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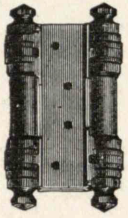
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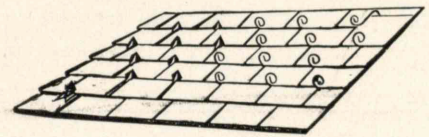


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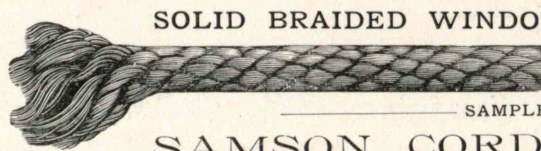
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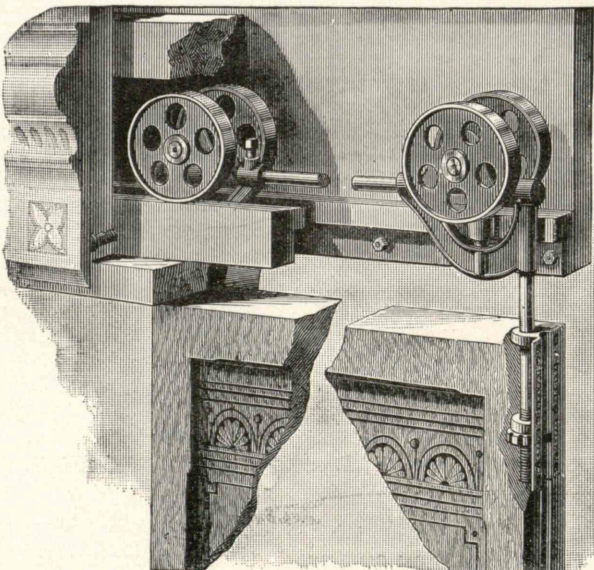


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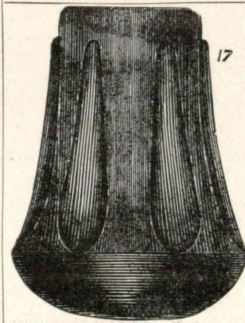
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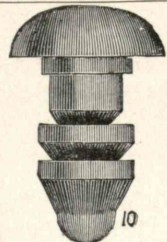
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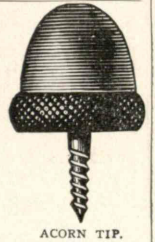
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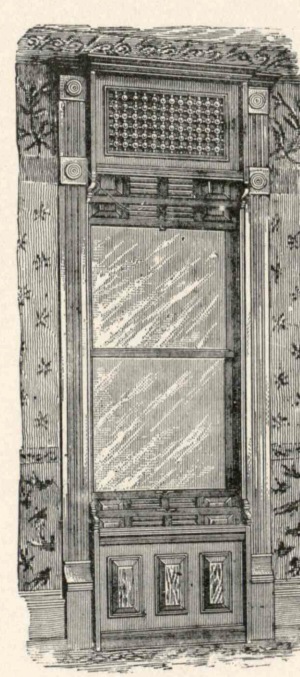
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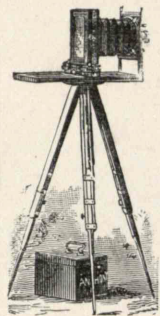
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THE COURSE IN ARCHITECTURE

aims not only to make the student thoroughly acquainted with the scientific principles underlying sound construction, and to familiarize him with the mathematical and mechanical formulæ and processes necessary to the solution of architectural problems, but also to cultivate his taste in color and form by constant practice in design and by the study of the history of architecture. Too great restriction to purely professional work is avoided by the introduction of the study of modern languages, history, political science, etc., the proportion of time devoted to these general subjects diminishing as the student goes on in his course.

The studies of the first year are common to all the courses of the School, and embrace mathematics, drawing, chemistry, and modern languages. In the higher years, thorough courses in analytic geometry and the calculus, carried on simultaneously with lectures and laboratory work in physics, lead up to the study of theoretical and applied mechanics, the lecture-room work in which is supplemented by actual laboratory tests to determine the strength of the various building materials, the accuracy of the commonly accepted constants, etc. The strictly professional work begins with instruction in materials, common constructions, and architectural history, followed, in the later years, by courses in stereotomy, iron construction, specifications, and contracts, in heating and ventilation, in planning, and in the requirements of schools, theatres, hospitals, and other special classes of buildings. Whenever practicable, the text-book and lecture-room work is emphasized by visits to actual structures; and throughout the whole course the student is continually drilled in original design. To this end two problems each month are required, — one, a sketch, to be finished within one week; and the other, more elaborate, occupying the whole month for the completion of the details and finished drawings relating to it.

Sketching in water-color and pen-and-ink, together with lectures and exercises in color decoration and history of ornament, are in charge of well-known gentlemen; and a class for drawing from the living model is maintained during the greater part of the year.

Unusual advantages exist in the nearness of the Boston Museum of Fine Arts and of the Boston Public Library, the facilities of which are freely offered by the Trustees to students of the Institute. The School itself possesses a valuable departmental library and collection of casts and building materials.

For the benefit of those who are contented with a limited acquaintance with the subject, or who have acquired elsewhere the necessary mathematical and physical knowledge, a partial course in Architecture is arranged, occupying two years.

The professional work of both courses is under the immediate charge of Prof. Frank W. Chandler, who gives the lectures on Construction, Specifications, and Contracts, Materials, and Special Classes of Buildings; Assoc. Prof. Eugene Létang, the Instructor in Design; and Messrs. Eleazer B. Homer and Frank A. Moore, Assistants. Special instruction is given by Messrs. Ross Turner, in Water-Colors; C. Howard Walker, in Decoration; Charles E. Mills, in Drawing from the Life; and David A. Gregg, in Pen-and-Ink Sketching.

For detailed information apply to

JAMES P. MUNROE,
Secretary.

TECHNOLOGY ARCHITECTURAL REVIEW.

DEPARTMENT OF ARCHITECTURE,

Massachusetts Institute of Technology.

VOL. I.

BOSTON, MARCH 15, 1888.

No. 5.

TECHNOLOGY ARCHITECTURAL REVIEW.

PUBLICATION OF

The Massachusetts Institute of Technology Architectural Society.

HENRY D. BATES. THOMAS R. KIMBALL.
EDITORS.

DEPARTMENT OF ARCHITECTURE.

MONTHLY COMPETITIONS.

FOURTH YEAR SPECIALS.

PLATE I.

Programme: AN ACADEMIC SCHOOL.

THIS school, which we will suppose is to be erected in the vicinity of Boston, is intended for the education of young ladies. It may be a single-story building with basement, or possibly two stories in part.

The principal requirements are: one large exhibition room or music hall, six or eight class-rooms, one study hall, a library, wash-rooms, cloak-rooms, etc. In connection with the institution will be the residence of the principal, conveniently arranged and combining agreeably with the general composition. The shape and dimensions of the plot of ground are not given.

Required: a preliminary sketch,— plan and elevation on a scale of one sixteenth of an inch to the foot; finished drawings,— one elevation on a scale of one eighth of an inch to the foot, and plan and section on a scale of one sixteenth of an inch to the foot.

E. LÉTANG.

Designs submitted by GEORGE C. SHATTUCK (*First Mention*) *and*
W. PROCTOR, JR.

NOTES TAKEN FROM CRITICISM.

FIRST MENTION: The general scheme of this design, with a few exceptions, is admirably adapted to the requirements. The approach is large and dignified, leading into a very spacious lobby, which gives access to the several parts of the building. The staircases on either side of the way leading to the music hall communicate with four schoolrooms in the second story. The entrance to the music hall, flanked with large niches containing groups of statuary, adds materially to the dignity of the whole. The hall is admirably well placed, abundantly lighted, and simply and effectively treated on the interior.

The arcade corridors on either side give the pupils means of communication between the school and the stage end of the hall, without interfering with the public on festive occasions, and also afford means for the principal of the school to pass from his residence in the rear to the building. The library on one side and the study hall on the other are well isolated from the other parts of the building and exceedingly well lighted. The library, arranged in alcoves, with a few large working-tables in the centre, is an excellent scheme. The books can be arranged according to some set plan, and one can generally find all the books she may require on a subject in one compartment.

The schoolrooms are not well placed. Altogether they are located conveniently enough; but if any one of them is rightly placed with reference to the sun and light, the remaining ones are sacrificed. The basement windows are not large enough. The residence of the principal is well placed, is suffi-

ciently isolated from the school, and forms an interesting part of the whole composition.

The façade is a charming work of design. The grouping of the several parts of the building, the relation between the voids and solids, and the judicious appreciation of ornament applied in just the right places give the whole a tone of refinement and loveliness of sentiment which is indeed gratifying.

THOMAS O'GRADY, JR., *Critic.*

THIRD YEAR REGULARS AND SPECIALS.

PLATE II.

Programme: A CITY HOUSE.

THE problem is to design a rich private dwelling, to be built upon a twenty-five foot lot in the middle of a large block. The structure is to be entirely of light-colored stone, or brick with stone trimmings, and will have three clear stories exclusive of attic and basement. The first floor is to be about six feet above the level of the sidewalk, so that the basement may be supplied with ample light. The house will also be provided with bay-windows, whose plan and disposition is left to the taste and fancy of the designer.

Required: a preliminary sketch,— comprising plan of the front wall, cutting through the windows and doorway of the first story, and showing outside steps, and the elevation, on a scale of one eighth of an inch to the foot; finished drawings,— front elevation and partial section on a scale of one quarter of an inch to the foot; plans of first and second stories on a small scale; details of the principal parts of the building, such as cornice, profiles, carving, etc.

E. LÉTANG.

JUDGMENT.

First Mention THEO. W. PIETSCH.
Second Mention JOHN W. CASE.
Third Mention R. C. SPENCER, JR.
Mention GEORGE C. HARDING.

Twenty-four designs in Competition.

NOTES TAKEN FROM CRITICISM.

The chief difficulty in designing such a city house as the programme calls for lies in the arrangement of the first story and its entrance. Two schemes are at once apparent. One is to sacrifice a spacious entrance hall for a room on the front, while in the other scheme the whole width of the house is given to the hall. The latter gives, both within and without, a finer architectural effect; but the former secures such practical advantages as shutting off direct draughts of cold air, insuring greater privacy, and offering a useful reception-room.

Though the programme does not emphasize study of the plans, there can be no doubt that they are of capital importance in this problem, as far, at least, as the front half of the first story; for therein lies the solution of the main difficulty, and the rest of the design is controlled by this. In ranking the elevations, therefore, due consideration has been given to the plans. Since plans with a front room involve greater ingenuity, the best of that class has been given the **FIRST MENTION**, and the most successful of those having large entrance halls placed second.

The designer of the **FIRST MENTION** has shown great ingenuity in his plan. Eminently practical and well lighted, every opportunity for decorative effects has been improved. Hall, staircase, and symmetrical axes promise excellent results from a purely architectural view. The inherent difficulties in façades of this type are boldly met. The front door is not central, but the division it suggests is carried up frankly. A skilful transition of interest is made from the entrance arch to the larger division of the front by the bay in the second story. Thence the eye is led to the large dormer, which completes the domination of this

larger compartment of the façade. The bay is made an integral part of the design — always a difficult matter — by its intimate connection with the small windows below. The architectural features give agreeable proportions, the position and scale of the windows being made to contribute interest to the design. The ornamental details are refined and are rightly placed.

Though the plan of the SECOND MENTION is anything but practical, — for many reasons besides those accompanying a large hall, — the façade is so clever in its refined originality that it deserves a high mark of approval. Rarely is the early French Renaissance thus delightfully applied. This charming style is so treacherous, so elusive, that it is a pleasant surprise to find the quiet ease with which it is here adapted to the requirements of a city house. As a piece of architecture, its contrasts of solid wall and well-massed windows, of plain and of ornamented members, its great unity of effect, and its extreme delicacy of detail mark it a rare success. It may be doubted whether the loggia over the front door can be classed as a bay, unless the windows should be brought out to the front. The large dormer is effective, but inadequate to light the attic floor, and the basement windows are an unwarrantable omission.

In the THIRD MENTION we find an excellent practical plan, well worked out. Proof of the study put into the exterior is shown by the ingenious device of a large two-story bay resting upon columns, — a scheme which would appear more difficult if it had been less successfully carried out. Another difficulty cleverly overcome is the harmony existing between the two symmetrical windows of the first story and those above attained through the medium of the colonnade. The chief defect of this front lies in the weak confusion in the value of string cornices and entablatures.

ARTHUR ROTCH, *Critic.*

THIRD YEAR REGULARS AND SPECIALS.

PLATE III.

Programme: A GRAND STAIRCASE.

THIS staircase, approached through a vestibule, is supposed to occupy the central hall of some public building, such as a State-house, library, or museum, in which the principal rooms are located in the second story. It must be built of stone or marble.

The hall is to be covered by a vaulted or domed ceiling, and may be lighted from above or by side windows, in which case it may be supposed to come to an external wall. The form of the hall, as well as that of the vault above and its means of support, is left to the taste and fancy of each student; but the disposition of the stairway must be kept in close relation to it. The staircase will extend from the ground floor to the main floor only, and its area will be from twenty-five hundred to three thousand square feet, exclusive of galleries surrounding it. The height of the stories is not fixed.

Required: a preliminary sketch, — comprising a plan of the hall taken at the level of the main story, looking down upon the staircase and showing three or more doorways by which access is had to the principal apartments; also one section; both sketches to be on a scale of one twelfth of an inch to the foot. Finished drawings, — two sections taken at right angles to each other, and one plan; the principal section to be on a scale of one eighth of an inch to the foot, and the other section and the plan to be on a scale of one sixteenth of an inch to the foot.

E. LÉTANG.

JUDGMENT.

First Mention	THEO. W. PIETSCH.
Second Mention	WALTER H. KILHAM.
Third Mention	EDWARD A. CRANE.
Mention	JOHN LAURENCE MAURAN.

NOTES TAKEN FROM CRITICISM.

FIRST MENTION: The stairs are hardly wide enough compared with the width of the galleries surrounding them. If they were a little wider, and the space left between them and the side walls filled in and arranged in a series of low pedestals, with possibly seats at either end of the landing, the effect would be much more elegant. The pedestals could be used for floral decorations on festive occasions. The niches in the gallery at the head of the stairs, and the recesses directly opposite them at the other end, have an engaged column on one side and ought to have a corresponding feature on the other. The single entrance to the large hall in the rear is not sufficient: better to have had additional ones on either side of the gallery.

The general conception of the scheme is excellent, and has been developed into a magnificent structure. The proportions throughout are excellent, save perhaps the attic under the ceiling, which is a little too high. It helps, however, the effect of the ceiling. The circular windows ought to have been omitted. The beautiful paintings in the cove and on the ceiling cannot be seen to advantage with a flood of light striking the eyes.

The general treatment of the hall, the beautiful and refined character of the colonnade, particularly as treated at the endings, surmounted by the elegantly enriched cove ceiling, with abundance of light coming through a noble series of windows on the gallery floor, — combined, make indeed a grand staircase hall.

SECOND MENTION: The arrangement of the stairs in this plan is good, occupying about one third the width of the hall, leaving the space on each side for passages, and avoiding the objection of a well on each side of the staircase, which is a defect in the design placed first. The section is very well studied, and the general effect is good; but the Palladian motive, a beautiful feature in itself, is misapplied here. The details are out of scale with the large, heavily treated Corinthian order which encases it, and the void is too wide for its height.

The light is probably (?) admitted through skylights, placed in the panelled ceiling; although judging from the way the shadows are cast, and the absence of windows in the walls of the main galleries, one is led to believe that they have been neglected. The design would be improved by decorating the bays in the ceiling over the arches.

THIRD MENTION (Plate IV.): The plan has the same defect as the one placed first, — the well room on each side is too wide or not wide enough. The general proportions and effect are excellent. The spaces between the columns are a little too great, and the balustrade would have a better effect if its hand-rail was a continuation of the cap of the pedestals.

THIRD YEAR REGULARS AND SPECIALS.

PLATE IV.

Programme: A MEMORIAL LIBRARY.

It is proposed to erect a small memorial library in a suburban town, the structure to be a single-story building with basement. This library is to accommodate fifty thousand volumes, and is to provide for one convenient delivery-room connected with the book stacks, a large reading-room, rooms for librarian and clerks, card catalogue, etc. The basement is to contain a bookbinding room, store, fuel, and boiler rooms. The structure must be monumental in character, and the vestibule or main hall devoted to the commemoration of the donor.

Required: preliminary sketches on a scale of one sixteenth of an inch to the foot; finished drawings, — one elevation on a scale of one eighth of an inch to the foot, one plan and one section on a scale of one sixteenth of an inch to the foot. The lot has a frontage of seventy-five feet.

E. LÉTANG.

JUDGMENT.

First Mention	ARTHUR V. EDWARDS.
Second Mention	WALTER H. KILHAM.
Third Mention	EDWARD A. CRANE.
Mention	JOHN H. RANKIN.

Twenty-four designs in Competition.

NOTES TAKEN FROM CRITICISM.

FIRST MENTION: It is surprising that in so large a number of designs submitted as in this problem, not one shows the results of study of libraries with the object in view of obtaining the best possible arrangement of the books, the greatest amount of light, and the most convenient location for the administration. So much has been said and written recently about the best method of arranging the books and the convenient distribution of them to the public, that the problem has become an entirely new one, differing widely from the old system. Not a single design has suggested the stack system in arranging the books, and yet it is the most approved system in use. It may be seen on a small scale in the library at Harvard College.

The main object of the problems is to give the student a subject to study up and become familiar with what has been done on its literary side, as well as what has actually been done in building. If most of the student's time for the first few weeks were devoted to the study of the problem, finding out everything everybody ever knew about it, he would be prepared to attack it more intelligently.

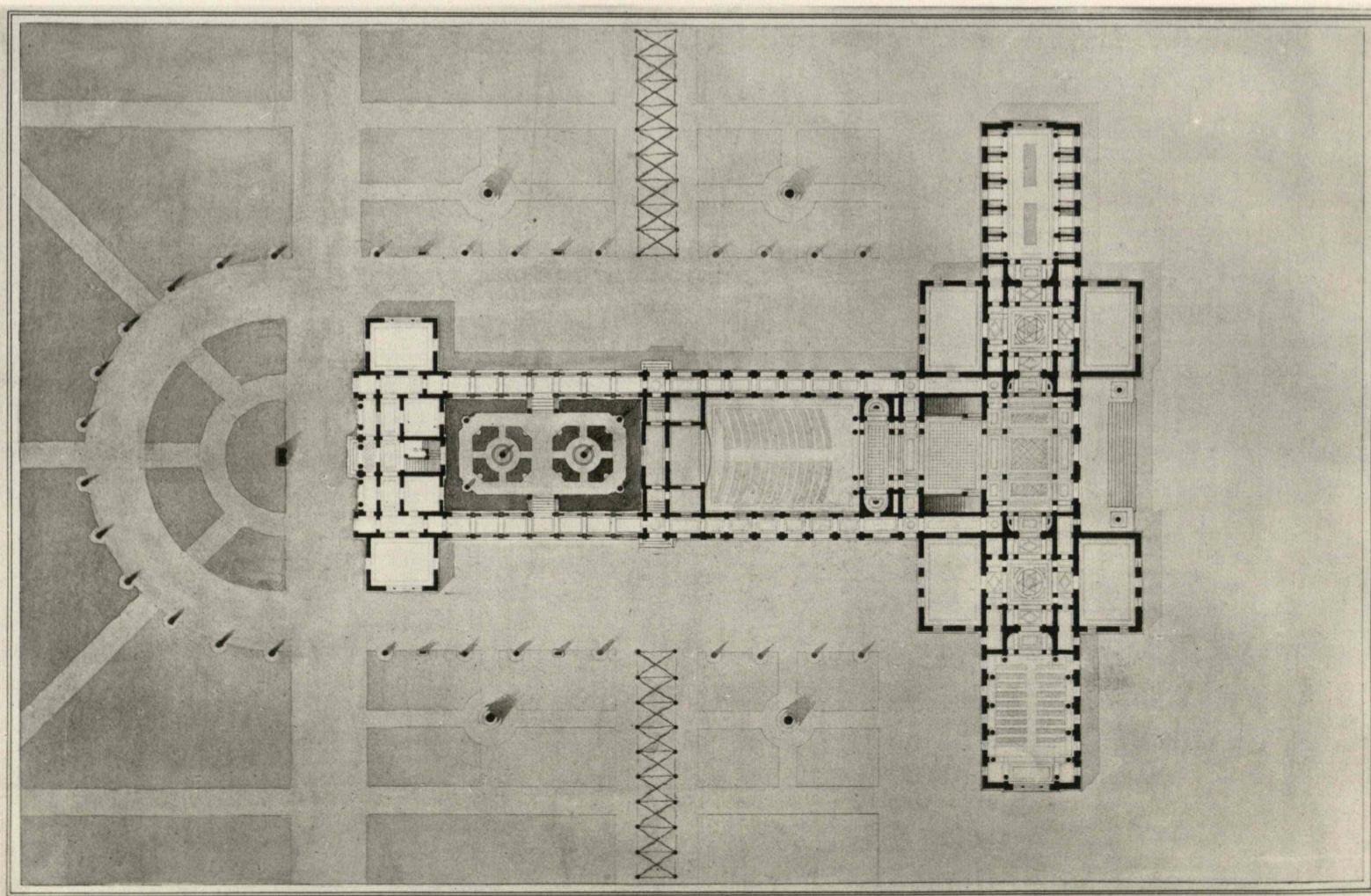
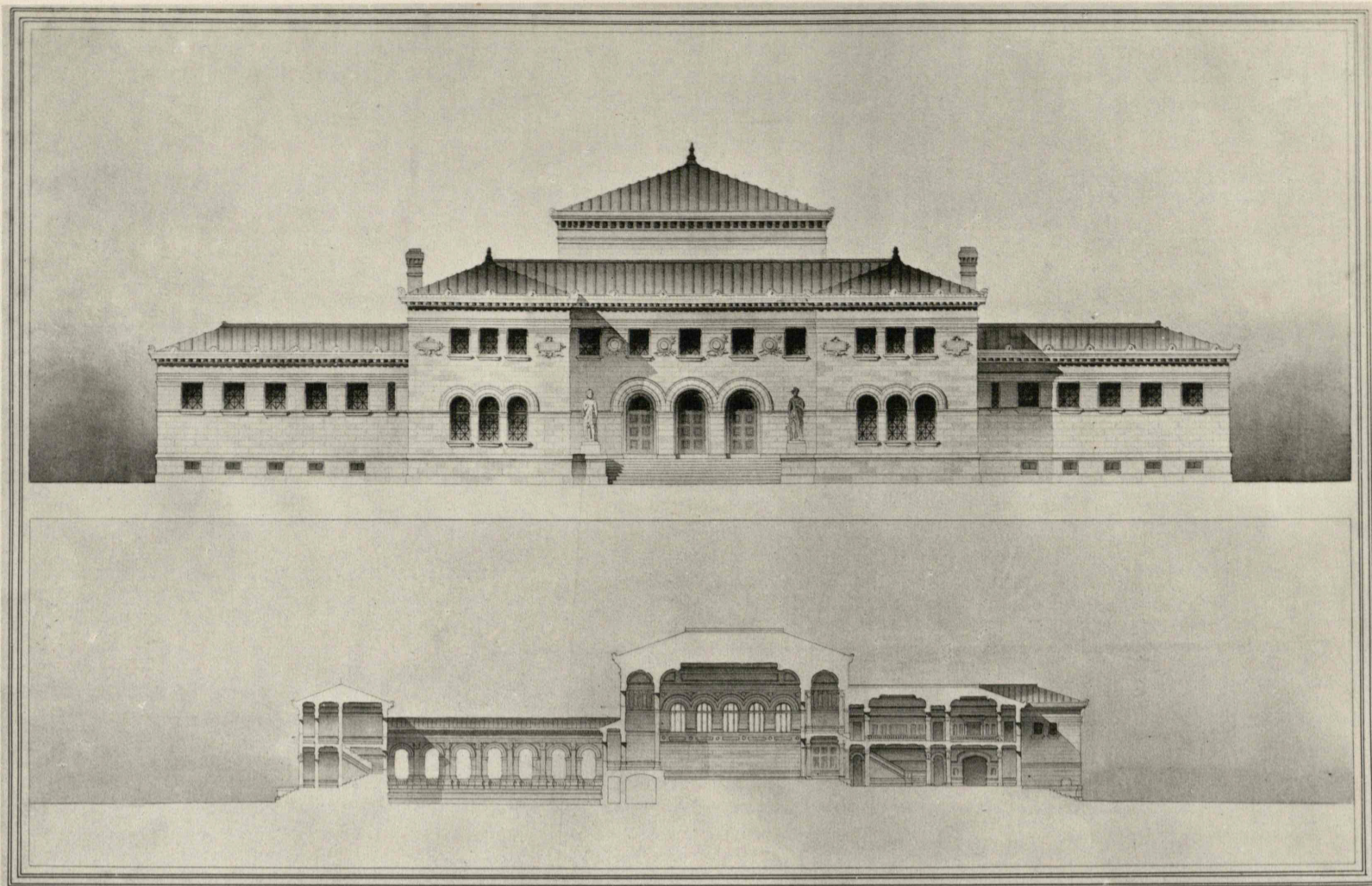
In this design the book-room is badly lighted, there being but eight windows. As shown in the section they are very much too narrow and too low. If they were extended to the cove and there were additional lights in the ceiling, the side stacks would be lighted well enough, but those in the centre would require artificial light. The space occupied by the delivery is ample, and well placed for delivering and receiving the books. The reading-room is divided into two rooms by the main hall, — a very good arrangement, but a violation of the programme. The small rooms on either side of the reading-rooms, and opening directly into them, are badly placed, as they deprive the reading-rooms of sufficient light, and are not accessible except through them.

The elevation is well studied, — a beautiful grouping of the several features, bound together by well-defined architectural lines. It is an interesting design in itself, and no doubt can be appreciated by leaving its plan and destiny to be supplied by the imagination.

THOMAS O'GRADY, JR., *Critic.*

IN our Supplement we present an example of a style of rendering in line which was in vogue early in the present century, being carried to its highest excellence by M. Paul Le Tarouilly in his "Edifices of Modern Rome," which appeared in 1840.

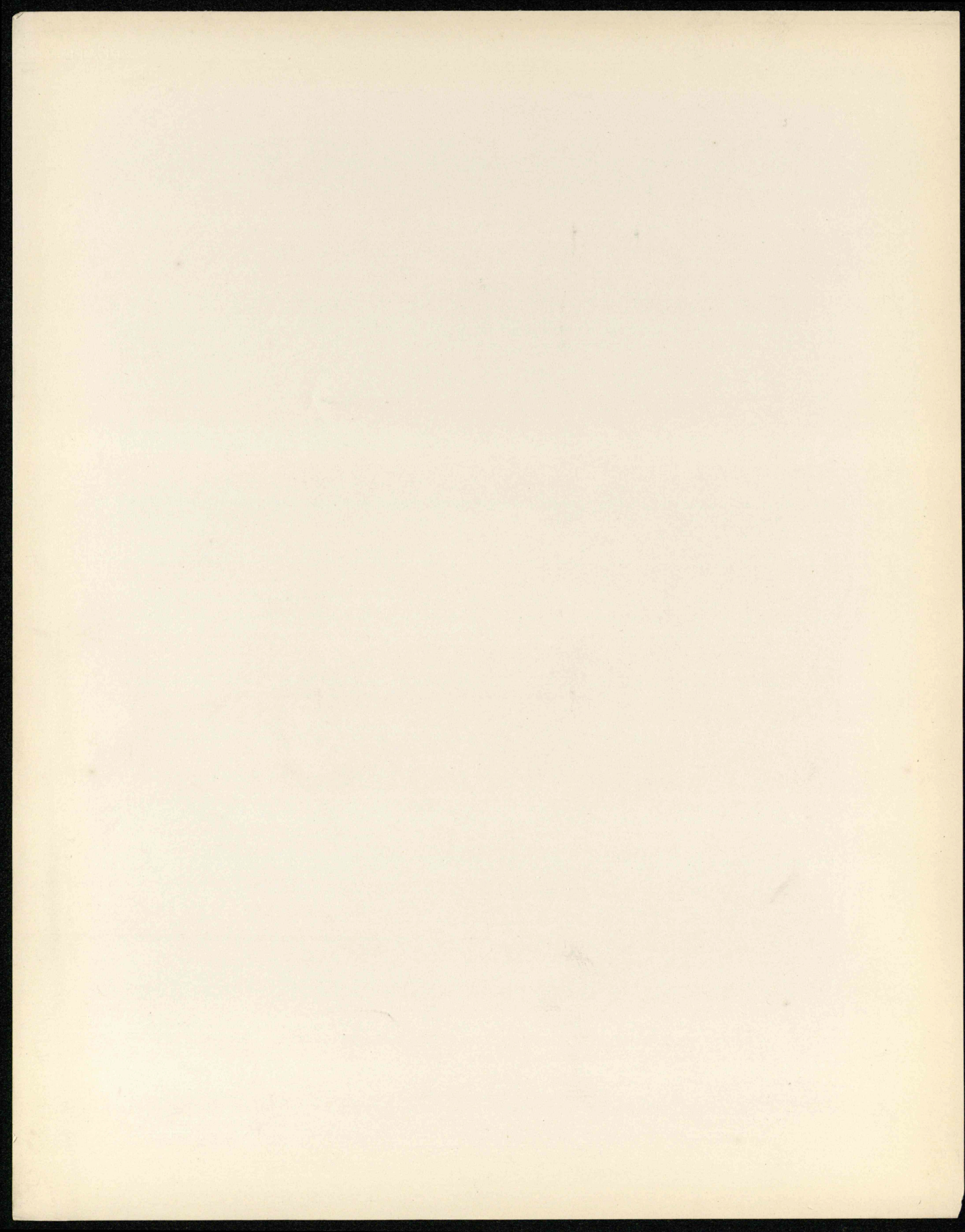
The drawing we reproduce is the work of a student of the Architectural Department, class of '88. Its subject is the proposed interior for a vestibule in the new Suffolk County Court House, done in two-point perspective.

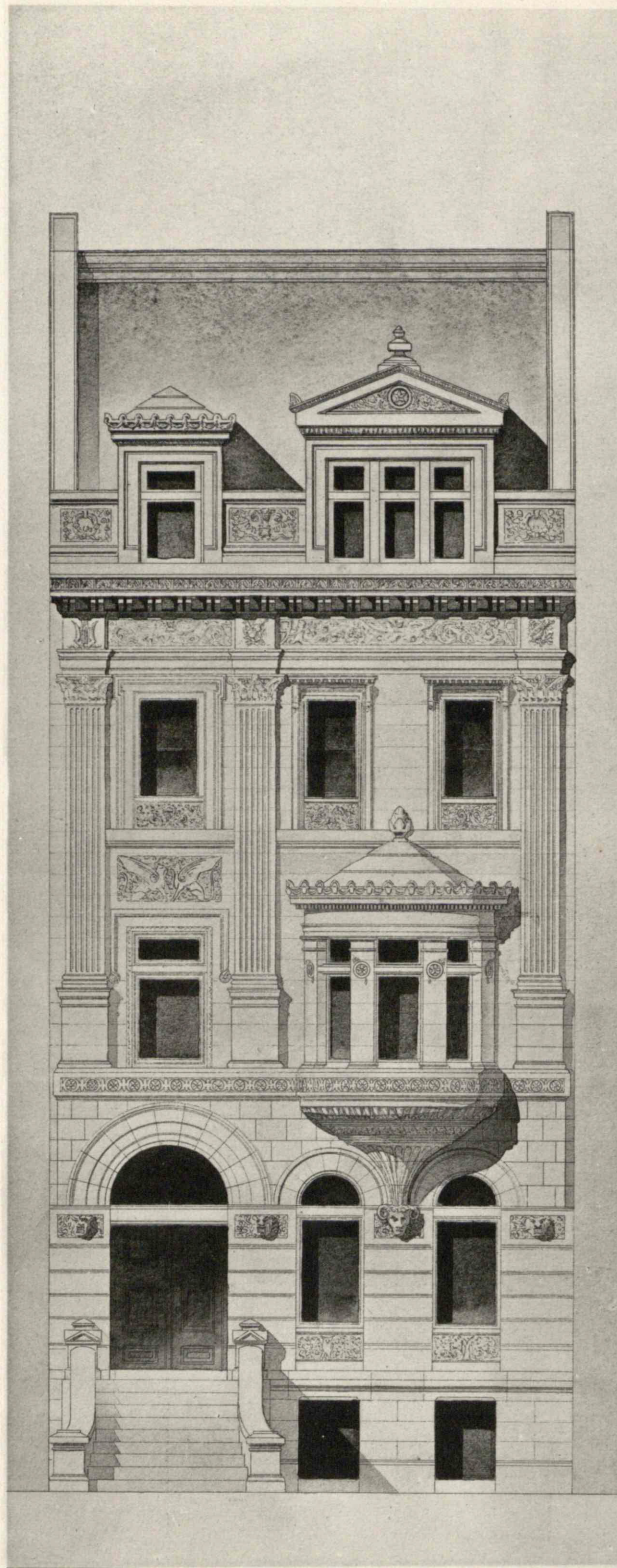


MONTHLY COMPETITION.
FOURTH YEAR SPECIALS.

FIRST MENTION.
GEO. C. SHATTUCK.

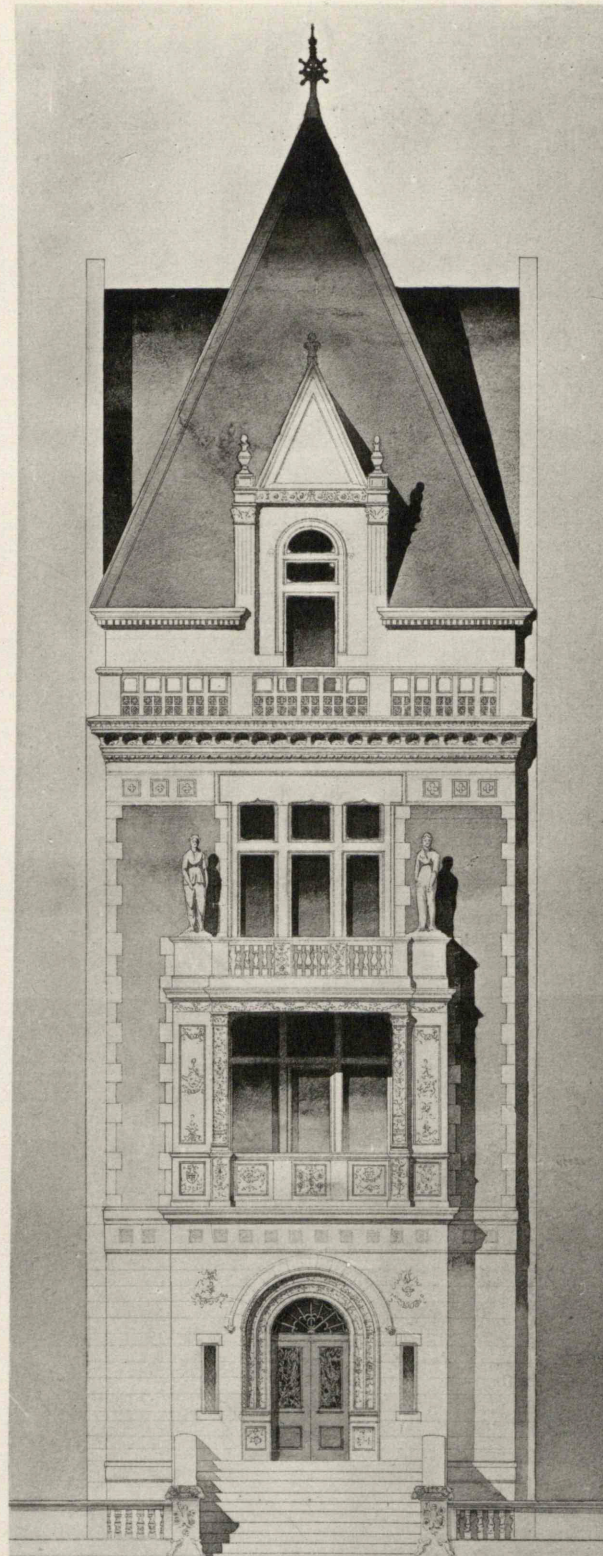
AN ACADEMIC SCHOOL.





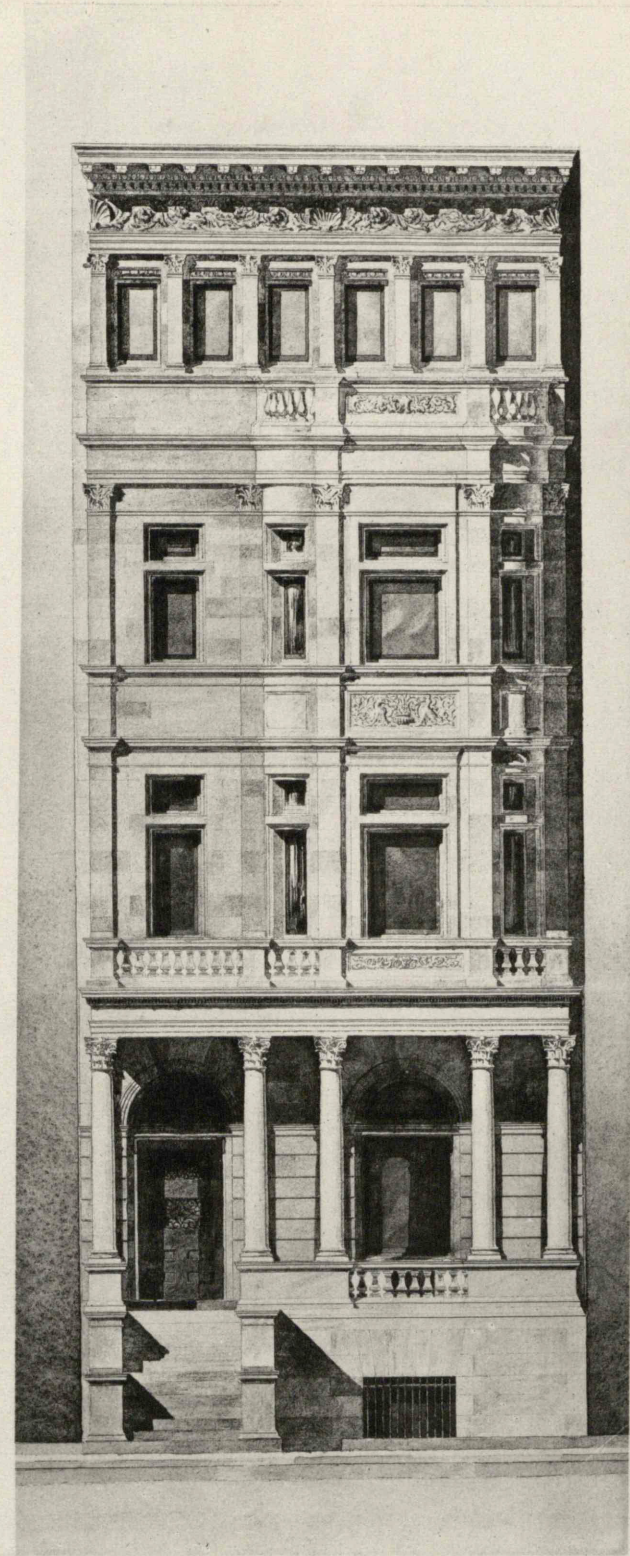
1ST MENTION,

T. W. PIETSCH.



2ND MENTION,

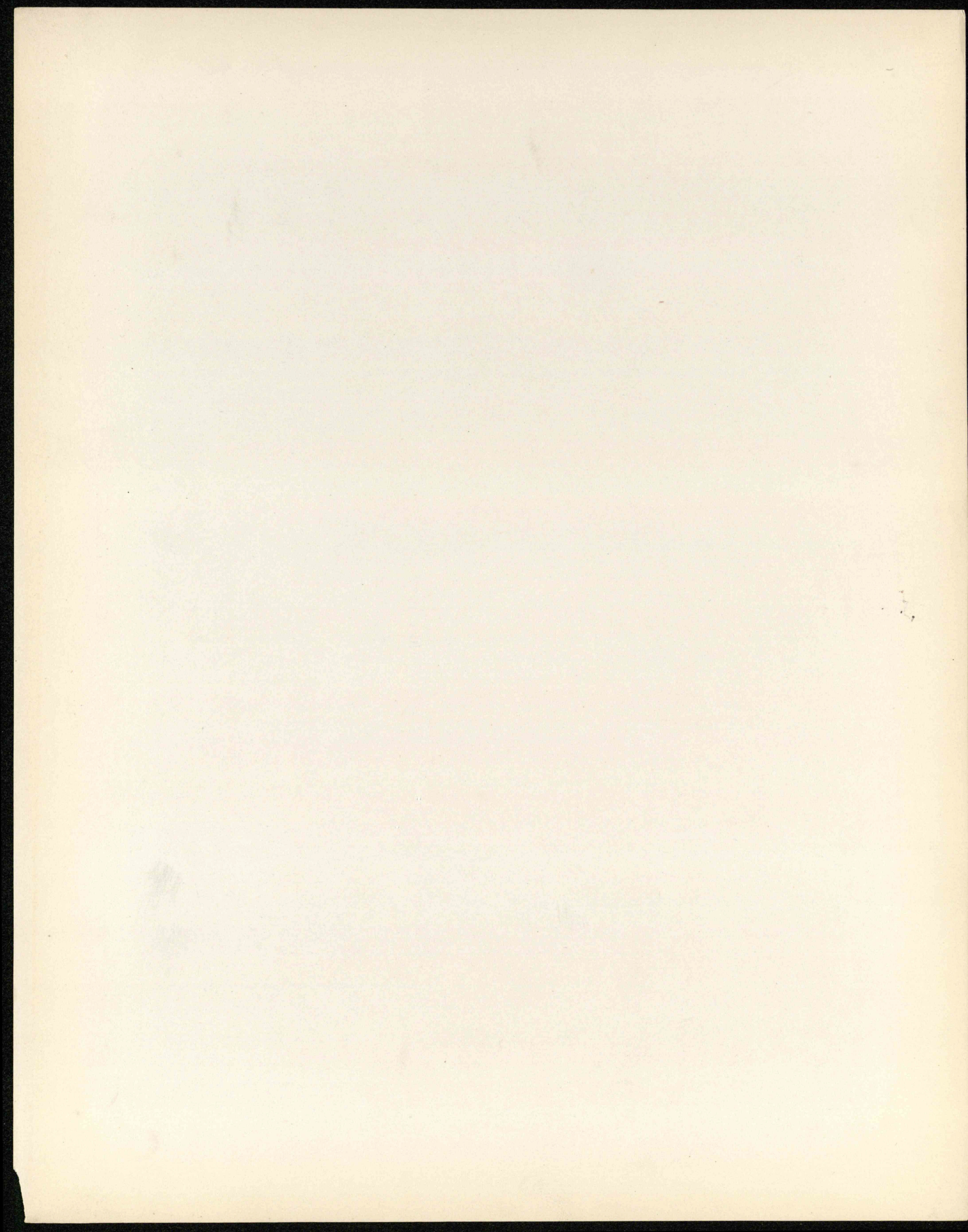
J. W. CASE.

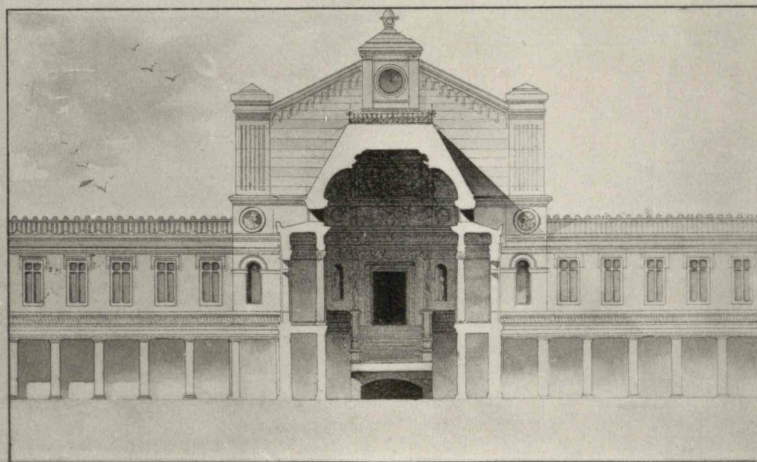
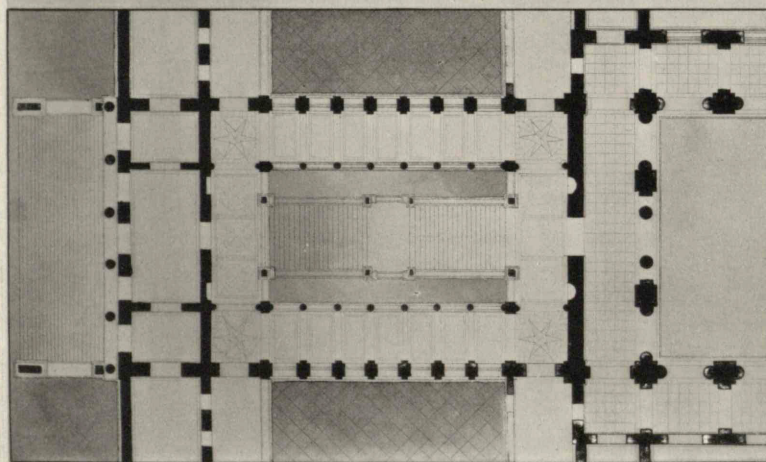
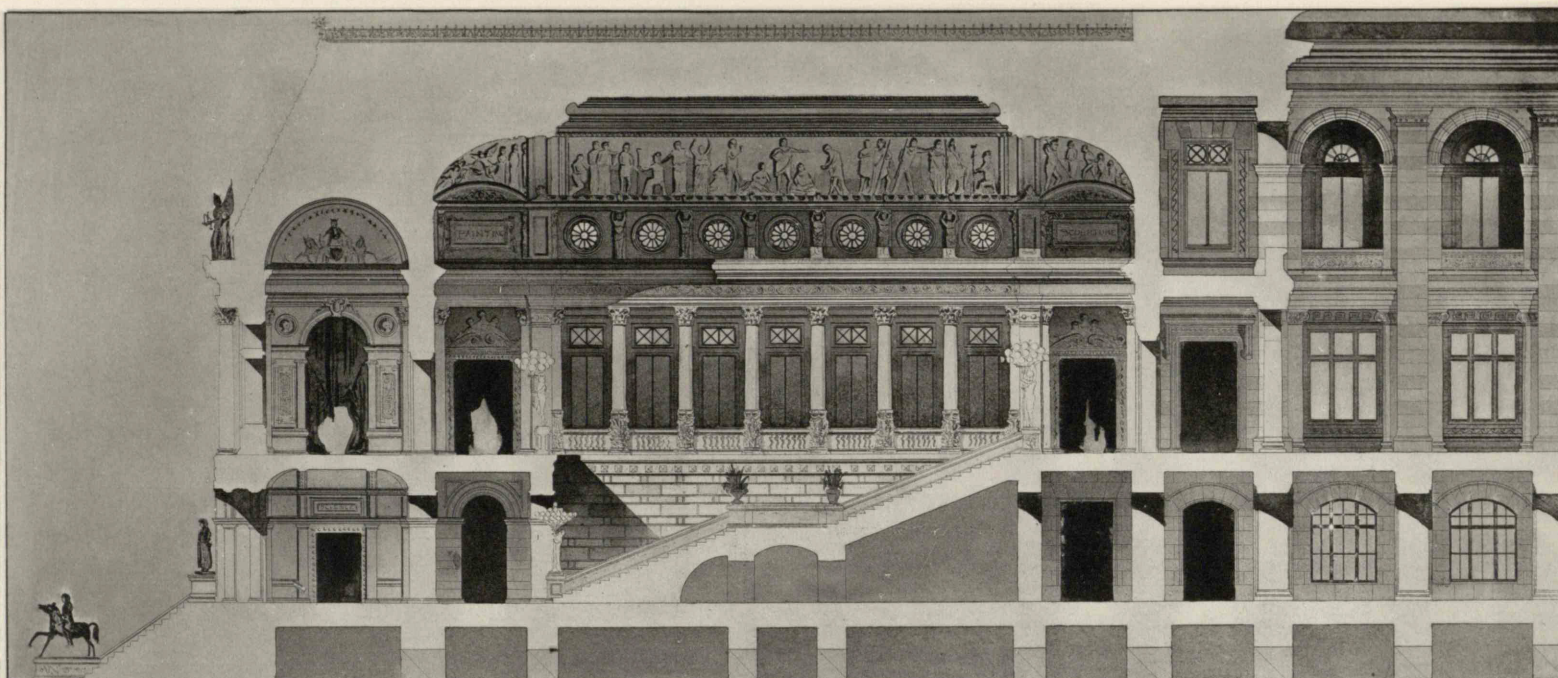


3RD MENTION,

R. C. SPENCER, JR.

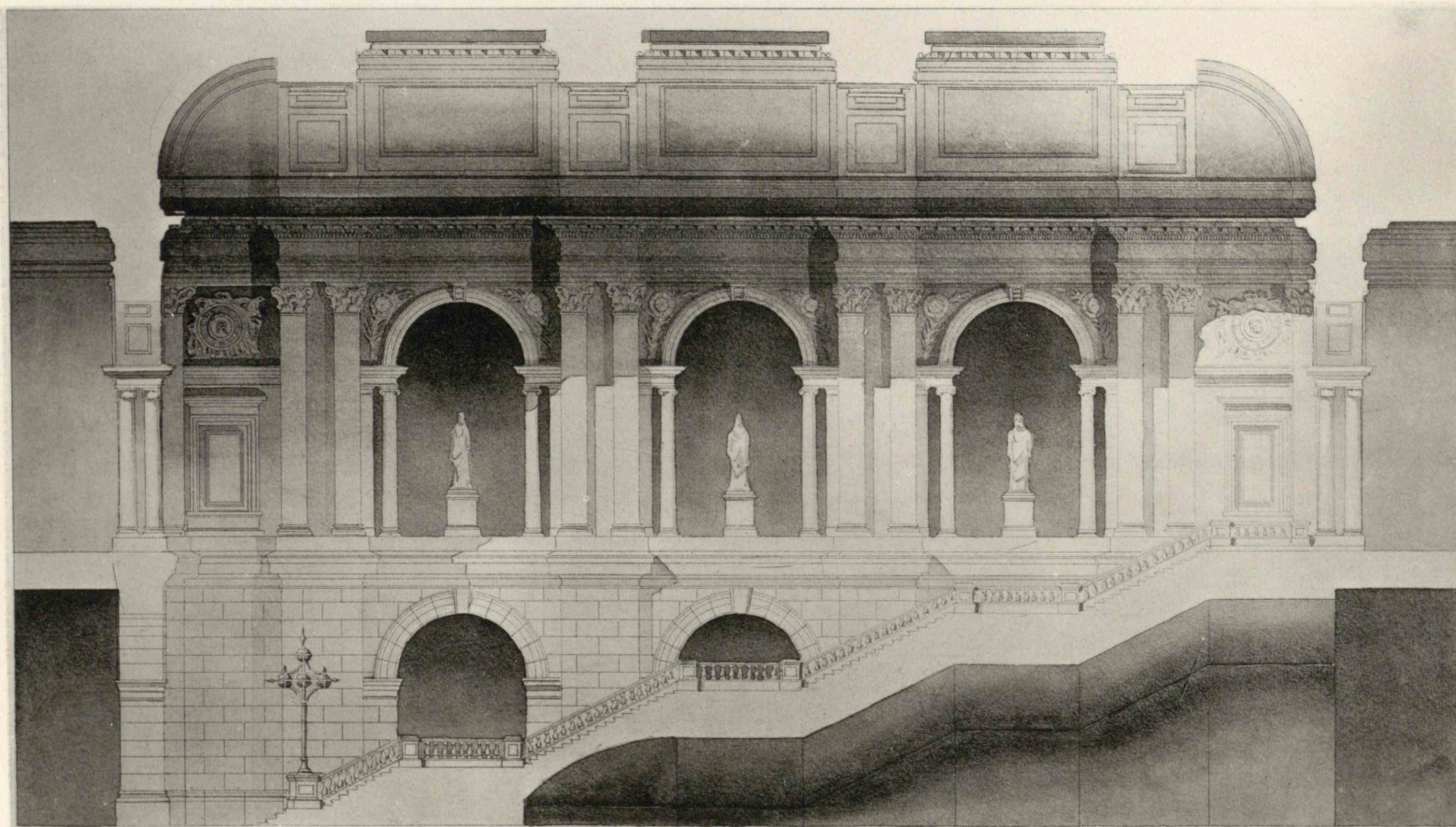
A CITY HOUSE FRONT.





FIRST MENTION.

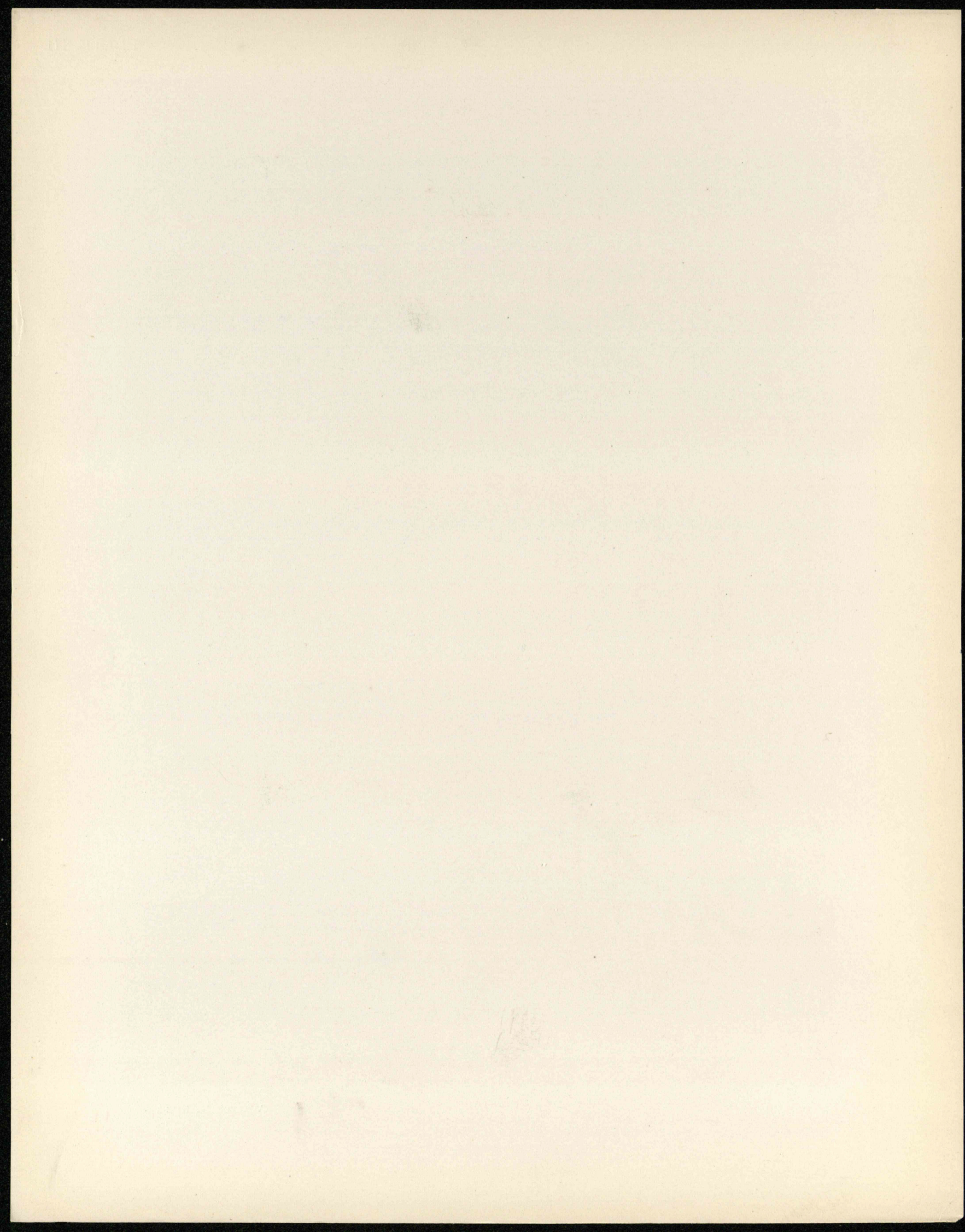
T. W. PIETSCH.

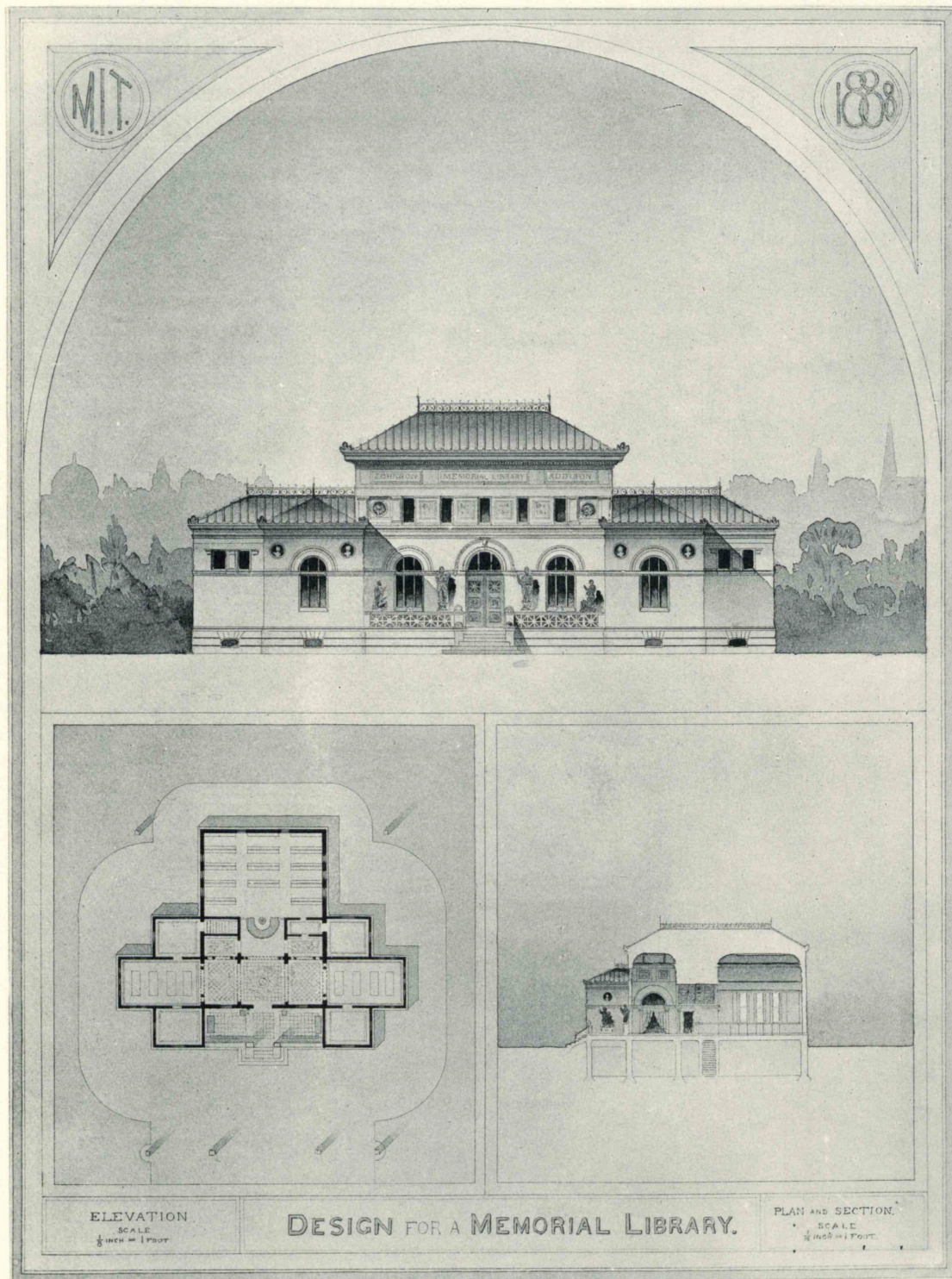


SECOND MENTION.

WALTER H. KILHAM.

A GRAND STAIRCASE.



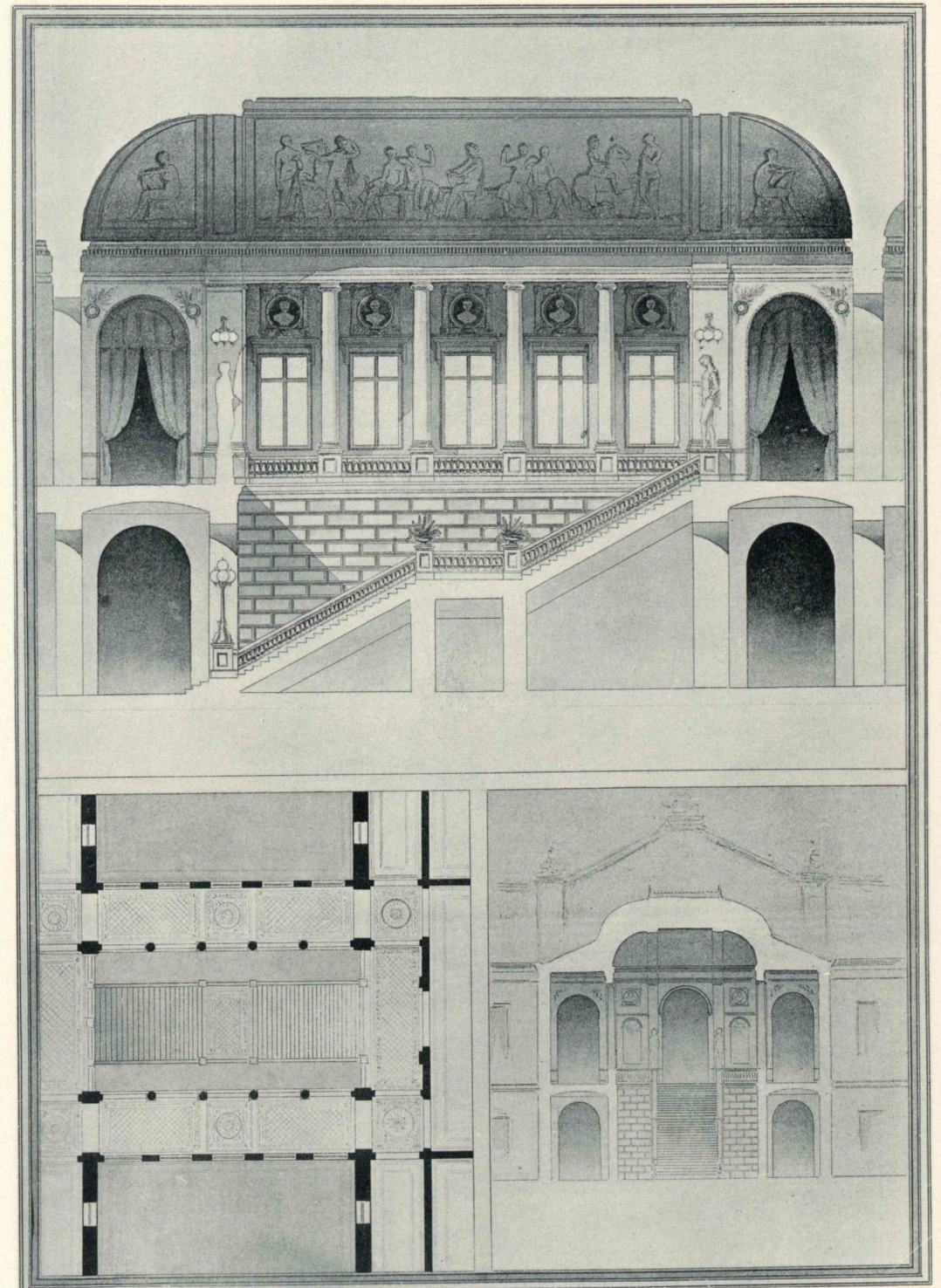


FIRST MENTION,

ARTHUR V. EDWARDS.

A MEMORIAL LIBRARY.

MONTHLY COMPETITIONS.

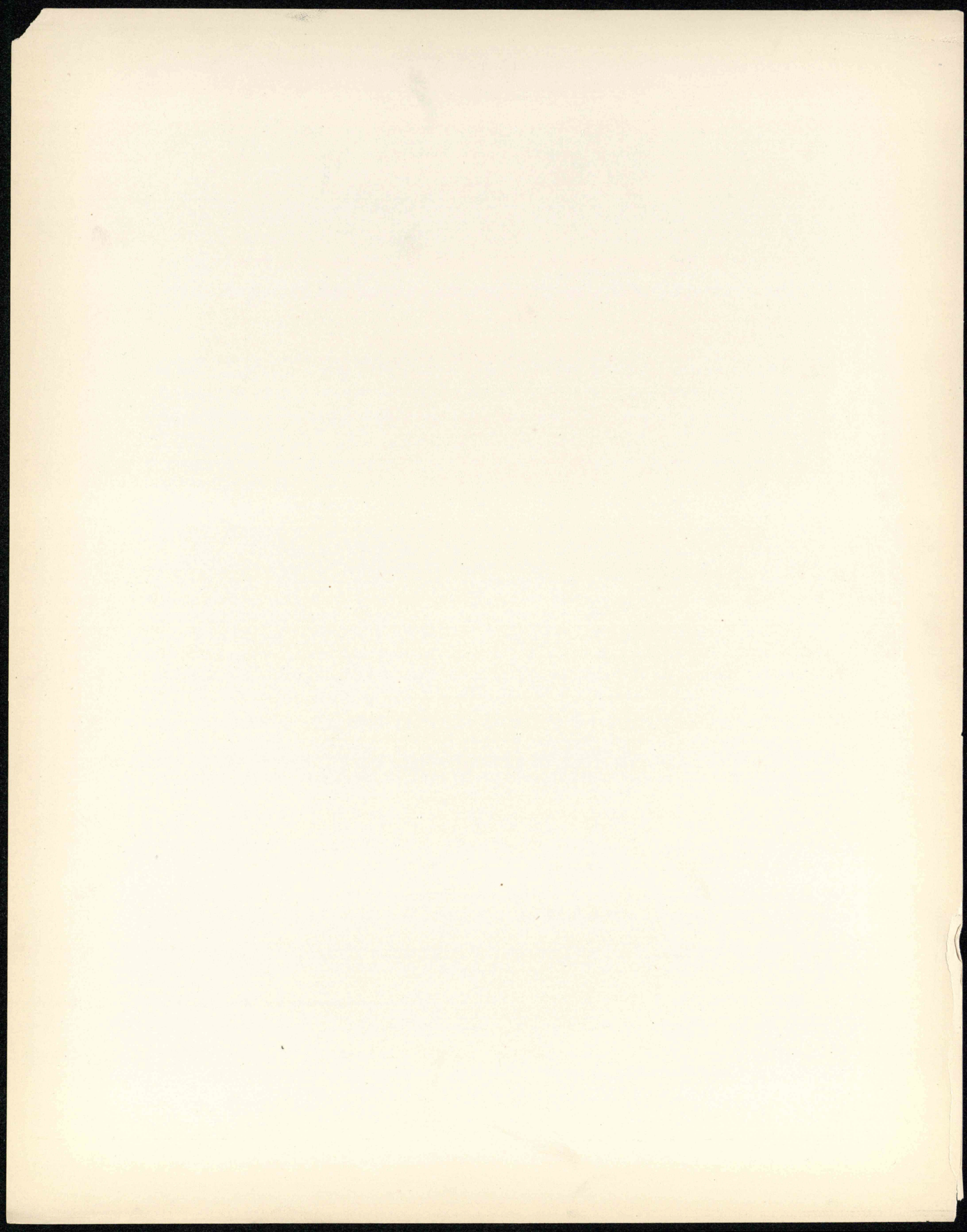


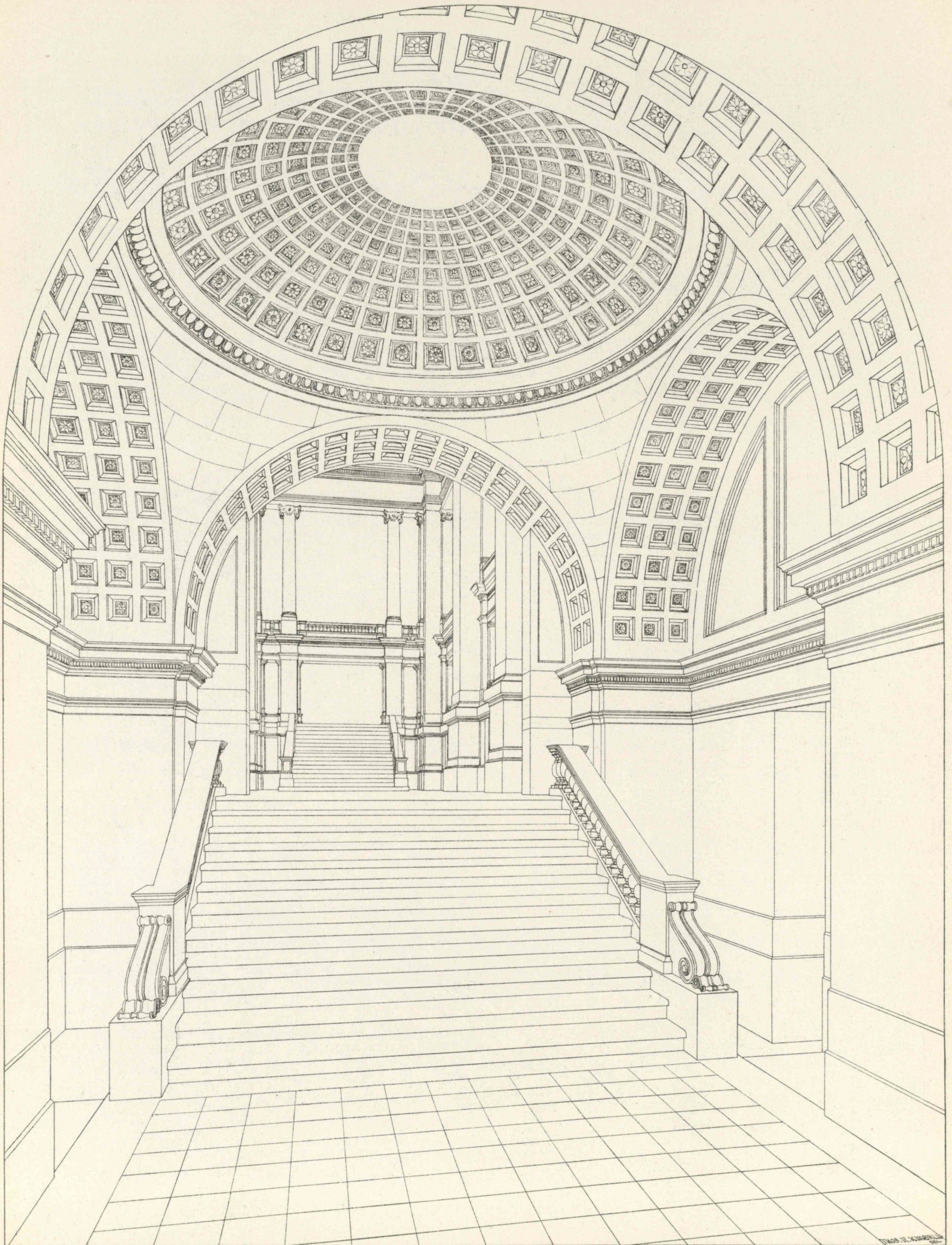
THIRD MENTION.

EDWARD A. CRANE.

A GRAND STAIRCASE.

THIRD YEAR CLASS





EXAMPLE OF TWO-POINT INTERIOR PERSPECTIVE IN LINE.

PROPOSED VESTIBULE IN NEW SUFFOLK COUNTY COURT HOUSE.

