural drawings which we have had preserved until this day, and some of them are well rendered in India ink.

The building cost \$15,000, and was built in 1818 and still stands in the green at Springfield in good repair. The interior is not dissimilar to that of many of the other early churches, although the organ has been placed behind the pulpit since the original construction of the building in a somewhat awkward and ineffective manner. It is certainly worth remark that in many of the early churches where the designer took pretty good care of his ceiling treatment and handled the balconies and entrances extremely well, the treatment around the pulpit should have been so very unarchitectural in so many cases; there were, of course, few Classic motives which could be adjusted to meet the condition, but when the towers were so well designed, as a rule, it seems extraordinary that the pulpit wall, which naturally presents far less difficulty, should have been so far inferior.

THE FIRST CHURCH, SPRINGFIELD, MASS.



Photo by G. I. King



THE MEETING HOUSE (THE
FIRST CHURCH), LENOX, MASS.



THE MEETING HOUSE (THE
FIRST CHURCH), LENOX, MASS.

THE MEETING HOUSE

(The First Church)
Lenox, Massachusetts

THIS LITTLE CHURCH, one of the plainest in New England, was built in 1814, probably from the designs of Isaac Damon, who was also the architect of the county court house, which was built of brick, in Lenox in the same year. Isaac Damon was perhaps the leading architect in Western Massachusetts from 1812 to 1840 and influenced public work in much the same way that Asher Benjamin did domestic work. He built thirteen or more churches in Western Massachusetts, and nearly all the town

halls, as well as being one of the first men who understood the use of the real truss and made it part of the bridge work.

This church at Lenox is severely simple, the interior showing superimposed orders carrying the balcony and roof, the lower order being a very curious variety of Doric, while the upper is Ionic. The interior of the church has been modified only above the pulpit since its construction in 1814, and the exterior has been modified not at all.

"GLORIA DEI" OLD SWEDE'S CHURCH

Philadelphia, Pa.

THIS CHURCH also known as Old Swedes—was one of three churches erected by the old Swedish congregations which settled along the Delaware. This building was begun in 1697 and dedicated in July 2, 1700: the congregation is one of the oldest in America, dating from 1667, the time of the first Swedish emigration to this country. The church was sixty feet long, thirty feet wide and twenty-one feet high at the eaves, and when it was begun the west wall was left unfinished until it could be learned whether a chime of bells could be procured in Sweden for the building, in which case the intention was to add a belfry. The tower and the vestibule of the entrance door were added in 1704, and the little belfry at present in place was probably also constructed at this time, although its design would seem to indicate that it was built many

years later. Vaults were constructed for burial beneath the church floor, and the galleries were added at some date which is not at present known to me. It seems strange that this little structure, interesting rather through its quaintness and picturesqueness than through its size and strictly architectural merit, should have been described by its pastor in 1700 in the words "through God's blessing we have completed a great work and have built a church superior to any in this country so that the English themselves, who now govern this province and are beyond measure richer than we are, wonder at what we have done." In fact, these same English were allowed for a number of years to worship in the same church after the Swedish services were finished, and gradually the English language was adopted as that of the service of the original congregation.





"GLORIA DEI"—OLD SWEDE'S CHURCH,
PHILADELPHIA, PENNSYLVANIA.



"GLORIA DEI"—OLD SWEDE'S CHURCH,
PHILADELPHIA, PENNSYLVANIA.

MONUMENTAL CHURCH,
RICHMOND,
VIRGINIA.



MONUMENTAL CHURCH,
RICHMOND,
VIRGINIA.



THE MONUMENTAL CHURCH

Richmond, Virginia

THIS CHURCH, one of the most unusual in architectural design in the United States, was built in 1812 in memory of seventy-two people who were killed by the burning of a theater on December 26th, 1811. The urn in front of the portico is supposed to contain the ashes of the victims.

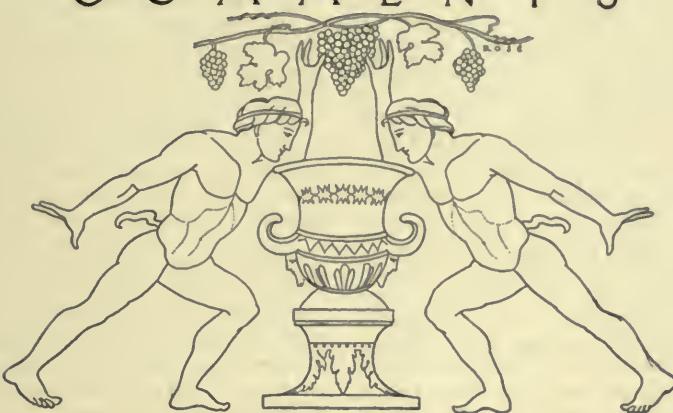
The design is so very unusual as to make the name of its designer of especial interest, and I have unfortunately not been able to discover anything at all about him. The building is very evidently strongly influenced by the Classic movement which was then just beginning, and yet the design is handled with such freedom and vigor that we are compelled to admit that its architect was a great and original thinker. The columns in antis, are, of course, the well-known Greek motive, but the columns themselves only suggest the Greek, while the limitation of the architrave to the space between the antae is certainly not in the least Greek, while the cornice and pediment above are much what we expect to find in some of our advanced modern work. It seems to me that this is perhaps one of the first buildings in the United States in which the Greek

Revival began to make itself felt, and that its designer while recognizing the beauty of the Greek order hesitated to transform the tall slender columns of the Colonial work into the heavy and solid variety used by the Greeks.

There are many cases of early American churches in which the flat dome forms the ceiling, but this is one of the very few in which the dome is suggested in the exterior, and where it seems to have a real and logical reason for being. Yet at the same time the correspondence between the interior and exterior treatment is in a measure superficial, since the plaster domed ceiling of the auditorium is completely inside the lines of support and was evidently considered simply as a ceiling treatment and not as a structural feature. The treatment of the interior is exceedingly simple, the reredos most exquisitely designed. The octagonal form is rather what we are accustomed to consider as the auditorium plan than a genuine church plan, and in this respect resembles more nearly the early New England churches than the Southern ones, which from the earliest times were comparatively long and narrow.



N O T E S A N D C O M M E N T S



THE CITIES EXPOSITION.

In the Exposition of Municipal Institutions, commonly called the "Cities Fair," Düsseldorf is pointing the way to such an exhibition as we in America are surely tending toward.

We have had several trials at it—notably in the Congestion Exhibition in New York some years ago, in the exhibitions of the Architectural League of New York, in the City Planning Exhibition at Philadelphia, a year ago last spring, and in the Municipal Exhibition at Chicago last September. All of these have been successful, both from the point of view of popularity and of interest, even of education. But we have not yet had the courage to do just what Düsseldorf has been so successfully doing this summer. The "Cities Fair" opened on June 29 in the presence of the mayors of about fifty German cities, and it is to remain open until November. It covers an area of about a square mile. The main building and the center of the Exposition is the City Art Palace, overlooking the Rhine. The exhibits are divided into five great groups. The first has to do with the enlargement, improvement and embellishment of cities. Here there are about 750 exhibits from about 200 municipalities. The second group has to do with municipal sanitation. The third, with hospitals, poor-houses, etc. The fourth group is devoted to the building department. All kinds of public and semi-public structures are shown in plans and models, the exhibits numbering nearly 400. The fifth group is devoted to industrial concerns. But to an American visitor, the best part of the Exposition is the beautiful up-to-date city of Düsseldorf itself.

AMERICA WINS THE PRIZE.

Details as to the result of the International Competition for plans for Australia's new Capital city have been slow in coming to this country—where the first prize was won. It was awarded

to Walter Burley Griffin, an architect of Chicago, a member of the class of 1899 in the architectural course at the University of Illinois, who has not been heretofore identified with the City Planning movement in the United States. The prize was £1,750. The second prize, which was a thousand pounds less, went to M. Eliel Saarinen, of Helsingfors, Finland, and the third prize to M. Alfred Agache of Paris.

The awards were made by a jury of three Australian Federal officers—an engineer, an architect and a surveyor. Accounts differ as to the number of plans sent in. One report is that there were more than eight hundred competitors, France and Germany sending the greatest number. English town planners were debarred from competing by the disapproving attitude of the Royal Institute of British Architects. Thus the competition was really between the United States and the Continent of Europe. The submitted designs were hung in the ballroom of the Federal Government House and, of course, represented every kind of Town Planning.

It is said that the Germans led "in the modern conception of new cities," the French "in artistic treatment," and the United States "in boldness of design." No checkerboard plan received a prize, owing in part at least to the peculiarities of the site and to climatic conditions. Description of the premiated design will be given next month.

**HOUSING
AND
PHILANTHROPY.**

It is interesting and significant to note how large the subjects of town planning and garden cities loomed at the Second Annual Conference on the Prevention of Destitution held this summer in London. There was a separate housing section in which was represented every housing association in the country. Subjects of sessions included the following: "The Creation of New Towns," "Town Planning," "Rural Housing," "Slum Clearance," "Housing Problems in Agricultural Areas," and "The Casual Relation Between Housing and Health." Among those who read papers on the subjects were Henry Vivian, Ewart G. Culpin, J. S. Nettleford and Alderman Thompson. It would seem a safe prediction that our National Conference of Charities and Corrections must soon include a discussion of town planning and garden cities. When it does, our progress in the actual execution of such schemes may be expected to be more rapid.

**THREE
BEAUTIFUL
CITIES.**

"Three Beautiful Cities" was the alluring title of an article by Birge Harrison in a summer number of "Art and Progress." The cities are Quebec, New Orleans and Charleston,

each with a distinctive architectural charm of which Mr. Harrison writes with enthusiasm. Significantly, he points out, in these three cities the architecture of pre-revolutionary days has come down to us undisturbed. He believes them the most beautiful cities in the country, and thinks this is largely due to their having been built to meet certain social and climatic conditions which could not be overcome or avoided. "In accepting the limitations which were thus imposed and working within them, the old architects achieved a character, a beauty and a harmony which could have been secured in no other way."

Note, he says, of Quebec, "how every ray of sunlight has been courted—how every porch, every projection which could cast a shadow, has been rigidly suppressed. And how admirable also are the high-pitched roofs, made obligatory by the heavy Canadian snowfall. It would seem as if just that acute angle of roof-line were aesthetically necessary to give character to these flat-sided houses, with their well-spaced windows. Then note the two or three tiers

of dormers in the roof. . . . the one absolutely fitting decoration to an otherwise over-plain surface. And how harmoniously these high-pitched roofs fit into the general effect of the city—how they help it to climb the heights upon which it is built. Indeed this marvelous hill-city, aspiring ever skyward, . . . could not possibly have been roofed in any other way." Into this picture of the city appropriate and beautiful, as a striking, even as a dominating, note, fits, he says, the comparatively new Chateau Frontenac—the great hotel, whose harmony with its surroundings he ascribes to the co-operation and artistic sympathy of Bruce Price, "the artist-architect," and Sir William Van Horne, then president of the Canadian Pacific Railway, "the artist-magnate."

In New Orleans, the architects' problem was exactly the reverse of that in Quebec. There was sun to guard against, and "the natural reply to this was found in wide-flung eaves and broad verandas. These verandas mounted story upon story to the very roof-line." The need of stout railings on the upper levels led to the use of decorative ironwork. "As a result of this, the piazza railings of New Orleans are unique. . . . The patterns are infinitely varied and the design almost always intricate and graceful. The strongest impression which the aesthetic pilgrim carries away from New Orleans is that of a city whose houses are seen through bands of lace."

But of the three cities, he thinks the most beautiful is Charleston, "which floats like a white sea-bird on the blue harbor behind old Fort Sumter." Here again the need of large areas of shade led to the use of verandas which cover the whole facade of dwelling houses from ground to roof-line. But now "the ironwork is absent, and its place is taken by classic columns and railings, and an occasional classic portico, filling the central space. . . . As in the mansions of old Virginia, the general form of the Charleston houses is very simple, and they depend for their beauty upon the fine balance and spacing of doors and windows, the character of the cornice and above all upon the dignified beauty of the classic porticos and galleries which adorn one side of each structure." And Charleston, the author says, "has another and quite unique architectural feature in the arched and ornate walls of moss-grown brick, which close in all the fine residences; and the highly decorative wrought-iron gateways. . . . These marvels of wrought and beaten iron were all the work of local smiths. I was told

that no two gates of the city were of similar design, and I certainly saw no single example which was not in itself beautiful." Then over the whole city, its business section as well as its residence quarter, he finds the special silver-white color scheme, broken here and there by a note of "weather-stained rose of sulphur yellow," and "the indescribable something which gives the "subtle Southern flavor everywhere."

Because, Mr. Harrison remarks, the great wave of prosperity which swept over the rest of the country in the last half century, passed by these three cities, they escaped that "terrible transition period which destroyed most of the old-time charm in the more thriving cities of the North and West. Poverty was in this case truly a blessing." Yet he is full of faith in the present and hope for the future, because new problems, he believes, are being met with intelligence and taste. He cites, in proof, the New York skyscraper, "often as graceful and beautiful in design as it is well fitted to its essential needs;" the growth in New York of a new domestic architecture in which the old brownstone front gives way to facades "simple, unpretentious and often truly beautiful in design," the admirable new suburban architecture of California with its semi-Spanish character; "and the frank acceptance of the Puritan gambrel roof or the old Colonial type as the best models for our own suburban residences."

DISSENTING FROM A PROTEST.

Grosvenor Atterbury contributed to "Scribner's" for July an exceptionally valuable article. His subject was "Model Towns in America." It is a long discussion, but full of

interest and suggestion. Starting out with the statement that one of the definitions for model towns that had been suggested to him was "failures," he shows very convincingly that the time is at least approaching when model towns can be expected to be successes. No one who has the task of designing a suburban or industrial community can fail to receive both stimulus and assistance from Mr. Atterbury's article. And yet, when all this is said, but not properly until it has been said earnestly and emphatically, one may call attention to a discordant note. The importance of it lies in the fact that one finds this note repeated now and then in other articles of similar general character. This is the attack on the aesthetics of town planning.

In order to make town planning seem practical, and through wish to appeal to the "hard headed business man," who is assumed to have no regard for aesthetics, it has become the fashion to open such articles and such papers with a sneer at the City Beautiful. Mr. Atterbury, then, is by no means alone. Arnold W. Brunner opened his paper at the last City Planning Conference with a similar attack; Cass Gilbert has made it before the Institute; and small men have followed such distinguished lead. This article in "Scribner's" is cited only because it is the latest.

Mr. Atterbury begins by saying, "Let us state clearly certain things which a model town is not. Let us at once, for example, disentangle the 'Model Town' from the 'City Beautiful'—that fatal euphemism which, like Helen of Troy, has brought such tribulation upon those who would possess themselves of beauty without due process of law—who would deck out our modest villages in Paris finery and ruin their complexion with architectural cosmetics." This sounds very brave and very practical, but one does not have to read far to see that in bald literalness it overshoots the mark. A wish for irrational city beauty is bad; but as any irrational desire is foolish, "the man in the street" is not likely to suppose that the serious writer, who protests so valiantly, means only that. He takes the words at their full value and begins to repent that in using the phrase, "City Beautiful," and believing in it he made it popular. Mr. Atterbury, when he has shot his big gun at the City Beautiful, turns the page and feels that he can be frank. "What we decry in the American town," he says, "is the ugliness of discord, waste, and unhealthfulness. What we ask is only that which is suitable to its place and purpose. 'The foundation of beauty,' says a gentleman named Philebus, 'is a reasonable order addressed to the imagination through the senses,' from which I gather that he must have given some thought to city planning and the subject of model towns." The problem of the model towns, he says, "is to be solved along three lines—the aesthetic, the social and economic." So the doughty warrior who started out by disentangling the model town from aesthetic aspirations or pretensions, gets down to the business of his article by putting aesthetic problems first!

And here he is very interesting and even very practical, and what he says rings true in its sincerity. "Collective or co-operative planning and control," he remarks, "can operate for the aesthetic benefit of the town

in two ways: Negatively, on the principle of the smoke ordinance, it may preserve a reasonably harmless aesthetic atmosphere by putting some limit on the architectural anarchy and lawless bad taste that runs riot in even the best governed of our cities to-day; while at the same time giving the most misguided architectural efforts a better chance to show such poor merit as they may possess. To show a mob the effectiveness of discipline may seem dangerously like giving them arms. But the truth is that with any kind of control anarchy ceases. And so bad state, however brutal it may be, at once becomes capable of better things if it be ordered. The leavening element of design and purpose appears. The noise becomes music, however crude. With the elimination of lawless eccentricity and disregard of architectural decency the good elements in the situation begin to count. However bad individually, a series of houses that exhibit some mutual acknowledgment of each other's right of existence has at once some aesthetic value. . . . To demonstrate the advantage to the individual of a reasonable self-restraint in the subordination of his own architectural impulses to a general aesthetic scheme is one of the functions of the model development. Its successful accomplishment will depend, I feel sure, solely on the education of the sense of beauty, already nascent in this country." This is very well said. The other way by which collective planning and control can operate advantageously is, he states, in producing "conditions under which good aesthetic results may be secured far more easily and inexpensively, whether the designing be individual or collective." All this the article fully explains, gaining from these explanations its value.

The point which we would make is that protest against the "City Beautiful," which does not yet come at all from the public, is carried too far by those architects who think that in this way they can please the public. Because they say more than they mean in their protests, they find it difficult to be consistent. In the bottom of their hearts they do have City Beautiful ideals. That is the whole purpose of their training. Can one think of Brunner, Atterbury or Gilbert without them? If they had not such ideals they would be in some other profession—as railroad engineering or baseball. And with their training, their opportunities and their obligations, are they true to themselves and their profession when they deny their ideals? It is well to protest against an irrational "City Beautiful"

ambition—if such there be; but let us be very careful to say it is only the irrational we object to.

ONE HUNDRED AND EIGHTY MILLION FOR CITY IMPROVEMENTS

be "the Paris of America," will do well to study the new improvement project to which Paris has now, with no great fuss, committed herself.

This contemplates the expenditure of \$180,000,000 on municipal improvements, the expenditure to be spread over a period of fifteen to eighteen years, and to be met by the issue of municipal loan stock. School additions and improvements are to be one-tenth of the sum; hospitals, \$7,000,000; new construction connected with the water supply, \$25,000,000; street work, \$9,000,000; the fight against tuberculosis, \$6,000,000; public buildings, \$5,000,000; and squares and gardens, \$3,000,000, while the great sum of \$86,000,000 is set aside for what we call city-planning work, to be used in the creation of extension of traffic arteries, etc.

With all the talk about the town-planning act of Great Britain, the fact has been almost overlooked that France has its counterpart in the passage of the Beauquier town extension bill. The bill provides that within five years from the date of its passage each urban district containing ten thousand or more inhabitants shall prepare a plan for its improvement and extension.

This shall "determine the position of public squares, gardens, parks and open spaces; shall fix the width of roads, their direction, the manner of constructing the houses, and, in general, shall establish the proper development of the town on hygienic and artistic lines."

The plan must be approved by the department Bureau of Hygiene and by the commission for the preservation of sites and places of natural beauty or historic interest. The plan must also be subject for a year to public criticism and objection before the Council of State shall authorize its adoption. Once adopted, it is to remain in operation for 30 years, when it is to be renewed, and during all this period extensions and improvements must be made in accordance with it. Here is a vigorous and practical grappling with what has now become a problem of international interest.

The cities of the Country which have made such a stir about getting "city plans" and adopting a program of improvement to last over a term of years, in order that each may