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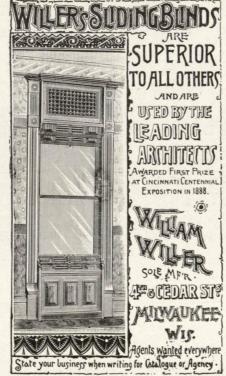
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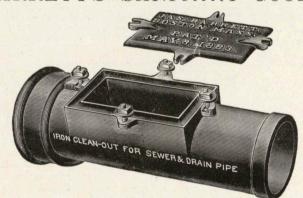
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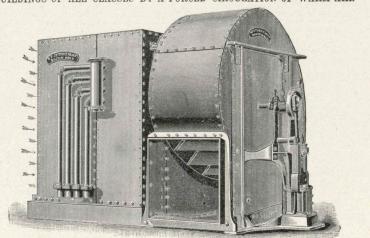
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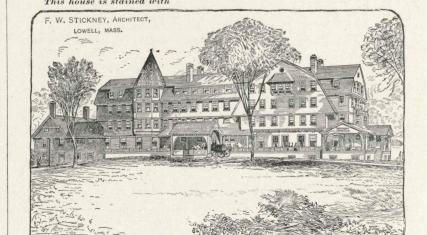


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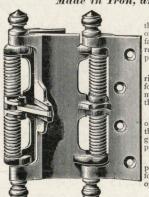
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NEAR the beginning of the book in which Mrs. Stowe gives an account of her visit to Europe at the line account of her visit to Europe, she tells her readers (I do not cite her words, not having the book at hand) that she was going abroad eager to see the famous works of art, and that being blessed with an excellent pair of eyes, and accustomed to trust them, she was about to form an independent judgment of the merit of these works, and not allow herself to be biassed by the opinion of critics and connoisseurs. Why should she not be able to tell good from bad quite as well as they?

Hawthorne, too, in his "Marble Faun" and his "Italian Note-Books" shows a similar confidence in his native faculty for judging of artistic excellence, and even after a residence of a year and more in Italy, and in spite of his modesty in other matters, pronounces confident verdicts upon the merits of pictures or statues, going so far even in one notable instance as to express his wish that Raphael had "painted the Transfiguration in the style of Gerard Dow, at the same time preserving the breadth and grandeur of his design!" Hawthorne would hardly have given weight to the opinion of the Iliad held by one who could not read Greek, or have trusted the judgment of the illiterate in respect to the merits of Virgil. But such a judgment would be at least as valuable and as trustworthy as his own, when he speaks of the "distressing frescos by Cimabue and Giotto" which make "his heart sink and his stomach sicken" whenever he sees them.

Yet if Hawthorne, a man of genius, of sense, and of real, if limited culture, could think and write in this fashion, we cannot find much fault with the average prosperous and self-confident American citizen for fancying himself as good a judge of a picture or statue as anybody, and competent to decide on the merit of an architectural design. He is accustomed to rely on his own judgment in practical matters, and is slow to admit that to appreciate a work of art correctly requires not only knowledge but also perceptions which he does not possess. Especially is this the case in regard to works of architecture, from their double nature as works of practical utility as well as of fine art.

In this condition of feeling, combined with general ignorance of the principles of the art and indifference to them, lies the chief

hindrance to the progress of architecture as a fine art in this country. Very few even of the most cultivated people have had the opportunity or have taken the pains requisite for acquiring a competent judgment in this art, and the judgment of these few, being often counter to the popular fancy, is little regarded. It would hardly be going too far to say that a competent judgment is rare even among our professional architects, and that a majority of them conform and pander to the popular taste because they have no better taste of their own.

There is no nobler and no more difficult art than architecture. As the art of expression of thought and sentiment in the most appropriate and beautiful forms of building, it requires a combination of the creative imagination with the practical understanding and with scientific attainment such as no other art demands. The understanding is not an uncommon gift; the knowledge may be acquired by industry; but the poetic genius in architecture is even more rare than in any of the other arts. And yet this genius, this creative imagination, is what alone gives to architecture its claim to be regarded as a fine art. And this genius is likely neither to be recognized nor approved by the community. On the other hand, the prospect is as fair as could be desired for the skilful architect who, without creative faculty, aims simply at the practice of a money-getting profession. As an art of construction and display, employing the magnificent resources of modern wealth and science in the erection of ingenious and costly edifices, architecture has never had a better field than the United States, with their thousand rich and rapidly growing cities, now offer.

But for the architect who is endowed with a creative imagination and a keen sense of beauty, whose profession is dear to him because of his love of his art, who recognizes the entirely peculiar and enormous power of architecture as an educational influence, an influence for good or bad upon the taste, and hence upon the morals of the community, — there is little in the condition of public sentiment from which he may draw inspiration or encouragement. He will see bad work generally admired, corrupting work approved. The moral problem with which he is confronted is a difficult one. He does not want to starve, and yet he is likely to starve unless he be faithless to his own ideal, and conform his work to the liking of the crowd. He must be a strong man if he does not give up his allegiance to the fine art. There is hardly one out of ten thousand for whom-

. "spread their nets in vain Thieving ambition and paltering gain; Who deem it happier to be dead, To die for beauty, than to live for bread."

But if one such there be, he may cherish confidently the inward satisfaction that in holding firm his faith in the essential principles of his art, and in endeavoring to embody these principles in forms of beauty that shall be the evidence of his inward vision, he is rendering to his generation a service than which no man is rendering a higher. For his work is the expression of principles which have to do with character; it is a permanent, visible witness to the truth that beauty and strength reside in simplicity, sincerity, proportion, and harmony. CHARLES ELIOT NORTON.

REPORT.

ROTCH TRAVELLING SCHOLARSHIP.

1887-89.

Mr. President and Members of the Committee for the Rotch Travelling Scholarship, and Members of the Boston Society of Architects:

In offering you a report of my scholarship term I will place before you a review of the work pursued in Paris in an atelier and in connection with the School of Fine Arts (École des Beaux-Arts), and a short narrative of my travelling experiences. The entire period of my absence from Boston was about twenty-seven months and a half. Arriving in Liverpool June 19, 1887, and leaving it Sept. 12, 1889, for America, the entire length of time in Europe was something less than twenty-seven months. Of this, seventeen months and a half were spent in Paris, the remaining nine and a half in travelling. Since my plans on reaching Europe were to commence work in Paris as soon as possible, I went almost immediately to that city, with an interval of but little over a week from the day of arrival in Liverpool, most of this time being spent in London. I then remained in Paris until the middle of August of the following year, during the time making three short journeys away from the city, amounting altogether to not more than two weeks. Then followed a period of about three months of travelling and a return to Paris for the winter, leaving it again March 2 for the final journey of a little over six months. Almost the entire time spent in Paris was devoted to work done in the atelier or for the School; and this study, taking as it did the greater part of my time and attention during the two years, was decided upon to be the principal point in my scholarship work. I entered an atelier - that of Monsieur Pascal - about a week after arriving in Paris, and maintained connection with it until the first of last March, - a period of twenty months. Presumably my experience here from first to last would very much resemble that of all students in a Paris atelier, and I am very glad to have passed through all the phases of their peculiar life. Although receiving certain favors on account of previous experience and the relatively short period of my stay compared with the number of years usually given by a French student to this work, I passed through on the whole the usual system of progress in atelier membership. At first the time was almost entirely occupied in assisting the other students in their work; for this was a very busy time, when the work of the summer was being finished up. This gave me a good idea of the method employed in the School and the life in an atelier. At the end of a month or so the School problems were finished, and the studio almost deserted, and for the succeeding three months I had the opportunity of quietly working for myself. November brought back most of the students, and the winter months passed with a crowded atelier. During all this time I carried on my own work, which was the study of current first-class problems at the School, and from time to time assisted fellow-students in theirs. About the first of the year, while continuing the usual work, I commenced to study at odd times what was necessary for regular admission to the School, and during the months of February and March took up the work more seriously, finally taking the examinations in March, and passing them. After entering the School I continued on at the atelier, but sent problems to the regular exhibitions and judgments rather than pursue the old course of independent work. Two problems, one of two months and another of one, occupied me in Paris until the middle of August, when I started on a three months' journey, to be mentioned in detail farther on. Returning to Paris in November, the four winter months of

November, December, January, and February were spent in the city, continuing the course pursued the season before.

To sum up what was accomplished in the time spent in Paris and the studio, besides a considerable amount of general work, I studied and rendered the following problems: The Executive Mansion, which was the subject of the scholarship examination of '86; a problem for a covered bridge connecting two buildings across a street; a farm school, with the necessary groups of buildings; a villa at Nice; a town market, with the application of a Roman order; another school problem illustrating an order; an observatory; a rendered drawing of the Monument of Lysicrates at Athens; and a measured and rendered drawing of an Asiatic base in the Louvre. All but one of these were sent as envois to the Committee. There was also a certain amount of work done in free-hand drawing from the cast and in modelling in clay, both of which were required for admission to the School. There was also time given to lessons in water-colors. Meanwhile there were opportunities to visit the great museums, which afforded material for sketching, the numerous churches, including St. Denis, a few miles outside, and the large number of buildings about the city worthy of architectural study.

Devoting as I did the greater part of my scholarship term to atelier work, it is from that I should expect to gain the greatest good, and in this I do not think I have been mistaken. The chief good gained was, doubtless, that insight into French methods of study and criticism which came with each day's work, not only from the advice and opinion of the patron, but the mutual discussion among the students.

Among the advantages gained by regular membership in the School was a certain item of additional seriousness given to the problems, since they were intended for exhibition and judgment, and the opportunity to work on the same ground with other students and under the same conditions and with the same benefits. The use of the library at all hours when opened, privilege to draw from cast with criticisms from a professor, and other opportunities in connection with lectures, etc., are among additional advantages worthy of mention.

I think all Americans who have ever studied in Paris will always retain a feeling of gratitude towards the government of this great school for the privileges offered to foreigners to enter on an equal footing with the native Frenchmen. The testimonial recently offered by the Americans in the establishment of the American Prize is a most commendable acknowledgment of these favors, and as such has been very kindly received by the French students. At the time of the first award of the prize, which took place last winter while I was in Paris, there were everywhere expressions of appreciation and gratitude to those who had made the gift; and the good-will that has always existed between the French students and the Americans was strengthened by the event.

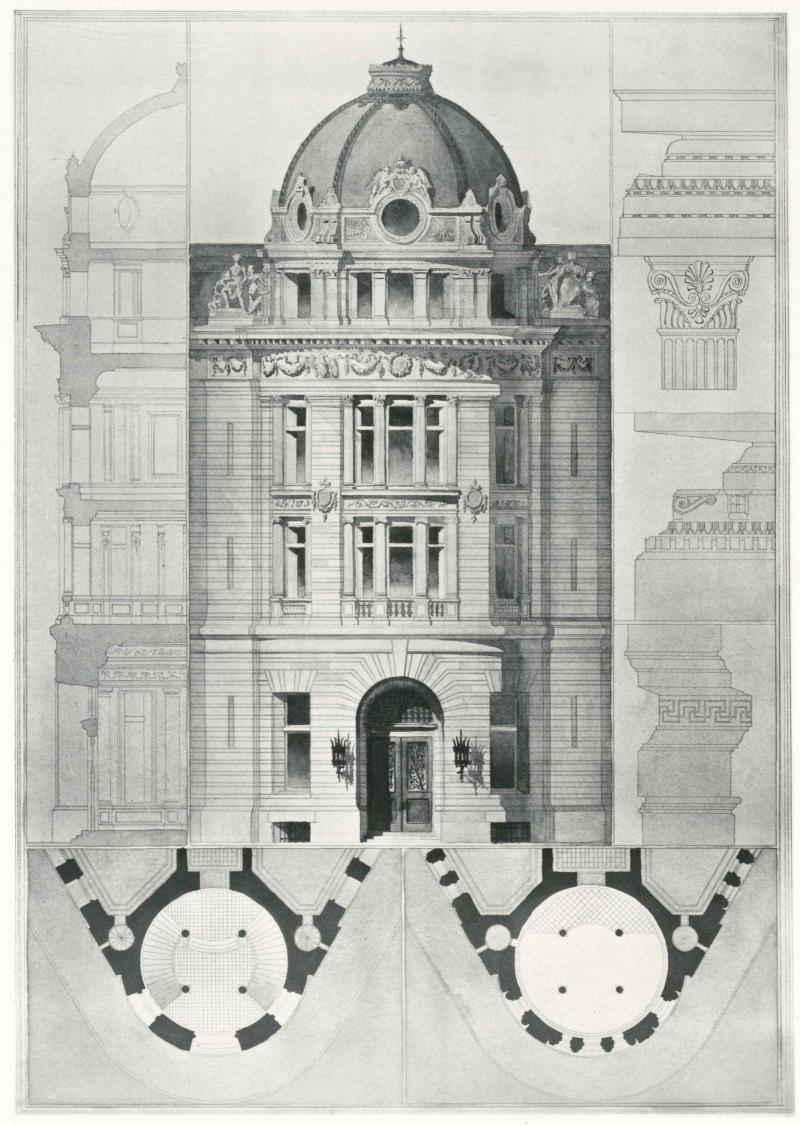
In closing this subject I would like to speak of the indebtedness I feel toward my patron, Monsieur Pascal, for his kindly interest and ever ready advice; and I shall always recall with pleasure my acquaintance with him and the friendship formed among fellow-students in this atelier.

The period devoted to travelling covered in all about nine months and a half, and, although taken at different times during the two years, may best be reviewed all together and apart from the Paris work. The time was spent as follows: about two months were given to the French country, one month to Spain, four to Italy, about three weeks to the journey to Greece and Constantinople, five weeks to England, a week to Belgium, the same along the north coast of Africa, and another in Switzerland.

My first experience in travelling, after the winter's study, commenced with a trip to Pierrefonds, made in the early spring of '88 in the company of three fellow-students in Paris. A short journey to Compiegne and a pleasant walk through the forest between that place and Pierrefonds brought us to the great chateau and the little

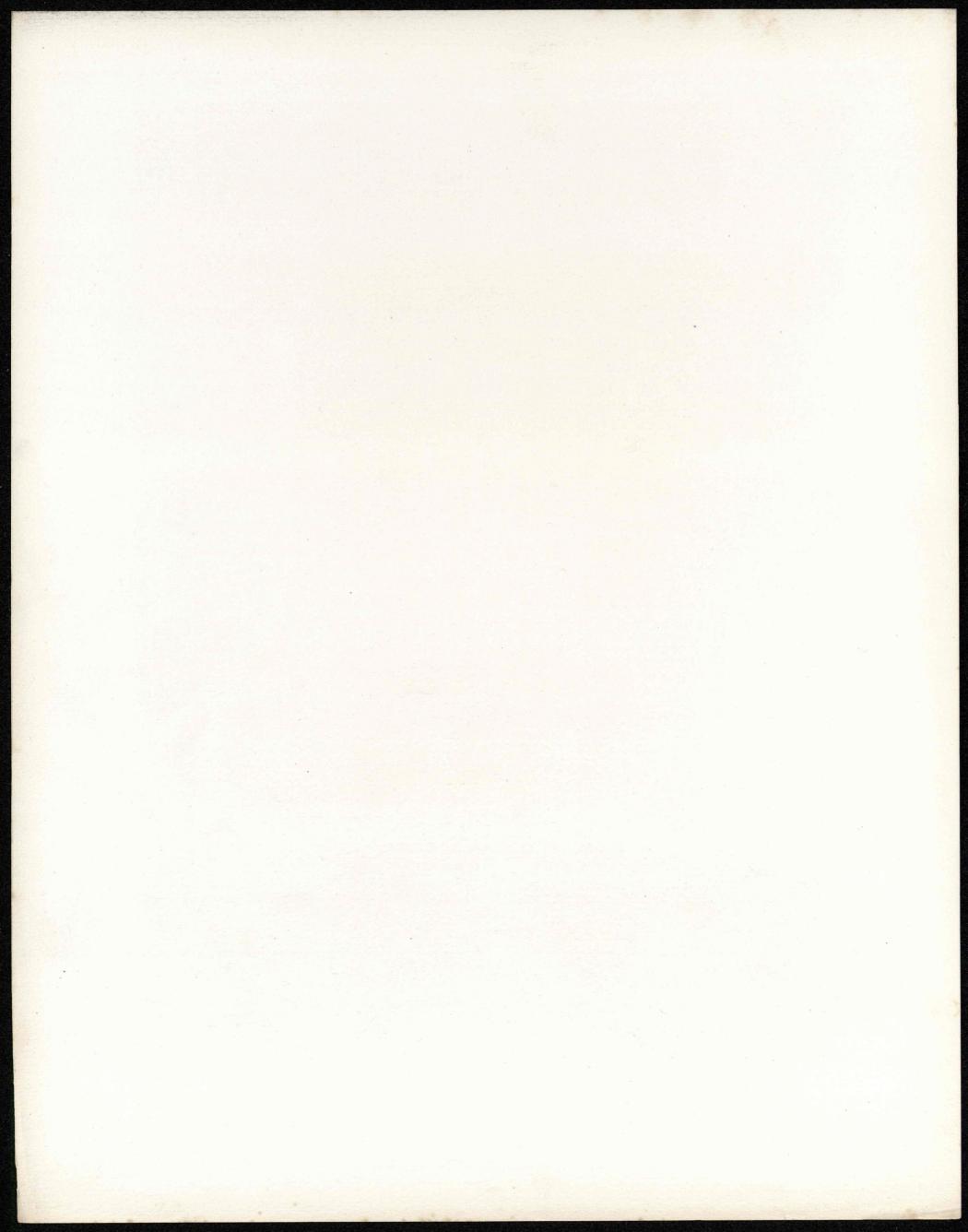
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FIRST MENTION.

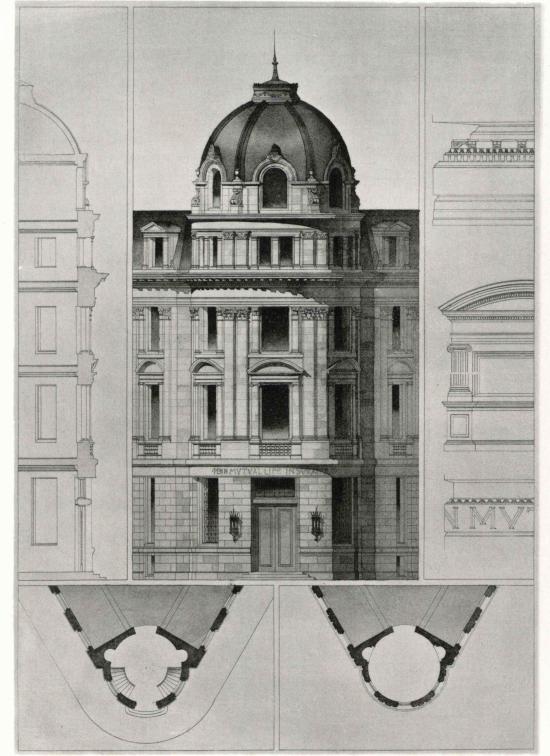
HUBERT G. RIPLEY.



TECHNOLOGY ARCHITECTURAL REVIEW.

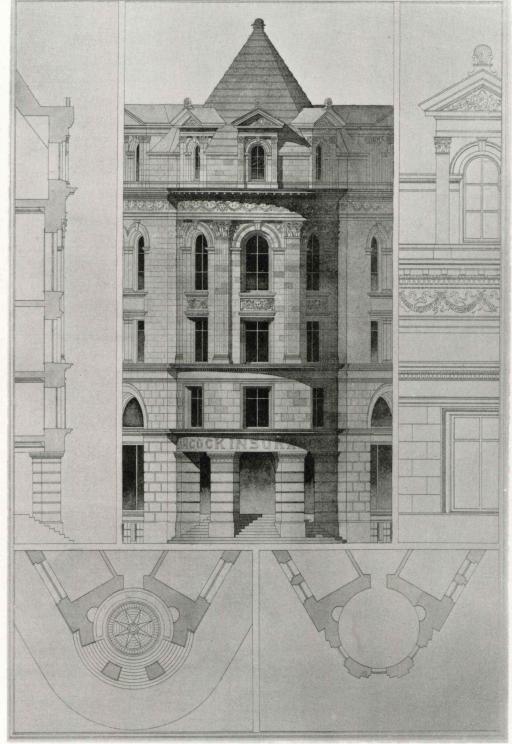
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THE M. I. T. ARCHITECTURAL SOCIETY.



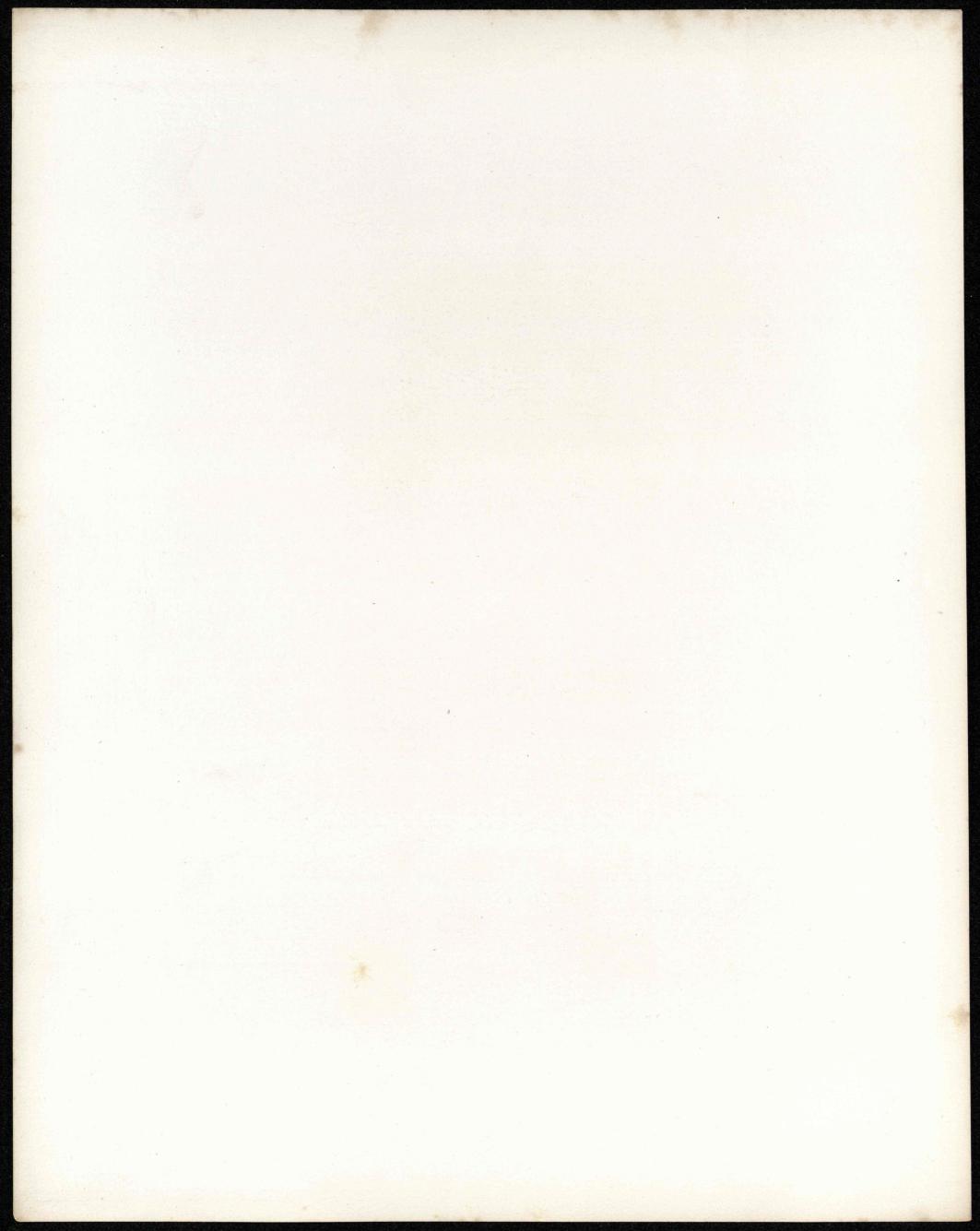


THIRD MENTION, LYMAN A. FORD.

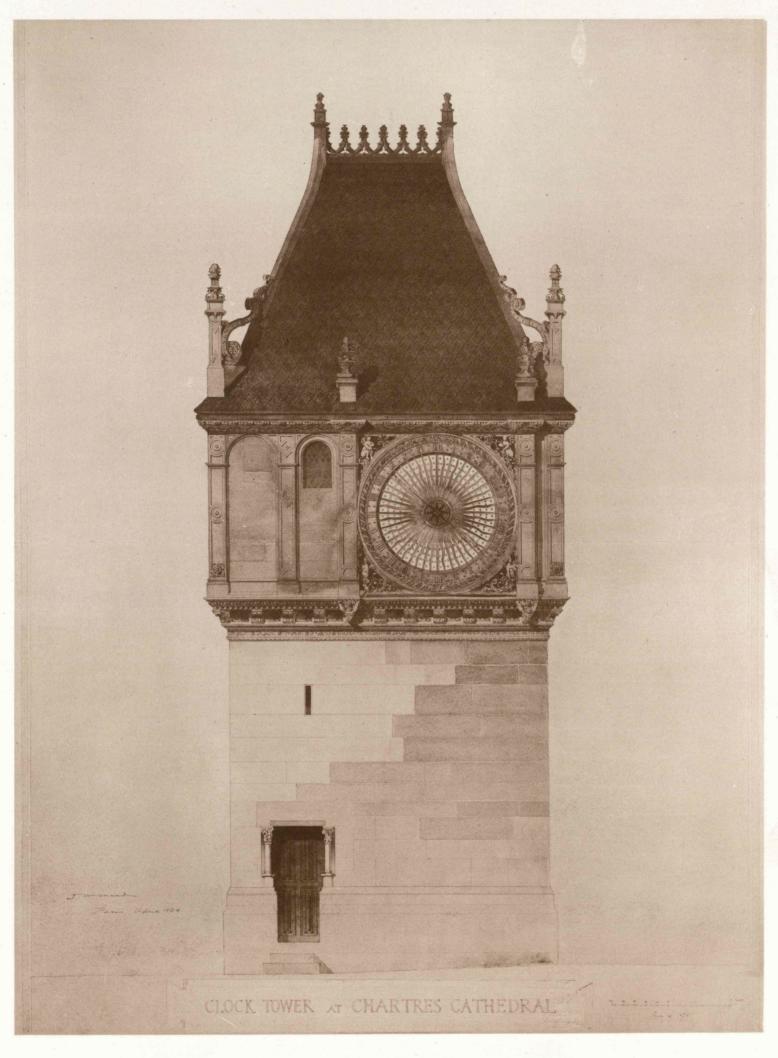


E. I. THOMAS.

TREATMENT OF A ROUND CORNER.



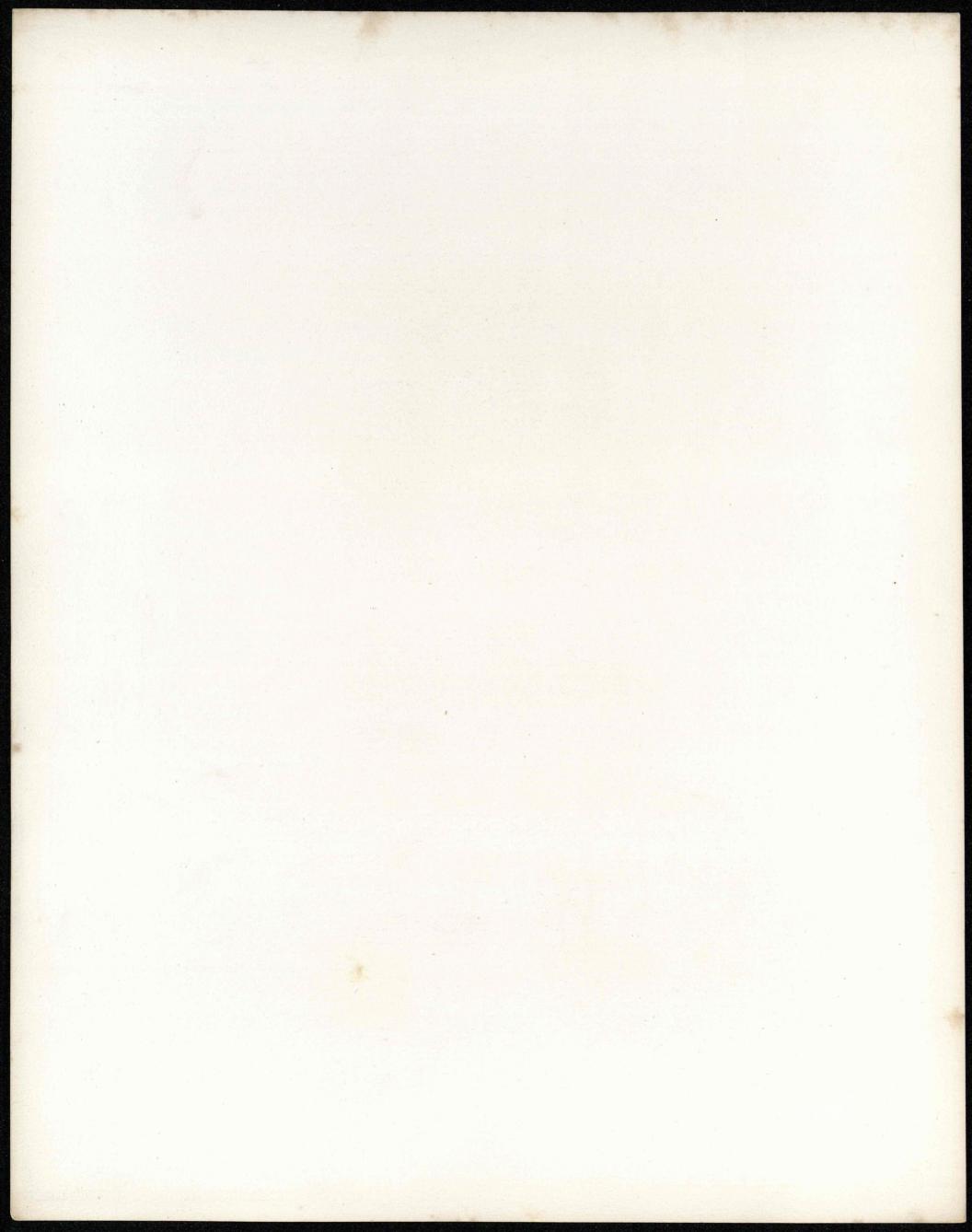
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ROTCH TRAVELLING SCHOLARSHIP ENVOL.

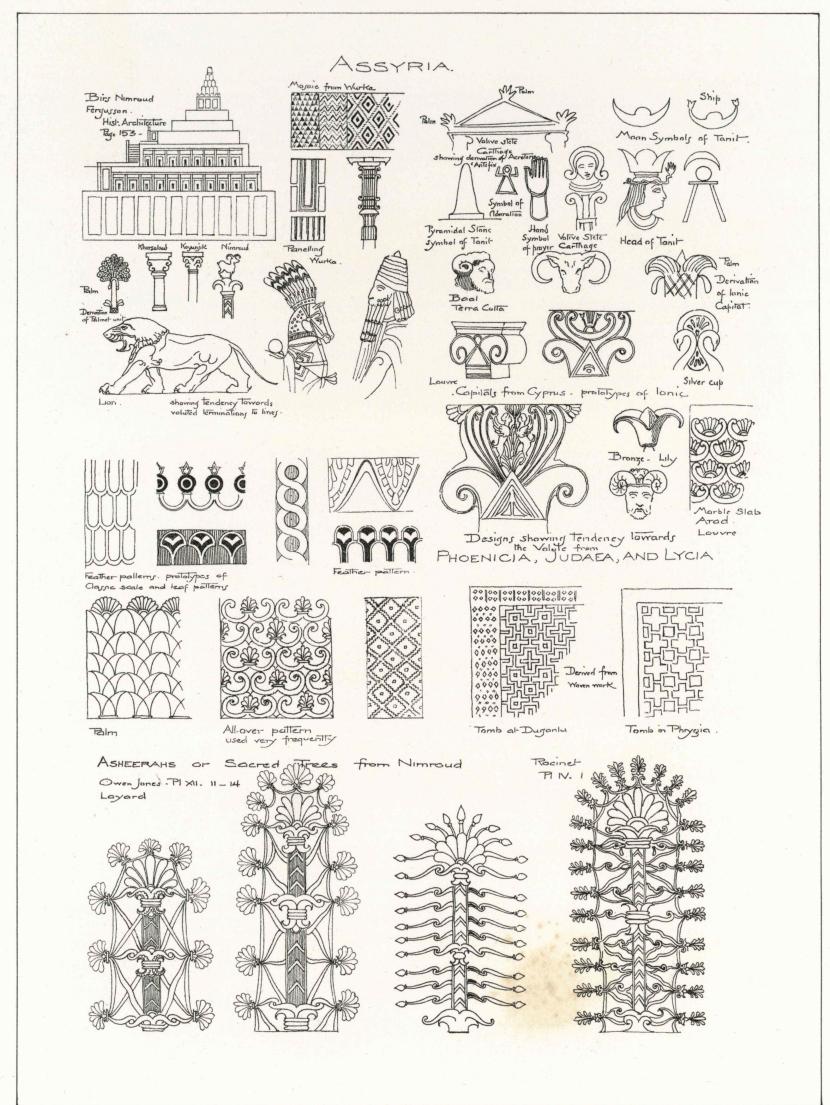
CLOCK TOWER AT CHARTRES CATHEDRAL.

S. W. MEAD.

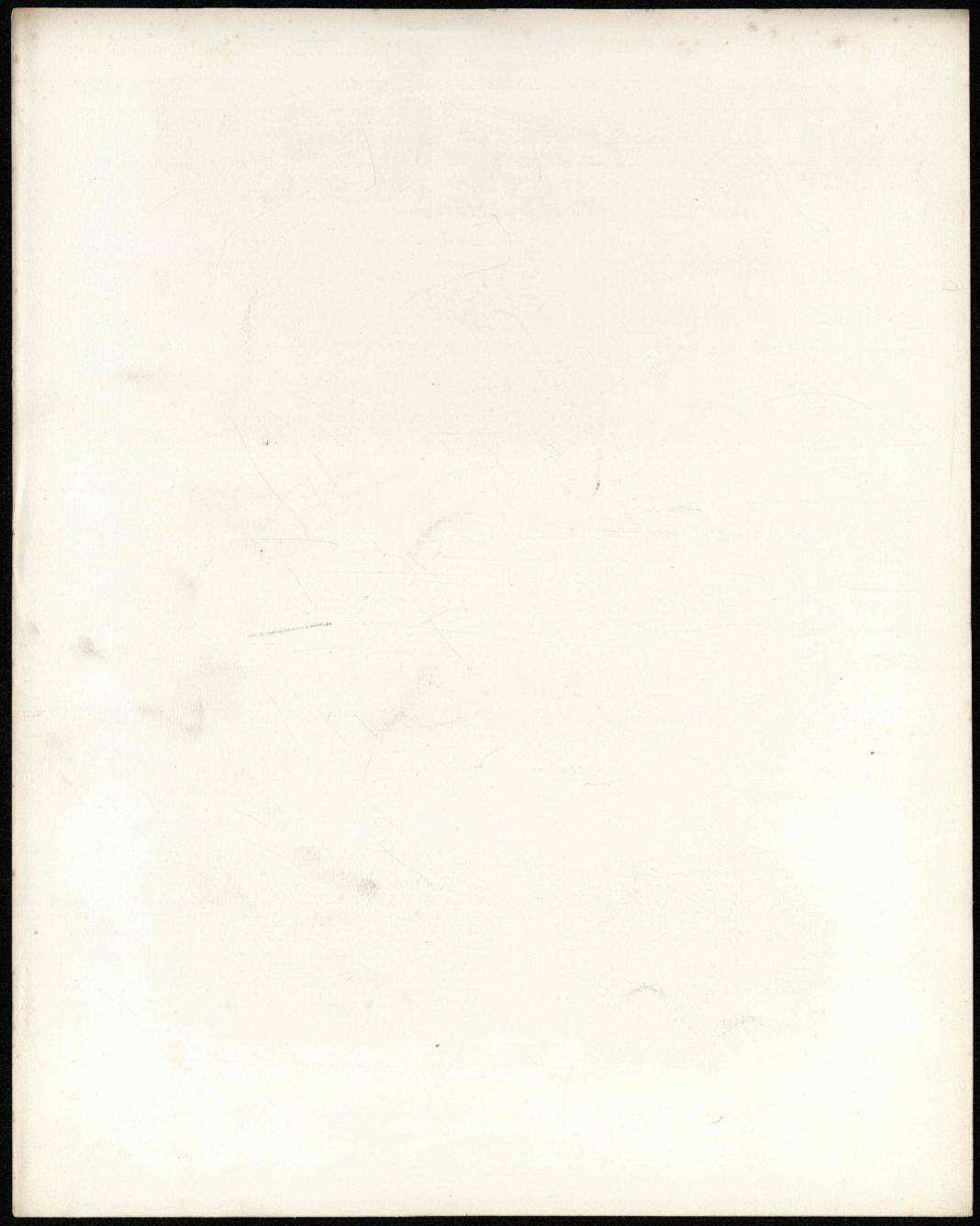


TECHNOLOGY ARCHITECTURAL REVIEW.

THE M. I. T. ARCHITECTURAL SOCIETY.



Heliotype Printing Co. Basto



town at its foot. One could hardly do better than to begin his acquaintance with the chateaux of France by a visit to this noble example. As we now see it, skilfully restored by Viollet-le-Duc, with its picturesque courts and halls and elaborate system of defence, and even a faithful reproduction of its old interior appointments and decorations, it gives a wonderfully correct and pleasing idea of a typical mediæval castle in its strength as a fortress and beauty as a mansion, and in the characteristic beauty and force of its detail and ornament.

Not long after, in an intermediate time between two problems at the School, I made a journey of ten days to Northeastern France and Belgium, visiting Reims, Laon, Brussels, Louvain, Ghent, Bruges, Ypres, Amiens, and Beauvais. This little trip, as well as affording a good opportunity to study comparatively the grand old cathedrals of Reims, Amiens, Laon, and Beauvais, gave me a very good idea of the civil and domestic work in the later Gothic style found in the cities of Belgium. Apart from the undesirability of a direct copyism of this, it impressed me at the time that there were many useful hints contained in it directly applicable to our own domestic work, and that there was a kind of republican and individual spirit in all of it that expressed the character of the times in which these buildings were built, and that spirit being not unlike that of our own times, their way of expressing it would not be inappropriate for us.

There was still another short excursion taken before leaving Paris, and this was a short trip to Sens and Fontainebleau, taken in company with a fellow-student, the third Rotch scholar. At Sens we found much interesting work in and about the cathedral, and at Fontainebleau there was abundant material in the chateau for notes and sketches of detail.

August 18, I started on a three months' period of travelling in France and Spain, this time with another student from Paris. Rouen was the first town visited, and the wealth of Gothic work here interested us keenly. From Rouen we travelled westward through Normandy, visiting Lisieux, Caen, Bayeux, Coutances, St. Lo, Avranches, Mont St. Michel, Pontorson, and Vitré. Among the many great churches of Normandy, the cathedral of Coutances, for its size, impressed me as favorably by its interior as any we saw. The different levels of nave, choir, and choir aisles, the beautiful tracery between the chapels, and the arrangement of coupled columns in the choir seemed to me particularly pleasing. From Vitré we went into the Loire Valley, by way of Laval and Angers, continuing on to Saumur, Tours, Loches, Chenonceau, and Azay-le-Rideau. This is a district well known to all architectural students, and is perhaps the richest in France in material for sketching and in work particularly adapted to our tastes and needs. With a somewhat hurried journey, I was fortunate in being able to take away some of these pleasing and valuable bits in my sketchbook. Of the chateaux that I saw, Azay-le-Rideau pleased me best, with its well-proportioned façades and elegant exterior and interior detail. At this point my friend was obliged to leave me, having arranged for only a short vacation from Paris, and so I proceeded on alone, remaining so the rest of my journey, - just two months from this time until my return to Paris in November. If any one here has ever travelled alone in a foreign country, he will second me, I am sure, in the advice to all others never to do it, for it is not only discouraging and lonely in the extreme, but one's capacity for appreciation and even for work is sadly reduced. From the Loire Valley I travelled south, first reaching Poitiers, a city particularly rich in the Romanesque style of the district. Among the things that made Poitiers so interesting were the numerous Romanesque towers, particularly that of Radegonde, and some peculiarities of planning in the churches of the same period. There were two good examples of choirs raised well above the nave, - a most effective arrangement, especially for a ritual service, giving great prominence to the principal part of the church.

¹ Mr. George F. Newton.

Continuing south from Poitiers, I visited in succession Angouleme and Perigueux, with their domed churches, Bordeaux, St. Macaire, Montauban, Toulouse, Carcassonne, — most interesting as a remarkably preserved example of a mediæval fortified town, — Castelnaudary, Castres, Albi, Moissac, and Bayonne. It might be well to speak here of the brickwork one finds in the Toulouse district, particularly at Albi, the cathedral in the latter place showing that dignified construction can be executed in this material where the attention is given to forming well-proportioned masses, confining the detail to those points where stone is used, and this hardly appearing except about the portal and other parts near the eye.

From Bayonne I entered Spain, going first to San Sebastian, and then proceeding to Burgos, Medina, Salamanca, Madrid, Toledo, Cordova, Seville, Granada, and Malaga. This Spanish trip, which occupied in all only a little over one month, was, on the whole, one of the most profitable and enjoyable of any part of my travels. For the limited time that it was possible to devote to this most interesting country, a very good idea was obtained of her best monuments and of her characteristic styles, — the Moorish in the South, and the adapted Romanesque and Gothic in the North. Sketches where time would allow, and notes and memoranda where the opportunity for further work failed, with an occasional note in color, helped to put in more lasting form the many pleasing impressions gained from this journey, and to record some of the numerous valuable suggestions contained in these monuments.

From Malaga to Marseilles was a journey of a week and a day, principally by steamer on the Mediterranean, and was one of great interest, giving, as it did, a little acquaintance with Tangier, Gibraltar, Oran, and Algiers. Although these few days in North Africa did not afford me an opportunity for any serious study of architecture, yet there were many valuable hints to be obtained from the old cities with their distinctively Eastern character. The modern portion of the city of Algiers is distinctively French, and as such does not demand any more attention than any modern French town; but there are still remaining in the older parts several mosques and a part of a palace and any number of streets preserving their distinctive Arabic character, - narrow, nearly covered above by the projection of the houses, crooked so as to keep out the sunlight, and with walls entirely white and almost without windows. There is not much to attract one in the exterior architecture, although the palace still retained several interesting bits, notably a frieze of tiles on the walls and tower. The mosques were quite interesting, and under the French power they are accessible to Christians who are willing to remove their shoes on entering. I went into two of the mosques, and was allowed to walk about alone and see what I wished. The Moorish style prevails throughout, but they are very plain, decoration being used but sparingly and confined mostly to the sacred niche. The walls are white, and the floor is covered with a carpet, with a dado of straw matting everywhere about three feet high. There is a noticeable resemblance in the plan of one to that of the mosque at Cordova, and while this is simply a series of cross aisles, there is a distinct system in the arrangement and in the management and decoration of the arches above.

On arriving in Marseilles there was but a week remaining before it was necessary to be back at Paris in time to take the November problems at the School; and this time was devoted to short visits to Arles, St. Gilles, Nîmes, Lyon, and Dijon, where were to be seen some of the best Romanesque works in France.

On the second of March of the present year I left Paris with a friend for a journey in Italy and the East. Owing to the earliness of the season, nothing could be done in the French country towns on account of cold weather, which fairly drove us south; so we devoted only eight days to the journey to Marseilles, which still gave us an opportunity to make short visits to Orleans, Bourges, Montluçon, Clermont-Ferrand, Issoire, Brioude, Nîmes, and Tarascon. This is a district wonderfully rich in good work, and I was

very glad to gain even this slight acquaintance with it. The church at Issoire was about the finest example of the Romanesque of the Auvergne that we saw, and in many respects was superior to Notre Dame du Port at Clermont, - among other things, in the color of the stone-work and the richness of the capitals of the choir. From Marseilles we went to Nice, and then entering Italy visited successively Genoa, Pisa, Lucca, Florence, Fiesole, Prato, Siena, Rome, Tivoli, Naples, and Pompeii, from Naples taking a steamer for the Eastern trip, after which we returned to Italy to visit the east coast and the north, which will be described further on. In this journey down the west coast we made two principal stops, at Florence and Rome, remaining in the former two weeks and a half and in the latter city one month. The work accomplished here was principally the sketching of details, in which these cities are so rich. The mere looking up and examining critically the great number of important buildings and works of art that are everywhere at hand demands a large proportion of the time, but at the same time yields the most important returns.

Leaving Naples May 13, we took an Italian steamer for Messina, and there changed for another for the Piræus, touching at Catania, in Eastern Sicily. We were on the water four nights, coming in sight of Athens in the afternoon of the fifth day, clearly seeing the Acropolis with its ruins while yet a considerable distance out at sea. An hour or so more, and we were at anchor in the Piræus. Our plans at this time deferred our stay in Greece until our return from Constantinople, and we sailed away again the next day, after but a few hours' visit to Athens. The sailing of the steamers limited our time, giving us but two days in Constantinople, which nevertheless enabled us to get a good idea of St. Sophia - which we saw both by daylight and lamplight—and to make a round of sightseeing in the city which brought us to a number of fine bits of Byzantine and Arabian architecture, notably a beautiful fountain, and some excellent early Christian mosaics. Our first visit to St. Sophia was in the evening, when, not being observed by any one in authority, we actually entered the body of the church with our shoes in our hands, before being discovered and put out. They did put us out soon, however, politely but firmly, showing us the way to the gallery where Christian visitors were allowed, and where the whole mosque can be seen very well. The lighting of the church was a prominent feature, and the time being a Mohammedan feast, this was seen at its best. The arrangement of lamps is very effective, there being great numbers placed on a level so that they form a kind of plane of light, above the worshippers but below the galleries. Besides this, there are lights along the cornice and at other points, so that the entire illumination is brilliant. We could walk about the galleries and examine the beautiful detail in the capitals and ornament, and what remains of the old mosaics, some of which are fine in design and color. One is not permitted to stay here as long as he wishes, however, and after a while is asked to leave; but the next day we were enabled again to visit the mosque and to go about the main floor for an hour or two and examine it in detail. While this did not admit of any drawing or sketching, I was able to make a number of notes, principally about the colors and decorations, to supplement and explain a fairly complete set of photographs, and fix the impressions gained by the visit. The Byzantine detail seemed to me some of the most beautiful work I had ever seen, and as something I would like to see adapted to whatever purposes could come within appropriate use. The proportions of the interior are grand, although on the whole they did not seem very churchlike. The richness of the coloring is very pleasing. Of the exterior little can be said; it follows logically the form of the interior and is perfectly consistent with Eastern architecture, but the difficulties in the way of adapting anything of the sort to a Christian Byzantine church seem almost insurmountable.

Edgar A. Josselyn.

BOSTON, 1889

To be continued.

DEPARTMENT OF ARCHITECTURE.

MONTHLY COMPETITION.

THIRD YEAR REGULARS AND SECOND YEAR SPECIALS.

Programme: THE TREATMENT OF A ROUND CORNER.

It is supposed that a block formed by two streets meeting at an angle of sixty degrees is to be occupied by a large commercial building, bank, or life-insurance building.

The corner is to be treated as a decorative feature, and may be one of the entrances to the building if desired. It is stipulated that this corner shall be only so far occupied as shall be included within the arc of a circle whose given radius is eighteen feet, and which is tangent to the two streets. It is possible to make the plan on either a circular or polygonal arrangement, but in any case it must include enough of the building to show clearly the manner of joining. The structure is to be no less than three stories high, exclusive of a strong basement, and is to be built of rich stone, with its architecture effective and dignified.

Required: Preliminary sketches showing plan of outside walls and elevation taken perpendicularly to the bisecting line of the angle; scale, one eighth of an inch to the foot. Finished drawings, comprising principal elevation on a scale of one quarter of an inch to the foot, and two plans on a scale of one eighth of an inch to the foot. Principal details on a scale of one inch to the

E. LÉTANG.

JUDGMENT.

First First Mention Hubert G. Ripley. Second First Mention . . . Lyman A. Ford. First Second Mention . . . Elmer I. Thomas. Second Second Mention . . . Ernest M. A. Machado.

Twenty-two designs in Competition.

NOTES FROM CRITICISM.

It is presumed that a student of architecture, before undertaking a problem in design like that given in the Programme, has passed the first steps to fit him for such an undertaking. He has drawn his orders, and some examples to give him an idea of style; has had exercises in construction and the projection of shadows. But has he studied the antique with an understanding of the true spirit of those glorious old forms that have stood the test of ages? Has he felt the power of expression in the Doric for refinement as well as support and mass, that his basement may possess all these qualities? Has he found in the Ionic the grace and reticent ornament that he would give to his first story, and in the Corinthian the greater lightness to lead naturally to the crowning features of his design? If he has given long and patient study to these forms, and possessed himself of their inward meaning, he will find that they have given him a feeling, a consciousness, of graceful line and proportion like that the true artist derives from the study of the human form, and he will have acquired a sense which will enable him at once to perceive the harmony or discord in any work brought to his notice.

work brought to his notice.

In the present design (that of the First Mention), though there is much merit, there is not sufficient evidence of this sort of study, but rather of a superficial preparation such as one would derive from a reference to the work of ficial preparation such as one would derive from a reference to the work of other students and books on modern classicism, resulting in a design devoid of any individuality. To criticise it in detail, one would say that the basement was out of harmony with the superstructure, too massive and severe for what comes directly above it. Though the disposition of the leading features of the upper stories is good, the windows and their details are too crowded. The channelling of the lines of masonry throughout makes them too conspicuous, detracting from the more important details. The roofing of a circular plan with a dome is a good feature in such a situation, but the effect of its fine lines is much weakened by the introduction of the round attic windows with their trivial decoration.

The design which received the second First Mention is in its general features dignified and simple, but in detail poor and weak. The coupled pilasters above the basement are slim and crowded, and the attic dormers cut the dome awkwardly.

dome awkwardly.

The design receiving the first Second Mention is badly proportioned in its masses. The basement is too open, giving a sense of want of proper support for the superstructure. The entresol is inharmonious, breaking the continuity of the lines above and below.

EDWARD C. CABOT, Critic.

CLOCK TOWER AT CHARTRES.

PLATE III.

ENVOI OF THE ROTCH TRAVELLING SCHOLARSHIP.

DRAWN BY S. W. MEAD.

This little structure is built at the foot of the north, or new, tower of Chartres Cathedral, and is rectangular in plan, the principal elevation, which our plate reproduces, facing the north. It is just to the east of the corner of the north tower, with which it is connected by a prolongation of the west wall. Directly behind the clock tower and in the bay next to the north tower, is an entrance to the north aisle of the cathedral.

The lower part of the structure dates from the thirteenth century, and the upper part, containing the clock, was built at the beginning of the sixteenth century. The roof is of stone, laid in courses, with the shell ornament cut upon it. The clock face is painted directly on the stone, and is a piece of brilliant coloring. The height of the tower is about fourteen metres.

THE STUDY OF DECORATION.

(Continued from No. 3.)

AT a period contemporaneous with the last of the Pyramid Kings of Egypt, the country immediately around the two great rivers flowing into the Persian Gulf was occupied by three different tribes of people. Furthest to the south, toward the Gulf, was the country of the Akkadians, comprising the kingdom of Babylon and the site of Susa; further north, upon the steppes, were the Kossæans; and north of them, at the foot of the mountains, the Assyrians. The Akkadians had formed and held the Babylonian empire, at times under Semitic rule and at times under Caucasian. Occupying the fertile plains between the rivers, they were naturally an agricultural people, little disposed to warfare, and resembling the earlier dynasties of Egypt under the kings of Memphis. The Kossæans, living amidst barren steppes, depended upon perpetual forage for their existence, and developed into a race of warriors, turbulent and little capable of united action. The Assyrians, mountaineers and hunters, hardy and intrepid, acting in concert as is usual with small tribes, had all the qualities from which could be predicted ultimate sovereignty. The thousand years between 2300 B. C. and 1300 B. C. is occupied by the descents of the Kossæans upon the Akkadians, their repulses, their alliance with the Assyrians, the Kossæan conquest of Akkad in 1500 B.C., and the final assumption of power by Assyrian kings one hundred and fifty years later. Doubtless this overthrow of the southern kingdoms -which have been also called Chaldaean monarchies, from the tribe which later occupied the land - can be ascribed to the exhausted state to which they were reduced by long-continued wars against the victorious Egyptian kings of the eighteenth dynasty. About the year 1100 B.C. Assyria reigned over entire Western Asia. From 900 B. C. to the destruction of Nineveh (606 B. C.) and the fall of the Assyrian empire, the reigns of the kings are well determined. To this period belong the palaces at Nimroud, Khorsabad, and Koyunjik; and the great cities of Babylon and Nineveh and even Egypt fell under Assyrian sway. At length the Medes in the North were forced southward by the Scythians, and, joined by a mutinous governor of Babylon, swept through Assyria, and razed it from the earth. The cities and the nation were blotted out, and became subject for history alone. To the earlier and agricultural period belong the peculiar pyramidal brick templetombs in stories, which are the prototypes of the modern Buddhist temples, and which were repeated in stone under the later empires. Like all work in the Euphrates plain, where stone was not to be found, these temples were built of sun-dried brick, with sometimes a coating of glazed brick, or else a vitreous glaze produced after the building was erected. The stories were colored with the symbolical colors of the heavenly spheres, to whose worship the temple was dedicated, as follows: lowest story, black, to Saturn; second, orange, to Jupiter; third, red, to Mars; fourth, yellow, to the sun; fifth, green, to Venus; sixth, blue, to Mercury; and upper story white, to the moon, which in all Assyrian worship is pre-eminent, while in Egyptian worship the sun holds first place. These stories

are decorated with panels, perpendicular and long, and the parapets of the stories have the usual battlemented pattern.

Upon the topmost platform of these temple pyramids was the sanctuary itself, probably at first a mere fire floor and later a thick-walled cella surmounted by a pavilion or a pedimented roof. The Birs Nimroud, near Babylon, is a typical example (see Fergusson, vol. 1., page 153). The successive receding stories seem absurdly exaggerated stylobates - and probably suggested the stylobate to the Greeks, as Egyptian temples were destitute of any such method of elevating the sanctuary. The stories diminished in height upward, and the staircases form always an important factor in the design. Most of this work was built of colored glazed brick, and whatever patterns were used were necessarily a sort of brick mosaic. Actual mosaic is to be found for the first time in the walls of Wurka. The reeded panels are decorated with zigzags and diagonal lines, and the plain wall surfaces with diamonds of mosaic, formed of numerous small cones embedded in plaster, point inward; the designs are unmistakably suggested by woven matting hung on walls. Panel treatment is markedly perpendicular, as with the Egyptians, and is merely a succession of square-cut sinkings, one within another. After 900 B. C., during the height of Assyria's power and splendor, Nineveh becomes the chief centre of art. Near the mountains, in a situation where stone can easily be procured, the brick forms of Babylon are repeated in Nineveh in stone. Brick covered with stucco is superseded by veneering sheets of alabaster and of metal, fastened by bolts with bolt-heads of rosettes of lotus. The art of the Egyptian and Greek was lavished upon the temple; that of Assyria added to the luxury of the palace. Egypt and Greece used columns; Assyria used walls. The decoration of Egypt is symbolic; that of Assyria is merely narrative. The walls of these great palace courts, surrounded by the apartments of the harem and of the numberless courtiers and servants, have sculptures of conquest, of the chase, and of festivals, carved along their bases in vast processions; above are successive belts of ornament forming a cornice, the lowest and broadest decorated with the sacred tree, and those above with the lotus, borrowed from Egypt, no longer symbolical, but become only a decorative unit. Where columns are used to support the roof of earth they have multiform caps of wood or derived from wood forms. Gigantic winged bulls guard the entrances on either side of arches leading into further courts, with elaborate pavements and sculptured walls. These great masses of building were raised upon mounds above the city, surrounded by walled enclosures, and approached by vast stairways. But with all this luxurious and barbaric splendor, the result must have been far inferior to that of Egyptian temples. There was none of the great apparent strength and stability of the hypostyle columns, none of the mysterious depth of shadow of the great temple aisles; and, more than all, there is a lack of refinement in detail. It is characteristic of a cultivated nation in developing its art to tend more and more in forms, and in mouldings especially, toward concave surfaces. The more barbaric the designer, the more convex and rotund will be the work. With the Assyrian this is unusually noticeable. A nation that is at first nomadic, then warlike, and always commercial, with a religion that is manifestly of an unintellectual character, can hardly be expected to appreciate the finer qualities of art.

All lines show a tendency to terminate in a scroll. Upon the figures of men or of animals, beards and manes curl into spirals; wherever accent is desired, the line, instead of having vigor or subtlety of curve, coils into a volute. Surfaces are rounded outward; sculpture is rotund; there are few, if any, sharp arrises. When delineation of plants or of trees is attempted, it is with a rudeness that evinces but little appreciation of the actual form. The single exception to this crudeness of representation is in the figures of lions and of horses, both of which are drawn with masterly skill. With the tendency toward the spiral forms, it would

be natural to expect the prototype of the Ionic capital in Assyria, and a double cap of this description is often used, though it is probable that the Greek developed the perfect cap from a Phœnician example. The Palmet - in this case probably derived from the Palm-is much used, and is repeated and developed into the Ashurah,—the sacred tree or grove. The lotus, both in face as a rosette and in profile, is constantly used; but the units of decoration among the Assyrians, as among the Greeks, were few. We find the first use of tiles, of mosaics, of sheets of metal used as a covering with ornamented bolt-heads and of panelled walls of sheets of alabaster and marble. The coloring is to a great extent confined to yellow and blue, with a little green and a still smaller quantity of black and of white. As in Egyptian work, there is no gradation of tone, and the colors are pure and strong. In the mosaics there is a little red used. Detail is usually vigorous and large in scale, often crude, and ornament is overdone and covers too large a proportion of the mass it decorates. Assyrian art throughout is manifestly a borrowed art and an art in decadence. Its virtues it owes to Egyptian influence.

PHŒNICIA.

On the eastern coast of the Mediterranean, a narrow strip of land about one hundred and fifty miles in length and some fifteen in width, between the range of Lebanon and the sea, was destined to be the seat of the great commercial cities of the East. This land was fertile, but incapable of supporting a large population by agriculture alone; and its people, active and daring, ventured upon voyages of discovery in search of commerce, and became the masters of the carrying trade of the olden world. All along the coast arose populous commercial cities with great harbors, - Tyre, Sidon, Byblos, - from which sailed vessels to the Ægean, the Adriatic, and as far as the pillars of Hercules, and beyond them to Britain, and returned bringing tin, Spanish silver, and merchandise of all kinds, so that Phœnicia, small in extent, became great in importance and wealth. To the Phœnicians is ascribed the discovery of glass and the invention of the alphabet, and however apocryphal may be such tales, it is certain that they point toward ascendency in matters of material welfare. Absorbing from all nations, Phœnicia equally gives to all nations, and forms the link between the arts of Egypt and Assyria and the growing art of Greece. The Egyptian knew Phœnicia as the land of Keft, - that is, the land of the palm, — and the use of the palm as a decorative motive is very prevalent. At the apex and at the ends of the pedimental form that makes its appearance when the flat roofs of Egypt and of Assyria give way to the pitched roofs of Syria and Greece, palms are fastened as emblems of victory, and become the prototypes of the Greek acroteria and antefixæ. The Egyptian palm-cap, used as an ante, gradually becomes the voluted cap of Byblos, from which it is but a step to the fully developed Ionic.

The religion of Phœnicia has at the head of its mythology, not a sun-god, as in Egypt, but a moon-goddess, Tanit, Astarte. The moon symbols, the circle, and the crescent are consequently frequent. The chief gods are Baal and Ammon, represented with rams-horns. The palm bending over, the crescent, and the ramshorns all have in them a very full curve with a tendency toward the volute. In the art of any people there seems to be extreme vitality in a prevalent curve; once adopted it becomes universal, is inherent in all forms, and creates the chief characteristic of the art of the time until reaction sets in and its use is abolished. In Egypt the subtle, long, concave curve is in the ascendency; in Assyria and Phœnicia the volute. The prows of boats bend into it; the favorite all-over pattern is full of it; and voluted caps, however rude, are usual. The use of animals' heads as units of ornament begins to make its appearance, the sacrificial bulls' heads being used on the temples. Of the Astarte symbols there are several. The goddess was originally worshipped as a large conical and probably meteoric stone. From this worship sprang a number of conical forms which are peculiar to Phœnicia. The crescent and the full orb form the eye of divinity. The Phœnicians used color more in the manner of the Egyptians than of the Assyrians, and were especially famous for their Tyrian dyes, which ranged from scarlets to rich purples.

JUDÆA.

About 1000 B. C. the Hebrews, having been brought out of Egypt and conquered a place for themselves from the Philistines, reached the height of their prosperity under the reign of Saul, David, and Solomon, each of whom reigned forty years. Under Solomon alone did art develop, and then only in an imitation of the Assyrian work that was rife at the time. A love for natural forms, however, led the Jew to adapt the lily and the vine to decoration; and in Solomon's temple, in the capitals and roofs of cedar of the house of the Cedars of Lebanon, both were used. The so-called lily which is mentioned by Josephus is very probably an adaptation of the Egyptian lotus cap. The almond and pomegranate are also mentioned in the Scriptures as decorative units. This is the first mention of the pomegranate unit which in modern Oriental work is the favorite unit. The ceilings are decorated and plated with gold, presumably with the dark red of the cedar as a background. This use of dark wood, picked out with brilliant color or with gold, later becomes very frequent in the East. Of the earlier work we can only surmise the effect by the later, which undoubtedly has descended in a direct line from it; and in the ceilings of the Arab mosques, and the wooden ceilings of the Moors in Spain, and especially in the synagogues at Toledo, are to be found schemes of decoration which probably have their antecedents in the roofs of Judæa and of Assyria. For the Jews are a people peculiarly retentive in their customs; and, in fact, the religions of Egypt, of Judæa, and of Greece each developed an individual set of hieratic architectural and decorative forms, which it was incumbent upon each nation to continue and develop, and these forms became so firmly implanted in the art of the nation that a fundamental change from them never suggested itself in the mind of the designers. As far as Judæa was concerned, its decoration was, to quite an extent, borrowed from Egypt and from Assyria; but it soon takes an individual character which is most easily discoverable, perhaps, in the ceilings and in the tendency to employ natural forms. The use of the vine, as the symbol of the wine of life, the spirit, is found in all Jewish work. It appears constantly in other Oriental decoration, but never with the redundance that is given to it under the hand of the Hebrew. The leaves especially are carefully modelled, and though kept flat and conventionalized in composition, are evidently studied from Nature. The contrast of the broad surface of the vine leaf, alternating with small detail of the bunches of grapes, give just that element of sudden difference of tone that is sought for in so many decorative motives, that is, in the egg and dart, the beads and fillet, the garlands, and in the acanthus itself; and the tendrils, with their spiral movement, give a certain playfulness to the outlines, which if not overdone (and it is very easy to overdo this motive) give a charm of detail and play of line that is most effective. The angels brooding over the Ark of the Covenant resembled doubtless the winged figures upon the walls of the Theban temples and the Nineveh palaces, - the wings denoting sovereignty more than supernatural qualities.

In Lycia there is a set of rock-cut tombs, with imitation of wooden forms in stone, that have a peculiar all-over pattern on their façades, probably derived from woven patterns; such is the so-called tomb of Midas. There is little to be said of this work; it merely gives a decorative tone to a surface, and in this is interesting. It follows the usual system of all-over repeat on a basis of squares, and may have had the ground colored differently from the pattern.

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[To be continued.]