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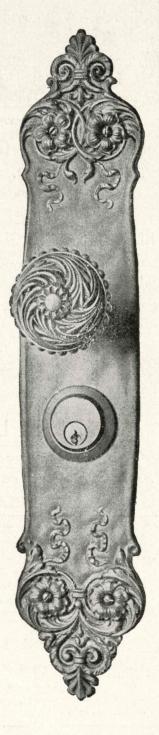
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ROTCH TRAVELLING SCHOLARSHIP.

A SCHOLAR'S LETTER.

Editors Technology Architectural Review, Boston :

DEAR SIRS, - The enclosed letter from Mr. HENRY BACON, Jr., now abroad under the Rotch Travelling Scholarship, may be of interest to those of your readers who follow the results of this excellent possession for young architectural students; and I send it, thinking that you may feel inclined to give it a place in the REVIEW.

I am very truly yours, EDWARD C. CABOT, Chairman Committee, B. S. A.

NAPLES, May 23, 1890.

DEAR MR. CABOT, - The first thing I must tell you is that I realize how delinquent I am in not writing till now about my plans and work. With this, I think it will be the best plan for me to start with the beginning of my stay in Europe and let you know what I have seen and done up to the present time.

I left New York on a "Red Star Line" steamer, bound for Antwerp, on May 22 of last year; arrived in Antwerp in due time, and in a driving rain was carried in a cab past the old cathedral, which under the influence of wet weather seemed to look older and mouldier than it really was. At any rate, being the first old building that I had ever seen gave it such a flavor that the sight of more ancient things has n't yet erased it. I will let Greece and her temples do it. I stayed in Antwerp two days, and as the skies cleared up and the sun shone brightly, I enjoyed all the sights from the "Musée Plantin" to the "Zoo." From Antwerp I went straight through to Paris.

I was strongly urged by Mr. Chamberlin and others to try the July examinations for the School of Fine Arts and spend the larger part of my two years there. I was n't altogether sure that it was the best thing for me, but I wanted to find out from the American fellows, then in the school, just what conditions would be coupled with a "greenhorn's" entrance, how much "nouveau work," the facility or difficulty of mention getting, and how long a time was necessary to work on the "orders" before being allowed to "plan." I don't remember now what I did n't try to find out, but I gave up the idea of settling down in Paris for two years.

I then devoted the greater part of my stay there to the Exposition. It was there that I first saw the French rendering, and it was always a source of inspiration each time that I saw it. I am writing now of the architectural drawings, the school and projected work and restorations being exhibited in the Palais des Beaux-Arts, and the drawings of French historic monuments in the Trocadero. Then there were the Louvre and Cluny Museums, which I appreciated fully.

August 19, with two Americans from the school, I left Paris for a trip down the Loire and up into Normandy. I shall never forget the glorious time that we had in visiting the old châteaus and houses in the Loire district. The weather was perfect; no rain, and cool enough. As I look back now to those monuments, the happiness of situation and the harmony of the architecture with the situation, the expression of stateliness or domesticity seems increased. I don't believe that my enthusiasm adds anything to the attractiveness of those beautiful châteaus, for my companions were as enthusiastic as I. Blois and Azay-le-Rideau will always hold a warm place in my heart. It was on first seeing them that I saw that photographs carried shot only so far and no farther. Chartres Cathedral was seen under the most favorable conditions, the two towers showing themselves clear and crisp from every point of view, trees fresh and green, and the musty interior lighted with strong rays through those glorious windows.

We went West as far as Angers, and then came back to Le Mans with its famous cathedral, thence to Vitré, Mont St. Michel, Coutances, St. Lo, Bayeux, Caen, Lisieux, Evreux, Nantes, arriving at Paris on September 29. In October I spent nearly every day at the Exposition, seeing things I had n't seen, and enjoying over again the things I had seen. I also attended all of the school exhibitions. November was spent in the Louvre and Cluny, and I made then the *rendu* of the last.* I intended to make one of the St. Geneviève library, but did n't. This last building seems unsympathetic, a fault, I think, of many of the French modern buildings. I think they are too apt to put grace and severity at opposite extremes. Take the street façade of Francis I.'s part of the Château at Blois. While that should n't be as severe as libraries, temples, or justice halls, it seems to me that there is a right blending of the two features. The Exposition buildings were entirely frivolous, and they were splendid; but it is seldom that one wants things entirely frivolous. I took water-color lessons for one month in Paris and am afraid I did n't learn much. I also spent six hours a week with a French teacher, which helped me a great deal.

On December 8, in company with Codman, — a Boston fellow who has since entered the school, I hear - I left Paris in a snowstorm, for Italy, stopping at places that I shall mention as I come to them. The first stop was Orleans; two days there satisfied me, and we then went to Bourges, which, with its fine cathedral and "hôtels," presents a fine chance for study. Unluckily for us, drizzling rains set in, which, added to the very cold weather, kept us from drawing. Owing to the wet, all of the buildings were showing most brilliant colors. From Bourges we went on to

* See PLATE I.

Nevers, Riom, Clermont-Ferrand, Issoire (there the snow was two feet deep), Aurillac, and Albi. We stayed at Albi three days, and I wish I could go and stay there six more. The Spanish look of the town surprised me. Our first view of the cathedral was at night, which circumstance, you may imagine, did n't detract from its appearance of grandeur. We went on to Toulouse, and there Codman and I went on our respective ways, he to Pau, and I to Carcasonne. From Carcasonne I went south by way of Narbonne to Perpignan and Elne. Up to the time that I arrived at Elne, I had suffered from the very cold weather. When I walked up to the cathedral there, and was shown into the cloister, the warm sun lighting up the soft stains on the white marble, roses blooming in the court, the beauty of the architecture was made more beautiful. Elne is one of the objective points in a student's campaign over here. I would n't give it for half a dozen towns in Italy, of course letting me pick out the towns. On leaving Elne (I stayed there two days, in the cloister all the time), I began to feel the approach of the influenza, whose premonitory symptoms I had been experiencing on my way down from Paris. However I stopped at Arles and Nîmes, and arrived at Marseilles on December 27, where I laid up, swallowed quinine, and took the boat on the 29th, for Leghorn. Here wet weather set in, and as I was fearing a relapse, I only spent one day in Pisa, and one in Lucca, and went on to Florence to settle down in a room and feel at home. I was in Florence five weeks; Lord, with his companions, arriving a day or two after I did. We had there very good weather and we worked all the time, mostly measuring. The collection of old architectural drawings in the Uffizi library was most interesting. For instance, after having measured up the Strozzino palace, I saw an original design for it by Benedetto da Maiano. It is for this collection that I want to visit Florence for another month next winter, though I shall spend some of that time in visiting the suburbs that I have n't yet seen. But I am anticipating. Florence is such a fine city that I shall not feel satisfied with myself unless I give it as much time as I spent at Rome. There are many things there yet that I want to draw, and I am looking forward to the pleasure of reseeing. I intend to draw out in color the decoration in the loggia of the Bargello. I have some of it already, but I want it all. Have you ever seen the castle of Vincigliata, about two miles beyond Fiesole? We all went out there one day, and it was fine. It is now owned by Mr. Leader, an Englishman, who has restored it in very good taste, - decorated vaults, good old furniture, weapons, and household implements. It gives one a complete idea of mediæval living. There was also some good stained glass and frescos.

On February 8, Lord and the others and I, left en route for Rome, stopping at Siena, Orvieto, Viterbo, Toscanella, and Corneto. Of all these places, Toscanella was the most enjoyed. We stopped there five days and measured both of the churches. We arrived in Rome on February 19, and started in on the wearisome road of sight seeing. I say wearisome, because there was such a sight of those sixteenth-century churches, into which I often went to find something good, but did n't. Then Rome is so big and everything is so scattered, that one feels as if he were travelling from town to town in order to see things. The Roman ruins though, impressed us all; also the campaniles. We all took watercolor lessons from a very good man, Donadoni, who was as cheap as he was good. After seeing all we wanted, I began to sketch and measure, the Cancelleria occupying the most of the time. We measured one of the campaniles. The size of the Basilica of Constantine was so imposing that I started in with a few measurements, and finely concluded to try a restoration. Armed with a letter from the consul, I obtained access to the German library, which is full of old books, some bad, some good, but nearly all of them interesting. I obtained all the data that I could. By the way, a very good book for the Rotch scholar to read, is J. H. Middleton's "Rome," obtainable at Spadoni's circulating library. I found it very instructive, and it was handy to refer to when questions arose in regard to old building operations, etc.

On May 7, I arrived in Naples, — a city which at first sight disgusted me, and in which I would n't stay now but for the Museum. Lord and our mutual friends arrived later, and some of us went down to Pompeii on May 12, the others joining us later. I have to bring in the others, as the work I have done and the plans I have made have been influenced somewhat by the companionship. There have been hot disputes and oppositions in the party, but I think that has added spice to what might have been otherwise monotonous travelling. I don't agree that "a bad companion is worse than none" while over here, and besides we were n't bad to each other all of the time.

On Pompeii, I feel as if I could write as much again as I have already written to you of other things, and that will give you some idea of its impression on me. I was there eight days. If one has to be lonely, let him go to Pompeii, as there, loneliness is an enjoyment. For my part, I preferred to wander about the deserted streets, and sit around in the old peristyles all by myself. The place seemed to require it.

I made several water-colors and measured two of the houses, of which I shall restore one. A big section through the forum and Temple of Jupiter, showing the Curia and other buildings on the other side, would have made an interesting *rendu*; but I wanted to spend my time on the dwellings. We all went up Vesuvius, which was "working" more than common. I had no idea of the fissures and the awfulness of the hot blasts which issue from them. The ground was so hot that it burned our feet through our shoes.

Last Tuesday I returned to Naples and the party began to separate, some going to America, and Lord going North to Pisa, etc., on his way to Paris, England, and home. I am alone here, and am working every day in the Museum, "taking off" details. Monday I shall begin to copy some of the Pompeian decoration in order to get material for the restoration. There is such a lot of it though, and it's all so good that I hardly know where to begin, and I'm afraid I won't know where to stop. But I don't feel in a hurry when doing work like this, so don't believe I'll ever think that the time spent on it was wasted.

I am now planning to spend two weeks here, more or less, according to the work I shall do, and then make a short stay at Capri to recuperate, that I may endure the hot weather in Greece. I am very curious to see those beautiful grottos there. I have now begun on my future plans, and the ones made for the past were changed so often that I cannot myself place much confidence in the solidity of those before me. But as they are now, so I write them to you.

About June 10, I shall sail from Brindisi to Patras. Before then, however, I am expecting a letter from my brother, giving me advice about the places to visit. Anyway, I will go to Olympia and remain there a week or more. There was a good restoration of it in the Exposition by a *Grand Prix* man; also a splendid actual state drawing. Whatever places in Greece I may decide to visit, I intend to stay one entire month in Athens. So far as Greece is concerned, this is all I know now of what I shall see there. I shall surely make drawings (*rendus*) of at least one temple; and I want to understand, as far as I am able, the pure spirit which prompted the work there. I have an inkling of it in some of the bronze details in the museum here. In Rome there were too many Roman copies of the originals floating around; they almost ruined Praxiteles ideals.

From Greece I shall sail for Constantinople; then I shall return to the Dardanelles, where I will draw out from the measurements and data the buildings that I have mentioned. In addition to this I want to read there. I remember the books in America which I used to read only at the sacrifice of desire; I feel now that they will be a source of enjoyment. I have some works on Grecian architecture, and I shall send for some general histories. It is a

2

pity that I don't know the history of the things I see, - construction, etc. It was on returning to Paris from the trip down the Loire that I realized the deliciousness of Viollet-le-Duc's dictionary. However, all the more chance that my second visit over here will be the pleasanter.

Towards fall, I shall return to Italy, Ancona, Assisi, etc., to Florence, see Northern Italy, and by May 1, or later, be in Paris. From there I want to take a long trip in the northeast and around Rouen. I should say that I shall see the Yonne district before reaching Paris. There were some fine drawings in the Exposition, of Vezelay, Sens, Autun, etc.; they gave one more of an idea of what to expect than a month's reading could ever do.

So much for plans.

As I take up the regulations for the holder of the scholarship, I realize how little I have said to express my guiltiness. It is needless to say that I will in future keep you posted with regard to my movements. "The student must send, at least, four envois annually, which are to be the property of the trustees, and each one of the drawings so sent, must be clearly marked, 'property of the trustees." As to this clause, I have sent the required number of envois, but none of them were marked "property of the trustees." I am willing that any four should be chosen by the trustees. I suppose there will be no difficulty on my return in being allowed to copy the ones chosen.

I think I have already taken up too much of your time and will soon close. I had some time ago an indistinct idea of going into Dalmatia, but it has fallen through and I have decided to spend all of my time in Greece, Italy, and France. I have inquired carefully of the fellows who have travelled in Spain (Lord and friends), and think I should be sorry if I spent the time necessary to see anything there, away from France or Italy. With England it is another thing. Only six days from New York; if I live long enough I shall surely see it, and if I don't, the seeing will not have done me any good.

If I could express the debt that I owe to the beneficence of the founder of the scholarship, seconded by the care of the trustees, I should feel that this letter was ended properly. That I am sure that I am expanding and growing in knowledge, will I hope give those in whose hands the care of the scholarship is left cause for satisfaction. I remain, Yours truly,

HENRY BACON, JR.

HÔTEL DE CLUNY. PLATE I.

ENVOI OF THE ROTCH TRAVELLING SCHOLARSHIP. BY HENRY BACON, JR.

Historical Note Translated from the French of E. du Sommerard.

THE Palais Romain of Paris, known as the Palais des Thermes, whose great hall - the majestic ruin of a colossal building - still stands, with its immense semicircular vaults, in the midst of the imposing ruins surrounding it, was built in the first part of the fourth century. Writers have almost with one accord attributed its construction to Constantius Chlorus, father of Constantine, and they seem justified by the long sojourn which this emperor made among the Gauls. It is the oldest monument of Paris, and to-day constitutes the only vestige of the grand buildings raised by the Roman emperors upon the soil of ancient Lutetia.

The Hôtel de Cluny, built in great part upon the ruins of the Palais Romain, dates from the second part of the fifteenth century. It is also one of the remains of the magnificence of old Paris, and the only specimen remaining intact of the beautiful civil architecture of the second Gothic period in France, associated with the charming fantasies of the early Renaissance.

These two buildings, of different ages, the last ruins in Paris, the one of the Gallo-Roman era, the other of an epoch eleven centuries later, and which by their juxtaposition present to the world a perchance unique comparison of these two periods of architecture, were eminently suited to become a museum of historical monuments. There is no precise document giving either the date of construction or the name of the founder of the Palais des Thermes; nevertheless, it undoubtedly existed at the time of Julian. It is certain that this prince had fixed his residence there, and was there proclaimed emperor by his troops in A. D. 360. The traces of the sojourns which the Emperors Valentinian I. and Valens made there are equally well established.

Later, after the long commotions resulting from the invasion of the barbarians, the Roman power and its allies were forced to yield to the valor of the Franks; and the dwelling of the Caesars became the residence of the kings of the first and second dynasties up to the time when, transferring their residence to the city, they built at the point of the island the great structure known as the Palace. From that time the building, called Palais des Thermes, or Thermes de Paris, became the Old Palace; and the lands which belonged to it, and which, extending towards the Seine, took in all the shore up to the church of St. Vincent (now St. Germain-des-Prés) were parcelled out and divided successively by the new city wall, built during the reign of Philippe-Auguste.

These lands were covered with buildings, which, as well as the Palace itself, passed into the hands of different proprietors, until the acquisition by Pierre de Chaslus, about 1340, in the name of the order of Cluny, of the whole of this domain as it exists to-day.

During the hundred and fifty years which rolled by before the construction of the Hôtel de Cluny by Jehan de Bourbon and Jacques d'Amboise, we are ignorant as to what use these buildings were put. It is, however, true, that at the end of the fifth century there remained of this great edifice - completely intact three centuries before - only the halls which we see to-day, and which have kept the name of Palais des Thermes.

At this epoch the Hôtel de Cluny had just been built upon a part of the Roman foundations, and the ancient halls still existing were kept as dependencies by the abbés of Cluny, who remained proprietors of the whole domain up to the end of the last century. It was then that, following the conversion of religious property to national ownership, the remains of the Palace of the Caesars were put on sale and disposed of at a low price; and some years later the great hall, rented to a cooper, was granted by imperial decree to the hospital of Charenton.

In 1819 the city formed the project of establishing in the Thermes a museum to contain the Gallic and Roman antiquities discovered in Paris. This project was abandoned as soon as conceived, and it was only in 1836 that, thanks to the provision made by the Prefect of the Seine upon the proposition of the municipal council, the remains of the Roman Palace returned to the domain of the city of Paris.

From the time of its construction up to the end of the last century, the Hôtel de Cluny, continually placed at the disposition of the French kings, and inhabited for three centuries by the most distinguished hosts, never ceased to be the property of the order of Cluny. From the first part of 1515, a short time after the completion of the work, Marie d'Angleterre, widow of Louis XII. and sister of Henry VIII., chose Hôtel de Cluny for her residence, and (upon the invitation of Francis I.) came there to pass the remainder of her sad life. The chamber inhabited by this princess has kept up to this day the name of châmbre de la reine Blanche. A few years later this building was the theatre of an event which has given it a still more royal consecration, - the marriage of Madeleine, daughter of Francis I., to James V., King of Scotland.

Among other illustrious personages whose sojourn at Hôtel Cluny is well established by common report, may be mentioned the princes of the house of Lorraine, and among others the Cardinal of Lorraine, his nephew, the Duc de Guise, and in 1565, the Duc d'Aumale; the nuncios of the Pope, in 1601; the illustrious abbess of Port-Royal-des-Champs, in 1625; and finally, the astronomers Lalande and Messier, in 1748 to 1817.

3

At the end of the last century, from the first years of the revolutionary storm, Hôtel de Cluny, like all other belongings of the clergy, was made national property. It is from that time especially, that the principal mutilations of its architecture date. Later, in the first part of the nineteenth century, the members composing the administration of the department of the Seine relinquished *la mâison de Cluny*, which passed successively into the possession of M. Bandot, physician and ex-legislator, then finally to M. Leprieur, one of the deans of the modern library. It was at this last epoch, in 1833, that an indefatigable amateur of the monuments of past centuries, M. du Sommerard, chose this old manor to serve as a depository for the precious collections of objects of art of the Middle Ages and the Renaissance, brought together by his efforts during forty years of research and study.

At the death of this celebrated antiquarian, and upon the wish expressed by the Commission of Historic Monuments, the Minister of the Interior, M. le Comte Duchâtel, presented a bill for the acquisition of this beautiful collection. The City, falling in with this noble plan, offers as a gift to the Government the ruins of the Palais des Thermes. The Sommerard collection and the Hôtel de Cluny were acquired by the State, by virtue of the act of July 24, 1843. From that day, the communication which formerly connected the ruins of the Palace of the Caesars and the residence of the abbés of Cluny has been re-established. The galleries of the Hôtel, disfigured for two centuries and transformed into modern apartments, have been restored to their original state ; the sculptures and carvings have been cleaned and restored ; and the museum was opened to the public, for the first time, on March 16, 1844.

The principal façade of the Hôtel de Cluny consists of a great building flanked by two wings which extend forward to the Rue du Sommerard. Its entrance gate, formerly surmounted by a richly carved Gothic crest, still keeps its broad band decorated with ornaments and figures carved in relief. Along the top of the wall ran a row of battlements, judging from those preserved; they have been restored, as well as the *chemin de ronde* giving access to them, and the entrance gate has again taken its first aspect.

The principal façade is crowned by an open-work gallery or balustrade, behind which rise the high dormer windows richly decorated with carving and which show in their tympanums the coats-of-arms, insignia, and devices of the family of Amboise. Towards the middle of the façade rises a tall tower, à pans coupés, which is crowned by a gallery similar to that on the other parts of the building. Upon the walls of this tower are sculptured in relief the attributes of Saint-Jacques, the shells, and the pilgrims' staffs, allusions to the name of the founder, Jacques d'Amboise.

The wing to the left of the entrance is pierced by four pointed arches, which give access to a hall communicating with the Thermes. This hall, the walls of which are of Roman construction, was a dependency of the Palace. Its old covering was torn down only in 1737, and in these last years it has been replaced. The opposite wing, on the ground floor, contains the kitchens and offices.

DEPARTMENT OF ARCHITECTURE. MONTHLY PROBLEM.

FOURTH YEAR REGULARS AND THIRD YEAR SPECIALS. *Programme*:

AN HOTEL TO ACCOMMODATE THREE HUNDRED GUESTS.

BASEMENT to contain boiler-rooms, kitchens, servants' halls, store-rooms, bowling-alleys, baths, rooms for bell-boys, porters, etc.

First story to contain large entrance hall, with offices, public and private parlors, public and private dining-rooms, billiard-room, smoking-room, writing-room, etc. Remaining stories to be devoted to suites and single rooms. The building is to be situated on a side hill, the land pitching one foot in twenty. It is to be around three sides of a central court, the open side towards the descent of the hill and towards the view.

The main entrance is to be at the back of the court.

There should be all necessary staircases, elevators, entrances, and exits.

In the upper story there should be a small hall capable of being used as a theatre, and a portion of this story should be an open-air summer restaurant, connected by staircases and lifts with kitchen below.

Materials, brick and stone.

Absolute classic proportions and details need not be necessarily adopted. One or two towers can be used in the design.

Rendered drawings required: plan of first story and front elevation at a scale of one sixteenth of an inch to the foot; plans of two other stories at a scale of one thirty-second of an inch to the foot; one perspective in line only.

C. HOWARD WALKER.

First Mention HUBERT G. RIPLEY.

PLATES II., III., IV. NOTES FROM CRITICISM.

THE general block plan adopted in this case is a very familiar one, and at the same time a perfectly natural arrangement for a large hotel, permitting of a strongly marked central feature and two easily balanced accentuated groups, the parlors on one side and the billiard, card, and wine rooms on the other; while in the upper stories it is possible to have long, well-ventilated corridors, with continuous rows of moderate-sized sleeping-rooms and a minimum of unlighted corners. In general, the plan may be said to be well balanced and arranged. The office is not fortunate in its location, being too much on one side for any practical efficiency; and it would seem as if the grand parlor ought to be more closely in connection with the main corridor; but the scheme is excellent and the effect of the open rotunda in the centre is well chosen and susceptible of very successful treatment. The arrangement of the dining-hall is also quite happy, being placed where it properly belongs, on the axis of the building opposite the entrance, while by being raised a few steps above the main floor, a great deal of dignity is given to the approach.

The axes have evidently been so carefully considered in the plan, that it is to be regretted they do not find more expression in the elevation. There is nothing on the elevation to show that each wing is occupied on the ground floor by a single large room, nor is it at all plain that the first story is the principal one. The lower portion of the building is treated so much like a basement that there is a sense of incongruity in finding that the rusticated, horizontal effect on the exterior does not agree with the large, spacious-looking grand parlor and billiard-room of the plan. It is also questionable whether the triumphal arch is a sufficient or suitable mark for the central axis of the building. It serves admirably to mask the thinness of the connecting corridor, and is not only excellently designed of itself, but it gives to the elevation a dignity and a certain monumental effect which is very satisfactory; but it is questioned whether such a device does not make one regret the necessarily simple and restricted doorway which must form the real entrance to the building; and while in a problem of this sort practical considerations impose themselves very strongly, a more ideal solution as to external effect would seem to be one in which the first story should show more clearly what it really is in plan. The plan considered without reference to the elevation is really excellent; and vice versa, the exterior, considered without a knowledge of the real plan, is very satisfactory. Given an exterior scheme such as the one here followed, and the principal rooms belong one flight up; or given a plan calling for large public rooms on the ground floor, and the first story should show as more than a basement.

As to the character of the exterior design, the author has drawn freely from the best sources in perfectly legitimate ways, and has studied in a very careful, appreciative manner. The cupola is the least successful portion of the design. The connection between it and the central pavilion is very slight, and there is hardly a natural outgrowth from the square plan to the octagonal, so that while combining to form a pleasing outline in the perspective the cupola does not seem to be an integral part of the design. The details of the building are excellently chosen. The conditions of the problem hint at a certain latitude in classic forms, a freedom which has been wisely indulged in, — the general effect, both in mass and detail, indicating a pleasing, well-studied building, which is unquestionably a hotel in its character, and which, in the main, easily meets the requirements of the design.

As to rendering, the perspective is exceedingly charming both in use of lines and choice of view, and the plans and elevations are what they set out to be, — correct, well-finished, academic drawings.

C. H. BLACKALL, Critic.

5

THE STUDY OF DECORATION.

(Continued from Vol. II., No. 8.)

CHAPTER IV.

WHEN Marcus Aurelius, 180 A.D., instead of adopting a worthy successor, left his son Commodus in power as emperor, the decline of the Roman Empire began, and for one hundred years Rome was governed by a series of second-rate generals who sprang into power anywhere within her domain. At length Diocletian, upon his accession, assumed that it was no longer possible for one man to govern so vast a territory, and formed what was, in fact, a quadruple imperial partnership, with a separate emperor, respectively, over the Gauls, the Italians, the Danubian Provinces, and the East, Diocletian himself governing the Prefecture of the East. Until his death this arrangement worked well enough; but warfare between the rival emperors occurred at once after Diocletian's influence was no longer felt, and at length Constantine, Emperor of the West, conquered Licinius, Emperor of the East, and became sole ruler of Rome. In order to popularize himself with the people and to assure the permanency of his power, Constantine not only acknowledged Christianity, but made it the religion of the State. Mythology and its accompanying forms had long lost their hold upon the mind of the people; old manners, old laws, were dying out. With Constantine's edict a new vigor, an enthusiastic life, sprang into being. Above ground in Rome the temples of paganism and the palaces of the Emperors were crumbling in decay; the fitful flame of classic art, renewed by Hadrian, had died down and was nearly extinguished ; the cult of the heathen gods had lost its hold upon the nation. Below ground in the catacombs, in the hidden chapels of a proscribed and persecuted sect, the symbols of a new religion, the beginnings of a new art, were pictured on the walls. Above was the wealth of carving and of gold, of representations of triumphal processions and bacchic revels; below, the austere dignity of the Good Shepherd, of saints and of angels, the portrayal of the solemn ritual of the Christian Church.

It needed but the edict of Milan for the old life and religion to fade and disappear before the sudden might of the new. The classic age was at its end; with the advent of Christian art begins the history of modern art. Little cared the followers of the new faith for the canons which governed the erection of the pagan temples. Their very antagonism to former beliefs induced a similar antagonism to the arts associated with those beliefs. Coming into full power after years of oppression, made rulers of State as well as of Church, the early Christians scorned to be governed by the arts of their predecessors, and with a daring, indicative of their spirit, began treating the new requirements and new conditions without regard to preceding work. Constantine, assured that Western Europe was secure, transferred the seat of empire to Byzantium, that he might govern the more uncertain province. Byzantium, settled by a colony of Greeks from Chalcedon, had been for centuries an important post upon the great highway between Europe and Asia. Governed alternately by Greek and by Persian, it had received a strong Oriental character from the Eastern nations and had added to the Greek subtlety and delicacy of expression the Oriental love of detail. When converted by Constantine into New Rome, it became a perfect treasure-house of Eastern and of Grecian art. It was said of it that there were more statues than there were inhabitants in the city, and the temples and stoæ of the Greeks became the churches and exchanges of the Christian merchants. Under Constantine's successor the empire again became dual, with an Emperor of the West and an Emperor of the East. Dissension soon sprang up between the empires; and when Alaric, king of the Ostrogoths, is

made master general of Illyria by the Eastern emperor, Rome is attacked and in A.D. 410 pillaged and destroyed, the Christian shrines alone being spared. This is the final blow to pagan art. The seat of the Western emperor is henceforth at Ravenna; and the Christians in Rome, cut off from the influence of Byzantium, develop the series of basilican churches which are the prototypes for the later Romanesque work.

The culture of Rome is transferred to Byzantium, henceforth to be known as Constantinople. The Byzantine work, which spreads over the East in the sixth, seventh, and eighth centuries, is therefore a union of the refinement of the Greek, the desire for color and detail of the Oriental, and the vigor of constructional invention and conception of mass and grandeur of the Roman. A portion of it is transplanted to Ravenna during Justinian's reign, and there is a glorious afterglow in the Venetian splendor of the tenth and eleventh centuries. The Romanesque, on the other hand, is a union of the work of Rome as it appears in the Christian basilicas and the crude but vigorous imitation of the Ostrogoths and barbarian tribes of the North. We may expect, then, of the Byzantine work, wealth of color, refinement of detail, and grandeur of mass ; of the Romanesque, crudeness of color, vigor, but barbarity of detail, and subdivision and clumsiness of mass, all of which occur. Byzantine art is a Renaissance of the Greek spirit engrafted upon Roman construction; Romanesque art is a translation of Roman construction by unskilful imitators, decorated with the grotesque fancies of barbarians. Byzantine art flowers and quickly becomes stereotyped; Romanesque art steadily develops and fuses into the inspiration of the Gothic. Both meet in Venice in the twelfth century. The three great centres of Byzantine work are Constantinople, Ravenna, and Venice; and the three most noted examples, the churches of St. Sophia, S. Vitale, and St. Marks. Apart from these, the cathedral at Monreale and the Capella Palatina in Palermo in Sicily, which remained under Eastern sway even after the German occupancy of Italy, represent a variation from the Byzantine type, a variation affected by Moslem design. Salonica also shows fine examples of the earlier Byzantine work. From the time of Constantine to that of Justinian, one hundred and fifty years, is a period of formation. Under the reign of Justinian, the Byzantine art reached its height. Prominent among its factors was the use of mosaic. The frescos of the earlier Christian art - those frescos which were crude adaptations of the painted walls of Pompeii and of Rome - were too perishable to portray the lives of the saints and the scenes of the Old and New Testament in the churches. The mosaics of the Romans, which except in the Pompeian fountains were confined to the floors, were eagerly adopted and mounted the walls, and at length spread in magnificent purple and gold upon the vaulted ceilings. At first these pictures of the new faith were confined to the sanctuary, and displayed upon the apses of the churches only; but soon the intervals between the windows were filled with figures, and long processions of magi and of apostles marched down the walls above the nave columns. The early basilican wooden roofs gave place to barrel vaults, and the mosaic, overcoming the Roman caissoned ceiling, spread in paler tones up the springing arches and met above in a firmament of color. With the universal use of a material which was displayed, as was mosaic, in broad surfaces, and made up for lack of light and shade by color, sculpture languished. The cornices and entablatures of classic work withered into long, thin lines of moulding; projections, which disturbed the effect of color by the shadows they cast, were discarded; voussoirs disappeared under a mosaic veil; surfaces resolved themselves into broad expanses of infinitely varied tones, bounded by narrow but strongly contrasting bands and borders of marble. Where mosaic was not used, the walls were veneered with great sheets of marble divided from each other by slight white marble bands. Occasionally these panels were carved, but always in very low relief. Pierced slabs of marble, with Oriental intricacy of pattern, filled

openings and windows, in lieu of colored glass, which had not made its appearance. Mosaic, comparatively perishable from its fine subdivisions, could only be used on the exteriors in protected places; and partly for this reason, partly from the revulsion of feeling against pagan splendor displayed upon the outside of the temples, the Byzantine art became more and more an art which was used in interiors instead of upon façades and domes. The dome itself, which in the fifth century was adopted throughout the East, was broad, low, and flat, carried on pendentives and lighted at its base by a row of small windows, and was, in fact, a development of a Roman form used in the Calidaria and in the Pantheon, adapted with magnificent daring by the Byzantine to vaulting great spaces. With surface and color for the chief motives of effect, it is evident that all carved work would become low and flat in treatment, and would depend for effect more upon its line and outline than upon its light and shade and modelling; so that it soon occurs that modelling of surface becomes a forgotten art, and sculpture a matter of delicate and intricately woven profiles.

St. Sophia was built upon the site of an earlier church, erected by Constantine upon the great Hippodrome of Constantinople. It was begun in 532 and dedicated at Christmas time, four years later, with great ceremony. The architects, Anthemius of Tralles and Isidor of Miletus, were of Greek race and with Greek refinement of conception. The columns were taken from all points of the Empire,-the pagan temples rendering tribute to the Christian church, - but the capitals in most cases were carved in the new forms; and the panel moulding, the archivolts, and spandrils were covered with a wealth of Byzantine carving. As upon the Mohammedan conquest of Constantinople in 1453, most of the mosaics were covered so that no representation of a human form should appear in a Moslem mosque, it is uncertain what proportion of gold grounds were used. That there are some few is definitely known; but most of the grounds of the earlier mosaics of the sixth and seventh centuries were deep-blue shading into paler blues and seagreens and greens of the color of jade, upon which great circles were displayed containing symbols or heads of saints; and at prominent points, such as the semi-domes of the apses and chapels, the pendentives, the bases of the domes, and between the windows, figures of Christ and of the disciples and of the saints and the angels.

At Ravenna, S. Vitale, which was founded by Saint Ecclesius after a visit made to Constantinople with Pope John I. in 526, and which was dedicated in the presence of Justinian during his visit to Ravenna after he reconquered this part of Italy, having always remained a Christian church, the mosaics are untouched, especially in the apse, where the rich blue of the ground blends into peacock greens, and the ornament of scrolls and vine-leaves is carried out in garnet reds, deep yellows and greens, and pale-toned whites. In S. Apollinare in Classe, outside of Ravenna, the grounds are pale sea-greens deepening to cerulean blue towards the base; but in the mausoleum of Gallia Placidia, - a chapel with the Greek cross plan roofed with barrel vaults that cross at the centre,walls and vaults are covered with a deep rich blue ground, on which are roses of ornament, with the symbols of the cross, the vine, and the lamb, and at the arch lines heavy garlands of leaves matted together. There appear to be two types of Byzantine conventional ornament, - the one usually used in the mosaics of thin scrolls, terminating in a flower or symbol, displayed upon a ground which is much more in quantity than is the ornament; the other, usually confined to sculpture, an intricate interlace of ribbon lines with the spaces filled with the Byzantine acanthus, the ornament much more in proportion than is the ground, which only shows in small separated pieces. Apart from these are the borders, occasionally of overlapping leaves, often of small repeated units, such as Greek crosses and squares and diamonds, or else meanders of guilloches. The guilloche takes a new form in Byzantine design, and instead of being a continuous succession of small circles enclosed in an interlacing ribbon, it assumes the form of alternating small and large circles, or of small circles alternating with large squares, and often progresses in both directions at once, horizontally and perpendicularly, and thus forms an all-over pattern. The roses of ornament are often incorporated into this form of guilloche. Sculpture of the human form in marble becomes more and more feeble and crude; and a general disinclination to attempt what has manifestly become an impossibility seems to attack the untrained sculptors, so that frequently lambs are substituted for the twelve apostles.

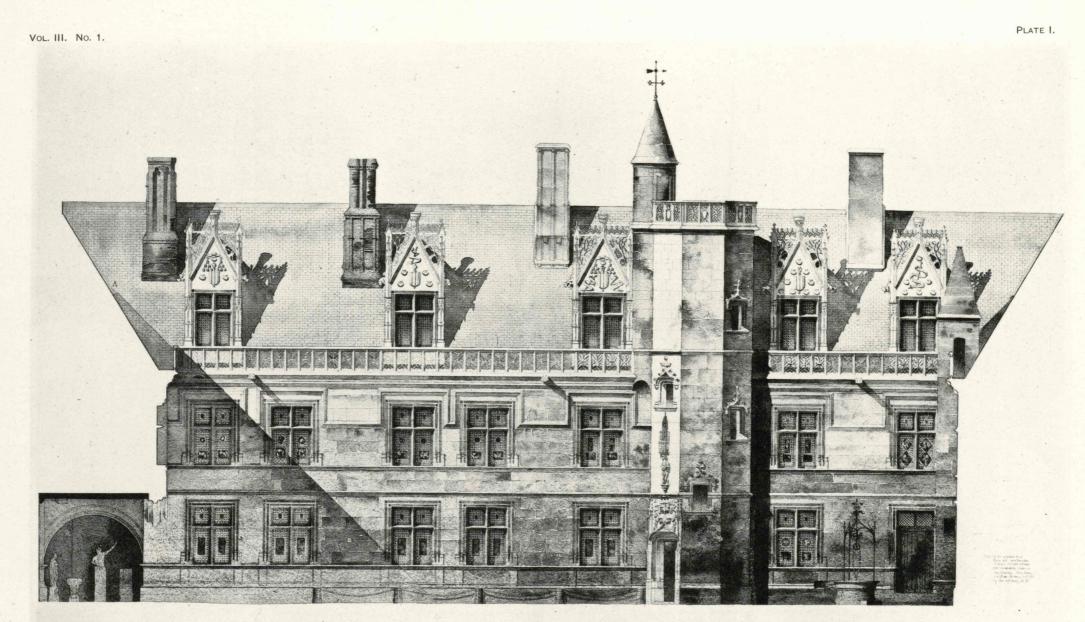
In ivory and metal, however, essays are made to represent human form, - efforts which are naive and expressive but pitifully weak. Ornament, per se, however, is wonderfully developed, and as the Mohammedan edict that no representation of human beings should appear in the mosques only stimulated the fertility of invention in conventional design, so the revolt of the iconoclasts against the holy images in the eighth century seems to have increased the ingenuity of Byzantine designers. It would have been a matter of small moment if the crude attempts at portraiture of the Byzantine alone had been destroyed; but unfortunately the wrath of the iconoclasts was directed also against the masterpieces of Greece; and great is the loss of ancient sculpture due to the fanaticism of a horde of semi-barbarian enthusiasts. The acanthus, however, went steadily through successive variation until it attained the virile form seen in the best Byzantine work. It is no longer the olive type of the Romans or the heavy, stupid leaf of the earlier centuries of the Christian era, but has again turned towards the sharp-pointed, vigorous leaf of the Greeks. Its lobes are divided into three or five tines, each sharp at the tip; its centre lines radiating from a central stem, bend like flames; its surfaces are concave, with deep V cutting, and it has one very marked peculiarity, that is, that as far as possible no tine is left displayed alone on the ground, but the tip of each is made to touch either the tip of a neighboring tine or the ribbon or moulding bounding the space in which the ornament occurs. The tines are of nearly equal size throughout, and the spaces of ground left by the ornament are also of comparatively equal size, and, if possible, symmetrically grouped. The one almost universal moulding is decorated with acanthus units, and the capitals have acanthus leaves around their bells. These caps are of two types. One, that is manifestly an adaptation of a classic cap, and of which there is a transitional type at Sardis, is a union of an Ionic and a Corinthian, or, at other times, of a Roman Doric and a Corinthian capital. The other is peculiar to Byzantine work, and can best be defined perhaps as a reversed four-sided truncated cone brought to a circle at its base. This cap, as at S. Vitale, is often supplemented by another plainer cap above. The lower cap has its faces decorated with scrolls, acanthus wreaths, etc., and usually the corners are strengthened with a decorative unit, leaf, or other motive.

The Christian symbols of the lamb, the cross, the vine of life, the peacock, and dove are frequent in mosaic sculpture, both in ivory, wood, and marble, and in the metal-work and enamels, these latter being in all cases cloisonné work. Under the Macedonian emperors in the ninth century, Constantinople became the great mart of the Mediterranean, and her wares are to be found all over Europe. Basile erected an enormous Imperial palace which must have vied in splendor with those of Rome, and which served, as did the palaces of the Palatine, as a quarry for other buildings for centuries.

The twelfth century saw the beginning of the decay of the Byzantine empire. Before this Venice had eaten into the commercial supremacy of the East, and had gleaned both art and artists to enrich the walls of her churches. The Turks, as the Seljuk dynasty arose on the ruin of that of the Osmanlis, had deprived her of most of her possessions, and the Greek churches and monasteries alone carried on an art that had become conventional to the last degree, the colors even being fixed by precedent, — an art that has flickered down through the centuries in the Greek churches of Russia, but which was beyond recreation when Constantinople fell in 1453, before the scimitar of the Moslem.

C. HOWARD WALKER.

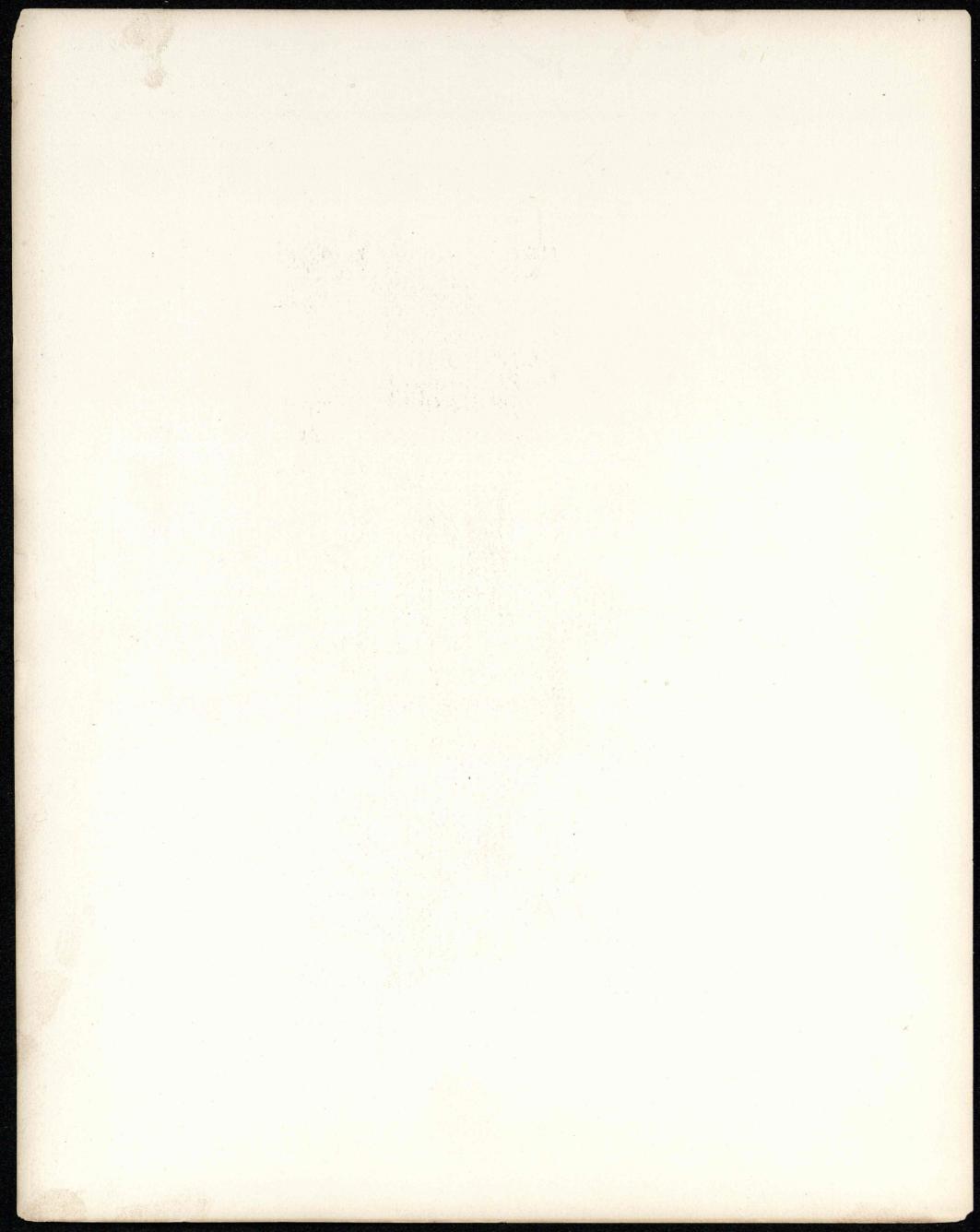
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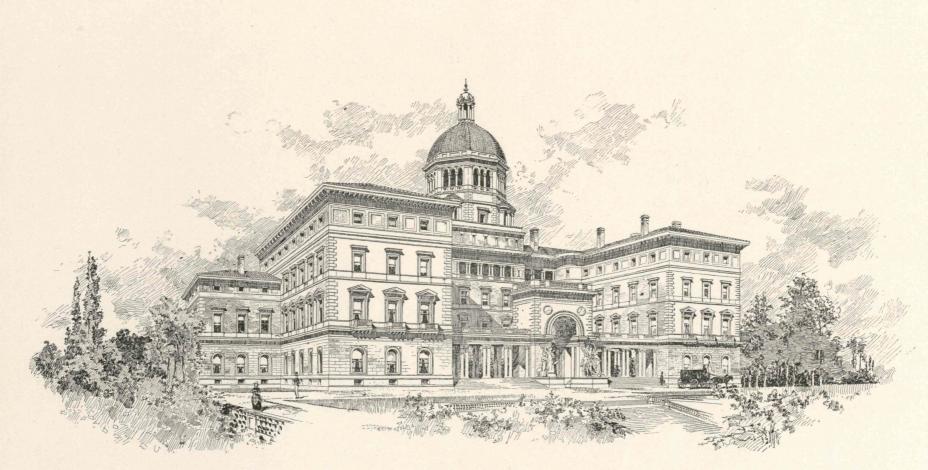
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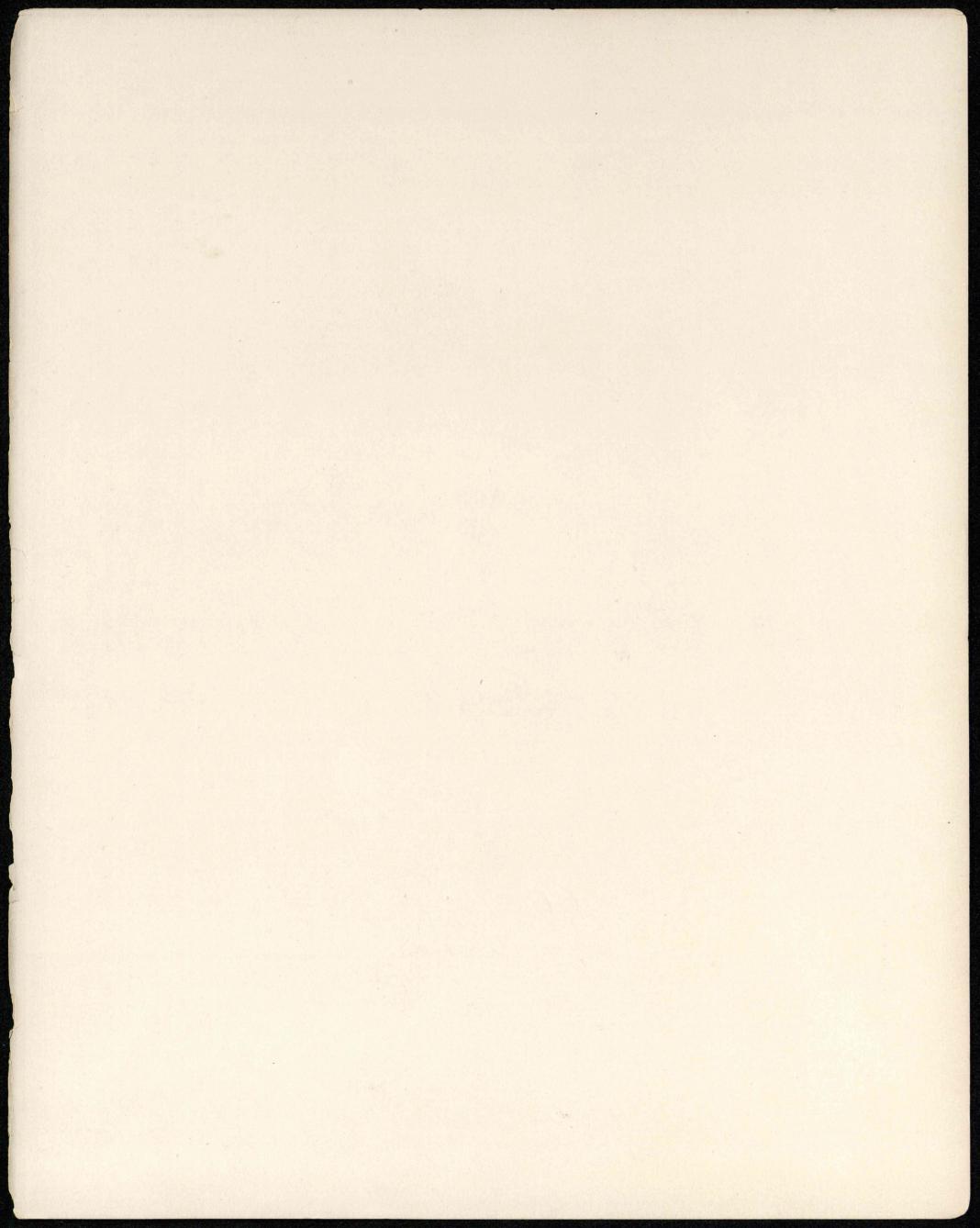
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FIRST MENTION.

PROBLEM IN DESIGN, massachusetts institute of technology. DESIGN FOR AN HOTEL, BY HUBERT G. RIPLEY. FOURTH YEAR.



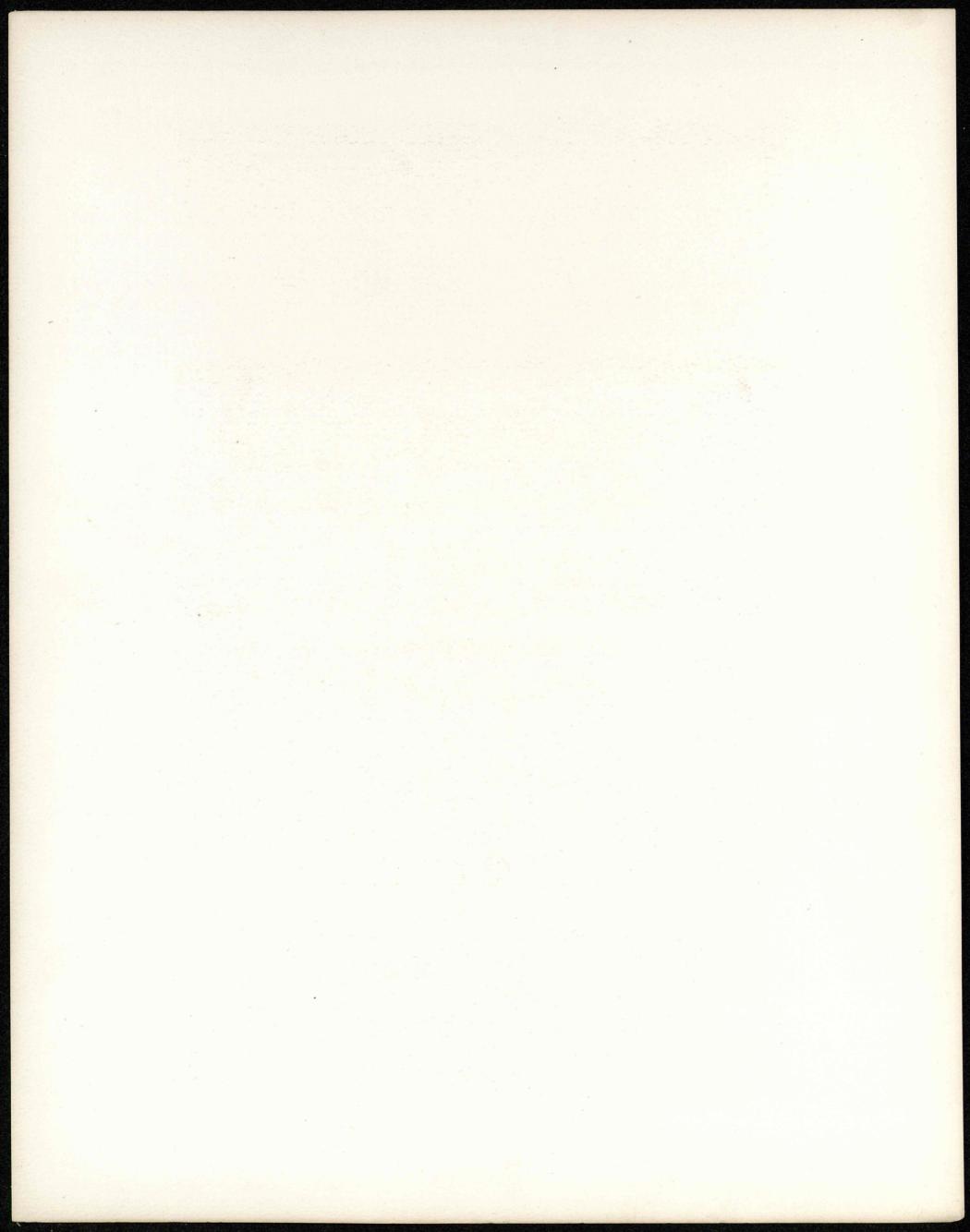
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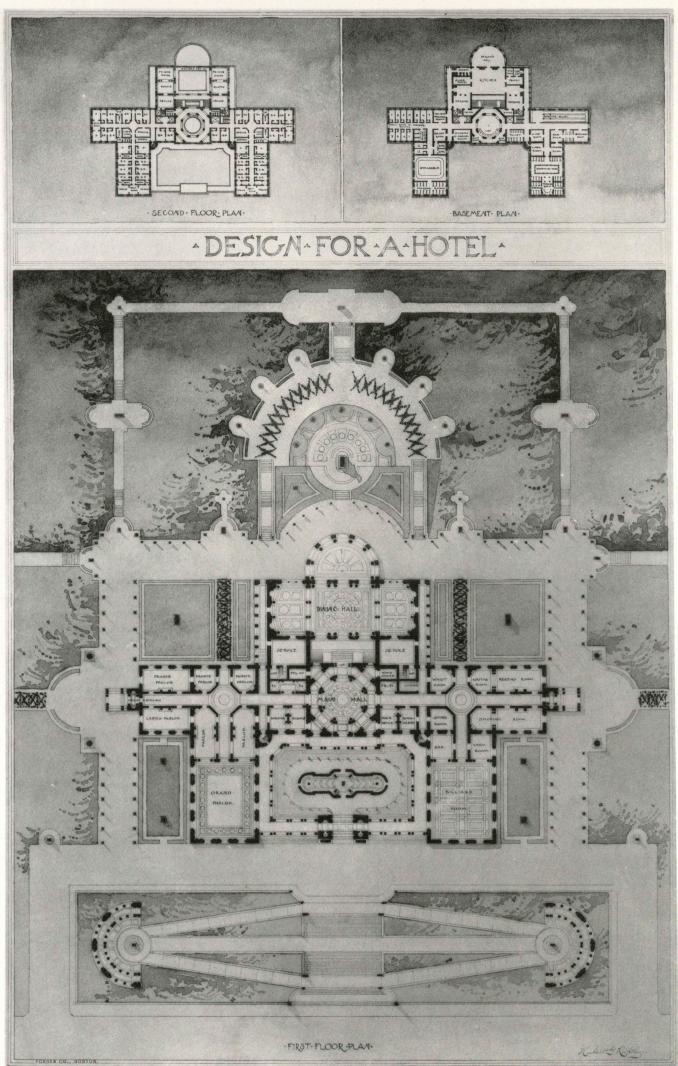
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PROBLEM IN DESIGN. MASSACHUSETTS INSTITUTE OF TECHNOLOGY. DESIGN FOR AN HOTEL, BY HUBERT G. RIPLEY. Plate III.



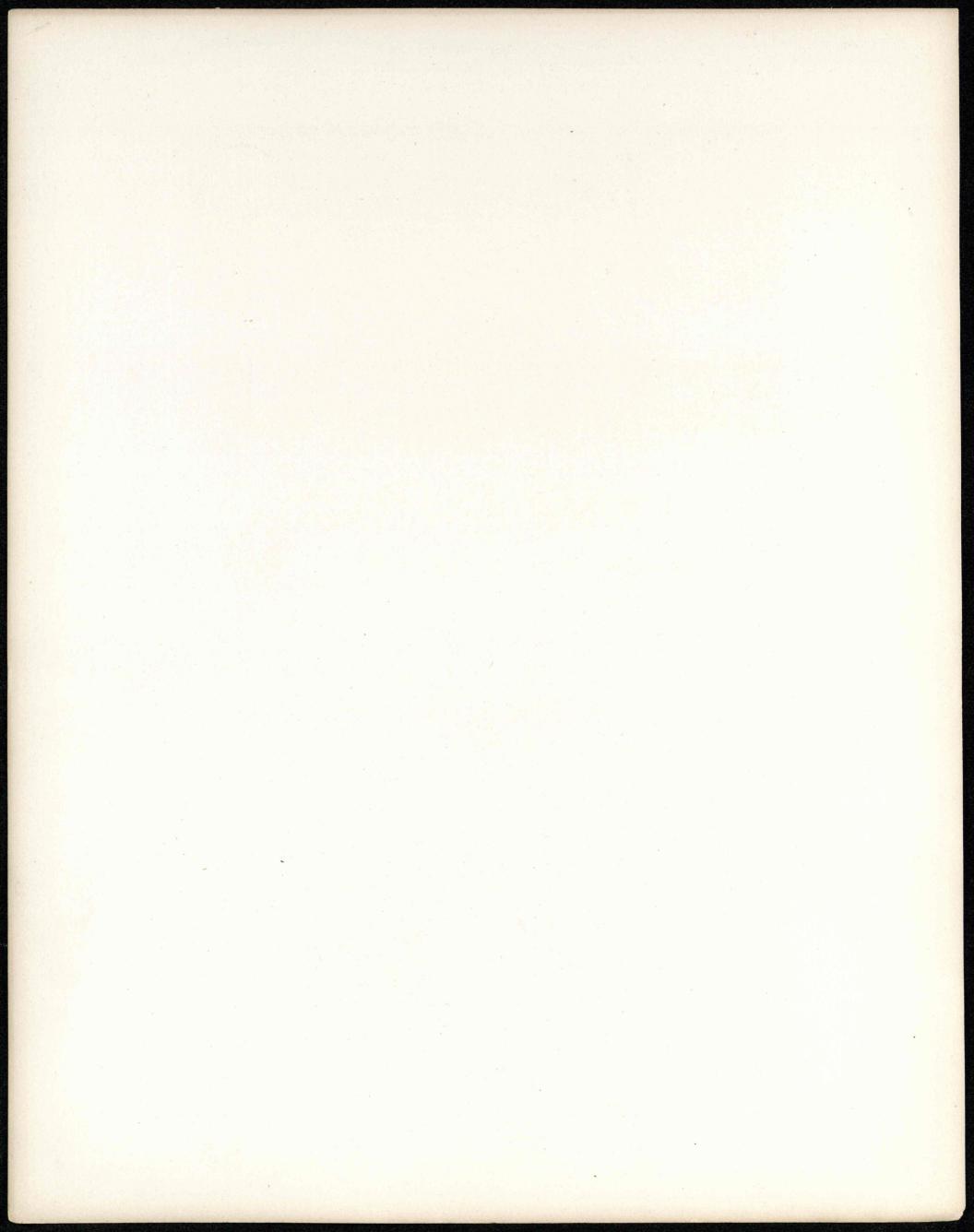
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PLATE IV.

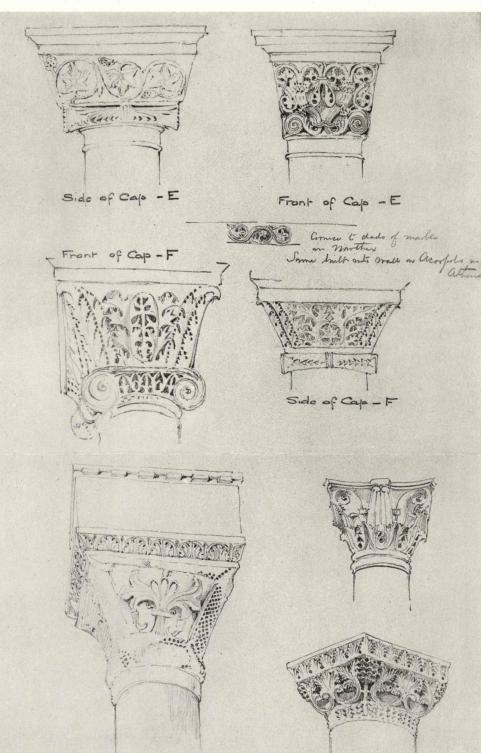


FIRST MENTION.

PROBLEM IN DESIGN. Massachusetts institute of technology. DESIGN FOR AN HOTEL, BY HUBERT G. RIPLEY. FOURTH YEAR.







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A STUDY OF DECORATION. By C. HOWARD WALKER. PLATE V.

