

PRICE 13 CENTS.

MAY 2, 1891.

THE
AMERICAN ARCHITECT
AND BUILDING NEWS

VOL. XXXII.

* REGULAR EDITION *

NO. 801.

ARCHITECTURE

ENGINEERING

DECORATION

TICKNOR & COMPANY

CONSTRUCTION

BOSTON MASS.

CONTENTS.

EDITORIAL SUMMARY.
FRENCH ARCHITECTURE.—IV.
ETRUSCAN ART.—III.
SOME GERMAN TOWN-GATES.
EMMANUEL FREMIET.—VII.
NOTES AND SKETCHES FROM TOLTEC-LAND.
BOOKS AND PAPERS.
COMMUNICATIONS.
NOTES AND CLIPPINGS.
TRADE SURVEYS.

ILLUSTRATIONS.

TURKISH AND RUSSIAN BATH ESTABLISHMENT, WALNUT ST.,
PHILADELPHIA, PA.
[Gelatine Print issued with the International and Imperial Editions only.]
HOUSE AT AUSTIN, TEX.
WEBB ACADEMY FOR SHIP-BUILDERS, FORDHAM HEIGHTS,
N. Y.

HAMBLETON OLD HALL.
DETAILS OF SAME.
BUILDING AT BOSTON, MASS.
A MEXICAN IDOL.

Additional Illustrations in the International Edition.

APARTMENT-HOUSE, BRUNN, AUSTRIA.
[Gelatine Print.]
GLAZED VERANDA.
[Etching.]
THE TOWERS AND SPIRES OF BRUGES, BELGIUM.
[Gelatine Print.]
PULPIT IN MORAY CHAPEL, ST. GILES CATHEDRAL, EDIN-
BURGH.
ALL SAINTS' CHURCH, ACKWORTH MOOR TOP, YORKSHIRE,
ENG.
KITWELLS PARK, SHENLEY, HERTS, ENG.
NEW FACTORY, BIRMINGHAM, ENG.



THE SANITAS TRAPS AND CLOSETS

Are the SIMPLEST, CHEAPEST and most SCIENTIFIC APPLIANCES in the market.

These Specialties have the approval and endorsement of Architects, Builders, Engineers, Superintendents, Plumbers and Medical Authorities, and their acceptance by the owner of the building is assured if he is made to realize the saving effected by their use.

In one building a Chicago Architect saved his client two thousand dollars by using the SANITAS Traps instead of the ordinary S. Trap.

We shall be glad to correspond with parties not already familiar with the merits of these goods.

SMITH & ANTHONY STOVE CO.,
BOSTON,

Makers and Proprietors of SANITAS Appliances.

54 Gold Street, New York.

219 Lake Street, Chicago.



FOR MANY YEARS PAST we have been supplying reflectors for lighting Churches, Halls, Theatres, Stores, Libraries, Art Galleries and Dwellings, and in doing so have succeeded in giving general satisfaction and in building up an unrivalled reputation. This is attested by the thousands of testimonials we have received, all of which we have pleasure in showing to any who call upon us.

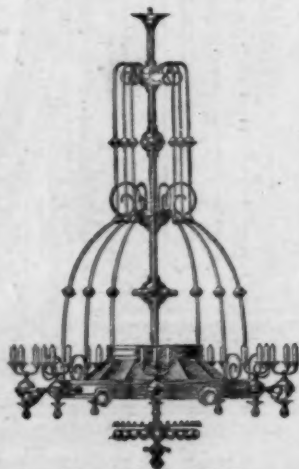
Our reflectors are adapted for use with gas, kerosene, electric or day light. We manufacture different kinds adapted to different positions and for use under different circumstances.

Our goods are strongly endorsed by leading architects everywhere.

We have recently brought out a line of Polished Brass Gas and Electric Brackets, Chandeliers, Hall and Vestibule Lights, Pulpit Lights, etc., the best of each kind that is made.

Our catalogue and circulars are very comprehensive and we take pleasure in sending them to all applicants. Send us the plans and full description of the rooms to be lighted, state the amount to be expended on fixtures and we will forward estimate with designs and return plans promptly.

I. P. FRINK, 551 PEARL STREET, NEW YORK.



Established 1857.

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. XXXII.

Copyright, 1891, by TICKNOR & COMPANY, Boston, Mass.

No. 801.

Entered at the Post-Office at Boston as second-class matter.

MAY 2, 1891.



SUMMARY:—

Death of O. P. Hatfield, Architect.—Death of H. M. A. Chapu, Sculptor.—The Question of the Architect's Diploma in France.—Fall of Stairways in a Washington Apartment-house.—Sunday-opening of the Metropolitan Museum.—Proposed Zoological Garden for Boston.—Transmitting, Converting and Using Great Electric Power.	61
FRENCH ARCHITECTURE.—IV.	63
ETRUSCAN ART.—III.	65
SOME GERMAN TOWN-GATES.	68
EMMANUEL FREMIET.—VII.	70
NOTES AND SKETCHES FROM TOLTEC-LAND.	72
BOOKS AND PAPERS.	73
ILLUSTRATIONS:—	
Turkish and Russian Bath Establishment, Walnut St., Philadelphia, Pa.—Hambleton Old Hall.—Details of Same.—House at Austin, Texas.—Webb Academy for Ship-builders, Fordham Heights, N. Y.—Building at Boston, Mass.—A Pottery Mexican Idol.	
Additional: The Towers and Spires of Bruges, Belgium.—Apartment-house, Brunn, Austria.—Glazed Veranda.—Pulpit in Moray Chapel, St. Giles's Cathedral, Edinburgh.—All Saints' Church, Ackworth Moor Top, Yorkshire, Eng.—Kitwells Park, Shenley, Herts.—New Factory, Birmingham, Eng.	75
COMMUNICATIONS:—	
A Case of Extras.—Blue and Black Prints.	76
TRADE SURVEYS.	76

ALL the older members of the American Institute of Architects will hear with great regret of the death of Mr. Oliver P. Hatfield of New York, which occurred last week, just as our edition was in the hands of the binders. Mr. Hatfield, who had attained the age of seventy-two, was one of the most honored architects in New York. It must be nearly half a century since he went into business with his brother, the late R. G. Hatfield, under the firm name of R. G. & O. P. Hatfield. At that time, architecture was much less of a fine art than it is now, and the Hatfields found themselves led by inclination to the scientific and practical side of the profession, in which they soon gained a wide reputation. Mr. R. G. Hatfield, early in his career, wrote a book of extraordinary merit for the period at which it was published, containing rules deduced from experiments of his own, as well as those which had been made by Tredgold and Rondelet in England and France, accompanied by an immense amount of practical information. This book, under the name of the "*American House Carpenter*," passed through many editions, and is still popular and useful. Another valuable work of the Hatfields was the invention of what is universally known as the Hatfield Sheave, although the patent expired long ago, and the principle of it is used by a score of manufacturers. In the Hatfield Sheave, which was devised to meet the want of a frictionless roller for sliding-doors, the pin, or axle, of the sheave runs in a slot in the frame, the length of which bears nearly the same proportion to the diameter of the pin that the length of the track bears to the diameter of the sheave. Hence, while the sheave is rolling through a distance of perhaps a yard, the pin rolls an inch and a half in its slot, and there is no perceptible friction or wear anywhere, while the whole affair is very cheap. This apparatus was, we believe, patented in the name of R. G. Hatfield, but the thoughtful ingenuity which devised it was shared by both the brothers. Without taking a great part in original building, although New York owes to them some fine structures, the firm became widely known as experts and consulting architects, and were constantly called upon by their fellows in the profession, to whom they gave admirable advice, and skilful service. Mr. R. G. Hatfield was almost the first, if not the very first Treasurer of the American Institute of Architects, and held that post until his death, when he was succeeded by Mr. O. P. Hatfield, who retained the office, by repeated reelection, until the consolidation of the Institute with the Western Association made it advisable to remove the business offices of the new body to Chicago. Personally, Mr. O. P. Hatfield, like his elder brother, was quiet, thoughtful, of measured speech, and considerate, but precise in action. Although the

brilliancy of our modern makers of picturesque architecture has cast a little into the shade the steady-going old offices which date from before the war, it has not totally obscured them, and some of the same brilliant artists will be the first to acknowledge with gratitude the kindness with which the Hatfields labored for years, by evening lectures and experiments, to instruct the New York students and draughtsmen in the rudiments of building construction.

HENRI MICHEL ANTOINE CHAPU, one of the greatest of French sculptors, died last week at Saint-Germain. Chapu was born at Mée in 1833, and studied under Pradier and Duret. He gained the Prize of Rome in 1855, and has ever since been prominent as an artist. His works are very numerous. One of the best known in this country, from innumerable photographs and drawings, is the Regnault monument in the School of Fine Arts in Paris; but this is by no means the most important. His "*Mercury*," exhibited in 1863, was purchased by the French Government, and is now at the Luxembourg, and he was the sculptor of the great monument to M. Schneider at Le Creusot. He was an officer of the Legion of Honor, and had obtained many distinguished honors.

IT will be remembered that a Commission was appointed by the French Government, some time ago, to inquire whether it was advisable to restrict the practice of architecture to persons provided with a diploma, or certificate of attainment, to be secured by means of a competitive examination, or in some other way. The Commission was composed of the most distinguished men in and out of the profession of architecture. The President was M. Gustave Larroumet, Government Director of Fine Arts; M. Charles Garnier and M. Bailly were Vice-presidents, and among the members were the Presidents of nearly all the great professional societies. The two Secretaries were M. Roussi, the Vice-president of the Society of "Architectes Diplômés," and M. Jules Perin, a lawyer of high repute among architects; and, at the close of the meetings, M. Achille Hermant, the well-known Architect to the City of Paris, was chosen to prepare the report of the Commission, a duty which he discharged with exemplary earnestness. Although some of the French technical journals were rather impatient at the failure of the Commission to devise a scheme by which all pretenders should infallibly be kept out of the practice of architecture, there seems to be no doubt that they discussed the question with a sincere desire to find a practicable plan of the kind, and that they abandoned the effort only after extensive inquiry and long discussion had satisfied them that it was useless. M. Hermant, speaking for the Commission, does not attempt to conceal the evils which arise from the unrestricted license given to any man in France to practise architecture. In the provinces, particularly, a great deal of architectural work among the French is done, to the detriment of owners, as well as of the real architects, by bankrupt bricklayers, building surveyors, decorators, bric-à-brac dealers and charlatans of all kinds, who, it must be remembered, cannot be distinguished by their names from men profoundly versed in the most difficult of all professions, and, owing to their impudence, which they generally possess in inverse ratio to their scientific and artistic capacity, thrust themselves into all sorts of professional employment, particularly into public work, of which, as M. Hermant says, they do, in the provinces, the greater part. Of the way in which they do it, there are amusing stories enough, but, as with us, many of them possess a political "pull" which makes them sure of employment and countenance, whatever blunders they may be guilty of; while the dishonesty and corruption by which they enrich themselves at the expense of their confiding clients are generally unsuspected by any except experienced architects, who, however, dislike to call public attention to the malpractices by which they themselves are the worst sufferers. At first thought, it would certainly seem that the restriction of architectural practice to persons known to be properly qualified for it would be the simplest and best way of escape, both for the profession and the public, from the tricks and blunders of ignorant charlatans; but the Commission, after long deliberation, has come to the opposite conclusion. It approves the principle of visibly separating architects from pretenders, but believes that the best way to do so is by voluntary association of the real

architects in societies, and not by Government interference; and, above all, it believes that the public may, and should, be taught to distinguish between good architecture and bad, and to value accordingly those who produce the former, by the more general teaching of the rudiments of architecture in schools. In pursuance of this idea, the Commission investigated all the schools in France and Algeria in which architecture is taught. In a few towns a tolerably complete course is given, but in most architecture is taught as it is in high-schools here, by a little history of styles and a little drawing, and hardly anything more. All this is well enough, but much more is needed. Some of the schools give four years to the course, and others three, and the instruction should be made suitable to the importance of the subject, not as a matter of mere accomplishment, but as a serious professional study. As a reward for the successful completion of such a course, a scholastic diploma might, it seems to the Commission, be useful, and, with its aid, and the development of the curriculum leading to it into such a training as a thorough professional school can give, the Commission thinks that the public discrimination in matters of architecture might be greatly improved, and a large number of young men might be properly educated for an honorable profession, from which they are now cut off by the difficulty and expense of a course at the great architectural schools, without invoking the interference of the Government with actual practice. To the same conclusion, we are sure, many people would come from a consideration of the circumstances which exist in this country. As in France, the profession suffers much from the competition of ignorant and incompetent, but impudent pretenders, and, like the French, our architects in many States are now demanding the licensing of all persons who wish to practise the profession after suitable examination. Whether, in any State, the demand will be acceded to is doubtful, but it is worth remembering that the establishment of new centres of architectural education will tend to the result desired, with much incidental advantage in other ways, and State legislatures could easily be persuaded, if a little rivalry should arise among them, to spend money for local schools of architecture, where a proposition to examine and license architects in actual practice would not be entertained for a moment.

A CURIOUS accident took place not long ago at the Shoreham Hotel, in Washington, a handsome building, owned by Vice-president Morton. The main staircase, which is of so-called "fireproof" construction, had landings laid with timbers, between iron beams, and the space between the timbers filled with mortar. This is, at best, a doubtful method of building, and, although the structure is only a few years old, the timbers are said to have begun to rot. On the day of the accident, some workmen, who were making repairs in the ceiling over the upper landing, set a trestle on the upper landing, and, according to the newspapers, tried to raise a part of the ceiling with wedges or jack-screws. The landing, which was never intended for such a purpose, gave way, falling upon the one beneath it, and carrying away that also; and so on, until six landings had fallen together to the bottom of the stairway. As no one was on the landings, and the area of the catastrophe was very limited, no person was injured.

THE question of the opening of the Metropolitan Museum of Art in New York on Sundays is again under discussion, and there seems to be some prospect that a way will be found for having it open to the public at least part of the day. It is understood that the Trustees recognize the advantage to the community of providing a place where people who do not care to go to church can improve their minds on their only leisure day, but there is, we believe, a question whether a part of the endowment of the Museum was not given under conditions which presume the closing of the galleries on Sunday; and, if it should be finally decided that they can be opened, there will be a considerable expense for an extra staff of attendants, which some one must pay.

IN Boston, where such a thing has long been greatly needed, an effort, which promises success, is being made to secure a Zoological Garden, on an important scale. The city, which can now dispose of space in a very extensive system of parks, has promised to give the use of the necessary land, if money can be raised for erecting the buildings, and for stock-

ing the Garden with animals; and the Natural History Society, which has long maintained a fine collection of stuffed animals, and illustrations of comparative anatomy, in its handsome building on Boylston Street, has set itself at work in earnest to procure subscriptions for the Garden. According to the latest scheme, it is proposed to divide the collections, placing the land animals in one park, and the aquaria in another, some miles away, which borders on the water, and, possibly, another part of the collection in a third. With all deference to the wisdom of those who are directing the affair, it seems to us that it would be a great pity to divide the collections in this way. Although the Marine Park would be conveniently situated for getting a supply of salt water for the aquaria, its exposed location would make it almost inaccessible in winter, or during an easterly storm; and the proportion of visitors whose enthusiasm would sustain them, after wandering through the Franklin Park Garden, in travelling a long distance to the aquaria, is very small. There is no work more fatiguing than sight-seeing, and even the pleasures of a visit to a zoological garden are much enhanced by occasional rest and relief, such as is afforded by sitting down and looking at the sea-anemones, after the excitement of seeing the ferocious beasts fed; or of breathing the fresh air around the seal-pond, after too long a sojourn in the monkey-house. Some years ago, when the project was first talked about, it was proposed that the Massachusetts Horticultural Society, the largest and most enthusiastic association of the kind in the United States, should join with the Natural History Society, and erect a building for its exhibitions, which are sadly crowded in its present quarters. It is much to be hoped that this part of the scheme has not been given up. The Franklin Park is large enough to accommodate the whole, and for educational purposes, as well as for economy of administration and brilliancy of effect, to say nothing of the convenience of visitors, it is very desirable to have all the collections, vegetable as well as animal, together. To recall only a few foreign examples, it is hardly too much to say that the London "Zoo" owes a large part of its immense popularity to the beautiful gardening with which it is associated, and to the fact that it has no competitor,—the Kew Garden being so far off, and so little known to the public, as hardly to count as a rival. At Frankfort-on-the-Main, there is, at one end of the city, a splendid Zoological Garden, which attracts crowds of visitors, and at the other end the equally splendid and interesting Palm Garden, which attracts other crowds. Separately, each is famous in its way, but each unquestionably loses in reputation through the rivalry of the other; while, if they had been united in the same place, so that visitors could go directly from one to the other, their combined interest would far surpass that of the London "Zoo."

THE work of establishing the line of wire between Frankfort-on-the-Main and the Falls of Lauffen, which is to carry three hundred horse-power to a distance of about a hundred miles, by means of a current of twenty thousand volts' pressure, is going on rapidly. Meanwhile, some experiments with converters and other apparatus of the kinds which it is intended to use are being made at Oerlikon, in Switzerland, where there is an extensive establishment for the manufacture of such apparatus. Not long ago, an experimental line was stretched at Oerlikon, mounted on one hundred insulators of the ordinary sort, and furnished with converters at each end. Through this wire a current varying from thirty to forty thousand volts' pressure was sent for a considerable time, without any remarkable effects. The electricity showed no tendency to jump off the wire at the insulators, and even when one end of the line was laid on the ground, the loss of current was not serious. The transformation in the converters from about fifty volts to forty thousand, and back again, took place with perfect regularity, and current enough was diverted from the main wire to feed a line of thirty incandescent lamps, which burned quite regularly and evenly. For a further test, a telephone wire was strung very near the main power wire, but no particular disturbance took place in it, even while a current of thirty-six thousand volts was passing near it. Whether the use of such enormous electrical pressures will prove dangerous in some unexpected way remains to be seen; but if they can be safely controlled, they will be of great service in transmitting power as by means of them, a large amount of power can be concentrated and transmitted to a distance over a single small wire, and distributed again, on reaching its destination, among hundreds of consumers.

FRENCH ARCHITECTURE.¹—IV.

RELIGIOUS SOCIETY FROM THE FIFTH TO THE TWELFTH CENTURY.—II.



A NEW art is always the creation of a new people, which has preserved intact its primitive characteristics. Just as the members of the same race of mankind are recognized by certain distinctive physiological tokens, such as general structure, features or a common physiognomy, so there are certain intellectual and moral faculties corresponding to these external lineaments, which are developed in this race with an accentuation not encountered elsewhere in a like degree.

These faculties are exceedingly varied and are often independent of one another. At times some of them are

entirely wanting, while others take on an extraordinary development: in antiquity—where we will look for examples in order not to offend the *amour-propre* of any modern nation—no purely original artistic work existed among the Hebrews or Phœnicians, which might be considered as the expression of an aptitude for plastic productions; they borrowed everything from the Egyptians and Assyrians, and, at a later date, from the Greeks. This partial inferiority did not, however, deprive the Hebrews of that gift which enabled them to create a literature unsurpassed by any other. In another line, Phœnicia and her principal colonies displayed, from remotest times, an audacity in their undertakings, a talent for organization, commercial qualifications and at times a military spirit, which mark incontestably a vigorous and bold race. In like manner, in the Roman, artistic and literary qualities were always subordinated to the powerful faculties of the administrator and the soldier.

In some peoples, an harmonious balance of these various aptitudes is met with. But every race has an intellectual cast peculiarly its own, as it has a physiognomy recognizable by certain typical external features; it has its own conception of beauty, and also the faculty of creating in conformity with this conception; and for this very reason, its productions present characteristics which differ widely from those observed in the works of other peoples.

In a word, if the intellect, like the face, has features varying infinitely with the individual, it is not less true that the members of the same race, so long as it remains pure, have likenesses sufficiently striking to enable one to recognize their common parentage, and distinguish them from persons of every other race. In time, however, migrations, invasions, wars and the constant relationships and interchangings incident upon the growth of civilization, inevitably lead to fusions which complicate, attenuate and, perhaps, completely transform the most sharply-defined primitive characteristics. The race may thereby acquire new faculties which can be harmonized with the first, rounding them out or correcting them, and resulting at last in gain rather than loss. Sometimes, however, the native and the acquired qualities are too dissimilar to be grafted on one another, in which case the fruit becomes abortive and decay sets in.

This is always a critical period in the history of a people, the more so because, though it may come out of it equipped for immediate achievements, it may also have its vigor and vitality so sapped that it will disappear in the sea of humanity, without leaving an eddy to mark the place where it went down.

It is, then, through the contact of a new race with a more advanced civilization that a period of great artistic, architectural and literary fertility is ushered in: when a people makes its way out of the limbo of barbarism and appears on the confines of history, it bears in its bosom new faculties which, though often pregnant with power, are, nevertheless, for the time devoid of consciousness or at least dormant; the germ ready to burst needs a suitable and well-prepared soil, one which has hith-

erto been denied it. In the first place, a condition of settled comfort is requisite to the conquering race, which its former wandering and precarious existence could not assure to it. To the poet and artist, a delicate and even refined training for their work is sometimes necessary, a cultured intellectual *milieu*, and a following disposed to listen and apt to comprehend. As for the architect, he needs, as we know, in addition to all this, to have access to previously acquired knowledge, which it is difficult to assimilate, even with time.

Undoubtedly, it is not impossible for a race, though isolated and limited solely to its own inspirations, to attain that degree of civilization which is necessary for the creation of an art; this thing must have happened at least once, in the beginning. But it was then the work of ages, without the occurrence during the long formative period of more violent disturbances than it was able to resist; Egypt probably offers an example of this, as well as China and perhaps India. We know how lasting the productions were in these cases.

Generally, when a new race is once settled in the bosom of an ancient civilization, it promptly assimilates all that has been acquired before its advent, eliminates such elements as are too foreign, and introduces fresh ones of sufficient vigor to rejuvenate and often to transform the structures started again on the old foundations. It was thus with the Greeks when they came in contact with Egypt and the Orient; with the Romans, conquerors of Greece; with the Arabs, vanquishers of Persia and the Byzantine Empire; and with the barbarians, when brought face to face with Latin and Byzantine civilization.

This contact of a newly appeared race with an ancient civilization is ordinarily a necessary condition to the abridgment of the long term, which its unaided natural development would require; a period of exposure to the myriad chances and catastrophes of the perpetual conflicts of history.

But this condition is far from being all-sufficient. How many invasions have left in their track ruin to the invaded civilizations, without working lasting benefit to the conquerors? How few have given birth to a new civilization, marking, as a beacon, one of those moments towards which successive generations turn their gaze with feelings of admiration and gratitude!

Success in such an event depends upon the rare, almost extraordinary conjunction of circumstances, which are at the same time complicated and independent of one another. In this sense it may be said that the great artistic periods have nearly always been ushered in by chance; for what we call chance is nothing else than the fortuitous coincidence of independent conditions, a coincidence effected in accordance with no regular law, so far as we can discern.

If a barbarous race be devoid of the necessary qualifications, or if, on the other hand the invaded civilization fails to retain sufficient vitality; if by the natural effects of time its traditions have gone to decay and its artistic faculties have too far degenerated; if, in the eyes of the barbarians, it no longer exercises a due prestige; or again, if the genius of the two peoples is too unlike, if the incongruities are too irreconcilable; finally, if the invading race is so weak numerically that it is swallowed up in the mass around it, without forming a permanent stock; or if, on the other hand, misery and dispersion impoverish the enslaved nation to an excessive degree,—if any one of these dangers shows itself too prominently, the invasion will merely result in a general downfall, with no ulterior compensation and with no prospect of a resurrection at some future day.

It is with these fusions of peoples as with the compounding of metals. Not all metals can be made to enter into an alloy, nor in all proportions. There are some which will remain obstinately separate, at the bottom of the hottest crucible; those even which show some affinity for one another will lie distinct in the mass, unless introduced in certain narrowly defined proportions; and only an incoherent mixture will be obtained, wherein the original properties of each metal are marked or altered, weakened or destroyed by those of other heterogeneous elements. Only when all necessary precautions have been taken, and when each element is present in exactly the right proportion, is the composition produced which we call alloy, in which each metal loses its own independence and goes to make up an entirely new and homogenous body. However small a particle you detach from this alloy, you will find it always of the same composition, one and inseparable; and the alloy obtained presents new and special properties which sometimes differ totally from the properties peculiar to each of the constituent elements.

In the twelfth century, all the conditions requisite to the

¹From the French of P. Planat, in Planat's "Encyclopédie de l'Architecture et de la Construction." Continued from page 37, No. 799.

formation and development of a new and original art were found in conjunction; the old civilization, which, between the fifth and the eighth centuries, had seemed buried beneath the débris, had taken on fresh vigor from the ninth century, and had just produced a rare and beautiful efflorescence in the eleventh century and the beginning of the twelfth; it was then still capable of furnishing the peoples of the north with the examples needed to hasten the development of their own artistic spirit.

The Frankish race has now attained a degree of civilization favorable to a flowering out of the arts. Wherever it has become firmly established, it possesses a sufficiently marked predominance to enable it thenceforth to put its own stamp upon its works, though at the same time it must borrow its materials from foreign civilizations. By contact with the latter it will gain what it still lacks though without letting go of what constitutes its own force and originality.

Now, then, that it was possible for a new architecture to be created, where was it destined to see the light? Was it in the heart of Germany, where the Frankish tribes originated, in regions having only distant and indirect relations with that old society from which the indispensable initiative must come? Truly not, for the contact necessary for this creation was not realized there. Was it in the most remote provinces, where the men of the north, occupying the farthest outposts, were scattered among peoples of quite different stock, manners and institutions? Surely not there either, for the new element was not sufficiently preponderant, it had already been altered, the native blood had not remained pure.

The region where, apparently, the looked-for art would appear was that lying on the confines of Neustria and Austrasia, not too far from the original sources nor too far from the points where the old civilization flourished; that is to say, somewhere in the country between the Loire and the Rhine, where the Franks of Austrasia came in contact with the Franks of Neustria, who were earlier comers and who had, up to that time, been unable to produce any artistic work exclusively their own.

The first wave of invasion had, as it were, not brought a sufficient quantity of fertilizing material to transform the nature of the ground; the importation of a second and more powerful alluvion was needed for this. Then a few centuries—from the eighth to the eleventh—were required for the latter to penetrate deeply into the soil.

We shall certainly not attempt, as some archaeologists have done, to settle rigorously the question of which was the earliest of all the edifices to which the term Gothic may be applied. It would be necessary to determine first—in the continuous chain of transformations from the Romanesque to the Gothic—the precise moment when Romanesque forms and dispositions had disappeared and Gothic elements had come in to such an extent as to justify one in dropping one of these terms and adopting the other; this grammatical, rather than architectural, distinction is above our powers of discernment. We will not therefore attempt to decide where the first Gothic structure was cradled; still less will we try to determine where the architect of this embryonic creation originated, although that would be necessary in order to enable one to fix the paternity of the style upon a particular province. These questions seem to us almost incapable of solution, and we deem it wise to stick to the general facts and the laws of *ensemble* noted above; we would refrain also from ascribing the origin of an event, so important and so general as the creation of a new architecture, to petty and accidental circumstances.

What form would the new-born art naturally take? Military architecture certainly made its appearance at an early date; but it was incapable of producing works of art of an elevated character, for in it art is wholly subordinated to the necessities of defence. Civil architecture had not yet been developed on a large scale, for, outside of their fortified castles, the Franks of the period saw no need or even use for luxurious structures adorned with all the resources of art.

There was at that time one grand sentiment alone which was pervasive enough, strong enough, deeply rooted enough, to call forth a really grand creation, and that was religious belief.

Here, too, we must take into account the important influence which the Crusades exercised in various ways over all the fixed populations of Western Europe; these movements were themselves the outcome of an ardent faith, and they exalted religious feeling to a still loftier pitch; they brought all the tribes just issuing from barbarism, without exception, into contact

with the highest civilization of the Orient; they put these tribes into closer and closer relationships, uniting them in common expeditions and mingling them intimately with one another. They thus paved the way for the rapid diffusion, throughout all the regions occupied by the men of the north, of the in-coming art.

The Crusades caused an extraordinary awakening of the human mind all over Western Europe. Amid disorders, struggles, rivalries, wars and invasions, a common sentiment, a single tie had survived, namely religious faith. "The world of the eleventh century had in its diversity one common principle of life. . . . A religious war was the only bond that could bind it together; the diversity of race and political interests, which kept it divided, could be forgotten only in the presence of a greater and more general diversity." Disregarding all distinctions of rank, class, origin and race, hordes and disciplined armies alike set off in succession from Toulouse, Normandy, Picardy, Flanders, England and Germany. They founded in distant lands principalities and empires which were subject to the feudal régime, and which had only an ephemeral existence. But the barbarians had at different times found themselves in the presence of the Byzantine and Arabic civilizations, and what they witnessed there made an indelible impression upon their minds. The remnants of Latin civilization, letters, the arts and sciences, had been dispersed and had almost wholly disappeared in the darkness in which all Western Europe had been, until now, enveloped. On approaching the shores of Asia, a radiance streamed upon these eyes unused to the light.

The impression made was deep and lasting, and it was religious architecture, especially, that profited by it.

Religious architecture had long been in the hands of the monastic orders, which having establishments scattered throughout Europe, had intimate relations at an early period with the civilized world, where they trained or hired architects and builders, master-workmen and artisans; these constituted a part of the order and journeyed for it from one house to another. The Byzantines and the Lombards of Italy, by this means, exerted a powerful influence for a long period over the style of the monastic constructions.

By the side of the regular clergy, were the secular clergy, who were long too barbarous to be able to compete with them. We have seen that the highest functions of the clergy gradually passed into the hands of the Franks, and, in many cases, of the representatives of their most influential families. The bishops and archbishops of barbarian origin, jealous of the influence, wealth and power of the monastic orders, whose establishments extended to the boundaries of distant empires, soon entered into rivalry with them, and conceived the design of rearing magnificent edifices which should symbolize their own grandeur. It was very natural that they should not wish to employ the builders attached to the monasteries; they therefore formed a corps of masters, independent of the monkish orders and bound to the prelates, but who may have belonged to the same race and had the same origin as the others. What is certain, in any case, is that the cathedrals which sprang up at the bidding of powerful masters under the direction of the clergy, were conceived in a spirit differing radically from the Latin, and were inspired by bishops of Frankish origin.

In the provinces fully occupied by the Franks, creative tendencies and an artistic taste hostile to tradition had already formed, as might be expected in a young and vigorous people, that had ceased to be content with inspirations derived from external sources.

Naturally, the first fruits thus realized would at once attract and charm souls eager to create for themselves; a wide-spread rivalry in the construction of masterly works would be the immediate result. This accounts for the rapidity with which the new style, when once inaugurated, made its way over the country and among all peoples of Germanic stock, and explains the fact that contemporary examples of it exist among these various peoples, the origin of which must be assigned to the earliest years of Gothic art.

It was a grand style, and wholly overturned traditional ideas; this will not seem surprising, if the conditions noted above as necessary for the appearance of a really original art be accepted. But many an admirer of this style, overlooking the inevitable and sometimes quite unsuccessful gropings of mediæval builders, has gone so far as to declare that it appeared, from its cradle, as a profoundly logical and entirely rational style; that, even in the smallest details, reason reigned as absolute mistress;

some have even attempted to create a sort of monopoly for it in these respects, assuming it to be the only architecture solidly based on logic and reason.

These are exaggerated statements, which may be excused, coming as they do from persons defending a just cause, but who, roused by opposition, sometimes overstep the bounds of careful discrimination. Looking at the matter coolly, it may be asserted that there never was a noble architecture without good construction, nor good construction without logic and reason. The Parthenon of Athens, the Pantheon of Rome and that of Paris, are as logical in their way as the cathedrals of Laon or Beauvais. The Gothic groined vaulting, which was, moreover, derived from the Romanesque or Byzantine vault, is a very happy solution; the Byzantine dome is not less successful; and that of St. Peter's has its own merits. It would be easy to multiply comparisons of this sort; it would be useless in the eyes of men endowed with any wise impartiality. Nor shall we have the cruelty to analyze too minutely certain dispositions of the Middle Ages which, we are told, are wholly unique and wrought a revolution in construction; in reality, the Gothic architects seem to have been quite guiltless of these clever and subtle inventions in constructive science, for examples of them are, to our knowledge, more than rare. These miracles of ingenuity most often prove, on examination, to be at best only mediocre solutions.

It has been claimed also that the Gothic is our national style *par excellence*; according to this dictum all our other architecture is merely copied from foreign sources. We cannot agree to this proposition; moreover, it would be well to come to a clear understanding as to the use of terms here; a national art in the Middle Ages presupposes the existence of a nation, and one cannot speak of a nation, or of nationality, in France, until a much later date; not, in fact, until just the period when Gothic art was doomed, and was even on the verge of disappearing forever. But it is unquestionably true that the Gothic style is one of the most purely original styles, and that it has borrowed as little as possible from without. It is the production of a new race possessed of creative genius, during its period of unimpaired vigor; but it must be acknowledged that this race constitutes but a relatively unimportant element of the French blood. In applying the term, national art, to works reared on our soil by men coming as conquerors from the far-away lands of northern Europe, we forget that the same title might be given, with as good authority, to Gothic art in England, and, perhaps, with even a greater show of reason, to the same style in Germany.

Why should we dwell on the quarrels of controversialists who, though certainly sincere, are yet imprudent? One fact remains undisputed, namely, the beauty and grandeur of Gothic art. It has left admirable productions in more than one country. Those found in some parts of France figure among the oldest, the most beautiful and the purest. The race which created this style is not foreign to us; it was among us, in contact with our civilization and refined, cultivated and developed by it, that the conquerors were trained and here that they were able to create their masterpieces of art; then, they were gradually drawn into the crucible, wherein Gallo-Romans and Franks were fused, to constitute at last the strong French nationality. Cannot that suffice?

[To be continued.]

ANOTHER WONDERFUL CLOCK.—Another marvellous piece of mechanism has, says the *Jeweller and Metalworker*, recently been exhibited in Paris. It is an eight-day clock, which chimes the quarters, plays 16 tunes, playing three tunes every hour, or at any interval required by simply touching a spring. The hands go as follows: One once a minute, one once an hour, one once a week, one once a month and one once a year. It shows the moon's age, rising and setting of the sun, the time of high and low tide, besides showing half-ebb and half-flood. A curious device represents the water, showing ships at high-water tide as if they were in motion; and, as it recedes, leaves them high and dry on the sands. The clock shows the hour of the day, the day of the week, the day of the month, and the month of the year. The mechanism is so arranged as to make its own provisions for long and short months. It also shows the signs of the zodiac, and the difference between sun and railroad time for every day in the year.

ETRUSCAN ART.—III.



WHILE the Etruscans have not left us any architectural work of capital importance, we possess a sufficiently large number of documents which enable us to affirm that they had much taste in plastic art. From the time that they emerged from barbarism they strove to give to all objects which they used forms both bizarre and elegant, and to fashion them in such a way as to give them an agreeable aspect. Even the objects which we discover in the tombs of the first

epochs bear testimony to this taste. The porringers, vases, amphoras, lamps, all are modelled first with a rude art and then with a degree of fineness which continually takes on more perfection. One remarkable trait is that the Etruscans especially excelled in the art of modelling in clay and that the ancients always spoke in flattering terms of the terra-cotta statues made in Etruria, a fact which does not prevent our discovering occasional pieces of sculpture in marble or in bronze which have a certain value. The fetiches, the household articles, the *stela*, are often decorated with designs. We also see in museums a great number of sarcophagi, on the lids of which are found a female figure in the attitude of repose. Often these sarcophagi are also covered with bas-reliefs, which almost always represent the funeral games and have an incontestable interest; but pieces of sculpture of real value are rare. I will mention among others the statue of the orator, found near Lake Trasimene, which is to-day in the Museum at Florence. The orator is in the act of haranguing a crowd. But for the great fault, in a man who is supposed to be speaking, of having his mouth closed, his attitude does not lack for breadth or movement. Amongst the bas-reliefs the most remarkable are those upon the cinerary urns which are found in the museums at Florence, representing Ulysses passing before the rocks of the sirens; the one representing Actæon devoured by his dogs and that whereon we see the death of Echelas and Polyneices, which are also at Florence; the bas-relief on the sarcophagus found near Perouse, where the artist has reproduced a procession proceeding to a tomb for the purpose of accomplishing a sacrifice and two which can be examined in the Micali collection, which represent the agony of an old man and a scene of separation. The first of these bas-reliefs is on an alabaster urn, and the other on a sarcophagus found at Chiusi.

In the way of curiosities, I ought also to mention a cinerary urn in travertine, covered with polychrome stucco, belonging to the tomb of the Volumi at Berouse. This urn is a beautiful composition; it bears winged figures at the corners, and exhibits, as do a great number of marble Etruscan tombs, a bed of state, upon which lies extended a personage of importance. But the most characteristic thing which it presents is the polychromy which had such vogue in Greek sculpture and of which traces have been found in the accessory sculptures of the Parthenon. Upon the lid of a sarcophagus at Vulci, we see two figures, a man and a woman embracing one another, probably spouses; this design has an extremely distinguished air. The countenance of the woman in particular is of remarkable beauty. In the Museum at Florence can be admired a terra-cotta statue of Apollo, which comes from the pediment of Luni, and represents the peculiarity of departing farther from the consecrated type which Grecian sculpture had bestowed on this god, which allows us to suppose that we here find ourselves in the presence of a truly indigenous work, pure from every foreign influence. But the three most beautiful pieces of Etruscan statuary are without doubt the bronze Minerva found at Avezzo, the Mars discovered at Todi, in Umbria, and the Apollo, also in bronze. The Minerva, which is in the Florence Museum, is stamped with great majesty. Her robes are draped with a consummate richness of effect and her attitude breathes nobility. This work is certainly of Greek origin or Greek inspiration. I cannot say as much for the Mars of Todi, which in nothing resembles the ideal which Hellenic artists have transmitted to us as the god of war. As to the Apollo at Ferrara, it is very Etruscan, not only because he bears on his left leg Etruscan characters, but particularly because his features express a peculiar conception, very individual and differing in everything, like the fragments at Luni, from the typical Apollo of the Greeks or the Romans. In spite of these isolated specimens which have real value, it is to-day still impossible to form any exact idea of the history of Etruscan sculpture. We know neither the chronology, nor the schools, nor the names of the artists and all that we can understand of the styles does not yet

¹ Continued from No. 798, page 23.

permit us to classify them. M. Martha himself has been obliged to renounce all attempt at making a classification and he has been very wise in limiting himself to bringing together some observations on the fashion in which this art was developed. In spite of the tendency which the Etruscans had toward plastic art, it is certain that without the aid of foreigners they would never have reached a remarkable degree of perfection. Whenever they were left to their own devices, their plastic works were immobile and archaic in form. They began to acquire perfection when they began to inspire themselves from the models of Oriental art, which came to them in the form of carved ivory, jewels, amulets, arms and stuffs. Later, the Greeks, who came into Etruria, toiled, as it were, by the grand Asiatic currents, supplanted the Oriental models and became almost exclusively the masters of Etruscan art. The signs of this double influence are easily recognized in the most ancient Etruscan works which bear the stamp of it. At the time of the grand migrations, Grecian artists, who were numerous and widely scattered over their own country where their work was relatively poorly paid, because of the very fact of their numbers, spread themselves in great numbers over all the roads of the Occident, and it is natural that they should have sought by preference the most flourishing nations, who were more likely to recompense them satisfactorily. Etruria, which was then very prosperous, was one of the regions to which, apparently, these Grecian artists were attracted. We know the names of several Corinthian artists who came to Tarquinii with Demaratus, whom I have already mentioned. These are Ephantos, Euchair and Eugrammos, mentioned by Pliny. Later, there are mentioned at Rome two Grecian artists who came from Etruria, Gorgasos and Damophilos, employed in the construction of the Temple of Ceres. It has been, then, a mistake to hold that the Etruscans were the inventors of statuary in Italy. The only merit perhaps which can be recognized in them is their having been the people amongst whom were executed the earliest statues on the peninsula, but by the hands of foreigners. At precisely what date all this importation took place remains still obscure, but it cannot go much beyond the time when the great currents of Corinthians, Carthaginians and Greeks directed themselves toward Italy. It can be quietly assumed that central Italy was the point of disembarkment where these grand civilizing currents met in rendezvous, particularly the Etruscan ports of the Mediterranean, the doors of the peninsula. Thus Etruria was the way by which the first glimmers of Oriental civilization were able to penetrate the very bosom of Italian barbarism at the time when Rome was not yet born, when from the Alps as far as Sicily there could be met only primitive and rude peoples.

From the examination of objects found in all the Etruscan cities it results that toward the sixth century of our era sculpture was still limited to the Etruscan cities of the south; that is to say, the maritime cities. It is only three centuries later that one finds the trace of it toward the north and in the interior, at Bologna, Cortona, Perouse, Volterra and Chiusi. All this time was needed for art to accomplish its work of penetrating the depths of Etruscan society. Nevertheless, we can remark that several centres were formed, and that each centre had its specialty, probably according to the taste of the inhabitants and according to the gross material which could most easily be procured in each locality. At Cortona, Arezzo and Perugia bronze was the fashionable material. At Clusium stone was carved. At Volterra they chiselled alabaster. At Tarquinii and Cerveteri they used terra-cotta. It is also remarkable that each locality had its own style, its own school and manner, and this comes doubtless from the fact that each centre was created by artists who brought with them their several processes, their models, their inclinations, which they communicated to their pupils and their imitators. It even seems that, for each category of objects, there prevailed a different aesthetic quality derived from the exclusiveness of the ateliers. At Chiusi, for instance, to cite only this city, one recognizes very marked differences in the styles of the *canopes*,¹ statues, bas-reliefs and urns. The *canopes* are conceived with an unconscious but sincere and very pronounced realism, which denotes a real spirit of observation and a serious study of the human countenance. The statues, on the contrary, aside from the heads, which have sometimes an evident expression, are always modelled after a common type, with great dryness of form, without grace and without truthfulness. The bas-reliefs of the cippi are without grace or proportion, hardly comparable to the poor studies of the early times of Attic art. On the contrary, the urns, like the *canopes*, evidence a great searching after reality and sometimes an exaggerated care for truth. All this proves to us that Etruscan sculpture, like all arts which flourished in this country had no fixed rules, following no regular and normal course of development. Ceaselessly submitted to innovation brought by the last arrivals, exposed to a continual retouching and enlargement of ideas and processes, it was formed at hazard, by fits and starts, sometimes advancing, sometimes retreating, but never succeeding in becoming an organic art, purely because, in place of being indigenous, it was before and above all an imported art. It would, therefore, be impossible to trace the chronological history of Etruscan art, as can so easily be done in case of Greek art, which is quite homogeneous, whose phases can be followed from primitive archaism up to the decadence, passing through the periods of its bloom to full maturity. Etruscan sculpture has no age, because one sometimes discovers it to have quite an advanced degree of perfection, only to fall again

into infancy; then, after a period of experiment more or less long, it suddenly reaches a moment of inexplicable prosperity.

The thing which is definite as regards the sculpture of the Etruscans is its poverty of invention. The types are reduced to a small number and they are not individual. The religious images were borrowed from Asia or Greece. Some of the compositions are only reproductions of those which already had a place upon Greek pediments. Almost all the bas-reliefs are imitations of Hellenic work. In general the execution is heavy, except for the expression of the countenances, which is ordinarily striking. We find also, here and there, certain statues like those which I have mentioned, which depart from the ordinary style, such for example as the "Orator" at Florence. The general air of the personage has in these too rare cases a great expression of nobility, and breathes movement and life; but these are exceptions which are not sufficient in number to efface the impression of poverty and narrowness which is left by a far-reaching analysis of the works of Etruscan sculpture which we know.

Now let us pass to Etruscan painting, as to which we can formulate more precise and more complete ideas than as to their sculpture. The thing which offers the most interesting point is the study of the processes employed by the Etruscan painters. The documents are numberless. Unfortunately the best paintings, which have lain beneath the ground for centuries, have been injured by dampness. Others have been damaged by too hasty excavation, and again others bear marks of the injuries which at different epochs Etruscan tombs had to endure. But we have succeeded, more or less, through copies, through restorations or by repairs — the fidelity of which may be called in question, but which, nevertheless, are of great assistance to us in these studies — in reaching certain conclusions. The German Institute and the Gregorian Museum at Rome, as well as the Museum at Bologna, and the British Museum, possess fairly good collections of copies in color, but the surest studies are those which can be made on the spot, in the caves where the paintings can still be seen on the very surfaces where they were executed, and where, consequently, one can take better account of the styles and inclination prevailing among the Etruscan painters. At Corneto there are fifty or more caves with painted walls; twelve at Chiusi, four at Centuri, two at Vulci, and at Orvieto. These are almost always, with two exceptions, mural paintings, and the first remark one makes is that these paintings are always executed upon the tufa or upon walls of masonry. When the tomb is of built masonry it is not painted. I believe there is not a single example of Etruscan painting in distemper. All are in fresco. As the tufa itself forms a very permeable background naturally prepared to receive color, the coating applied is ordinarily very thin, its thickness varying from ten millimetres to two centimetres. In analyzing these paintings, one obtains proof that the Etruscans had the practice of working after cartoons, and probably also used tracings. We can frequently notice on the plastered surface the traces of the dry point used to mark the outlines. With few exceptions, also, the background of the picture was never painted. It was the color of the plaster itself which furnished the distant planes of the picture. The colors of the Etruscan palette are grayish green, blue, ochre, lime-white, red and lamp-black; but these colors are not always met in Etruscan paintings. The paintings of the first epoch are composed in two or three colors, black, white and ochre. The paintings ordinarily represent banquets, dances, games, races, combats, hunts, portraits, deathbed scenes, funerary compositions, Greek or Etruscan legends, landscapes, and animals; but it is the gayer subjects, such as banquets and dances, which predominate, as if it were a part of the Etruscan philosophy to soften the conception of death by joyous imaging; as if it were to be considered only a happy event over which man need not borrow trouble. In the banquets are often shown licentious scenes, naked men and women, thus indicating the libertine habits of the time, and women, who are often found with cups in their hands, thus admirably justifying the reputation of passed-masters of drunkenness which the Etruscan dames enjoyed in the times of the ancients. From the pictured dances, it appears that the sound of the flute and the castanet was most agreeable to the Etruscans as accompaniment for these exercises. Sometimes the sexes alternate, or are mixed together; sometimes we see all the men on one side and the women on the other. The dance with the Etruscans had nothing methodical or coherent; dancers gave themselves up to disorderly and frantic gestures, jumping about as if the perfection of movement consisted in exhibiting prodigies of agility and equilibrium. With their dancing were exhibited feats of address, and there can be seen in a crowd of dancers personages who, while executing capers and pirouettes, play with crowns and cups overflowing with wines, holding them out at arm's length without spilling, or emptying them at a single draught. The games are as various as the dances, but they are more frequently the sports of the circus that are discovered. I do not remember to have seen in the Etruscan collections a scene of combat with wild beasts, a fact which would prove that the shameful merit of causing men to fight with lions and tigers must, in the Western World, be credited to the Romans.

The study of these paintings concerning games is very useful in conveying knowledge of Etruscan manners and customs; and these paintings represent the inhabitants of Etruria as a gay people, lively, agile, comfortable and well content. The indication of the muscles, although anatomically false, gives evidences of robustness. Legends take an unimportant place in the collections with which we are

¹ Egyptian mortuary vases.

familiar. We see that even in the funerary decorations, the Etruscans had an unconquerable inclination for the convivialities of life; and upon this point, the Grecian artists, so devoted to mythological subjects, have been forced to make considerable concessions to the taste of the people for whom they worked when they came to Etruria. One can almost count upon his fingers the paintings which have for a theme some legend drawn from Greece. In these paintings the names of personages are almost always indicated in Etruscan characters. They are Hades, Proserpina, Geryon, Memnon, Tiresias and Ajax, or some scene from the Odyssey, where we see Ulysses sinking a stick in the eye of a cyclop. Elsewhere it may be the death of Cassandra, slain by Ajax at the feet of the statue of Pallas; a sacrifice of Trojan prisoners, immolated by Achilles to the manes of Pterocelus, before Agamemnon; the duel of Polynices and Eteocles, or a combat of Greeks and Amazons. But that which is very curious to remark is that Grecian mythology is corrupted by becoming acclimated in Etruria, and that among the heroes of Grecian legend there are mixed types belonging to Etruscan legend, such, for example, as the terrible Tuculcha, whom we see by the side of Theseus and Pirithous, which same Tuculcha is only an Etruscan demon, a kind of winged Charon, who has an eagle's beak for a mouth, burning eyes and grinning countenance framed with Medusa-like hair. It is just this mixture of Hellenic reminiscences with local tendencies which forms the characteristic of Etruscan painting. And we see that the Etruscan painters have been constantly divided between their personal tastes, which urged them toward the realities of life, and the precepts of Grecian art which, together with the superiority of its technique, exercised over them an irresistible influence. Often they are discovered about to reproduce with almost brutal truthfulness scenes from nature and social life, which displayed themselves around them with the luxury and abundance of an already advanced civilization. Then all at once we see them inclining towards the foreign style, from which they not only borrow the manner of execution, but also the subjects, the conceptions, the conventional forms. The history of Etruscan art, if one can only seize and fix its details, is only the history of this perpetual balancing between the love of realism which was the peculiar influence with Etruscan artists and the invasion of Hellenic genius. One thing which is worthy of remark, even in works where the preponderance of Hellenic influence is triumphant, is that the note of realism always makes itself apparent. One other detail should be noted, namely, that painting does not appear to have permeated all Etruria as sculpture did, but seems to have stopped at the limits of the maritime cities, and not to have passed beyond the regions where these cities could exercise a direct influence. But this is a mere induction which may have its foundation only in the results of excavations, which have not discovered up to now any important paintings in the interior of the peninsula beyond Orvieto in the valley of the Tiber.

In any case, apart from the historic interest which they present, Etruscan paintings have a very dubious artistic value. It is possible to point out here and there some delicate trait, some pure line, some well-poised head, some figure gracefully posed, some happy commingling of color, but these are isolated pieces of good luck. In short the general quality of the art is poverty of construction and lack of creativeness and dash. The execution is almost always hesitating, heavy, defective, the color unequal and arbitrary. Etruscan painters were merely artisans and professional colorists, and some minute comparisons have allowed us to establish that like the sculptors, the workers in ceramics possessed a certain number of stereotyped forms which passed from one workshop to another. From an historical point of view they are, on the contrary, very precious. Precisely because of the tendencies which influenced the Etruscan painters to study actuality, they furnish us useful information of great value as to the manners and customs of Etruria and the habits of a people, who, without being always at the height of the reputation which has been made for them, must have contributed a great deal to form the psychological character of the people of Italy, a people in short who, without contradiction, were in many things the masters of the Romans, their future conquerors.

It would be possible to make some interesting remarks about ceramic-work, metal-work, jewelry, but it is time to stop, and I cannot do better than to associate myself, with some slight reservation, in the conclusions of the author himself. Etruscan art is in its totality only a secondary art. It lacks the fundamental faculty of all art, creative genius. In architecture it invented nothing. It is in everything tributary to the foreigner. The pediment, the column, the vault, were borrowed from architects who came from the East. The pediment is imitated servilely from the Greeks; the column is spoiled in bastardizing the style; the vault alone has been treated by the Etruscans with a certain masterly handling and perhaps carried a step farther toward perfection. In accessories and decoration the Etruscan people are also servile imitators. They show originality only in the composition of wooden framing and who knows that they did even that? This did not lack in inventiveness and was not limited to adopting local usages, for it is possible that before their arrival in the region to which they have given their name, the indigenous people, inhabiting a country covered with forests, had before it the taste and the custom of using wood for framing and embellishing their dwellings. In painting and sculpture it is still from Greece and the East, especially from Greece, that they borrowed their subjects, their compositions, their technique and their style. Finally, before all else, they lack, besides originality, the æsthetic sense, that

is to say, the love and comprehension of beauty, elegance, harmony, the superior conception of the ideal which compels forms to adapt themselves to the necessity of expressing an elevated inspiration.

The deduction must be drawn that the Etruscans were totally devoid of the qualities which would have permitted them in certain circumstances to have a national art. I have already remarked that they had the instinct for realism and a passionate love for nature and that, especially in the works of the archaic epoch, that is to say, the epoch when they had not submitted to the yoke of foreign art, they gave evidence of great capacity for observation and truthfulness. With such inclinations, a people can surely become artistic, if it has time to develop and urge its genius to the farthest degree of maturity. Unfortunately the Etruscans were a people rich and prosperous. The reputation of their prosperity drew to them at an early day Grecian artists who brought models, conventional if you wish, that already presented all the delicacies of a perfect art. It was a flood, an inundation, ever repeated and increasing. To every harbor of Etruria flocked artists provided with stereotyped forms, superior for delicacy of line and form, if not for nobility of conception, to the types which the Etruscan artists so painfully practised. Probably the purchasers preferred the foreign productions which, among other superiorities, possessed that exotic perfume which even to-day exercises a fascinating influence upon the crowd; and in order to endure competition, as well as to avoid fatiguing studies in a way where there was still a long distance to travel, the painters, sculptors and architects of Italy became not the rivals, but the imitators of their foreign competitors.

This does not mean to say that Etruscan art presents no interest. If it had no other merit than that of being the source from which flowed the art of the Romans, it would be enough to make it a subject worthy of the highest interest. I do not side with those who think, like M. Martha, that Roman art is a superior art. From many points of view, it is not worth more than Etruscan art. Italian genius slumbered for centuries over the ruins of Roman art, without experiencing the least quivering of life. The Italian Renaissance began when at Pisa, Florence, Siena, Rome, the leading Italian artists began to be able to admire the remains of Grecian sculpture, a thing which proves that the remains of Roman art had nothing vivifying, except in architecture. In this branch of art the Romans were incomparable. Everywhere that they passed their glory and their grandeur is affirmed in works of majesty and unexcelled solidity. Now the fundamental principles of architecture the Romans derived from the Etruscans. It is these last who taught them the laws of stability and proportion, the principles of ornamentation, and who made them acquainted with the vault, which plays so great a rôle in Roman architecture. It is true, as I have already said, it was not the Etruscans who invented it, but they gave it more breadth and solidity, and made its use easy and elegant. On this point it would not be fair to dispute their deserts. It is they, also, who taught their conquerors the art of fortification and the principal processes used in the construction of bridges, aqueducts, sewers and harbors, and who finally inspired them with the plan of private dwelling-houses, with those devices which correspond so well to the needs of the ideal family life, and notably with the atrium, the central space destined for the place of general assembly for the family. Finally the processions which the Romans sculptured on their monumental arches, the ornaments which are found on the lids of their sarcophagi, the bas-reliefs which decorate all funerary edifices, reveal a Greek origin; but it is through the intermediation of the Etruscans that the Romans were so early initiated into the beauties of Hellenic art. This precocious initiation has a great influence on the development of Roman art, for when, later, the Roman artists were by conquest brought into direct contact with treasures of Greek art, they were already prepared to comprehend them and imitate them as they did, though in so doing they lent them a rudeness and vigor which were not exclusively in their own temperament, but which they had remarked in the productions of the Etruscans. Without this characterizing robustness, Roman art would be only a flat imitation of Hellenic art. It is Roman precisely because before succumbing to the ascendancy of Greece, it had succumbed to that of Etruria. It is especially from this point of view that the study of Etruscan art is of capital importance.

H. MEREU.

GAS FROM WOOD.—The Attleboro' Gas Company, of Attleboro' Mass., U. S. A., has introduced in its works a plant for the manufacture of wood and oil gas, according to the patent of Mr. George Ramsdell. one other apparatus of a similar kind is at work in the State of New York. It is claimed that wood gas is the most healthful produced by any process, and that it possesses a greater illuminating power than any gas made. It is stated one cord of wood and 300 gallons of crude linia oil will produce 60,000 to 80,000 cubic feet of gas of 20 to 30 candle power, with a residue of two barrels of fine tar and 65 bushels of mercantile charcoal. The new process at the works has been put in such a condition that the coal-gas retorts may be used for the wood and oil gas, with the addition of a mixer and superheater. The wood used is maple, and when the gas has been extracted this is carbonized, leaving a fine quality of charcoal. By the Ramsdell process, the gas can stand a much colder weather without condensing or stratifying.—*Invention.*

SOME GERMAN TOWN-GATES.



Fig. 1. The Friedland Gate.

TOWN-GATES are things of the past, but, after all, not of so old a past as we incline to fancy. Their origin, of course, goes back to feudal times: in Germany, for the most part, to the thirteenth and fourteenth centuries. But many an old gate was still in regular use so late as twenty years ago. In the North, where I have gathered my first harvest of photographs of these neglected monuments, a *Thor Schreiber* was still often lodged in an upper chamber long after the uppermost chambers of the tower had been given up to rats and final ruin. Or he had taken his seat of survey at a loop-hole in the lower wall.

You might have lived in the neighborhood of the town your life long; you might have driven in regularly once a week or daily, and your face and his phiz have observed each other grow leathery and wizen by age, yet your vehicle would be halted! Your friend would scramble to his desk as to a pulpit, and lift his voice to entune his ding-dong: "Who art thou? Whence comest thou? Whither goest thou? What is thy business there? How long wilt thou there abide?"

His business was to take the inventory of your past and of your purposes—a work that is still undertaken in Continental Europe, but no longer face to face. There are too many faces, no doubt, that turn towards a town, in our age of steam-cars, for a magistracy to provide surveyors of each. The interlocution is done on its side by a printing-machine instead, which, unlike the poor gate-man, can turn off a thousand of the traditional "Who art thou?" in a minute. You write answers to the questions in your lodgings—a much more comfortable place to stand examination in than was the draughty archway of the tower-gate.

But who would not resign comfort—now and then, at least—for a sight again of the skull-capped *Herr Thor Schreiber*; for the musty smell of moss, mixed with the dampness of ponderous masonry; for the voice, with its liturgical pitch and fall, and all the picturesque sights and stirring sounds of the gate-court?

In feudal times, the assistant of the gate-watcher was a town-gate dog. "Every morning," runs an old manuscript [Lunelac 4° No. 202, Vienna], "the watcher and the dog shall see, before the gate be opened or the draw-bridge let down, if no one lies hidden behind the tower; and if a wood be in the vicinity, it shall be beaten up and searched through. If a person be let into the outer door, the same shall be closed first, and then the inner gate be opened. If a person be let out, the inner gate must be closed before the outer one is opened, and it must be kept shut so long as the outer one remaineth open."

We do not know whether the gate-dog was a bloodhound. It is hardly probable, however, for the enemy was seldom the departing guest with tracks to be followed. He was the approaching stranger, and, above all, approaching squads of strangers.

The important adjunct to a gate, for this reason, was an eye, rather than a nose. Yet, curiously enough, in the oldest gate-towers the architectural accessories gave as much account to the one as to the other. A dog-stall formed an invariable feature of the court-stalls, and the architectural projection that characterizes German towers of the fourteenth century was given, in early times, the name of *Pech Nase*, or tar nose.

The name for loop-hole was *Guck Loch*, or peep-hole, and was an unroofed opening. The *Pech Nase* was a roofed, awning-like formed outlet devoid of a solid floor. Where it occurs in its primitive form, the gate-tower to which it is attached belongs to early mediævalism. It continued, along with loop-holes, so long as the old arms of close attack were employed, and longer in the North than in the South. The line of defence which a *Pech Nase* opened was a sheer perpendicular line. Generally they were stones, tar and boiling water that were poured through its nostrils, or openings in the floor, upon sappers at work at undermining the wall beneath, or upon besiegers at work forcing the gate. When sapping ceased to be the chief means resorted to by the enemy for bringing down tower walls, and hand-to-hand fighting became even rarer and rarer, this perpendicular line of defence naturally became superfluous; and, as a consequence, *Pech Nasen*, that had controlled this line, begin to be omitted from architectural plans.

Mortars and the new instruments of warfare were instruments of distant attack, and, being planted at a distance, they required horizontal lines of defence on the part of the besieged. Now loop-holes met this requirement, and, while *Pech Nasen* were going out, we find these openings not only retained, but multiplied. They resumed the ancient name of *Scharten*, or shoot-slits, and are often widened to give room for a cannon. By the fifteenth century loop-holes reign supreme. Almost as many *Scharten* occur in some inner gate-tower walls as there were firearms in the tower-chambers and men in the town to shoulder or load the arms.

Recent centuries have seen the *Pech Nasen* of feudal times brought into life again under the transformations known as towerlets, oriels and balconies. But these transfigurations seldom grow out of public or town gate-towers, and for the reason that the elders of the towns, unlike independent princes or private builders, were held by tradition to the duty of seeing that the designs which they accepted fulfilled the ends of defence or of inspection. And in oriels there is no end aimed at, save that of convenience for the inhabitant and of decoration *per se*. While private persons have never ceased to have towers and lodges and every variety of feudal bar erected, no magistracy has had a gate-tower built within a century or two, or since the time when gates were actually no longer needed. The newest city-gate in Germany, of monumental proportions and ponderousness, is the *Brandenburger Thor* at Berlin, an ornamental structure already a hundred years old. Nor is this a town-gate any longer so much as a triumphal arch. It is impractical for defence, and what it suggests are purely historical associations. The ground for the erection of a triumphal gate is a single occasion. The chief ground for its continued conservation is a sentiment of national pride.

The mediæval town-gate is an organic structure. What it bespeaks is a municipal need or practice, and its members are adjusted to the regular and to the intermittent wants of an organized population.

Being above all things an inlet and outlet, its site is prescribed in advance. In the North of Germany, where rivers are narrow, exquisite specimens of late Gothic gates span their sluggish waters. Their situation, as we shall see in a future paper, was determined often by that of the town grist-mill. Canals are arched by defensive and customs gateways, at the town boundary. The most frequent site for gates, however, was over roads, and my present examples, which can be dated at a glance as specimens of North German Gothic of the fifteenth century, occupy such sites. The Friedland Gate (Figure 1) is a square tower flanked by octagonal corner towers, and intersecting the ancient ring wall of the town. The flanking, separate tower, in its rear, is fallen into decay and ruins; its use as a defensive fortress having expired with the expiration of feudal warfare. The preservation of the gate, or exterior tower is due, on the other hand, to the maintenance of city tolls. When towns gave up taking your life or person, they continued to take your purse—or at least a part of it. Like the highwaymen in the *Traveller's Tale*

"They let our necks go by a-wagie,
But slack for the necks of our money-bagies."

The custom of town tolls, none the less was a god-send to architecture. It urged the magistracy to expend money enough on their feudal gateways to keep their stones together, down to our day; or over a period of national poverty and artistic dearth, to a period of national glory and munificent restorations. For although Friedland Gate is not restored, many dozens of gates have been—more dozens within the past decade, than in the whole of the last two centuries. From the time of the Thirty Years' War to the Franco-German War, gate-towers were not restored but only repaired.

I speak of gate towers because towers of considerable height are the rule for the setting of gates in the North. In this respect, Friedland Gate is typical. The country is the flat, or rolling land of Mecklenburg—a land that ought to be favorable to low watch-towers. But it must be recollected that the advantage which the flatness of the alluvial plains of North Germany afford in the way of wide perspectives, is put to naught by the prevailing thickness of the atmosphere. And besides, a certain height was necessary for defence in early times, as well as for an outlook. The greater the height from which stones were hurled, the mightier the force of their crushing blows. Then, too, the carrying distance of missiles was accurately calculated, and the defenders of municipal gates were provided with good weapons, and were set by their military architects out of the reach of the swarm of inferior missiles in the hands of the private retainers that invariably formed a major portion of attacking forces. Out of the early necessity of defence grew a tradition. Height became an architectural symbol of defensive power in Northern lands. Nor was the symbol relinquished so long as defensive power was a vivid thing to be expressed. Height falls away in triumphal arches, quite naturally, for triumph spreads itself. Roman arches, which are the arches of triumph *par excellence*, were monuments to the extension of Roman empire. Their lines are predominately horizontal.

The outside, or façade wall of the Friedland Gate is five feet thick. The flanking towers at its four corners have the same thickness. The court-yard side, or back wall is four feet thick. We judged that the walls were from a foot to ten inches wider at their base than at their apex, without being able, however, to substantiate our ocular calculation by actual measurements.

All four walls rise to near the roof in massive plainness. Their

dependence for artistic beauty is on the octagonal towerlets at their angles of contact; and these do, in fact, modify their ponderous weight by a suggestion of slenderness. Both the towerlets and the spaces of wall between them have been sparsely honeycombed by air-holes, that are used also as putlog holes. A line of sixteenth-century windows in the second story of the façade, has been filled-in and an original row of loop-holes of the third story, partially built up too. But, fortunately for the gable — whose look of greater lightness owes much to the picturesque effect of their black shadows — the *Scharten* or windows of the garret story have been left intact so far as their lower-most line is concerned.

The body of the square tower is terminated by a dog-tooth moulding and band. The towerlets are crowned by a band-moulding and each of their eight faces by a miniature gable; the roof rising behind these gablets, eight-sided, to a pyramidal point.

The gables that surmount the moulding on the two fronts of the body of the tower are an instructive example of what flexibility constructive forms of an old style possess for modern talent, that knows the new want and has mastered the spirit of existing old forms. Gables! — it was the age of gables; and on the tower, too, a gable must be perched. One can fancy what a problem the requirement was to the architect! If his townsfolk did not know or see that a gable was a thing against all tradition for towers, as well as against practical sense, his learning showed him that it was. But — he could solve the problem! He could retain the traditional in substance, and recast it into the fashionable and new; make a gable in short, out of of a battlement.

We see the result of his stern and skilful project; and its equal must be looked for, in that which pertains to rigid constructive fidelity to a given plan, combined with tasteful adaptations of new decorative motives.

Almost every other gate-tower gable of the time (which was late, the Renaissance having broken in everywhere else save in this north country) was a gable that revealed a filial likeness in its aspect to



Fig. 2. The Stargard Gate.

cathedral models. (See ex. Fig. 2.) Not so with this Friedland gate. Its predominating trait is still military.

The vertical roof-line is divided into five battlements. The central crest is prolonged upward. Its point forms an apex. Below it, on both sides, occur the points of the neighboring crests, in descending lines to the corners; the whole together making the regular triangular gable contour. The spaces between the crests (that appear pillar-like from their height) are three-quarter filled-up and afford room for flat-arched blind windows. Originally this decoration was heightened by the introduction of three vertical rows of *Scharten* within the blind-windows, two *Scharten* coming into the uppermost row, and four in each of the two lower rows. At present, however, these miniature windows are filled with masonry save the four that composed the lowermost row.

The tower possesses artistic properties, as we see; but the conception is still a conception pervaded by a prevailing sense of rugged, determined practicality.

The Stargard gate in New Brandenburg, Fig. 2, allows this conception to prevail only in its back tower. Its outside gate resembles a chapel, and displays Gothic ornamentation in profuse abundance and delicate designs. Nothing suggests its militant office. The ground plan is a quadrangle. The long sides are placed broadside across the road. The walls offer the minimum of plain and massive masonry. Lancet blind windows in groups of four adorn the lower story of the façade, at the right and left of the pointed archway. The broadside of the roof is broken up into gables, edged with crockets and surmounting richly-traceryed rose and lancet windows. Pinnacles separate the gables and furnish the close of each of the four corners of the cheerful-looking, tasteful house.

The windows of the narrow end walls and the wall of the court-yard side, furnish the chief light to the interior chambers. The openings in the façade are small stained-glass leads set into small casements, in the middle of the two inner blind windows of the several groups of the upper story.

The typical plan of a Northern German gate includes a postern

gate-tower, a court-yard between, and side buildings, or enclosing and connecting walls. (See Figure 3.) After coming through the outer, or wall gate, the passenger found himself within a trap-like enclosure, with a second gate between him and the street of the

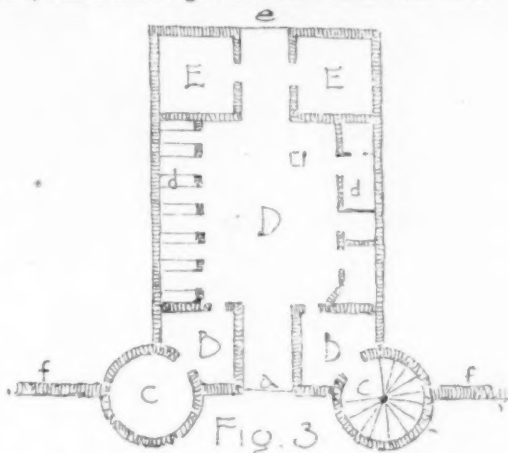


Fig. 3. Typical Plan of Gate-tower: B. Gate-tower; a. Archway; c. Flanking-towers; D. Court; d. Hostleries; d'. Dog stall; E, E. Postern-tower; e. archway; f. City wall.

town. The back or postern tower is commonly loftier than the outside gate, especially in ancient examples, the tower having taken the place in towns of the donjon or keep-towers of hill castles. That of the Stargard gate has been restored, and displays to advantage the further development of the gabled tower represented in Figure 1. The view in the present case is that of the court-yard side of the postern tower, a side that was a common centre for doors and windows to open upon.

The side buildings served the function of guard-rooms, hostleries for man and beast, kitchens, drinking-rooms and prisons. Chambers for suspects, lodgers and the families of the gate-keepers were relegated to the upper stories of the postern house. The upper stories of the side buildings were used as granaries, store-rooms, and perhaps, for the sleeping-stalls of *knechts*, although commonly, the sleeping place for these was in the fifteenth century, where it is to-day, in the stables alongside their teams.

The original iron-coated-gates have been replaced by oaken lattice-work doors, a couple of which exist in a half-ruined tower of the same town and have been photographed for Figure 4. The upper ends of

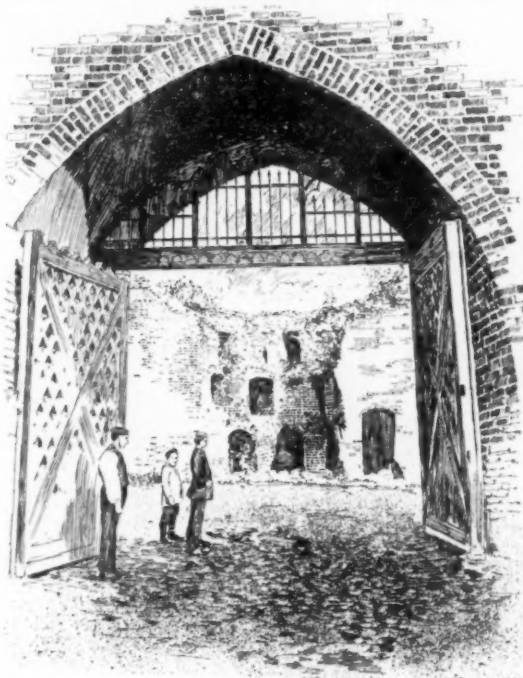


Fig. 4. Modern Gates.

the doors are straight — save for a row of crowning ornaments — and the space left between them and the pointed arch of the gateway is filled out by an iron grille.

The material of all the town-gates mentioned is burned brick, the alluvial plain of Northern Germany offering no natural building stone except granite boulders and cobble-stones. These latter are taken often for the foundation walls of towers, and the Stargard gate rises from a foundation of such stones.

But to conclude, we find that the town-gate was a complex structure, consisting of an outside gate and a postern tower, with an enclosed court between. Their original office was defence; their later office control of traffic and travel. According to these offices their architectural features corresponded, developed and changed. A constant, traditional trait was height. Of minor features, one of the earliest was the *Peck Nase* or machiculi, and another, the loop-hole. With the introduction of modern fire-arms the *Peck Nase* fell into disuse. With the introduction of modern traffic loop-holes gave way to windows, and massiveness to ornamental richness of tracery. Gate-towers, finally, are themselves supplanted by mere arches.

COUNTESS VON KROCKOW.

EMMANUEL FRÉMIET.¹—VII.

JOAN OF ARC.—II.



"L'Incrovable," Frémiel, Sculptor.

"WHY did you make a second Joan of Arc?" I asked Frémiel. "I was influenced by the critics," he replied. "I made Joan larger and the horse finer and it is infinitely better than the first one. The Minister of Fine Arts would not consent to have the first one replaced by the second. Then I sold two copies of the last, one to go to Nancy, the other to Philadelphia. I am delighted to have one of my works go to the United States. I designed the pedestals for both. The price for each was 17,500 francs."

"Will you reduce the second Joan, to sell?" "No, there is not sufficient difference between them to make it worth while."

The *Salon* of 1889 was peculiarly notable for its sculptured representations of the virgin of Domrémy, there being no less than three, two of which were equestrian: one by Frémiel—his second—the other by Dubois, and one standing, by Pézieux. That by Frémiel was welcomed with as general acceptance as the first one had been condemned. Two hundred and fifty newspapers spoke its praise, while a few criticised it severely. The very small number of artists who liked the first in 1873, and have increased in their admiration since, do not like the second. The appearance of these two equestrian statues of Joan in connection with the history of both, that of Frémiel being very unusual, was the starting point of what is at this time a thorough French craze, a very worship of the unfortunate peasant girl; and it is doubtful if any piece of French sculpture has been written about so much as that which Frémiel made to take the place of the first. M. Paul Mantz wrote as follows in *Le Temps*, after a severe and singularly suggestive criticism of Dubois's statue: "It has been known for some time that M. Frémiel was troubled. He had already made the equestrian statue of the Place des Pyramides, and, with that touching loyalty which characterizes his artistic conscience, he feared that he had not completely succeeded. We can to-day reassure M. Frémiel he is the only one in Paris that is not satisfied with his work."

"The 'Joan of Arc' of the Place des Pyramides, a little thin, a little girlish on her enormous work-horse, is one of the most original figures of the time; and if, at first, she surprised a few persons, she very soon won good judges in her favor. We are all in accord in finding intelligent, subtle even, the contrast which exists between the little fighter and the rustic animal that she rides. Whatever was said when it first appeared, the 'Joan of Arc' of the Place des Pyramides is a work of great value, and many of us cannot see the necessity of correcting it."

"But M. Frémiel indulged in some uneasiness; he imagined that he had not told the whole story, and, this dream remaining, he desired to realize it under another form. There is nothing to do but to bow before the preoccupation of a master who is taken up with a certain ideal. I ought to say, however, that these second editions which an author gives to his thought have not always been happy: certain poets, re-seeing in the decline of life the creations of their youth or of their virility, have often made corrections which were weak. So when we heard, last winter, that M. Frémiel was remaking his 'Joan of Arc,' we were for a moment troubled. 'What purpose will it serve?' we said. Happily, M. Frémiel, respecting the first form of his thought, has limited himself to some modifications of detail."

"In its general lines, the character of the work remains the same. The essential change consists in a new type; Joan is less young, more of a woman; a certain robustness has been substituted for the slenderness of childhood; the horse has equally been revised and refined; perhaps the details of the armor have also been subjected to a few corrections. To fully determine these points, the two images should be placed side by side and undergo an analytical comparison; but the outline, the moral impression, is not sensibly different. There is something lacking, however, something that we love in the Joan of the Place des Pyramides; it is the contrast, very visible and very intended, that exists between the frail child and her vigorous horse. Really, we do not see in what respect the second

edition of the equestrian statue of M. Frémiel will be better than the first. We shall without doubt consent that the new model shall be cast in bronze and placed somewhere, but it would grieve us if the statue in the Place des Pyramides should be dethroned in favor of its elder sister. M. Frémiel would be cruel to deprive us of a work in which he has expressed everything, and of an image that we love."

Whatever might be the merits of the new model of Joan, there were many objectors to its taking the place of the old one. Fearing that such an event might happen, a number of the most eminent artists proposed petitioning the Minister of Fine Arts against it. On this point, M. Paul Leroy, in *L'Art*, thus wrote: "I should reproach myself, if I kept silent in regard to a master like M. Emmanuel Frémiel, who has never had the high reputation for which he has the solid titles, and for whom I have always professed the liveliest and most respectful admiration. Go to the Universal Exhibition, look at the 'Age of Stone'; this superb bronze will immediately justify to your eyes the rank, without rival, to which such a talent has so many rights. And it is precisely for this that one would fail in doing him justice if one did not tell him the truth. M. Frémiel, to whom French art owes one of her most perfect statues, a monument which is at one and the same time a model of elevated thought, of taste, of delicacy inspired by profound knowledge, the exquisite 'Joan of Arc' of the Place des Pyramides, M. Frémiel has listened to critics to whom it is regrettable that he did not remain deaf, and his extreme conscientiousness, the nobility of his character, have led him not only to begin his work anew, but to take the resolution of replacing it at his own expense; I cannot say strongly enough that nothing could honor the man more. But this act of artistic probity, admirable as it may be, is one that must be deplored. I don't hesitate, on my own part, to supplicate M. Frémiel to renounce his intention of casting in bronze his new creation, whatever may be its merits. The equestrian statue which, justly venerated, reigns on the pedestal in the Place des Pyramides is too meritorious to be taken down. To replace it by another would be a fault that all the sincere friends of M. Frémiel's talent would be desolated to see."

And M. Ernst, in *La Paix*, wrote: "The 'Joan of Arc,' is the most interesting work in the *Salon*. Was Frémiel right in making a new one. I don't know. Anyway, there is no more beautiful spectacle than that of a master severe with himself, jealous of perfecting his work, and of bringing forth a new beauty. In the present version, Joan is a larger woman. More of a woman, less boyish; her virgin neck fills out her steel corset more. Whatever may be my admiration for this Joan of Arc, I cherish a preference for the other one, for that little peasant girl dressed as a warrior, that child of the people, so simple and so true, perched upon the high saddle of her formidable steed. She, to me, is the real frail and tragic adolescent; the humble saint, elected by God to save her country."

But it took seventeen years to bring about this change of sentiment in favor of this statue.

The appearance of the new "Joan," also reawakened the complaints against the first, and they embraced suggestions, not only as to how the subject should be treated, but that it should not be represented at all. The matter is sufficiently interesting to warrant the repetition of some of these criticisms. And then, too, they will give the reader an idea of one phase of French writing on art. An "Old Parisian," says, "Instead of this vulgar little idiot of an Alsatian broom-pedler, better fitted to wear a baby-cap, or the bee-hive bonnet of a workwoman, I wish to see the liberator of France with the poetic traits of Camille, Chlorinde, Bradamante, or Penthésilie. Since seeing this object, I have dreamed that I saw the Joan of Arc of the Place des Pyramides riding the donkey which Voltaire placed her upon, and going at the head of a band of *petroleuses* to set fire to the Tuileries; whilst my Joan of Arc, riding horseback on a white horse, child of the sun, arrived at the head of the Army of the Loire, like Bradamante; cutting and thrusting with her glittering sword, she delivered Paris and obliged the Prussians to raise the siege."

This from M. H. Thurat, in the *Revue des Beaux-Arts*: "Let us be frank, like the criticisms! Our school of sculpture—this famous School which is the admiration of all who are endowed with pictorial sense—our school of sculpture that is set up, with pride, in its beautiful attitudes, in contrast with the other school, and which throws into an adorable lyricism of adolescence whoever starts in the career of the *Salons*—our school of sculpture is dying, yes, madame, she is dead!!! Weep, Nymphs! I ought to frame this necrological article in tallow. I prefer muffled drums to funeral orations. It is a tourney: Joan against Joan, Frémiel against Dubois! Bad against bad! And that occupies the grand avenue, the grand nave! That is to say, a total of eleven yards of sculpture in length. You will see what will remain of it!"

"I am in the habit of thinking and writing exactly the contrary from what the sculptors say of their comrades, and entirely opposed to what the numerous Albert Woolfs print. That is a rule that I got from a certain wise man who had some weight in his time."

"The number of Joans of Arc is, like the sots, infinite. The Pucelle can no more be made than Christ. They are the figures that ought not to be touched, under pain of attempting the ideal; this sin against the Holy Ghost; this mysterious sin that attracts all the thunders and which none can remit. Make patriotism in plaster, it is difficult! Compress a people in a figure, it is hard! If, at

¹ Continued from No. 798, page 28.

least, we had some impression of the virgin face! Nothing! If only the end of the nose! a corner of the lips! a plane of the forehead! a hair! *one of thy hairs would be enough.* But nothing! Nothing but the big girls of Lorraine who fatten to-day in the same pastures as in the time of Jehanne! If I were in the place of Dubois and Frémiet, I should simply go to the suburbs of Domrémy. I should walk around in the fields: looking after a shepherd girl who turned her eyes towards heaven at the hour of the Angelus; not yet developed, but eating weeds, if need be, to purge the blood; a beautiful rustic creature who turns her passionate warmth into white visions: heavy feet; awkward hands; big heart, making love to some being in the air; and with a virgin womb! Eyes that look for a god in man! A daughter of the land of Gaul fitted with a sad sun; thinking of impossibilities! Saying to herself: 'The King of France is a great shepherd, and France a great sheepfold. The wolves must be killed; must they not! There is no time to be lost.' A daughter of the Druids! Perhaps a soul that has been sacrificed by those bloody old ones! Who knows?

"If I were a sculptor, I would take this model and put it on a horse of that country, knock-kneed, with a long head, a big swelled belly, and bob-tailed. Very surely—in spite of the legends of the good writers—I should not have put her fresh and perfumed body in an iron corset; and much less sealed up her dumpy legs in a harness. Bad would it have been for me not to think about the hands that speak! A sword that points to heaven; a flag fluttering in the wind, what does all that say? No more than a weather-cock! Against this! tell me of two beautifully sculptured hands, pressing a heart doubly beating with the terrors of battle and of evil desire.

"This is to say that the Joan of Arc of Dubois and Frémiet is yet to be made by Rodin, if not by Baffier. I shall commence my *Salon* articles when the big ones have done theirs: to see a little what they will do."

It is interesting to note that this kind of criticism, that advocates, with the most absolute truth, the facts of local nature in the representation of historic characters, brutally if necessary, but always truthfully, came in in force soon after the appearance of Rodin's works, "The Age of Brass," "St. John," etc. The classic, or old school of sculpture, represented by the *École des Beaux-Arts*, has always been against Frémiet, just as it was against Barye, and all the vital men of French art. Against them, because they went to nature for their inspiration. For the same reason the School has fought Rodin, and will always do so. It is amusing, then, to see a writer, who adores the latter because he depends on nature, attack Frémiet because he neglects it.

Another number of the art-journal just mentioned contained a long article, from the pen of a well-known Parisian writer, whose literary name is "Ignote," on the general subject of the various representations of Joan of Arc, in both sculpture and painting. It is well worth repeating, but fearing that it might weary the reader I will only give a few extracts. After very justly exposing the weak pretention of the over-estimated Joan of Bastien-Lepage, the writer alludes to the barbaric vestiges of the real appearance of the Maid, taken, he affirms, from old writings. "Joan was large and well-rounded and well-formed, she was of tawny complexion and had black hair." "That is the type of our valiant and free peasant girls who, like the Gauls, their ancestors, have never failed in the hour of danger or of suffering." On this point there is a decided difference of opinion, for others affirm that "she was, until her death, a child both weak and tender, whose whole strength lay in an over-excited mind in regard to the affairs of her afflicted country; that she could hardly draw her sword from its scabbard, or wave aloft the banner of France." Then the statue of Dubois is taken up. "Does it suffice, M. Dubois, to surround yourself with so much mystery, to pass ten years of your austere life, in laboriously giving birth, as they say, to such an untimely offspring? Where have you found your inspirations and how is it that you have not seen, during all that time, that you were outside of your subject? It must be believed that you are as ignorant as a painter, which is not true. Has your confidence in yourself made you blind? Neither the gesture, the armor, nor the type of Joan are happy.

"It is too unlucky! Ah! this is what you think of our young and virile heroine: a stiff manikin, starched up and broken-backed, bent-double. Really I am sorry, being generally an admirer of your fine talent, for this manikin, articulated like a lobster, cannot keep itself in the saddle an instant; it would fall at the first gust of wind, at the first movement of the horse. And the action of the uplifted arm, whose hand, so unused to such a task, holds a useless sword, here out of place. And this movement of the head, so coquettish, so puerile that it is babyish; always the legend of the Jew child David! Let us be human and French! Why in the devil's name not be so? Joan was not a sky-lark; she was a bouncing girl, do you hear it; this female leader, though pure, was not prudish, she had the gayety of the strong and the fury of our race! You will not make any one believe, M. Dubois, that you took your head of Joan from the shoulders of a Frenchwoman. I know the soft girl that served you as a model; she was an Italian! You ought to have gone to the plains of the Isle of France, of Picardy or of Champagne; you would have seen our young peasant girls, handsome and well-formed, swinging the scythe with ease or following the plow with joy; they would have given you another idea of the valiant Pucelle. As for the horse, it is a secret to no one that you did not make it. I will not name your modest and learned collaborator. I regret it, but I shall imitate your dis-

cretion: it is right, at the same time, to render justice to an artist of such rare merit; for the horse is first-rate, very much better than that of the *animalier* Frémiet, of whom I shall soon speak. But there is one thing that annoys and troubles me: it is his movement. A specialist tells me that one part trots and one walks. I think he is pulling. As he is not pulling, he gives the effect of falling head-foremost. Is this the fault of your timid and anonymous collaborator or your own? Did you oblige him to commit so enormous an error, or, if he did it himself, the entire responsibility should rest on him by his signing the work with you in common. Without doubt, you intended the horse to walk, as the rider could not endure any other movement. If he trots, why does he do it with only half of his body? An unsolvable problem. Why are his eyes dug out? I know; because the plaster-cast known in the School under the name of the 'Horse's head of the Capitol' are like that because the barbarians stole the eyes of precious stones. I am, like yourself, a passionate admirer of the antique, but I don't believe in copying their degradations. Do you?" This criticism continues concerning this statue until every part has been raked over in the same caustic way.

Then he begins with Frémiet. "I don't reproach the character or type of Frémiet's horse: but, how unlucky, it is so badly executed! Where did you find this model of consecutive humps, M. Frémiet? Model false and monotonous! How is it, that you, a



The (second) Joan of Arc. Frémiet, Sculptor.

master specialist, have not observed the law that was Barye's strength: the alternation of high and low planes, always varying in form and volume, and which by their indirect situations properly produce the sweep of the figure; the sweep, M. Frémiet, that superior quality without which it is impossible to be a good draughtsman, or a good sculptor, even if one be an *animalier*. And what a singular idea to put one of your horse's feet so unnaturally on the edge of the plinth! Nor is he very happy, this horse, in his common movement! And your Joan of Arc! Why did you make a German girl? I have been told that you went to Lorraine to make a series of studies in order to find the type of your young heroine. What matters it anyway! It was a real young French girl that ought to have been made. You are very much deceived, for this heavy face is not a Lorrainer, nor even an Alsatian, but a Bavarian. I defy you to put black hair on such a head! She has certainly blonde hempy hair, this beer-drinker with her frothy, falling lips, and a forehead too narrow to contain the brain of one of the greatest geniuses that ever lived. Believe me, M. Frémiet, more tact would

have better directed you. What need had you to remake your Joan of Arc of the Place des Pyramides. I can understand that this mediocre work weighed heavily on your mind, but you ought to have made a better one. It is necessary to tell a different story; but that requires a thoroughbred artist, and you are nothing but an ingenious one. Rogue, you are as the most roguish of your contemporaries; but on this occasion you needed faith, and that of the modest ones. It is not sufficient, believe me, to make the virile Apollo of the *Figaro* cry out the praises of your new Pucelle. Every one knows that this modern Aretino, who has less than the little literary value of the old one, is absolutely disinterested in whatever he does, and they ask, in view of your work, by what charm have you disinterested him to such a degree!!" The critic continues by examining the armor in the same style as above, and closes by saying that "Joan is yet to be made."

Soon after the completion of the second Joan of Arc, the city of Nancy, in the department of Lorraine, expressed a desire to possess a copy in bronze, to be erected in one of its public places. To attain that object, two committees were formed, one in that city, the other in Paris, for the purpose of soliciting subscriptions. The Paris committee was composed of some of the most eminent artists, men of letters, public officials, etc. A little over three hundred dollars were raised. Fearing that the project would fail, a public-spirited citizen of Nancy, M. Osiris, offered to present the statue to the city. It was unveiled on June 28, 1890, in the presence of a large concourse of people, including representatives of the Government, and many distinguished citizens. The occasion was made a general festival, literary, dramatic, and musical societies taking prominent parts. Speeches were made, songs sung, and plays acted, all in honor of the poor girl who had been practically forgotten for four hundred years. The selection of the site for the statue is not the least curious item in the history of the present interest in the subject. The city authorities did not know what to do in presence of a wide division of opinion in regard to where the statue should be placed. It was finally decided to carry the pedestal to the different localities and see how it would look and this was done, a crowd of citizens following. The majority voted in favor of a small square called "the Place Lafayette," and there the pedestal was left, to be, in due time, crowned by the statue.

This locality was so small that the mayor, in his proclamation stating when the inauguration would take place, and inviting the citizens to make the occasion a joyous one, was obliged to apologize for not asking more people to attend, because there was no room for them.

The house in which the heroine was born was purchased sixty years ago by the Department of Vosges, and classed in the list of "Historic Monuments." On his visit to Nancy to attend the ceremonies of inauguration, M. Larroumet, Director of Fine Arts, went to see the house, and, finding it in anything but a satisfactory condition, bare, neglected and covered with hideous ornaments, began at once to negotiate for its purchase by the government, for the purpose of making it a well-kept museum of relics pertaining to the illustrious personage who first saw light within its humble walls.

As the press truly says, "The hour is to Joan of Arc. From every part of France there go to her voices less mysterious, but louder, than those she believed she heard in the little garden at Domrémy. There is not a hamlet from the Vosges to the ocean that does not claim her as its own. She symbolizes national resistance and national resurrection. The worship of Joan of Arc is a new and recent one, much better than many others. It is the worship of patriotic devotion, of duty and of sacrifice."

Of the many ways of expressing this new religion, having for motives money-making, jealousy between Church and State, personal aggrandizement and local pride, the spectacular representation given at the Paris Hippodrome was altogether the most imposing and popular. This pantomime embraced illustrations of Domrémy, the various scenes and incidents characteristic of the times in which Joan lived, the chief events of her life, and closed with the last tragic one, when she is burned at the stake in the square at Rouen. There she disappeared in flame and smoke, and from these mysterious elements there rose a gilded, full-sized model of Frémiet's statue. On its appearance, there assembled around and on the base of the pedestal all the five or six hundred variously costumed persons who had taken parts in the previous scenes, and representing the different departments and cities of France. A military chant was sung amidst the impressive plaudits of the spectators. This spectacle had a great success. There were many very touching moments, interesting scenes and pleasing representations, although the acting of Joan was somewhat stagey. A circular screen of wire gauze fourteen yards high ran all round the arena a few yards in front of the lowest row of seats. Upon it was painted a copy of the square at Rouen, and through which the spectator saw the houses and people on the opposite side, an extremely interesting sight. A national monument will be erected to the memory of Joan, and inaugurated in 1892. It will consist of a statue showing her as a peasant.

The most significant tribute paid to Joan is the decision of the Superior Council of Public Instruction in granting its approval of an annual holiday in all the public schools in her honor.

With the coming of this extraordinary manifestation of remembrance, there has also been awakened new interest in her life, and, as one result, the revealing of new and important facts. The latest

statements in regard to the death of the Maid throw the entire blame upon the French clergy, and not, as has been long believed, upon the English. It is stated that the Bishop of Beauvais placed upon the pile that burned her a plaque, upon which were these words: "Joan, called the Maid, liar, schismatic, blasphemer of God."

It was stated in the beginning of the short history of Frémiet's first statue that the face of Joan bore a close resemblance to his youngest daughter; it may now be added that the face of the second Joan is a near likeness to the same lady, now the wife of M. Fauré, the choir-master of the Madeleine Church and a composer of high merit. The model who posed for the figure of the first Joan was one of the most elegant members of that trade ever seen in Paris.

While this statue has gradually won admirers since its erection, it is still as true now as it was at that time, that it is most intensely hated by a certain class, whom Taine denominates as "old-fashioned men"—men who cannot bear any individuality not in harmony with the staid, undisturbing placidity of the old school of sculpture.

They accuse Frémiet of levity, almost frivolity; of a lack of grave respect for what they understand as the antique. This class also includes those who hate by temperament. The existence of such a nature as his is, to them, an unbearable thorn in the flesh. One of them has himself made an equestrian representation of Joan, the artistic value of which has not yet been decided. And another has made an equestrian statue of a different subject, which has escaped both praise and blame.

Speaking with the sculptor about the statues and pictures of Joan of Arc, he said: "There is only one, that by Rude, in the Louvre."

T. H. BARTLETT.

(To be continued.)

NOTES AND SKETCHES FROM TOLTEC-LAND.



Bishop's Stall. XVI Century.

THE idol-pottery illustrated on another page was dug from a violated mound-grave in La Huasteca, Potosina, a steaming strip of coast country south of Tampico, Mexico.

The Muachinango, or Totonaco Indian, renowned in battle or barter, who preëempted this choice spot for the repose of his bones, short-sightedly failed to secure from the Lord paramount of the time a perpetual paper title, with ecclesiastical sanction to him and his assigns: otherwise, what with ancient fear of "bogies" and modern veneration for property, his crumbling remains would have been undisturbed still; but who to-day, honors nameless graves, or mouldy bones, unless they be revenue-producing, saintly ones.

The hideous figure squatting in vacuous solemnity—one of the multitudinous gods of the vanished races of men, who gained renown in proportion to the fear they inspired—king-like blazons on his person the spoils of his force, or fraud had won,

and, still king-like, wisely makes his teeth warders of his imprisoned tongue—knowing that the imagination of the dupe is more eloquent than the inspired words of a prophet. He is made of baked clay in black glaze, which years have made soft and porous like the bones he failed to guard from the spoilers. His head-dress and arm are ornamented with the fat leaves of the prickly-pear, the much-eaten fruit of which, as a pendant, is attached to a polished stone crescent that hangs from his scrawny neck; so I have dubbed him "Dios de las Tunas." It will be noticed that epaulettes are quite ancient; in this case, probably they were used to ward off club blows, rather than to tickle the vanity of the wearer. On knee-pan, shoulder and brow, he has disks of polished obsidian; while his breast is adorned with stars; or, did the artist intend to represent a woman? Beneath his belt he has secured a whorl of tubes, perhaps a musical instrument, or simply a fancy of the artist, for its centre is a hole communicating with a hollow interior, from which Toltec devotees may have fancied

they imbibed the water of eternal life. Altogether it is a funny figure in spite of, rather than because of, its inane dignity and solemn pretentiousness.

The vessels that flank the central piece are likewise of burned clay; one has a puffing face eloquently expressing the idea that it is full to bursting. The contents of the other are guarded by the grinning face of a monster. The spout to the vessel is suggestive of tea, of which there are various kinds used by the dwindling remnants of the ancient races. Almost, the time has come when some broken pottery will be the only vestige of this vanished race. Millions have come, through slowly circling years, scratched the ground for daily bread—and gone, trooping, shadowless into the past; while we, with the old perennial vanity, sing in myopic bliss of imperishable renown—of everlasting fame.

Conquering peoples once zoned the globe where we find to-day, perishing races, burrowing amidst stupendous ruins. In those days monster idols represented the living revengeful gods, their ruined altars and battered trunks may still be traced through Egypt, Syria, Ceylon, India and China, and scattered over the islands of the Pacific, leading to the scenes of their latest power in Central America. The seat of empire has moved northward since, and, urged by the burning sun still continues moving. Evidently, climate is the cause of the birth and extinction of races and it seems certain that the flower of Central American civilization did not bloom beneath a vertical sun, neither, can another take root there under such a condition. Four hundred years of Christian teaching (Catholic Christianity, it is true, but why should the kettle call the pot black) has made the modern Mexican "peon" altogether inferior to his forebears of a thousand years ago. To-day, he could not make a calendar stone, or turn out, without iron, a perfectly polished jug from obsidian rock, which is harder to work than flint; he could not build the Palenque Palace, or organize his fellows to erect a pyramid or mould one of the little clay heads that are found scattered in thousands on the sites of ancient cities. He no longer plasters the walls of his hut with imperishable mortar, nor floors it with concrete; even his inseparable companion, the "sarape," is a shoddy production compared with those of quite recent times. What force is there, potent enough to vitalize a dying race? When the environment is unpropitious, its doom is as certain as that of snow in the sun.

As one views the figures here reproduced, which were evidently finished with nice care by a plodding artist, they woo imagination to lose its hold on the prosaic present, dreamily drop into the abyssal depths of the past, and synthetically reproduce from erratic deductions and vague imaginings the ancient worker plying his daily task, doing well or ill his life's work, which, to-day, dug out from ruins and rubbish, attests the skill and patient toil of the nameless artist. He lived in a mud-hut with lime-washed interior, relieved by fanciful designs and mathematical patterns in ochrous earths; the floor was of a lasting concrete, made of comminuted pumice, or volcanic tufa, and clay. The doorway was narrow and the mud roof low, making of the interior a dusky, cool retreat from the glare and fierce heat of *siesta*-compelling noon. In the wet corner, where the wife sprouted and ground the corn for the perennial "tortillas," he kept his stock of clay to ripen. The walls of his hut sloped outwards, so that he could recline comfortably when drinking "pulque" with his convivial neighbors. He fashioned niches in the walls, in which he dried his tender clay creations, or stored his food out of reach of the dogs, for, like unto ourselves, his vanity was flattered by the interested friendship of the servile, vermin-breeding cur. One can fancy him sitting on the floor in the doorway, his bare limbs the color of the clay in which he is moulding the ill-proportioned phiz of some disturbing neighbor, thousands of which are still found where the iron-clad sticks of his dwindling descendants scratch the soil made fertile by the dust of the idol-makers and pyramid-builders.

He could hardly have been fanatic in his idolatry, for the objects of his worship were multitudinous. The large ones he elevated on altars, the small ones hung on his breast, probably on the ever-vital principle that, if the gods were powerless, little harm was done, while if powerful, it was good policy to be on the right side. Our artist in clay lived his little day, with what result? Who can say? With much labor wearied—for very likely he worked for the priest-craft—he laid down his tools and died. Yes, he died when he dropped into idleness, for there were no paupers in those days; those likely to become such were sacrificed to the gods. Our artist's contemporaries fashioned colossal images out of blocks of feldspathic porphyry by what means? "*Quien sabe?*" Perhaps, along with head-dress, sandals and hieroglyphs, monster idols, pyramids and cyclopean architecture, they likewise inherited tools from Egypt or some common ancestral race. Like a pest, the malignant shadow of a dominant priesthood overspreads the past, and still its bane is felt wherever are found the stupendous structures in whose mysterious depths they lived, died and were buried; where they evolved codes and laws *divine*, that warped and vitiated the lives and sapped the manly stamina of their credulous dupes, till gods, priests and peoples, hosts and parasites, sank together into utter degradation.

What more pitiable than the disintegrating image of a god deposited from his fearful throne in the minds of men! Once a horrid incubus that strangled every new-born aspiration and devoured the children of liberty; now a battered idol, uncouth and ridiculous, whose eyeless sockets the children of a new day and new

fetich mutilate with impunity and wonder over with Pharisaic pity, bemoaning the degraded worshippers of his fallen majesty, who, compared with their modern, gilt god, was but a petty potentate, for always, everywhere, one's own God is the only true one.

The clothes worn by these ancient idolaters consisted of a body-cloth and sandals. The cloth was woven from the fine fibres of the maguey-plant, the dyed threads forming tasteful patterns, the colors of which, on pieces preserved in the tombs, are bright to-day—as bright as unwashed modern prints. Half a gourd, painted in brilliant colors, served to fend the sun's piercing rays from the part of the head least protected by their wiry hair—black, of course, and like the mane of an old lion bleached at the points. Sometimes a square of cloth, oftener a load, protected the head. In rainy weather they thatched themselves with palm, aloe or other leaves, which, providentially, grow where it rains much. Very probably, the bugbear of the life of the small and large boy of those times was pyramid-building. The men were "bosses," priests, soldiers and tillers of the soil. The women ground the corn and helped the boys, for they wasted no time dusting, clear-starching or sewing, for their garments, too, were all in one piece, and that not cumbersome. They must have worked, "packing" materials for generations to complete some of their structures, and the fact that these were built proves that they had an army of drones to support. One is tempted to believe that, like the ant, once started working, they could not stop till, like the monster turtle of fossil fame, they fortified themselves to death.

N. DALMA.

BOOKS AND PAPERS

SEVEN years ago we wrote in approbation of the "*Sketch-Book of the Boston Architectural Association*" with as much warmth as a very genuine feeling could produce, and expressed the hope that a second number might—not too soon—make its appearance, but we were far from believing that nearly eight years would pass before the second portfolio of sketches should make its appearance. We cannot believe it possible that this long hiatus has been caused by a failure on the part of the profession to signify appreciation of the first portfolio in that solid commercial manner which is really more gratifying to the responsible projectors of such undertakings than all the flattering words that can be said or written—even if prompted by the utmost sincerity. To be sure, the Boston Architectural Association passed out of existence shortly after the appearance of its first and only publication, but the Boston Architectural Club, its revised and enlarged successor, has been in existence for a number of years, and it is not easy to discover why this first "*Sketch-Book of the Boston Architectural Club*"¹ should have delayed so long in making its appearance, as the delay has in a measure lost it the advantage of the prestige which the earlier publication seemed to assure.

It looks as if there were more in a name than many people are willing to believe. The present organization is essentially the same in character, purpose and membership as the earlier one, and yet, seemingly, the mere change of name has apparently occasioned this delay of eight years in preparing the second portfolio of the series—for in everything but the name the second portfolio is identical in character, size and make-up with the first. In fact, this great similarity is one of the few grounds we have for any fault-finding. In the last eight years many improvements have been made in the reproductive printing processes; yet advantage has been taken of none of these, but the reproductive method employed for the first portfolio has been used in the preparation of the second, and not only this, but it has been used with less success and discrimination, so that many of the plates do not have the great delicacy which was one of the distinctive charms of the earlier publication. The responsibility for this difference lies partly with the editing committee, of course, but mainly with the firm who did the printing.

Very probably, too, the deficiencies are chargeable to that peculiar and unreasonable feeling that most draughtsmen and artists have, that there is something sacred and unimprovable about their own work which forbids that it should be touched-up and adapted to the requirements of printing processes. It is an amiable and comprehensible weakness, but it is one which, if yielded to, will inevitably and needlessly depreciate the value of any published work. The maker of the sketch will look at the imperfect reproduction of his sketch with loving eye, and will find that there has been little loss, for his memory and imagination will supply what has actually disappeared; but others will look upon it merely as imperfect work, and will condemn the haste and inaccuracy which has accomplished only such disappointing results.

A few examples will explain our meaning. Here is this tomb at Avila, with its pagoda-like canopy, which is unnecessarily coarse because the photographer timed his negative for one set of lines and had to let the others come as they could. The result is that the plate has none of the delicacy of Mr. Walker's usual work—although the delicacy presumably exists, to a degree, in the original. A little

¹ "*Sketch-book of the Boston Architectural Club.*" Issue for 1890. Boston. R. Clipston Sturgis, Secretary.

time spent in bringing the lines of the original to an average photographic equivalency would have vastly improved the result and probably would not have hurt the original. This plate, too, is one upon which the printer used such refinements of his art as happened to be familiar to him. Here is another of Mr. Walker's plates that suffers through some one's ignorance; this sketch of St. Ouen where the central tower is shown as attempting a game of leap-frog with the apsidal chapels with a vivacious movement that we feel sure is not apparent in the original colored sketch. It is a great mistake in most cases to attempt the reproduction of colored drawings in black and white. Here is a sketch of pier and vault in the municipal palace at Pistoja, by Mr. Stewardson, which was very likely wholly charming in its colored form but which is absolutely valueless here, and almost meaningless. Mr. Newton's sketches in brushwork have been saved, in a manner, through being printed in brown ink which lends an atmospheric effect that is lacking where black ink is used.

Again, here are some of Mr. Van Straaten's sketches which, through the too great reductions and the impossibility (for these printers) of reproducing the irreproducible, are here shown as a visible aggregation of dots without connecting and shaping lines. If only these gentlemen had been willing to abandon the draughtsman's shibboleth—Hands off, this is the sanctified result of inspired effort—the results, for everybody but themselves, would have been more pleasing. It so happens, too, that the three persons we have used as examples are every one of them capable of making a drawing which shall reproduce perfectly and yet shall retain all the delicacy of the original.

It is the old saw once more exemplified, a silk purse cannot be made out of a sow's ear. You can make something that looks like a purse, something that will hold money but the patient labor of the silkworm will have no share in the result.

The present portfolio differs from its predecessor in that it contains the work of a number of the honorary members of the Club, and consequently the series has not the merit that the first one had of being the work of what might be supposed to be a school of Boston draughtsmen. It is possible that the compliment thus paid to its honorary members may have been an injudicious thing for the Club to do, as it, of course, sacrifices somewhat of the local flavor; and supposing that the T-Square Club of Philadelphia should some day return the compliment, it would but repeat the mistake. The old "*Boston Architectural Sketch-Book*" and the "*New York Sketch-Book of Architecture*" were very distinctly different in their characteristics, and this difference was no inconsiderable factor in promoting the welfare of each publication.

The real value of these publications, charming as they are, is open to question, and apart from the evidence they give of a general appreciative sense of picturesqueness, they tend rather to show that the American architectural student goes abroad without any clear idea of what he can accomplish in the way of serious study while there. It is not, perhaps, strictly fair to base any such inference upon such a publication as this, for it is possible that one or more of the contributors may have undertaken and accomplished some serious and consecutive line of work; but it is difficult to believe that any editing committee, if the existence of such material had been made known to them, should not have seen the advantage of including all or a part of it in this publication, if for nothing more than for the sake of showing that the making of traveller's sketches was not the only result that an architectural student could accomplish.

It is not at all easy to determine in the case of old examples of English architecture, how much of their indisputable attractiveness for alien architects is due to their real architectural merits and how much to the adventitious claims of landscape gardening. The fresh clean foliage—usually darker than ours—the luxuriant ivies and the trim lawns and grounds have had much to do with building up the architectural reputation of many an English "show place," which deprived of these accidental aids would be as barren and uninteresting as much of the modern work—which fifty years hence may be as interesting to our successors by reason of the growth of vegetation as many an older manor house which has a real historic interest.

The great attractiveness of English country houses, whether they are castles, manors, halls or farm-houses, lies in the fact that they are homes, and homes that look as if they were lived in all over, not merely one wing or corner, here a room and there another. But those Americans who have visited such places say that the cosy and homelike air is largely deceptive, that though effort is unceasingly made to secure comfort and homely enjoyments, they are often barren of results. In fact, some people go so far as to declare that the real reason for Englishmen being such confirmed travellers lies in the fact that their own houses are too uncomfortable for them to live in. There is some base of truth in this. These old houses were not built for these days and times, or for our sybaritic generation. They were built for men who spent most of their time out of doors and used little more than the dining-room when in the house, and when they left that they cared little how damp and cold might be the chamber where they couched, so thoroughly had they fortified their systems with port, punch and toddy. As for the women, they did not then receive the kind of thoughtful attention to their comforts that they now exact, and then, did they not have their mufflers, their screens, foot-stoves and warming-pans? A big fire blazing in a great open fire-place is the most cheering companion that man ever devised to

please his eye, but can any one compute the deaths it has caused through the powerful currents it creates? A glimpse of a fine oaken staircase is all the reward a travelling-student hopes to earn by a long tramp and he asks no better, and if his ill-spared shilling will earn him other glimpses of a high wainscoted, panelled-ceiling dining-room, a state bed-chamber, or a balustrated gallery, he will willingly forego his chops and content himself with beer and stale bread, envying as he makes way with them the men and women who have the happiness to live amid such surroundings, little knowing of the many positive discomforts they have to put up with for the sake of preserving the ancestral surroundings essentially unchanged and ill-adapted to modern life.

A French château, a German castle, or an Italian villa, charming as it may be in appearance, looks somehow as if the men who lived in it must have vastly different habits and manners from those which would suit American ideas, and the transplantation of any copy of these homes to America suggests to those who see them a distinctly foreign flavor and want of adaptation to American ideas and habits, while a copy of almost any English house of equivalent character would not call attention by its foreign air or attract notice save by its evident desirability for a home-loving owner.

The domestic architecture of England practically begins with the Stuarts and its evolution continued through varying phases of Tudor, Elizabethan, Jacobean and Queen Anne styles, as these overlapping names are given to the changing forms adopted. Our authors have chosen to style their work the "*Architecture of the Renaissance in England*,"¹ and they exhibit not the graceful Renaissance of Italy, or the picturesque Renaissance of France, but the insular interpretation of the impulse that had trickled into Great Britain by way of Flanders, after it had spent its most vital effort with peoples whom nature had endowed with a keener perception of grace and graciousness than she had bestowed upon the energetic offspring of mixed Northern races. Consequently one must not hope to find amongst the illustrations, the work is to contain, the kind and quality of detail which has grown to be associated with the word "Renaissance," but one may hope to find, and will find, work of homely useful character, whose great charm is its homeliness, its immediate applicability to our own every-day uses.

At the present time, fashion has decreed a revival of interest in Renaissance architecture and architects who are not content to work in the simple vernacular are now seeking inspiration from the published documents that have a bearing on these styles, and any office library that is not well equipped with works on Italian, French, English and German Renaissance is at a disadvantage as regards success in competition for business.

Broadly speaking, Italian Renaissance details and motifs are better adapted to urban than to suburban buildings. French and German Renaissance is usable amid surroundings of either kind, while English Renaissance, where it is clearly distinguishable from the Continental styles, is more adopted than they are for use in isolated buildings amid country surroundings, with the result, so far as this country is concerned, of not seeming out of place. This country is so enormous, however, that its climatic conditions and the manners and customs of its inhabitants vary as widely as climate and manners vary between different European countries, so a style of building which may seem merely foreign to all its surroundings in one locality may in another be thoroughly in harmony with them and take on an altogether homelike air. As an American architect may at any time, though practising in one place, be called upon to design buildings for other places, he may, if he has a penchant for any particular phase of style, do himself and his art a grave injustice by yielding to the temptation to design the new building in his favorite style rather than in a style really better suited to the conditions of site, climate and manners which are part and parcel of his new problem. Therefore it behooves the American architect to have his office library well equipped with reference-books which he can turn-to at a moment's notice, and he will not find one that covers English Renaissance work any better than this. The photographic prints are at so large a scale that there is no great need of illustrations of their detail, yet our authors supply measured drawings of detail with the photographic plates and an additional supply introduced as cuts in the text. Of text there is so little that the subscriber cannot feel that more than a very small part of the price of the work is assignable to the production of this part of the book, and neither does it call for an expenditure of much time in its reading, and gives no excuse for the plea so often urged that "architects have no time to read," that "all they care for is the picture." Yet there is enough of text to satisfy the inquiring mind.

Of course any work of this kind which aims to be fairly comprehensive must consider a number of old friends, which have become familiar through other publications which have dealt with them through the medium of the artist's pencil but without the exactitude of the photographic camera. Nash and Richardson and Billings and others have published some of the buildings that are to be included in this work, but our authors have kept this fact in mind

¹ "*Architecture of the Renaissance in England*": illustrated by a series of views and details of buildings erected between the years 1560-1630, with historical and critical text by J. Alfred Gotch, F. R. I. B. A., assisted by W. Talbot Brown, A. R. I. B. A. Part I: Burleigh House, Hardwick Hall, Haddon Hall, Park Hall, Boughton Castle, Apethorpe Hall, Ragdale Hall, Hambleton Old Hall, etc. 22 plates 14" x 19", in portfolio, with 12 pages of text. Price to subscribers, \$8 per part (to non-subscribers \$10). Boston: Ticknor & Co. 1891. London: B. T. Batsford.

and have been particular to exhibit these familiar friends under new aspects and from unfamiliar points of view.

Some architects look with disfavor on any book that contains anything but new and unfamiliar matter, and some may incline to think that because some of the subjects in this work can be found in Nash or Richardson that it is not worth their while to purchase it, but we fancy that very few of those who may advance this argument actually have in their offices either of these standard works, or know where, at a moment's notice, they can lay their hands on them.

A VERY different publication from the foregoing is that which has been recently issued by the publishers of the *Technology Architectural Review*, who have sought to add their mite to supply the present demand for documents on Renaissance architecture by issuing a portfolio — put up in a very attractive form — containing fifty small plates illustrating details of the Italian Renaissance. There is little to be said of this collection¹ save that it is of a convenient size, and as useful, probably, as any other collection of similarly miscellaneous and unclassified materials. It has the air of being the reproduction, by one of the so-called "half-tone processes," of the collection of photographs that some architect has culled from the dealer's collections placed before him merely because they chanced to please his momentary fancy, or were the only subjects of all the dealer's supplies that seemed to him at all worth buying. But collections made in this way are of greater value usually to the maker than to any other person, and though the publication is worth the modest price, it seems to us to be a thing which will be turned to in search of some particular something which invariably proves not to be there.

A BOOK with Messrs. John Wiley & Son's endorsement, as publishers, can generally be depended upon as being well written, and by some one who understands his subject, and Mr. Birkmire's convenient work² is no exception to the rule. Architects have long wanted just such a book as this, simple, practical and comprehensive, for daily use in the office by draughtsmen engaged in laying-out iron-work. There are some admirable treatises on the designing of trusses and girders, which the architect himself finds indispensable in his private library, and he will probably see that his superintendent, in cases of importance, is supplied with the latest and best works on the qualities of all sorts of iron and steel; but these publications, however valuable in their way, do not give that comprehensive, even if superficial, view of all kinds of iron building, to which the average draughtsman needs first to be introduced. We remember, many years ago, when iron buildings were popular in New York, an advertising book of plates, issued by a firm of iron founders and builders, which contained rough sections and details of all parts of an iron building, from the bowstring girder over the rear extension to the Hyatt light in the front sidewalk, and from the bed-plates under the basement columns to the sheet-iron cornice, with diagrams of the joints and methods of securing the parts together. This book was absolutely invaluable in the office. The size of the box for the rolling-shutters, the proportions of the sidewalk L-girders, the proper connection of the front columns, the most judicious bracketing for the reception of ends of the floor girders, the arrangement of the dwarf doors, and the infinite variety of other details of the sort, could be immediately ascertained from it, without the laborious process of going out and measuring some executed example, or the shorter, but more costly one, of making the drawings by inspiration, without reference to actual precedent; and it was with much regret that we learned, some years ago, that it had long been out of print. Mr. Fryer's excellent book came to take the place of it, to some extent, and Mr. Birkmire's is still more modern, and, while keeping in mind the same practical usefulness, in a far wider diversity of detail, adds a large number of good and convenient tables and formulæ. A model specification for ironwork is also inserted, which will be useful for reference; and, as an appendix, we find extracts from the proposed New York Building Act, which has not yet been passed, but will at least afford valuable suggestions.

MR. ROBERT GRIMSHAW, General Editor of the Trades Department of Funk & Wagnalls' "Standard Dictionary," being desirous of making as complete as possible his list of mechanical and industrial terms, requests manufacturers of machinery and tools having important parts not found on those of other makers, or the names of which are not yet in general use, to send the name, definition and use of each such part to him at 115 Bible House, New York City.

PUTTING OUT FIRE WITH SAND. — In connection with the equipment, for fire protection, of wood-working establishments, it is recommended that a gallon pail filled with fine sand, be always placed within convenient reach of each workman employed where oiling and finishing is being done. This practice might well be followed wherever there is a possibility of fire starting in oils or oil-soaked materials. There is nothing which will quench an oil-fed fire in its incipency more quickly and effectually than sand — and there are no afterclaps in the way of water damage either. — *Fire and Water.*

¹ "Details of Decorative Sculpture." Italian Renaissance. 50 small plates in portfolio. Boston: 1890. *Technology Architectural Review.*
² "Architectural Iron and Steel, and its application in the Construction of Buildings." By Wm. H. Birkmire. Fully illustrated. New York: John Wiley & Sons, 53 East Tenth street. 1891.



[Contributors are requested to send with their drawings full and adequate descriptions of the buildings, including a statement of cost.]

TURKISH AND RUSSIAN BATH ESTABLISHMENT, WALNUT ST., PHILADELPHIA, PA. MR. WILSON EYRE, JR., ARCHITECT, PHILADELPHIA, PA.

[Gelatine Print issued with the Imperial and International Editions only.]

A DETAIL of this building was published in our issue for March 28.

HAMBLETON OLD HALL. REPRODUCED FROM GOTCH'S "Architecture of the Renaissance in England."

THERE is no record to show who built this house, nor are there any arms, initials, or date upon it to give a clue. It is a good example of one of the smaller houses of the period, showing how a comparatively slight feature, like the arcade, can impart architectural character to a building. On the north side is an arcade with arches, of which a measured drawing is given on Plate 21. The plan is of the usual type, the hall dividing the family apartments from those occupied by the servants. The original arrangements have evidently come down to us with very few alterations, though, judging by the fragments of wrought stone that lies about, the house was once larger; and it is clear, from a fireplace still remaining, that there was a room over the kitchen.

HAMBLETON OLD HALL: DETAILS.

HOUSE FOR M. E. HOUSE, ESQ., AUSTIN, TEX. MR. FRANK FREEMAN, ARCHITECT, NEW YORK, N. Y.

WEBB ACADEMY FOR SHIP-BUILDERS, FORDHAM HEIGHTS, N. Y. MR. A. B. JENNINGS, ARCHITECT, NEW YORK, N. Y.

BUILDING AT THE CORNER OF LINCOLN AND ESSEX STREETS, BOSTON, MASS. MR. J. H. BESARICK, ARCHITECT, BOSTON, MASS.

A POTTERY MEXICAN IDOL SKETCHED BY MR. N. DALMA.

SEE article elsewhere in this issue.

[Additional Illustrations in the International Edition.]

THE TOWERS AND SPIRES OF BRUGES, BELGIUM.

BRUGES is less a "city of churches than many another place, but the level canal-cut plain that surrounds it gives great value in the monotonous landscape to the towers and spires, that do rise up. In the view here shown, the spire just emerging from behind the windmill mound belongs to the Cathedral of St. Sauveur, the square tower in the middle is the famous bell-tower of the Halles, but the one between it and St. Sauveur's we cannot identify. Next to the bell-tower on the right are the Temple de Jerusalem (see *American Architect* for June 6, 1885,) the Church of Ste. Anna, and the Convent des Apostelins and still farther away on the right can be dimly seen the low dome of the Convent des Dames Anglaises. In the immediate foreground, on the canal, is the remains of the old town-wall.

APARTMENT-HOUSE, BRÜNN, AUSTRIA. HERR F. SCHÖNBUNNER, ARCHITECT, VIENNA, AUSTRIA.

[Gelatine Print.]

GLAZED VERANDA.

[Etching.]

PULPIT IN MORAY CHAPEL. ST. GILES'S CATHEDRAL, EDINBURGH. DR. R. R. ANDERSON.

ALL SAINTS' CHURCH, ACKWORTH MOOR TOP, YORKSHIRE, ENG. MR. CURZON, ARCHITECT, LONDON, ENG.

This building is a chapel of ease to the mother church of Ackworth. The north side faces the high road from Ackworth to Wragby, and the porch is therefore placed on that side, and on account of its aspect and bleak position there is also an internal lobby to shut off the cold winds. This is planned within the half-timber structure which supports the bell-turret, and a corresponding space on the south side being given to the belfry, the suggestion of a narthex between the two is presented in the interior. The eastern bay of nave has shallow transepts, which give a useful increase of

light and space there. The nave ceiling is polygonal in form, the apex, 28 feet high, not reaching to the ridge of roof.

The walls and masonry are mainly of local stone from the neighboring Brackenhill quarries, and the interior is all of this stone in fair ashlar. Excellent as this stone is in many respects, the architect, after examining the ancient and more modern buildings of the district, decided against its use near the ground or under drips from window-sills and elsewhere, and a more trustworthy Yorkshire weather-stone had been used in these positions.

The church seats 152, exclusive of the small choir. The embroidered requisites for the chancel and other objects in silver and brass (except the gas pendants) were made by Messrs. Jones & Willis, from the architects' drawings. The reredos is of alabaster, with panels of mosaic. In the nave there is a wooden cornice connecting the hammer-beams and running round three sides (one side being the beam of the half-timbered narthex) and on this is inscribed in black letters, illuminated, the Lord's Prayer, divided into seven sentences, each in a separate compartment. The external boundary walls, etc., of a local pattern, were not the work of the architect or the builders of the church.

KITWELLS PARK, SHENLEY, HERTS, THE RESIDENCE OF MR. A. J. LAMBERT. MR. REGINALD G. PINDER, ARCHITECT.

THIS mansion has lately been altered and renovated. Our illustration shows the entrance-hall, which is executed in oak in the Jacobean style. The work was carried out by Messrs. Boff Bros., builders, Park Street, St. Albans.

NEW FACTORY, GRANVILLE STREET, BIRMINGHAM. MESSRS. ESSEX & NICOL, OF BIRMINGHAM, ARCHITECTS.

THESE works are being erected by Messrs. Surmon & Sons, contractors, for Messrs. Martin & Martins, leather goods manufacturers. The front block contains the offices, show-rooms, ware-houses and store-rooms. The front elevation is carried out in red brick with Bath stone dressings, and the roof is covered with Bangor slates.



[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.]

A CASE OF EXTRAS.

ROCHESTER, N. Y., April 20, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Will you please give me your decisions as soon as possible on the following points:

1. I have just completed a building and have settled up the contract between the owners and the contractors. The contractors presented a bill of \$15 for a few outside blinds, which had been omitted by an error of my draughtsman from the drawings, on which the contractors originally figured. The specifications read "Windows marked O. B. on drawings to have outside blinds." Both the owners and the contractors positively refuse to pay for the blinds, and both claim that the architect should pay the bill. The owners agree to leave it to you and to abide by your decision.

I would like to settle once for all, the question of the liability of the architect in all similar cases.

2. What do you consider the best material to put into hollow iron columns which stand in water liable to freeze solid, in winter? The bases of the columns are cast solid, but water is apt to get in from the top and freeze inside, if they are not filled-in with something.

Yours very truly, ARCHITECT.

[1. If the contractor saw that blinds were really intended for those windows, and the mark was left out by mistake, he is bound to put them in at his own expense, as neither he, nor the owner, nor you, has a right to take fraudulent advantage of an innocent mistake on the part of either of the others. If, on the contrary, he supposed that blinds were not wanted on those windows, and made his price for the house without them, it is evident that the contract price would have been higher if they had been included, and, if they were not included, the owner is bound to pay a reasonable price for having them added. The limit of the architect's responsibility is this: If the addition of the blinds left out of the drawings by his mistake involved any change in work already done, he ought to pay for making the change, so that the owner should only have to pay for the house, with all the blinds complete, just what he would have had to pay if they had all been included in the contract price. Whether the amount charged as extra for the blinds is the same as the addition which would have been made to the contract price is a matter into which the owner is fairly entitled to inquire: but we suppose that, under the contract, nothing more than a reasonable price is to be paid for extras, and, unless the contractor was put to special trouble and expense to get these particular blinds, a reasonable price would be no more than he would have added to his estimate, to cover the cost, with his profit.

2. If the columns could be thoroughly dried out, and warmed, we should be inclined to fill them with melted rosin, or with coal tar. If not, perhaps the lower part could be filled with cement, with rosin or tar in the upper portion.—EDS. AMERICAN ARCHITECT.]

BLUE AND BLACK PRINTS.

LOGAN, UTAH T., April 13, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Could you furnish me, through the *American Architect*, the exact names of the blue-print chemicals and the black print, if possible?

Very respectfully yours,

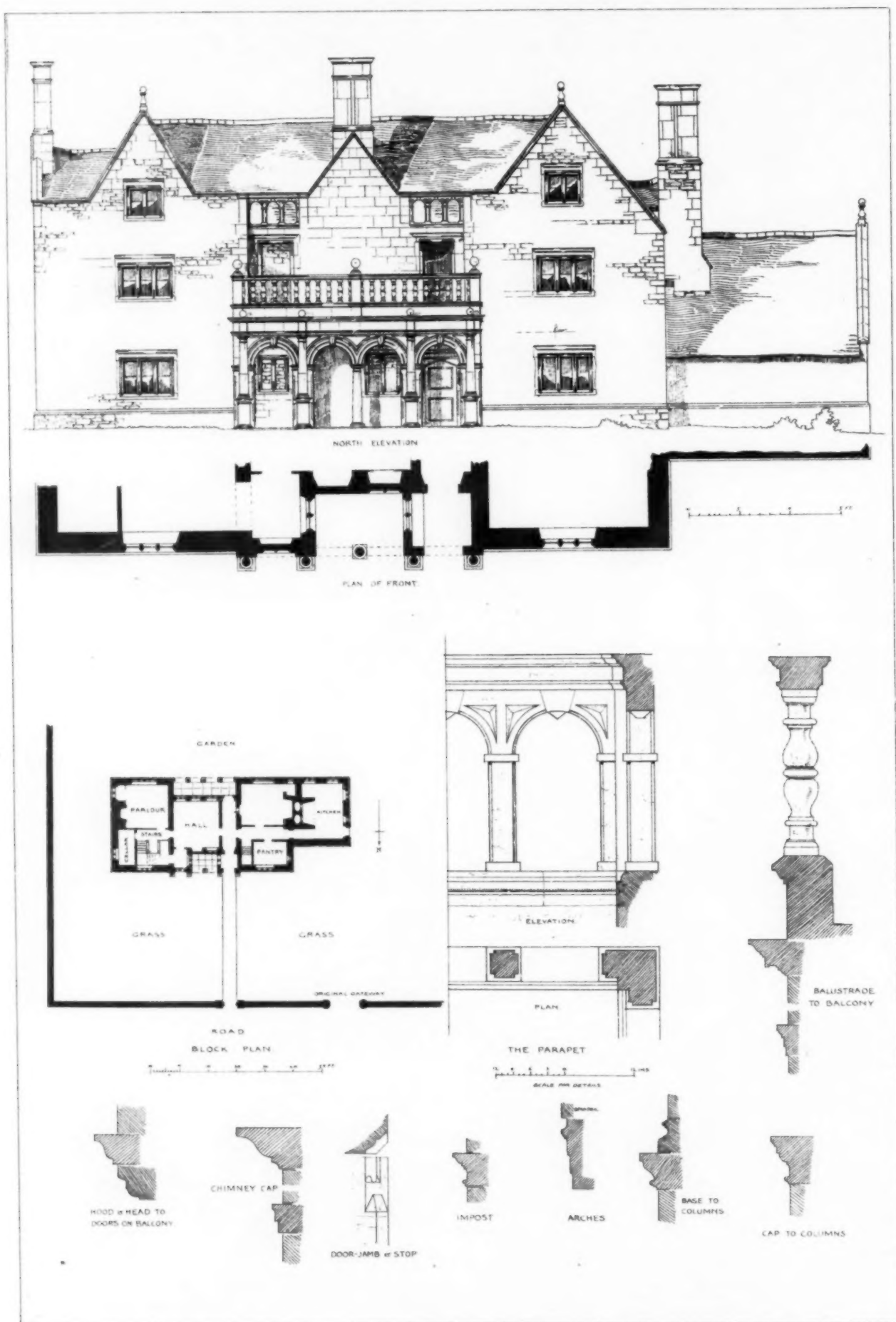
K. C. SCHAUB.

[THE black print process was described in the *American Architect* for December 7, 1889, another black process in the issue for January 29, 1887, a reverse blue process (blue on white) in the issue for August 1, 1885, and the blue process itself in issue for September 13, 1884. EDS. AMERICAN ARCHITECT.]

TRADE SURVEYS.

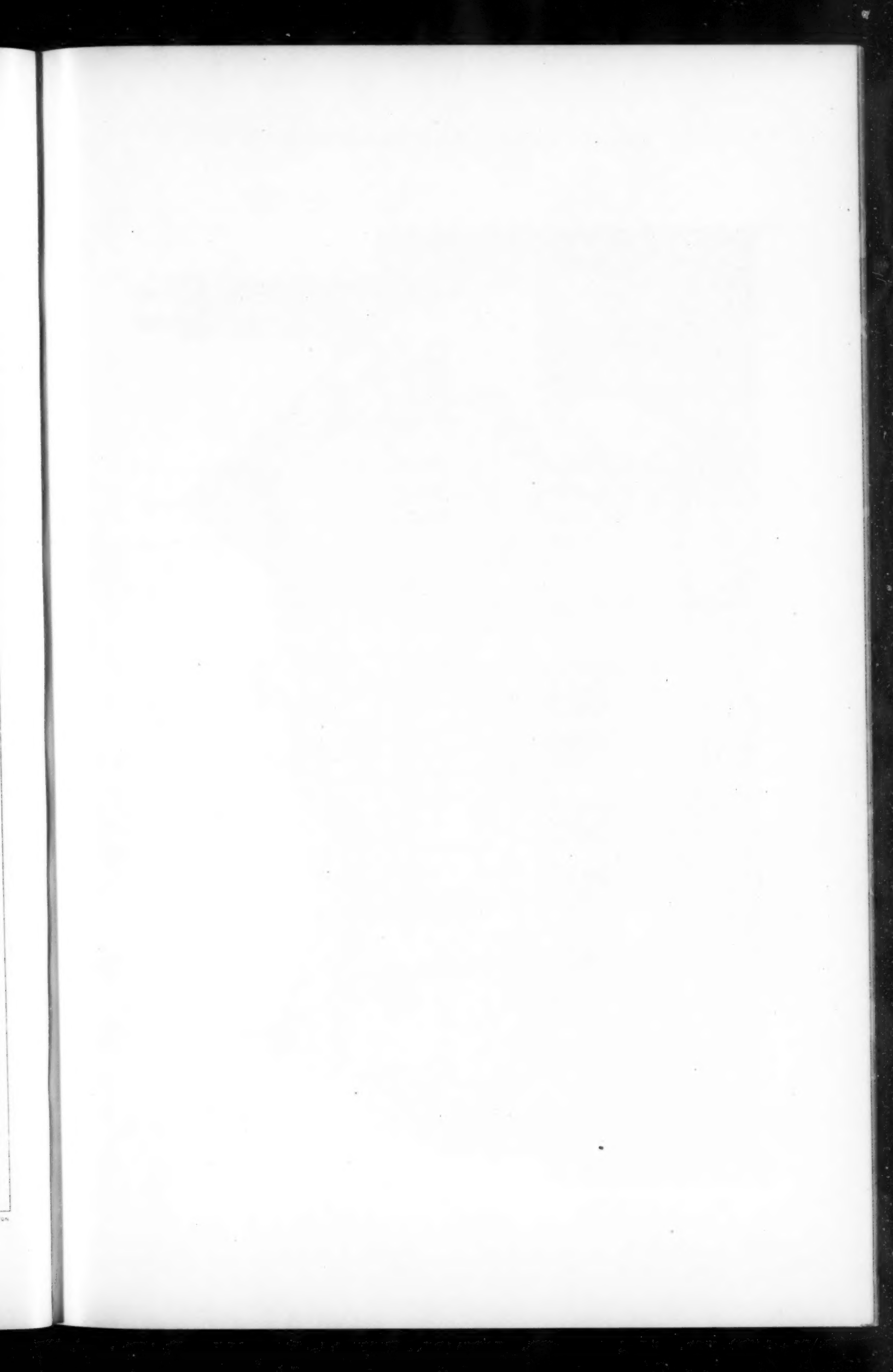
ONE fact which deserves more than passing notice in the industrial situation is the increasing compactness of organizations among employers of labor in all parts of the country and in all occupations. The failure of so many recent strikes is due to this cause in a large measure. Besides the mere fact of the organization of employers, there is a stronger sympathy between those who are not openly organized, which serves to that extent the purpose of organization. Employers have discovered this cohesiveness among employers, and have felt the effect of it in various ways. The inability of labor to carry its purposes with a high hand or with a minimum of effort is also due in a measure to the fact that there is not an urgent demand for labor. The building boom has subsided partially; the iron trade is sluggish; railroad-building is at a standstill; facilities for mining have been greatly increased, and if coal cannot be had in one section, it can in another. While there is no overproduction, there is an abundant supply of manufactured products. Organized labor instinctively feels that these conditions are against it, and that efforts to force conclusions under such conditions are in greater danger of failure than three or four years ago, before organization of employers had reached its present condition of efficiency. If labor was in greater demand, if facilities for production were not what they are, if employers were not as compactly organized as they are, we would doubtless witness a series of strikes extending throughout the country, and affecting not two or three trades, but many. Then, again, the spirit of socialism has received a setback from organized labor itself, and the workmen at large, both in and out of organizations, have come to recognize that strikes are, at best, a costly remedy, and that other remedies and measures are more desirable. Still, while the worst is over, the danger of obstruction from organized labor is by no means over. Miners, in the start, were never in sympathy with the few agitators who proposed a general suspension. The railroaders throughout the country showed they were not in sympathy with the general strike movements that have been agitated within the past year or so. Mill and shop labor has shown its dislike for organized efforts to force employers. While the membership of labor organizations is large, and to that extent threatening, the actual spirit which animates these organizations has changed very materially, and, it may safely be said, permanently. While strikes are probable as long as men are banded together, it can be said with a good deal of safety that general strikes for an advancement of wages are a more remote probability than they have ever been. The greatest danger from labor agitations in the future is in the direction of hours of labor. The laborers who are working ten hours will never relinquish the purpose of reducing the hours to eight. It is this, rather than the hope of better wages, which holds so many thousands together. The members of the building trades have given less trouble this year than for many, perhaps because they have secured material concessions, and feel sure that others are likely to follow soon. The workmen of foreign countries are discontented, but are giving more attention to higher and broader measures of emancipation, as they are termed, than they have ever given to the subject before. European governments are watching labor organizations in their national and international conferences, knowing that they represent a power which ere long will be heard, and heard effectively, in the halls of legislation. European labor has placed itself upon a firmer footing than it ever before enjoyed. It has the cooperation of agencies and of men, and of a leadership which never before condescended to render aid directly or indirectly. In this way, the danger of socialism is being, to a certain extent, averted. The discontented laborers of Europe are working in legitimate directions and for creditable purposes, and are drawing to their aid influences and powers which would never otherwise have regarded their causes with sympathy or interest. In short, education and reflection are doing for laborers on both sides of the water what nothing else could do. A few years ago, the organization of labor was regarded as involving possible disaster, but with organization came education and reflection; out of these has come the present departure into more conservative methods for the accomplishment of its aims. The volume of business throughout the country is still a little below that of last year; prices are stationary; production is kept well in hand; labor is being re-employed for spring and summer work; new enterprises are multiplying, and there is more care manifested by investors and promoters in new work. Shop-capacity in the New England and the Middle States is being increased. The accumulation of stocks is being most carefully guarded against. All work supervised by architects will be as abundant as last year, but the class of work in which ordinary builders engage will not be. House-building in the larger cities will not engage as much capital and labor this year, but it will be compensated for by a greater amount of work in ship-building. Despite the fact that low prices prevail in all manufactured products, it is true that there will be more manufacturing-capacity erected this year than last. While it is true that dividends in industrial stocks are low, it is also true that capacity in these industrial channels is being increased; just why it would be, perhaps, impossible to intelligently explain. Doubtless the investors anticipated a reaction and a general improvement in a short time. The promise of abundant crops is giving encouragement to business men at large. The farming area is being steadily increased, and this fact, perhaps, counts for more than it is credited with. Western railway managers look forward to a rapid increase in the population of the strictly agricultural area; higher prices for farm-products seem probable; good prices for cotton are assured. An increasing output of precious metals and of Western mine-products generally is spoken of by authorities in such matters. A great deal of capital is seeking opportunities in the mineral fields of the far West. While the country at large is prospering, and is advancing with a steady step, there is not that inducement for wild investment and for speculative ventures which stimulated enterprise to undue limits a few years ago. The country is, perhaps, better for the check it has sustained.

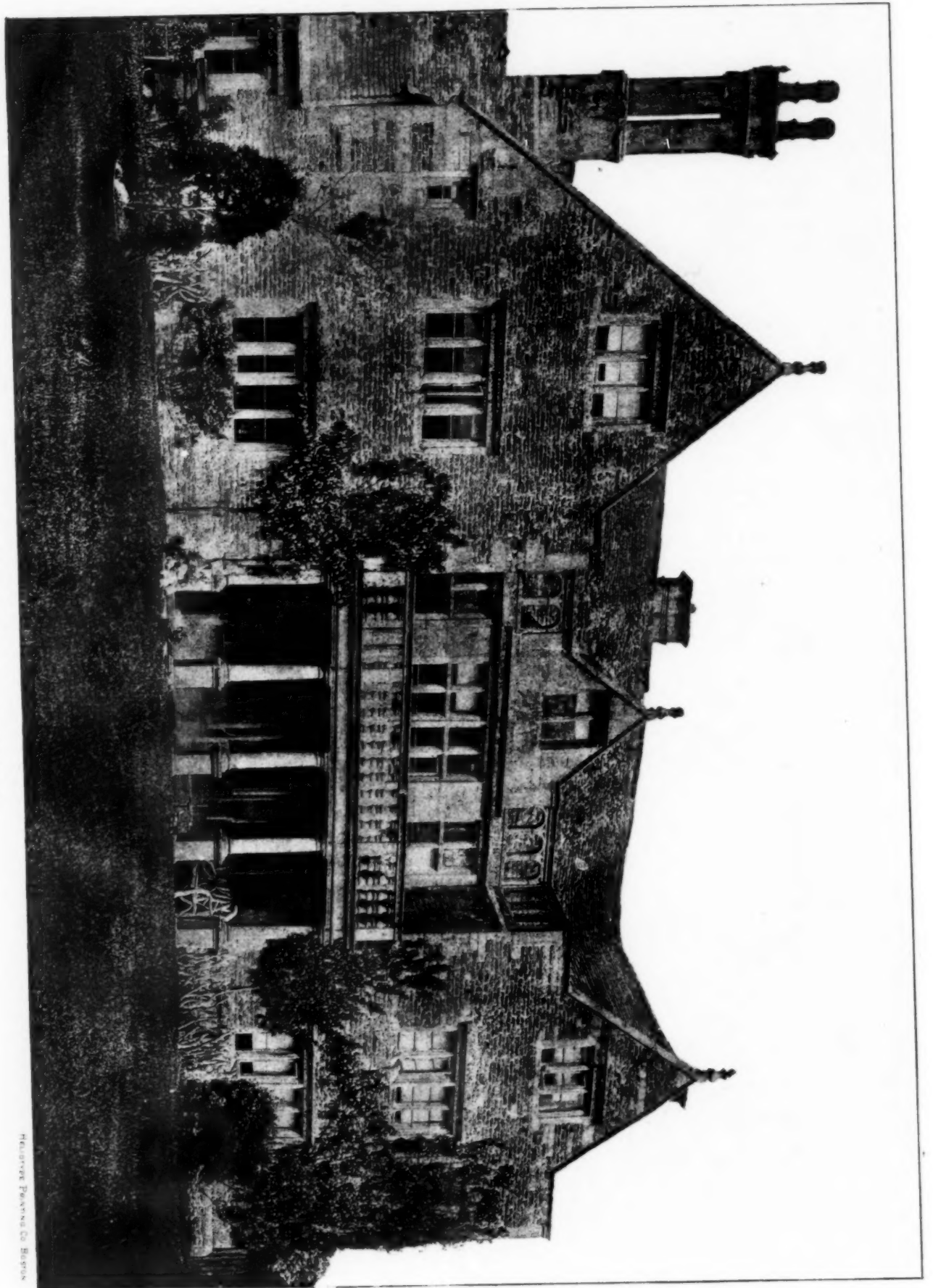
[illegible]



HELIOTYPE PRINTING CO. BOSTON

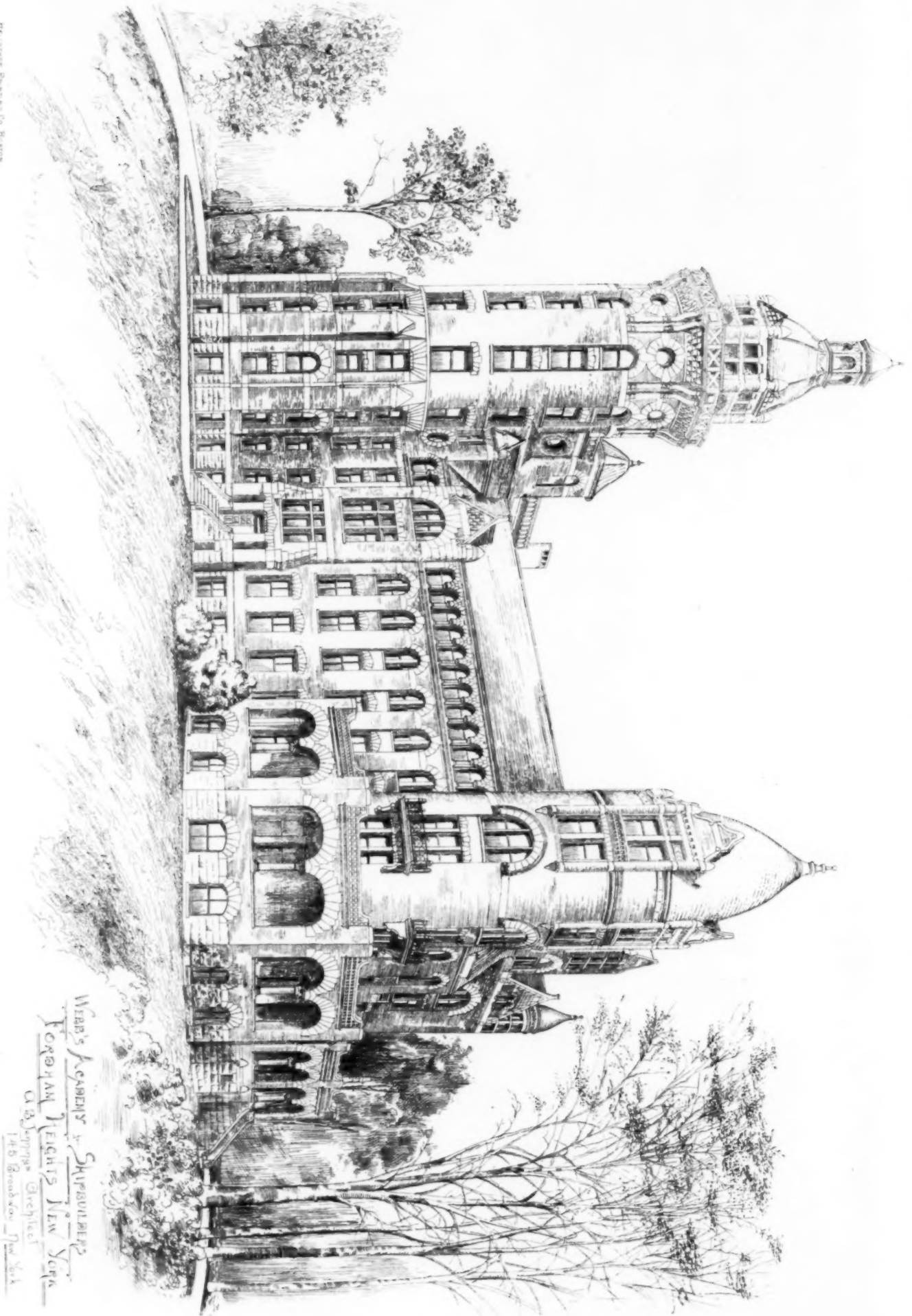
HAMBLETON OLD HALL,
NORTH FRONT.



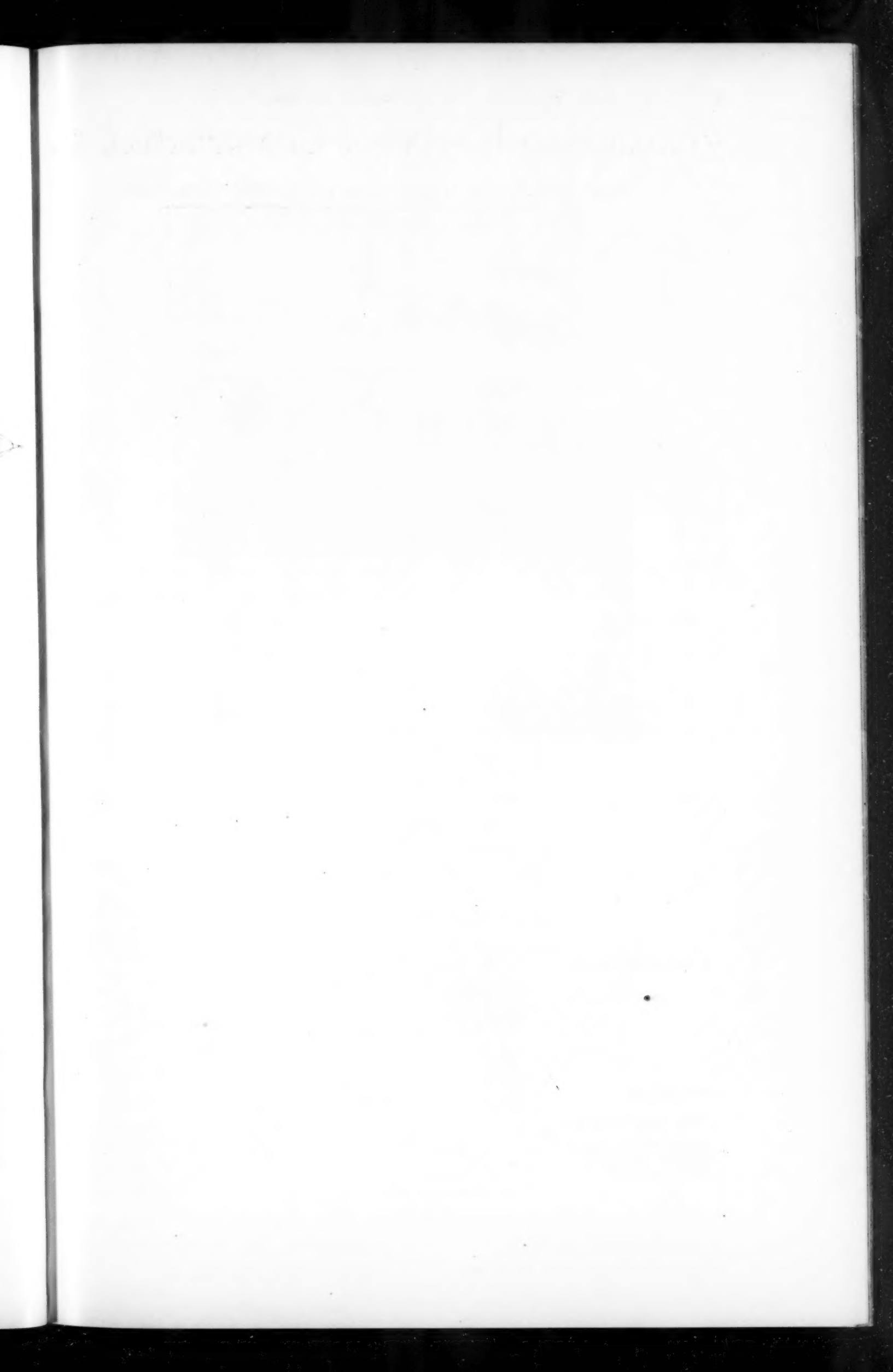


HAMBLETON OLD HALL,
NORTH FRONT.

REPRODUCED FROM THE ORIGINAL



WEBB'S ACADEMY & SHIPBUILDERS
 109 N. 11TH ST. NEW YORK
 U.S. Copyright Office
 145 Broadway New York

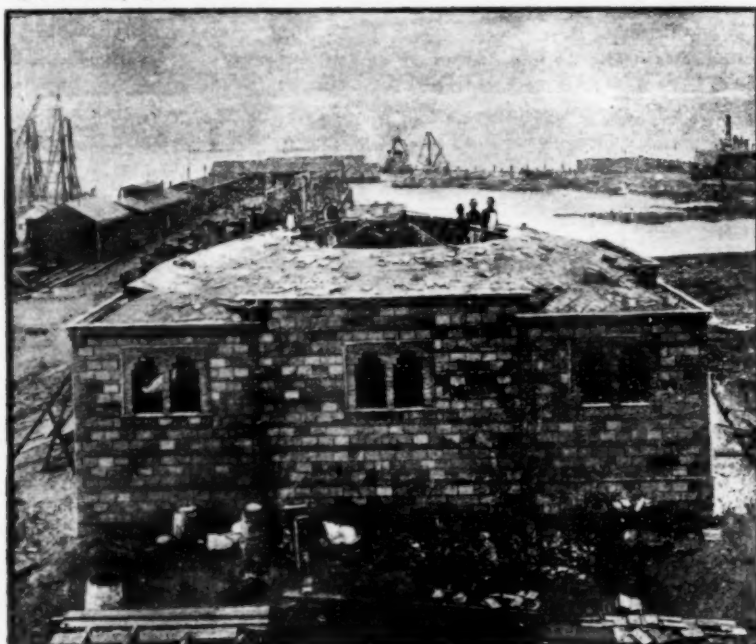


Guastavino Fireproof Construction Co.

MAIN OFFICE, 57TH STREET, NEAR 11TH AVENUE, NEW YORK.

BOSTON, MASS.,
PIERCE BUILDING, BACK BAY,
TELEPHONE CALL.

PROVIDENCE, R. I.,
SWARTS BUILDING, ROOM 42.



CHICAGO, ILL.,
PHENIX BUILDING.

MILWAUKEE, WIS.,
NEW INSURANCE BUILDING.

Buildings completed or in process of construction, in which the Guastavino Fireproof Construction Company or R. Guastavino has obtained contracts, and put in Fireproofing.

NEW YORK.

Edison Electric Illuminating Co. Building, 26th St. Station - - New York.
" " " " " 39th St. Station " "
" " " " " Cor. Pearl and Elm Sts. "

Sun Fire Company Building - - - - - "
Corbin Building - - - - - "
Lyons Building, Bleecker Street - - - - - "
Mt. Sinai Hospital - - - - - "
Music Hall - - - - - "
Arion Club - - - - - "
Sidenberg Building - - - - - "
Plaza Hotel - - - - - "
Young Woman's Christian Ass'n Building - - - - - "
" " " " " Lodging House - - - - - "
Manhattan Brass Foundry - - - - - "
" " " " " Extension - - - - - "
Lyons Building, Mercer Street - - - - - "
" " " " " Waverly Place - - - - - "

Lion Brewery - - - - - "
Matthiessen Vaults - - - - - Woodlawn.
Hammerstein Harlem Opera House - - - - - New York.

Fish Building - - - - - "
Montauk Club - - - - - Brooklyn.
Bloomingdale Building - - - - - New York.
LaConcha Baths - - - - - Syracuse.
Norton Building - - - - - New York.
Atlantic Brewery - - - - - Staten Island.

MASSACHUSETTS.

Boston New Public Library - - - - - Boston.

American Legion of Honor Building - - - - - "
Exeter Chambers - - - - - "
Graftam Building - - - - - "
Boston Gas Light Company Building - - - - - "
Bay State Gas Company Building - - - - - "
Harcourt Building - - - - - "

Cox Stable - - - - - Brookline.
Savage Building - - - - - Boston.

COLORADO.

Massachusetts State House Extension - - - - - "
Colorado Telephone Co's Building - - - - - Denver.
Denver Athletic Club - - - - - "

NEW HAMPSHIRE.

Dover City Hall - - - - - Dover.

PENNSYLVANIA.

Hitchcock Memorial Hospital - - - - - Hanover.

RHODE ISLAND.

Philadelphia Market - - - - - Philadelphia.

NEW JERSEY.

Morgan Stables - - - - - Newport.

W. Fellows' Residence - - - - - Montclair.

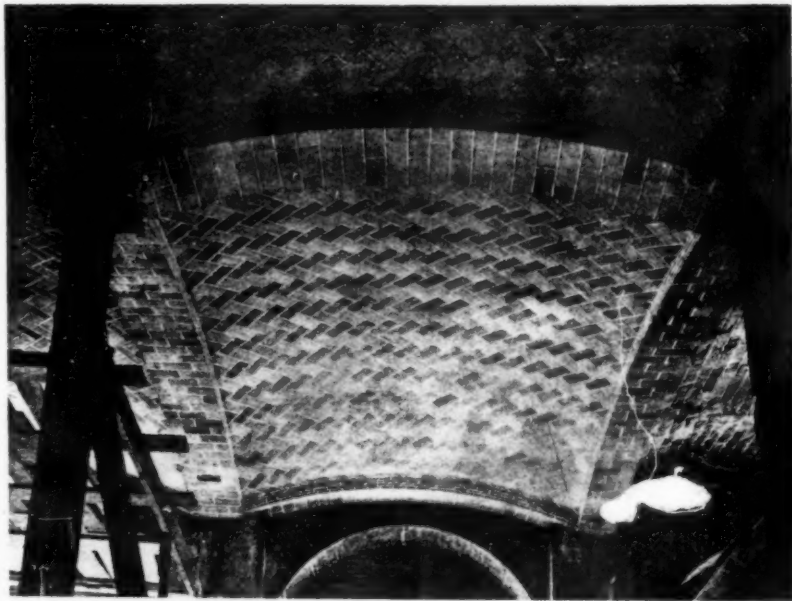
Paterson Savings Institution - - - - - Paterson.

This Company gives Estimates and takes Contracts for Fireproof Buildings, Floors, Ceilings, Partitions and Staircases, under the System called, GUASTAVINO TILE ARCH SYSTEM.

The above list will show the increase of their business and general facilities.

DOMED CONSTRUCTION OF FIRE CLAY CORRUGATED
FLANGE FINISHING TILE, REQUIRING NO PLASTERING. ®

IN THIS BUILDING WE HAVE THIS CONSTRUCTION IN
PLAIN & CORRUGATED TILE, WHITE, YELLOW AND BUFF,
ALSO IN GLAZED TILE, DIFFERENT COLORS. ®



SAMPLE OF TILE VAULTING IN THE NEW PUBLIC LIBRARY, BOSTON.

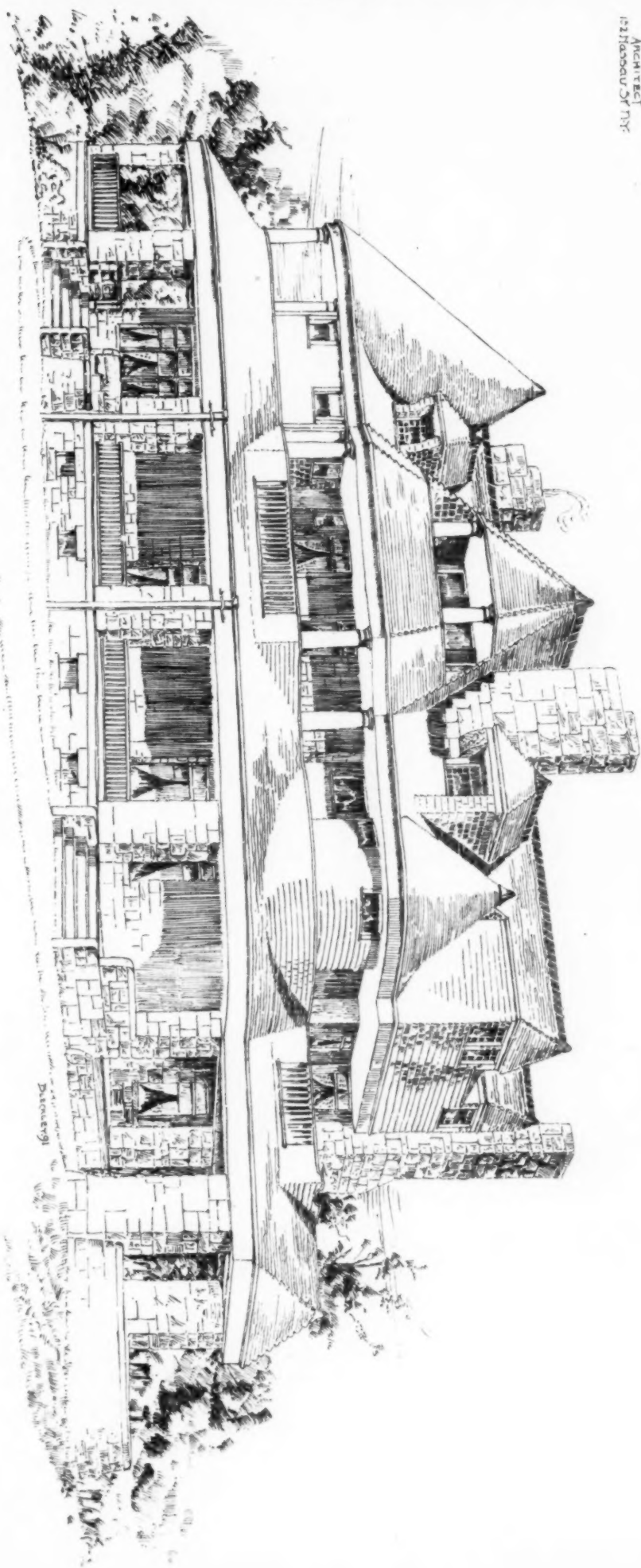
© MCKIM, MEAD & WHITE, ARCH'TS. ®

THE GUASTAVINO
FIRE-PROOF CONSTRUCTION CO

MAIN OFFICE: 57th ST. & NORTH RIVER: NEW YORK: N.Y.

COPYRIGHT 1891 BY TICKNOR & CO

RESIDENCE FOR
MR. E. M. HOUSE.
AUSTIN, TEXAS.
FRANK FREDMAN
ARCHITECT
123 MADISON ST. N.Y.



~ North-East View ~

THE HISTORY OF THE UNITED STATES OF AMERICA

COPYRIGHT 1891 BY TICKNOR & CO.

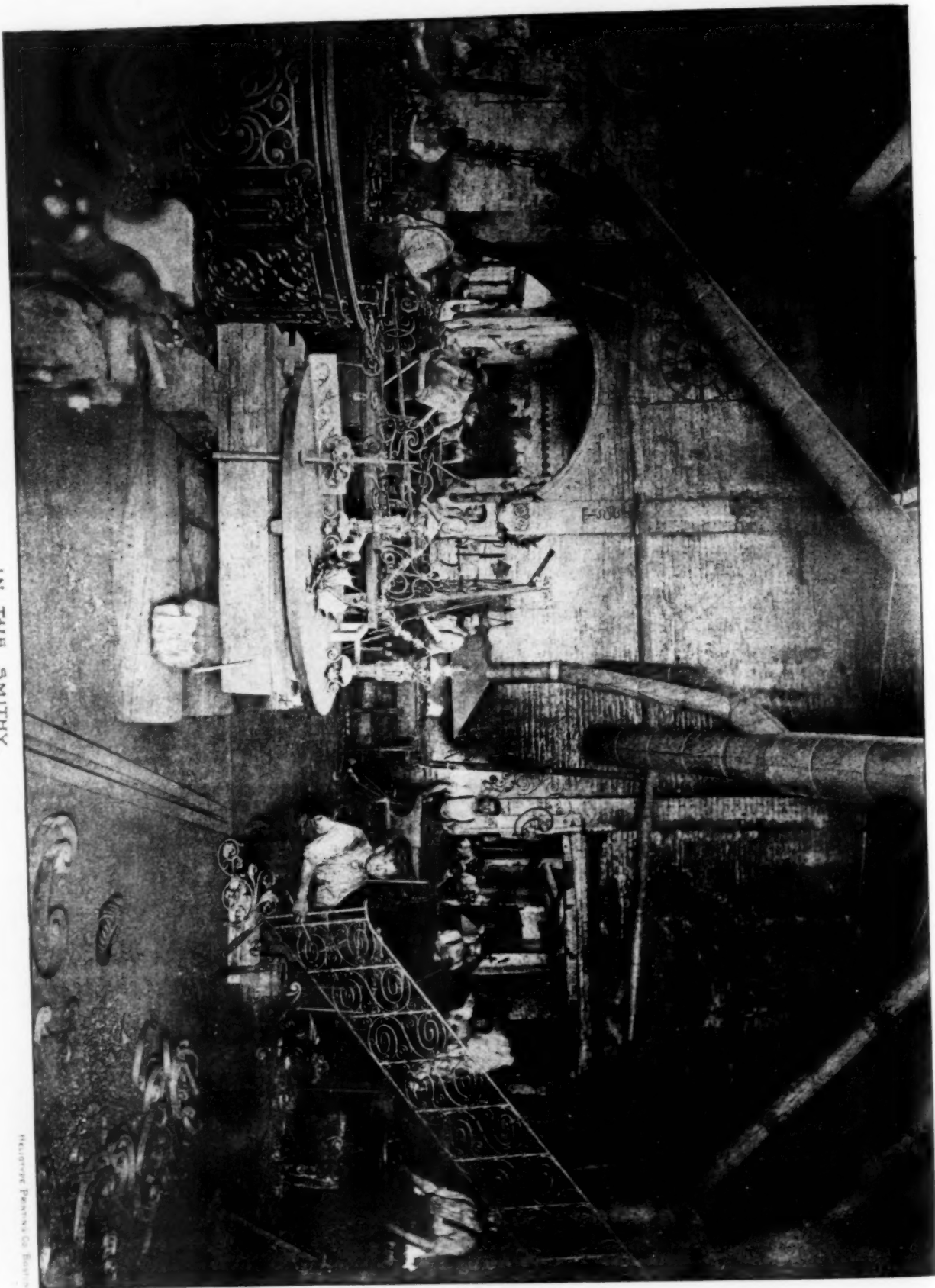


REPRODUCED BY PERMISSION



HELIOTYPE PRINTING CO. BOSTON

BUILDING COR. LINCOLN AND ESSEX ST'S. BOSTON, MASS.
J. H. B. SARICK, ARCHT. BOSTON.



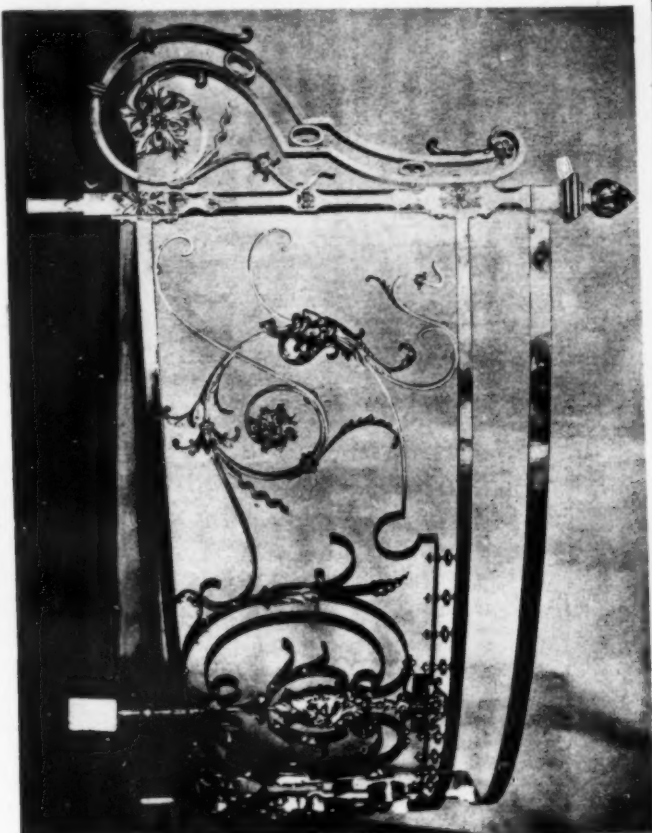
HELOPPE PAINTEUR CO. BOSTON

IN THE SMITHY.
TRADE SUPPLEMENT.

No. 501.

AMERICAN ARCHITECT AND BUILDING NEWS, MAY 2, 1891.

COPYRIGHT 1891 BY TIERCE & CO



ART IN IRON.

BY

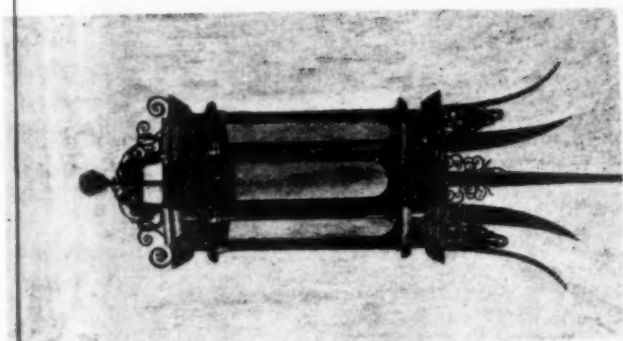
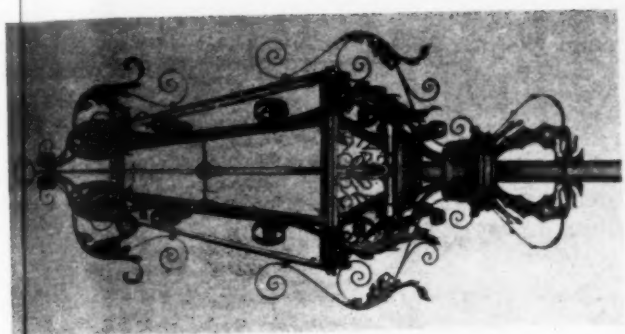
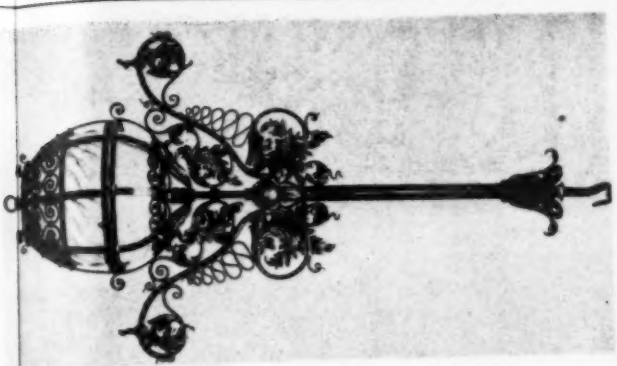
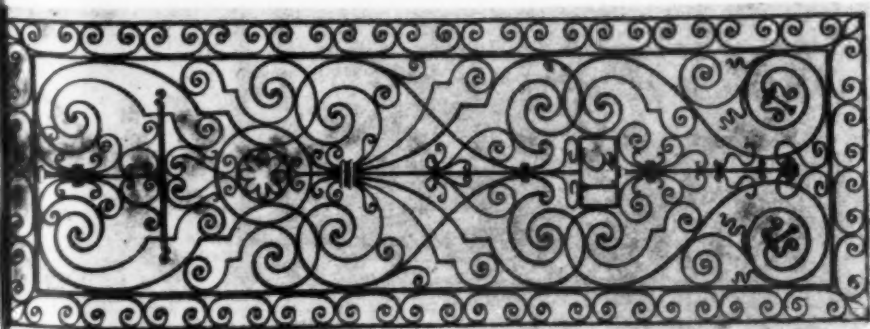
JNO. WILLIAMS.

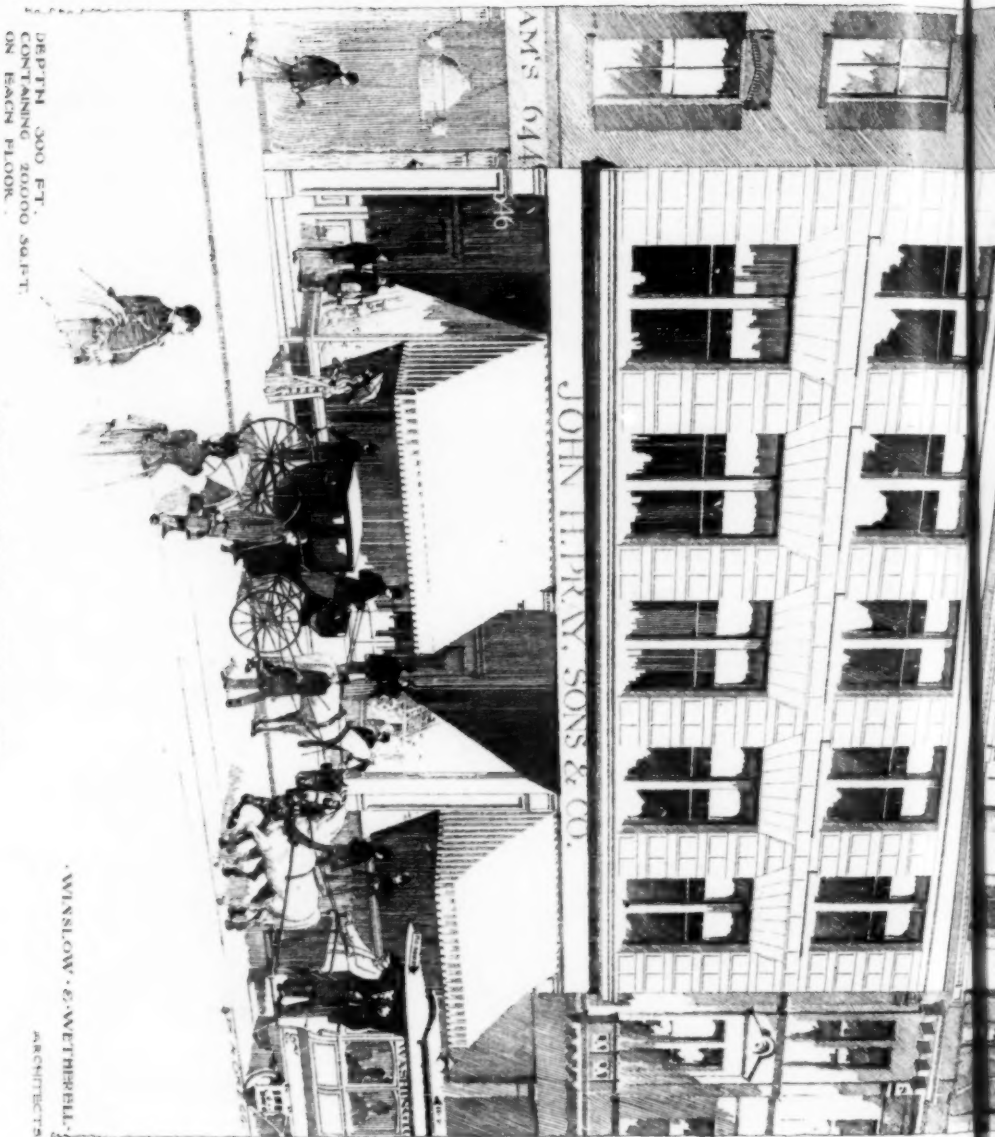
544-556 W. 27TH ST.

NEW YORK.



ALB STILLMAN.





DEPTH 300 FT.
CONTAINING 20000 SQ. FT.
ON EACH FLOOR.

TRADE SUPPLEMENT.

JOHN H. PRAY, SONS & CO.
CARPETS & UPHOLSTERY.
646 TO 608 WASHINGTON ST.
OPP. BOYLSTON ST.
BOSTON.

WINSLOW & WETTERBEH,
ARCHITECTS.

116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800, 802, 804, 806, 808, 810, 812, 814, 816, 818, 820, 822, 824, 826, 828, 830, 832, 834, 836, 838, 840, 842, 844, 846, 848, 850, 852, 854, 856, 858, 860, 862, 864, 866, 868, 870, 872, 874, 876, 878, 880, 882, 884, 886, 888, 890, 892, 894, 896, 898, 900, 902, 904, 906, 908, 910, 912, 914, 916, 918, 920, 922, 924, 926, 928, 930, 932, 934, 936, 938, 940, 942, 944, 946, 948, 950, 952, 954, 956, 958, 960, 962, 964, 966, 968, 970, 972, 974, 976, 978, 980, 982, 984, 986, 988, 990, 992, 994, 996, 998, 1000.

