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#### The

# Architectural Record

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#### The New Custom House at New York

The new New York Custom House. on Bowling Green, now in a condition to be fairly well seen and judged, almost irresistibly provokes comparison with the old in Wall street. Primarily, perhaps, on account of the identity of the purpose to which the old has been and the new is to be devoted. For the matter of that, most New Yorkers who are likely to read these remarks are aware that the old Custom House socalled was not built for the purposes of a custom house at all, but for those of a merchants' exchange. The only building extant in Manhattan erected for a custom house, excepting this new one, is the little "Parthenon" at the corner of Wall and Nassau, which now does duty as the sub-treasury. Built in the thirties for a custom house, it was outgrown in a decade and the Federal Government kindly took their elephant off the hands of the merchants whose civic pride had so far outrun their sense of practicality as to induce them to erect it for their communal purposes. A voracious elephant it was, eating off its own head and theirs. For, with the ground, it had cost two millions, a prodigious sum for the New York of those days, twice as much as the closely succeeding Trinity Church cost, and out of all comparison with the sum that its own successor and supplanter has cost Uncle Sam sixty-five years later. The explanation that it was not meant for a custom house is needed to vindicate the memory of its architect as a "practical man." For his rotunda. lighted only from above, was an eligible

apartment for a daily meeting of merchants, though aboninably unsuited to the practical work to which it came to be devoted.

Now that the new successor is finished, an architectural comparison is quite in order and quite fair. The area, one supposes, is virtually equal, though the new building is of six stories against three and a low inconspicuous attic, for the architectural attic above the entablature of the Wall street building is evidently a later and utilitarian addition architecturally extraneous and negligible. The architecture consists in effect of the colonnade fronting Wall street. The other three sides of the building consist of walls almost architecturally blank, well enough very possibly for their purpose of foils to the single front and the single feature, masses of good and solid masonry of cut granite, but certainly not worth considering on their own account. The one attempt at architecture which their expanses show, outside of the "trim" of the windows, which is well enough, is the moulded sill course under the third story, which divides the second story from the third, and this is architecturally worse than useless, being a belt without rhyme or reason, emphasizing a division of the wall included in the height of the order into two equal parts, a division which should rather be slurred than emphasized. The order is the thing which to all intents and purposes comprises the architecture.

The order is the thing also which inevitably compels a comparison between the old building and the new, of which it is also the chief feature. The question arises, do the architects of our current variety of classic understand their business of making an effective architectural display out of the elements of Greek architecture better than did the Greek revivalists of the fourth decade of the nineteenth century, specifically than good old Isaiah Rogers, fresh from such triumphs as were constituted by the As-

tral mounted upon pedestals which subdivide the broad and ample "perron," the flight of stairs which gives access to the main floor, and the four flankers on each side upon a studiously plain basement. It is, truly, that Wall street front, one of the most impressive examples on Manhattan Island, or, for that matter, in the United States, of the effectiveness of the classic colonnade. If it have a

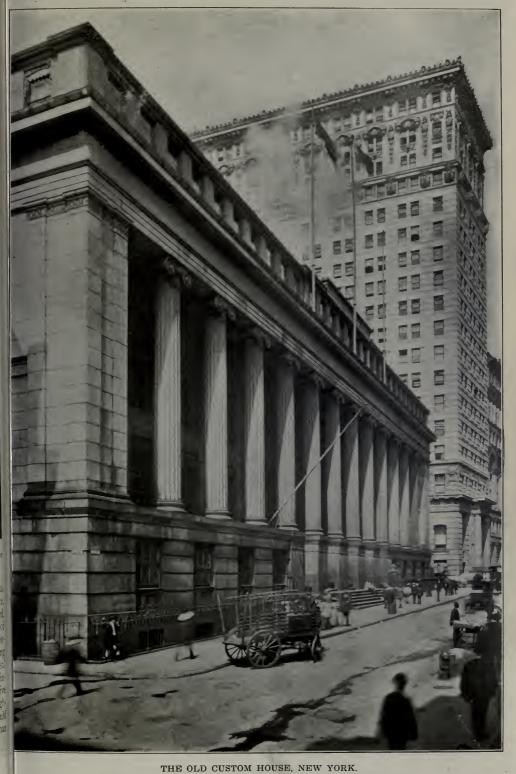


AMERICA. Carl Bitter, Sculptor. Cartouche crowning the attic on the Bowling Green elevation.

tor House in New York and the Tremont House in Boston? Does the new Custom House gain or lose, as a mere matter of architectural effect, in comparison with the old?

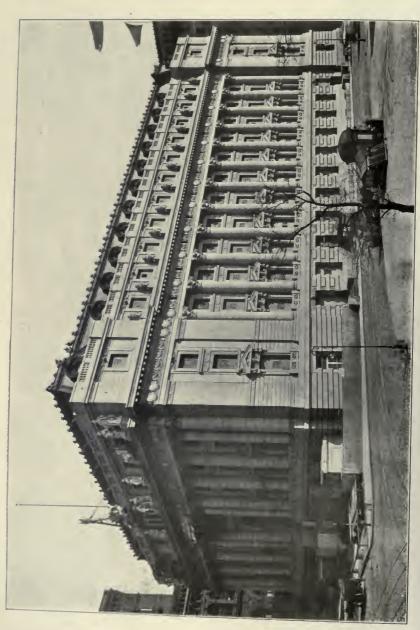
To ask that question, it seems to us, is almost to answer it. There is no front or aspect of the new Custom House so impressive and imposing as the Wall street front of the old. That row of twelve monoliths of a monumental solidity and a monumental scale, the four cen-

rival in its own kind, it is, or rather was, that Colonnade Row, in Lafayette Place, unfortunately now partly demolished, not much posterior to it in point of time, the work of the good and now forgotten Seth Geer. It is an unfailing effect, that effect of the long colossal colonnade, long enough to be interminable to the eye, colossal enough to give it a scale visibly superior to its neighbors. These two examples of it would prove that, prove it better perhaps than



Showing a splendid and imposing Colonnade of Ionic Monoliths. Isaiah Rogers, Architect.

Oner of William and Wall Streets, New York.



Showing the Bowling Green and Battery Park elevations; also some of the sculpture illustrated herewith. THE NEW NEW YORK CUSTOM HOUSE.

the nearly contemporary colonnade of the Treasury in Washington, prove it as well, perhaps, as the colonnade, not so very much anterior in point of time, of the Bourse in Paris, the masterpiece of the classic revival in France.

Only (and this is our point) there must be no compromise. If the needs of your building happen to interfere with the requirements of your architecture, you must, as a conscientious Hellenic revivalist, sacrifice your building. "dodge," if one may say so, of prefacing a portico to act the centre of each front, as exemplified very effectively in the good Ammi Young's Boston Custom House, will not wholly and in most cases serve your turn. It served Ammi's turn because the clerks who had to work in the shadow of his porticoes and to execrate his memory every hour for shutting off their light were, luckily for him, not the officials who had to pass



GERMANY.

Johannes Gelert, Sculptor.



PORTUGAL.
Louis St. Gaudens, Sculptor.

upon his plans. Now, Isaiah Rogers was a practical man. Being a Hellenic revivalist, and having had, previously, only hotels and such like to build, in which practical considerations were controlling, he had contented himself, in the Astor and the Tremont, with a bit of portico by way of a main entrance, though always cherishing that vision of the detached, continuous Grecian colonnade, of which the exterior effect might realize his vision, and in regard to which the inmates, lurking in the dense shadow of the architecture, might with impunity be neglected. He had his opportunity at last in the Merchant's Exchange, of which the interior rotunda might be sufficiently illuminated from above for the purposes of the daily congregation of merchants, and of which the occupants of the peripheral offices on the architectural front might with comparative safety be condemned, or contemmed. Seth



HOLLAND.

Louis St. Gaudens, Sculptor.



ROME.

F. E. Elwell, Sculptor.



VENICE.

F. M. L. Tonetti, Sculptor.



GENOA.

Augustus Lukeman, Sculptor.

Geer, in Colonnade Row, had a much harder task, since it was necessary in his case, in the erection of a row of dwellings, to find altruistic tenants who were willing to lurk in the dark, to the admiration of the passers by for the exterior architecture, and to his own glory—even though there may not be more than half a dozen New Yorkers who can, after some sixty years, even so much as remember his name.

The modern building owner or building committee is by no means so facile as was the building committee of Isaiah, or the owner of Seth. It is true that, in a certain number of cases, "the profession" has forced the appointment of "expert advisers," whose motto might properly, though profanely, be "To hell with the man who pays." The man who pays may some day be expected to awaken from his innocence as to the expert advisers and to retort the contempt which



FRANCE.
Charles Grafly, Sculptor:



SPAIN. F. M. L. Tonetti, Sculptor.

they express for him. But, even as things are now, it appears that even Uncle Sam is not to be sacrificed to his architects without a struggle, and that even his chosen architects must make some pretence of consulting his needs and requirements. Neither Mr. Cass Gilbert, nor any of his competitors in the competition, could have had the face to propose a building for the purposes of the new Custom House, which should be fronted with and darkened by a detached colonnade on each of its four fronts, as the old Custom House is on one and as the Paris Bourse is on all four. And yet, architecturally, that would have been a most attractive proposition. One does not see why, with a sufficiently "expert" jury, it should not have been feasible. Really, one shudders, thinking of him who pays and them who are to occupy, when one considers what might have happened if the competitors "got together."

But the competitors did not get together. And no one of them, singly and alone, felt up to proposing the "radical solution," in which the practical purpose of the building should be contemptuously ignored. Of course, as competitions go, still less did any one of them think of a radical solution in the opposite sense, in which the requirements of the building should be insisted upon as the basis of the design, and the architecture consist in the mere satisfaction and expression of those requirements. Probably every

present case, as it was in the older, and it is the equal insistence upon reducing its interference with the practical purposes of the building which makes any front of the new Custom House less impressive than the single front of the old. It is the complete detachment of the colonnade as a portico which practically spoils the Wall street front of the old Custom House and architecturally makes its fortune. It is the withdrawal and engagement of the colonnade on the east and west fronts of the new building



EUROPE.

Daniel C. French, Sculptor.

design submitted was a compromise. Very likely the accepted design was the most ingenius and workable compromise. And yet the result is that the old Custom House which was ruthlessly sacrificed to architecture was architecturally more successful than the new, very possibly than any could be in which a compromise between utility and impressiveness was sought. It is not an individual architect whom we are criticising, but our general way of doing architecture.

Evidently the insistence upon the order is the sacrifice to architecture in the

which at once reduces the practical interference of the architecture with the building and weakens the effect of the architecture. The scale of the order, one judges, is not so very different. It is reared upon a podium of, in either case, about equally exemplary simplicity and solidity. It is in either case enclosed between terminal pavilions or antæ, of which those of the new building are very distinctly superior in design to those of the old, of which the massiveness, insufficient for their best effect if it had been left alone, is wantonly weak-

ened by the unfortunate application of mere strips of pilaster, each narrower than the diameter of the column of the order, while in the new building the angle pilasters are real reinforcements of a satisfactory robustness. And yet no one would think of comparing for attractiveness and impressiveness the Corinthian colonnades of Bowling Green with the Ionic colonnade of Wall street. The former can be compared only with such a work as the flank of the Hall of Records, in which the assumed condition of an engagement of the order was equally imposed, or assumed. Thomas's problem was more difficult than Mr. Gilbert's in one respect, that his building was of seven stories against six, and he was thus compelled, given an order of about the same scale, to stilt it on a two-story base instead of being enabled, as Mr. Gilbert is, merely to set it on a base duly proportioned. treatment of the angles also is very distinctly better in the Custom House than in the Hall of Records, and this improvement is distinctly to be credited to the architect. On the other hand, the present architect has felt himself compelled. doubtless in the interest of a stricter classicality, to forego the Mansard with which Mr. Thomas crowned his edifice. If he had been able to keep his edifice within five stories his choice would have been justified, and his order suitably framed at top and bottom as well as at the ends, with an attic not overburdening. But, since he was enforced to add another story, he found himself enforced to add it in the form of another attic, an attic, moreover, in which classicality has to be ignored, an attic which appears to be, quite properly, ashamed of itself, and, quite ineffectually, to be endeavoring to efface and conceal itself. Better, one thinks, to have brazened it out with a Mansard. For the parapet story and the Mansard in one case pretty clearly "crown the edifice" more effectually than does the double attic of the other. But upon the whole and with one important exception the colonnaded side of the new Custom House is more effectively composed and designed than the flank of the Hall of Records.



PHOENICIA.
F. W. Ruckstuhl, Sculptor.

But the exception is important. The shafts of the Hall of Records, like the shafts of the old Custom House, are monoliths, while the columns of the new Custom House are laid up in low drums, each comprising two courses of the adjoining masonry. The difference in effect is, of course, all in favor of the monolith, and it is one of the surprises as well as one of the misfortunes of the later building that the architect did not see his way to reaching this obvious but unfailing source of effect. Ruskin has observed upon the pettiness of the effect which is produced in the Madeleine by the building up of small stones of the columns of the portico. The drums of the columns of the Custom House are not fairly to be described as petty. But the greater their extension the greater their effectiveness, which would be raised to the highest point by alloting but one drum to each, and then tieing in

all the drums or every other one, to the body of the wall in an architectural manner. But the increasing the number of drums does not seem to have occurred to the architect. And, since the shafts are unfluted, it seems to have been feasible to choose for them a material that would take a polish. If the shafts of the order had been shining monoliths of granite, it is clear that the effectiveness of the colonnade would have been greatly enhanced.

Since this was not to be, it is not easy to see why the shafts should not have been masonically incorporated with the wall with which they are engaged, why, that is to say, each drum of the shaft should not have corresponded to a single course, instead of two courses of the adjoining masonry. The next step would have been to avow the incorporation, and make it the basis of a decoration, according to the precedent set by Philibert de l'Orme in the Tuileries, in which the bonding and belting of column and backintroduced a new and legitimate effect enhanced and enriched by the decoration. Such a treatment is, in fact, indicated by the building up of the shafts in the Custom House. To be sure, it would have impaired the classicality of the design, and the effect of the series of similar and single members which makes the effectiveness of the classic colonnade. But, upon the whole, and in spite of the severity and purity of the detail, the actual arrangement does not give so complete a sense of classicism that it would have been a very great pity to impair it to that extent.

Thus far, we have been speaking of the east and west fronts, in which the effectiveness of the classic colonnade, even though it might have been enhanced, and even though it suffers by comparison with such a detached colonnade of monoliths as that which fronts the old Custom House, is nevertheless preserved. One cannot, with even tolerable detail, and the detail here is much more than tolerable, fail to make an effect with a range of columns equally spaced and long enough to be to the eye, interminable, or at least not readily and at a glance numerable. But this source

of effect the architect has quite foregone and renounced when he came to the principal front of all, the northern front facing the Bowling Green, and containing the principal entrance. Here "you cannot see the forest for the trees;" it is a collection of columns, not a colonnade. In the first place, the order is advanced beyond the flanking pavilions, instead of being withdrawn behind them and framed between them. In the second place, the series is interrupted and the serial effect destroyed by the doubling of the columns at the ends and on each side of the entrance. The arrangement lacks harmony, lacks rhythm, lacks effectiveness. To make a feature of the entrance was to destroy the colonnade and to convert the order into what seems, in comparison with the flanking series, a casual assemblage of columns. A central pavilion, signalizing the entrance, even without a pediment, but with its own order, might have been a very impressive A continuous colonnade in which the entrance occurs as it were casually between the columns might also. as we see, be impressive. But both sources of impressiveness seem to be thrown away when a central interpolation is emphasized and signalized by an emphatic solution of continuity of the order. The device adopted in the Hall of Records, of confining the order to the central portico, seems more eligible than that adopted in the Custom House, of trying to combine the effects of a conspicuous central feature and a continuous and persuasive system. It rather oddly happens, by the way, that, in his original design, Mr. Thomas continued the order of his Chambers street portico along his curtain walls, in the form of pilasters, but was talked into leaving these out, doubtless to the advantage of the front.

There is in the "Discourses" of Viollet-le-Duc what to most practitioners of the architecture now in fashion will seem a hard saying: "As soon as the order ceases to constitute the whole architecture of a building, the order no longer has a right to exist as such." But, the more it is considered, and the more current examples are brought to the test of

it, the more valuable an architectural aphorism it appears. To be sure, its author carries it so far as to condemn the "colossal order" altogether, saying: "In my opinion, two or three superimposed ranges of windows cannot be comprised between pilasters or columns thirty or forty feet high with good effect," giving the not very cogent reason that "the arrangement must give the impression that a building built by giants is inhabited by dwarfs," and contradicting his own praise of the basilica of Agrigentum, in which the intercolumniations of the order were filled with a light construction, in contradistinction to the superimposed orders of the Romans. But that does not affect the soundness of the proposition that it is only when it is possible to represent the order as the structure "constituting the whole architecture" that the order gains its best and due effect. Consider the superior effectiveness of those recent buildings, in which designers have found it feasible so to represent it, over those in which they have been reduced to applying it to a structure evidently independent of it. The new Stock Exchange gains immensely in effect, in spite of its clearly "applied" pediment, by the mere fact that it is evidently a portico, with the intercolumniations glazed, and nothing more. The Knickerbocker Trust Building, in Fifth avenue, owes its effectiveness chiefly to the fact that its fronts are colonnades, which constitute the whole

structure, the intercolumniations, with the anomalous and regrettable exception of the masonry entrance, being a mere screen of glass and grillage. Memorial Hall, at West Point, owes its effectiveness chiefly to the fact that the order is the structure, though here it is "engaged," perhaps too deeply engaged, in a screen wall of masonry which closes the intercolumniations. The flanks of the new Custom House owe their effectiveness to the fact that the order is the structure, or would be, in spite of the podium and of the first attic, but for the unhappy emergence of the incongruous second attic, which cannot be altogether hidden. Practical considerations imposed upon the later designer, from which the earlier was free, render the effectiveness of these flanks less than that of the Wall street front of the old Custom House, where it was permitted to darken the front for the sake of detaching and emphasizing the order. And the old monoliths are more effective than the new shafts laid up in courses. The reason why the Bowling Green front is less effective than the flanks seems to be that, in the case of this front, it is not possible to regard the advanced and unequally spaced order as the structure, which visibly exists behind it and independently of it. But, in spite of these drawbacks, whether imposed misfortunes or voluntary errors, the new building is a valuable civic possession, a work of refinement and distinction.



Model for Capitals of Exterior Columns, by the Architect, Cass Gilbert.

## Some Early Business Buildings of San Francisco



NE of the parts of San Francisco which suffered most severely from the recent earthquake and conflagration was the district lying between Chinatown and the Bay, and

it is certainly a great pity that such was the case, because this particular district was in many respects the most interesting in all San Francisco. Here it was that the most exciting events connected with the early history of that city occurred, and here it was that one received a livelier impression that San Francisco belonged among American cities in a class wholly by itself. Its location, the accidents of its early life and the mixed cosmopolitan character of the California pioneers, all combined, at least in this portion of the city, to give it a highly flavored individuality; and what is still more unusual, the design and appearance of the buildings contributed materially to the novelty and interest of the spectacle. In other parts of the city almost every house erected before about 1885 could be safely and even cheerfully overlooked. They had indeed a peculiar flavor; but it was not one which commended itself to an educated taste. On the other hand, in this older portion of the city there were many really good buildings, and many more buildings which, whether good or bad, betrayed training and architectural experience on the part of their designers. They had indeed an exotic character like so many of the festive buildings recently erected in the Eastern cities, but this alien flavor was an essential part of their novelty and They were, it may be safely said, the first business buildings erected in the United States which were both exotic and interesting—buildings which were the product of an alien tradition, vet which retained under American surroundings a certain propriety and a positive charm.

The explanation of this architectural phenomenon is, of course, to be found in the peculiarities of the early history of San Francisco. The pioneers of California were not, like the pioneers of the other Western States, backwoodsmen, hunters and farmers. They were in many instances educated and trained men, who had been tempted by the discovery of gold in California to forsake their customary pursuits and to seek their fortunes in the Golden Land. It was natural that among these adventurers from all parts of the world there should be some men who had received a European architectural training; and it was natural also that these gentlemen, when they arrived in California, should prefer the high and feverish excitement of life in San Francisco to the hard and frequently unprofitable work of placer mining. It was natural, also, that these disillusionized Argonauts should, when the opportunity arrived, resume the practice of their professions; and finally it was inevitable that the work which they did should attract at the time so little approval and attention that its authorship should go frequently unrecorded and its value unappreciated, and that, deposited as it was in sterile ground, it should fail entirely to take root and bear further fruit. It is not easy at the present time to find out who these men were. how it happened that they came to San Francisco, and what work they did while Certain names have, however, been handed down, and certain buildings can be identified as their work. Among them may be mentioned Thomas Boyd, Henry Kenitzer, Victor Hoffman, Peter Portois, Stephen H. Williams, Prospect Huerne, Reuben Clark, Gordon Cummings and others, the majority of them being men of French or English training. Furthermore, as the stone carving and wrought iron work on these buildings prove, these architects could call to their assistance mechanics, who also had received a training at that





(This block was unharmed by the recent disaster.) MONTGOMERY BLOCK-1854. Montgomery Street, San Francisco, Cal.



THE NAGLEE BUILDING.
(The oldest brick building in San Francisco.)
Corner Montgomery and Merchant Streets, San Francisco, Cal.

period very rare anywhere in America. It is known, for instance, that Carpeaux lived for some time in San Francisco, and certain ornamental architectural plaster work is identified as his; but the work of these men is even more obscure than that of the architects, and the recent conflagration has made any attempt to resurrect it still more difficult. It was all an accident, depending upon the residence in San Francisco of a few men of definite technical training at a time when circumstances made their services necessary and valuable.

The circumstances which rendered their services so valuable were unfortunately not wholly dissimilar to those The first buildwhich prevail to-day. ings erected after the discovery of gold were at best nothing but frame shanties, and at worst the early Californians lived in tents or rag houses. Fires were inevitable, and again and again a large part of the city was burnt down. Finally two conflagrations, one on May 4, 1851, and one on June 22nd, of the same year, aroused the citizens of the city to appreciation of the economic necessity of more substantial buildings. The two fires had between them destroyed both the business and the residential portions of the city; and it was decided that at least in its

business portion the city should be rebuilt as nearly fireproof as was possible under the local conditions. These local conditions rendered all forms of masonry construction extremely expensive; but in the summer of 1851 the prosperous merchants of San Francisco believed that they could afford the expense of substantial buildings. By that time it was manifest that California was a veritable Eldorado and that San Francisco had come to stay; and its merchants felt justified in investing large sums of money in permanent structures. The "Annals" report that thenceforward many of the buildings showed "a wonderful improvement in strength and grandeur;" and the annalists had some cause for enthusiasm. During the fifties the San Franciscans built well, better than they have until any but a very recent period. Subsequently the city was less prosperous, so that its business men could not afford so easily the heavy expense of well-constructed buildings. Moreover, as the means of transportation improved they derived more of their materials and methods of construction from the East, with the result that their buildings declined even below the contemporary Eastern level, both in design and in structure.

But in the fifties the pioneers were men who were not afraid to take great risks, and who were accustomed to overcome great obstacles. And the obstacles were certainly worthy of their mettle. Never was a city worse equipped by nature with the materials of building, and in no other place has the labor of good mechanics been so scarce and so expensive. There was little or no good building stone in immediate vicinity of the city; and the man who insisted upon a stone building was obliged to import it from afar, sometimes even from China. The consequence was that as late as 1860 there were only six stone structures in the whole city of San Francisco against forty-seven which were made of iron, six of adobe, 1,461 of brick and 18,603 of wood. Most of the new business buildings were constructed of brick, but even this material was very expensive and often far from satisfactory in composi-



DR. CZAPKAY'S HOUSE.
Washington, near Kearney Street,
San Francisco, Cal. Victor Hoffman, Architect.

tion. The brick which was laid in one building erected in 1850 cost its owner no less than \$140 per thousand, and much of the brick used in the early years was really unfit for its purpose. It was burnt for the most part at the prison kiln at Point San Quentin. In this vicinity there happened to be but little fresh water, and as there was an imperative demand for new material the clay was often mixed with salt water, the consequence being that the blocks were liable to "sweat." Nevertheless brick, some-



THE GLOBE HOTEL.

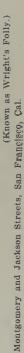
Chinatown, San Francisco, Cal.

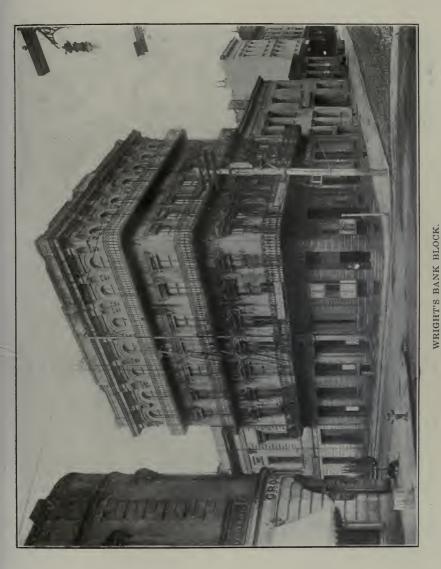
Victor Hoffman, Architect.

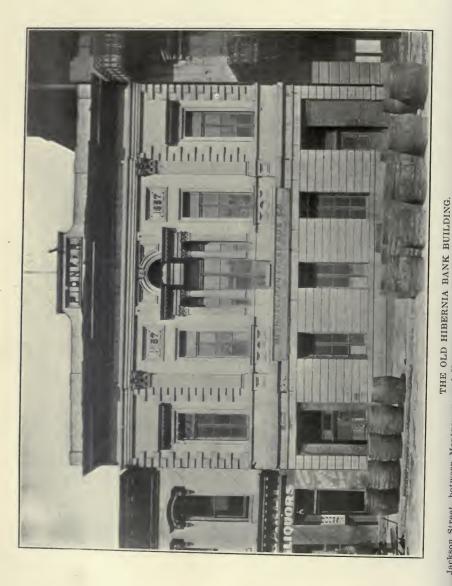
times bare and sometimes covered with mastic, remained the most available and popular material for the fireproof buildings of that date. It may be added that even a frame building was not to be erected without a heavy expense. Well dried lumber frequently cost as much as \$400 per thousand feet, and it may be imagined what that meant in a large building. The flooring most commonly

used in the early fifties was yellow pine, while the siding and finishing was made of redwood, and the sashes and doors of sugar pine. Carpenters and masons sometimes cost during the early years as much as \$15 to \$20 a day.

The best known and most interesting of the stone buildings was the old Parrott Block, until recently standing at the northwest corner of California and



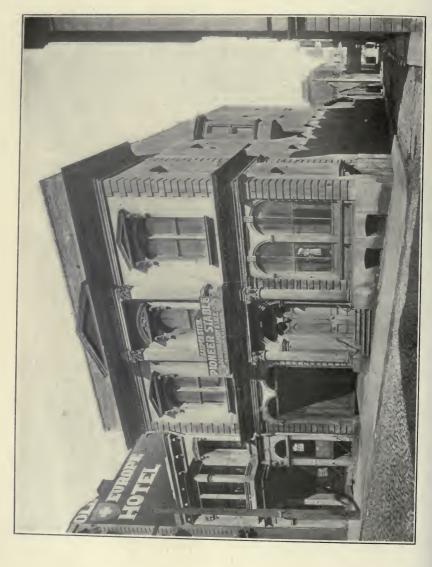




Montgomery streets. It was a three-story and basement building, designed with the utmost simplicity. Its only architectural feature is a flat arcade, carried by engaged columns on the ground floor, but this arcade was so well managed that it gave the building a dignity appropriate to its important location and its substantial material. It is its simplicity which more than anything else distinguishes it from many of the other buildings erected at that date at a large expense; and its architect, Mr. Stephen Williams, evidently had very different ideas from some of his contemporaries of French training. But the circumstances under which the building was planned and constructed demanded plainness of design and economy of ornamentation. In 1852, when Mr. Parrott decided to construct his new building of granite, the best market for that material appeared to be in China; and, accordingly, as soon as he had his plans drawn, Mr. Parrott sent his agent, Mr. Bernard Peyton, to Hong Kong to negotiate for the material. There the stone was cut and dressed. Under Mr. Peyton's supervision each of the three stories of the new building was laid out and put together. Then each block of granite was numbered and a diagram drawn, showing the relation which these numbers should bear one to another. Finally it was all placed on a vessel and shipped to San Francisco. In the meantime the stone foundation, the cost of which was \$4,000, had been quarried on Goat Island in the Bay of San Francisco, and by the time the Chinese house arrived a substantial base was waiting to receive Inasmuch, however, as Chinamen had made the building, none but Chinamen could put it together, for all the blocks were marked in Chinese script; and this task of putting its parts together required an effort almost as extraordinary as the one which had been required to obtain the parts themselves. Derricks there were none, and in their absence the granite blocks had to be lifted by human hands and carried up ladders of bamboo to their pre-ordained niches. Twenty stalwart coolies, ranged along a stout bamboo pole, were required to carry each

of the blocks to their places. This labor was continued four months before the building was completed, and the whole structure, with its interlining of brick, cost its owner \$117,000. How much would a three-story granite building measuring 63x103 feet cost in New York today? Surely no incident could illustrate better the fine determination with which some of the pioneers faced the difficulty of erecting substantial buildings, and it may be taken to typify, also, the strange things which have happened and will happen to San Francisco, as a consequence of its Pacific relations with the Far East.

Another structure which was erected almost regardless of expense was the Naglee Building, at the southwest corner of Montgomery and Merchant streets. Four times Mr. Henry M. Naglee had watched the fire consume the building in which he transacted his business, and he decided that he would make his new building fireproof at any cost. So he began on May 11, 1850, to erect what was at the time the second brick house to be constructed in San Francisco, and what had become at the time of the recent conflagration the oldest brick building in the city. It was he who paid \$140 per thousand for his brick, and as high as \$20 a day to his masons, but he obtained what he wanted, for his building escaped destruction in the fires of 1851. The reader will notice that its design is decidedly French in character. It reminds one of the plaster houses erected in Paris during the reign of Louis Philippe, and it was planned evidently by an architect with Parisian training. During the half century during which it survived, it has obviously suffered both from renovation and mutilation. In 1897 the fronts of the building both on Montgomery and Merchant streets, were rejuvenated with a fresh coat of plaster, while at the same time the iron balconies on the former frontage were torn out, so as to afford more space for "Lubin's" sign. At a still earlier date the frontage of the ground floor, on Montgomery street, was obviously filled in with a comparatively solid wall, similar to that on Merchant street,





THE WEST END HOTEL.

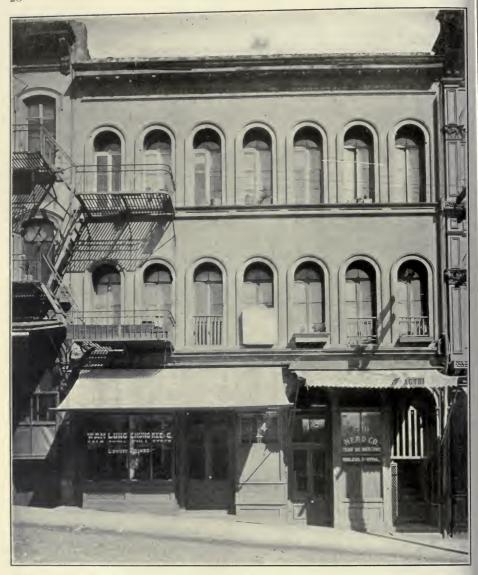
Portsmouth Square, San Francisco, Cal.

Peter Portois, Architect.

and when this was the case and when the building was all of one color, it must have been a very respectable piece of mid-century Parisian design. The detail of the iron balconies, the cornices and the consoles all betray a practiced hand.

The largest of the early buildings in San Francisco was the Montgomery Block. At the time of its erection, in 1853, it excited as much interest in San Francisco as did the Astor House in New York at the time of its erection; and the new block deserved the interest it aroused. It was most substantially constructed with every intention of making it a permanent fireproof edifice, and as a protection against more inflammable neighbors, its windows were closed originally with massive iron shutters—the best contemporary substitute for wire glass. Moreover the precautions taken were singularly effective, because the Montgomery block is one of the few edifices in that vicinity which escaped the

ruin wrought by the recent conflagration. Coppa's restaurant, situated in one corner of the building, pulled through so well that meals were being served at its tables a few days after the fire; and the humorous decorations with which the local artists had covered the walls of the restaurant were preserved, let us hope, for the amusement of several generations of patrons. The block was planned by Mr. Gordon Cummings, and belongs as emphatically to the London of the fourth decade of this century as the Naglee Building belongs to the Paris of the same period. Here again the design betrays a practiced hand and is worth respectful attention. Mr. Cummings, like certain contemporary architects, adopted single unit of design, and merely duplicated it along three fronts of the building a method which is intellectually economical, but productive of a somewhat stiff and mechanical effect. Nevertheless much careful study was incorpo-



THE TYPICAL BRICK HOUSE FINISHED IN PLASTER. 714 Washington Street, San Francisco, Cal.

rated in the façades. The gradually diminishing size of the windows and their neat and emphatic framing was excellently managed, and the frieze below the cornice is an extremely well-considered piece of ornamentation. The ground floor is not, perhaps, so successful. It appears weak and confused compared to the simplicity of the rest of the building; but the architect was evidently doing his best to make his base strong and interesting, while at the same time allowing sufficient window space for shop-keeping purposes. One obtains from the frontage on the side street a better idea of the appearance of this first story, as



A MODEST CORNER, BUT NOT ALTOGETHER COMMONPLACE. Stockton and Sacramento Streets, San Francisco, Cal.

intended by the architect; but the arcade, while more regular, is weak for its purpose. In spite of any deductions we may care to make, however, there were very few American business buildings in the year 1854 as good as the Montgomery Block. It was emphatically better, for instance, than the Trinity Building in New York, which was also a long, low, four-story building erected at about the same time.

One of the very early stone buildings erected in San Francisco was the private sanitarium of Dr. L. J. Czapkay. This doctor was a quack of considerable local reputation, who obtained large fees from the early San Franciscans for what was probably very bad advice, and who combined, so it is said, the practice of his profession with an even more lucrative practice of blackmail. At any rate, he was sufficiently prosperous to erect in 1854 a stone office and sanitarium on

Washington street, near Kearney. The stone has something of the appearance of marble; but it proves on closer inspection to be a local granite, a granite which has remained until this day the best building stone which can be quarried in California. One of the foremost architects of the day, Mr. Victor Hoffman, designed the building, and it does him credit. Disfigured as it is by the fire escape, and plain as it is to the verge of barrenness, it shows that the architect has nevertheless done what he could to make it interesting. The reader will notice, for instance, that the lines of the third and fourth floors are marked on the façade by a flatter course of stone. It is a simple device; but it was about as much as the architect could do to make the lines of his stone work merge into something resembling a pattern.

Another more pretentious building, designed by Victor Hoffman, was the old



AN INTERESTING BASEMENT ARCADE.

609 Pine Street, San Francisco, Cal.

Globe Hotel in Chinatown. In this instance the more popular method of brick construction with a plaster coating was adopted; and the architect was enabled thereby to apply to his frontages a much larger quantity of cheap ornamentation. Inasmuch as the building was to be used as a hotel it was evidently his intention to make it look like a gay and amusing place in which to live; and he thereby showed the influence of his foreign point of view and training, for it was customary at that time to make big American hotels respectable, dull and almost forbidding. In the pursuit of his more laudable purpose, he went, perhaps, rather too far, and the "pilasteration," with which he emphasized the division of the second and third stories above the entrance, was not a happy piece of architectural decoration and expression. If. however, the reader

will imagine this excrescence removed from the building, and if he can shut his eyes to the awnings, flower boxes and other base practical eruptions, he will have left what is, after all, a very smart, careful and amusing piece of Parisian architecture. The sloping ground on which the building is situated enabled Mr. Hoffman to give some proportion and dignity to the arcade on the ground floor, and he has wisely simplified the design and decreased the ornamentation of the upper as compared to the lower stories. It is by no means an impeccable composition; but was there another hotel in the country at that time which combined so much with such good architecture?

Perhaps, however, the most famous of the contemporary San Franciscan architects was one Peter Portois. Portois was a Belgian by birth, but he was a



ONE OF THE PIONEERS.

736 Montgomery Street, San Francisco, Cal.

Frenchman by training. His architectural education was completed at the Beaux-Arts in Paris, and inasmuch as he arrived in San Francisco in 1840 and immediately began there the practice of his profession, he is entitled to the distinction of being the first American architect from the Beaux-Arts. It would only be fair for the modern San Franciscan architects, who are renewing the same tradition, to raise some sort of a memorial to his memory, for he died in obscurity and poverty, and he was a designer of no mean ability. Neither was he entirely unconscious of his own merit. He liked to declare that Belgium was par excellence the country of architects, and then, after a pause of a few seconds, to add with sententious conviction: "I was really the leading architect of Belgium."

He was certainly the leading architect of San Francisco, and three of the buildings illustrated herewith are identified as the product of his pencil. The most im-

portant of his works, which used to stand at the northwest corner of Jackson and Montgomery streets, was known as "Wright's Folly." Stephen Wright was in the early fifties one of the leading bankers of San Francisco, and some of his friends possessed sufficient faith in the permanence of his bank to deposit with him a sum amounting to \$150,000. Thereupon Mr. Wright, like so many New York bankers of to-day, decided to erect a banking house which should symbolize his financial opulence and stability. And a large part of the \$150,000 went into what was for that day a magnificent building—a building which in 1855, when Mr. Wright went down in a financial panic, must have been a source of some pride and interest to his creditors. And in truth, it is a good building to look at. Mr. Portois, who designed it, served his client well. It is an extremely competent bit of Parisian architecture of the period of the third Napoleon



WM. F. COLEMAN'S STORE—1851.
Northwest Corner California and Front Streets, San Francisco, Cal.

—simple, as far as the manner of its kind permitted, and compared to such a building as the Globe Hotel, even business-like. Mr. Portois did not attempt to emphasize his corners and his vertical lines. The façades are dominated by the wrought iron balconies of excellent design, which divide the stories one from another, and the treatment of each story is almost uniform and is nicely adapted to its place in the façade. The only vertical divisions which receive any emphasis are those made by the two entrances. The more important entrance, on Jackson street, is distinguished by the enclosure of three windows of each of the upper floors in a pilaster strip, terminating at the line of the cornice in two consoles instead of one. Moreover the framing of the windows included within the projection is more emphatic and is different from that of the other windows. A similar distinction is bestowed upon

one line of windows of the frontage on Montgomery street. This whole idea is ingeniously and skillfully carried out, and if it is not wholly effective the responsibility therefore must be traced to the architect's failure to emphasize correspondingly the entrances on the ground floor. Nevertheless it is a design which really repays careful analysis and study, much more so than many contemporary products of the Beaux-Arts methods and tradition. The scale of all the projections, for instance, is admirable; and the architect deserves credit for adapting the whole of his design to the exterior fire escape, which apparently was necessitated in a building of that period which mounted as high as four stories.

The building immediately adjoining Wright's Banking House, on Jackson street, was also designed by Peter Portois. It was originally occupied by the Society of the Hibernians, and was the



THE COUNTY JAIL.

Broadway, near Montgomery Avenue, San Francisco, Cal.

first home of the Hibernia Bank. Later the Society of the Pioneers used it, until their new building, on Montgomery street, was completed. This also is an extremely interesting façade, considering the date of its erection, but the architect would have done better either to have simplified the design of his second story or else to have grouped the entrances in the centre of the façade and carried the ornate scheme of the middle division of that story through to the street. Mr. Portois' manifest intention of making his second story as festive as the assembly hall of a club should be, is not consistent with the business-like severity of his ground floor. The club house which the Society of Pioneers subsequently erected from plans by Mr. Bugbee is a more commonplace building, which reminds one of the rest of architectural hybrids which were being erected about 1855 on Fifth avenue in New York.

Peter Portois, as well as Victor Hoff-

man, tried his hand at a hotel, which is still standing on the west side of Portsmouth Square. He has not attempted to make this West End hotel as festive as the Globe, and the design like that of Wright's banking house shows a tendency to be a little over-ingenious in the composition of his façade. He has taken great pains to introduce refinements which probably were more important on paper than they subsequently became in solid brick and plaster. The detail on the front of this building is most elaborate, while at the same time being most carefully applied and most reticent in effect, yet it hardly reflects the care which the architect lavished upon it. Notice, for instance, the successive projections on the face of the building, the most prominent of which encloses the three windows over the entrances. Notice the panels in the wall which mark the line of the central windows, the more emphatic framing of the windows on the two outer tiers, and the deeper recesses

of the windows on the sides and in the centre of the second story. It is all studied with most conscious exactitude, and with great technical skill; but somehow the architect seems conscious that his arrangements will give him more pleasure on paper than they ever will to the indifferent and busy crowd of men who will see it from the square. And if Peter Portois did have any secret joys of this kind he assuredly deserved them, just as he assuredly deserved livelier and more intelligent appreciation while he lived, and a little reputation after his death among the men of his own profession.

A number of other photographs are also reproduced herewith which will afford a fair idea of some of the smaller and less costly business buildings which were erected in San Francisco between 1850 and 1860. These houses are generally simple and straightforward pieces of design, and we are very much mistaken, in case they are not on the whole better looking structures than were being erected at that time for business pur-

poses anywhere else in this country. The spacing of the windows and the scale of the detail is nearly always good, and they possess both propriety of appearance and substantiality of construction. There are so many of them that it almost looks as if for a while a local tradition had been established to which even the ordinary builder conformed; but if so it did not last very long. The business building with the iron front soon succeeded; and it was as hideous in San Francisco as it was in our other cities. tradition died and the generations which followed built houses which were perhaps even uglier in San Francisco than they were in the rest of the country. Nevertheless the little architectural episode which has been faintly outlined in this article was thoroughly typical of San Francisco. It could not in 1850 have happened in any other city in the United States; and the spirit and methods which gave it form curiously and amusingly foreshadow much subsequent American architectural history.

Agnes Foster Buchanan.



FIG. 19. ATRIUM OF THE HOUSE OF THE VETTII-POMPEII.

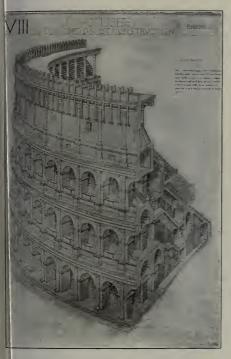
### Roman Art

PART II.



EFORE proceeding to speak of Roman domestic architecture, which cannot be passed over in treating, however briefly, of Roman art, we desire to show still more strikingly the practical character of

the Roman genius, in order that that trait be deeply impressed upon the minds of our readers. With this object we publish (Fig. 18) an outside view of the stantly to the admirable work of French architects belonging to the School at Rome, which works are preserved in the library of the Paris Ecole des Beaux-Arts. We have already pointed out, in connection with this edifice, the alliance—which is very characteristic of Roman architecture—of the arcade on imposts and the column. We mention, en passant, the superposition of the three orders, a thing which would have astonished the architects of the Parthenon, and which is one more example of the use made by the Romans of the Grecian



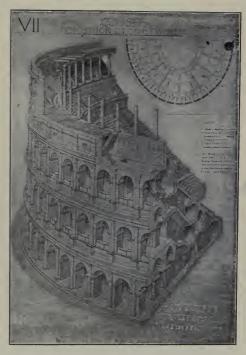
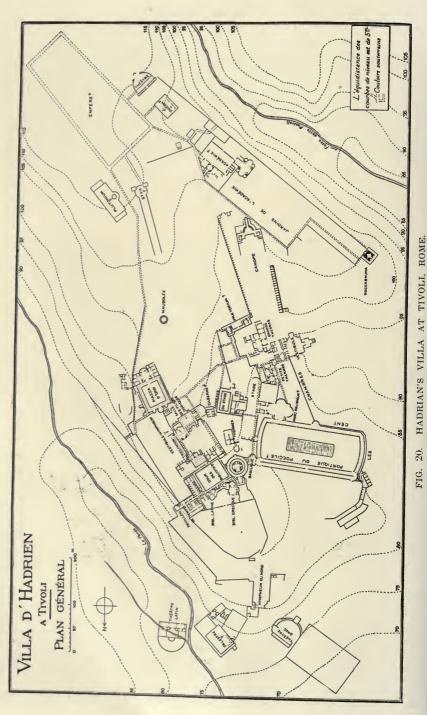


FIG. 18. RESTORED SECTIONS OF THE COLISEUM—ROME. (By Gaudet, and now preserved in the Ecole des Beaux Arts, Paris.)

oliseum, a photograph of a reconstituon of that edifice, made by an architect, I. Guadet, winner of the *Grand Prix* onferred by the Ecole des Beaux-Arts. hey show clearly its construction and rrangement.

It will be noticed that we refer con-

orders, with which they played without understanding them. But they did at least superpose them with a certain amount of sense, putting the Doric, which is the most substantial, on the ground, the Ionic next, and the Corinthian to crown all. One sees imme-



General Plan by Gusman.

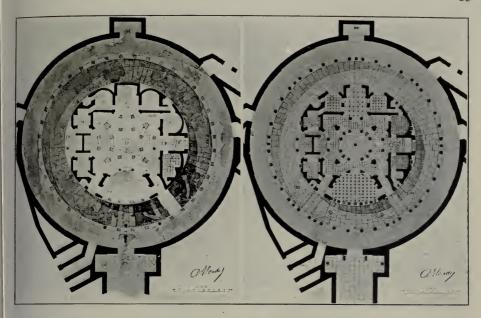


FIG. 21. PLANS OF THE PORTICO OR BASILICA, HADRIAN'S VILLA AT TIVOLI—ROME. (Restored by Blondel.)

diately, however, what an imposing effect the Romans managed to obtain from those arcades, those columns, and that entablature, running uniformly around the edifice.

But it is of the practical arrangement of the Coliseum that we wish to speak, and to do this we examine M. Guadet's reconstitution. It was a matter of constructing an immense building, to hold some eighty thousand spectators. What was to be done to enable this vast number of persons to enter it freely, without crush, and come out of it again, around its entire circumference, without blocking this or that row of seats, or this or that staircase? The architect performed his task splendidly, and we, who scarcely know how to design a theatre in a way enabling fifteen hundred spectators to enter and leave without difficulty, have sad need of some lessons from him.

Around the entire outer circumference, under the arches, the crowd took their stand until the staircase barriers were removed. When these barriers were withdrawn the people went up. On each floor, as our illustration shows, the

staircases were each divided into two narrower ones, and in this way the crowd spread and got split up as it ascended. Each group of places had its staircase, and the spectators could descend from the upper tiers of seats as easily and with as little overcrowding as from the lower. As VII shows, there were gangways between the groups of benches, and their profile was sufficiently high to prevent the people moving about from obstructing the view of the seated spectators. The slope of the tiers was steep, so that the people in each row had a clear view of the arena. There was also, on each floor, a series of covered galleries, on which the staircases gave, and these galleries were sufficiently spacious for all the spectators to leave their places and take shelter there in case of a storm or heavy rain.

It would be impossible to conceive anything better, either as regards the general scheme or the minute details, than those Roman arenas of which the Coliseum remains the prototype, but which were also constructed in most provincial towns. Fine specimens exist at



FIGS. 22 AND 24. LONGITUDINAL SECTION, HADRIAN'S VILLA, TIVOLI, ROME. (Restored by Esquié.)

Verona, Arles and Nimes, to mention

only the principal ones.

The arena of the Coliseum was hollowed out, and the underground places from which the scenery was worked can still be seen. Besides, the immense arena could be inundated for sea fights—called Naumachiae.

We think the reader is now beginning to have a pretty clear idea of what really constitutes the greatness of Roman architecture, about which, as will presently be seen, many very false notions have been formed during past centuries and even in our own times.

But it would be a great mistake to think that the Romans were only capable of big architectural enterprisesworks for the benefit of the nation at large. The qualities which we have just pointed out were also displayed in domestic architecture, and this in the most delightful manner. We shall find the Roman mind, applied to this branch. freer and more supple than might be Indeed, an interesting and expected. useful chapter could be written on the domestic architecture of the Romans; but here we can give only an outline or summary of it.

Roman ideas as to home life are well known. The father was the all-powerful head of the family. Two different individuals are to be recognized in him—the family head and the citizen. The former had his daily life, his duties and habits, which were the concern of no one; the latter, on the other hand, had an outside life, friends and acquaintances, unconnected with his family. There was no such intermingling of the two lives as we see nowadays, when business and politics are discussed at table, and the

drawing-room of a clever woman is an important meeting-place. With the Roman the two things were entirely separate, and we find the same separation in the Roman dwelling. The house was arranged in the following manner. There was a door opening on the street, but no windows looked thereon. As in the East, all life went on inside. There was perhaps a small shop on either side of the door, but they did not communicate with the house.

A vestibule led from the entrance to an atrium or court, square or oblong in shape, which was surrounded by a portico with (in most cases) colonnades. From each side of this portico one passed into the rooms, which were open to everybody. On the side farthest from the door was the tablinum, a large apartment in which the master of the house was to be found and where he received his clients. In the middle of the atrium there was generally a fountain surrounded by flowers and shrubs. tablinum was adorned with ancestors' portraits and works of art copied from Greek models.

The tablinum was separated by a movable partition from the second portion of the house, which was devoted to the exclusive use of the family, no stranger being admitted there. Its arrangement was similar to that of the preceding part of the house. There was an atrium surrounded by a portico, on to which gave the various rooms of the dwelling. The largest room was at the back. Usually, the slaves were lodged in the garrets. The excavations made at Pompeii have brought to light Roman houses with their decoration and furniture in an almost intact state. Fig. 19 shows the atrium of the house of the Vettii family,



FIG. 23. THE THERMAE AT HADRIAN'S VILLA, TIVOLI, ROME. (From a Drawing at Gusman.)

one of the most complete discovered there. The smallness of the sleeping rooms astonishes one; but as the Romans spent sixteen hours of the twenty-four in the open air and used the *cubicula* simply to sleep in, the matter of ventilation was less important for them than it is for us in our bedchambers, which are living rooms. Besides, it is unlikely that the doors opening on the peristyle were ever closed. In general, a curtain was the only separation.

Under the peristyle, which was decorated with frescoes and supported by columns ornamented in stucco, the Roman wiled away the peaceful hours. In the center, under the dark blue canopy of the sky, was the garden, containing a few flowers or shrubs surrounding Hermes sculptured in a hard stone, and a fountain, with marble swans, which was upheld by small genii. From the beaks of the swans there spouted jets of water which fell into a porphyry basin. There was also a table, resting upon massive chimeras. On the wall behind him there were cupids gathering grapes from a vine, the branches of which were twined in the most free and charming manner. Paris was depicted encircling Helen, and

Venus enticing Mars to her beautiful arms. In the tesselated pavement there were figures of fishes with glittering scales.

It was an installation which suited to perfection the voluptuous climate of Southern Italy. The climate remains unchanged, but the modern house has not managed to retain the living rooms all on the ground floor, and the inner garden, which are the features that made the charm of the antique dwelling.

All town houses were built on this plan or very near to it. Occasionally the first *atrium* was covered and thus formed a large hall greatly resembling a basilica.

But it was in the construction of their villas that the Romans displayed their superiority. In this case there was no lack of ground, and they were able to do as they pleased in satisfaction of their love of comfort and luxury. They succeeded in the most brilliant and most ingenious manner, and the Roman villa was a creation to be admired.

The Roman was not a slave to any rule of symmetry. He liked to have symmetry where it was a good thing—in the

Coliseum, for instance—but he knew how to disregard it whenever its observance would have bothered him. He extended his buildings and arranged his rooms according to the requirements they had to fulfil, with the result that the Roman country house was very complete and convenient. It always comprised, in addition to the living rooms, a library, a portico to stroll in, and baths, which latter were planned in miniature on the immense *Thermae* which we have described, and included hot and cold swimming baths, a sweating room and a gym-



Fig. 25. Painted Wall Decoration, from Fragments of the House of Castor and Pollux. (Restored by Denuelle.)

nasium. Often a basilica was added to the villa. Often, too, there was a double set of living rooms-one set, facing exactly south, for winter use, and the other, looking to the north, for summer We know of no more inoccupation. genious arrangement than this, nor one more worthy of being revived in these modern days. Nothing could be more excellent or more comfortable than this double set of rooms in a country house. If the season was rainy and dull, one could install oneself on the south side, so as to enjoy what little sunshine there was, and avoid the cold northerly winds. If the season was hot, one could live in the cool rooms facing the north. What are our multi-millionaires thinking of, who content themselves with country houses the rooms of which are arranged ne varietur?. Shall we not some day see a revival in the United States of the great and luxurious tradition of the Roman villa?

It is in this hope that we publish here the plans of the finest and most complete of all the villas that imperial Rome saw—Hadrian's Villa, at Tivoli. We owe them to the kindness of M. Gusman, who has produced a book full of interesting information on this subject. Let us fancy ourselves living with that great emperor in his beautiful villa, built on the Tivoli slopes, which were doubtless covered then, as now, with fine oaks and olive-trees.

In this vast villa the Emperor Hadrian collected replicas of works of art that had won his admiration in the course of his travels, and he even tried to imitate certain celebrated landscapes which had taken his fancy. The plan (Fig. 20) enables us to understand the general arrangement of the villa, which stands on the hillside. Everything contributed to make Hadrian's Villa one of the most beautiful spots in the world. In front of it there was the Roman Campagna—Rome with her thousand monuments. Behind, there were the Sabine mountains.

The principal building presented its four corners to the four cardinal points, according to the favorite Roman practice. The side facing the northwest contained the libraries, of which there were two in this building alone—one for Latin manuscripts and one for Greek. On the north corner there was a pavilion, called the Pavilion of Tempe, whence could be had a delicious view of the valley of that name, with the river Peneus very appropriately running through it.

At the southwest corner stood a circular portico or basilica (there is some doubt as to this), of which we give the detailed plan according to the reconstitution made by M. Blondel (Fig. 21). Behind the court of the libraries were the dwellings, of which we also reproduce a



FIG. 23. THE THERMAE AT HADRIAN'S VILLA, TIVOLI, ROME, IN THE FRIEZE. (Restored by Denuelle.)

detailed plan, based on the work of M. Esquié (Fig. 22). By the ruins, which, unfortunately, are very much dilapidated, we see that, next, there was a hall with Doric pillars. On the eastern corner was the Piazza d'Oro.

On the western corner there commenced a long portico in imitation of that of the Poecile, and which deserves some notice. It was about two hundred and fifty yards long, and the manner of its construction is most interesting. A plain wall ran almost exactly from west to east, so that one of its sides faced full north and the other full south. The portico was covered in, columns supporting the roof on the sides and the wall upholding it in the middle. Thus one of the promenades was on the north side and received the cool winds, and that was the summer promenade, whilst the other caught all the sun and was fully protected from the cold winds, and that was the winter promenade. A bay in the middle of the wall served as a passage from one side of the portico to the other.

The above were only a few of the buildings composing the entire villa. Uncertainty exists as to the genuineness of many of the ruins lying within the area of the villa, but there are numerous points about which there can be no doubt. For instance, close to the principal building we find the *Thermae*. They were arranged with every luxury and refinement that could be thought of by people who had seen what the *Thermae* in Rome were like. Near the *Thermae* was the *Stadium*, for athletic games. Underground passages led from the *Thermae* to the dwellings.

We reproduce a drawing by M. Gusman which shows the present state of the large *Thermae* and the striking character of those fine apartments, amidst which melancholy cypresses are now growing

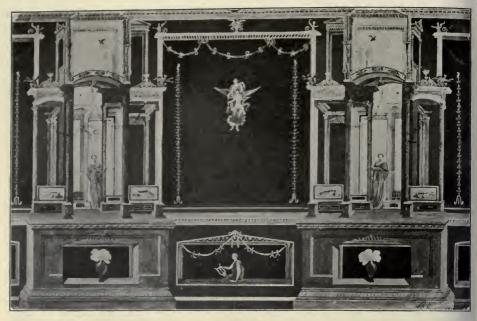


FIG. 27. PAINTED WALL DECORATION, FROM THE PANTHEON -POMPEII. (Restored by Denuelle, and now in the Naples Museum.)

(Fig. 23). It is believed that a copy of the serapeum at Canopus led to the gardens and the Academy. Behind, against the hill, was a theatre. That, however, was not the only theatre contained within the precincts of Hadrian's Villa. On the north, near the main building, there were two theatres, one Greek and the other Latin.

Such were the general lines of the imperial villa. It now remains to restore. with the aid of the information that has come down to us, the rich decoration that adorned it, and replace on their pedestals the admirable statues brought from

Greece by Adrian.

First we have M. Esquié's longitudinal section of the principal edifices in the northeastern part (Fig. 22). It conveys an idea of the varied aspect of the rooms, some of which were high and vaulted with domes, whilst others were open to the sky. The porticos, libraries, dwellings, atriums (covered and open), succeeded each other and formed the most picturesque suite of buildings imaginable.

It is to be observed that all those build-

ings had but one story. We shall touch upon this feature farther on.

Now let us put into those buildings the painted decorations, which the Roman ruins have furnished in large number. Here, for example, is an entire decoration that has been reconstituted by a pupil of the French School in Rome, M. Denuelle (Fig. 25). The fragments were picked up in a house at Pompeii, that of Castor and Pollux. They show the Roman architect's idea of decorating a wall, with a base and large panels. The base is naturally of a dark shade. Animals are painted on it, not with a slavish aim after realism, but in a decorative way, which is much more sensible. Slender festoons run in arabesques over the plain part of the panels. Nothing could be finer or in more pleasing taste than those free arabesques and those little subjects, which form a framing. Sometimes the frieze was ornamented with scenes of a comedy (Fig. 26). A painting from the Pantheon at Pompeii (Fig. 27), which is preserved in the Naples Museum, and which was also reconstituted by M. Denuelle, permits us to



FIG. 28. ROMAN PAINTED STUCCO DECORATION. (Tomb of the Anicii—Rome.)

see how fond the Romans of that day were of still life deceptions and it is not their most praiseworthy feature. Unfortunately, the Italians inherited this taste. Italy, decadent Italy, is the home of still life deceptions, and they are often of the coarsest and most abominable description. The author of the paintings preserved in the Pantheon deserves credit for having at least executed his cleverly and gracefully, and with a remarkable lightness of touch.

Two photographs of the interior of a tomb, that of the Anicii, on the Via Latina, near Rome, show us another decorative method dear to the Romans (Figs. 28 and 29). It is decoration in painted stucco. One sees with what virtuosity the Romans employed this process. Subjects and ornaments, personages and surroundings, are treated with equal skill, and the result is one of surpassing richness.

When one strolls through Pompeii or

the museums of Rome and Naples, one is astonished at the quality of these decorative paintings, the number of which is considerable. It seems almost incredible that so many charming works could have been brought to light, at random, in the dwellings of a provincial city, the inhabitants of which were simply middle-class people. And these works were not purchased at high prices, like many of those found in an emperor's abode, but were executed on the spot by local painters, and paid for, no doubt, at a moderate Moreover, these paintings are decorative, handsome, and in excellent taste. They are all different, testifying to an inventiveness of endless fertility. Suppose that by some cataclysm the town of Springfield, Massachusetts, or the town of Havre, France, were to be buried beneath a mass of lava and ashes, and that fifteen hundred years hence the wall decorations of its middle-class houses were to be exhumed in an undam-



FIG. 29. PAINTED STUCCO DECORATION. (Detail of the Dome in the Tomb of the Anicii—Rome.

aged state. We think our distant descendants, on seeing the moulded ornaments, the paste-covered ceilings, the paintings decorating (!) them, and the hangings of our bedrooms, would not feel strongly inclined to build a museum to preserve those specimens of our decorative art for the admiration of posterity.

In Hadrian's Villa the paintings were doubtless of the first quality. Besides, the emperor had collected Greek and Egyptian works of art, and had had copies made of some of those fine statues in which Rome was so rich. Fig. 30

shows one of these, a Satyr and Child which is in the Louvre Museum, and which has the merit, for us, of having been found in the ruins of Hadrian's Villa. We also know that during Hadrian's reign there existed a great taste for very old works of art. It is curious to note this fashion for things archaic with people who had attained the highest possible degree of refinement. Antique works were imitated, statues were made stiff and compact, and Egyptian art was held in much favor. We give an Egypto-Greek statue dating from Hadrian's time (Fig. 31). It was dis-

covered in his Villa, and now stands in the Vatican Museum.

Lastly, we reproduce "A Child and Goose" (Fig. 32), which is also preserved in the Vatican. This celebrated example of Roman art used, no doubt, like the other, to embellish the gardens or porticos of some splendid Villa.

Such was Hadrian's Villa, at Tivoli. When one studies it, both as a whole and in detail, when one raises those crumbled walls, replaces the superb mosaics with which those halls were paved, decorates the walls anew with lightly drawn paintings, and restores to their pedestals the numerous Greek statues; when one wanders in those gardens amid the many edifices standing there and containing everything calculated to delight a man who has reached the highest attainable degree of refinement, both physically and intellectually, and is leading a life brimful of enjoyments for mind and senseswhere, in short, he can live in a state of equilibrium only attained by the ancients; when, we say, one sees all that, in imagination, in its life and not in its dead state, one asks whether in all man's history there ever was any other moment when human beings had attained such a level of expansion. What is Versailles, with its one solitary, monotonous palace and its park, compared with Adrian's Villa? And how vastly richer a life, in the most complete sense of the word, under the Roman emperor than under the king of France.

The reader now sees what interest there is for us in this short promenade through the domestic architecture of the Romans. It has enabled us to resuscitate, amid masses of ruins, the men of a bygone age. It only remains for us to indicate briefly the advantage we of the present day may and should obtain from a study of Roman architecture.

\* \* \* \*

Historically, there can be no doubt that it is the Romans who have taught us what we know about antiquity. For us, they were for a long while its embodiment. What is really curious and noteworthy is that, although we have taken many things from them, we have left



FIG. 30. SATYR AND CHILD.

Found in the Ruins of Hadrian's Villa and now
Preserved in the Louvre.

that which might have been most useful to us.

We have taken, as said above, their detestable theory of independent decoration, the reign of which is far from coming to an end. However, we will not pursue this point farther. We have taken from them their taste for the monumental, the effect-producing. We have taken from



Fig. 31. Egypto-Greek Statue, made in Hadrian's Time.
(Now in the Vatican Museum.)

them, on the strength of certain edifices, their taste for big, symmetrical arrangements, which, however, is only half Roman. As we have seen, not only were their villas asymmetrical to the last degree, but the Romans, for a long time, ignored symmetry in their urban public places. In the old Forum, the temples, basilica and monuments were located in the most fanciful manner. The

foreigner visiting the Roman Forum is much astonished by the seeming confusion in which all those noble edifices were placed. And the want of order was by no means due to chance; it was designed with art, to produce striking effects. But anyhow, that belonged to a period. Under the emperors the taste for symmetry became dominant. There was a principal square with an equestrian statue of the emperor in the middle. At the bottom there was a basilica where justice was administered. Behind the basilica there was a smaller open space, bordered by two libraries and Trajan's Temple, with the Trajan Column standing in the middle.

These were the great symmetrical arrangements which, for the men of the seventeenth century, constituted all Roman architecture. It would be quite useless to complain. Symmetry has become a law of monumental architecture the world over, and there is no sign of a genius untrammeled enough to defy it. Moreover, it must be conceded that admirable effects are obtained from archi-

tectural symmetry. In this respect we have nothing more to learn from the Romans, for we are now their equals. But we could have taken from them their practicalness. That is a thing which would have been valuable to the seventeenth-century people, and even more so to ourselves. Yet that, the most remarkable feature in Roman architecture, as is revealed by the plans and sections of the Thermae, the Coliseum and the Villas, was a dead letter to our forefathers of the neo-classic period. They put all Roman art under one word: symmetry. Had they then not studied, or even seen, the marvelous edifices which we have examined in this article? They built Versailles when, at Tivoli, they had the model of a perfect imperial country residence! The one is the very negation of the other. The Villa is everything that can be imagined in the way of practical, intelligent arrangements for securing convenience, comfort and enjoyment; Versailles is the acme of inconvenience and bad arrangement—in short, it is uninhabitable.

Where do we find the practical spirit

of the Romans imitated in private edifices? In mediaeval architecture, in which there are separate buildings for the different services, and there we meet with the same variety of aspect that marked Roman architecture, and the same practical arrangement as is seen in the Roman villas. The necessity of fortifying the big dwellings of the Middle Ages caused them to be placed as close together as possible, and carried up to several stories; but the spirit is the same in both architectures.

The same arrangement is also found in English rural architecture. There is the same plan of grouping the rooms according to their uses, regardless of that external symmetricalness which French neo-classic architects dared not ignore. The result is a dwelling practical and comfortable within, and of a picturesque appearance outside.

We have seen in the Architectural Record plans of handsome American country houses erected in recent years which have nothing of what we call classic about them, which do not claim to be reconstitutions, nor imitations of the antique, and yet of which it can be said without paradox that they are stamped by all that is best in the Roman genius, evidencing, as they do, a marvelous understanding of what is comfortable and practical, and an ingenious grouping of the various living rooms and servants' quarters, not according to any absurd law of symmetry, but according to the needs and exigencies of the life led nowadays by a rich man and his family.

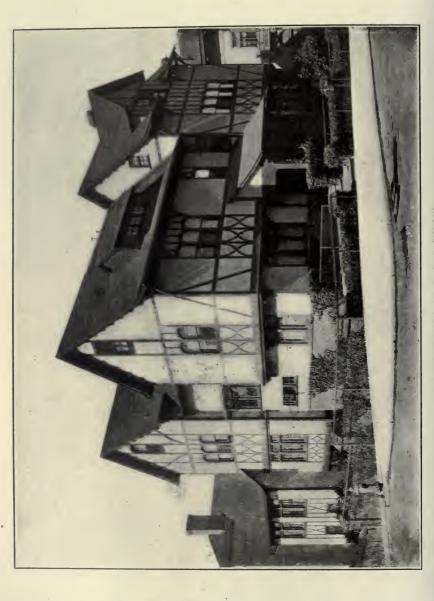
The writer has often asked himself why, in France, architects, when designing country houses, cling to the plan of having two or three stories, an arrangement which is quite natural in cities, owing to the high value of the ground. In the country, where land is cheap, why not return to the pleasing and commodious arrangement of the Roman villa, which never consisted of more than the ground floor.

We conclude by asking that, in future, Roman architecture be studied with a view to acquiring the genius of practicalness it possesses, and no longer, as has been done hitherto, for its decoration.

Jean Schopfer.



FIG. 32. CHILD AND GOOSE—ROMAN ART. (Now in the Vatican Museum)





THE HOUSE AND STABLE OF WM. CHAPPELL.

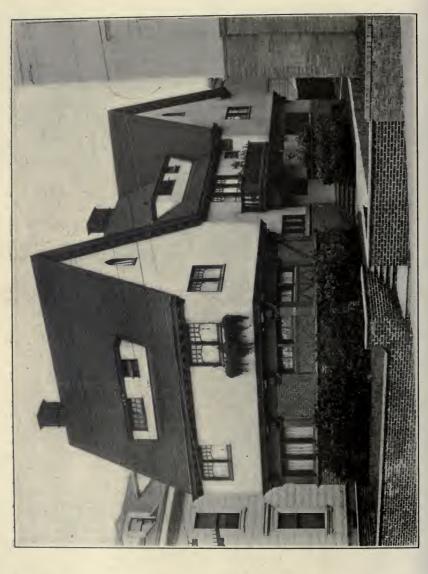
(Overlooking Puget Sound.) Edgar A. Mathews, Architect.

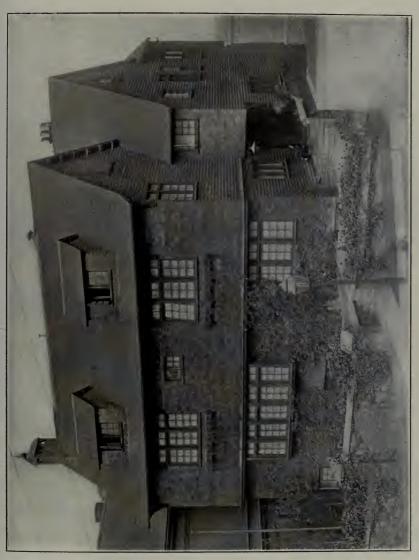
Seattle, Wash.

### An Architect of Residences in San Francisco

The buildings designed by Mr. Edgar A. Mathews, which are reproduced herewith, consist, for the most part, of dwellings which have been erected on the streets in the best residential parts of San Francisco, and their character, in view of their location, will impress many observers as peculiar. With one or two exceptions, they have all of them been adapted with more or less freedom from the Elizabethan type of dwelling. This type has been sufficiently popular among suburban residents in the vicinity of all the larger cities in the country, but it has rarely been used for house-fronts on the streets of a large city, and the reasons why Mr. Mathews, although hitherto an architect for the most part of urban dwellings, has persisted in designing so many Elizabethan houses, cannot be entirely understood without some preliminary explanation of the peculiar conditions which an architect of dwellings was obliged to meet in San Francisco. Of course, at bottom Mr. Mathews has designed picturesque houses, because he liked that sort of thing, but inasmuch as in any other American city of similar size, he could hardly have given such free expression to this preference, it will be helpful to consider in the beginning what the local conditions were, which encouraged him in his choice.

It is well known, of course, that the typical San Franciscan dwelling is built of wood. The building laws of the city allowed the use of frame construction and wooden sheathing even in these parts of the city where houses were arranged in rows; and their liberality in this respect was the result of a number of more or less sufficient reasons. In the first place it was believed that frame was preferable to masonry construction because of the local liability to severe earthquakes, and it was also believed that redwood, the timber out of which almost all of these houses were built, was practically uninflammable. Of course it would burn; but it burned so slowly that with the aid of a very efficient fire department, it was expected that its effects could be readily confined to the house in which it originated. Moreover, San Francisco had







THE MAIN HALL-RESIDENCE OF GEO. D. GREENWOOD.



THE DINING ROOM WITH THE BREAKFAST ROOM BEYOND—RESIDENCE OF GEORGE D. GREENWOOD. Oakland, Cal.



THE HALL IN THE RESIDENCE OF A. H. TURNER.



THE DINING ROOM IN THE WM. F. GERSTLE HOUSE.



THE RESIDENCE OF MRS. FANNY S. SPRAGUE.

San Francisco, Cal.

Edgar A. Mathews, Architect.

economic reasons for not extending the fire limit to the residential part of the city. Stone, brick, and the labor of putting them together were expensive, and San Francisco decided that it could not afford the luxury of masonry construction. It was anticipated that the legal imposition of more substantial and more expensive methods of construction would constitute too heavy a burden upon the growth of the city.

The consequence was that an architect in San Francisco was not only permitted to erect frame houses, but he was generally compelled to do so by his client. Of late years the proportion of brick and stone houses was increasing, but the increase was not very rapid. On Pacific Heights one would come across frequently houses of almost palatial dimensions and of pretentious and imposing design, which were merely wooden structures, and naturally the smaller houses

were still more frequently of similar fabric. What, then, was an architect of domestic buildings in that city to do? He was obliged generally to design wooden or frame houses in spite of the fact that the most characteristic types of wooden and frame construction were not very well adapted to the social situation of a house front, sandwiched between other house fronts on the streets of a large city.

It cannot be said that the majority of San Francisco architects have in the past been deeply troubled by this problem. It had for them a simple solution, which seemed to be entirely satisfactory both to their clients and to themselves. They would build a wooden house; but they would make it look as much as possible like stone. Instead of covering the exterior with shingles or clap-boards, they would sheathe it with wide smooth boards, and then paint and sand-paper



THE J. BOAS APARTMENTS.

San Francisco, Cal.

Edgar A. Mathews, Architect.

these boards until they had something of the color and surface of stone. Everybody might know it was wood; but everybody also knows that we are all naked beneath our clothes. Local life on the streets of a large city is necessarily a good deal of sham, and the way to do is to carry the sham off bravely—which being translated into architectural terms, means that we are to cover our wooden buildings with all sorts and conditions of pilasters, columns, friezes, and other similar detail. Thus, perhaps, may people be beguiled into believing that wood is not only a good material for a city house, but that it is also a satisfactory substitute for stone. The attempt to convert wood into such a substitute has been more or less assiduously pursued in many different parts of the United States, but in no city or country has it been so persistent or popular as in San Francisco, and nowhere else has it tended to corrupt so completely good architectural manners.

A designer such as Mr. Edgar A. Mathews, who possessed training, good taste, and a sense of responsibility, could not, however, accept this method of evading the difficulty. Furthermore, the fact that wood as a substitute for stone was so popular in San Francisco would naturally lead a vigorous man who disliked such shams, to assert as emphatically as he could his own designs that he not propose to be a party to the cheap deception. He would naturally desire sharply to distinguish both in the use of materials and in general appearance the houses which he designed from the ordinary type, and as the ordinary type consisted generally of a more or less corrupt version of carpenters' classic, it is not surprising that he fell back for the source of his adopted forms upon the early English domestic architecture. Furthermore, such forms could be used with better effect in San Francisco than they could in some other large cities, because of the character and grade of the street frontages. A solid frontage with a uniform sky-line was often impossible to obtain because the houses were as a rule slightly detached one from another, and because the roofs of two adjoining houses might, owing to the slope of a hill, rise to very different levels. Many different conditions consequently tempted an intelligent architect who cordially disliked the current methods of

public very much as your neighbors behave. We all wear much the same kind of clothes, no matter how much we differ one from another in intelligence, taste, and point of view; and in a large city a man should show his individuality rather on the inside than on the outside of his house. But the most confirmed advocate of a decent conformity as the condition of good architecture on the streets of a large city must admit that the archi-



THE M. D. STEIN APARTMENTS.

San Francisco, Cal.

Edgar A. Mathews, Architect.

design and building to embody his own ideas in picturesque and individual forms.

In general it cannot be said that an architect is justified in giving a very free rein to his individual preferences upon the streets of a large city. If there is a local tradition of domestic design which possesses any particular propriety or merit, the architect should conform thereto, because it is the part of good sense and good manners to behave in

tect who began practicing in San Francisco ten or more years ago had good reason to emphasize rather than repress intelligent and well-informed individual preferences. That was the course adopted by Mr. Mathews, and he seems to be sufficiently justified by the event. His houses, just because of the strongly individual point of view, have made a marked impression in San Francisco, and they have helped to awaken among the well-to-do people of that city some conscious-

ness of the extreme decadence of the older San Franciscan residence. At the present time the kind of house which he has designed is even being occasionally copied by speculative builders; and if the result of this imitation is not any happier than it should be, at all events it shows that Mr. Mathews' revolt was too impressive to be ignored. And it is no wonder that such should be the case, be-

as many great and peculiar successes as can be placed to the credit of certain architects in Philadelphia, but evidently this is rather the fault of his opportunities than of his mastery of his chosen forms. A house, where effect is primarily picturesque, cannot look at its best on the streets of a city; and in the case of Mr. Mathews' houses one is constantly surprised that in such surround-



THE RESIDENCE OF A. H. TURNER.

San Francisco, Cal.

Edgar A. Mathews, Architect.

cause again and again his buildings, which are fairly numerous in certain parts of the city, give the passer-by pleasant shocks of surprise. They are different from their neighbors, and they are generally so good.

It can be stated emphatically and without hesitation that Mr. Mathews has used the early English domestic forms as well as any architect in this country. One cannot place to his credit

ings they manage to look as well as they do. The truth is that these forms are a genuine expression of Mr. Mathews' personal way of seeing things. His imagination works easily and vigorously among them, and he uses them with an unfailing understanding of the kind of effect which they are capable of making. His houses are as vigorous and picturesque as you please; but it is distinctly not true to say that their striking qual-

ity is obtained by the excessive emphasis of any single feature, or that their picturesqueness is the result of any looseness of design. On the contrary he composes his masses and places his openings with the utmost care. His designs even have a tendency to become symmetrical, and yet the symmetry is never carried too

and dignity are rarely characteristic of American buildings based on early English models, but it is not too much to say that Mr. Mathews has imparted a certain compact balance to the peculiarly restless forms which he has adopted.

A comparison of the different houses designed by Mr. Mathews which are



THE RESIDENCES OF CHAS. P. ELLIS AND JAMES IRVINE.
San Francisco, Cal. Edgar A. Mathews, Architect.

far. The genius of the style demands that a house of this kind should have its irregularities in appearance, its episodes in the total effect, and in such minor features Mr. Mathews' houses are never lacking. But he knows how and where to use them; and he knows that a building which consists merely of one remorseless and insistent episode, must be deficient in dignity and repose. Repose

illustrated herewith, discloses many interesting uniformities and diversities of treatment. He almost always secures a good æsthetic foundation for his structure by outlining the site with a low brick wall, whose height is determined by the height of the building above the street level. This seems to be a tolerably obvious thing to do, but the necessity of such walls is so frequently overlooked



THE LIVING ROOM—JAMES IRVINE HOUSE.



THE DINING ROOM—JAMES IRVINE HOUSE.

an Francisco, Cal.



THE RESIDENCE OF GEORGE SHREVE.

San Francisco, Cal.

Edgar A. Mathews, Architect.

even by good architects that there is sufficient reason for bringing out Mr. Mathews' persistent desire to define his site and some times construct a pedestal to his building by some good straight lines of masonry. His buildings are consequently well fitted to their lots, and he has an opportunity to make the entrances wear an inviting appearance, and to emphasize their importance. The houses themselves are for the most part

of frame construction, finished with plaster, and among these houses we prefer on the whole those in which there has been no attempt to diversify the surface of the walls by exposing the timber frame. Of course it is not actually the framing of the building which is exposed, and on a city street the plain wall surface, broken only by the necessary diversions in the façades and the window openings, are much to be preferred. The plaster-

coated and concrete building has evidently a great future in this country, and particularly in San Francisco; and Mr. Mathews is doing his fellow-townsmen a great service in placing before them such idiomatic and vigorous handling of this class of construction and type of design. Houses such as those of Mr. Chas. P. Ellis, James Irvine, Wm. L. Gerstle and George Shreve are admirable examples of the adaptation of his-

story wooden apartment houses have been cut up somewhat owing to the looseness of the plan and to the San Franciscan passion for bay windows, but the architect has succeeded well in bringing a good many stubborn and discordant elements into some kind of a harmony.

Mr. Edgar A. Mathews is one of the best examples among American architects of the advantage of remaining



LEON KAUFMAN'S HOUSE.

San Francisco, Cal.

Edgar A. Mathews, Architect.

toric forms to modern uses. The old forms have been given thereby a new value, and an important part of this new value is derived directly from the elimination from the new houses of the ornamental timbers, which no longer have a structural function. Mr. Mathews, however, is no less happy in his shingled buildings. It will be noticed that all of his wooden houses are shingled, and that of Mr. Ackerman is one of the simplest and best of his designs. The two four-

true to one specific type of design. In each large American city there are one or two practitioners, almost always comparatively young men, who have adopted from the beginning the forms which appealed most to their taste, and have constantly expressed themselves in this selected medium. In this way they have captured something of the spirit of the style they used, and they have obtained a completer mastery of its whole technical parapher-



THE LIBRARY—RESIDENCE OF HUGO AND RUDOLPH TAUSSIG.

San Francisco, Cal. Edgar A. Mathews, Architect



THE DINING ROOM—RESIDENCE OF HUGO AND RUDOLPH TAUSSIG.
San Francisco, Cal. Edgar A. Mathews, Architect



THE COUNTRY HOME OF LEON SLOSS.

an Rafael, Cal.

Edgar A. Mathews, Architect.



HOUSE OF GEORGE L. KING.

Edgar A. Mathews, Architect.

Oakland, Cal.



THE RESIDENCES OF MRS. SOPHIE LILIENTHAL AND MRS. BERTHA LILIENTHAL.

San Francisco, Cal. Edgar A. Mathews, Architect.

nalia. They can design out of their own eyes and fingers and minds, whereas an architect who adopts a different set of forms for every house he creates, is obliged to fall back upon the books. Even Mr. Mathews, when he strays from the straight and narrow path and transfers his allegiance to the colonial tradition, does not succeed so well. The three brick houses illustrated herewith are respectable, careful and scholarly examples of colonial work, but they are nothing That sort of house requires a different habit of mind and a different training of the imagination, and it is no wonder that Mr. Mathews loses some of

his vigor and momentum when he forsakes his chosen path. Evidently, however, he has not done so of his own accord; and the fact that he has remained in general so true to his favorite forms accounts in part for his practical as well as for his artistic success. The world soon comes to recognize that such a man stands for a certain thing, and the people who want that sort of thing naturally drift into his office. There is nothing which pays an American architect so well from every point of view as integrity of artistic purpose; provided, of course, that he unites with such integrity both talent and energy.

Herbert Croly.

#### The Hotel Belmont

In the Hotel Belmont at Park avenue, Forty-first and Forty-second streets, recently completed and thrown open for business, New York has added another splendid hostelry to its already rich store. To this monster hotel one might aptly apply the expression for large New York enterprises: A city in itself. On entering it the spectator experiences a sensation as in a large department store: Where shall we go first? There are so many things to be seen in this strictly up-to-date hotel that after seeing them all, one has forgotten half of them, and is unconsciously seeing them a second time. Before going in, let us make a hasty inspection of the exterior (Fig. I.)

In composing the exterior of the Hotel Belmont the architects, Messrs. Warren & Wetmore, have made no attempt to solve the sky-scraper problem, or if they have, their attempt is scarcely noticeable. The general notion of base, shaft and cap has been followed out; a ponderous and rather loud bracketed cornice crowns a composition in which the base appears to have been considered the most important member. It so happens that the large parts of the establishment come within or are brought within the compass of this base, which is the thing architecturally. In it the two great entrance features, one on Park avenue, the other on Forty-second street, with their marquises in glass and wrought-iron, form the eyes, the centres of interest.

In the Park avenue elevation the stone pedimented windows are given such importance that they appear to fight the ironwork for supremacy, and antagonism of the windows and entrance is further emphasized by the negative way in which the intermediate long windows of the first and second stories are treated. The ornament in these pediments which had to be broken to admit it seems to add nothing to the architectural character of the hotel and hardly explains it-The way in which the square croisetted third story windows have been suspended from the flat moulded architrave seems very unsatisfactory; they are not even treated alike. A part of the architrave disappears over the pediment nearest the corner in a most mysterious way, while on the corner pier it is made to run down and return on the bottom on both sides of the pier which consequently looks weakened and ineffectual.

The Forty-second street elevation is more successful; the iron and glass surface is broken up into three parts by two stone piers of slender proportions, but in a satisfactory way, and to contrast with the corner piers which are much broader and look more adequate to do the work required of them than do those of the avenue elevation. The sixteen stories of shaft of the composition offered the architects no particular advantage for architectural effect, except in the fenestration, which is well managed, setting off the corners of the building by the greater distance apart of some of the windows, but the little balconies which occur on both elevations at the fifteenth and seventeenth stories might better, we think, have been left off, as they do not serve any visible artistic function or at least fail to give their reason for The larger balconies of the being. twentieth story are better conceived; they plainly serve as a head for the middle group of windows in their respective elevations. One feels perhaps that the soffits of the balconies might have been made more of and that the balconies themselves might have been designed to cover the middle window grouping completely instead of stopping a module short on each end. We have now reached to the height of the stringcourse, down to which hang great copper garlands that are fastened to enormous brackets in the main cornice. These hanging bunches if conceived in the spirit of ornament cannot be too strongly condemned; but if designed with the idea of breaking up into vertical panels the long horizontal frieze-band, as it were, they are good; but granting the latter to



FIG. 1. THE HOTEL BELMONT, AS SEEN FROM 42D STREET AND PARK AVENUE.

Park Avenue, 41st and 42d Streets, New York.

Warren & Wetmore, Architects

be their purpose, could not the result have been obtained by more suitable means? We think pilasters or raised panels would have answered the purpose equally well besides being more appropriate features.

These upper members and in fact everything on the building is so large that it is impossible for the spectator Let us enter by the Forty-second street entrance. We are at once in a spacious two-story lobby (Fig 2) with an interior staircase, the second story forming galleries around three sides and affording excellent lounging space amply provided with comfortable chairs from which patrons can see down onto the lobby floor and still be out of the bustle



FIG. 2. THE MAIN LOBBY OF THE HOTEL BELMONT.

ark Avenue, 41st and 42d Streets, New York. Warren & Wetmore, Architects.

o properly see all of it at a glance. But his disadvantage is shared by most tall uildings in New York, and therefore hould not be allowed as a peculiar disdvantage in judging it as a piece of ommercial architecture. Many other ttle points of interest might be picked ut on the exterior, but space forbids; we shall endeavor in a few lines say a little about the decoration and rchitectural treatment of the interior. of the moving crowd, a very admirable piece of hotel planning (Fig. 3). The decorative treatment of the ceiling and wall surfaces calls for less enthusiastic praise. The piers, ceiling and ceiling beams are treated in artificial Caen-stone with the joints marked off in white. Supporting the beams and on each side of the piers which look quite able to support their loads, there have been placed ponderous Atlas-like figures executed in



white staff. Aesthetically one can find no excuse for them, nor do they give any particular character to the room. Even as architectural ornaments they fail to lang together, springing as they do from ittle trivial pilasters, the intersection of which with the figures has been but lawkwardly concealed. Passing through the lobby and through the corridor on the Park avenue side, one emerges into the

entrance lobby has balconies on three sides, but instead of sculpture, the entire surface is elaborately frescoed, pale blue and green being the predominating colors. The effect is rather cold and uninviting, though perhaps it may attract in summer. The brilliant chandelier of cut glass in the centre forms the most attractive spot of decoration in a rather expressionless interior, but unfortunately



IG. 4. THE PARK AVENUE ENTRANCE HALL AND STAIRCASE.—THE HOTEL BELMONT.
rk Avenue, 41st and 42d Streets, New York.
Warren & Welmore, Architects.

there entrance hall (Fig. 4) which controls a pretentious and ample staircase inning to the third story, and the elevtors which run all the way up (Fig. 5). The floor, walls and supports are treated red marble and produce an effect so referent from the entrance lobby we have just left that we can scarcely betwee we are still in the same building. The view beyond shows the end of the ching room (Fig 6) which, like the

that was draped when the photograph shown herewith was taken. The floor is richly carpeted and the furniture and curtains are simple and appropriate in design and color. We retrace our steps into the entrance hall and go up to the second floor to the banquet room which, unlike the rooms we have thus far noted, is small for such a large hotel; it has a ceiling of plain gold, and mirrors on all sides, somewhat counteracting its small-



FIG. 5. THE ELEVATOR ENCLOSURES ARE TREATED IN MARBLE AND THE DOORS ARE COVERED WITH MIRRORS-HOTEL BELMONT.

Park Avenue, 41st and 42d Streets, New York.

Warren & Wetmore, Arch



FIG. 6. THE DINING ROOM—HOTEL BELMONT.

Park Avenue, 41st and 42d Streets, New York.

Warren & Wetmore, Arch

ness. Red is the predominating color in the furniture and draperies, which here as elsewhere are simple and appropriate.

If we had space and illustrations we night explore the upper floors, but unfortunately we have neither at our imlobby and the dining room. It is an attractive room, monumental in treatment with great red columns clustered around massive piers supporting highly decorated arches and entablatures. The arched ceiling is treated in Caen-stone with festoons and cartouches in gay colors and



FIG. 7. THE PALM ROOM, LOOKING TOWARD THE DINING ROOM—HOTEL BELMONT.

ark Avenue, 41st and 42d Streets, New York. Warren & Wetmore, Architects.

lediate disposal, so we shall take an eleator from the main hall and ride down o the first floor again; and before we nish our inspection we must just glance nto the palm room (Fig 7), which lies etween the main (Forty-second street) gold. We walk through the palm room and are again in the great lobby with people bustling hither and thither, confirming our impression of vastness which we cannot have failed to get from what we have seen. H. W. Frohne.



HOTEL DEVON.

Nos. 70-72 West 55th Street, New York. Israels & Harder, Architects.

# NOTES & COMMENTS

TWO STORES IN CHICAGO One of the many extremes which characterize various phases of American life is the craze for unjustified pretensions. It is not so much a quality of the typical American as it is his lack of confidence

when he finds himself on unknown ground and so depends on foreign influence. This has brought about those strange architectural products, which serve a home-grown purpose, but borrow their forms from foreign buildings where these same forms were justified by their natural but entirely different conditions. There are palatial stores, palatial newspaper buildings, even palatial "homes," temple-banks and libraries, Roman railroad stations and Greek museums; but only too seldom is a building found which expresses clearly its utilitarian purpose.

It is precisely this rare quality which attaches an especial interest to the two stores presented in the following illustrations. They occupy two adjoining lofts on the ground floor of the First National Bank building, Chicago. They are conceived as stores and as nothing else, and avoid consciously any misplaced monumentality. Both of them are intended to serve as an advertisement which justifies to a degree the capriciousness in the design.

Generous funds did not tempt the architects to use a classical order with a disproportioned entablature, caused by the height of the show window, but they adopted a straight-forward treatment of plain wood panels, which enabled them to use freely all available space for show cases or closets.

Messrs. Jobson and Godfroy, designers for the Pullman Car Co., are experienced in handling smooth surfaces, which, through the modern hydraulic process, are easily and well executed. In planning the cigar store, they were satisfied to show the beautiful grain of the cocoanut wood which they enriched by inlaid colored glass, and these new materials, treated freely in design and by modern methods, preserve a modern spirit in the whole.

Such plain interiors necessitate a particularly careful choice of color; in this instance the keynote is given by the greyish-brown of the highly polished wood and the pale and smoky blue of the painted frieze. The inlaid mosaic is in white, blue, green and gold, which colors appear again in the stained glass of the showcases and in the shades of the light fixtures. The ceiling is treated in a clearly decorative but not very happy beam effect, and the plaster panels between are toned in yellow ochre with a stenciled pattern in green and gold.

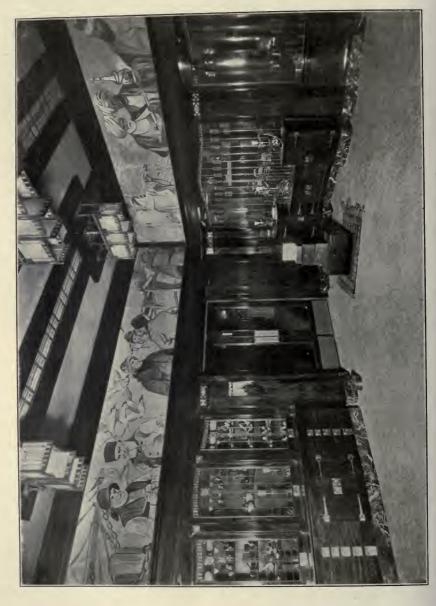
The narrow passage in the rear is separated from the store room by a glass partition with double sash; this latter is provided with a sprinkler arrangement which automatically regulates the amount of moisture necessary for the preservation of costly cigars. The splendid execution of the cabinet work is to be credited to the Pullman works.

The clothes store for Messrs. Meyer and Simon was planned by Horatio Wilson in Chicago. In comparison to the former design, which shows local influence and the study of modern German work, this latter store leans slightly towards modern English examples. The principle in both cases is to avoid any detail resembling stone forms, which forced the architects to preserve in their design the characteristics of wooden board. Shelves are treated as shelves, not as cornices; even the carved screen is kept in the thickness of a board, and where boxes are used they appear as such and not as solid.

Such honesty leaves no room for sham and does away with applied carved ornament or composition and papier maché.

The store consists of one room and a small mezzanine workshop in the rear. It was evidently the desire to create for a men's clothing establishment the same privacy which is so very characteristic of women's millinery and clothing departments. This does away for once with the homely display of stock on long tables which is the usual feature. Instead, wardrobes provided with sliding racks and hangers are arranged on three sides of the room. On the fourth wall an ice water fountain is placed between show-window and door.

The general color scheme is formed by the dull finished light brown oak panels, the gold brown stain of the plaster parts, and the green of the carpet, leather coverings and lighting features.





Chicago, Ill.

Occasionally woodwork or wall surface is decorated with a slightly tinted and flatly modelled rose motive, and this latter is repeated on the tables, the marble fountain and the mosaic back of it.

Although there is nothing extraordinary about these two stores, they demonstrate a remarkable desire for honesty in regard to the utilitarian purpose and the treatment of materials. This and the courage for independence in design places them above many costly and highly-praised specimens of the conventional type.

ROBERT A. RAETZE.

# THE UNIFORM DESIGN OF REINFORCED CONCRETE

Reinforced concrete, although the most popular form of fireproof construction at the present day, is a veritable chaos as to its design.

Quoting from a recent publication: "Many sys-

tems are patented and it is a common matter for designs to be furnished free, contingent on the designer's patent being used."

This seems to be an unnecessary state of affairs. Reinforced concrete should be standardized. Structural steel construction has been standardized until all mills roll the same sections. Standards devised by the various steel companies are practically uniform. There are no patents to speak of, and all designers uniformly adopt the standard sections rolled, and specify the uniform connections.

There is no reason why reinforced concrete should not be brought to the same state of uniformity.

It is true that there are at present a great variety of so-called "systems" which have more or less merit, but it is also true that perfect construction can be and is every day being devised, which does not use patented forms or methods.

Standard methods should be adopted in such a form that the architect, engineer or contractor, is made entirely independent of the so-called patented "systems," and at the same time the standards should be arranged so that where it is shown profitable, a patented section could be substituted for the reinforcement shown upon the plans of the designer.

Until some systematic action is taken to standardize reinforced concrete, designers will be handicapped by the necessity of specifying some particular "system," or leaving the plans open to a free-for-all scrap as to who can do the work for the least money.

# THE ARCHITECT AND REINFORCED CONCRETE

"What is the position of the architect to-day?" This question has been asked by nearly everyone in the profession. Is the architect to be the agent of the contractor; is he to be crowded out of the busi-

ness by those who "design and build," or is he going to maintain his old time prestige, and stand firmly for his rights as to the character of construction which is to go into the building under his management?

These questions must be settled once and for all, if the architect is to maintain his self-respect and the confidence of his clients.

At the present time there are comparatively few architects who undertake to show upon their own plans the methods which must be followed in the construction of the reinforced concrete portions of the building under consideration. It is explained that the good methods are all patented and it would be wrong to show any one system. This is true only to the extent that no contractor should not be given a preference by the specifying of his system. "There are just as good fish in the sea as have ever been caught," and the architect should assert his independence by showing upon his plans what he knows to be a good form of construction, and free from patent royalties.

This may mean considerable study to some, but to those who prove themselves capable it will mean a restoration of prestige not now enjoyed by many.

Competition where cost is to be the deciding point, and design the battleground, is to say the least, "penny wise and pound foolish," if not actually amounting to criminal negligence.

Where designers are to be awarded a contract for producing a design costing less money than any other, it is needless to say that one will probably be adopted in which the insufficiency of material is the principal source of economy.

Numerous examples of failures, often resulting in death, have proven the "penny wise pound foolish" principle of procedure. Architects should keep before their minds the fact that they are held professionally and criminally responsible for designs under their supervision, and that no amount of bonding will excuse a contractor from not knowing that the design is incorrect.

The only safe, professional and self-respecting method to follow is for the architect to educate himself to a position where he can design as he would in structural steel, and permit of no tampering with his

design in the interests of economy in any way which would decrease the stability of the structure or jeopardize his professional standing.

THE 25TH

The School of Archi-YEAR OF THE tecture of Columbia Uni-SCHOOL OF AR. versity has just closed the CHITECTURE twenty-fifth year of its active existence. This of COLUMBIA year has been a period of UNIVERSITY special interest not only to the school but to the

profession at large, because it has witnessed the carrying into execution of several measures and new methods of administration which have attracted rather widespread attention. It may not be generally known that some three years ago the trustees requested a number of architects of prominence in this city to visit this school and report upon the efficiency of its methods and make such suggestions as the investigation might suggest to them. The letters received in reply to this invitation were then referred to the staff of the school for examination and report. While many of the suggestions contained in the letters were found to be either impracticable or based upon incorrect information, certain others were strongly approved, and to these the members of the staff added their own suggestions.

The recommendations resulting from this exchange of ideas were in course of time all approved by the president and trustees, and have been since carried into effective operation. A somewhat detailed account of them is to be found in the June Columbia University Quarterly. There is space here only to refer to a few of them. The old division into classes has been abolished. The course in architecture is now of indeterminate duration, dependent upon the ability and indus-The requirements in try of the student. each branch of study are stated in "points" so that if one student is able to acquire the necessary proficiency or knowledge in a shorter time than another he can profit by this superior ability and complete his course in a correspondingly shorter period; while the student who has less time at his disposal or who works in a more deliberate way is exposed to no discredit if he take a year or more longer to complete his course than another student. In the work in design and in drawing this has brought especially happy results. There is no more "back work" to make up; failures in one design or one drawing can only be made up by acquiring more points—that is a higher award-on the next design or set of drawings, and the stimulus is always towards a higher standard of performance.

Not more radical as an innovation, although it has attracted wider public attention, is the establishment of two downtown ateliers, so that the University now maintains three drafting rooms; one under Mr. Charles F. McKim, assisted by Mr. J. R. Pope; another under Mr. Thomas Hastings, assisted by Mr. J. B. Van Pelt; and a third at the University itself under Mr. W. A. Delano, assisted by Mr. A. H. Gumaer. The programs are given out by a joint committee of instructors of the three ateliers, and the designs are judged by a jury consisting partly of these instructors and partly of practising architects specially invited each time. The result has been the introduction of a quite new element of friendly emulation and enthusiasm into the work in design, while the advantage of having six instructors instead of one or two is too obvious to need further emphasis. The work in design of the school for the past year will be exhibited in the Model House, near Havemeyer Hall, during the week of commencement (June 11-16). It is hoped also that arrangements may be made for a much more extensive joint exhibition of the work both of students and graduates of the school during the coming fall season.

The school has now become an organic part of the new Faculty of Fine Arts, established by the trustees at their meeting in March, in affiliation with the National Academy of Design and the Metropolitan Museum of Art; the president of the academy becoming a member, ex-officio, of the new Faculty, which is being organized upon an extremely broad and liberal basis, giving adequate recognition both to the technical or studio side of art and to its theoretical and intellectual side. This is simply the culmination of the movement begun by Prof. W. R. Ware, the real founder of the School of Architecture, whose effort from the earliest days of the school was directed towards emancipating it from the unduly strict and hampering control of the scientific faculty with which it was at first, as a measure of administrative convenience, connected. No one of the new measures or methods of the School of Architecture has superseded or suppressed any of the fundamental principles which Prof. Ware considered essential to the success of an American School of Architecture, and all the wider and broader developments of its activities have simply confirmed the breadth and far-sightedness of the foundations laid down by Prof. Ware.

A. D. F. HAMLIN.

THE ARCHITEC-TURAL TRAINING

Much has been said and written about the architect and various phases of his professional life, but DRAFTSMAN scarcely any one has yet WITH SCHOOL raised his voice in defense of the architect's emthat sometimes ployee,

snubbed but very useful and often indispensable person, the draftsman.

In this discussion it is proposed to speak only of the man who through some advantage or through hard work has really tried to improve himself by studying the art of architecture in some recognized school. course this classification does not include many men who are just as capable and equally deserving of success and who have acquired their professional knowledge in some other way, but they in the very nature of things are exceptions, and for that reason may properly be omitted.

How many young men are annually turned out of the various architectural schools of the land, some of them the sons of people in moderate circumstances, who have been able to give their sons the advantages of an education which they deserve, and others who have had to pitch in right after leaving the grammar school or the high school and earn their own living, tracing details in an architect's office and gradually acquiring a commercial value to their employer which after several years has finally enabled them to save enough money to pay their way through the professional school, and this only in cases where they had kept up their academic training and were able to pass the necessary examination; many others started, got discouraged and fell in the struggle. But it is of the successful ones that we speak; of those fellows who have fought long and hard and who have finally won out. We mean to include also the men who have had even the greater advantage of foreign study and travel.

What happens to all these men after they leave school? Let us follow them from the beginning of their career. They get a job, perhaps, through the school or through their professor. They don't get much pay for a year or so, but gradually catch up with the office-taught man. By reason of better training they are enabled to do more individual and independent work and get along admirably for a time. Then there comes a lull, the office force is very large, work gives out and the men are laid off one by one; finally our subject's turn comes. He has got accustomed to the place and feels rather hard hit; he looks for another job and finds that the people are not as nice to him or as ready to listen to his story as he has previously found them. They ask him many questions, to some of which he must give evasive answers or fail of his purpose.

He gets his first real hard rub, and very often from people who have been through the same mill but who have utterly forgotten the fact, in their altered circumstances. Thus the draftsman goes along sometimes for years, getting experience, it is true, all the while, but with small opportunity to improve his condition.

Even if he is lucky and strikes a steady job, what chance has he for making friends who will be able to help him set up his own office some day? He is cooped up all day long in the office and sometimes many evenings, too, always pushing the pencil (only few get the chance to superintend their employer's work), and in some cases men have been designing for years and don't know their own work when they see it afterwarda truly sad state of affairs.

If the office be a very large one, the men are apt to be specialized, e. g., a man is good on plan, on elevation or on ornament. He is kept working on his specialty to the exclusion of other parts of the work, thus helping to nullify the valuable training received in school of studying plan, elevation and section together. Of course, this scheme in school is very easy to work but often impracticable in an office, especially on a very large job. There is, nevertheless, a tendency of the architect to get as much out of a man commercially as he can, irrespective of its effect on the man, and for this reason alone many men are continually changing Every now and then one meets a offices. friend who used to be with a certain firm and who informs you he is now working for Mr. C. He explains: "You see Messrs. A. & B. are very nice people, but they seemed to think I was particularly useful to them in arranging their business with the building department, so they kept me busy filing plans and making amendments. I didn't mind doing it once or twice, but I felt that they were taking an unfair advantage of me, so I got out. Mr. C. does not get such important work, but I get a chance at many things; sometimes I have entire charge of a little job. It isn't much, but I get a chance to apply some of my school training in solving a complete problem. I feel that my employer has some interest in my welfare besides expecting so much work of me."

The relation between employee and employer is often a false one; both have had good training, and sometimes the draftsman has superior ability, but, of course has to do as he is bid, but the question is one rather not so much what the boss says, but the nasty way he says it. draftsman gets a piece of work, say a plan: he is told to make it at 1/16-inch scale; there are streets on two sides; the building is to be a hotel; his employer gets the plan when it is finished, and does not further take the author into his confidence. The draftsman, being human, feels hurt, and justly so. Other instances could be cited to show that the relation between the architect and his draftsman is not one of entire confidence and harmony, and too commercial. The draftsman is willing to work at all hours just to keep on the right side of his employer, who does not always reciprocate to the same extent.

At best the situation is a very difficult one, and so much more easily deplored than remedied, and it must be said in justice to the architect that he has realized how serious it really is and how vital the draftsman is to the success of his business; yea, even to his profession. For when he gets big work and lots of it he can, of course, give only a general supervision to the various problems that arise; for the actual working out of the details he must depend upon his draftsman. To secure themselves against being left in the lurch, as well as to help the men, some architects have a practice of lending one another draftsmen when the occasion demands it, but even this scheme is not altogether successful from the architect's standpoint, or very helpful or pleasant for the men.

The architect's living, his business, is precarious: he never knows from one month's end to the next where he is at, and unless he be willing and able to take financial risks the same condition of uncertainty must reflect to his employees. H. W. F.

"Architectural Hardwood Finishing," by George Whigelt (The Painter's Magazine, 100 William St., New York City, publishers), is a technical handbook that may well be found of much value by architects and architectural students. Its contents deal with "trade" methods and practices-sandpapering, staining, the preparation of stains, wood-fillers, varnishes and varnishers-and gives the reader a large amount of valuable and thoroughly sound information, not to be found elsewhere in a form so condensed and handy.

#### THE FINE ARTS SCHOOL

There seems to exist in the popular mind a misapprehension as to the project mentioned some time ago in the art journals of New York in relation to the Proposed Fine Arts School. The scheme con-

templates co-operation of the National Academy of Design with the School of Fine Arts at Columbia University. Somehow the notion has got abroad that the National Academy is to be absorbed by Columbia University. No such move was contemplated by either institution. Their aim is to supplement each other's work, giving the academy student, who in most cases has not had the educational advantages of his University neighbor, some of the spirit and academic training of Columbia, while the Columbia student gets in return the benefit of instruction in the fine arts by some of the greatest masters of our land, besides the example set by the older Academy students, who must needs possess greater skill, especially in the manipulation of the material, than their college co-workers who enter on the work more as a secondary issue. To enforce our meaning we think that the mutual relation of ancien and nouveau will be established by the working together of the two schools; in the academic branches the college-taught man will set the example and help the less tutored but equally intelligent and practical art student, while the art student will set the pace, as it were, in the actual handling of the tools and the colors. The University man will supply the theory; the art school man the practice; working together should be of mutual benefit to them, and result in a more satisfactory solution of the fine arts education problem.

CURRENT

There are developing very interesting pamphlet and periodical literatures IMPROVEMENT on town and city improvement topics. Of the lat-LITERATURE ter the Architectural Record itself offers examples. But the interest

of architects in this matter is so logicaleven so inevitable—that the devotion of space in this journal to the discussion of "improvement" subjects has not the significance that it has in magazines of a more general scope. Apart from the significance, however-and considering note, comment, record and discussion by themselves-the monthly output of improvement literature by the magazines is assuming large pro-

portions. The collecting of bibliographical data for a year or more has revealed an average of fully twenty such articles every month, barring out those which, dealing with a single horticultural or a single architectural topic, have been arbitrarily put aside as not sufficiently distinctly and broadly of "improvement" interest-a disqualification, by the way, that more nearly approaches justice in theory than in practice. For a type of the better class of articles in the non-technical periodicals one may consult Sylvester Baxter's contributions to The Century. In these there is always a blending of good sense and correct artistic feeling.

FAIRMOUNT
PARK
ART
ASSOCIATION

The report of the Fairmount Park Art Association, of Philadelphia, has always interest—as the record of a very remarkable society. It is in its thirty-fifth year, has a membership of over eleven

hundred, and investments and cash to the amount of \$127,570-after making to the city a long list of noble gifts. Clearly, it is a power. This year's report is more interesting than usual, both for what it chronicles and what it promises. The year has seen the erection of the following: Near Lansdowne Drive and Belmont Avenue, a monument to Anthony J. Drexel-the seated figure in bronze and the pedestal of dark marble. It is the work of M. Ezekiel, of Rome, and is the gift of John H. Harjes, of Paris. Mr. Drexel was the first president of the association, and that was the only position in the nature of a public office that he held. In the sunken garden near Horticultural Hall there has been placed a beautiful sundial, the work of A. Stirling Calder, and anonymously given to the city through the association. Near the Lotus Pond, between Horticultural and Memorial Halls. there has been placed the ancient and beautiful Temple Gate, which was in the Japanese government's exhibit at St. Louis. The gate, and the temple's contents, are the gift of John H. Converse and S. M. Vauclain, through the association. The statue of M. W. Baldwin is now in course of erection, and progress is being made in the efforts to secure memorials to Robert Morris and to Ericsson. Thus the society is exercising an historical as well as purely æsthetic function; and though one involuntarily looks askance at movements to put sculpture into parks, the sites in this case seem to be chosen with irreproachable taste. As to the report's discussion of the future, the report of the directors promises a distinct change in policy, very significantly saying: "Our activities may perhaps be quite as profitably directed in the future towards the promotion of plans for the development of the city in all that relates to the improvement of its general plan, . . . the development and adornment of its parks, parkways and public places, the abatement of unsightly nuisances, the preservation of places of natural beauty and historic interest, and the co-operation with organizations of a similar purpose throughout the country, as with the acquisition of individual works of art or the adornment of any particular locality." The directors then state their belief that a first duty is the urgent advocacy of the appointment of a City Improvement Commission and of an Art Commission.

We wish to correct errors on page 12 under the advertisement of the Grant Marble Co., of Milwaukee, Wis., also on page 437 and following pages of the June issue. On these pages we have attributed the Indianapolis Court House and Post Office to Mr. James Knox Taylor, Supervising Architect for the Government, who is good enough to inform us that this building came under the Tarsney Act, and was won by Messrs. Rankin & Kellogg, architects, of Philadelphia, in competition, and that he had only a supervisory interest in the building. We take this means to express our regrets as well as to place the credit where it belongs.

Page 476 of the June issue shows a picture of the Majestic Building in Chicago, of which Mr. E. R. Krause is the architect. The authorship was erroneously ascribed to Mr. A. G. Zimmermann, who in justice to Mr. Krause has kindly informed us of the error.

In the March issue in his article on "Mr. Sturgis' Last Book," Mr. La Farge wishes to offer an explanation of the phrase on page 202, "what an ass the great Mr. Bouguereau must have been." He says that This phrase had direct reference to the anecdote once well known in the Paris studios.

It appears that St. Peter rapped at the door of the private room of *le bon Dieu* and stated that there was some one there who desired to see his Majesty.

"Is it a seraph?"

No. Sire, it is not a seraph,

"Is it a throne? a domination? a virtue? a power? an archangel?"

No, Your Majesty; he says that he is la Perfection meme.

"Oh, c'est cet animal de Bouguereau."
Oh, it is that ass of a Bouguereau.)

## Ready Mixed vs. Shop Mixed Paints

There is a professional prejudice against ready mixed paints, while there is a decided popular opinion favorable to them. It is easier to account for the latter than for the former. The public judges by results, the professional man, too often, from theoretical grounds or

from precedent.

On the face of the matter the probabilities are all in favor of ready mixed paint and against the shop mixed product. The former is the result of accumulated and multiplied experience fortified by technical knowledge—the latter a product of tradition, inexact methods, and necessary ignorance of technical conditions. As a class, painters are resolutely opposed to the use of these modern factory products. In some cities the local associations have adopted resolutions binding themselves mutually not to apply them. Is it a spirit of philanthropy or of scrupulous probity that prompts such extremes? Perhaps so; but such a conclusion is open to suspicion.

As a matter of simple fact this widespread opposition is prompted by two considerations: First, the assumption that the convenience and comparative cheapness of ready mixed paints will deprive the painter of his profit on part of the materials used in painting and on the labor employed in mixing them; and second, the less excusable opposition to any material that lasts too long and thus defers repainting. The lastmentioned motive probably prevails to a far less extent than the first.

In the country and the country towns of 1,000 inhabitants or fewer, probably two gallons of ready mixed paint are used to one gallon of shop mixed; in cities of five thousand inhabitants and upwards shop mixed products are the rule. The reason for this disparity is found in the fact that in the city the architect rules the specification, and the painter (or what amounts to the same thing, painters' tradition) rules the architect.

Note the sweeping condemnation of the Painters' Associations, embracing in one category of denunciation every mixed paint, of every type and kind. Painters who openly boast of their superior success with certain proportions, let us say, of zinc and lead, crudely combined in a paint bucket, condemn among mixed paints precisely the same formula ground to uniformity in a paint mill with oil and driers that are necessarily above suspicion; whereas the oil and driers bought by the painter in the open market are

generally open to question.

Paint, no matter what its character or composition, will sometimes fail inexplicably. This is true of hand-mixed lead and oil as well as of the most approved brands of ready mixed paints; but the records of actual service—not isolated records, but a mass of experience all over the country—will show a far higher average of durability (and consequently of economy) for the better grades of ready mixed paint than for shop mixed paint. Moreover, the painter, who without evidence of data condemns any ready mixed paint, simply because it is ready mixed, is an irresponsible and unsafe adviser.

It is the record and repute of a product that counts in every case where technical standards are lacking. This is peculiarly so with paint. The American Society for Testing Materials are only now endeavoring to gather data regarding the serviceability of the several types of protective paints for steel, and no one of standing has attempted to define the factors governing the service of paints for wood surfaces. Until these standards are determined there will always be more or less floundering; but the records are available, and these records, empirical though they are and in the hands of interested manufacturers, nevertheless are so abundant and convincing that they leave no room for doubt of the superiority of the better grades of ready mixed paints over shop mixed lead and oil.



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