



VOL. LXXXII

SATURDAY, OCTOBER 17, 1903

Public Library,
RECEIVED,
OCT 22 1903
Washington, D.C.

No. 1451

CONTENTS.

SUMMARY:—

Effect of the Cost of Labor and Materials on next Year's Work.
— Trade Union Combination against others "unlawful" in Pennsylvania. — Mr. W. De L. Dodge's Mural Painting to be left unaltered. — The St. Louis Plasterers now rank themselves as Sculptors. — The Work of the American Anti-Boycott Association. — Derivation of the word "Boycott." — Union Labor Threatens an Assault on the Savings-banks. — The University of California's Open-air Theatre. — Reforestation in Southeastern France.

COLORED BUILDINGS. 17
THE USE OF CONCRETE-STEEL CONSTRUCTION IN NEW YORK. 19
THE LANDSCAPE ARCHITECT. 21
THE LION, AFTER THE "PHYSIOLOGUS." 22
BOOKS AND PAPERS. 22
SOCIETIES. 23

ILLUSTRATIONS:—

Simmons College, Boston, Mass. — Preliminary Study for the Texas Presbyterian University, McKinney, Texas. — Entrance Gate and Lodge to the Samoset Grounds, Rockland, Me.
Additional: The Governor's Room: Rhode Island State-house, Providence, R. I. — Warehouse: No. 10 Kronenstrasse, Berlin. — Entrance to Crypt. Cathedral of St. Juvenalis, Narni, Italy. — Sketch for Library, Rumford Falls, Me. — House of William H. Oakes, Esq., Waban, Mass. 23

COMMUNICATION:—

"The Skull and Bones Club-house": A Correction. 23

NOTES AND CLIPPINGS. 23

THERE is no doubt that the next season will see a reduction in the cost of building. The prices of many materials have fallen off already to a very considerable extent, and there is a feeling that further concessions can be obtained by those who are ready to purchase for cash. The cost of labor remains nominally unchanged, and, until a reduction is made in wages, there is not much probability of any revival in business; but the non-union man is beginning to hold his head up timidly, and a great host of the best class of mechanics, who are tired of being dragooned by noisy grafters, and long for an opportunity to work for whom they like, as long as they like, and for what wages they can earn, and to take their proper place in the community as self-respecting citizens, are anxiously watching to see what becomes of him. Meanwhile, building is almost at a standstill in all the large cities and other places where the walking-delegate is rampant. Although this condition is trying for those whose living depends upon employment in building, it carries with it the compensation that the demand for houses, stores, factories, offices and tenements is slowly overtaking the supply, and if a substantial reduction in the cost of labor next spring should start a revival in business, as is likely to be the case, it may, if not interfered with by the walking-delegates, be a lasting one.

IT is curious that one of the most sweeping decisions yet given against trades-union tactics in Philadelphia, a stronghold of unionism, has been rendered by the Pennsylvania Supreme Court in a controversy between rival unions. The Allied Building Trades organization of Philadelphia undertook to force the Plumbers' League, which was not "affiliated" with it, into the fold; and, for that purpose, began the usual course of persecution, with strikes and boycotts. The Plumbers' League resisted, and applied to the courts, which have decided on final appeal, that "Trades-unions may cease to work for reasons satisfactory to their members, but if they combine to prevent others from obtaining work the combination is unlawful." This, therefore, is now the law in Pennsylvania, and it is likely to be extensively applied.

MR. WILLIAM DE LEFTWICH DODGE, the mural painter, has won his case against the Allied Arts Company, an injunction having been issued, restraining the company from interfering with his pictures in the King Edward Hotel, in Toronto. Although this is, probably, rather a barren victory for Mr. Dodge, he has, at least, upheld the right of artists to have the work for which they are responsible left unchanged. As we understand the decision of the Court, the law would not prevent the owners or custodians of a picture publicly exhibited as the work of a certain artist from altering it to suit themselves, but it would forbid them to show it, after such alteration, as the work of that artist, and would, perhaps, award the artist damages for the injury done to his reputation by the exhibition, under his name, of a work so altered. On

the whole, this is a great gain for art. It is very difficult for the public, in this country, to understand that the difference between good and bad art is measured by the breadth of a hair, and that the work of an artist, unless it is completely respected, ceases to be his work. Architects have many occasions for remembering this principle. In fact, no works of art are so ruthlessly mangled as designs for buildings. Even if the owner is enlightened enough to refrain from changing the arrangement of the windows, or the height of the roof, the contractor usually makes these alterations, with others, as may best suit the length of the timbers that he happens to have on hand, or the width of his clapboards, or the size of his bricks, or other circumstances, without saying anything either to the owner or the architect. It is very difficult for the latter to detect the changes in a building surrounded by a mass of staging, and, when the staging is removed, it is impossible to correct the faults without reconstructing the building, and thereby involving the owner in loss and delay.

THE most interesting labor incident of the last week is, decidedly, the intrusion of the St. Louis plasterers among the sculptors of the World's Fair buildings. As all our readers know, much more is to be done with sculpture at St. Louis than has ever before been attempted at any exhibition in this country, and many of the best American sculptors, including a large party of younger men, are busily at work on their plaster groups. Some of them are already finished, and have been shipped to St. Louis for setting in place. On their arrival there, a considerable proportion of them were, as is usual in such cases, found to be chipped, or otherwise damaged, and Mr. Bitter, the general Director of Sculpture, applied to the St. Louis Modellers' and Sculptors' Union for men to make the necessary repairs. No sooner had the modellers undertaken the work than all the plasterers employed on the Exposition buildings struck, on the ground that, as the statues were of plaster, they were the proper persons to "point them up," and threatened, unless the job were taken from the modellers, and given to them, to call a strike of all the union workmen, of every kind, on the buildings. The Director of Public Works was appealed to, and decided in favor of the modellers, but his decision was completely ignored. Then the Missouri State Board of Arbitration intervened, gave public hearings at which both sides were represented, and finally gave its award in favor of the modellers. The plasterers ignored this award as completely as they had Mr. Taylor's decision, and continued their threats. Then Mr. Bitter, in despair, was misguided enough to think that he could appeal to the courtesy and common-sense of a labor magnate. He wrote to the President of the Plasterers' International Association, setting forth the ridicule and disgrace which would be brought upon American art and American workmanship by the spectacle of goddesses with their arms patched with neat rule joints, or the missing portions of their drapery replaced by handsome cornice-mouldings, and begging, in the interests of all the citizens of this country, that the costly sculpture work, on which half a million is to be spent, might be repaired by some one with at least some feeble qualifications for such work. No one who knows anything of the dominant element in the unions needs to be told what the result of the appeal was. Taking it simply as a confession of weakness, the President of the International Association, after keeping the Exposition authorities waiting, with characteristic union insolence, for more than a month before making a reply, sent an answer that all the work should be done by common plasterers.

THUS ends, in the shameful ruin of what was intended to be the most brilliant display of American plastic art ever seen, a series of mistakes in dealing with the unions at St. Louis. The uniform policy of these organizations, or rather, of those who manage them, is, where they are offered an inch, to take an ell. They ought never to have been offered an inch, but the Exposition authorities, moved, apparently, by that sickly sentimentalism in favor of organized labor which politicians affect, undertook to conciliate the unions at the outset, in the hope of avoiding those scenes of extortion which have accompanied the completion of most recent Exposition schemes. They might as well have attempted to

conciliate a gang of pirates. The only effect of their demonstrations was to show their timidity, and to put them more completely in the power of the harpies. How ruthlessly this power will be exercised is shown by the present example, and we shall be much mistaken if there are not many more demonstrations before the Exposition buildings are opened to the public.

THE case of Loewe & Co. against the Hatters' Union, and the National Federation of Labor, and various individual members of these organizations, to recover damages for loss due to a boycotting conspiracy, is backed by the American Anti-Boycott Association, and will, undoubtedly, be pressed to final judgment. Naturally, the labor leaders are a good deal agitated over the matter, as an unfavorable decision would take out of their hands the weapon with which they have for many years clubbed or threatened the rest of the community into submission. It is said that they rely, for defence, upon what they allege to be the fact that neither common nor statute law in any State prohibits the sort of conspiracy known as boycotting; but it is probable, in the present state of the public mind, that laws enough will be found applicable to the case when the time comes to look for them.

IT may be interesting to recall the etymology of the word "boycott," and the circumstances under which it came into use. Some twenty years ago, when "political" agitation in Ireland consisted chiefly in the assassination of landlords or agents, a well-to-do farmer named Boycott happened to incur the ill-will of the ruffianly peasants around him. Attempts to shoot him from behind a hedge were attended with the inconvenience that he usually went armed, and the cowardly assassins ran some risk of a shot in return; so these worthy gentlemen adopted the safer course of starving him, by threatening with assassination every one who brought him supplies, or had any dealings with him. The plan was, very probably, devised by some clerical moonshiner, in imitation of the interdicts of the mediæval church, and it proved, in its modern application, very effective. The unfortunate Mr. Boycott held out for a time, but, cut off from all intercourse with the outside world by a circle of bloodthirsty bog-trotters, he was finally compelled to abandon his property, which was promptly appropriated by those who had devised the plan. Ever since then, conspiracies of a large number of persons to distress or injure another have been known as boycotts, and the word has fairly taken its place in the English language.

A TERRIBLE threat is made by the labor leaders, who are evidently alarmed over the suits now pending in Connecticut and elsewhere for damages for boycotting and other concerted injury. The Vice-President of the American Federation of Labor, who has been studying these suits, finds no better way of meeting them than to proclaim that "Organized capital, through its Anti-Boycott and Employers' Associations, must stop its raids on the savings of the trades-unions, or the union men will withdraw three hundred million dollars from the savings-banks." It is difficult to believe that Mr. Kidd is serious in this absurd menace. Supposing union men to have three hundred million dollars in the savings banks, a statement which would bear a good deal of proof, they would hurt nobody but themselves by drawing it out. The saving-bank officials, who are the only capitalists interested in the matter, except the depositors themselves, would be glad to be relieved of the necessity for finding safe investments for the money entrusted to them, a task which grows more difficult every day; while any general movement of the kind would be immediately followed by the appearance of a swarm of sharks, with mining shares, patent rights, trust stocks and other attractive investments, for sale in exchange for the savings withdrawn, and it would not be long before the unfortunate workingmen lost everything that they had. The notion that the members of anti-boycott associations, or any other capitalists, are interested in savings-banks, except out of benevolence, as unpaid trustees or directors, is quite erroneous. Most savings-banks pay no interest on deposits amounting to more than a thousand or fifteen hundred dollars, so that the manager of an extensive business would not think of keeping anything more than a small personal account, at most, in them, and bankers or financiers need to have their money more under their control than it would be in a savings-bank, and possess, also, skill enough to make it earn for them a larger interest than the savings-banks can pay. Even as borrowers from savings-banks, business men and capitalists rarely appear. In all States the

investments which can be made of savings-bank funds are limited by law, and by far the largest part of savings-bank money is invested in mortgages on modest dwelling-houses, such as workingmen own and live in. To withdraw any large amount of money from the savings-banks would simply cause the foreclosure of these mortgages, and not even the terrors of organized labor could compel a workingman with prudence enough to have a savings-bank book to be instrumental in causing his bank to foreclose the mortgage on his own house. The fact is that savings-banks deposits form the best and safest investment for people of small means, who have neither the time nor the knowledge requisite for studying stocks or real-estate. By putting their money in the savings-bank they know that it will be honestly invested, by men who have spent their lives in studying and weighing the value of property, and the characters of borrowers, and who are held by law to strict accountability for anything like imprudence or carelessness, and that they will receive compound interest on it. As a matter of fact, very few safe investments are as profitable as savings-bank deposits. A trustee of the Lenox estate, in New York, which held what was originally a farm on Fifth Avenue, where the Lenox Library now stands, said, after the value of the land had increased from a few dollars an acre to forty or fifty dollars a square foot, that if the founder of the estate, instead of buying the farm, had put the price of it in the savings-bank, and kept it there, at ordinary savings-bank interest, his descendants would have been richer than they were when the farm was cut up into building-lots and sold at the highest prices ever paid for dwelling-house land in New York.

THE University of California is fortunate in the possession of an open-air theatre, copied quite closely from that at Epidaurus, in which seven thousand spectators can watch the performances on the stage. In the mild and unvarying climate of Central California such a structure is of practical value, and the University courses in Greek, enriched by the actual performance of the plays of Euripides, Æschylus, Sophocles and Aristophanes, in a theatre, and under conditions, practically identical with those for which they were written, should attract large numbers of students of the greatest of all literary languages, now rather falling into neglect. The structure is of concrete, but it is hoped to face it with marble later. At the opening performance, which took place a few days ago, a portion of the "Birds" of Aristophanes was given. It is interesting to read that, after the earlier rehearsals, it was found that the movement of the actors and chorus on the stage interfered with the effect of the play, and a screen of trees and branches was placed in front of the stage, in the middle of the screen being set a huge nest, containing three gigantic eggs, of plaster-of-Paris, so as to give reality to the fancy of the conversation among birds introducing the play. According to Professor Dörpfeld, the stage was probably thus treated among the Greeks, and the independent reasoning which led to similar results in California is very interesting. The performance was witnessed by an audience which filled every one of the seven thousand seats in the theatre, and the University may well be proud of the success of an undertaking which it has been enabled, by the generosity of Mr. William R. Hearst, to carry out.

REFORESTATION, which, as our readers know, has been practised for some years with considerable energy in France, is beginning to produce tangible results. Many of our readers have probably passed through the mountain regions of Savoy and Dauphiné, and have looked with something like horror at what seemed to be their irreclaimable barrenness. Yet, some centuries ago, both Savoy and Dauphiné were rich provinces. One of the Counts of Savoy, if we remember our history correctly, had five daughters, all of whom married kings, and Dauphiné, on its annexation to France, was considered a rich prize. Now, it is difficult to see how five hearty young princesses could find sustenance in Savoy, if there were no railroads to bring it to them. By the systematic control of the mountain torrents, and scientific planting, the desolate rocks have now begun to cover themselves again with verdure. The official report says that the young trees grow with "surprising vigor," and those who have observed how rapidly vegetation, under favorable circumstances, finds or makes for itself a soil in regions apparently barren, can believe this. Whether vigorous or not, however, the little trees are slowly, but surely, restoring to southeastern France the wealth and prosperity which it had lost.

COLORED BUILDINGS.¹

IT is impossible to embrace so vast a subject as color in one lecture, even when its application to architecture is alone to be considered, so I shall begin with color applied to the outsides of buildings, and hope that I may be able to treat of inside color hereafter.

In considering the subject of color my intention is to show the position color holds to man, the passionate love mankind have for it, whether it be exhibited in Nature's works or in works of art; to describe how mankind have directly employed beautiful works of nature to adorn their temples or their dwellings, to show that color has almost always been used to enhance the beauty of buildings, and to give some of the most striking examples I know; then to mention the modern examples of colored architecture in London and elsewhere, and to make a few remarks on permanent colored materials that can be used externally in England, and particularly in London and the large manufacturing towns.

Color, if we include white with its gradations to black, is the only visual means by which things can be known, for there are persons so unfortunate as to be color-blind who still see the shades and shadows of things. John Dalton, the discoverer of atomic chemistry, was color-blind, and its prevalence among engine-drivers and look-out men has been the cause of many accidents.

By the general consent of mankind the arrangement of certain colors in certain proportions causes delight; in fact, for the bulk of mankind Nature has made almost every visible phase of earth, air, fire and water beautiful by color. When we go into the country for delight, what is it we go for? I will not exclude the song of birds, the lowing of cattle, the murmur or roar of the sea, the babbling of brooks, the thunder of waterfalls, nor the sighing of trees; I will not omit the scent of the may-blossom, nor of the traveller's joy, nor the new-mown hay; but still it is mainly to feast our eyes on the beauty of color. Every poet and every rhapsodist has sung or descanted on the beauties of trees, flowers, meadows and mountains, seas and rivers, lakes and waterfalls, of the moon, of the starlit sky, of the sunshine and of the clouds, from Homer's "rosy-fingered Aurora" to "a looming bastion fringed with fire." Shelley says, "men hardly know how beautiful fire is," and the story-teller of the "Arabian Nights" compares the violet to sulphur burned in the fire. What is the exciting cause of "those gilt gauds men children run to see" but the hunger after color?

Why are the painters courted and the sculptors neglected but because the former deal in color that we all know and love, and the latter in a white abstraction of the human form which in this climate most of us have hardly seen? We love landscape-painting because it preserves for our admiration the colors as well as the forms of Nature, and such evanescent phases of color that strike us as most lovely and most rare. In Turner's picture of "Ulysses deriding Polyphemus," though we have had the golden galleys and the colored dresses of the men, the main beauty is in the ocean, the mountains, and the sky ribbed with the flaming spokes of the setting sun. In one of almost the last landscapes that were painted by our lost brother Vicat Cole the opalescent mist rising from the river was most beautifully shown. We love figure-painting because it not only gives us the shapes of men and animals, and the incidents of life, but also the exquisite and subtle tones of flesh, which harmonize or contrast with the colors of the hair and eyes, with lovely or gorgeous robes, with armor, with the sky, water, trees and buildings. Landscapes are always open-air effects, and in numberless instances figure-subjects are so too.

Titian was particularly fond of open-air effects, and most of his gorgeous colorings combine flesh and robes, trees and water, buildings and sky. To name no others we have his "Bacchus and Ariadne" in London and his "Virgin and Child" in the Louvre. If we can bring our minds to leave out of consideration his knowledge of form and composition, and his skill in portraying them, we have but a collocation of various colors and tones making a gorgeous and enchanting whole. This abstraction can perhaps be less made in the "Bacchus and Ariadne" than in the other pictures of Titian, as the discord in the red and blue of Ariadne's dress is put there to rivet our attention on her. But how gorgeous are the orange and blue of the Bacchantes' dress, the red dappled robe of Bacchus, and the ring of pale stars in the blue heavens!

In the "Virgin and Child" at the Louvre a female saint presents a palm-branch to the Virgin, while in front is St. John with his lamb. The background to the Virgin is gray architecture deepening into brown, which contrasts with the Virgin's glowing flesh and dark hair; she wears a deep brownish-crimson robe with a black cloak, and nurses the Infant Jesus, whose warm flesh and short white shirt stand out against the black. The saint has dark red hair and deeper colored flesh than the Virgin, and her gown is of green velvet with a gold girdle, and a deep crimson cloak. The child John in the foreground mainly gives warm flesh tones set off by a dull-green garment and by a gray lamb. Immediately behind the saint is brown burnt-up herbage, with a forest of green trees on the ridge beyond, a deep blue sea against which some brownish foliage cuts, and a pale warm sky with white and gray clouds, the whole forming one of the most sumptuous pieces of color imaginable. I may mention Titian's "Entombment," with a shepherd's plaid scarf against the dappled crimson robe, one of the most magnificent

of Titian's pictures. Bonifazio's "Supper at Venice" or his "Finding of Moses," in the Brera; Tintoretto's "Miracle of St. Mark," some of Schiavone's, Paul Veronese's, and Pieter de Hoope's work have splendid harmonies of color. I merely mention these to show that if superb pieces of color can be culled from nature and put on canvas to enchant us, a building may be substituted for the canvas and be equally superb in color.

In the bas-relief of the "Visit of Bacchus to Icarus" we see a servant fixing up garlands on the house. Here is a direct application of beautiful colored leaves, fruit and flowers to adorn a building, and to this day wreaths and garlands are so used in Italy. All of us have admired the laborer's white cottage latticed with rose-trees, with green or golden leaves, and pale yellow, pink, or blush roses; or a red-brick cottage trellised with white roses, the fire-thorn or a purple jasmine of Japan, with clematis, wistaria, the scarlet-runner, or the passion-flower; or the cottage is beautifully ornamented by being covered with a grape-vine full of bunches of green, purple, or black grapes, not to speak of those houses wholly green with ivy or glowing with the red autumnal leaves of the Virginia creeper. It is only for the last few centuries and at occasional epochs that buildings have been left to the monotone of one material, and we must not forget that the word "monotonous" expresses neither admiration nor delight.

The Egyptians, the Persians, the Assyrians, the Greeks, the Etruscans, the Chinese, the Japanese, the Mexicans, the Peruvians, the Arabs, Moors and Turks, all enriched their buildings with color; nay, I believe the Gauls, Germans, Scandinavians, the Goths, Huns and Vandals did the same; and all that group of Western nations which we call mediæval made their buildings striking at least by the aid of color.

Why has color disappeared from the outside of modern buildings? For till quite lately we only allowed ourselves pea-green outside shutters, a red chimney-pot, and a gilded weathercock; and though in this country Puritanism may have had something to answer for, in Italy Palladio had more, who said, "white was more acceptable to the gods." Beyond these two factors I believe the main reason to be that this adornment was mostly perishable, and in bad times was not renewed, so that many generations have grown up without ever seeing colored buildings, and novelty shocks mankind's conservative instincts. I can remember the storm raised by Owen Jones's coloring of the Exhibition buildings of 1851; he had, I believe, been to Egypt and seen color on a grand scale there, and had studied the coloring of the Arabs and Moors at Granada; his critics knew no color but that detestable application of gold and white they had seen at Versailles, or perhaps some pale pea-green and gold in their own drawing-rooms.

Viollet-le-Duc says in his article on painting: "The Romans during the Empire seem to have been the first people who erected monuments of white marble or stone without color; as to their stucco-work this was always colored, whether inside or out."

Decorative painting once played a most important part on the outside of buildings; the front of Notre-Dame at Paris shows many traces of painting and gilding, not put on the bare walls, but upon the mouldings, columns, sculptured ornaments and figures. The same observations can be made under the porch of the Cathedral at Amiens, and the ornaments placed in 1257 on the top of the transept gables of Notre-Dame were gilt, with grounds of dull red and black. The outside color was much more vivid than that of the inside; there were bright red tones (vermilion glazed with brilliant red), crude green, orange, yellow ochre, blacks and pure white, rarely blues, outside, the brilliancy of direct light allowing a harshness of coloring which would not be tolerable under the sifted and diffused light of the interior.

I may mention that the late William Burges and I, in our travels together, found traces of color on the porch of the church of Villeneuve l'Archevêque.

Viollet-le-Duc goes on to say that the whole front of Notre-Dame was not colored, but only the three doorways with their voussours and tympanums, and the niches and statues that bind the doorways together. The gallery of the kings formed a long strip, all colored and gilt; and above the only parts painted were the arcade with the windows under the towers and the central rose-window; the upper part, lost in the air, was left the color of the stone. Viollet-le-Duc makes this reflection: "Why do we deprive ourselves of all these resources of art? Why does the Classic school pretend that coldness and monotony are the inseparable accompaniments of beauty, when the Greeks, whom they present to us as artists *par excellence*, always colored their buildings inside and out, not timidly, but by putting on colors of extreme brilliancy?" Mr. G. F. Watts, R. A., saw a fragment of foliage at Halicarnassus, just dug up, painted with vermilion, turquoise green and golden yellow.

It is not to be supposed that figures in white marble with a polished surface and of translucent substance were covered with opaque distemper; the flesh at least was delicately glazed with transparent color. When I was at Constantinople, in talking with Canon Curtis I mentioned that the Greeks always painted their statues, to which he objected; and when I quoted Plato's well-known passage he defended himself by saying it was probably of late interpolation, but I have never heard the authenticity of the passage questioned; and as we know that painters of statues are not infrequently mentioned it seems rather ridiculous to deny the painting of statues when it was a distinct profession. The brother of Phidias is said to have been a painter of statues, and the gold and ivory of the great iconic statues

¹ A lecture by Professor Atchison, R. A., Past President, Royal Gold Medalist, delivered before the Royal Institute of British Architects and printed in the *Journal* of that Society.

suggest polychromy. The painted figures of Tanagra and the small figures on the sarcophagi of Alexander's captains that were found at Sidon show that the contention verges on the absurd, and, besides, the use of polychromy on the statue of Giovanni Pisano shows that it was still in vogue in mediæval times.

In one of Sir Lawrence Alma-Tadema's pictures he showed the figure sculpture of the Parthenon painted, so you may have formed an opinion of its effects; at any rate you will be quite certain that Sir Lawrence would not have done anything that spoiled the effect or looked incongruous.

In many parts of Italy bas-reliefs in *gesso duro* are painted exactly like pictures, not to speak of the colored ware of Luca della Robbia and his school. The Ca' d'Oro at Venice received its name from being gilt, and Commendatore Boni, when in charge of the restorations at the Ducal Palace, found traces of gold and color on the ornaments and tracery of the Porta della Carta executed before 1500. The bronze horses of St. Mark were once gilt. We know that Nero had a bronze statue of some great Greek artist gilt; but as this was not intended for gilding, it so spoiled its effect that Nero had to pay twice the cost of the gilding for having it rubbed off.

Signor Molmenti in his book on Venice quotes Philip de Comines (Charles VIII's ambassador, who visited Venice in 1495) as saying, quite dazzled: "The houses are very large and high and of good stone, the old ones all painted; and others, built in the last 100 years, have their fronts of white marble which comes from Istria, 100 miles from there, and I saw many great pieces of porphyry and serpentine on the fronts."

You may see in Carpaccio's pictures the fronts of houses thus ornamented with painting and gilding. In 1854, when I was first at Venice, remains of old painting, in the shape of figure frescos, were still to be seen on the fronts of some of the houses; and at Brescia, when I visited it a few years ago, there were the remains of fine figure frescos and color on many of the houses. Pictures, except in the case of tombs, go but a small distance back, but in illuminated manuscripts and mosaics we get buildings represented of much earlier date, and these are mostly shown as wholly or partially colored.

I will just say something of pictures, because in them you can see how colored buildings look. In one of Giotto's there is a white building with a scarlet cornice, and under the cornice semicircular machicolations, the corbels of which are scarlet, and the semicircular sunk panel above the lintel of the door is filled with geometrical mosaics. Gentile da Fabriano shows red walls with black archivolt, red porphyry caps of columns, and veined shafts, and in another picture gray walls with white lines round the arches, black archivolts, columns of red, and the soffit of a balcony black, with scarlet cantilevers.

In a picture of Benozzo Gozzoli, the "Rape of Helen," there is a house of peach-blossom marble, the frieze black, with peach-blossom festoons and cherub heads, the columns of the upper loggia white, the soffit of the eaves yellow, with black panels and a scarlet cymatium. In one of Luca Signorelli's pictures gray pilasters panelled and carved are backed by red edges and have gilded caps. The entablature is in red and gray marble, and there is a narrow carved architrave of red marble with gray mouldings at the top, a carved red marble frieze, gray bed-mould and corona, and a red marble cymatium; above, the gray line of pedestal, with red carved panels, on which stand square red pilasters with panels of red variegated marble and gray caps. The flank of this house is yellowish gray, with the same entablature, and three gilt cherubs' heads at the wall. There is a gray house opposite that has red brickwork under a flight of gray stone stairs, one bright red line under the string, and the massive stone window jambs and lintels are red, with a wide red band under the cornice.

Pinturicchio has two pictures with arcades, one in which the architecture is all gold, the pilaster panels dark blue, nearly black, with gold ornament, and the spandrels and frieze also dark blue or black, with gold ornaments, while under the centre of each spandrel, and touching the gold archivolt, is a circular gold medallion with figures. Another arcade of gray stone has tall pilasters carrying continuous entablatures, so that each arch is cut off by a pilaster, the panels of which are black and gold, with a gold ornament, and the pilasters have gold bases and caps; the spandrels are black, with gold angels, and between the gilt caps of the pilasters runs a pale green frieze with gold ornaments. The abacus of the pilasters, which is gray, runs over this band as a capping.

A greatly improved effect is often produced in a colored front by the substitution by a naturally patterned marble for a plain one; this may be seen in the Magasin du Printemps at Paris, by the late Paul Sédille, where veined marble has been introduced instead of white. It was what is now called Pavonazzetto, though not the true Docimeian or Synnadic (from Docimeium and Synnada, towns in Phrygia). A year or two ago Jay's shop in Regent Street was made quite beautiful by some parts of the architecture being painted like veined instead of plain white marble.

I think it best to speak of things I have seen, because by that means you can allow for what the astronomers call my "personal equation"; yet I must speak of countries that I have not seen, Persia and India, because in those countries is to be found the most magnificent exposition of extreme color applied externally, and executed, too, in that splendid and imperishable material (in a dry climate) enamelled earthenware. Their flat walls, cylindrical minarets and drums, bulbous-domes, half-domes, and honeycomb work

are all covered with richly colored tiles painted or inlaid in the most beautiful and intricate patterns, and where white, blue, green, yellow, red and black are used in their fullest intensity. Sir C. Purdon Clarke, who has resided in Persia and secured for England some Persian architects' pattern-books, describes the effect of this colored architecture as being superb, so that he did not desire to see it altered, and could not see how the color could be improved.

Splendid color is, as a rule, only to be found in the East, or has been got from there. I strongly suspect that all the fine color in Europe came directly or indirectly from the East, as it filtered through Constantinople, and skilled men were sent from Constantinople to execute works in different parts of Europe. The churches, mausoleums and mosaics at Ravenna were, I believe, executed by architects and artists from Constantinople, and probably the mosaics on churches in Rome, Sicily and elsewhere. We know that St. Mark's at Venice and the Mihrab of the Mosque at Cordova were done by them.

The Crusades enabled the Westerns to see something of the glories of the East, and the plunder familiarized those at home with Eastern color and workmanship. Afterwards this impression was kept up by the traders who visited the East and trafficked in its goods, the Pisans, Genoese, the Venetians, Portuguese and the Dutch. There is very little doubt that very effective adornment, horizontal stripes in different colors, was brought from the East. We see red and black stripes in the buildings of Cairo repeated in the cathedrals at Genoa, Pisa and Siena, though in Italy the bands are mostly of the dark green marble or serpentine of Prato.

St. Mark's is wholly covered with slabs of Greek, Africano, verde antico and other beautiful marbles. The shafts of its columns are of green and red porphyry, verde antico, grand antique and other splendid marbles, and over its doorways are mosaics on a gold ground, while smaller pieces as ornaments and borders are interspersed on its façades. Its crockets are gilt, and at one time the bronze horses from Constantinople were gilt too. You all know the delicate pink-and-white diaper of the Doge's Palace from pictures, if not from the Palace itself, a reminder of the city of Irak in the "Arabian Nights," whose walls were built with alternate silver and gold bricks. The bell-tower of Florence and the cathedral are covered with pink-and-white marble, with borders and inlaid work of green serpentine.

It is useless to speak of the effects of red brick with white stone, as they are too well known in the form of dressings, strings, stripes and chequer-work.

In many Italian buildings happy effects are got by filling in the ground of carved ornament with mosaic of green, gold, red, black, or other colors. The most striking example of modern external polychromy I have seen is a palace at Berlin. The walls are faced with black-and-red tiles in a diaper, the window dressings are majolica, and the frieze is colored glass mosaic on a gold ground; and at the time I saw it, some years ago, it was not pleasant to reflect that the tiles were probably English, the majolica Minton's and the mosaic from the English Company at Murano, and that no such complete attempt has been made in our own country.

In Paris we have the polychromy of the Opera House of a delicate and dignified character, obtained by marble, bronze and gilding, with a slight sprinkling of enamelled earthenware on the flanks. Charles Garnier's dream of the future of Paris is that of an enthusiast for color: "The grounds of the cornices will shine with eternal colors, the piers will be enriched with sparkling panels, gilded friezes will run along the building, the monuments will be clothed with marbles and enamels, and the mosaics will make all love movement and color."

The late Paul Sédille in his Magasin du Printemps has been very successful with his polychromy. When he was in London he was very complimentary on some of our new buildings. He said: "Certain new constructions in London are truly grand, the friezes ornamented with enamelled terra-cotta; mosaics on a gold ground become the decoration of the façades. Certain halls of public establishments are completely covered with painted earthenware, developing decorative composition with true style."

There is rather a pretty shop just at the beginning of Kensington High Street, all built of pinkish-yellow terra-cotta, with open arches as a shelter in front of the shop-front itself, and much of it is enriched with finely colored glass mosaic. Other fronts that I recollect are a restaurant in Oxford Street, built by the late Prof. Banister Fletcher, where the rustications are of bronze-green enamelled earthenware, and the front is enriched with dull gold ornament in the pilasters; and Pagani's Restaurant in Great Portland Street, which is partially colored.

A very noble polychromy might be effected by the use of polished porphyries and perhaps of some granites. There are in Norway, or Sweden, or in both, splendid porphyries varying in color from white to black and of almost all colors. But very few even of the wealthiest people seem to have any inclination to build a beautiful but costly house for themselves, and the freehold sites that remain are very scarce and very costly; and as the fashion for some particular part of the town is constantly varying, even immensely rich people scarcely venture to lay out much money in building a stately palace when they may find in a few years that they are in an unfashionable neighborhood; and the passion for something old is so great in England that were an Ictinus or a Mnesicles to design the most magnificent mansion in a new style it would have no chance of success by the side of a Gothic or an Elizabethan one.

THE USE OF CONCRETE-STEEL CONSTRUCTION IN NEW YORK.

1. THE term "concrete-steel" in these Regulations¹ shall be understood to mean an approved concrete mixture reinforced by steel of any shape, so combined that the steel will take up the tensional stresses and assist in the resistance to shear.

2. Concrete-steel construction will be approved only for buildings which are not required to be fireproof by the Building Code, unless satisfactory fire and water tests shall have been made under the supervision of this Bureau. Such tests shall be made in accordance with the Regulations fixed by this Bureau and conducted as nearly as practicable in the same manner as prescribed for fireproof floor fillings in Section 106 of the Building Code. Each company offering a system of concrete-steel construction for fireproof buildings must submit such construction to a fire and water test.

3. Before permission to erect any concrete-steel structure is issued, complete drawings and specifications must be filed with the Superintendent of Buildings, showing all details of the construction, the size and position of all reinforcing rods, stirrups, etc., and giving the composition of the concrete.

4. The execution of work shall be confided to workmen who shall be under the control of a competent foreman or superintendent.

5. The concrete must be mixed in the proportions of one of cement, two of sand and four of stone or gravel; or the proportions may be such that the resistance of the concrete to crushing shall not be less than 2,000 pounds per square inch after hardening for twenty-eight days. The tests to determine this value must be made under the direction of the Superintendent of Buildings. The concrete used in concrete-steel construction must be what is usually known as a "wet" mixture.

6. Only high-grade Portland-cements shall be permitted in concrete-steel construction. Such cements, when tested neat, shall, after one day in air, develop a tensile-strength of at least 300 pounds per square inch; and after one day in air and six days in water shall develop a tensile-strength of at least 500 pounds per square inch; and after one day in air and twenty-seven days in water shall develop a tensile-strength of at least 600 pounds per square inch. Other tests, as to fineness, constancy of volume, etc., made in accordance with the standard method prescribed by the American Society of Civil Engineers' Committee may, from time to time, be prescribed by the Superintendent of Buildings.

7. The sand to be used must be clean, sharp grit sand, free from loam or dirt, and shall not be finer than the standard sample of the Bureau of Buildings.

8. The stone used in the concrete shall be a clean, broken trap rock, or gravel, of a size that will pass through a $\frac{3}{4}$ -inch ring. In case it is desired to use any other material or other kind of stone than that specified, samples of same must first be submitted to and approved by the Superintendent of Buildings.

9. The steel shall meet the requirements of Section 21 of the Building Code.

10. Concrete-steel shall be so designed that the stresses in the concrete and the steel shall not exceed the following limits:—

Extreme fibre-stress on concrete in compression....	500 lbs. per sq. in.
Shearing-stress in concrete.....	80 lbs. per sq. in.
Concrete in direct compression.....	350 lbs. per sq. in.
Tensile-stress in steel.....	16,000 lbs. per sq. in.
Shearing-stress in steel.....	10,000 lbs. per sq. in.

11. The adhesion of concrete to steel shall be assumed to be not greater than the shearing strength of the concrete.

12. The ratio of the moduli of elasticity of concrete and steel shall be taken as one to twelve.

13. The following assumption shall guide in the determination of the bending-moments due to the external forces: Beams and girders shall be considered as simply supported at the ends, no allowance being made for the continuous construction over supports. Floor plates, when constructed continuous and when provided with reinforcement at top of plate over the supports, may be treated as continuous beams, the bending-moment for uniformly distributed loads being taken at not less than $\frac{WL}{10}$; the bending-moment may be taken

as $\frac{WL}{20}$ in the case of square floor plates which are reinforced in both directions and supported on all sides. The floor plate to the extent of not more than ten times the width of any beam or girder may be taken as part of that beam or girder in computing its moment of resistance.

14. The moment of resistance of any concrete-steel construction under transverse loads shall be determined by formulas based on the following assumptions:—

(a) The bond between the concrete and steel is sufficient to make the two materials act together as a homogeneous solid.

(b) The strain in any fibre is directly proportionate to the distance of that fibre from the neutral axis.

(c) The modulus of elasticity of the concrete remains constant within the limits of the working stresses fixed in these Regulations.

From these assumptions it follows that the stress in any fibre is

¹ Regulations of the Bureau of Buildings of the Borough of Manhattan.

directly proportionate to the distance of that fibre from the neutral axis.

The tensile-strength of the concrete shall not be considered.

15. When the shearing stresses developed in any part of a construction exceed the safe working strength of concrete, as fixed in these Regulations, a sufficient amount of steel shall be introduced in such a position that the deficiency in the resistance to shear is overcome.

16. When the safe limit of adhesion between the concrete and steel is exceeded, some provision must be made for transmitting the strength of the steel to the concrete.

17. Concrete-steel may be used for columns in which the ratio of length to least side or diameter does not exceed twelve. The reinforcing rods must be tied together at intervals of not more than the least side or diameter of the column.

18. The contractor must be prepared to make load tests on any portion of a concrete-steel construction, within a reasonable time after erection, as often as may be required by the Superintendent of Buildings. The tests must show that the construction will sustain a load of three times that for which it is designed without any sign of failure.

Approved September 9, 1903.

HENRY S. THOMPSON,

Superintendent of Buildings, for the Borough of Manhattan.

THE LANDSCAPE ARCHITECT.

WHO the Boston Herald Mr. Frederick Law Olmsted, Jr., addresses the following letter which is self explanatory:—

"In the course of your editorial on Monday, speaking in the highest terms of the late Frederick Law Olmsted, occurs the question: 'Who in the world first put into anybody's head this recent fad of calling a landscape gardener a landscape architect?' The question may be answered in a general way by the statement that Frederick Law Olmsted used this designation in connection with the first professional work he undertook, Central Park, New York, in 1857, and continued to use it during the whole of his career. His example has probably had more to do with the general adoption of the term than any other influence.

"In view of the denunciation of the term 'landscape architect' in your editorial, may I suggest that Mr. Olmsted was very careful and thoughtful in his use of words, and that he had probably given much more careful consideration to the term than the person whose sentiments your editorial voices.

"Mr. Olmsted's avoidance of the term 'landscape gardening' as a general designation of the art which he practised was based mainly upon two considerations.

"In the first place, the term was used by its originator, Shenstone, to mean exclusively informal or picturesque gardening in contradistinction to formal or architectural gardening, and has been more or less generally so used ever since. Within Shenstone's lifetime 'landscape gardeners' sprang up who made a practice of designing gardens and other pleasure grounds exclusively in this informal manner, then newly come into fashion in England, partly through its own excellence and partly through reaction from the puerile excesses of formal garden design in the early eighteenth century. It was not long, however, before men of breadth and ability, like Repton, engaged mainly in the practice of such informal design, and therefore called 'landscape gardeners,' began to realize that formal design had its own proper function and excellence, and began to use it under certain circumstances. But the loose extension of the term 'landscape gardening' to include such works was and is a serious twisting of its original meaning, and tends to a confusion of mind and a mixture of æsthetic motives which is often fatal to success alike in formal and informal design.

"Now, the art which Mr. Olmsted practised was by no means confined by arbitrary limitations, whether of fashion or personal prejudice, to the use of purely informal motives. He did not think it necessary to apologize for making formal designs where he felt them to be appropriate, as those who professed to be 'landscape gardeners' had often done. His art was that of 'arranging land for use with regard to the beauty of its appearance.' Where the conditions made a formal treatment appropriate, it was adopted without hesitation, as in the Court of Honor at the World's Fair; where the conditions made an informal treatment appropriate, that was as readily accepted and as consistently carried out, as in the lagoons and wooded island of the World's Fair; and the two kinds of motives were not jumbled and confused. He liked to call a spade a spade, and he had too much respect both for Shenstone's term, 'landscape gardening,' and for his own wider art, which included that and more, to adopt it as a designation for his profession.

"In the second place, the term 'landscape gardener' carries within itself two ideas, which are distinct and often contradictory. A garden is strictly a place engirt or inclosed, set apart, highly cultivated. A landscape is but the appearance of such part of the face of the earth as falls within the view, and it almost necessarily implies something of freedom and spaciousness. Many a beautiful landscape, peaceful, quiet and free from obtrusive evidence of man's elaborate control, has been painfully defaced by the would-be beautifier, who thrusts into its midst such garden elements as beds of geraniums or rare and striking shrubs or clipped bushes or paths or stonework. On the other hand, many a cosey and secluded garden

has been bereft of its charm by well intentioned 'opening out' to the view and throwing down of the barriers that were its most essential element; and many another containing rare and striking plants which might with orderly arrangement be very attractive is reduced to a state of mere confusion by the attempt to make an informal 'landscape' of it, when each element cries aloud for individual attention. The confusion of mind which leads to such results has been fostered not a little by the term 'landscape garden,' and for this reason also Mr. Olmsted was disinclined to use it, and disinclined even to use 'landscape gardening' without a word of caution.

"Seeking for a name that would not be open to these objections, he adopted the title 'landscape architect,' either of his own motion, translating the term from the French, *architecte paysagiste*, or because the Central Park commission happened to give him that title when appointing him and his partner, Vaux. Etymologically the term was sound, for 'architect' means but 'master workman,' and no more fitting name could be found for him than 'master workman of landscapes.'

"That the meaning and intention of the name have been often misunderstood is unfortunately true, and the connotation which it conveys to many people that a landscape architect is but an architect of buildings who meddles with the landscape is most regrettable. Granting that the title is unsatisfactory, Mr. Olmsted still felt that it was less so upon the whole than 'landscape gardener,' and he looked in vain for a better.

"A name for the profession coined from the Greek *topos*, a place, a locality, a piece of the earth's surface, which appears in the word 'topography,' meaning the art of delineating the surface of the earth and what it bears, would be admirable in its etymology. The old Latin word *topiarius* from this root was precisely the 'man who lays out places,' who shapes and controls a locality, just as the topographer delineates it. But, unfortunately, the connotations of any such term would be even more misleading than those of 'landscape architect,' because 'topiary,' derived from this root, has been degraded in English to refer merely to one of the mechanical operations of the Roman *topiarius*, namely, that of clipping bushes into hedges and geometrical and fantastic forms.

"On the whole, since 'landscaper' and 'landscapist' have rather a barbarous sound, and have been already applied to landscape painters, there does not appear to be any better resort than 'landscape architect' and it is generally used by those in this country who are endeavoring to practise the art in which the way was led by the late Frederick Law Olmsted."

THE LION, AFTER THE "PHYSIOLOGUS."

THE strange, fanciful beast-carvings found in Christian architecture were, in great measure, the outcome either of Oriental tradition through unconscious copying or irrepressible semi-conscious paganism, or of treatises on symbolic animals dating probably from the second century A. D. The most important of these treatises, in that it became the one from which all later ones drew their inspiration, was the "Physiologus," or "Naturalist," compiled from many sources by an Alexandrian Greek. This was condemned by the Church in the fourth century, but was reinstated by Gregory the Great, and from the seventh to the twelfth centuries was regarded as a Christianized summary of natural history, calculated both to teach and to edify. It formed the basis of the French bestiaries, and its influence may be traced in many mediæval works, the most celebrated perhaps being the "*Speculum Naturale*" of Vincent de Beauvais, the "*Speculum Ecclesie*" of Honorius of Autun, and "*Li Tresors*" of Brunetto Latini, the friend and master of Dante. It served, through these media, to inspire the mediæval artist as well as the mediæval poet, and it is by knowing something of its quaint conceits that we must seek to understand both the one and the other. At the same time it must not be inferred that all sculptured objects, whether natural or grotesque, made use of to beautify either cathedral or church, were necessarily symbolic. That there was frequently a desire on the part of the mediæval artist merely to express life in its various aspects, without any ulterior motive, is evident from the world of birds and beasts and foliage which manifestly were carved for the sole pleasure of representing animate nature.

The natural history of the "Physiologus" was doubtless based upon Aristotle's "*History of Animals*" and Pliny's "*Natural History*," supplemented by moral reflections founded upon current opinion and ancient tradition. . . .

The "Physiologus," in common with the bestiaries, begins with the lion, the king of beasts, the emblem of Christ, and the most frequently used symbol of the Christian menagerie. To the lion is attributed three characteristics: first, that when he is pursued he obliterates his track with his tail; secondly, that he sleeps with his eyes open; and thirdly, that the cubs are born dead, and are brought to life on the third day by his breathing upon them. These characteristics are naively explained and commented upon in the French bestiaries, the earliest of which was translated about 1130 A. D. by the Anglo-Norman clerk Philip of Thaon, for Aélis of Lorraine, the second Queen of Henry I of England. The opening sentence, introducing the work as "a book of science," shows us the mediæval attitude towards these, to us, childish though sometimes ingenious, moral reflections. It begins thus: "Philip of Thaon into the French language has translated the bestiary, a book of science, for

the honor of a jewel, who is a very beautiful woman; Aélis is she named, a Queen she is crowned, Queen she is of England; may her soul never have trouble!" But after this courtly opening there is little elaboration, perhaps because Philip of Thaon had but a limited gift of imagination, or was more of a courtier than a moralizer, or perhaps because the royal lady at whose command he labored preferred her spiritual food in as concentrated a form as possible. Owing to this poverty of expression, quotations to illustrate the manner of mediæval moralizing will be taken from "*Le Bestiaire Divin*," the most elaborate example of its kind for inventive thought, and one giving an idea of the boredom which the good folk of the Middle Ages could inflict upon themselves. It was written about the beginning of the thirteenth century by one William, a clerk of Normandy, who begins, as was usual, with the king of beasts, the first characteristic of which, as before alluded to, is there said to symbolize the incarnation of Christ, which "truly he did covertly"; and the writer goes on to say that "the meaning is very clear. When God, our sovereign Father, who is the spiritual lion, came by his grace onto this earth for our salvation, so wisely veiled he his coming, that the hunter knew not that he was the source of our salvation, and marvelled how he came among us. By the hunter we must understand him who makes man to do wrong, and who pursues him in order to destroy him; he is the Devil, who deserves evil."

The second characteristic symbolizes that on the Cross it was the man Christ, and not the God Christ who suffered:—

"When the lion [Christ] was put upon the Cross by his enemies the Jews, who judged him wrongfully, his humanity there suffered death. When the spirit quitted the body, the man fell asleep on the holy Cross, but the Godhead kept watch there. And think of him in no other way if you would rise again. For the Godhead could never be touched, or felt, or scourged, or beaten. Mankind can wound the man without injuring the Godhead, which shall be shown to you by a parable which can leave no doubt. Cut a lofty and spreading tree when the sun is shining, and in the rent of the first splinter you will see a ray of the beautiful sun; and, as the rent increases and the sunbeams extend, nowhere can you touch, injure, capture, or hold the ray. You can cut down the whole tree without injuring the sun at all. Thus was it with Jesus Christ. Humanity, which he took upon him for our sake and for love of us, and garbed himself in, suffering trouble and labor and death, of this the Godhead felt naught. This you believe if you do well."

Of the third characteristic, which was a favorite symbol of the resurrection of Christ, as well as of the general resurrection, the writer says:—

"When God was placed in the tomb, for three days only remained he there, and on the third day the Father raised him from the dead by breathing upon him, even as the lion breathes upon his little cub. Now I have told you of the lion; the truth about him is written."

The tradition that the lion sleeps with his eyes open may partly account for its effigy being placed, as is so often the case in Romanesque and Gothic churches, over the entrance or on either side of the portal, as guardian of the sanctuary; although the original idea of making use of a lion's image in such positions was doubtless derived from the traditions of ancient civilizations, such as those of Assyria, Egypt and Greece, where lions, as guardians of tombs and gates, are constantly found as emblems of strength and prowess, and as inspiring fear.

Although not mentioned in the bestiaries, it is of interest to note that the same beast may symbolize entirely different principles, just as it embodies different qualities. The lion in some instances is typical of the Devil, who "as a roaring lion walketh about seeking whom he may devour"; and thus on some early tombs we find the sculptured effigy of the deceased person with the feet resting on a lion, to indicate triumph over the powers of hell, whereas, on later ones, the lion in the same position symbolized strength and bravery.

In mediæval literature, the characteristics attributed in the bestiary to the lion are applied in sundry and strange connections, sometimes to the hero, as in Wolfram von Eschenbach's poem, where Parsifal and his brother are compared to a lion's whelps "roused to life and energy by the roar of battle"; sometimes to the lover, who could be brought back to life by the voice of his mistress, as the breath of the lion brings to life its young; sometimes to the counsellor, who advises his lord, when he has erred, to blot out the remembrance of his error by repentance and by good deeds, just as the lion, when pursued, obliterates his track with his tail.—Alice Kemp-Welch, in *The Nineteenth Century*.



ALL those who have studied the history of the Italian republics, those who are interested in the greatest schools of Italian painting, and, most of all, those who have themselves wandered among the ancient cities of Etruria and Umbria, will be grateful to Mr. Williams for his book.¹ It is not every tourist who has the courage to trust himself to the inns of Chiusi, Bolsena and Spoleto, even though he knows that the inns of small Italian towns are often

¹ *Hill Towns of Italy*: By Egerton R. Williams, Jr. With Illustrations from Photographs. Boston and New York: Houghton, Mifflin & Co. 1903.

undeservedly maligned by travellers; and the tourist who, in addition to being of good courage in regard to inns, is athletic enough to enjoy climbing about Perugia in the blazing sunshine, is enthusiastic and well instructed in matters of art and architecture, and understands Italian dialects well enough to make himself at home among the people with whom he comes in contact, has at least some of the qualifications for writing an interesting volume. Mr. Williams has all these, and more, possessing a literary style at once animated and refined, while he has discretion enough never to allow his earnestness and knowledge to lead him into monotony or pedantry.

Those who have seen of Italy only Rome, Venice, Florence, Naples and Milan have little idea of the strange interest of the hill country of Umbria. Here are no orange groves, no palms, no gondolas, no beautiful promenades, crowded with fashionable society, but, instead of these, hills of bare, precipitous rocks, crowned with walls and towns which seem a part of the rock itself, overlooking plains and foothills of moderate fertility, in which lie shallow lakes; yet the walls of yellow stone which we see encircling the little towns upon the heights are Etruscan and were already ancient when Romulus turned the first sod of his primitive earthworks on the Capitoline Hill; the arched gateway through which we see people passing has been in daily use for three thousand years; and the peaceful sheet of water by the edge of which the railway passes is the Lake Trasymenus, where Hannibal destroyed the Roman army, twenty-one hundred years ago, reddening with the blood of fifteen thousand men the brook which to this day is known to the peasants as the Sanguinetto.

If we climb the steep paths to the walled towns at the top of the cliffs, we find in them churches and palaces adorned with the most beautiful pictures in the whole world, the work of native artists, who found in the people around them, and in their dreams, the inspiration for the perfections of expression, composition and color which characterize what is known as the Umbrian School of Painting. It is true that the great Umbrian painters have been dead for three hundred years, but the houses in which they lived still stand, almost unaltered, the streets which they trod are unchanged, and their works still hang in the places for which they were painted. Nowhere else in the world, perhaps, do we find such concentration of artistic and historical interest, so little changed by time, and in Mr. Williams's pages we follow with constant pleasure the impressions which we seem to share with him, and which the beautiful illustrations materially heighten.

MR. CROWNINSHIELD'S poetry grows more interesting as his style becomes more individual, and he improves in ease and confidence. His taste is naturally so refined that it is a pleasure to see him beginning to forget the asperities of Browning, and cultivating, in addition to the careful versification for which he has always been remarkable, a purity and simplicity of language which are as charming as they are really characteristic. This little book¹ begins with what seems to us the best portion of it, a set of five stories in unrhymed verse, as smooth and delicate in form as they are sympathetic in feeling. Besides all that they are interesting, and it would not be easy, in these modern days, to find better examples of the fact that good verse, instead of being, like bad verse, more dull and stupid than prose, gains immensely, in the interest of the story that it presents, by its poetical form.

The sonnets and other less important poems in the volume show like the others increased refinement and individuality in treatment, as well as what seems to us a pleasanter choice of subjects. Mr. Crowninshield, as an educated man, is naturally interested in a variety of subjects, but it is a satisfaction to see that his muse, at least, moves in this book in an atmosphere a little less mundane than formerly. However, our readers will be quite disposed to excuse her for turning her attention for a moment, unfavorably, to "Some Architects and Decorators," who insert antique fragments in the houses of modern millionaires, and to echo her plea for "New bottles for new wine."



BUFFALO, N. Y., CHAPTER, A. I. A.

AT the regular annual meeting of the Buffalo Chapter of the American Institute of Architects, the following officers were elected for the ensuing year: *President*, H. Osgood Holland; *First Vice-President*, Ulysses G. Orr; *Second Vice-President*, William L. Fuchs; *Secretary*, Thomas W. Harris; *Treasurer*, M. G. Beierl.

SOUTHERN CALIFORNIA CHAPTER, A. I. A.

SOUTHERN California Chapter of the American Architects has elected the following new officers: *President*, John P. Kemple; *Vice-President*, John C. Austin; *Secretary*, Julius W. Krause; *Treasurer*, August Wackerbarth; *Trustees*, Frank D. Hudson, Octavius Morgan, Robert F. Train.

¹"Tales in Metre and Other Poems": By Frederic Crowninshield. New York: Robert Grier Cooke, 307 Fifth Avenue. (150 copies printed.)

ARCHITECTURAL LEAGUE OF AMERICA.

WILLIAM B. Ittner, Building Commissioner for the Board of Education, and a member of the St. Louis Architectural Club, was elected President of the Architectural League of America, at the late St. Louis Convention. The League also voted to hold its 1904 convention at Pittsburgh, but no date was definitely fixed.



[Contributors of drawings are requested to send also plans and a full and adequate description of the buildings, including a statement of cost.]

SIMMONS COLLEGE, BOSTON, MASS. MESSRS. PEABODY & STEARNS, ARCHITECTS, BOSTON, MASS.

PRELIMINARY STUDY FOR THE TEXAS PRESBYTERIAN UNIVERSITY, MCKINNEY, TEXAS. MR. GLENN ALLEN, ARCHITECT, WACO, TEXAS.

ENTRANCE GATE AND LODGE TO THE SAMOSET GROUNDS, ROCKLAND, ME. MR. H. C. WILKINSON, ARCHITECT, WASHINGTON, D. C.

Additional Illustrations in the International Edition.

THE GOVERNOR'S ROOM: RHODE ISLAND STATE-HOUSE, PROVIDENCE, R. I. MESSRS. MCKIM, MEAD & WHITE, ARCHITECTS, NEW YORK, N. Y.

WAREHOUSE: NO. 10 KRONENSTRASSE, BERLIN. MESSRS. HART & LESSER, ARCHITECTS.

This plate is copied from *Blätter für Architektur*.

ENTRANCE TO CRYPT: CATHEDRAL OF ST. JUVENALIS, NARNI, ITALY.

SKETCH FOR LIBRARY, RUMFORD FALLS, ME. MR. JOHN CALVIN STEVENS, ARCHITECT.

HOUSE OF WILLIAM H. OAKES, ESQ., WABAN, MASS. MESSRS. SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS, BOSTON, MASS.



[The editors cannot pay attention to demands of correspondents who forget to give their names and addresses as guaranty of good faith; nor do they hold themselves responsible for opinions expressed by their correspondents.]

"THE SKULL AND BONES CLUB-HOUSE": A CORRECTION.

NEW YORK, N. Y., October 8, 1903.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—In your issue of September 26 you publish a photographic plate showing the addition made by us to the "Skull and Bones" Building in New Haven. No description of the work accompanying it, the natural inference is that we designed the whole building and are responsible for the exceedingly dry and crude style which characterizes it.

That is not, we are glad to state, the case.

The left-hand wing of the building was erected many years ago (architect unknown to us), and the problem was to double the size of the building without destroying its original character, the simplest solution being to practically reproduce the existing wing and separate the two members by an open porch in the mysterious style (so far as we could interpret) of the original work—and this is all we did.

We would be glad if you would make this explanation in your next issue. We are,

Yours very truly,

ROBERTSON & POTTER.



A SCHOOL OF SCENE PAINTING.—Boston is to have a school for scene painters under the direction of Walter Burridge. It has been started by Henry W. Savage, the manager of theatrical ventures, in order to train a corps of painters who shall understand the peculiarities of stage painting in all its ins and outs.—*Exchange*.

THE EXPORT OF ITALIAN WORKS OF ART STOPPED.—Export of antiquities and art works from Italy has been stopped by law since the 26th of June and will remain illegal for two years. Meantime a catalogue of all objects in private hands is to be compiled. Each chief port is to have two officials, who are specially empowered to stop the exit of those objects in private hands which are not entered in the catalogue. — *N. Y. Times*.

THE PROFITABLENESS OF SWISS HOTELS.—A Swiss statistician, Herr Freuler, of Zurich, has been making some curious calculations as to the annual profits made in Switzerland on tourists. He estimates that the total amount of money paid over to the proprietors of hotels and pensions in the course of a year is between \$17,000,000 and \$20,000,000, about twenty per cent of which comes from the pockets of the native population. Foreign visitors, he calculates, spend about \$15,000,000 for board and lodging, and disburse about \$4,500,000 to the railway companies, steamboat proprietors and owners of vehicles. Against these sums he puts an expenditure on the part of the caterers, railway companies, etc., of \$10,000,000. Allowing for a gross profit of \$12,000,000, Herr Freuler says that \$6,500,000 must be deducted for depreciation and improvements, and that consequently the net profit on the capital outlay, which he estimates at a sum amounting to more than \$110,000,000, is decidedly small. It does not follow, however, that everybody will accept Herr Freuler's figures as indisputable. He goes on to say that there are for the reception of visitors 1,896 hotels, pensions and private lodging-houses, which contain 104,800 beds. Of these places, 945 are open only during the season. Herr Freuler adds that these hotels and pensions employ 22,000 persons regularly, and about another 5,000 irregularly, there being almost equal numbers of both sexes. On the whole, the hotel business gives direct or indirect employment to between 32,000 and 35,000 people at the height of the season, and nearly all of these are natives. — *N. Y. Evening Post*.

FIRES FROM ELECTRIC WIRING.—One of the most difficult things an electrical insurance department has to do is to prove to the lay mind that an installation which has been in use for several years is in unsafe condition owing to the poor condition of the insulation. The claim is made, and perhaps rightly, that the equipment has not given any great amount of trouble, and it is, therefore, difficult to convince the assured of the possibility of fire from electrical causes, as they fail to appreciate the fact that the efforts of the fire department are directed toward the prevention of fires, rather than in determining the cause or origin of a fire, after it has occurred. The old saying that "familiarity breeds contempt" is most applicable to the average electrical equipment when under the supervision of persons who know nothing of the inherent danger of the system. As a rule, no sooner is an equipment completed than more or less extensive changes and alterations are instituted, these additions and changes being made without any regard whatever to the ordinary precautions which are supposed to be taken in connection with electrical work. It is a common thing to find on the average equipment, after it has been in service a short time, the panel-boards, or cut-outs, which, for protection, were incased in cabinets constructed of, or lined with, slate, iron or similar material used as storage closets for waste, rags and paper and other combustible things. When the inclosures are too small for this purpose the doors are either left open or removed, and material of the most combustible nature is stored in direct contact with open fuses, bare bus-bars and switches. The ease with which an electric light or fan can be installed at any point in a building, or with which changes can be made in the position of a lamp, using for this purpose a flexible cord and connecting it to the most convenient source of supply, is perhaps one of the most common and flagrant violations of prescribed rules. As it requires but a short time, usually, for the insulation on this cord to become abraded, or so dry and hard as to break at any point where it may be disturbed, it can be seen that this condition is likely to result in trouble at any place on the circuit. — *Cassier's Magazine*.

SOD-HOUSES, LOG-CABINS AND DUG-OUTS.—It is an error, however, to present the sod-house as the domicile of the earliest settlers in Kansas. Along the eastern reaches of the State the earliest domicile was the log-cabin familiar to pioneer settlements in every partly or wholly timbered country. On the treeless plains the sod-house marked the second stage of advancing civilization. The primitive dwelling of the plains was the dug-out. The sod-house required the presence of culture at least to the extent of breaking-plows and teams of horses or oxen. The dug-out was the product of a few hand tools, and its process of construction was almost as simple as that of the cave dwellings of prehistoric man. The dug-out was the abode of the trapper and hunter who preceded the farmer. It was a square hole dug into the bank of some creek or "draw," surmounted by a ridge-pole which rested one end on the bank and the other on a forked stick at the mouth of the hole, and from this ridge-pole smaller poles were extended to the ground on either side and covered with brush and soil to serve as a roof. Such a domicile was dark and forbidding, but no safer or warmer abiding place has been devised by man. The sod-house was built entirely above ground. The sods were first turned over by an ordinary breaking-plow and then laid in walls like bricks or stones. The roots of the buffalo grass gave these sods a mass and consistency which successfully defied the onslaughts of rain and wind for a long time. The earliest of sod-houses were roofed like the dug-outs, with ridge-pole, brush and soil. The most of them were set with windows like an ordinary house. Some had wooden floors and partitions, though canvas was usually the material with which the latter were made. They had the qualities of stoutness, warmth and cheapness. They have been known to stand for many years, and they made the subjugation of the

prairies by poor men a possible thing. A number of years ago a rich family went from New York to the vicinity of Hays City. A son was suffering from consumption and they sought the pure air of the prairies in hope that it would save his life. Four miles north of Hays they built a modern residence, and by the side of this they caused to be erected a chapel, built, save for the roof, entirely of sod. This chapel was not a crooked building, thrown loosely together, but an edifice of height and fine proportions, having architectural beauty and the usual churchly concomitants of steeple, bell, stained-glass windows, organ-loft and chancel. Often, visiting clergymen gave the services of the Episcopal Church in this chapel, and it is standing yet as a monument to the fancy of a rich man and the enduring quality of the prairie sod. In Greeley County, A. L. Hurt has just completed an edifice which is worth considering as a type of western Kansas architecture. It is a sod-house of comfortable proportions, having a shingle roof and the ordinary doors and windows. But that which singles it out from its fellows on the prairie is a coating of Portland-cement, applied both inside and out, from the ground to the roof timbers. It is the theory of Mr. Hurt that if the sod walls are protected from the weather they will stand forever, or, at least, as long as walls of the hardest stone. — *Kansas City Journal*.

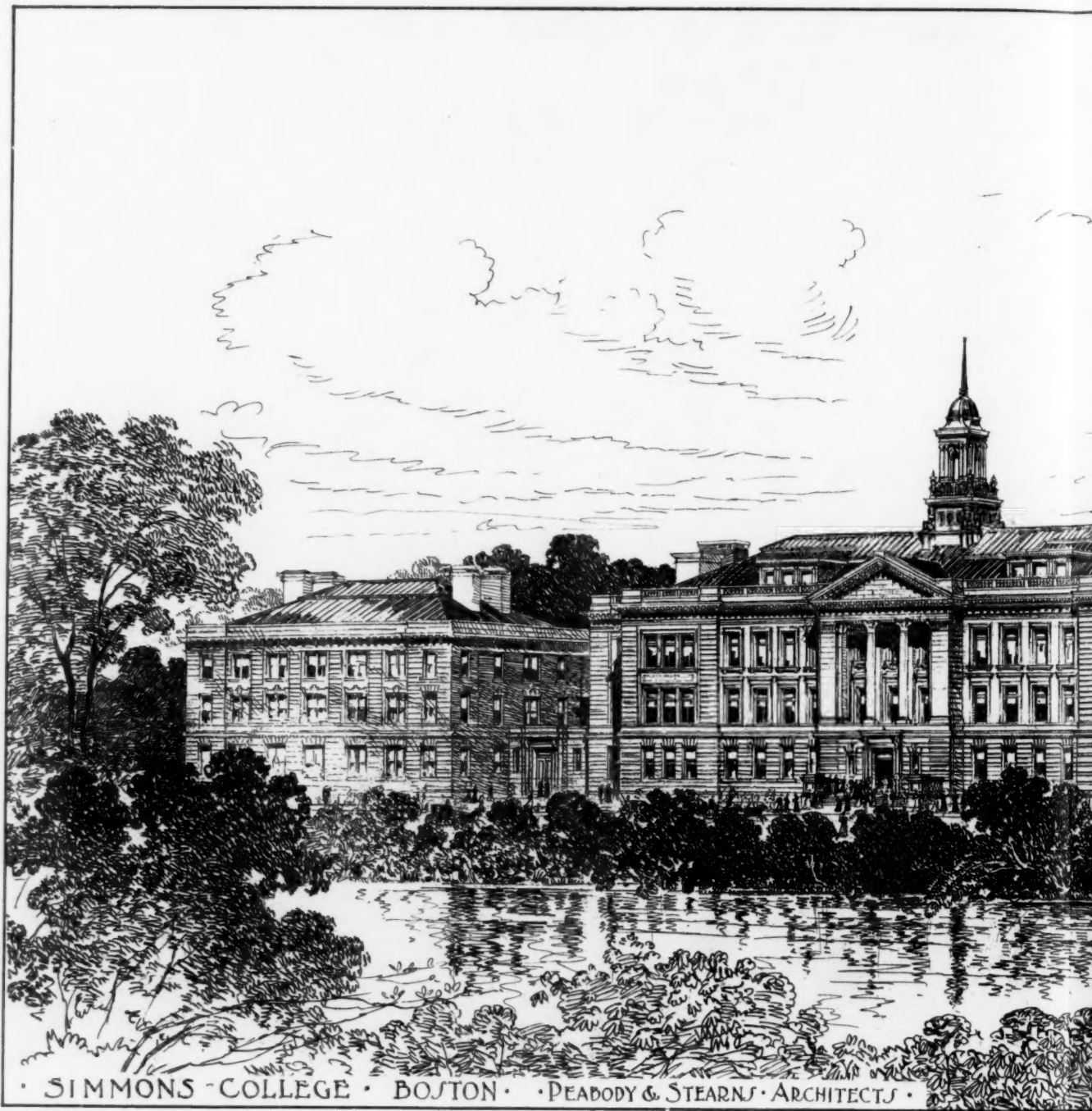
CHINA-LINED WATER-PIPES.—The Meissen china factory, in Saxony, is making water-pipes for waterworks which, on account of the various advantages they have over iron and stone pipes, seem to be a promising article, although they are more expensive than the latter. These pipes are very thin and glazed, and are imbedded in iron pipes, the space between the two substances being filled up with cement. — *Exchange*.

"THE DUKE OF SHOREDITCH."—Shoreditch, to which Archdeacon Sinclair has just appointed a new vicar, is erroneously connected in London legend with the beautiful mistress of Edward IV. The name was really derived from the family of Soerdich, who held the manor, and is still pronounced "Soreditch" with unconscious correctitude by many of the inhabitants. The fields in this neighborhood were the chief practising grounds for the city archers, the best shot of whom was styled the "Duke of Shoreditch." This explains the prayer in the "Poor Man's Petition" of 1603, that the King should not make "the good Lord of Lincoln Duke of Shoreditch." The "good old Ditch," as it is playfully termed by 'Arry, has some literary interest as the first London home of the hapless Chatterton, and the residence of several of the original actors in the plays of Shakespeare. — *Westminster Gazette*.

WATER-JETS AND ELECTRICITY.—The danger from electricity for the fireman in directing a stream of water upon an object carrying electric current, was the subject of an article in a recent issue of *Energie*, of Berlin, recording the results of a number of tests. A man wearing wet shoes, and standing on a wet plank flooring, threw a jet of water on an electrified plate. At 500 volts and an aperture of .47 inches in the nozzle, he felt the current at a distance of 2½ inches, and with an aperture of about 2 inches could not get nearer than about 3½ feet. Under the same conditions, but with alternating current, he could not stay within 8 feet, and at 3,600 volts he had to remain at a distance of 26 feet. — *Engineer*.

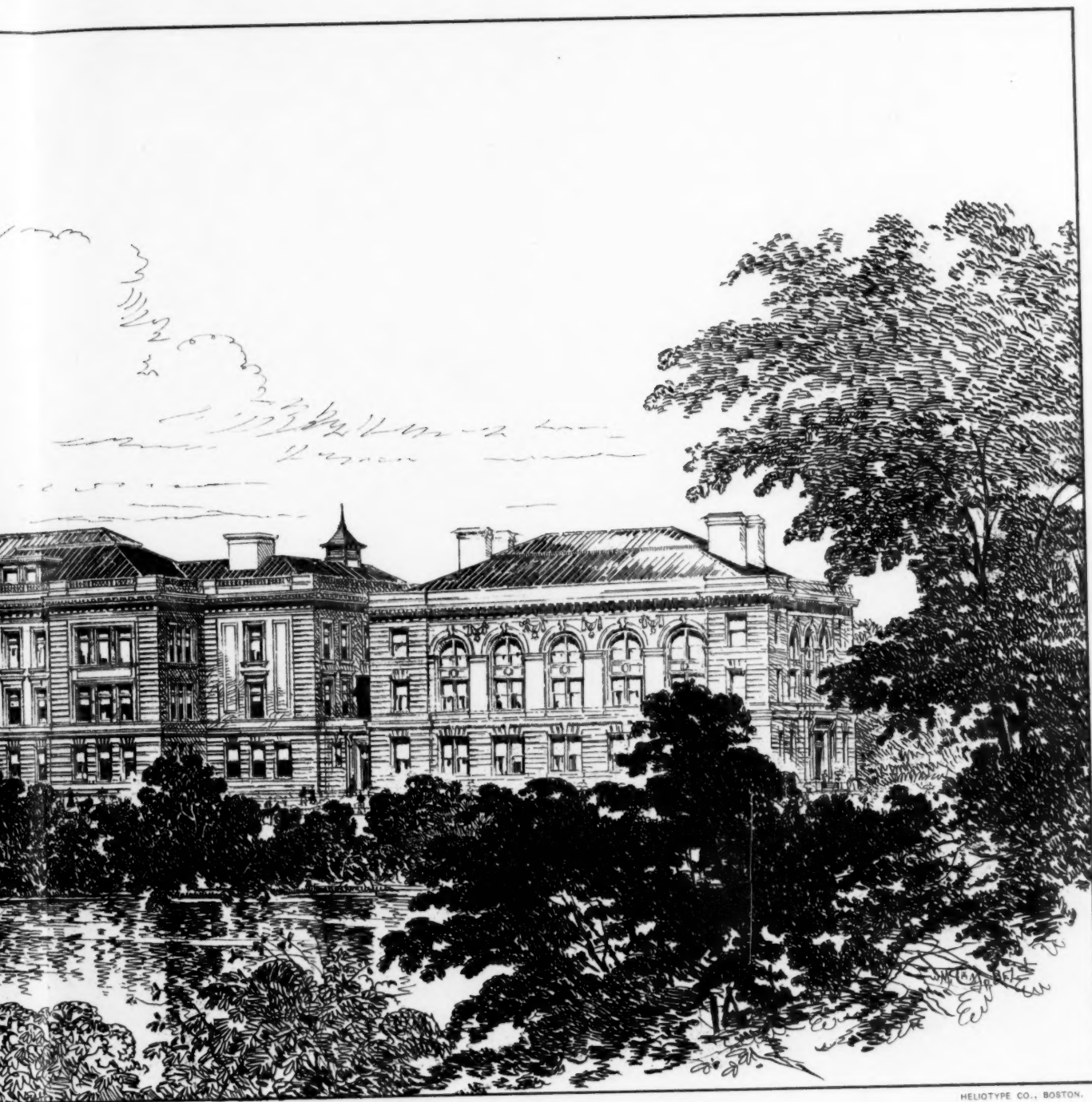
LOSS OF THE ENGLISH TOMBSTONE TRADE.—Cheap labor in Italy at the quarries near Carrara and cheap freights have revolutionized the important craft in tombstones which formerly employed many thousands of marble-cutters in England and Ireland. Marble used to be imported from Italy in the rough, and plenty of stone-cutters were employed to chisel tombstones for English cemeteries. Now the stones are finished in Italy, and only the inscriptions are carved in England. Formerly the gray, green and black marbles of Ireland were worked up by Irish carvers, but now the Italian product can be imported so cheaply in a finished state that the workmen have turned to other trades. The Trades Council of Dublin complains that Italian marblework is sold to patriotic Irishmen as Irish manufacture. Monumental work in the British Islands has greatly declined under this severe competition. — *N. Y. Times*.

THE CHURCH PEW.—I wonder how many people who go to church on Sundays realize that the pews there are, strictly speaking, an institution of aristocratic origin. In olden times people either knelt in church or else stood, just as they do to-day in Russia and in the Christian churches of the Oriental rites. But by degrees the princes, the great barons and the lord of the manor, whose munificence contributed not merely to the erection, but also to the maintenance, of the sacred fane, were permitted by the clergy either to sit among the latter in the chancel or else to have benches and cushions placed for them by the serfs in the nave. In cities this privilege of having seats placed in the nave for them was extended to the mayor and aldermen. But it was the Reformation with the long pulpit discourses that led to the universal establishment of pews, and these became a necessity when attendance at three long services every Sunday was enforced by dire legal penalties. It was, however, in the Puritan days that the system of pews received its furthest development. For the Puritan ladies, like certain ladies in our own time, to whom the Puritan is an anathema, used to take a naughty pleasure in sitting down throughout all those portions of the services where standing was decreed, with the object of flouting the Rubric. In one word, the use of the pew, which was formerly restricted to the princes, the great nobles, the territorial and city magnates and to the lord of the manor, is now extended to all, thanks to the spread of the doctrines of equality and to the length of the sermons. — *Marquise de Fontenoy in N. Y. Tribune*.

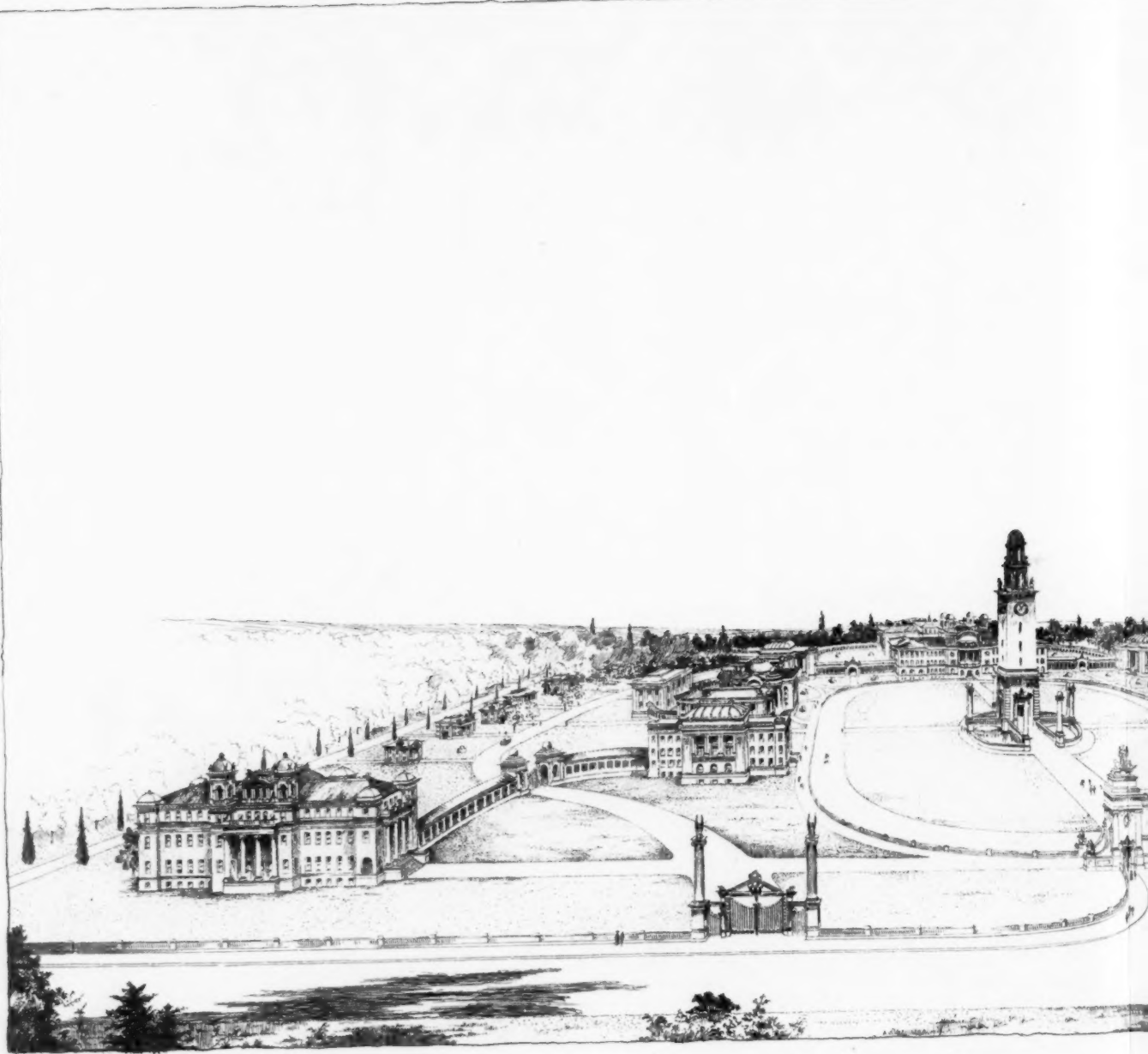


• SIMMONS COLLEGE • BOSTON • PEABODY & STEARNS ARCHITECTS •

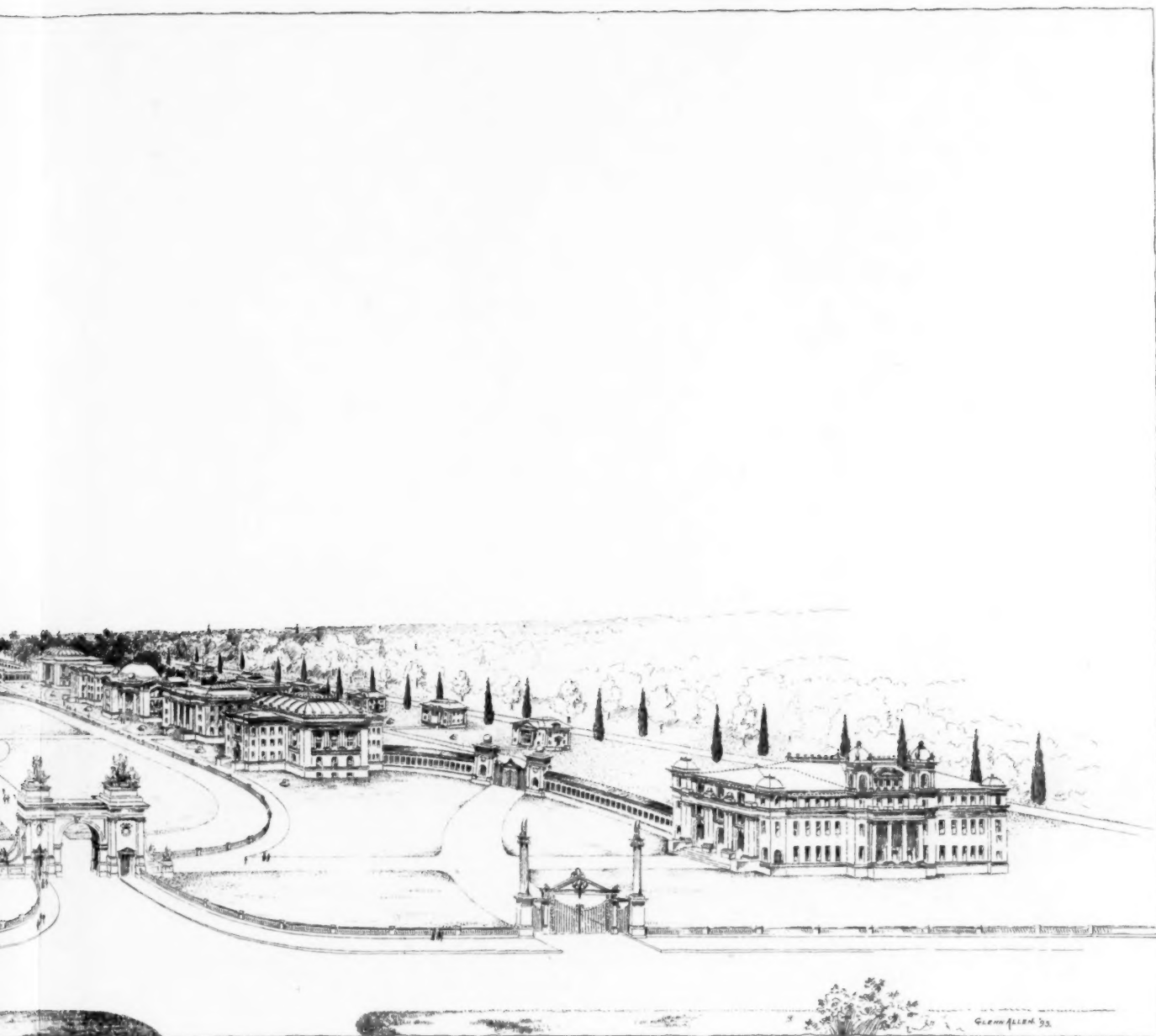
COPYRIGHT, 1903, BY AM. ARCHITECT CO.



HELIO TYPE CO., BOSTON.

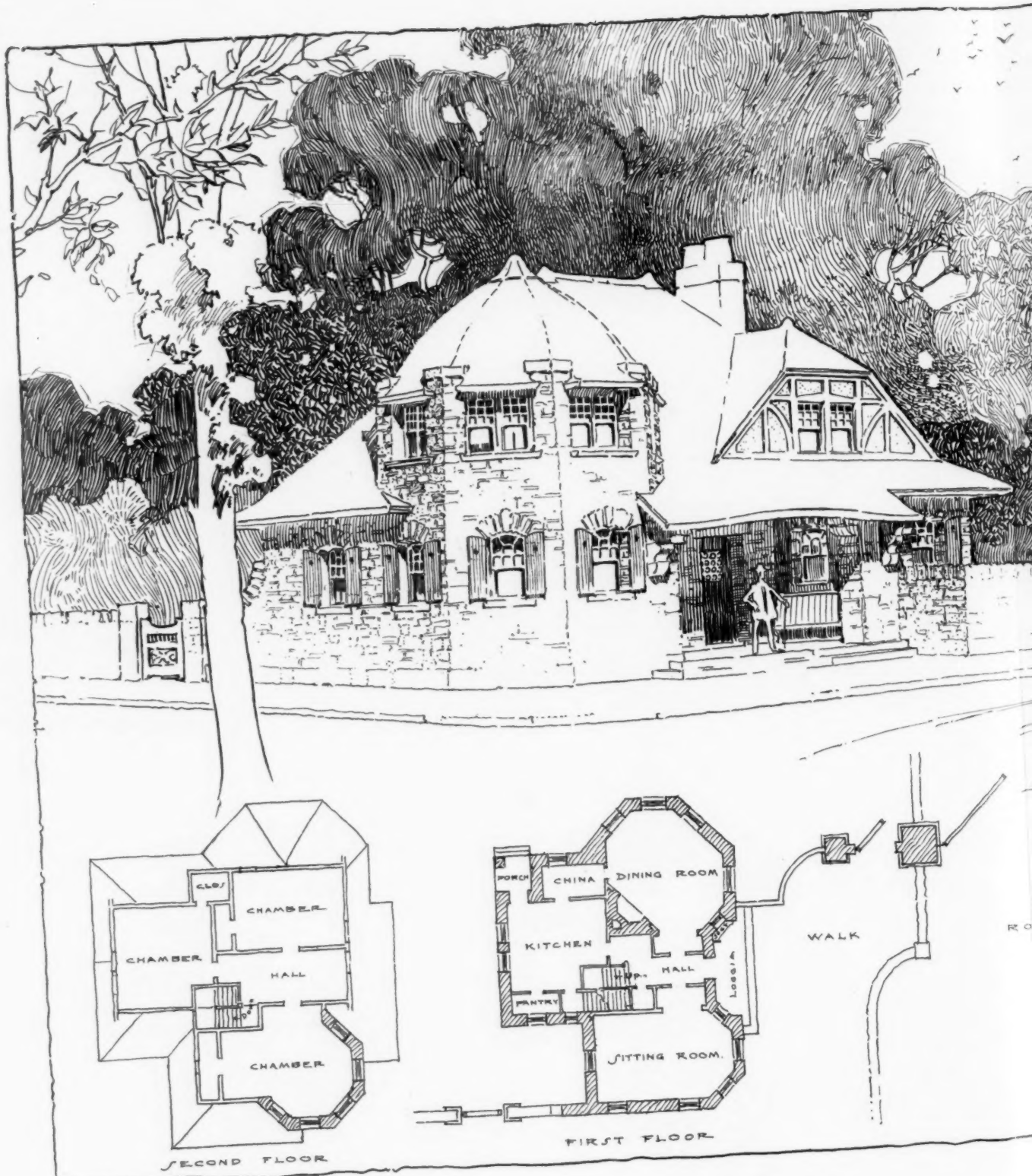


PRELIMINARY STUDY FOR THE TEXAS PRES
GLENN ALLEN, ARCHIT



HELIOTYPE CO., BOSTON.

AS PRESBYTERIAN UNIVERSITY, MCKINNEY, TEXAS.
N, ARCHITECT, WACO, TEXAS.



COPYRIGHT, 1903, BY AM. ARCHITECT CO.

ENTRANCE GATE AND LODGE TO THE SAMOSET GROUNDS
FOR THE RICKER HOTEL CO. · ROCKLAND, ME.



H.C. Wilkinson ARCHITECT
WASHINGTON, D. C.

HELIO TYPE CO., BOSTON.

THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART

VOL. LXXXII.—No. 1451.]

SATURDAY, OCTOBER 17, 1903.

PRICE, { INTERNATIONAL ISSUE, 50 CTS
REGULAR " 15 "

WHITTIER MACHINE CO.,

PASSENGER AND FREIGHT
ELEVATORS.

53 STATE STREET - - - BOSTON.

ELEVATOR SIGNALS

OF ALL KINDS

HERZOG TELESEME CO.

51 WEST 24TH ST., NEW YORK



ARCHITECTURAL INSTRUCTION.

BOSTON, MASS.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

DEPARTMENT OF ARCHITECTURE.

Options in Architectural Engineering and Landscape Architecture.

College graduates and draughtsmen admitted as special students.

SUMMER COURSES in Elementary Design and Shades and Shadows. Proficiency in these subjects will enable draughtsmen and students from other colleges to enter third year work.

For catalogues and information apply to

H. W. TYLER, Secretary,
Mass. Institute of Technology, Boston, Mass.

CAMBRIDGE, MASS.

HARVARD UNIVERSITY.

THE LAWRENCE SCIENTIFIC SCHOOL

offers professional courses in Forestry, Engineering, Mining and Metallurgy, Architecture, Landscape Architecture, etc. Students admitted by examination and by transfer from other Schools or Colleges. Approved Special Students admitted without examinations. New and enlarged equipment. For Catalogue apply to the Secretary, J. L. LOVE, 16 University Hall, Cambridge, Mass. N. S. SHALER, Dean.

Redding, Baird & Co.

Stained Glass

83 Franklin St., Boston

Original Designs for Church and Memorial Windows of every type and in all grades of outlay.

LOOMIS FILTERS.

ESTABLISHED 1880.

Improved System. Simple and Effective.

LOOMIS-MANNING FILTER CO.,

Main Office: 402 CHESTNUT ST., PHILADELPHIA.
Boston. New York. Baltimore. Washington.

COLUMBUS, OHIO.

**OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING**

Offers four-year courses in Architecture, Civil, Electrical, Mechanical and Mining Engineering, and in Ceramics. Tuition free. For information address,
President W. O. THOMPSON, Columbus, Ohio.

ITHACA, N. Y.

**CORNELL UNIVERSITY
COLLEGE OF ARCHITECTURE**

Offers a four-year course in Architecture leading to the degree of B. Arch.; also a two-year special course with certificate.

NEW YORK.

**THE SOCIETY OF BEAUX-ARTS
ARCHITECTS**

has established

A FREE COURSE OF STUDY

open to draughtsmen and students of any city modelled on the general plan pursued at the Ecole des Beaux-Arts in Paris, and comprising frequent problems in Orders, Design, Archeology, etc.

For information apply to the Secretary of the Committee on Education, 2 East 83d St., New York City.

ST. LOUIS, MO.

**WASHINGTON UNIVERSITY
SCHOOL OF ENGINEERING AND
ARCHITECTURE**

Offers a four-year course in Architecture, leading to a degree of B. S. in Architecture. College Graduates admitted to advanced standing or as special students.

FREDERICK M. MANN, Professor.

FLYNT

BUILDING AND CONSTRUCTION CO.

GENERAL OFFICE, PALMER, MASS.

We contract to perform all labor and furnish all material of the different classes required to build complete

CHURCHES, HOTELS, MILLS, PUBLIC
BUILDINGS AND RESIDENCES.

Also for the construction of

RAILROADS, DAMS AND BRIDGES.

We solicit correspondence with those wishing to place the construction of any proposed new work under ONE CONTRACT, which shall include all branches connected with the work. To such parties we will furnish satisfactory references from those for whom we have performed similar work.

The WINSLOW BROS. COMPANY,

CHICAGO,

Ornamental Iron and Bronze.

PHILADELPHIA, PA.

UNIVERSITY OF PENNSYLVANIA

SCHOOL OF ARCHITECTURE

FOUR-YEAR COURSE (Degree B. S. in Arch.).

GRADUATE YEAR (Degree M. S. in Arch.).

TWO-YEAR SPECIAL COURSE (Certificate).

College Graduates are granted advanced standing and qualified draughtsmen admitted to the Special Course.

The University offers also four-year courses in CIVIL, MECHANICAL, ELECTRICAL and CHEMICAL ENGINEERING, leading to the Degrees of B. S. in their respective subjects.

For full information address: DR. J. H. PENNIMAN, Dean, College Hall, University of Pennsylvania, Philadelphia, Pa.

"THE AMERICAN VIGNOLA"

THE FIVE ORDERS OF ARCHITECTURE

BY

WILLIAM R. WARE

Professor of Architecture, Columbia University
Text and Plates, 86 pp., 9"x12" Price, \$3.00
AMERICAN ARCHITECT COMPANY,
PUBLISHERS

BOOKS:

"Door and Window Grilles."

104 Plates: 10" x 14 1/4".

In Cloth, \$7.50.

In Portfolio, \$6.50.

AMERICAN ARCHITECT COMPANY, Publishers.

ROBERT C. FISHER & CO.

Successors to Fisher & Bird,

MARBLE AND GRANITE WORKS

97, 99, 101 and 103 EAST HOUSTON STREET,

Established 1830.

NEW YORK

Enamel Finish



that is made of inferior material will always look cheap and mar the beauty of the finest drawing room. The best materials that can be obtained are used in the manufacture of our

Structural Enamels

They always give satisfaction.

EDWARD SMITH & CO.

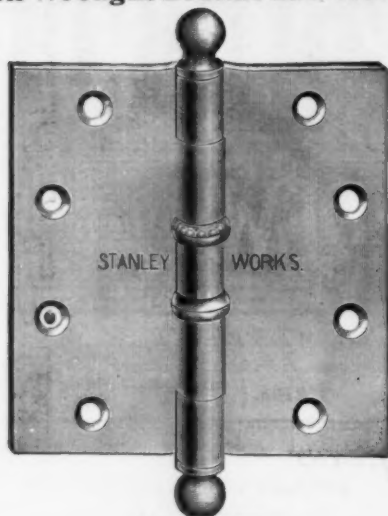
Varnish Makers and Color Grinders

45 Broadway, New York

59 Market St., Chicago

Ball Bearing Hinges

In Wrought Bronze and Steel



ALL FINISHES
Our new Catalog can be had for the asking
THE STANLEY WORKS, Dept. C
NEW BRITAIN, CONN.
79 Chambers Street, NEW YORK

CLINTON WIRE-CLOTH CO.

Sole Proprietors and Manufacturers of

WIRE LATH

DOUBLE TWIST WARP
STIFFENED (Iron Furred)
CLINTON CORRUGAT'D

Plain, Japanned or Galvanized.

The Most Perfect and Economic System of FIREPROOF Construction.

SEND FOR CIRCULAR.

BOSTON,
199 Washington St.

NEW YORK,
76 Beckman St.

CHICAGO,
137 Lake St.

FACTORY,
CLINTON, MASS.

FOR INFORMATION ABOUT

U. S. MAIL CHUTES

WHICH ARE

A necessity in Office Buildings and Hotels,
write to the sole makers.

THE CUTLER MFG. CO., ROCHESTER, N. Y.
PATENTED. AUTHORIZED.

"La Construction Moderne,"

A journal of whose merits our readers have had opportunity to judge because of our frequent reference to it and our occasional republication of designs that are published in it, is the most complete and most interesting of the French architectural journals.

The seventeenth annual volume is now in course of publication.

Subscription, including postage, 35 francs.

Each weekly issue contains, besides the illustrations included in the text, two full-page plates, which by themselves are worth double the amount of the annual subscription.

PRICE OF BACK ANNUAL VOLUMES,

:: 40 Francs. ::

Address for subscriptions and catalogues,

LIBRAIRIE DE LA CONSTRUCTION MODERNE,

18 Rue Bonaparte, Paris, France.

MINERAL WOOL

FIRE, SOUND and VERMIN PROOF INSULATOR.

Samples and Circulars Free.

U. S. Mineral Wool Co., 143 Liberty Street,
NEW YORK.

"COHESIVE CONSTRUCTION."

An Essay on the Theory and History of Cohesive Construction.

By RAFAEL GUASTAVINO, Architect.

Price, \$1.25.



THE NAME

"Standard"

is cast in relief on every piece of the

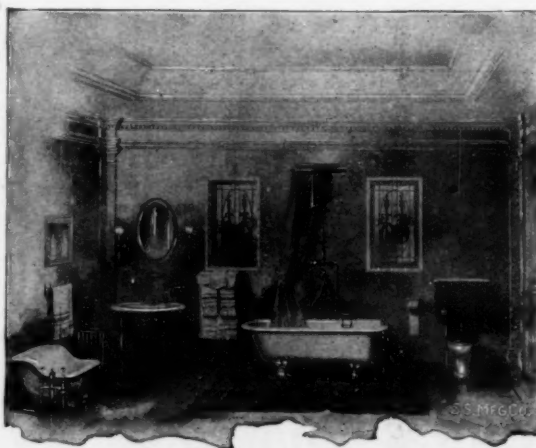
Porcelain Enameled Ware

that has received the Highest Awards at All World's Fairs and Expositions.

The guarantee which this name carries with it is absolute and a positive assurance against the annoyances inseparable from the use of inferior and non-guaranteed brands.

"Standard" Porcelain Enameled Ware has the hard, smooth and absolutely non-porous surface that is essential to perfect sanitation, combining the daintiness and purity of china with the strength and durability of iron.

Catalogue matter on request.



STANDARD SANITARY MFG. COMPANY
PITTSBURGH, PA.

ARCHITECT

AND

Contract Reporter

Published Every Friday by P. A. Gilbert Wood

6 TO 11 IMPERIAL BUILDINGS
LUDGATE CIRCUS. LONDON, E. C.

PRICE, FOURPENCE

The "ARCHITECT AND CONTRACT REPORTER" has been established nearly 40 years; has a large and influential circulation; has been proved to be the best medium for advertising to Architects, Builders and Contractors; has the finest illustrations, and has been specially noted for its Art reproductions.

Send us six English 1d. stamps and we will mail you sample copy.

Send us post-office money order for 50 cents and we will send you the last six weeks' issues.

On receipt of \$6.25 we will forward for 12 months.

PITTSBURGH NEW YORK BOSTON
PHILADELPHIA CHICAGO



Traveling and Jib
CRANES

Send for catalog, dimensions, etc.

NORTHERN ENGINEERING WORKS
 24 Chene St., Detroit, Mich.

We have a few incomplete sets of the

for the years 1893, 1894 and 1895 which we will sell at a bargain.

These are not second-hand copies, but fresh and perfect copies from our own stock-room.

Each copy contains, besides the black-and-white illustrations, a single gelatine print.

Each copy was published at twenty-five cents, but we will sell each lot as it stands for **\$5.00.**

Supplying each customer with the fullest of these incomplete lots in stock at the time of receiving his order.

The shortage runs from one to six or eight issues: for instance

One lot A. 1894. Short one print. E. & O. E.

Four lots B. " " two " "

One lot C. " " two issues. "

Four lots D. " " six " "

211 Tremont Street, Boston

[For pagination, see *Alphabetical Index on Cover 2.*]

RHODE ISLAND.
Providence.
Nathaniel Machine Co. I.E. 44



The Kinnear Stamped Steel Ceiling, Sidewall

etc., has held its place in the front for years. It has no equal in construction or design.

Catalogue and prices furnished upon request.

The Kinnear & Gager Co.
Manufacturers
(New Plant) 236 Mt. Vernon Ave.
Columbus, Ohio
Eastern Warehouse and Office
No. 125 Broad St., Boston



CORRECT TIME

Fine Self-Winding Clocks for Office Buildings, Residences, Libraries, Churches, Etc.

Self-Winding Tower Clocks. No heavy weights. No stopping by storms.

Program Clocks and Time Systems for Schools, Public Buildings, Etc.

20,000 in Use

Write for Catalog

Blodgett Clock Co., 141 Franklin St., Boston

LOCKERS

SEND FOR CATALOG
NARRAGANSETT MACH. CO.
BOX 24, PROVIDENCE, R. I.

STEEL OR WOOD

[Now Ready: The Second Volume of the "Topical Architecture" Library]

"Door and Window Grilles"

104 Plates: 10 in. x 14½ in.

Uniform with the first volume ["Italian Renaissance Doorways"] of this Library

MARCH 22, 1902

THE next time you pass along the streets of one of our large cities, note what rapid progress is making in the use of wrought-metal grilles, screens and gates of various kinds for the ornamental protection of doorways and the window-openings of lower stories.

The great interest shown in this particular form of artistic artisanship just now is our reason for devoting the second volume of this Library to door and window grilles.

PRICE: Bound in Cloth \$7.50
In Portfolio 6.50

American Architect Company
211 Tremont St., Boston

CODE OF PRACTICE FOR SUB-ESTIMATING AND SUB- CONTRACTING

Adopted by the Master Builders' Association of the City of Boston, Aug. 2, 1894.

ARTICLE I.

Obligation of Principal Contractor to Sub-Contractor.

A principal contractor is under obligation to treat upon an equal basis all estimates which he "receives" prior to putting in his own bid. Estimates must be considered as "received" when they come into a principal contractor's possession, either by his direct solicitation or by being accepted by him. The opening of a bid, knowing it to be such, constitutes receipt of the same.

A principal contractor is under no obligation to use a bid which he has not solicited, accepted, or received, but if he does not wish to use the estimate of a sub-bidder he should decline it, if proffered personally, or should return it unopened if sent to him by mail or otherwise. The retention of a bid should be construed as a receipt of the same.

A principal contractor, when making up his estimate, is not entitled to receive bids from sub-contractors if he is at the same time making himself their competitor by figuring their portion of the contemplated work. It is legitimate for a principal contractor to figure all portions of work, depending upon none for what are usually known as sub-estimates, but it is not legitimate for him to receive bids from others for sub-work if he is himself figuring those portions independently.

ARTICLE II.

Award of Sub-Contracts.

The principal contractor having been awarded a general contract should immediately award the sub-contracts to the lowest bidder in each branch.

ARTICLE III.

Penalty for not Awarding Contract to Lowest Sub-Bidder.

A principal contractor failing to award a sub-contract to the lowest sub-bidder to whom he is under obligation as previously provided should be liable to pay damages to the said lowest bidder, in amount not less than ten per cent of the amount of the estimate.

Payment of such damages will not relieve the principal contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

ARTICLE V.

Payments to Sub-Contractors.

Unless the contracts made with sub-contractors otherwise provide, payments during the progress of the work should be made by the principal contractor to the sub-contractors upon the same basis of payment, in relation to amount of work performed, as is prescribed in the contract made by the principal contractor with the owner.

Final payment to a sub-contractor should be considered as due at the expiration of thirty days after the completion of his work and its approval by the architect or owner, unless otherwise provided by the sub-contract or agreement.

ARTICLE VII.

Obligation of Sub-Contractor to Principal Contractor.

Should a sub-contractor refuse to contract at the amount of the estimate he has given to a principal contractor who has used the said estimate in good faith, he then should be liable to the said principal contractor for damages in amount not less than the difference between the amount of the estimate which was submitted by him and the amount at which the principal contractor may be obliged to contract the work.

Payment of such damages will not relieve the sub-contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

ARTICLE X.

Bids to Architects or Owners.

When bids for separate departments of work on a building are solicited by the architect or the owner, they should be submitted with the understanding that they are direct estimates, for which direct contracts are to be made by the owner with the lowest bidder, and no other disposition of such bids should be permitted without consent of the bidder submitting the same.

Sub-bids should be given only to the principal contractors who are estimating the work in question, and should not be left with architects or owners for the inspection and information of principal contractors. Sub-contractors must understand that bids thus left with architects or owners are in great danger of losing their confidential character, and that if they so leave them they cannot claim protection or redress under the first article of this Code.

SUGGESTIONS.

Members of this Association having sub-contracts to let, or material to buy, should, as far as may be consistent with business principles, deal only with members of the Association, or at all events give their fellow-members an opportunity to compete, and then give them the preference, other things being equal.

All bidders should take cognizance of the danger they may be subjected to through the practice, so prevalent in some architects' offices, of making change in plans or specifications, or in both, during the progress of estimating. Correction of this pernicious practice can only be obtained through refusal by contractors to estimate under such conditions.

A true copy.

Attest:

WM. H. SAYWARD,
Secretary, M. B. A.



CEMENT COATED NAILS WERE USED IN LAYING THE FLOORS OF THE WALDORF ASTORIA

Cement Coated Wire Nails

are superior for building purposes to either cut or ordinary wire nails, having the advantages of both and distinctive qualities of their own. Tests made by the U. S. Army at Watertown, Mass., and by our customers, have shown them to have a holding power at least 100 per cent. greater than that of uncoated wire nails. They are carefully made and closely inspected, the list including every size and style required for a building of any description.

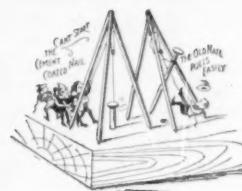
For Flooring

they have very apparent advantages over either cut or wire nails. They will not split the wood, and their unyielding grip "draws down" in a manner that for all time prevents springing. They cost you less. We invite your correspondence.

J. C. PEARSON COMPANY

Board of Trade Building

BOSTON, MASS.



"Renaissance Doorways"

ITALIAN

104 Plates, 10" x 14 1/4"

Uniform with the second volume ["Door and Window Grilles"] of the Topical Architecture Library

PRICE: Bound in Cloth. \$7.50
In Portfolio 6.50

AMERICAN ARCHITECT COMPANY, Publishers

211 TREMONT STREET, BOSTON

Masonry in Modern Work.

A "PROLEGOMENOS" ON THE FUNCTION OF MASONRY IN MODERN ARCHITECTURAL STRUCTURES.

BY
R. GUASTAVINO - - - Architect. | Price, Paper Cover - - 30 Cents.

FOR SALE BY THE
AMERICAN ARCHITECT CO.

[Now Ready: The Second Volume of the "Topical Architecture" Library]

"Door and Window Grilles"

104 Plates: 10 in. x 14 1/2 in.

Uniform with the first volume ["Italian Renaissance Doorways"] of this Library

MARCH 22, 1902

The next time you pass along the streets of one of our large cities, note what rapid progress is making in the use of wrought-metal grilles, screens and gates of various kinds for the ornamental protection of doorways and the window-openings of lower stories.

The great interest shown in this particular form of artistic artisanship just now is our reason for devoting the second volume of this Library to door and window grilles.

Price: Bound in Cloth . . . \$7.50
In Portfolio . . . 6.50

American Architect Company.
211 Tremont Street, Boston

"The Georgian Period"

THIS publication, which now consists of eleven Parts, contains over two hundred pages of text, illustrated by over three hundred and fifty text-cuts, and four hundred and four full-page plates, of which over one-third are gelatine or half-tone prints. It is in truth a work of superior excellence and great usefulness.

The matter illustrated may in small part be classified thus:

PUBLIC BUILDINGS

City Hall, New York, N. Y.	Date 1803-12
Old State House, Boston, Mass.	" 1748
Pennsylvania Hospital, Philadelphia, Pa.	" 1755
Carpenters' Hall, Philadelphia, Pa.	" 1770
Independence Hall, Philadelphia, Pa.	" 1729
Faneuil Hall, Boston, Mass.	" 1741
and others.	

CHURCHES

King's Chapel, Boston, Mass.	Date 1749
Seventh-day Baptist Church, Newport, R. I.	" 1729
Christ Church, Alexandria, Va.	" 1767
Christ Church, Philadelphia, Pa.	" 1727
St. Paul's Chapel, New York, N. Y.	" 1764
Old South Church, Boston, Mass.	" 1729
First Church, Hingham, Mass.	" 1681
St. John's Chapel, New York, N. Y.	" 1803
First Congregational Church, Canandaigua, N. Y.	" 1812
St. Peter's P. E. Church, Philadelphia, Pa.	" 1758
Gloria Dei Church, Philadelphia, Pa.	" 1700
and others.	

IMPORTANT HOUSES

Fairbanks House, Dedham, Mass.	Date 1636
Royall Mansion, Dedham, Mass.	" 1737
Philipse Manor House, Yonkers, N. Y.	" 1745
Tudor Place, Georgetown, D. C.	" 179-
Mappa House, Trenton, N. Y.	" 1809
Woodlawn, Va.	" 1799
Mount Vernon, Va.	" 1743
and others.	

Incidentally there are shown special measured drawings or large views of the following features and details:

Porches and Doorways	67	Subjects
Staircases	23	"
Mantelpieces	89	"
Pulpits	9	"
Fanlights	60	"

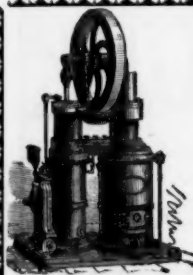
In addition to the subjects enumerated above there is a large quantity of measured and detailed drawings of Cornices, Ironwork, Gateposts, Windows, Interior Finish, Ceiling Decoration, Capitals, etc., together with elevational and sectional views of entire buildings.

AMERICAN ARCHITECT & BUILDING NEWS CO., Publishers, Boston, Mass.



THERE is nothing in which there is such a great difference between the good and bad kinds as there is in pencils. When they are bad they are so very bad, and when they are good they are so very satisfactory, that everyone who buys a Dixon pencil appreciates it. Ask for booklet 14-j.

JOSEPH DIXON CRUCIBLE CO., JERSEY CITY, N. J.



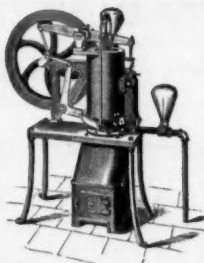
.. WATER .. RIDER & ERICSSON HOT-AIR PUMPING ENGINES

If water is required for household use, lawns, flower beds or stable, no pump in the world will pump it so safely, cheaply and reliably. No danger, as from steam. No complication, as in gasoline engines. No uncertainty, as in windmills. Prices reduced. Catalogue "B" on application.

RIDER-ERICSSON ENGINE CO.

35 Warren Street, New York
239 Franklin Street, Boston
692 Craig Street, Montreal, P. Q.

40 Dearborn Street, Chicago
40 North 7th St., Philadelphia
Teniente-Rey 71, Havana, Cuba



TRADE MARK
Everlastins
READY MIXED RED PAINT
Guaranteed the cheapest, most durable and absolutely the best for Buildings, Structures and all work that needs paint.
MEANS & THACHER, 6-8 CUSTOM HOUSE ST., BOSTON
Sole Manufacturers. Sample and prices on request



QUICK AND EASY RISING HAND POWER,
BELT POWER AND ELECTRIC

ELEVATORS

SEND FOR CATALOGUE

KIMBALL BROS. CO., 1014 9th St.,
Council Bluffs, Iowa.
KIMBALL ELEVATOR CO., 141 Vincent
St., Cleveland, O.
New York Office, 120 Cedar St.

Mason Safety Treads For STAIRS, WOOD, IRON, MARBLE
or CEMENT, new or old
Hundreds of thousands in use
Am. Mason Safety Tread Co., Boston

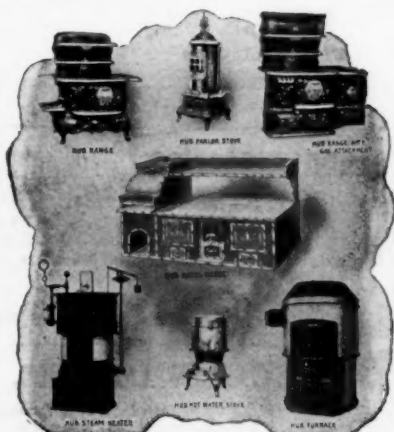
THE YALE LOCKS, Builders'
Hardware and Art Metal Work*
are produced by the

Yale & Towne
Mfg. Company.

General Offices: 9-11-13 Murray St.,
New York City.

*"Artist and Artisan" is the title of an attractive
Brochure dealing with the origin of the Hardware
of Ornament (Art Metal Work) and its present de-
velopment and uses. It will be sent on request.

ESTABLISHED 1868
THE "HAYES"
METALLIC GLAZED STRUCTURES
SKYLIGHTS FIRE PROOF WIRE-GLASS **WINDOWS**
71-8TH AVE. NEW YORK.
METAL LATHINGS ETC.



Smith & Anthony Co.
Manufacturers of

HUB

RANGES AND HEATERS

Hotel and Restaurant
Specialties and

Sanitas Plumbing Specialties

HUB goods have every tested mod-
ern convenience and are the
most popular make.

BEST BY EVERY TEST

48 - 54 Union Street, Boston, Mass.

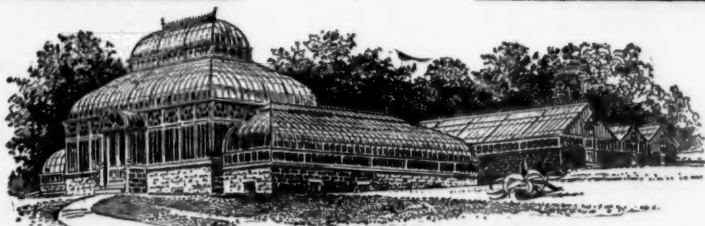
Write for further information and Catalogue A

SODERLUND
TWIN FAUCET
FIXTURES
FOR
Lavatories, Bath
Tubs and Shower
Baths
SEND FOR CATALOGUE
UNION BRASS WORKS
CO.
7 Sherman St.,
CHARLESTOWN, - MASS.

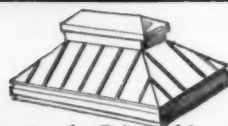
A. T. HAGEN CO.
Modern Laundry Machinery
CHICAGO, ILL.
ROCHESTER, N. Y.

RICHARD CROWELL, Jr., Pres. JNO. J. DUFFY, Gen'l Mgr.
CHAS. M. CROWELL, Vice-President

The Lafayette Mill and Lumber Co.
Sash, Doors, Blinds and Lumber
Lafayette Ave. and P. B. & W. R. R.
BALTIMORE, MD.
Telephone Connections



Horticultural Designers and Builders
PERFECT SASH-OPERATING APPARATUS
FOR FACTORIES, MILLS, GREENHOUSES, ETC.
HOT WATER BOILERS FOR GREENHOUSES & DWELLINGS
HITCHINGS & CO. 233 Mercer St. Send Four Cents
New York for Catalogue



Metal Skylights

that positively will not leak, drip, sweat or
burn; self-ventilating. All about them in
our Illustrated Catalogue—free for the
asking. Shall we mail it to you?

E. VAN NOORDEN CO.

944 Massachusetts Avenue
BOSTON, MASS.



JENKINS BROTHERS' VALVES

Perfectly tight under all pressures of steam, oils or acids.
Warranted to give satisfaction under the worst conditions.

RECEIVED THE **GOLD MEDAL** AT THE PAN-AMERICAN EXPOSITION

Insist on having the genuine, stamped with Trade Mark.

JENKINS BROTHERS, New York, Boston, Philadelphia, Chicago.

WARREN'S TRINIDAD ASPHALT

ROOFING

"ANCHOR BRAND"

PAVING

THE BEST MATERIAL FOR

WARREN CHEMICAL & MFG. CO., 170 Broadway, N. Y.

CRANE VALVES

ESTABLISHED 1855

ASPHALT FLOORS, ROOFS, SIDEWALKS AND CARRIAGE-WAYS

Of Public Buildings, Hospitals, Warehouses, Stables, Cellars, etc.

Laid with VAL de TRAVERS ROCK ASPHALT,

DURABLE, FIREPROOF AND IMPERVIOUS.

For estimates and list of works executed, apply to

THE NEUCHÂTEL ASPHALT CO., Limited

265 BROADWAY - - - NEW YORK.



TELEPHONE - 46-18th ST.

NEW YORK METAL CEILING CO.
537-539-541 WEST 24th ST. N.Y.

Boston Office: 48 Congress St., Room 24.

CABOT'S Sheathing & Deafening "QUILT"



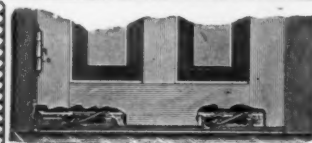
For Heat Insulation and Sound Deadening

In the tests made by Prof. Norton of the Mass. Institute of Technology, for sound-proofing for the New England Conservatory of Music, Quilt proved far superior to any other deadener, and Quilt construction cost less, weighed less and occupied less space than any other.

Samples and catalogue on request.

SAMUEL CABOT, Sole Manufacturer
BOSTON, MASS.

Agents at all central points



The Door Strip Problem Solved

The Introstile, "the perfect strip," gives satisfaction in every case.

No more worn thresholds.
The Introstile clears rugs and carpets, and is out of sight when door is open. Send for circular.

The Introstile & Novelty Co.
Marietta, Ohio.

Conservatories, Greenhouses, Vineries, Etc.

Designed, erected and heated. Catalogue, also special plans and estimates, on application.

LORD & BURNHAM CO.,
1133 Broadway - - - New York City.

E. ELDON DEANE,

Architectural Colorist and Draughtsman.
63 Seymour Building, Fifth Ave., cor. 42d St.
NEW YORK CITY.

BOOKS:

"Italian Renaissance Doorways."

104 Plates: 10" x 14 1/2".

In Cloth, \$7.50.

In Portfolio, \$6.50.

AMERICAN ARCHITECT COMPANY, Publishers.

BURDITT & WILLIAMS CO.

INVITE ATTENTION TO THE

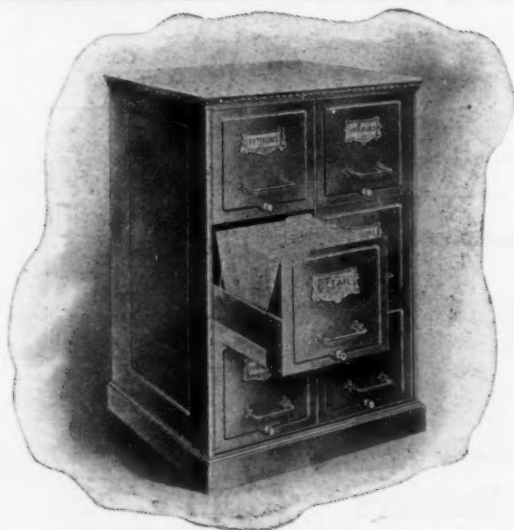
FINE HARDWARE

On Exhibition in their

**New and Spacious
Hardware Store**

4 High, cor. Summer St., Boston

Unique Reception and Sample Room
for the use of Architects and their clients.



STEEL FILES FOR ARCHITECTURAL PLATES

Incombustible, convenient, durable and finished.

Send for Booklet 542, illustrating new styles.

ART METAL CONSTRUCTION CO.

154 Gifford Ave., Jamestown, N. Y.

Officially Approved and Adopted
Throughout the Civilized World, as the Standard
KEASBEY & MATTISON'S
85 Per Cent.

Sectional Magnesia Coverings.

85 Per Cent. Magnesia Coverings are the highest priced coverings sold, but the cheapest to buy if you have to pay the coal bill yourself.

BUY THE GENUINE.

There are frauds and imitations being offered.
85 Per Cent Sectional Magnesia Coverings.

MANUFACTURED BY THE

KEASBEY & MATTISON COMPANY,
AMBLER, PENNA.

Branches in all the principal Cities.

All infringers will be held liable in heavy damages

"THE AMERICAN VIGNOLA"

The Five Orders of Architecture

By **WILLIAM R. WARE**, Professor of Architecture, Columbia University

Text and Plates, 86 pp., 9"x12". Price, \$3.00

AMERICAN ARCHITECT COMPANY, Boston, Publishers

The STURTEVANT SYSTEM

OF

Heating and Ventilation

Is admirably adapted for **BANKS, OFFICES** and **PUBLIC BUILDINGS**. Air is forced under pressure to the desired points and insures positive ventilation. The heating surface is localized, extended piping systems are avoided and the temperature automatically controlled. Send for Catalogue A 112A.

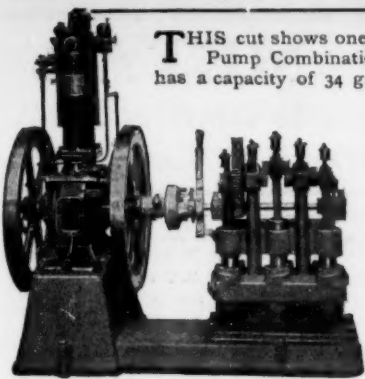
B. F. STURTEVANT CO. BOSTON, MASS.

NEW YORK

PHILADELPHIA

CHICAGO

LONDON



THIS cut shows one of our smaller Gasoline Engine and Triplex Pump Combinations. The Engine is of 3 Hp. and the outfit has a capacity of 34 gallons a minute discharged at 146' elevation.

We are consulting and contracting engineers for Complete Water Works Systems, using Windmills, Gasoline Engines, and Electric or Steam Pumps, and are prepared to give advice to anyone on proposed plants and to submit proposals and estimates for the whole or any part of same. Send for our special catalogue on this subject.

CHARLES J. JAGER COMPANY

174 HIGH ST., BOSTON

ELECTRIC HOUSE SERVICE PUMPS

WILLIAM E. QUIMBY

[Incorporated]

141 Broadway, New York

CHICAGO
EDWARD YEOMANS
1141 MONADNOCK BLDG.

NEW ORLEANS
SAFETY ELECTRIC MFG. CO.
303 MAGAZINE ST.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Muskegon, Mich.—Plans have been completed by W. G. & F. S. Robinson, of Grand Rapids, for the handsome residence of Secretary J. G. Emery of the Shaw Electric Crane Works. Work is to be commenced as soon as the contract is awarded, which will be shortly, and it is to be completed and ready for occupancy in the spring. The building will be of brick veneer, two stories in height and of Colonial design. It will be erected at the corner of Webster Ave. and 5th St., one block from Hackley Sq., and will cost \$10,000.

Newark, N. J.—A building will be erected at Central Ave. and Washington St. for the Newark Charitable Eye and Ear Infirmary, at a cost of \$50,000.

It is reported that an immense combination office building, hotel and station is to be built by the N. J. Central Railroad in Broad St. It is believed the building will cost about \$1,000,000.

New Castle, Ind.—The county commissioners will meet here to adopt the revised plans for a new addition to the court-house. The expenses for county improvements for the year, September 1 to September 1 next year, will be in the neighborhood of \$75,000. These include an addition to the court-house, heating plant, street paving and cement walks.

Newton, Mass.—This city is to have a new city-hall valued at about \$25,000 in the near future, and it will probably be situated near the corner of Commonwealth Ave. and Walnut St., which is the centre of the city.

New York, N. Y.—Plans have been filed for a ten-story brick loft and store building to be built for George E. McQuaid, at the corner of 2d Ave. and 24th St. It is to be of ornamental brick, and to cost \$250,000. Neville & Bagge, architects.

Plans have been filed for 2 six-story brick loft and store buildings, to be erected at a cost of \$100,000, for Louis Sachs, at 28 to 32 W. 22d St. Schickel & Dumas are the architects.

A three and six story carriage warehouse is to be built for B. M. Stivers, Incorporated, running through the block, 200 feet west of Central Park West, from 62d to 63d St. It is to be 50 feet wide, 200.10 feet deep and will cost \$65,000.

It is expected that the corner-stone for the new building of the N. Y. Historical Society will be laid by Mayor Low on November 17th at the ninety-ninth anniversary of the Society. The site for the building is on Central Park West, between 76th and 77th Sts. It will be erected in three sections, of which the central will be finished first, at an estimated cost of \$400,000. York & Sawyer are the architects.

North McGregor, Ia.—The United States government has broken ground for the erection of a \$50,000 fishery building.

Oklahoma City, Okla.—The foundations for the Katy passenger and Santa Fe freight depots were finished recently and the work of constructing the stone walls of the Santa Fe passenger station have been commenced. The cost of the new depots will exceed \$150,000.

Peabody, Mass.—A. B. Clark, of Peabody, has bought of Samuel W. King five acres of land on the northern side of the Salem & Lowell Railroad west of Endicott St., and will locate thereon the Peabody Extracting Works plant. The tract is considerably removed from all dwellings. Dodge's brook runs through the land, affording a water-supply for manufacturing purposes.

Philadelphia, Pa.—Roydhouse, Arey & Co. have been granted a permit for a freight warehouse for the Pennsylvania Railroad Co. on the south side of Carpenter St., extending from 15th to 16th Sts. It will be a three-story and basement brick structure, measuring 54' x 399'. The cost will be \$150,000.

Pittsfield, Mass.—The deeds have been recorded transferring from Frank Russell & Co. to Dr. Chas. H. Richardson a building site on the Atwater tract on Wendell Ave., adjoining the home of Architect J. McArthur Vance. Dr. Richardson will have plans prepared at once by a local architect for a residence to cost several thousand dollars, to be erected on the tract this fall.

Plainfield, N. J.—The contract for designing the new high school proposed for this city at a cost of

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

\$125,000 will be awarded to Boston architects, Herbert D. Hale and Henry G. Morse, Jr.

Port Arthur, Ont.—It is understood that the Canadian Northern Ry. will build a modern building for a hotel and depot, to cost \$150,000.

Portsmouth, N. H.—Richard E. Sturgis, a prominent Boston architect, has purchased of the trustees of the Frank Jones estate a tract of land comprising 20 acres located on the Wentworth Road in Rye and Portsmouth.

Redwood City, Cal.—The Board of Supervisors has awarded to the American-Hawaiian Engineering Co., of San Francisco, the contract for the new court-house. The contract price is \$132,845. Work will begin at once.

Rice Lake, Wis.—John H. Coulter, president of the Wisconsin Power Co., has offered the Soo line a strip of land for a depot and side tracks here. It is expected the Soo Road will expend \$20,000 in buildings and improvements. A committee of business men has been appointed to confer with the officials in an effort to have the depot erected this fall.

Salt Lake City, Utah.—If a franchise be granted the Rio Grande Western within a year, the construction of a station to cost not less than \$200,000 will be commenced and other improvements made.

San Francisco, Cal.—Bishop Conaty has adopted plans for the reconstruction of the recently purchased episcopal residence and the three parochial residences for the parishes of St. Patrick, St. Thomas the Apostle and St. Agnes. Final plans for these buildings have just been decided upon, and this means the expenditure of nearly \$30,000 in these improvements, exclusive of the cost of the sites.

It is reported that Mrs. Stanford will build a library at the University to cost between \$500,000 and \$1,000,000, and that it will be endowed with \$1,000,000 by either herself or Thomas Welton Stanford, of Australia.

Seattle, Wash.—Hon. C. F. Clapp, of Port Townsend, will erect a \$100,000 hotel building at 3d Ave. and Madison St., to be four-story and basement, containing 150 rooms. Will have pressed brick and terra-cotta front.

Sharon, Conn.—One of the largest contracts to be awarded Meritz Sons, Port Chester, N. Y., represents the erection of a country home and appurtenances for R. R. Colgate here. Their large force of mechanics will be engaged thereon for more than six months. The contract calls for work in excess of \$150,000.

South Omaha, Neb.—At the meeting of the Board of Education the plans for the proposed high school, submitted by John Latenser, of Omaha, were adopted. The buildings and grounds committee was instructed to advertise for bids for grading on the site. The building, exclusive of grounds, plumbing and heating, will cost \$75,000.

Spokane, Wash.—Preusse & Zittel, architects, have plans for a modern building to cost \$125,000. R. L. Daniels will erect a three-story building, brick and stone, to cost \$20,000.

St. Louis, Mo.—There is strong hope among the members of the Evangelical alliance that a united effort of the Christian Endeavor Society, Epworth League and Baptist young people's society may solve the vexed problem of interdenominational evangelization during the World's Fair. The latest proposition is that the various organizations build a large hotel, in which there will be located a large auditorium capable of seating 5,000 persons. In this auditorium services can be held without great expense, and as the site of the hotel is to be directly adjacent to the Fair grounds, it will be easy to secure large congregations. Both the Christian Endeavor union and the Epworth league have planned the erection of hotels, and to put their funds together will insure one large building for the common use of all.

The House of Delegates is stated to have reported favorably on the following appropriations: For completion of the city hospital \$67,434; for 2 insane wards for the poor-house, \$100,000; for completion of the city-hall, \$150,000.

St. Paul, Minn.—Olaf Swanson is the contractor for

The BUILDING NEWS

Every Friday. Price Fourpence

The **BUILDING NEWS** is an English Illustrated Journal devoted to Architecture, Civil Engineering, the Arts of Design, and Building.

It contains eight or more pages of lithographic illustrations, usually from two to four pages more of engravings, together with Original and Practical Essays on Fine Art, and on the Principles and Practices of Construction; Descriptions (accompanied with Illustrations, Details, etc.) of new English and Continental Bridges, Notices of New Buildings in all parts of the World, Reports of Architectural and Scientific Societies, Notes on Church Decorations, Statues, Memorials, and Stained Glass; Sanitary, Gas, Water, and other Intelligence; Improved Dwellings for the Working Classes (with Plans); List of Tenders received, suggestions (oftentimes illustrated) on subjects specially interesting to Architects, Builders, Contractors, Engineers, and their Employes; Prices of Materials; and a variety of interesting Miscellaneous Matter.

Annual Subscription to United States, \$6.25, or £1 6s.

Specimen copy free on receipt of postcard.

Offices—Clement's House, Clement's Inn, Strand, London, W. C., England.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

the Phalen Park School, a two-story brick building to be erected by the city, at a cost of \$40,000. Plans by J. W. Stevens, 502 Drake Block.

Tacoma, Wash.—The Northern Pacific Beneficiary Association will probably erect a modern hospital in this city. Cost, \$100,000.

Washington, D. C.—Working drawings for the fireproofing of the three military barracks buildings have been prepared by Albert and Julius Kahn, architects and engineers. For these buildings the government has adopted the system of reinforced concrete recently patented by Julius Kahn.

West Roxbury, Mass.—The new school-building to be erected for the primary department, will be fireproof and will cost \$125,000. J. S. Jacobs & Son and the Wheaton Building & Lumber Co. have the contracts.

Winchester, Mass.—The Winchester Y. M. C. A., which has in contemplation a new structure for association and investment purposes, is said to have sustained a setback in its plans by the recent transfer of property at Main St. and Converse Pl., where a site that would serve for the building had been considered by some of the authorities, although no negotiations had taken place. If this land is purchased it will be at a considerable advance over the figure of a year or two ago. Another location that may be considered is the site of the present fire-station, off Pleasant St., which building will be abandoned within a short period of time, another building being provided for.

Youngstown, O.—Work on the construction of the new Erie and P. & L. E. passenger depot in this city is to be commenced in the course of a reasonable length of time. The plans call for a three or four story brick structure with rooms on the top floor for all offices.

APARTMENT-HOUSES.

New York, N. Y.—Lenox Ave., cor. 140th St., six-story bk. & st. stores & apartments, 97' 8" x 100' & 99', one-story bk. extension, 12' 8" x 25'; \$85,000; o., August Ruff and Albert Hochstetler, 52 W. 120th St.; a., Kurtzer & Rentz, Spring St., cor. Bowery.

CHURCHES.

New York, N. Y.—E. Seventy-fifth St., Nos. 411-413, three-story & attic bk. & concrete church & dwell., 38' x 92'; \$15,000; o., Frederick Rueseler, 221 E. 74th St.; a., Edwin C. Georgi, 603 E. 83d St. Prospect Ave., cor. Macy Pl., one-story bk. church, 163' x 112', peak slate & tin roof; \$60,000; o., trustees Prospect Ave. M. E. Church, Sam'l W. Brown, Rose & Pearl Sts., pres.; a., Geo. W. Kramer, 1 Madison Ave.

FACTORIES.

New York, N. Y.—E. One Hundred and Second St., Nos. 416-424, two-story bk. & st. factory, 95' 11" x 125' & 100' 11" x 110', tar & gravel roof; \$20,000; o., George W. Grote, Newport, R. I.; a., John H. Knobel, 318 W. 42d St.

HOUSES.

Brooklyn, N. Y.—E. Thirteenth St., nr. Cortelyou Road, 3 two-story & attic fr. dwells., 28' x 47', shingle roofs; \$5,000; o., T. B. Ackerson Construction Co., 297 E. 13th St.; a., A. W. Pierce, 1127 Flatbush Ave.

E. Fourteenth St., nr. Cortelyou Road, 2 two-story & attic fr. dwells., 28' x 47', shingle roofs; \$10,000; o., T. B. Ackerson Construction Co., 297 E. 13th St.; a., A. W. Pierce, 1127 Flatbush Ave.

E. Fifteenth St., nr. Cortelyou Road, 3 two-story & attic fr. dwells., 38' x 44', shingle roofs; \$5,000; o., T. B. Ackerson Construction Co., 297 E. 13th St.; a., A. W. Pierce, 1127 Flatbush Ave.



**Architectural Sheet Metal
Ornamental Work
Cornices, Skylights
Tile Roofing
Statuary**

Send for illustrated catalogue.

Architects' special designs accurately produced in sheet metal.

Write for our prices.

W. H. MULLINS

107 Depot St.

SALEM, - OHIO



UNLESS

you resort to mechanical means, cutting and prying, you cannot force entrance into lockers built of

Expanded Metal

for the reason that the material is heavy gauge steel cut and opened into diamond shaped meshes, without joints or connections.

We build them to suit any sized or shaped space. Send us specifications and we will send estimates.

MERRITT & CO.
1011 Ridge Avenue
PHILADELPHIA



The
W. J. PERRY

Dumb Waiter

FOR

Hotels, Restaurants
Stores, Libraries and
Private Residences

Installed very simply and at reasonable cost.

Manufactured by

W. J. PERRY

591 Atlantic Avenue, Boston, Mass.

Local agents wanted. Correspondence solicited.

J. S. THORN CO.

Architectural Sheet Metal Works

Manufacturers and Erectors of Ventilating Skylights, Fire-proof Window Frames and Sash, and Opening Fixtures to operate ventilating sashes.

Nos. 1223 to 1233 Callowhill Street
PHILADELPHIA, PA.

BUILDING INTELLIGENCE.

(Houses Continued.)

E. Fifteenth St., nr. Avenue D, two-sty & attic fr. dwell., 23' x 46' 9", shingle roof, steam; \$5,000; o. & a. W. R. Lusher, 1116 Beverly Road.

Eighty-fifth St., nr. 19th Ave., 2 two-sty & attic fr. dwells., 18' 9" x 44' 2", shingle roofs; \$5,000; o. Hattie R. White, 471 Bay 20th St.; a. P. S. Haviland, 152 Bay 19th St.

Eighteenth Ave., cor. 86th St., three-sty bk. store & dwell., 23' x 56'; \$7,000; o. A. E. Wander, 8616 Bay 18th St.; a. J. B. Slee, 186 Remsen St.

E. Fourteenth St., nr. Church Ave., two-sty & attic fr. dwell., 32' x 33' 4", shingle roof; \$6,500; o. E. R. Strong, E. 28th St. & Flatbush Ave.; a. B. Driesler, 13 Willoughby St.

E. Twenty-first St., nr. Avenue F, two-sty & attic fr. dwell., 28' x 38' 4", shingle roof, steam; \$5,000; o. C. Bauer, E. 24th St. & Foster Ave.; a. H. V. B. Dittmas, 2415 Avenue C.

Rugby Road, nr. Albemarle Road, two-sty & attic fr. dwell., 40' x 41', steam; \$11,000; o. Mrs. M. S. Beales, 1505 Beverly Road; a. C. H. Pratt, 1505 Beverly Road.

St. Johns Pl., nr. Bedford Ave., 17 two-sty bk.

EXPANDED METAL

For Fireproofing and Concrete Construction

ASSOCIATED EXPANDED METAL COMPANIES Room 1205, 256 Broadway
NEW YORK

PASSAIC STEEL COMPANY

A. C. FAIRCHILD, Pres.

GEO. H. BLAKELEY, Chf. Engr.

SUCCESSOR TO
Passaic Rolling Mill Company

J. B. COOKE, Sec. and Treas.

Manufacturers, Contractors and Engineers for all kinds of

Structural Steel Work for Buildings

Plans, Specifications and Estimates Furnished on Application.

Main Office and Works, Paterson, N. J.

Boston Office, 31 State St.

New York Office, 5 Nassau St.

BUILDING INTELLIGENCE.

(Houses Continued.)

dwells., 18' 8" x 42'; \$54,400; o. Otto Singer, 671 Macon St.; a. A. R. Koch, 26 Court St.

E. Twenty-fourth St., nr. Avenue G, two-sty & attic fr. dwell., 26' x 43' 8", shingle roof, steam; \$5,500; o. & a. H. F. B. Dittmas, 492 Flatbush Ave.

Seventy-sixth St., nr. Stewart Ave., 4 two-sty & attic fr. dwells., 20' x 32', shingle roofs; \$11,200; o. & a. A. J. Hughes, 884 Seventieth St.

W. Third St., nr. Railroad Ave., 3 one-sty fr. dwells., 29' 3" x 48', gravel roofs; \$7,800; o. Margaret Rathgeber, Bay 20th St., nr. 80th St.; a. F. Schulze, Oceanic Walk.

Bedford Ave., cor. S. 5th St., three-sty bk. store & dwell., 14' 10" x 50'; \$6,500; o. H. B. Rosenson, 317 Grand St.; a. W. Debus, 808 Broadway.

New York, N. Y.—E. Seventy-third St., Nos. 165-167, two-sty & cellar bk. & st. dwell., 50' x 96', tar & gravel roof; \$50,000; o. H. H. Benedict, 280 Broadway; a. Geo. L. Amoureux, 113 E. 27th St.

Eighty-ninth St., nr. 5th Ave., five-sty bk. & st. dwell., 50' x 100' 8", sing & composition roof; \$75,000; o. Edward Thaw, 1 W. 72d St.; a. Israels & Harder, 31 W. 31st St.

Second Ave., No. 135, five-sty bk. & st. dwell., 20' x 41' 10", one-sty bk. extension, 4' 4" x 5'; \$15,000; o. Frank T. Frank, 120 E. 4th St.; a. F. W. Herter, 503 Manhattan Ave.

Topping St., nr. 174th St., 2-sty bk. dwell., 20' x 50' 6", slate mansard roof; \$7,500; o. Henry Lang, 1616 Washington Ave.; a. Rudolph Werner, 4019 Third Ave.

Madison Ave., cor. 52d St., five-sty & base. bk. dwell., 30' x 83'; \$40,000; o. Henry G. Trevor, Southampton, L. I.; a. Augustus N. Allen, 571 Fifth Ave.

One Hundred and Ninety-eighth St., nr. Webster Ave., 2 two-sty fr. dwells., 21' x 53' 6"; \$13,000; o. Geo. D. Kingston, 761 E. 198th St.; a. Chas. S. Clark, 709 Tremont Ave.

One Hundred and Fifty-sixth St., nr. Amsterdam Ave., two-sty st. & bk. shop & dwell., 25' x 73', one-sty bk. extension, 23' x 25', plastic roof; \$7,000; o. John H. Moran, 504 W. 156th St.; a. Richard E. Davis, 247 W. 125th St.

LIBRARIES.

Brooklyn, N. Y.—Bushwick Ave., cor. De Kalb Ave., one-sty & base. bk. library, 63' x 90', copper roof, steam; \$80,000; o. Carnegie Library, on premises; a. W. B. Tubby & Son, 81 Fulton St., N. Y.

Franklin Ave., nr. Jefferson Ave., two-sty bk. library, 69' x 74' 4", copper roof, steam; \$76,000; o. City of N. Y.; a. Lord & Hewlett, 16 E. 23d St., N. Y.

OFFICE BUILDINGS.

New York, N. Y.—Fifth Ave., No. 321, five-sty bk. & st. stores & office-building, 26' x 81', one-sty bk. & st. extension, 26' x 51', copper, mansard & composition roof; \$40,000; o. Theodore A. Kohn & Son, 56 W. 23d St.; a. Robert D. Kohn, 170 Fifth Ave.; b. Wm. Crawford, 7 E. 42d St.

STORES.

New York, N. Y.—Prince St., Nos. 131-135, seven-sty bk. & st. store & loft building, 60' 2" x 60' 3" & 64' 1", metal roof; \$85,000; o. Wm. H. Buffett, 1920 Park Ave.; a. W. G. Piguaron, 5 and 7 E. 42d St.

Catharine St., No. 20, six-sty bk. & st. store & loft building, 26' 11" x 25' 8" x 60' 3", with one-sty bk. & st. extension, 25' 8" x—; \$16,000; o. John A. Beckmann, 10 E. 12th St.; a. Max Muller, 3 Chambers St.

Fifth Ave., Nos. 391-401, seven-sty bk., marble & concrete stores & lofts, 117' 1" x 98' 9" x 152', tile roof; \$600,000; o. Tiffany & Co., Union Sq.; a. McKim, Mead & White, 160 Fifth Ave.; o. Charles T. Wills, 156 Fifth Ave.

Sheridan Ave., nr. 156th St., two-sty bk. store & carpenter shop, 29' 3" x 200', asphalt & gravel roof; \$12,000; o. N. Y. C. & H. R. R. Co.; a. C. Wellesley Smith, Grand Central Station, 42d St. & 4th Ave.

TENEMENT-HOUSES.

Brooklyn, N. Y.—McDonough St., nr. Throop Ave., 3 four-sty bk. tenements, 22' x 77'; steam; \$36,000; o. C. G. Cosine, 424 Fulton St.; a. W. Debus, 808 Broadway.

New York, N. Y.—Charles St., Nos. 12-14, six-sty bk. & st. tenement, 40' x 95' 3"; \$42,500; o. Henry Passmann, 245 E. 13th St.; a. G. F. Pelham, 503 Fifth Ave.

One Hundred and Forty-second St., nr. 7th Ave., 2 five-sty & cellar bk. & st. tenements, 37' 6" x 25' 0" x 87' 11"; \$70,000; o. Arthur E. Silverman, 241 W. 113th St.; a. Geo. Fred Pelham, 503 Fifth Ave.

Second St., Nos. 131-136, six-sty st. & bk. tenement, 27' 5" x 40' 5" x 87'; \$42,000; o. Horowitz Realty Co., Bowery Bank Building; a. Geo. Fred Pelham, 503 Fifth Ave.

Prospect Ave., nr. Jennings St., 4 four-sty bk. tenements, 27' 9" x 103' 9"; \$100,000; o. Wahlig & Soussin, 1853 Boston Ave.; a. Otto L. Spannhake, 933 Third Ave.

Park Ave., cor. 98th St., 2 six-sty & cellar bk. & st. tenements, 40' x 90' 11"; \$90,000; o. Mechanics

BUILDING INTELLIGENCE.

(Tenement-Houses Continued.)

and Traders' Realty Co., 92 Rivington St.; a. Geo. Fred Pelham, 503 Fifth Ave.

WAREHOUSES.

Brooklyn, N. Y.—Hancock St., cor. Saratoga Ave., five-sty bk. warehouse, 84' x 97', gravel roof; \$15,000; o. G. Gutting, 263 Wierfield St.; a. L. Berger & Co., 300 St. Nicholas Ave.

MISCELLANEOUS.

New York, N. Y.—Spring St., Nos. 278-284, three-sty bk. & st. engine-house, 72' 5" x 75', one-sty bk. & st. extension, 12' x 14', tile on concrete roof; \$75,000; o. City of New York; a. Edward P. Casey, 1 Nassau St.

COMPETITIONS.

LIBRARY.

[At Colorado Springs, Col.]

Competitive designs for the \$60,000 Carnegie Library building will be received by the Board of Directors of the Colorado Springs Free Library up to November 1, 1903. 1452

PROPOSALS.

PURIFICATION PLANT.

[At Fort Lincoln, N. D.]

Office of Chief Q. M., St. Paul, Minn. Sealed proposals will be received at this office until October 28, 1903, and opened then for the construction of a purification plant in connection with the water supply system at Fort Lincoln, N. D. Plans and specifications may be seen and blank proposals with full instructions had upon application here, or at the office of the Constructing Quartermaster, Fort Lincoln, N. D. J. McE. HYDE, C. Q. M. 1451

COURT-HOUSE.

[At Harrisburg, Ill.]

Bids will be received October 31 by the Bldg. Com. of the Co. Bd. Superv. for erecting a court-house. J. W. Gaddis, archt., Vincennes, Ind. W. S. DORRIS, Co. Clk. 1451

HOSPITAL.

[At Fort Bliss, Tex.]

Bids are wanted October 28 for constructing a 12-bed brick hospital, including plumbing, gas-piping and hot-water heating at this post. T. E. TRUE, Ch. Q. M., San Antonio. 1451

COUNTY BRIDGE.

[At Kansas City, Kan.]

Office of County Clerk, Court-house, Kansas City, Kan. Sealed proposals will be received at this office until November 9, 1903, for furnishing and erecting a steel bridge across the Kansas River at 5th St., said city. Plans, specifications, forms of bids and necessary information may be obtained at this office. Each bid must be accompanied by a certified check in the sum of one thousand dollars. FRANK HOLCOMB, County Clerk. 1452

POST EXCHANGE.

[At Governor's Island, N. Y.]

Sealed proposals will be received here until November 9, 1903, for constructing a post exchange and gymnasium. Information furnished on application. T. NORMAN, Q. M. 1452

CHURCH.

[At Columbia, S. C.]

Proposals for the erection of a \$40,000 church will be received until November 1 by the building committee of St. Peter's Roman Catholic Church. F. P. MILBURN, architect, Columbia. 1452

LOCK GATES, VALVES, ETC.

[At Nashville, Tenn.]

U. S. Engineer Office, Nashville, Tenn. Sealed proposals for construction, delivery, etc., of 4 pairs steel lock gates, filling valves, etc., for Locks A and No. 1, Cumberland River, will be received here until November 9, 1903. Information furnished on application. CLINTON B. SEARS, Lieut. Col., Engrs. 1452

BUILDING.

[At Columbus, O.]

Sealed proposals will be received by the Memorial Association of Franklin County, O., until October 31, 1903, for performing the labor and furnishing the necessary materials to erect Franklin County Memorial Building on building site located on E. Broad St., near 5th St., Columbus, O., according to the plans, descriptions, bills and specifications, prepared by Frank L. Packard, architect, which are on file at the office of the association, Room 1210 New Hayden Building located at 16-18 E. Broad St., Columbus, O., and open to public inspection at the above office between the hours of 8 A. M. and 5 P. M. on all working days, until the date of letting. Plans are also on file at the Columbus Builders' exchange and at the office of the architect. By order of the Memorial Association of Franklin County, O. N. B. ABBOTT, Chairman. 1452

Rudyard Kipling

and

"Topical Architecture"

15 Volumes of the first
12 Numbers of the second } All for \$5.00

On receipt of five dollars we will deliver, carriage paid, a fifteen volume set of Rudyard Kipling's works—cloth bound, pocket-volume size—and will send "Topical Architecture" for one year from date of order.

AMERICAN ARCHITECT COMPANY, Publishers
211 Tremont Street, Boston

PROPOSALS.

FURNITURE.

[New Capitol for the State of Minnesota.]

NOTICE TO CONTRACTORS.

Sealed proposals in duplicate will be received at the office of the Board of State Capitol Commissioners, No. 512 Endicott Building, St. Paul, Minn., until 12 o'clock noon on the 1st day of December, 1903, for the furniture, carpets, draperies, shades and miscellaneous furnishings for the new State Capitol building at St. Paul, in accordance with the drawings and specifications, which may be seen at the office of the Board and at the architect's offices on and after this date. Copies of said drawings and specifications may be obtained from Cass Gilbert, architect, No. 524 Endicott Building, St. Paul, Minn., or 79 Wall St., New York City, upon payment of the cost of such reproductions, and a deposit of \$100, such deposit to be returned to the bidder upon return of the drawings and specifications. Each bid must be accompanied by a certified check for a sum not less than five per cent of the amount of the bid, payable to the order of said Board, as a guarantee of good faith. The right is reserved to reject any and all bids and to waive any defect or informality in any bid, if it is deemed in the interest of the State to do so. Proposals received after the time stated will be returned to the bidders. Proposals must be made on printed forms, which will be furnished by the Board, and must be inclosed in envelopes, sealed and marked "Proposals for Furniture and Furnishings for New Minnesota State Capitol at St. Paul," and addressed to the Board of State Capitol Commissioners. For Board of State Capitol Commissioners. CHANNING SEABURY, Vice-president. St. Paul, October 6, 1903. 1452

MARKET-HOUSE.

[At Monroe, La.]

Bids will be received until November 2, 1903, for the erection and entire completion of a market-house building by the city of Monroe, La., according to plans and specifications prepared by L. M. Weathers, architect, of Memphis, Tenn., which can be had from J. M. Breard, chairman public building committee, Monroe, La., and also at the office of L. M. Weathers, architect, Room 25, Cotton Exchange Building, Memphis, Tenn. J. M. BREARD, Chairman Public Building Committee. 1453

RESIDENCE AND OFFICE.

[At Sac and Fox, Ia.]

Department of the Interior, Office of Indian Affairs, Washington, D. C. Sealed proposals addressed to the Commissioner of Indian Affairs, Washington, D. C., will be received at the Indian Office until November 3, 1903, for furnishing the necessary materials and labor required to construct a residence and office at Sac and Fox, Ia., boarding school, to be submitted in strict accordance with the plans, specifications and instructions to bidders, which may be examined at this office and at the Agency. For further information apply to William G. Mallin, U. S. Indian Agent, Toledo, O. W. A. JONES, Commissioner. 1451

MANUAL TRAINING SCHOOL.

[At Cleveland, O.]

Sealed proposals will be received at the office of the Clerk of the Board of Education, Rose Building, Cleveland, O., until October 26, 1903, for furnishing all the materials and for doing all the work necessary to complete a manual training school in the rear of Lincoln High School, and to be known as the annex to Lincoln High School, in accordance with the plans and specifications on file in the office of the Superintendent of Buildings, Rose Building, and as determined by the Board of Education by resolution No. 1735, adopted September 21, 1903. STARR CADWALLADER, School Director, Cleveland, O. 1451

PROPOSALS.

EXTENSION OF BUILDING.

[At Mare Island, Cal.]

Sealed proposals endorsed will be received at the Bureau of Yards and Docks, Navy Department, Washington, until October 11, 1903, for constructing an extension of building No. 116, Navy Yard, Mare Island, Cal. Estimated cost, \$16,500. Plan and specifications will be furnished by the commandant of the navy yard named or by the Bureau upon deposit of \$15 as security for their return. MORDECAI T. ENDICOTT, chief of bureau. 1451

REMODELLING BUILDINGS.

[At St. Paul, Minn.]

Office of Constructing Q. M., St. Paul, Minn. Sealed proposals will be received at this office until November 2, 1903, for remodelling old round tower and converting same into administration building; remodelling 2 buildings into quarters for 6 line officers and 1 set quarters for a field officer; remodelling 2 old barracks into barracks for 4 troops of cavalry; remodelling old hexagon tower and converting same into a storehouse; remodelling old prison building and converting same into a guard-house; remodelling old bake-house; remodelling old blacksmith shop and converting same into a blacksmith and farrier's shop for 4 troops cavalry; construction of 2 double sets captains' quarters, 4 brick cavalry stables and 2 double cavalry stable guard buildings. Plans and specifications may be seen and blank proposals with full instructions had upon application here. R. M. SCHOFIELD, Constructing Q. M. 1451

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., October 5, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 11th day of November, 1903, and then opened, for the construction (including heating apparatus and electric wiring and conduits) of the U. S. Post-office at Goldsboro, North Carolina, in accordance with the drawings and specification, copies of which may be had at this office or the office of the Postmaster at Goldsboro, N. C., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1451

COURT-HOUSE.

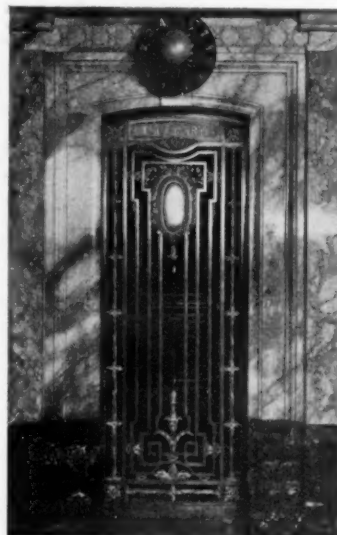
[At Windom, Minn.]

John A. Brown, County Auditor, invites the submission of detailed plans and specifications for the proposed new court-house until November 17, the cost, constructed and furnished, not to exceed \$10,000. 1452

SCHOOL-BUILDING.

[At Harrisburg, Pa.]

The Committee on Buildings, Furniture and Grounds of the Board of School Directors of the Harrisburg School District, will receive competitive plans for a twelve-room building to be located on State St., between 16th and 17th Sts., until October 20, 1903. The competition is open to all architects and only the plans adopted will be paid for. For further information apply to the undersigned. D. D. HAMMELBAUGH, Secretary, 121-123 Chestnut St. 1451



Architectural
Cast and Wrought

**IRON
BRONZE &
BRASS**

**STAIRS
ELEVATOR ENCLOSURES
WINDOW WORK
GRILLES
ENTRANCE DOORS
COUNTER SCREENS
MARQUEES
ETC. ETC.**

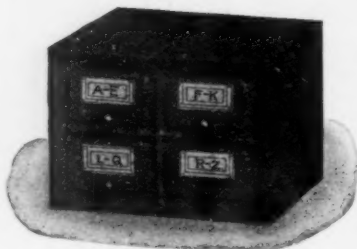
This Bronze Elevator Enclosure, Hanover National Bank, James B. Baker, Architect, Executed by

RICHEY, BROWNE & DONALD

Borden and Review Aves.

Long Island City, N. Y.

Architects, Attention



Have you seen that clever new book which we have just issued, illustrating and describing a distinctively new line of high grade

Office, Bank and Library Steel Filing Devices

combining beauty and strength, "the Armor Plate of Modern Business"?

If you are interested write now for copy, and note possibilities in this line.

Remember we make anything in Sheet Steel.

The Berger Mfg. Co.
CANTON, OHIO



THE
ALTON'S
1904
COW-BOY
GIRL

TRADE-MARK.

"Sequel to the Fencing Girl."

Copyright, 1903, by
Chicago & Alton
Railway.

ART CALENDAR

Four graceful poses from life; figures ten inches high, reproduced in colors by a process far superior to last year's calendar. Highest example of lithographic art.

"THE ONLY WAY"

to own one of these beautiful calendars is to send twenty-five cents with name of publication in which you read this advertisement, to GEO. J. CHARLTON, Gen'l Passenger Agent, Chicago & Alton Railway, CHICAGO, ILL.

The best railway line between CHICAGO, ST. LOUIS, KANSAS CITY and PEORIA. Take the "Alton" to the St. Louis World's Fair, 1904.

The Heliotype Printing Co.

LITHOGRAPHERS, ETC.

211 Tremont Street
Boston

FAC-SIMILE REPRODUCTIONS IN COLOR
OR MONOCHROME A SPECIALTY



Lithography
Heliotype
Color Printing
Photogravure
Maps, Plans, etc.

BEST WORK ONLY
PROMPT DELIVERY
REASONABLE PRICES

WRITE FOR ESTIMATES

BRONZE

JNO. WILLIAMS
BRONZE FOUNDRY AND WORKS
WROUGHT IRON WORKS
 544 to 556 WEST 27th STREET, NEW YORK

WROUGHT IRON**FERROINCLAVE**

FIREPROOF
ROOFING

NON DRYING PAINT

CONCRETE

FERROINCLAVE

Laid Like Ordinary Corrugated Iron
 Then Cemented on Both Sides

LIGHT, CHEAP, MOISTURE AND ACID PROOF**The Brown Hoisting Machinery Co.****CLEVELAND, OHIO****NEW YORK****PITTSBURG****NEW ENGLAND MATERIAL-MEN AND CONTRACTORS.****ARCHITECTS & DRAWING SUPPLIES** (Repairing of Drawing Tool).

G. G. LEDDER,
 9 Province Court, Boston, Mass.

ARTISTIC WIRE & METAL WORKS.

MORSS & WHYTE,
 75-81 Cornhill, Boston, Mass.

BAIRD'S HAND-MADE SILVER GLASS.

REDDING, BAIRD & CO.,
 83 Franklin St., Boston, Mass.

BLUE PRINTING.

B. L. MAKEPEACE,
 345 Washington St., Boston, Mass.

CHAS. E. MOSS,
 Rapid Printing Papers,
 38 Broad St., Boston.

PARKS & JEEVES,
 34 Merchants Row, Boston, Mass.

BUILDINGS TORN DOWN.

A. A. ELSTON & CO.,
 166 Devonshire St., Boston, Mass.

CONTRACTORS & BUILDERS.

McKAY & WOOLNER,
 19 Harvard Place, Boston, Mass.

WILLIAM L. RUTAN,
 1016 Tremont Bldg., Boston.

DOORS, WINDOWS, ETC.

E. A. CARLISLE, POPE & CO.,
 2 Sudbury St., Boston, Mass.

ELECTRICAL CONTRACTORS.

ERICKSON ELECTRIC EQUIP-
 MENT CO.,
 280 Devonshire St., Boston.

FIRE-ESCAPES.

STANDARD FIRE-ESCAPE & MFG
 CO.,
 120 Milk St., Boston, Mass.

MARBLE DEALERS.

COLUMBIAN MARBLE
 QUARRYING CO.,
 (Branch Office),
 186 Devonshire St., Boston, Mass.

MASONS AND BUILDERS.

MORRILL & WHITON CON-
 STRUCTION CO.,
 35 Federal St., Boston, Mass.

MEMORIAL WINDOWS

HARRY ELDREDGE GOODHUE,
 23 Church St., Cambridge, Mass.

MODELLING AND ORNAMENTAL PLASTER.

SLEEP, ELLIOT & KING CO.,
 331 Cambridge St., Boston.

**ORNAMENTAL PLASTER-
INC.**

HERBERT FOWLE,
 43 Bristol St., Boston, Mass.

PHOTOGRAPHIC SUPPLIES.

ROBEY-FRENCH CO.,
 34 Bromfield St., Boston, Mass.

Cameras.

PHOTOGRAPHY.

LEON E. DADMUN,
 169 Tremont St., Boston, Mass.

E. PERCY OLIVE,
 44 Washington St., Boston.

Tel. 1333-3 Richmond.

N. L. STEBBINS,
 132 Boylston St., Boston, Mass.

PLASTERERS.

GALLAGHER & MUNRO CO.,
 166 Devonshire St., Boston, Mass.

PORTABLE OVENS.

H. A. JOHNSON & CO.,
 224 State St., Boston, Mass.

ROOFING DUCK.

C. H. BATCHELDER & CO.,
 234 State St.,
 Boston, Mass.

SASH CORD.

SILVER LAKE CO.,
 78 Chauncy St., Boston.

SEAM-FACE GRANITE.

GILBRETH SEAM-FACE GRANITE
 CO.,
 Park Row Building, New York.

176 Federal St., Boston.

STABLE FIXTURES.

BROAD GAUGE IRON STALL &
 VANE WORKS,
 53 Elm St., Boston, Mass.

**STONE CARVING AND MOD-
ELLING.**

HUGH CAIRNS,
 48A Sudbury Street, Boston.

TELEPHONES.

S. H. COUCH CO.,
 156 Pearl St., Boston, Mass.

(Send for Circular A.)

TILES & FIREPLACES.

GEORGE E. CRAWLEY & SON,
 1 Somerset St., Boston, Mass.

WATERPROOF CELLARS.

FRANK B. GILBRETH,
 Park Row Bldg., New York.

176 Federal St., Boston.

Professional Ethics.

The following . . .

. . . CODE OF ETHICS . . .

* Prepared in Conformity with the
 * Best Standards of Practice, and
 * Recommended to its Members by
 the Boston Society of Architects,
 was

ADOPTED BY THE SOCIETY, FEBRUARY 1.

. . . 1895. . .

SECTION 1. No Member should enter into
 partnership, in any form or degree, with any
 builder, contractor, or manufacturer.

*
 SECTION 2. A Member having any ownership
 in any building material, device or invention,
 proposed to be used on work for which he is
 architect, should inform his employer of the
 fact of such ownership.

*
 SECTION 3. No Member should be a party to
 a building contract except as "owner."

*
 SECTION 4. No Member should guarantee an
 estimate or contract by personal bond.

*
 SECTION 5. It is unprofessional to offer draw-
 ings or other services "on approval" and
 without adequate pecuniary compensation.

*
 SECTION 6. It is unprofessional to advertise in
 any other way than by a notice giving name,
 address, profession, and office hours, and
 special branch (if such) of practice.

*
 SECTION 7. It is unprofessional to make altera-
 tions of a building designed by another archi-
 tect, within ten years of its completion,
 without ascertaining that the owner refuses
 to employ the original designer, or, in event
 of the property having changed hands, with-
 out due notice to the said designer.

*
 SECTION 8. It is unprofessional to attempt
 to supplant an architect after definite steps
 have been taken toward his employment.

*
 SECTION 9. It is unprofessional for a Member
 to criticize in the public prints the professional
 conduct or work of another architect except
 over his own name or under the authority of
 a professional journal.

*
 SECTION 10. It is unprofessional to furnish de-
 signs in competition for private work or for
 public work, unless for proper compensation,
 and unless a competent professional adviser
 is employed to draw up the "conditions" and
 assist in the award.

*
 SECTION 11. No Member should submit draw-
 ings except as an original contributor in any
 duly instituted competition, or attempt to
 secure any work for which such a competition
 remains undecided.

*
 SECTION 12. The American Institute of Archi-
 tects' "schedule of charges" represents mini-
 mum rates for full, faithful and competent
 service. It is the duty of every architect to
 charge higher rates whenever the demand for
 his services will justify the increase, rather
 than to accept work to which he cannot give
 proper personal attention.

*
 SECTION 13. No Member shall compete in
 amount of commission, or offer to work for
 less than another, in order to secure the work.

*
 SECTION 14. It is unprofessional to enter into
 competition with or to consult with an archi-
 tect who has been dishonorably expelled from
 the "Institute" or "Society."

*
 SECTION 15. The assumption of the title of
 "Architect" should be held to mean that the
 bearer has the professional knowledge and
 natural ability needed for the proper invention,
 illustration and supervision of all building
 operations which he may undertake.

*
 SECTION 16. A Member should so conduct his
 practice as to forward the cause of profes-
 sional education and render all possible help
 to juniors, draughtsmen and students.

What the Critics Say of "The Georgian Period"

"Review of Reviews"	"The most interesting of all American publications in the field of architecture."
"The Nation"	"One of the most important American works on architecture."
"Architectural Review" [London]	"This great work."
"The Builder" [London]	"Of great value."
"Building News" [London]	"Beautifully printed and well delineated."
"Irish Builder" [Dublin]	"Of superior excellence and great usefulness."
"Journal of the R. I. B. A." [London]	"We can only hope the publishers will continue the series."
"N. Y. Tribune"	"A peculiarly fascinating and instructive work."
"N. Y. Evening Post"	"Grows in interest with every succeeding number."
"Art Interchange"	"One cannot but marvel at the extent and value of the contents."
"N. Y. Times"	"Needs only to be better known in order to secure a wider audience."

Montgomery Schuyler, whose name and opinion carry weight, calls the "Georgian Period" "a fine, even a monumental, piece of work," and says that the work has been "well worth doing" and has been "admirably done."

AMERICAN ARCHITECT COMPANY, Publishers
211 Tremont Street, Boston, Mass.

The Northwestern Terra-Cotta Co.

Manufacturers of High Grade

Architectural Terra-Cotta CHICAGO

PERTH AMBOY
TERRA-COTTA COMPANY,

—OF—
PERTH AMBOY, NEW JERSEY.

OFFICE, 160 Fifth Ave., NEW YORK.

BOSTON AGENTS:

WALDO BROS., 102 MILK STREET.

BOOKS:

"Norman Monuments of Palermo."

Illustrated with 50 Plates: 13" x 17½".
Price bound, \$10.00. Unbound, \$9.00.

AMERICAN ARCHITECT COMPANY, Publishers.

BOOKS:

"Minor Fountains."

40 Gelatine Plates, on bond paper, 9" x 11".
In Envelope. Price, \$5.00.

AMERICAN ARCHITECT COMPANY, Publishers.

Cathedral of St. John the Divine.



NEW YORK, N. Y.



Illustrations of the competitive designs for the great Protestant Episcopal Cathedral, now building on Bloomingdale Heights, New York.

In all, fifty-seven plates [loose], 14 x 20 inches, printed on plate-paper.

PRICE, \$2.50 PER SET.

American Architect Company,
BOSTON, MASS.

[See Alphabetical Index on Cover 2 for Pagination.]

CLASSIFIED ADVERTISEMENTS.

[Advertisers can be indexed only under a single head free of charge.]

ARCHITECTURAL METALWORK.

Mullins, W. H., Salem, O.

ARTISTIC WIRE AND METAL WORKS.

Morris & Whyte, Boston.

ART METALWORK.

Art Metal Construction Co., Jamestown, N. Y.

ASPHALT.

Neuchatel Asphalt Co., New York.

ASPHALT ROOFING.

Warren Chemical & Mfg. Co., N. Y.

BLUE PRINTS.

Makepeace, B. L., Boston.

Moss, Chas. E., Boston.

Parks & Jeeves, Boston.

Spaulding Print Paper Co., Boston.

BRASS FINISHERS.

Marble Co., W. P., Boston.

BRONZEWORK (Ornamental).

Richey, Browne & Donald, Long Island City, N. Y.

Tyler Co., The W. S., Cleveland, O.

Winslow Bros. Co., The, Chicago, Ill.

BUILDINGS TORN DOWN.

Elston & Co., A. A., Boston.

CAPITALS (Carved).

G. T. Nelson Co., The, Columbus, Ohio.

CARVING.

Waddell Mfg. Co., Grand Rapids, Mich.

CEMENT.

Alsen's Cement Works, N. Y.

Atlas Cement Co., New York.

CLEAN-OUT.

Craig, David, Boston.

CLOCKS.

Blodgett Clock Co., Boston.

Howard Clock Co., The E., Boston.

CONSERVATORIES.

Lord & Burnham Co., Irvington-on-Hudson, N. Y.

CONTRACTING.

Flynt Building & Construction Co., Palmer, Mass.

Rutan, William L., Boston.

CONTRACTORS AND BUILDERS.

McKay & Woolner, Boston.

Rutan, William L., Boston.

CORDAGE.

Samson Cordage Works, Boston.

CRANES.

Northern Engineering Works, Detroit, Mich.

CUPOLAS (Foundry).

Northern Engineering Works, Detroit, Mich.

CUTLER PAT. MAILING SYSTEM.

Cutler Mfg. Co., Rochester, N. Y.

DEAPENING QUILT.

Samuel Cabot, Boston, Mass.

DOORS (Steel Rolling).

Kinnear Mfg. Co., The, Columbus, O.

DOORS, WINDOWS, ETC.

Carlisle, Pope & Co., E. A., Boston.

DRAUGHTSMAN.

E. Eldon Deane, New York.

DRAWING INSTRUMENTS.

G. G. Ledger, Boston, Mass.

DUMB-WAITER.

Perry, W. J., Boston.

ELECTRICAL CONTRACTORS.

Erickson Electric Equipment Co., Boston.

ELECTRIC SIGNALS.

Elevator Supply & Repair Co., New York.

ELEVATORS, ETC.

Kimball Bros. Co., Connell Bluffs, Ia.

Morse, Williams & Co., Philadelphia.

Whittier Machine Co., Boston.

ELEVATORS (Foundry).

Northern Engineering Works, Detroit, Mich.

ELEVATOR SIGNALS.

Herzog Teleseme Co., New York.

ENGINEERS.

Jager Co., Charles J., Boston.

ENGINES (Hot-Air).

Rider-Erickson Engine Co., New York.

FAN SYSTEM.

Sturtevant Co., B. F., Boston, Mass.

FAUCETS (Combination).

Union Brass Works Co., Boston.

FILING DEVICES.

Art Metal Construction Co., Jamestown, N. Y.

FILTER.

Loomis-Manning Filter Co., Phila., Pa.

FIRE-ESCAPES.

Standard Fire-escape & Mfg. Co., Boston.

FIREPROOFING.

Associated Expanded Metal Co., New York.

Brown Hoisting Machinery Co., The, New York.

National Fireproofing Co., Pittsburg, Pa.

FIREPROOF LATHING.

Hayes, Geo., New York.

FIREPROOF SHUTTERS.

Kinnear Mfg. Co., The, Columbus, O.

FLOOR POLISH.

Butcher Polish Co., Boston.

FOUNDRY EQUIPMENT.

Northern Engineering Works, Detroit, Mich.