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Important Circular Letter to Architects.

The circular letter, referred to in our last issue, which has been sent by the secretary of the American Institute of Architects to every member of the profession in the United States, is printed in this issue. It is the strongest letter ever addressed to the profession in any country. Its language is clear and its demands leave no room for non-compliance by any architect who deserves being numbered among those who regard not only their profession but their citizenship worthy of an hour's consideration. It was issued as the result of the action of the Secretary of the Treasury and the Supervising Architect in their manifest desire to turn all legislation and the operation of their respective offices to their personal benefit without regard for the public good. The history of the past year in the contest between the public, represented by the Institute, and political chicanery, represented by the public officers named, has shown that there is but one recourse left to those who have taken this great work of reformation in hand. That is, to call to their aid every architect and every right-minded citizen, in order that Congress may be placed in full possession of the facts and urged to pass a law which will be at once arbitrary and operative. The necessity that each architect thus called upon should consider it his personal business to comply with the request of the Institute is imperative. Arrayed against all effort to change the present method of supplying buildings for public purposes is the present Secretary of the Treasury. Always a political office governed by political methods, of which the "patronage" feature is most important, the disposition of the present incumbent goes so much farther that to those who know his record since assuming office it would indicate the utter folly of hoping that he would act other than selfishly in any matter. We can give the names of employés in the Supervising Architect's office, whose services were valuable and whose terms of office ranged from fifteen to twenty-six years, and who were discharged peremptorily by Secretary Carlisle avowedly to give place to some relative or friend, and to this list can be added the names and former employment with date of appointment of his appointees. But this is not a fight of personalities. The great principle involved does not allow of this, and it is only mentioned so that no hope that the present Secretary may yet give the demand of the profession some consideration may prevent some architect who has received the circular letter from acting and that immediately. The position taken by the Supervising Architect is probably copied from that of his superior, and is held by a narrow mind where a greater would have resigned rather than do violence to professional instincts and destroy all chance for professional reputation. With these facts in view, each architect should at once plan how he can best carry out the requests of the circular at once. In spite of the unartistic examples presented by the architecture of our government buildings, architecture has become an art and our practitioners are the peers of those of the world. That architects and not politicians should design our national buildings in the future should be the wish of every architect. That these unartistic buildings should cease to double in original cost as well

as in annual repairs those designed by private architects for private parties should be the wish of every citizen.

A System of National Electrical Education.

What has been termed the National School of Electricity has taken the form of a movement for the establishment in every town and city in the United States of a system of evening schools at which boys who cannot afford to leave work and enter a college for a term of years can acquire the rudiments of an electrical education by attending one evening each week. The rapid advance made by the science, the variety of its applications, and the certainty that this use is only in its infancy has caused the electricians of the country to look into the future and form plans for the education of all mechanically employed in the principles and practice of electrical work. The faculty of the school system is headed by Thomas A. Edison and includes the leading electricians of the country. The plan pursued, in brief, is to present to each class a lesson leaf, with drawings of the apparatus used, which can be studied, and, when the class meets, demonstrated by an instructor and apparatus supplied by the faculty. A school can be formed anywhere that a number of students become interested and supply a meeting place sufficient to warrant the faculty in supplying an instructor and apparatus. So far, these organizations have been called together by the prominent citizens of the towns and the meeting place donated by the people, so that the only expense to the pupil is a nominal one, $12 for the term of one year. It is in no sense a money-making scheme, but the great names that are not only connected with its faculty but are active in its work have only the desire to place electrical operation in the future in the hands of those educated in its principles, and who otherwise would only know such parts of the science as they might pick up in the workshop.

The Washington Competition and the Court-house Dome.

As an example of how that necessary evil architectural competitions may be regulated we publish the premiated drawings and the expert's report upon the competition for the state capitol of Washington, at Olympia. Anxious to obtain the best possible design, the commissioners advertised for drawings, offering liberal premiums. For their selection their desire was to have a jury composed of the best critics in the country, and to this end requested Architects D. H. Burnham, C. B. Atwood, C. F. McKim, Robert Peabody and Prof. W. R. Ware to serve as a jury of award. Business engagements prevented all but Professor Ware from serving, but the report of the latter shows that he gave the fullest consideration to the matter. In one respect this report is especially valuable, in that it will greatly influence the designing of state capitols in the future, pointing out as it does the unartistic effect which the dome has when not proportionally designed. So general has this narrow high dome become to this class of buildings that it has been called "courthouse architecture," and every architect for the past twenty years has seemed to consider it indispensable. The effect, therefore, of the discarding of fifty per cent of the one hundred and eighty-eight designs for this violation of good design alone will probably deter architects from placing an inappropriate dome on what might otherwise be an appropriate design. J. H. McNamara, of St. Louis, in a paper on "Domes and Towers," read before the Institute some years ago, called attention to this mistake in designing, unheeded but by the few; but if jurors upon public competitions will steadily discountenance this disposition to place St. Peter's dome on every $25,000 state or county building a marked improvement will be noticed, with a benefit to architecture only equaled by the hoped-for results to be attained when the government architecture is designed by private practitioners. Professor Ware is to be congratulated upon the general disposition among so many defeated competitors to accept his judgment as honest and capable.

The Field Columbian Museum Opened.

The Field Columbian Museum at Chicago was opened to the public on June 9 with appropriate ceremonies. It is the one permanent good Chicago can point resulting from the Columbian Exposition which will be of benefit to the whole people. It has gathered from that great exposition innumerable relics which otherwise would have occupied years in collecting at an almost incalculable cost. It gives to the West the nucleus of a museum that will probably outvalue all others in the country. Its temporary home is in the superb Fine Arts building of the Exposition, and as this structure is in every way suitable it will probably be many years before a new structure is built. Its directors and projectors were among those who contributed most to the success of the Exposition, but changes have placed the management in other hands, and this may have something to do with the fact that one of its greatest objects has been lost sight of, or at least has not been accomplished. This is the collection of an architectural museum, made up of sections from the superb architectural models that made the Columbian Exposition famous. The wreckers are abroad in the park, and are fast destroying all ornament for the sake of the junk in the structures. They have taken down the statuary, it is true, with some care, and have arranged it in the Electricity building, but only that they may offer it for sale to the highest bidder. The beautiful figure that surmounted the pilaster at the right of the east entrance to the Administration building, one of the finest modeled statues on any of the buildings, stands with her dish of water to her lips, waiting to be sold for a few dollars to ornament a saloon or a beer garden, when it should grace the favorite position in the Field Museum. This is but an example, but is not so glaring an exhibition of mistaken policy as that of allowing these cornices, pediments and other architectural features to be destroyed by the wrecker. True, the molds of much of the staff-work, both architectural and sculptural, have been preserved, but in this no particular system is observable. It was almost with a promise that these architectural features should be preserved for educational purposes that a large number of people lent influence and aid to the project of which this museum is a result, and it may be that the resignation of some of the former directors was owing to the fact that they could not induce their associates to work for this end, and resigned rather than be burdened with the just censure that a failure in this direction would bring upon them. If the Field Columbian Museum contained nothing else than an architectural collection such as could have been gathered from the Exposition buildings, its great purpose would have been served, and without it the most complete remains of prehistoric tribes and collections of beetles from Brazil will not recompense.

HENRY VAN BRUNT—ARCHITECT, WRITER AND PHILOSOPHER.

BY P. B. WIGHT.

PART III.

IN the paper read before the World's Congress of Architects, at Chicago, in August, 1893,* Mr. Van Brunt took a hopeful view of the future of artistic architecture in America—more hopeful than that which we expressed in our last article on this subject. It is, of course, important for the reader to form an idea at once as to the nature of the thing hoped for, in order to comprehend either the author's or our own meaning. We may have two different ideals in view, while both recognize the value of the essential principles that he lays down. It becomes necessary therefore to use plain language.

The present period seems to be one already marked by an awakening among architects, designers, instructors, well-informed critics, and even ill-informed *litterateurs* of architecture, to the importance of ascertaining what is the best course of education, not only for the students but the practitioners of architecture, upon whom will devolve the duty of expressing in their works the result of this new awakening. There have already appeared several essays directly bearing upon this subject and more are to follow. It was the same after the exposition at Philadelphia in 1876. That was followed by a distinct and very general revival of architecture and every form of decorative and applied art, upon lines which were not entirely new, but which had already been laid down by many investigators and practitioners during the preceding decade.

The Philadelphia exposition furnished the object lesson that was necessary to make the efforts of the new school of agitators comprehensible to the interested public. The leaven that had been planted had the first opportunity to grow. People who before regarded houses and the things that they contained as purely objects of utility, fashioned in such form and elaborated in such detail as pertained to the years in which they were produced, were awakened to a sense that these were proper subjects for artistic treatment. They saw them at the exposition, especially in the contributions from England (which better illustrated the state of English art at that period than did the contributions from that country at the Chicago exposition exhibit those of the present time from the same source), and were thereby enabled to look with critical eyes on our own commonplace, inferior and uninteresting productions. They saw that such things could do more for them than supply their wants, and give them the satisfaction that what they had ordered or bought were made merely according to the latest *mode;* that they might be objects of pleasure and education. The Philadelphia exposition was followed by a great revival of *popular appreciation* of the value of good design in everything just as the first great international exposition of London, in 1851, was. At London and throughout England the knowledge gained of French and other forms of continental design was the stimulus. What America gained at Philadelphia came mainly from England. What will be the results of the World's Columbian Exposition, where architecture was brought into greater prominence than ever before, remains to be seen. In 1876 the work of reform had already been commenced in the United States by many conscientious artists in architecture and decorative art, who had received but little popular encouragement. But when the exposition disseminated popular education in the same direction, it was found that the men were already on the ground to supply a demand that was thereby created. We were not obliged to import architects or designers, and many able men soon came to the front.

As this and what follows illustrates one of Mr. Van Brunt's fundamental propositions it will here be given: "A merely learned architecture can never be a living architecture, because a living architecture has never existed without popular sympathy." This applied with equal force to every other decorative art, including especially the designing of furniture.

The impetus that English art received in 1851 from France and elsewhere was an incentive to Englishmen to design things that had never been designed before. It was only to a slight extent that French designs were introduced. But the English were taught how to think and study, in matters that had theretofore been entirely left to incompetent mechanics and so-called designers whose designs had as little art in them as the machines that put them into execution. At that time the study of the mediæval arts of the twelfth, thirteenth and fourteenth centuries, which had been an ecclesiastical "fad" of the high church party, was beginning to interest the architects, but had no advocates among them to urge a study of the true principles of Gothic construction and design from the architect's standpoint. Modern Gothic architecture in England had been largely a cheap imitation of the superficial features of the latest remains of that style up to that time. But after 1851 there began to arise, mainly among the best informed young architects, and a few student amateurs like Ruskin, a number of advocates who elucidated the underlying principles of truth in construction, and the fidelity of design to construction, which were the underlying principles of twelfth and thirteenth century Gothic, and had been the results of a conscientious and consecutive development of architectural structure and design continued with various interruptions from the fall of the Roman Empire. The decadence of Gothic, its fall, and the causes of both then became fully understood for the first time.

The so-called and oft-derided and sneered at "Gothic" revival commenced in earnest after 1851, and was spurred on by the awakening caused by the exhibition of that year. The movement had but few disciples in this country who thoroughly understood it, but many superficial imitators; yet it was never the *mode* with us. In England it was unimpaired by dissensions, and was almost generally practiced up to 1876, though Norman Shaw had commenced some of his Elizabethan work before that time. The greatest architectural geniuses that England has produced worked in it, and have left some noble monuments, to be derided by W. J. Loftie and others; but today most of those strong men are dead and have left no successors. Side by side with these great works were erected many weak imitations by incompetents who never understood the underlying purpose of the revival, and practiced it only as a new fashion. These pass with the average critic of the present day as also examples of the revival.

Through the circulation of English architectural journals at a time when we had none of our own, a large number of American architects became interested in the movement, and we had a few Englishmen with us, like F. C. Withers and Frank Wills, who practiced it with a thorough knowledge of what it meant. But after 1876 it began to be popular with the American architects. At the same time there commenced what proved to be in a few years a complete revolution in the designing of furniture in this country, which was in the direction advocated by the English reformers. Before that time one could not buy at a store or factory in this country a single piece of rationally constructed or artistically designed furniture. Now they can be found in any shop from Portland, Maine, to Portland, Oregon.

These revivals were not unaccompanied by sideshows, which were the results of an ignorant impression that this was a new *fashion* of design to be copied superficially. It was the same with the architects as with the furniture maker, and the country is full of architectural travesties of modern Gothic, which outnumber the sincere efforts of those who understood and were competent to practice it. The furniture men, seizing upon the name of a famous president of the Royal Academy, whose son, the secretary of the Royal Institute of British Architects, had written an excellent popular book for general circulation, called "Hints on Household Taste," called their new designs "Eastlake," and it was not long before some of the frontier architects began to dub their designs with the same name, which they also dragged in the dust.

Meanwhile, students of the French School of Architecture became plentiful in this country, and the "Battle of the Styles," which had commenced in the United States soon after it did in England, was continued on our own ground. But the Renaissance architects were not vanquished here as they were in England. The examples of modern American architecture in which the mediæval principle is exemplified are very few, and hence the revival of the thirteenth century movement cannot be claimed to have been successful. But when Henry Hobson Richardson designed Trinity Church, Boston, on twelfth century lines, and followed it by many other brilliant examples, these attracted the attention of the young architects everywhere. There were now actual examples to be seen, and illustrations were spread throughout the land by American architectural journals that had been

* "The Growth of Characteristic Architectural Style in the United States," a paper by Henry Van Brunt, read before the World's Congress of Architects, Chicago, 1893, and published in Proceedings of the World's Congress of Architects, by the American Institute of Architects, 1894.

established. The lead was not only followed by Richardson's many pupils, who soon got into practice, but by many others. Richardson continued to develop his ideas through his immense practice until his death; and for several years after, through the works of the firm who were his immediate successors, and much better work by some who had never been under his powerful personal influence, for the first time in American history a genuine revival of architecture seemed to be in progress.

This has been forcibly and graphically described by Mr. Van Brunt in one of the chapters of Greek Lines. It was in every way a healthy revival, because, through the works of Richardson, its underlying principles were better understood than through all the English writings and illustrations of the subject. The style assumed national characteristics. The most healthy manifestation of it was not in the large and expensive buildings that were erected, but in the great number of dwellings in which simplicity of design took the place of florid redundancy, and in the great number of plain, but well designed buildings, that were erected on our up-town avenues and second-class business streets, especially in the large western cities, and even on the Pacific coast in the newly settled state of Washington.

While the strength of this movement was largely in the fact that many architects were working together, yet without concerted action, on the same lines, its main strength was in the fact that it met with a large measure of popular appreciation. It was adapted to the simplest as well as the most grandiose projects. It embodied that which was best in the underlying principles of the Gothic revival in England. The lintel, which was used quite as much as the arch in the domestic work of the middle ages, was again given a prominent place in construction wherever the proper material was procurable. Huge overhanging cornices, relics of classic influences, were abolished, with all the fictitious materials which had been used to cheapen their cost.

At the same time our country was not without many beautiful examples of revived pointed arch or thirteenth century work, by R. M. Upjohn, Withers, R. H. Robertson, Haight and others, and by John W. Root especially in the superb Woman's Temple at Chicago, all in the same spirit of revival which had characterized the work of Richardson and his disciples, and it looked as if American architects were about to work together in a common cause. Deceptive and fictitious methods of building were generally discarded. Terra cotta had come into extensive and legitimate use, and sheet copper expressed in ductile repoussé work what had been impossible in vulgar galvanized iron. It looked as if "characteristic architectural style" had begun to grow in the United States, and that it had broken loose from Old World conventionalities, formulas, dogmas and the traditions of the schools. The movement was, as might have been expected, characterized by many eccentricities. Naturalness in style was often carried to an affectation of crudity. Young architects were fond of piling up boulders for picturesque effects in country houses, and huge beams were often used where modest lintels only were required, while the picturesqueness of roof lines was carried to an excess in shingles and weathercocks. But, for all that, it was healthy work.

Such, then, was the nature of the thing hoped for, which formed our ideal of the growth of characteristic architectural style in the United States when we read Mr. Van Brunt's paper for the first time. Had his paper appeared three years earlier, we would both have agreed. But he seems satisfied as well with a state of things that has changed. It cannot be denied that there has been a revulsion against purity and simplicity of style within a very short time. It has been coming for ten years past, but has burst upon us with force within three years.

(*To be continued.*)

NEW PUBLICATIONS.

MAXIMUM STRESSES IN DRAWBRIDGES, and DIAGRAMS, FORMULAS AND TABLES FOR BRIDGE ENGINEERS AND ARCHITECTS. By Prof. Malverd A. Howe, Rose Polytechnic Institute, Terre Haute.

Each of these books, as the titles indicate, are intended for engineers; but the last-mentioned book, however, contains matter of interest to architects, or rather to that class of architects who take interest in problems of construction. On the first few pages are given weights of materials, trusses, etc., and rules by which such can be calculated, together with graphical illustrations of the same. To those interested in such matters it will be found useful. Like all the author's works it well carries out the purpose for which it was designed.

MECHANICAL HEATING AND VENTILATION.*

BY M. C. HUYETT.

HEATING and ventilation, as a branch in sanitary science, has within a few years been receiving much attention, with the result that more progress has been made in providing healthful conditions than in any twenty-five preceding years; it is a special branch in engineering in which a man can become an expert only when practical experience with the details of the construction and application of parts and mechanism shall form the basis of analysis, by which fact shall be separated from theory, and the laws which govern heat and cold and the movement of air currents shall be learned.

The subject has been treated from a theoretical standpoint by most writers; in no "text-book," so-called, can anything be found helpful, or even suggestive, which will aid architects in proportioning flue areas required for heating and ventilation.

In all the activities of life the specialist becomes most expert; the grand movement of material development made within the last ten years has, in the main, been made by specialists — "men of one idea" — who concentrated time, thought and money to accomplish a definite purpose.

Unreasonably, the impossible is expected of architects; necessarily, they must have creative minds; it is expected of them that they shall know as much of carpentery as the carpenter, of masonry as the mason, of plumbing as the plumber, and of heating and ventilating as the heating and ventilating engineer; it is impossible that they shall have practical experience in each and every branch of work entering into construction. Such being the fact it is my purpose to direct attention to essential elements and incorporate a table which will aid architects. Data, for estimating the parts, speed, and fan capacities, pressures, etc., for mechanical heating and ventilating plants, has not been put in print; the engineering is confined to a few persons, half or more of whom are theorists — men without practical experience — who accept manufacturers' printed tables as truth.

Good heating and ventilating apparatus consists of apparatus which will warm the air in an inclosed space to a temperature conducive to comfort and health, and supply a volume of air sufficient to maintain a sanitary standard of purity; both conditions — heating and ventilation — must be controllable, constant, safe and economical, with the air deliveries so made that occupants shall not be exposed to cold drafts. In plan and application of apparatus the two requirements must be treated as a unit—they are inseparable, and together form a complete whole.

Efficiency, sufficiency, safety, durability and economy, with the installation so simple that any person of average intelligence shall be competent to operate, are the prime factors to be considered in providing parts and mechanisms for a modern sanitary heating and ventilating plant.

Ventilation is the renewal of air by supply at one or more places into and displacement of foul air from an inclosed space; it is a gradual, constant and complete changing of the air in a structure, a substitution of fresh air for foul air.

Sanitists agree that air which contains seven parts carbonic dioxide in 10,000 parts, as the result of respiration, is no longer fit for use, and ten parts in 10,000 is slow poison; normal air contains 3 to 4 parts in 10,000. Chemical analysis establishes the fact that air in schoolrooms ranges from 14.5 to 32 parts carbonic dioxide in 10,000 parts; in fact, is worse than that of a well-kept sewer. Professor Kedzie gives 24.0 parts carbonic dioxide in 10,000 parts as the average in eleven high and normal schools in the state of Michigan. For ventilation the volume of fresh air to be supplied should be based on the number of occupants, terms of occupancy, and to some extent on kind of occupancy, and be delivered regardless of varying internal and external temperatures, and velocity and direction of external air currents. "Breathing space" is not a factor in estimating the air supply required.

In heating and ventilation, the conditions predominating, and the natural laws which make the conditions and govern, must be regarded, otherwise all applications will be experimental.

First. Air in a building or room is in motion, its direction and velocity caused and controlled by location and area of glass exposures, exterior temperature, location of heat supply, location of ventilating outlets, direction and velocity of external air currents, kind of occupancy, and, to some extent, the number of occupants;

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separate from the different factors specified, the motions of air, by the force of gravity, are precisely like those of fluids.

A movement of air

88 feet per minute	is	1 mile	per hour,	barely observable.	
176 "	"	" 2 miles	"		just perceptible.
264 "	"	" 3	"	"	
352 "	"	" 4	"	"	light breeze.
440 "	"	" 5	"	"	gentle wind.

Second. Air, in a room, in motion IS EFFECT; if it produces discomfort, the cause should be located and a proper remedy be applied.

Third. Air occupies space the same as solids and liquids, but because it is invisible, it is not so regarded.

Fourth. Cold air falls because of its density, and heated air rises because of its rarity.

Fifth. Carbonic acid gas, transmitted through the pores of the skin and expelled from the lungs by respiration, the result of internal combustion, is half again as heavy as pure air and falls by reason of its weight.

Sixth. A given volume of air occupies a given space; a like volume cannot occupy the same space at the same time.

Seventh. A volume of air can be delivered into a room only equal to the quantity displaced therefrom; when a space is full it can hold no more.

Eighth. A volume of air only equal to the quantity that leaks in, or is admitted through openings made therefor, can be exhausted from a room.

Ninth. Natural means for purifying air is the action of winds — diffusion, oxidation and the fall of rain, neither of which affects rooms which by reason of their construction are practically hermetically sealed boxes.

Tenth. A building or room so constructed as to make necessary the opening of doors, or windows, to admit fresh air, is not properly ventilated; open a door or window and a two-fold current is immediately produced; cold air, by reason of its weight, falling into the room, and displacing a like quantity of warmer air which passes outward, mainly through the same opening, the flow decreasing in proportion as an equilibrium of temperature is established as between the inner and outer air.

Eleventh. Persons sitting between a window and the source of heat supply are in a cold draft and usually "take cold"; they honestly believe that the draft is caused by ill-fitting sashes; make the sashes air-tight fit and the result will be the same.

In extreme winter weather the downflow of cold air produced by glass surfaces will cause light curtains to vibrate, in velocity is equivalent to from four to five miles an hour.

Tests can be made by blowing smoke in an upward direction against glass surfaces; if it be expelled from the mouth its temperature will be about 98°, and according to all preconceived notions should rise, but following a natural law it will almost instantly fall to the floor line and travel toward the source of heat supply.

Twelfth. Apparatus which will warm a building to a proper temperature in the shortest time with the least expense for fuel, will maintain the after required temperature at the lowest cost.

Thirteenth. It is impossible to exhaust air from a room in excess of the quantity admitted, and it is impracticable to admit air to a room unless it has previously been warmed.

Fourteenth. The transmitting power of various building surfaces and their cold-draft producing powers, relatively, are:

Oak and walnut	65
Window glass	1,000
White pine	80
Pitch pine	100
Lath and plaster	75 to 100
Brick	200 to 250
Iron	1,030 to 1,110

Fifteenth. A stove ventilates to the extent of the volume of air admitted to the combustion chamber; when the draft is closed ventilation ceases.

Sixteenth. An open fireplace *with a fire in it* ventilates to the extent of the quantity of air that can leak in about window sashes and doors; to that extent it is an air ejector exhausting air from a room which by the natural law of gravity and atmospheric equilibrium is replaced by cold air. When an open fireplace has no fire in it, in cold weather, cold air will fall into a room in volume equal to the leakage of warmer air outward caused by heavier—cold air—falling into and occupying a lower space than the warm air; this action will decrease in proportion as an equilibrium, as regards internal and external temperature, shall be restored. Make a room air-tight except a keyhole in the door, and the volume of ventilation can be measured by the quantity of air that can leak in through that hole.

Seventeenth. High and low pressure steam and hot-water systems with radiators in rooms will provide HEAT, but *ventilation is impossible;* it is true in most cases flues FOR ventilation are provided, but they *do not ventilate.*

Eighteenth. Direct-indirect heating has been applied to a limited extent; has never been a success, in most instances the indirect has been abandoned; practically the system is obsolete.

Nineteenth. Indirect heating provides ventilation in proportion to the area of radiating surface and its exposure to air contact, temperature of radiating surface, temperature of exterior air, direction and velocity of external air currents, atmospheric pressure, size and height of ventilating flues and quantity of heat force applied therein; as a result the volume of ventilation is inconstant and uncontrollable.

(*To be continued.*)

AMERICAN INSTITUTE CIRCULAR TO ARCHITECTS.

THE president and secretary of the American Institute of Architects have issued the following circular letter to every member of the profession in the United States:

AMERICAN INSTITUTE OF ARCHITECTS.

OFFICE OF THE SECRETARY,
PROVIDENCE, MAY 21, 1894.

To..... .. ..Architects:

DEAR SIR,— During the last twenty-five years the American Institute of Architects and members of the profession who do not belong to that body, together with many others who are deeply interested, have been trying to bring about a reform in the methods of designing and constructing buildings for the United States government.

The officials at Washington have met our committees courteously, have assured them of their entire sympathy, and have promised to support this cause. But we stand practically where we did a quarter of a century ago, although earnest and persistent efforts have not been wanting.

We are now forced to see that the path, so patiently pursued, runs in a circle and does not lead to any goal and that there has never been manifested in Washington the sincere support necessary to carry on this reform. We have failed to win our cause through personal, private means and must now go to the country with the facts.

THE ABUSES TO BE REFORMED.

1st. The needless cost of the public buildings.
2d. The needless cost of architectual service.

The authority for the figures quoted below is Mr. Glenn Brown's article in the *American Architect* of April 7, 1894, entitled "Government Buildings Compared with Private Buildings."

Mr. Brown's statistics show the actual cost of a large number of government and private buildings, which he compares with each other, class by class.

COST OF BUILDINGS.

These statistics prove that the United States Government buildings cost sixty-seven per cent more per cubic foot than private ones of similar construction, finish and size.

COST OF ARCHITECTURAL SERVICE.

Private "architectural service" covers the following:

Preliminary sketches, which include competitive drawings.
The final designs of every sort.
The working drawings, details and specifications.
All necessary reproductions of drawings.
All services of mechanical, sanitary, heating, electrical and constructional engineers, together with the draftsmanship, details and reports, necessary to carry out their ideas.
All paper, stationery, bookkeeping, estimating and rendering of accounts, making of certificates, etc., etc.
All preliminary and final adjustments.

For the above services the regular fee is 5 per cent on the total cost of the building. To this should be added the sum of 1 per cent, estimated on the cost of the building for traveling expenses, in case there are any, and for clerk-of-the-works, both of which are usually paid for by the owners themselves.

The cost, therefore, of complete private architectural service, including the clerk-of-the-works and traveling expenses, amounts to 6 per cent.

Mr. Glenn Brown's statistics, taken from the actual cost of a large number of *separate structures,* shows that *the government expends* for the same architectural service, as listed above, *over nine per cent* (9 per cent).*

* "Civis" (Adolf Cluss, who from service in the office of the supervising architect knows whereof he affirms) in a paper on this subject printed in 1869, says that the architectural service rendered costs the government more than 11 8-10 per cent.

COMPARISONS.

Cost of architectural service, public buildings.....	9 per cent.
Cost of architectural service, private buildings.....	6 per cent.
Excess of cost of government over private architectural service.....	50 per cent.

But this last comparison is made as if the government and private buildings cost the same per cubic foot, which, however, is not the case, as the government buildings cost on an average 67 per cent more than private buildings. The true comparison, therefore, on a basis of the same cost per cubic foot for private and public buildings is:

Architectural service, public buildings.....	15 per cent.
Architectural service, private buildings.....	6 per cent.
Excess of cost of government over private architectural service.....	150 per cent.

NOTE.

It is stated by Acting Secretary of the Treasury Curtis, in House of Representatives, 53d Congress, 2d Session, Ex. Doc. No. 179, which was recently sent to the speaker of the House of Representatives, that: "It appears from the schedule of fees customarily charged by architects that the expense of preparing plans, drawings and specifications and administration under the act might be greater than at present, but how much cannot be satisfactorily determined until a definite and detailed scheme is prepared for its development."

Does the Acting Secretary mean that the extravagant system now in vogue in the office of the Supervising Architect of the Treasury Department must be retained, and that to the total percentage must be *added*, that paid to outside architects, should they be employed to make designs? If so, one of the main purposes of any new legislation, so far as the architects are concerned, should be to cut off this frightful extravagance in the office of the Supervising Architect in order that the government may have its work done at the same price that individuals pay, and by means of a service more able, expert and satisfactory.

It is this very matter of enormous expense that we are striking at.

The government can have its work done as cheaply as anyone else, provided a mandatory law be passed, insuring the employment of the expert architects of the country.

THE ARCHITECTURAL RESULTS.

This point needs no argument: That after spending fifty per cent more for a given building, and one hundred and fifty per cent more for full professional services than there is need of doing, and after taking from twice to ten times as long to finish the structure, the result is inferior. The government buildings obtrude themselves upon us; are inferior not only to the *best* contemporary private structures, but to the *average* ones; few, if any, are well planned, and all are more or less offensive in appearance.

We wish to stop this great waste of the people's money, and to prevent the erection of any more structures which shall debase public taste.

Will you undertake your part in this work? A few men only in the profession have so far sacrificed their time and given their best efforts for the cause. It is a public duty. It must be carried forward unselfishly and without personal ends.

You wish to know what is to be done?

1st. Study this case until you are familiar with it. Procure a copy of the *American Architect* of April 7, 1894, and of House Ex. Doc. No. 179, and carefully inform yourself.

2d. Use every effort within your power to have a mandatory law passed which shall provide that all government buildings costing over $25,000 must be thrown open to public competition.

That a jury be selected to arrange the programme and pass upon the plans, consisting of the Supervising Architect of the Treasury Department, a business man to be appointed by the Secretary of the Treasury, and three others to be appointed by some means which will insure efficient and reputable men who are uninfluenced by party politics.

That when a design is premiated, its author shall be made architect in full charge of the work.

Will *you* personally see, or write to, your congressmen and senators, at once, and cause to be written not less than ten (and fifty if you can) letters from influential men, all addressed to those public officials and strongly favoring this cause? Please *see* the letters written and signed, wherever it is possible to do so without giving offense. Send one copy of each to Mr. Secretary Stone of the Institute, Providence, Rhode Island; and the other copy to the person to whom it is addressed.

Please call upon each and every newspaper and periodical within your reach and bring all the influence to bear you can, to induce them to strongly favor the passage of such an act as we desire, and send marked copy of every newspaper and periodical in your territory, mentioning this case favorably, to the secretary, and one to each of your congressmen and senators. It is especially important that each newspaper shall follow up the work and not allow an issue to be printed without some favorable mention of this matter in its columns.

Will you also request each of those who write letters for you, to sign a petition to Congress, and will you please forward this petition to the secretary, who will make proper use of it?

Faithful, persistent, urgent effort on the part of all will be necessary in this reformation. Don't say to yourself that another will do better, or more, or that he will attend to any duty within your possible reach. Do it yourself, giving to the Institute and its officers, who are making so great an effort, all the time you possibly can during the next 100 days. Do not intermit your efforts before Congress adjourns.

It will assist the officers of the Institute if you will promptly acknowledge to the secretary the receipt of this letter, giving them the benefit of your suggestions regarding further action.

Yours faithfully,

ALFRED STONE,
Secretary A. I. A.

A VISIT TO SOUTH MANITOU.

AT the entrance to the island-dotted waters that form the outlet to Lake Michigan, lie the Manitous, about two hundred miles from Chicago, sixty miles from the Wisconsin shore, seven and one-half from the main land of Michigan. Landsmen know little of these islands, but to the storm-tossed sailor to "run in under the Manitous" means a haven of rest until the storm is over. In the latter part of May a party of thirty gentlemen from Chicago visited the South Manitou for the purpose of inspecting the island with a view to establishing a summer resort. A special car was waiting at the Chicago & North-Western depot, which took the party over that line to Green Bay. Here the general manager of the Kewaunee, Green Bay & Western, Mr. S. W. Champion, furnished an engine, and at 4 o'clock on a beautiful spring morning the party left the car, and walking across the station platform stepped on board the City of Marquette, an elegant passenger steamer, which immediately started on its eighty-mile trip to the island.

Seven hours later the lighthouse on the southeast point of the island was rounded, and the steamer glided into the bay that with

outstretched arms receives the ships and protects them from every wind that blows. Here the gravelly shore drops at an angle so abrupt that the largest boats can lie a few feet from the shore in safety. The day was perfectly calm, a thin haze resting on the placid water, and the island seemed a green, restful paradise. Timber has been cut here, but so long ago that nature has covered the ruin man had made with her mosses and her vines, and a new growth of trees has taken the places of the destroyed forest, and all is as wild and primitive as it was when La Salle first passed its wooded shores on his voyage toward the Mississippi.

The second day was stormy outside, but scarcely a ripple disturbed the surface of the bay, where like a flock of ducks the craft from the lake sought shelter until twenty-five steamers and sailing vessels were anchored off the shore.

The party, *en masse*, made a tour of the island. It is about three and one-half miles long by about three miles wide. The ground rises gently from the east shore for two-thirds the distance across and then rises abruptly into heavily wooded hills that finally verge into sand dunes and bluffs, 600 feet high, forming the western shore. Near the center of the island is a lake a mile long, deep, with sandy forest-environed shores, and a general aspect that to the fisherman suggested pickerel and bass in abundance.

If the object of the excursion was to select a site for the handsome hotel Architect Henry Ives Cobb has designed, the problem of building will present real difficulties. For there are a dozen sites equally ideal and presenting strong claims for recognition, but no matter which is selected the choice cannot but be the best, for on this island each situation has its charms and all are superior to those occupied by any summer resort in the West.

The methods of reaching the island are two. If the visitor wishes a lake trip, but not too long to be tiresome, he will take the North-Western to Green Bay and then come under the care of Mr. Champion and his men, who, like himself, are gentlemen to be depended upon. The City of Marquette, under Captain J. C. Ackerman and crew, is a good sea boat, comfortable in a storm, and when once on board, the crew, from captain to cabin boy, give the traveler the impression that he "owns the boat," for all are at his service. On the Michigan shore the city of Frankfort is reached by the Chicago & West Michigan Railway, and from there the steamer Taylor, in charge of Captain Dunbar, will convey

the traveler over thirty miles of water to the island. When the hotel is built, the large passenger steamers direct from Chicago will stop at South Manitou.

The return trip gave the visitors an opportunity of seeing the city of Green Bay through the courtesy of Mayor Elmore, and the architectural eye noted many buildings that spoke of the taste and enterprise of that truly beautiful city. A stop at Oshkosh and a night journey home ended a most pleasant excursion, and the visitors will long remember Manitou, "the spirit island," and many will spend their summer months on its shores.

To say that it has every known hardwood as well as pine and cedar trees in its forest, with a predominance of beach and cedar; that there are absolutely no mosquitoes, and the surrounding waters keep the atmosphere always cool, will show that this island

deserves well the fame that will surely come to it as "the ideal summer island."

The members of the party were as follows and were the guests of Messrs. Shefler and Fisher, of the Garden City Land Company, and C. E. Bleyer, of the Hawley Down Draft Furnace Company:

C. E. Bleyer, W. B. Keeler, Chas. E. Felton, W. E. Mortimer, J. L. Fulton, Fritz Sontag, John D. Sherman, George C. Prussing, N. C. Fisher, A. W. Cobb, D. V. Purington, George W. Cobb, Raymond A. Beck, M. B. Madden, Thomas Cratty, Joseph Downing, C. B. Shefler, Benjamin M. Weil, George J. Williams, V. M. Breeze, G. D. Potter, John O. Plank, L. L. Leach, Henry Ives Cobb, Robert Craik McLean, Jacob Rodatz.

It was probably accident that brought so many members of the National Association of Builders together, but as one remarked, "If Billy Sayward were here this would resemble a N. A. B. convention delegation."

ANNUAL EXHIBITION NOTES.

SEVENTH ANNUAL EXHIBITION OF THE CHICAGO ARCHITECTURAL SKETCH CLUB.

Before this number appears the seventh annual exhibition of the Chicago Architectural Sketch Club, which has been continued one week longer than originally contemplated, will be closed. It has proved to be a genuine attraction at the Art Institute. As an exhibit of architectural work it is subject to the same strictures that we passed on the architectural exhibit in the American section at the World's Fair. It is totally without rational arrangement. The efforts of the hanging committee seem to have been to present a picturesque grouping of pictures rather than a synthetical classification.

No architectural exhibition can be of any value, as such, without this. It includes not only works of members of the Architectural Sketch Club, but drawings of all kinds from the Architects of Chicago and Milwaukee, as well as a select exhibition of decorative art work contributed by some of the leading merchants and manufacturers of Chicago, sculpture by Edward Kemeys and others, stained glass and architectural modeling. The latter class of works were of great merit. Perhaps none of the exhibitors anticipated that for want of more room in the corridor of the Art Institute they would be hung in close proximity to casts of some of the most superb examples of sculptural ornament that the world has ever seen from Chartres and Notre Dame of Paris. The best exhibits of decorative art were those in stained and ornamental glass windows and screens. The furniture was accorded a privilege that no architect received, by each exhibitor being allowed to exhibit his works in a group. The large Lecture Room of the Institute, in which the exhibition was held, therefore somewhat resembled a furniture sample and show room. It was good free advertising for certain dealers and they made the most of it. But in justice to the individual designers of these pieces, the names of those who were known appeared in the catalogue. The furniture was in some cases so placed as to make it impossible for visitors to get anywhere near the architectural drawings, while several of these were placed unnecessarily high, having considerable vacant wall spaces under them. It was stated by those in authority that more than half of the architectural drawings sent in were rejected by the jury of selection, and that a committee of the Sketch Club went about from office to office among the older architects to solicit contributions. This was not exactly in accordance with the published circular of the club.

For some reason unexplainable the exhibition was made up largely of the works of practicing architects who are not members. The club contributions were so few that the jurors appointed by the Illinois Chapter of the American Institute of Architects to award the annual gold medal for the first time, were only able to find ten drawings that were eligible, under the conditions of the gift. But they had no difficulty in making the award, because, as stated in their report, the water color perspective "Study for an Office Building" (No. 181) by Hugh M. G. Garden, president of the club, was so preëminently above all others, that they felt fully justified in selecting it, even though members of the club unofficially presented to them a paper suggesting, in view of the small number of contributions and in order to relieve the Chapter from any possible embarrassment, that the award be postponed for a year. The design, was in fact, not only the best sent by the club, but was one of the very best in the whole exhibition. It solved the problem of designing an eighteen-story office building, on a very difficult site, in a thoroughly artistic and practical manner. It is understood that this design was made for the site, corner of Broadway and Ann street, New York, recently abandoned by the New York *Herald*.

In view of the fact that the exhibition has closed there is no longer any occasion to refer to other individual designs. The catalogue, profusely illustrated, is a work of art in itself. The total number of exhibits was about four hundred. But it was notable for many inaccuracies, and showed inefficient proofreading that no amount of art can gloss over. Even zinc etchings of designs that were hung, which had been prepared by exhibitors at the request of the committee, were not inserted.

The Sketch Club, whose aims and endeavors warrant the highest encomiums, will doubtless succeed much better when they undertake another enterprise of such magnitude, especially if they do not employ so much assistance from without their own membership. Even if they do not make a scientific classification of exhibits, they should hang their own productions by themselves.

FIRST ANNUAL CHICAGO BUILDING TRADES AND MATERIAL EXHIBITION.

Almost contemporaneously with the seventh annual exhibition of the Chicago Architectural Sketch Club, the Illinois Chapter of the American Institute of Architects held a special exhibition of building materials which was supplementary to their permanent exhibition at the Institute of Building Arts on Washington street. We have already published the prospectus and invitation to exhibitors. Both exhibitions closed on June 2, but as far as that at the Institute of Building Arts is concerned, it means that the permanent exhibit continues with many accessions and additional attractions. On May 1 the Chapter added to its already large quarters at 63 and 65 Washington street, a floor about 40 by 70 feet at 67 and 69, so that it now has about 8,000 feet, all on the second floor in one of the best business streets of Chicago. In this the trustees of the Institute built an entirely new library, meeting and dining room, with necessary offices adjoining, which it had not had before for many years, as the dinners and meetings have heretofore been held in the unoccupied part of the large exhibition room. This was a surprise for the members. It was completely finished and decorated, furnished, and the books and recently acquired pictures put in place by May 14, when, at a regular meeting of the Chapter, the new addition and meeting room were appropriately dedicated. About four hundred guests assembled on invitation, who were entertained as well with a supper and music by Rosenbecker's orchestra. On this occasion the first award was made of the gold medal of the Chapter for the best design from an architectural standpoint, contributed by a member of the Chicago Architectural Club to the current exhibition of that society. The competition is limited to members who have not practiced more than two years. The jurors — P. B. Wight, Samuel A. Treat and Frederick W. Perkins — unanimously awarded the medal to Hugh M. G. Garden, president of the Sketch Club. Mr. Garden was present and the presentation was made by W. W. Clay, president of the Chapter. The Chapter also appointed a committee to prepare a memorial to the late W. Henri Adams. All the architects of the city and officers of the art societies, with their wives, had been invited. The evening's entertainment closed with impromptu dancing in the new meeting room.

On Monday, May 21, a special inspection day and luncheon was given to the architects of the city, from 12 to 4 P.M., and addresses were made by several exhibitors.

On Monday, May 28, a special inspection day with luncheon was given to the members of the Builders' and Trades' Exchange and the Real Estate Board, which was also largely attended.

On Friday evening, June 1, the closing reception was given for architects and exhibitors, and their wives and friends. The occasion was enlivened by a supper and music.

The new exhibits have proved to be objects of great interest. A part of the annex is arranged as a desk-room exchange. The privilege of hiring desk-room spaces six feet square is only accorded to permanent exhibitors. This is a new feature of the Institute. The Chapter collections have been enriched by the exhibit of the Central Society of Architects of France to the World's Fair, some valuable books, a part of the collection of photographs of the Photogrammetric Society, of Berlin, and those published by the French National Commission for Ancient Monuments. These are duplicates of what were exhibited at the Exposition. Ten of the large bromide prints from Berlin are framed and hung on the walls. The Chapter has also received a gift from the Northwestern Terra Cotta Company of an artistic chimney piece that will reach from floor to ceiling in the meeting room. It will be set up during the summer vacation. The widow of the late W. Henri Adams, F. A. I. A., has also within a few days presented to the Chapter the larger part of his library and collection of pictures and photographs. The last regular dinner and meeting of the Chapter for the season will be held June 18.

OUR ILLUSTRATIONS.

Central College, Fayette, Missouri. W. C. Root, architect, Kansas City.

Residence for Mrs. E. M. Periolat. M. E. Bell and O. W. Marble, architects, Chicago.

Sketches of Spanish Mission Architecture at San Antonio, by Albert Levering, Minneapolis.

Reception and Staircase Halls, residence of D. F. Crilly. Flanders & Zimmerman, architects, Chicago.

Competitive Designs for State Capitol, Olympia, Washington. In this competition it was deemed advisable to engage the assistance of some eminent architect, and the following named gentlemen were invited for that purpose: D. H. Burnham, Chicago; C. B. Atwood, Chicago; Peabody & Stearns, Boston; Stanford White, of McKim, Mead & White, New York; and William R. Ware, of Columbia College, New York. Professor Ware was the only one of those named whose engagements permitted him to accept this invitation. The commission feel that the assistance rendered by Professor Ware was invaluable. The features of the plan advertised, by which identity of competing architects was to be kept entirely secret, were strictly and successfully adhered to. It is a matter of congratulation that in only a few instances was there any disposition on the part of architects to violate this rule. The sealed letters accompanying the several plans were so numbered as to correspond therewith respectively. Examination resulted in the selection of the following numbered plans: First, plan No. 17; second, plan No. 162; third, plan No. 73; fourth, plan No. 6. Upon opening the envelopes bearing the corresponding numbers, the authors' names were disclosed.

First, plan No. 17, Ernest Flagg, New York city.

Second, plan No. 162, William M. Kenyon, Minneapolis, Minnesota.

Third, plan No. 73, W. H. Dennis, Minneapolis, Minnesota, and O. P. Dennis, Tacoma, Washington.

Fourth, plan No. 6, W. E. Brown, Chicago, Illinois, and German & de Waard, Duluth, Minnesota.

The commission thereupon voted to award the prizes provided by law in the order of selection made.

REPORT OF PROF. W. R. WARE.

OLYMPIA, Wash., January 5, 1894.

Of the 188 sets of drawings sent in for the state capitol at Olympia, nearly one-half proved upon examination to be unworthy of serious consideration. The rest I have carefully gone over, and have studied with special care those among them, about thirty in number, that seemed to promise the most satisfactory solution of the problem.

So far as the arrangement of the plans is concerned, there are about a dozen different schemes, to one or another of which most of the designs conform. Some of these schemes are illustrated by only three or four examples, while there are fifteen or twenty of one or two types, and nearly fifty of a third. Almost all the best designs belong to one of these three categories.

Whatever their plan, the chief part of the competitors have in the exterior treatment of the building followed the conventional type of state capitols, and surmounted the building with a small, high dome, or cupola. But a small dome upon a large building is almost always a contemptible feature, and a high dome always looks badly unless it is broad in proportion to its height. Few architects have ever succeeded in making a dome look well that was both small and high; and there is probably no more unsuccessful series of buildings in the world than the series of state capitols which have followed this scheme. This is due not so much to want of skill upon the part of their designers as to the intrinsic difficulty of the problem. The successful domes, like that of St. Peter's at Rome or St. Paul's in London, are not only large in proportion to their height, but are of really great dimensions—from 100 to 150 feet across.

To produce the same effect, either within or without, with a dome only 40 or 50 feet across, is impossible.

It happens, accordingly, that in the case of the drawings in hand almost every design would look better if the dome were cut off. There are only two or three in which this feature is both large enough and low enough to make a good composition with the rest of the building.

A high, narrow dome is, in the nature of things, as undesirable a feature within as without.

A room should seldom be higher than it is wide; for height tells much more than width, and a room 50 feet wide and 50 feet high looks twice as high as it really is. These high domes give, within, a round room or rotunda, 40 or 50 feet across, and 150 or 200 feet high. Nothing could be more ungainly than such a well hole. Indeed, it is generally found necessary to diminish the height within as much as possible, as is done in many of these designs, by inserting a false dome, or ceiling, half way up.

This prevalence of domes will suffice of itself to account for the choice of a classical or Italian style in the treatment of the architectural features and details in the chief part of these designs. But it shows the entire change in architectural taste and fashion during the last twenty-five years that there are only two or three of these designs which, by any stretch of language, could be called Gothic, and these are obviously the work of uneducated practitioners. Even the Romanesque, or round arch mediæval architecture, which has had so much vogue in this country during the ten or twelve years, has few representatives, and only two or three of these are apparently the work of well trained hands.

Within the limits of the classical style, however, these designs show great variety of treatment, from a florid and extravagant piling up of useless and meaningless architectural features to a simplicity approaching baldness. The cost must obviously vary accordingly; but a large number are characterized by elegance and simplicity, and promise an appropriate and satisfactory building without excessive expense.

Since the adoption of fireproof construction, however, the cost of external walls does not bear so large a proportion to the whole cost of a building as was formerly the case. A few columns more or less is not so important a matter. This method of construction being determined upon, what chiefly affects the cost of a building is its size and the materials and decorative treatment employed, within as well as without. The choice of materials and the amount of decorative and artistic work in sculpture and painting is an element obviously within the control of the commission.

As to dimensions, the designs submitted vary very much, ranging from less than two million cubic feet to nearly six million. As a building of this character, if constructed and finished as it should be, in order to meet reasonable expectations, and be an ornament to the city and a proper object of pride to the state, will cost probably before it is done from 40 to 60 cents a cubic foot, it is plain that, in point of size, the building cannot much surpass the lower limit.

This does not imply, however, that only those designs which show a comparatively small structure can be considered. Those that exhibit unnecessarily large and numerous halls, corridors and vestibules must of course be set aside as extravagant, along with those that are too sumptuous and magnificent for the place. But among those that show a reasonable economy in respect of size, almost anyone may be taken which otherwise commends itself. If it proves to be too expensive by reason of its dimensions it is easy to reduce them, as one of the competitors has pointed out, by erecting it at a slightly reduced scale. Rooms shown 40 feet wide and 25 feet high will, in general, answer their purpose just as well, or better, if made 32 feet wide and 20 feet high. Windows 5 feet wide may be reduced to 4 feet. A front of 300 feet may be made 240. If, in like manner, all linear dimensions are reduced by one-fifth, the area is reduced by one-third, and the cubic contents by about one-half. In most of these designs the dimensions given are so ample that such a change would do no harm. In many cases it would be a positive improvement, as rooms 20 feet deep are better lighted than those 25 feet across, which is the size generally adopted for committee rooms and smaller offices. Even a tower 200 feet high is, if well designed, just as effective as if it measured 250 feet. In no other way can so great economy be effected at so slight a sacrifice, as by this shrinking of the dimensions.

A reduction of only one-tenth, which would be imperceptible, makes a reduction of about one-fifth in the cubic contents, and presumably in the expense, which is just the difference between a million and a quarter, and a million.

There seems every argument then for making the building as small as is any way reasonable and as convenience will permit, especially if it is so designed as to admit of future enlargement. The means at command do not permit it to be conspicuous among buildings of its class by reason of size. Fortunately its isolated position away from other structures will make it a matter of comparative unimportance whether it is a few feet larger or smaller. The only way in which the building can be made especially creditable to the state or to the commissioners is by its beauty or proportion, perfection of workmanship, excellence of material, and the artistic quality of its decorative details. These qualities, like those of a jewel, are independent of size, and they can be obtained for the sum in hand, if the commission will work well within their means. If, on the contrary, by economy of material and paucity of embellishment they try to get a two-million building for a million dollars, they will have a cheap-looking, second-rate structure that nobody can take any pride or satisfaction in. But if they will spend a million dollars upon a building that could be very fairly built for half a million, the result, though no larger than the Parthenon, would stand a chance of being the best that the time can produce. Such a building would be a legitimate source of pride to all concerned, and would deserve admiration and imitation. The example could hardly fail to be of benefit in all similar enterprises in every part of the country.

The half dozen designs that seem to me, on the whole, best to lend themselves to this treatment, and, while combining convenience of arrangement with exceptional architectural excellence, to conform to the practical conditions of the problem, are those numbered 162, 6, 66, 67, 73 and 17.

There are others that equal or surpass most of these, in one particular or another. Some are perhaps a little more conveniently arranged; some are less extensive, and accordingly less expensive; some evince equal, if not greater, professional resources. But these six are, in my judgment, much the best in all these respects among those which the commission could seriously propose to erect. The others, though many of them full of merit, would require too great changes and modifications. All of these six, except No. 162, follow in plan the general arrangement which, as has been said, is adopted by the chief part of the competitors. They all also, except No. 6, surmount the building with a dome or cupola, larger or smaller.

Three of these are of about the same size, covering from 40,000 to 45,000 square feet. Two are larger, covering about 60,000 square feet, while one is only about half that size. All are so arranged that they can be enlarged without difficulty if at a future time more space is required.

They all have three full stories entirely above the ground with the halls for the senate and house of representatives in the second story. They all have another story half below the ground, lighted by windows just above the surface, which is really a cellar. Two of them show some rooms also in the roof. These stories are differently named in the different designs. Some count the first full story as a basement with two full stories above it, in which case the rooms in the roof count as the third story required in the programme, and the lowest story as a cellar. In these the senate and house are said to be in the first story. Others count the cellar as the required basement. In these the senate and house are said to be in the second story.

In describing them, however, I shall speak of them all as having three stories with a cellar beneath.

Some of the other drawings submitted show, besides the cellar, three full stories and a basement entirely above ground, thus making a four-story building, of excessive height and unnecessary size and cost.

Almost all the windows in these six designs are square-headed.

DESIGN NO. 162.

In the design numbered 162, the plan is in the shape of the letter "E," the library, which is only one story high, occupying the tongue in the middle, and the legislative halls the wings at either end. This arrangement, though it involves a maximum of external wall, is for that very reason favorable to light and air; and this is the only one of the six in which all parts of the building are lighted from the walls, not from the roof. Even the rotunda receives light in the second story from windows under the front portico.

The entrance through this portico is by the first story, and leads directly to the rotunda, which is of admirable proportions, being nearly 60 feet in diameter, and less than 105 feet high. In the second story is a gallery about 8 feet wide, surrounding a well hole about 25 feet across. The rooms for the senate and house of representatives are, as has been said, placed in wings projecting to the rear, and are lighted on three sides. The supreme courtroom is in one corner, lighted on two sides. The committee rooms are about 25 feet deep. The corridors are excellently well lighted by windows in the external walls.

The exterior is decorated with columns at the ends as well as in front, while the rear of the building is exceptionally and undesirably plain. It is not consistent with the dignity of a public building that any part of it should seem neglected or be treated as if it were not intended to be seen.

The dome is low, and composes admirably with the rest of the composition.

The corners show small pediments covering coupled windows and supported by five columns.

The area covered is something over forty thousand square feet; but the library wing, as has been said, is only one story high, and the dome is not an expensive one, so that there will be a fair prospect of erecting the building for the sum proposed.

The main staircase is in the rear of the rotunda. The entrance to the library is from the first landing of the stairs.

The drawings, except the perspective, are somewhat carelessly made.

The plans of the remaining five designs are substantially the same, closely resembling each other, and only to be distinguished in trifling details from about fifty of the others. They all show in the center of the building a hall or rotunda, generally surmounted by a dome, and sometimes occupied by a grand staircase. This is surrounded by a corridor on four sides, beyond which on the right and left are the assembly rooms for the senate and house of representatives, which are generally in the second story. The rotunda and the assembly rooms are lighted from the top. A corridor runs around them, outside of which are small and large rooms lighted by windows in the external walls. The larger of these rooms are devoted to the supreme court room, the library and the state officers; the smaller are used as private rooms for the judges and for committee rooms.

DESIGN NO. 6.

Of these, the design numbered 6 is exceptional in having no cupola, or other lofty central feature. The space in the middle of the building, occupied in most of the designs by a circular or octagonal rotunda, is here taken up by an oblong hall of large dimensions, extending through two stories, and covered by a ceiling, arched and glazed, of elliptical outline, supported on columns. At either end are large staircases.

The halls for the house and senate are also oblong in shape, and are in the second story. The library and courtroom, both of which are on the rear of

the building, occupying symmetrical positions to the right and left of the center, are square.

The external treatment is simple and elegant, consisting of two open colonnades, each of twelve Ionic columns on the front, between which is an arched entrance leading to an external vestibule covered with a vaulted ceiling. This composition, which resembles a triumphal arch, is surmounted by a large group of sculpture. Six smaller groups and four single figures are set upon the angles and piers. On the rear and ends of the building are pilasters and engaged columns.

The roof is but slightly inclined, and, as in most of these compositions, is not visible from the ground. In the center is an attic, long and narrow, rising higher than the main walls, and inclosing the skylights which admit light to the central hall and to the senate and the house. As in the case of No. 162, the style of the drawings and the treatment of the architectural details does not give evidence of any great professional experience or resources on the part of its author; but the composition is an admirable one, and if carried out with care and taste would give a noble and effective building.

Though in size this building is fairly up to the average, and the effect is more dependent upon sculpture than most of the others, the style of finish is simple and comparatively inexpensive. The absence of a dome or cupola not only saves the cost of this expensive feature, but of the walls and foundations necessary to support it.

DESIGN NO. 66.

The design numbered 66 is considerably the smallest, as shown, of the six here submitted, covering only about thirty-three thousand square feet. The main entrance is in the second story, the first story being treated as a high basement. It is approached by nearly thirty steps, in three runs of nine or ten steps each, leading to a portico of six columns. Beneath this portico is a driveway giving access to a lower door, affording entrance to the first story. In the rear is another entrance on a level with the driveway.

The rotunda is octagonal; it is well proportioned, being 50 feet in diameter and only 80 feet in height from the basement floor to the top of the dome. On the second story it is surrounded by a gallery about ten feet wide, leaving a circular opening nearly thirty feet in diameter. Since the only use of this opening is to light the basement, it would seem better to reduce it to 20 or even to 15 feet, so as to increase the floor space on the main story and make it more available as a public hall.

There are two main staircases arranged on either side of the main entrance and a third in the rear, all leading from the first story to the second. There are two service staircases and two elevators leading to the third story.

The halls for the senate and house are in the second story — the former semi-circular, the latter oblong.

The library is in the second story over the rear entrance, and the supreme courtroom in the third, above the library. These rooms are only 26 feet wide; it would probably be better to make them wider. The committee rooms are about twenty feet deep.

The exterior is simple and the architectural decoration is confined to half a dozen free standing columns on the front and as many engaged columns on the rear, and two decorative panels between the windows of the upper story. This has a very rich effect, forming a sort of decorative frieze below the main cornice. The dome is broad and low, and sits well upon the building. The windows are all square-headed.

The decorative sculpture is well placed and effective, and is not designed upon such a scale as to involve great expense.

DESIGNS NOS. 67 AND 73.

The two designs numbered 67 and 73 are examples of the type most commonly followed by the competitors. These two are chosen from among about fifty examples of this class, as being not only fairly within the means at command and of a reasonable sobriety and moderation of character, but as possessing an exceptional degree of architectural merit. They are, to my mind, much the best of their kind.

In plan they are almost identical, the position and shape of the legislative chambers and of the library, courtroom and governor's rooms being substantially the same. Both have, also, the main entrance in the basement story, through three arches, and in both are auxiliary entrances at the ends of the building, opening into the longitudinal corridors.

Number 73 is somewhat larger than No. 67 in all its parts, measuring about sixty thousand square feet on the ground, as against about forty-five thousand. But it could easily be contracted to the same dimensions by reducing all the figures by one-eighth. Both have similar domes, excessively high and narrow within. That of No. 67 is 40 feet wide and 130 feet high; that of No. 73, 55 feet wide and 170 feet high. This, if reduced by one-eighth, would be 48 feet wide and 150 feet high. The dome of No. 67, however, though higher in proportion on the inside, is of better shape on the outside, the drum being of only one story. In No. 73 an additional story or attic is added to the height of the drum, which does not show within, merely for the sake apparently of making the cupola as high as possible.

The principal difference between the two schemes in the plan is that in No. 67 the main stairways from the basement to the first story are placed at the sides of the rotunda, while in No. 73 the main staircase is placed in the rotunda itself, a most undesirable location, since it spoils the rotunda as a place of meeting. Both have two auxiliary stairways at the ends of the front corridors; and No. 73 has two others at the ends of the rear corridor. In number 67 these are better placed, in the more central position on either side of the library.

In its external treatment No. 67 is extremely simple — much more so than any of the other five. It is of a type of which there were altogether about a dozen excellent examples, and it does not differ from them in any important particular except in being, in my judgment, much the best proportioned in its parts and the most elegantly put together. There is between this and the others just the difference that makes success instead of failure in two attempts to do the same thing.

The chief objection to this design is that the dome is a little too small, even for its moderate height, and that the four small cupolas which accompany it stand too far away from it.

Very much the same thing is to be said of the exterior of No. 73. It was selected out of a dozen or twenty, which closely resemble it, as being on the whole the best composed and the best proportioned, and as most successfully escaping the reproach of commonplaceness which so frequent a type almost necessarily incurs. This it does without the aid of the eccentricities and superfluities by which many of its rivals are characterized. The central feature, in which a couple of low pavilions flank the entrance, taking the place of the more customary pediment, which is relegated to a subordinate position on the corner pavilions, seems to me a happy variation from the accepted type. This is the only one of these six designs in which the roof is seen. In these drawings, as with No. 162 and No. 6, the style in which the design is presented, except in case of the perspective, leaves something to be desired.

DESIGN NO. 17.

The design numbered 17 covers about the same area on the ground as No. 73, and like it, can, as the author remarks, easily be reduced in size. By substituting the scale of twelve inches to the foot for that of sixteen inches to the foot, at which these drawings are made, a reduction of about one-fifth linear dimension would be effected, and the number of square feet reduced from sixty thousand to less than forty thousand. This will probably bring the cost well within the means at command.

The general arrangement of the plan is the same as in the four designs last mentioned. The special features are, that on the front of the building the corridor runs along the wall and is lighted directly by windows, the row of small rooms on this side being omitted.

Both the legislative halls are semi-circular and both have on their rear two triangular shafts for light and air, features not occurring in the other plans. Both these rooms also are on the second floor, descending into the first. The main entrance is into the second story, at the top of steps, as in No. 66. These steps are arranged in curved flights, one on either side. It seems as if the doorway shown would be hardly important enough, especially if executed on the reduced scale suggested.

The rotunda is of exceptional dignity, being 60 feet across, and only 80 feet high. Even on the reduced scale it would be about fifty feet across and seventy-five feet high. It has double walls, within which are inclosed four staircases. The entrances to these stairways and to the rotunda, and, indeed, all the openings shown, both doors and windows, seem a little narrow.

In spite of these minor points of criticism, the plan is, perhaps, the most elegant and scholarly that the competition has called forth, and the elevation exhibits the same qualities. While most of the other designs seem struggling to avoid the commonplace and to give to a hackneyed theme a semblance of novelty, this is intrinsically individual and unusual, without being in any way queer or fantastic.

The whole building is much lower than most of the others, exhibiting only a high basement, a colonnade with cornice, and a low attic above. The doorway, as has been said, is a little inconspicuous and should be restudied. Perhaps it would be better if, upon the front, the steps ascended directly in a single flight.

The dome, which is large within, is still larger without, and is of really noble proportions, being nearly seventy feet in diameter, and rising only 90 feet above the roof. The total height is about one hundred and fifty feet, ninety feet less than that shown in No. 73. It is, indeed, probably not quite high enough, as the lower part of it would be hidden to the spectator looking at it from the ground in the neighborhood of the building, and it should probably be raised ten or twelve feet upon a plinth.

The whole treatment of the problem inspires confidence in its author, as does the paper which accompanies the drawings; and it would seem as if the committee could hardly make a mistake if they intrusted the work to his hands.

His suggestions as to the treatment of the ground, with terraces and water, are not essential to this solution of the problem, but again bear testimony to the good taste and professional resources of the designer.

WILLIAM R. WARE.

Photogravure Plate: Mechanical Arts Building, California Midwinter International Exposition. E. R. Swain, architect.

PHOTOGRAVURE PLATES.

Issued only with the Photogravure edition.

Old Church, Philadelphia.

Electrical Tower, California Midwinter International Exposition.

Old Parsonage, Baltimore, Maryland. Furness & Evans, architects.

Administration Building, California Midwinter International Exposition. A. Page Brown, architect, San Francisco.

Fine Arts Building, California Midwinter International Exposition. B. McDougall & Son, architects, San Francisco.

Manufactures and Liberal Arts Building, California Midwinter International Exposition. A. Page Brown, architect, San Francisco.

Agricultural and Horticultural Building, California Midwinter International Exposition. Samuel Newsom, architect, San Francisco.

ASSOCIATION NOTES.

CINCINNATI ARCHITECTURAL SKETCH CLUB.

The annual meeting of the club was held on May 5, marking the close of the fifth year of organization. The officers elected are Michael Heister, president; Harry Hake, vice-president; John Zettel, secretary; Ed E. Burt, treasurer; John A. Weil, member of executive committee. The president, David Davis, being absent, Vice-President Harry Hake delivered the annual address. The club prize for greatest number of points received during the year in club competitions was awarded to J. Bretthauer. From the report received it would seem that after the business of the evening was disposed of the club went into executive session, in the usual manner of sketch clubs at their annual gatherings. The performance resembled the variety, and the many stars in the "Olio" sought to outshine each other as variety stars are said to do. If the session closed early (in the morning), it was presumably because the caterer had received previous instructions or was somewhat acquainted with the thirty-odd members and friends that constituted the executive session, which is said to have been the most interesting ever indulged in by the club.

COMMUNICATION.

Editors Inland Architect:

The *American Architect and Building News*, in its number of of May 5, 1894, publishes under the heading of "A Justifiable Criticism," an article to which your attention is hereby called.

A note from the editors follows it, and makes all the amends possible to Messrs. Delhi & Chamberlin for having allowed one of their designs to have been copied and published in their paper over the name of another architect. If you will compare one of the plates in your last edition, Vol. XXIII, No. 3 — "Design for Residence" — with the same design to which attention was called in the article referred to, namely, "Mamenakating Inn," by Messrs. Delhi & Chamberlin, of New York, published in the *American Architect* of September 9, 1893, a remarkable similarity will be found to exist between the two designs, which even the smoke that is added as coming from the chimney does not avail to obscure.

This design of Messrs. Delhi & Chamberlin would seem to be a prolific source of inspiration to a frequent contributor to our architectural magazines, and an article in your next issue on the rights and proprieties involved in such cases would, I think, be read with interest. Yours truly, AN OBSERVER.

[The "rights and proprieties" of the architect, not alone in the matter of design, but in all other professional matters, are in so chaotic a state that an article could hardly be written upon the subject. It is easier to refer "An Observer" and other inquiring

minds to the report presented to the American Institute Convention at Washington in 1891, by Louis H. Sullivan as chairman of the Committee on Professional Ethics. Until the profession has outgrown the situation so clearly and truthfully outlined in that report, it will be useless to speak of the profession as anything more than a business subject to business practices. *Legalize the profession by legislative act in the several states*, so that each practitioner will be educated in his profession, and an ethical code will follow which will eliminate many of the evils now complained of, and professional pride will take the place of business ambition. There is no legal penalty for copying another man's design on paper and claiming it as original. There may be for building from it, but we think not. There may be consolation, however, in the adage that imitation is the most sincere form of flattery.—EDITOR.]

BUILDING OUTLOOK.

OFFICE INLAND ARCHITECT,
CHICAGO, June 10.

The only tenable conclusion the practical man can hold at this time regarding business is that buying should be restricted to actual needs. If this simple and sensible rule could always be observed, it would be better for business interests at all times. The brakes are turned down tight at every point. Builders are resolutely following their first convictions at the opening of the season, and events have fully justified their course. There has been no such general investment of money in building or industrial enterprises this year as last. The spring trade was unimportant, but there prevails everywhere a belief that a fairly active fall trade is assured. Financiers assure us there is an immense volume of capital in banks at home and abroad awaiting investment. This in a measure is true, but the average business man instinctively contends that there has not been and is not ordinarily a sufficient volume of money that finds its way in the smaller channels of trade and business. The situation is peculiar at this time. Production has been steadily curtailed for months. Prices have gradually fallen. Railroad freights have declined. Stocks have been reduced to a minimum. Enterprise has withdrawn itself. Traffic has fallen low. Business men have lost their spirit and ambition. The great consuming public seem to get along with but little. Month after month slips by and no light comes. A strike involving 175,000 miners has no other effect than to cause a temporary inconvenience. Labor is not in demand. Shops run half to three-quarter time. That this abnormal condition will reach its termination, perhaps suddenly, is evident. When the depression has exhausted itself the country will be on a stronger foundation than before. Enterprise has not been asleep if it has been idle. Schemes have been worked up for vast outlays. Electric lines will multiply. Transportation facilities will be rapidly increased and cheapened. Prices for iron, steel and stable construction requirements, will never return to the old high-water mark. The depression has done permanent good. Low prices have been permanently established, and when full employment to labor and capital comes, as it will, the real benefit will then be apparent.

SYNOPSIS OF BUILDING NEWS.

Architects are invited to furnish for publication in this department monthly or occasional reports of their new work before the letting of contracts. Reports of buildings costing less than $5,000 are not published.

Chicago, Ill.—Architect Paul Gerhardt: For M. Krummhaar, at 725 North Halsted street, a three-story and basement flat building, 24 by 60 feet in size; to have a neatly designed stone front, Georgia pine interior finish, the modern sanitary plumbing, mantels, gas fixtures, laundry tubs, etc. For Mrs. Hinsley, at Norwood Park, a two-story frame residence, 25 by 40 feet in size; to have a brick basement, sanitary plumbing, mantels, gas fixtures, hardwood finish, furnace.

Architect F. L. Wright: For M. Winslow, at River Forest, a two-story residence, 43 by 64 feet in size; to be constructed of salmon-colored Roman pressed brick with stone trimmings for the first story, and the second story will be of plaster, the roof of Spanish tile, the interior to be elegantly finished in hardwoods, have the best of modern improvements, hot-water heating and electric light. For R. W. Roloson, at Calumet avenue just south of Thirty-second street, a block of four three-story residences, 75 by 89 feet in size; to be of pressed brick and stone fronts, have hardwood interior finish, the best of plumbing, mantels, electric light, hot-water heating.

Architects Flanders & Zimmerman: Are letting contracts for the seven-story apartment house, to be erected at Twenty-second street and Indiana avenue, for Messrs. Hosmer and Fenn; it will be of pressed brick and stone, have all the modern improvements, marble wainscoting, elevators, etc.; also of fireproof construction. Also letting contracts for two two-story residences, to be erected at Ashland boulevard, for H. T. Weeks; they will be of stone fronts, have Spanish tile roof, hardwood interior finish, electric light, hot-water heating, etc.

Architect E. E. Snyder made plans for rebuilding of residence recently burned at 320 Oakwood boulevard; it will be three stories, 25 by 62 feet in size; have stone front, hardwood finish, mantels, gas fixtures, heating.

Architects Beers, Clay & Dutton: For Judge Freeman, at Fifty-eighth street and Woodlawn avenue, a two-story, basement and attic residence, 38 by 58 feet in size; to be of brown pressed brick and buff Bedford stone all round, have hardwood interior, all the modern conveniences, hot-water heating, etc.

Architect George W. Maher: For Mrs. R. N. Matson, at Edgewater, a two-story residence, 35 by 50 feet in size; to have hardwood finish, furnace, etc. For C. R. Morse, at Grinnell, Iowa, a two-story residence, 65 by 40 feet in size; to be of Kasota stone, first story, and frame above, have electric light, all sanitary specialties, hot-water heating, etc. For C. S. Gilbert, at Wausau, Wisconsin, a two-story and attic residence, 28 by 44 feet in size; to be of stone up to first story and frame above; to be in the old Colonial style of architecture.

Architects I. K. & A. B. Pond: For George Findlay, at Lake Forest, a two-story residence, 40 by 60 feet in size; to be of frame with stone basement, have hardwood finish, electric light, hot-water heating, etc. Also made plans for the four-story and basement apartment house, 60 by 160 feet in size; now being erected at the corner of Oak and State streets, for the Newberry estate; to be of pressed brick, stone and terra cotta, and have all improvements.

Architect Henry Ives Cobb: For Charles Offutt, at Omaha, Nebraska, a three-story residence, 44 by 62 feet in size; to be of stone, have slate roof, hardwood finish, gas fixtures, furnace, etc., cost $25,000. For President of the Chicago University (Dr. Harper), at Fifty-ninth street and Ellis avenue, a two-story residence, 40 by 60 feet in size; to have a stone front, electric light, hot-water heating, etc.

Architect W. R. Gibb: For E. A. Morris, at Sheridan Park, a two-story, basement and attic residence, to be of frame with stone basement, have all improvements; also two story barn. For Parker A. Jenks, at Sheridan Park, a two-story residence, 30 by 50 feet in size; to be of frame with stone basement, have hardwood finish, mantels, gas fixtures, modern plumbing, hot-water heating.

Architect George S. Kingsley: For R. A. Greifenhagen, at Evanston avenue near York place, a four-story store and flat building, 44 by 60 feet in size; to be of pressed brick and stone front, have the sanitary plumbing, mantels, gas fixtures, electric wiring, etc.

Architects Elmendorf & Park: For W. H. Wright, at 959 Park avenue, a three-story flat building, 25 by 62 feet in size; to be of stone front, have mantels, gas fixtures, sanitary plumbing, hot-water heating, etc.

Architects Perkins & Selby: For Prof. George A. Coe, at University Place, Evanston, a two-story residence, 36 by 38 feet in size; to be of frame with brick basement, have hardwood finish, electric light, etc.

Architect Albert Lang: For A. W. Constantine, at Edgemont avenue near Ashland avenue, a three-story and basement apartment house, 75 by 75 feet in size; to be of stone front, have hardwood finish, gas and electric fixtures, steam heat, all the modern plumbing; cost $20,000. Also made plans for remodeling residence at River Forest, for A. H. Zimmerman, plumbing, hardwood finish, mantels, electric fixtures.

Cincinnati, Ohio.—In spite of the financial depression pervading the land, the architects of Cincinnati have been fairly busy, and a spirit of hopefulness filled the hearts of the contractors.

Architects Boll & Taylor report: A house for J. H. Williams; materials: brick, slate roof, furnace, stained glass, gas, plumbing, mantels, hardwood floors, etc.; to cost $8,000.

Architect Martin Fisher, Central avenue and Freeman street, reports: For August Osterfield, Bellevue brewery, a store and flat building; materials: pressed brick, iron, stone trimmings, gas, plumbing, fire escape, tin roof; cost $10,000.

Architect H. E. Siter reports: For Board of Education of Cincinnati, a school building; materials: pressed and common brick, slate roof, copper cornice, Venetian blinds, gas, school fixtures, blackboards; size 70 by 96 feet, three stories; cost $40,000.

Cleveland, Ohio.—Architects Coburn & Barnum report: A double frame residence on Willson avenue, for P. J. Donovan, 38 by 72 feet in size; shingle second story, slate roof, furnace heat, plumbing, gas fixtures, electric bells, plate glass, hardwood; cost, $10,000.

Architect C. Frank Cramer reports: A two-story, brick patrol station and barn for the city of Cleveland; buff brick and Lake Superior sandstone will be used; accommodations are made for two patrol wagons and an ambulance; tile, slate and gravel roof; cost, $15,000.

Architects French & La Chance report: A general store building, 64 by 90 feet in size; four stories high, to be build at Clyde, Ohio; stock brick and stone trimmings, gravel and Spanish tile roof, ornamental ironwork, steam heating, plate glass, electric lights, combined passenger and freight elevator, skylights, plumbing and gas fixtures, engine, dynamos, cash conveyor; cost, $20,000.

Architects Lehman & Schmitt report: A granite and brick bank building at Canton, Ohio, for the City National Bank, 44 by 90 feet in size; six stories high, gravel roof, all modern office fittings, steam heat, electric lights, elevators, marble wainscot in halls, plumbing and gas fixtures; cost, $70,000. They are receiving bids upon the armory reported last month, owing to a change in some of the work.

Denver, Colo.—Architects F. E. Edbrooke & Co.: For J. W. Jackson, a two-story double dwelling, brick; size 48 by 63 feet; cost $6,000. For D. D. Seerie, a two-story stone residence; size 37 by 58 feet; cost $10,000. For May Shoe and Clothing Company, a one-story addition to business block; brick; size 60 by 90 feet; cost $5,000.

Architect C. E. Greaser: For Coe Brothers, a two-story stone residence; size 41 by 45 feet; cost $12,000.

C. H. Benedict will build a two-story brick house; size 29 by 46 feet; cost $6,000; builders, Fleming Brothers.

Detroit, Mich.—Architects Malcombson & Higganbotham: For Board of Education, a two-story schoolhouse; size 70 by 100 feet; brick with stone trimmings; to be built on corner of St. Aubin and Alexandrine avenues; cost $30,000. Also, a four-room addition to the Van Dyke school; cost $10,000. Also, remodeling the Houghton school, at a cost of $5,500. For J. R. McLaughlin, a terrace of four two-story brick and stone residences, on Greenwood avenue; size 53 by 70 feet; cost $25,000. For Mr. Wetmore, a two-story brick stable, to cost $6,500. For the Board of Education, Ypsilanti, Michigan, a three-story brick school building; cost $35,000.

Architects Mason & Rice: For Thomas W. Palmer, a six-story brick business building, to be built corner of Larned and Cass streets; size 50 by 120 feet; cost $35,000.

Architects John Scott & Co.: Are preparing plans for a three-story brick residence and store building, corner of Woodward avenue and Boulevard; cost $45,000.

The Union Trust Company are about to receive proposals for the construction and materials of their new building designed by Andrews, Jacques & Rantoul, Boston, Massachusetts. It is expected the building will cost in the neighborhood of $450,000.

Louisville, Ky.—Architects Maury & Dodd report the following: Residence for C. J. Walton, Third avenue near Hill; brick, stone and terra cotta, slate roof; 30 by 50 feet, two and one-half stories; cost $6,500. Residence for John Otter, Third avenue near Magnolia; buff brick and stone front, slate roof; 32 by 52 feet, three stories; cost $8,500. Residence for C. J. Walton, Third avenue near Hill; brick, stone and terra cotta, slate roof; 32 by 62 feet, three stories; cost $9,500. Standard Club, Fifth street near Chestnut street; brick, stone and terra cotta, metal roof; to cost $12,000.

Milwaukee, Wis.—Architects Schnetzky & Liebert: For Peter McGeogh, a five-story store building, 80 by 60 feet in size; brick and stone; cost $25,000.

Architect C. F. Ringer: For E. Doreston, a four-story store and office building, 40 by 120 feet in size; pressed brick with stone trimmings and all latest improvements; cost $25,000.

Minneapolis, Minn.—Architect W. H. Dennis is preparing plans for a three-story business block, 50 by 110 feet in size; brick with stone trimmings; to cost $40,000.

Architects Long & Kees: For W. F. Thayer; brick and stone; cost $5,000.

Architect George H. Brown: For J. M. Brown, a three-story brick flat block, 165 by 44 feet in size; all modern improvements; cost $18,000.

Pittsburgh, Pa.—Architect T. H. Scott: For Captain Hamilton, a three-story store and flat building; size 56 by 56 feet; brick and stone; cost $20,000.

Architect F. Sauer: For J. Kaiser, a two-story residence, brick and stone; size 40 by 38 feet; cost $6,000.

Rochester, N. Y.—Architects A. J. Warner & Co. have prepared plans and let contracts of the "Olean Hotel," to be built at Olean, Pennsylvania; the building is to be four stories high, built of brick with stone trimmings, ground floor to be used for lobby and hotel accommodations, about one hundred rooms finished in hardwood; cost $60,000. Also finished alterations and additions to Waverly Hotel buildings, in this city, costing $45,000. Additions to Powers' Fireproof Hotel, steel construction; cost $50,000.

Architect John Church has prepared plans for alterations and additions to stores for the estate of Hiram Sibley, to be four stories high, built of brick with stone trimmings; cost about $40,000.

St. Louis, Mo.—Architect W. A. Swasey: For J. C. Van Blarcom, a three-story residence, size, 80 by 80 feet; brick with stone trimmings; cost $70,000.

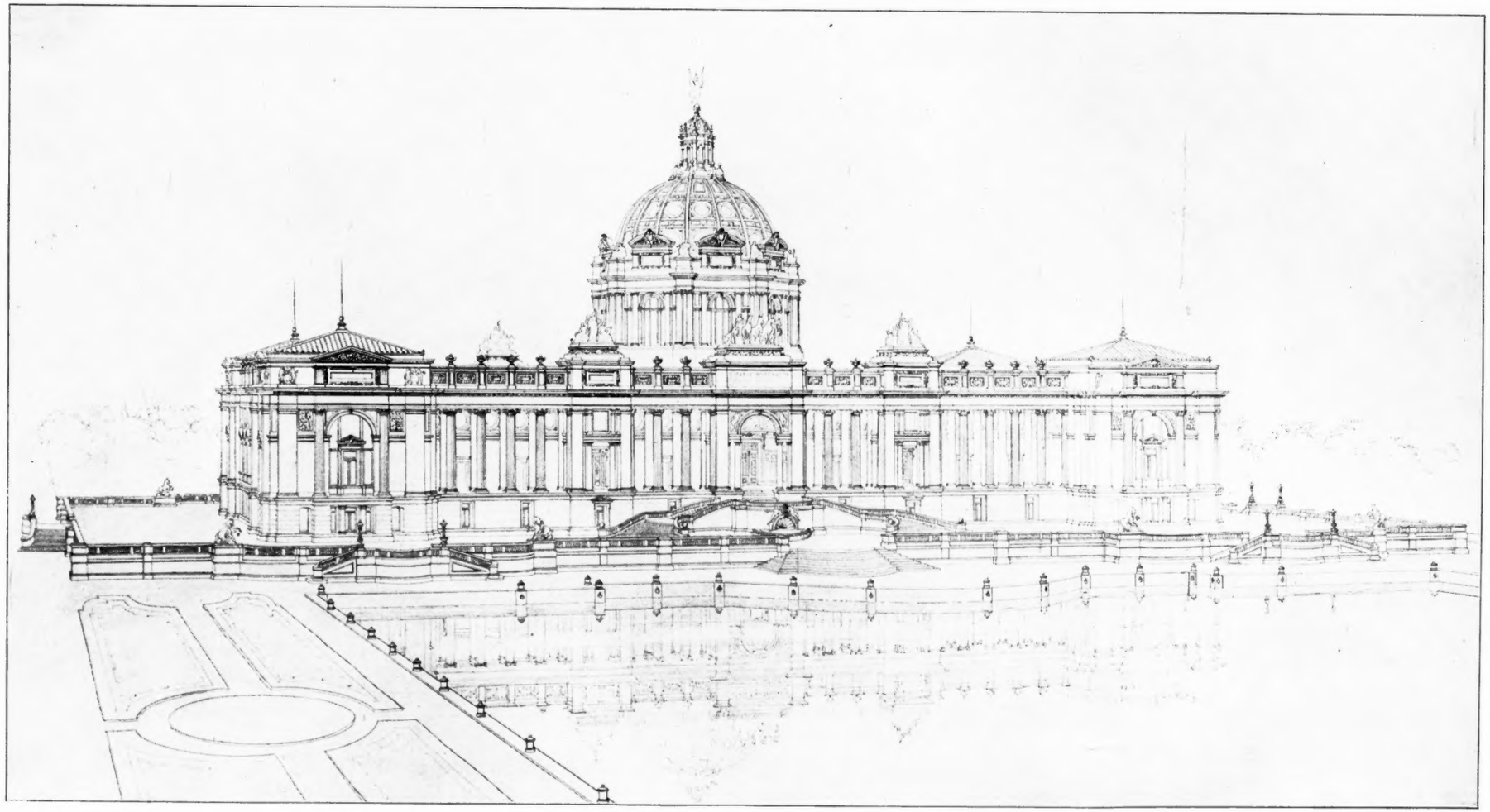
Architect W. B. Ittner: For J. R. Williams, a three-story brick dwelling, size 50 by 50 feet; cost $9,400.

Architect L. Cass Miller: For J. W. Teasdale, a two and one-half story residence, size 28 by 50 feet; brick with stone foundations, cost $10,000.

Architect C. F. May: For Evangelical Zion's Church, a two-story school building, size 40 by 63 feet; brick and stone, cost $8,000. For Henry Leidner, a three-story brick residence, size 30 by 50 feet, cost $9,000. For Capt. F. R. Rice, five three-story residences, 25 by 50 feet each; brick, with stone foundations and all latest improvements, cost $15,000.

Architects Barnett, Haynes & Barnett: For H. Newhouse, a two and one-half story brick residence, size 40 by 40 feet; cost $8,000.

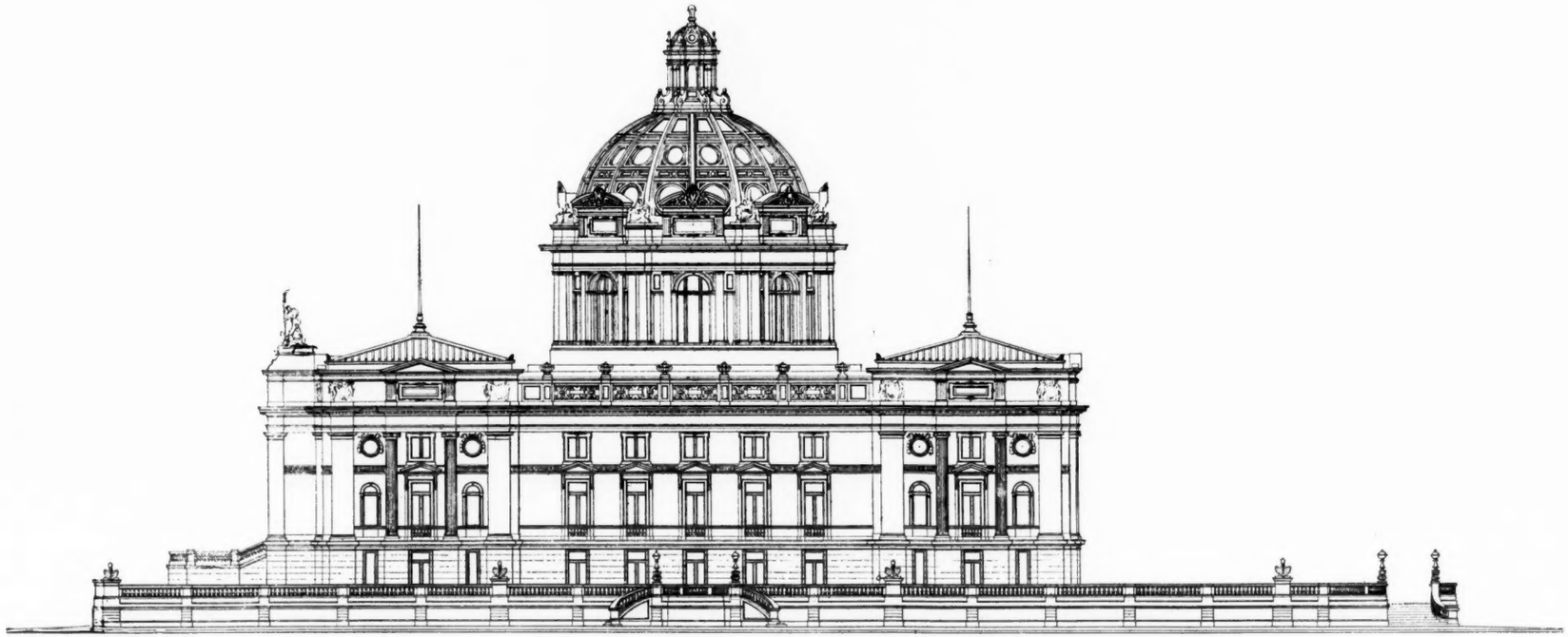
SKETCHES OF SPANISH MISSION ARCHITECTURE AT SAN ANTONIO



PERSPECTIVE.

ACCEPTED DESIGN, COMPETITION FOR STATE CAPITOL, OLYMPIA, WASHINGTON.

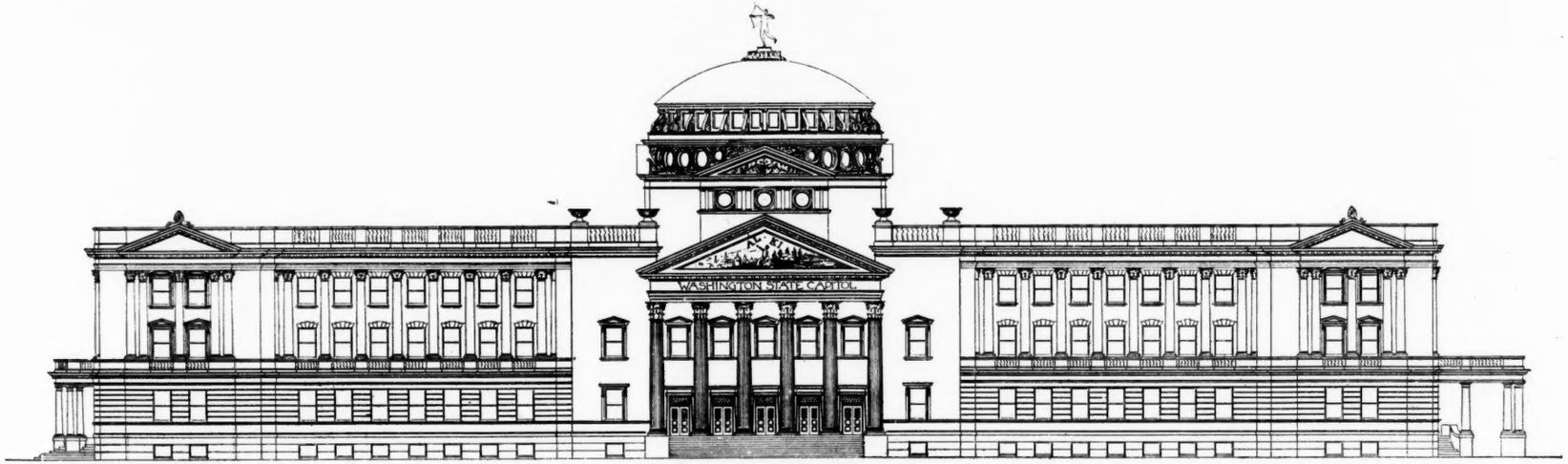
ERNEST FLAGG, ARCHITECT, NEW YORK.

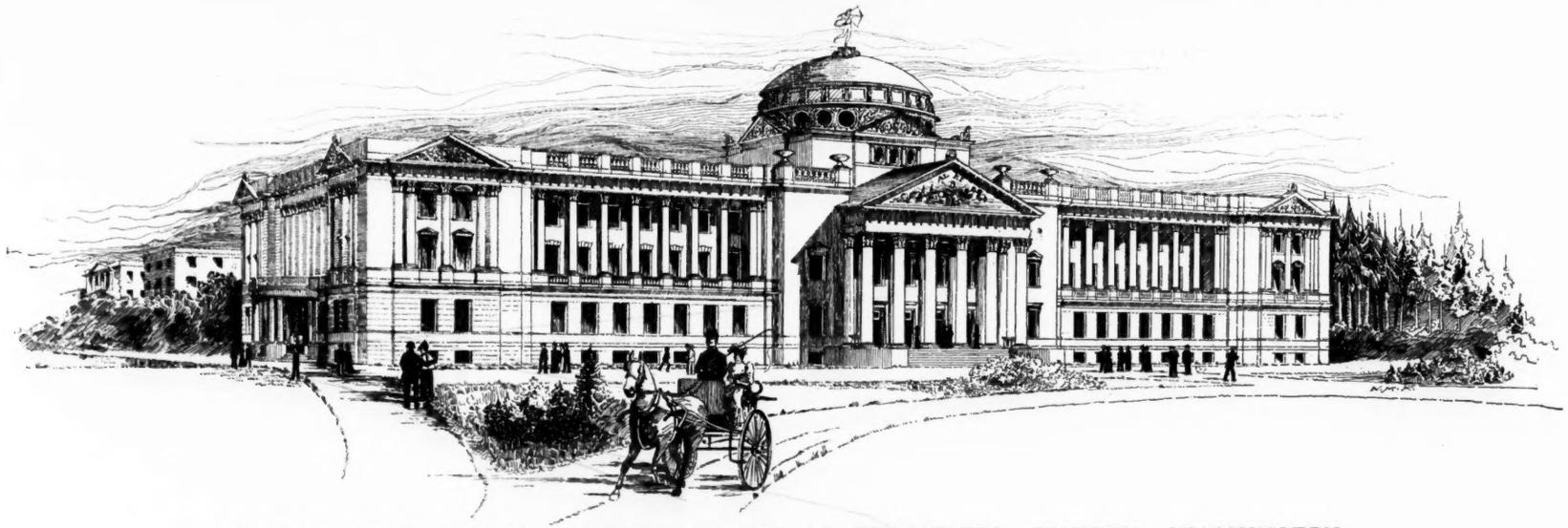


END ELEVATION.

ACCEPTED DESIGN, COMPETITION FOR STATE CAPITOL, OLYMPIA, WASHINGTON.

ERNEST FLAGG, ARCHITECT, NEW YORK.



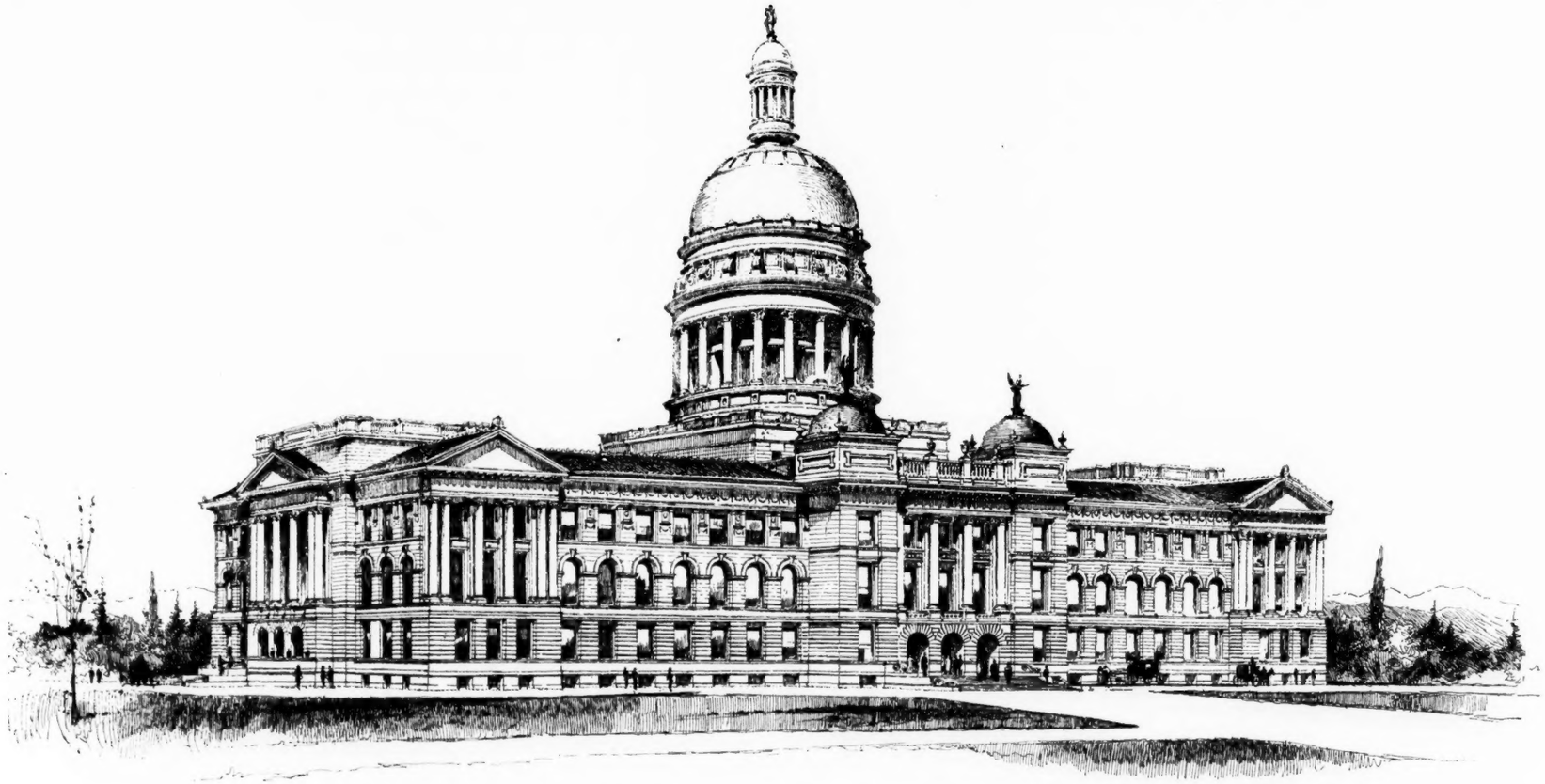


SECOND PRIZE DESIGN, COMPETITION FOR STATE CAPITOL, OLYMPIA, WASHINGTON.

SUBMITTED BY W. M. KENYON, ARCHITECT, MINNEAPOLIS.

FOURTH PRIZE DESIGN, COMPETITION FOR STATE CAPITOL, OLYMPIA, WASHINGTON.

SUBMITTED BY ARCHITECTS W. E. BROWN, CHICAGO, AND GERMAN & DE WAARD, DULUTH.

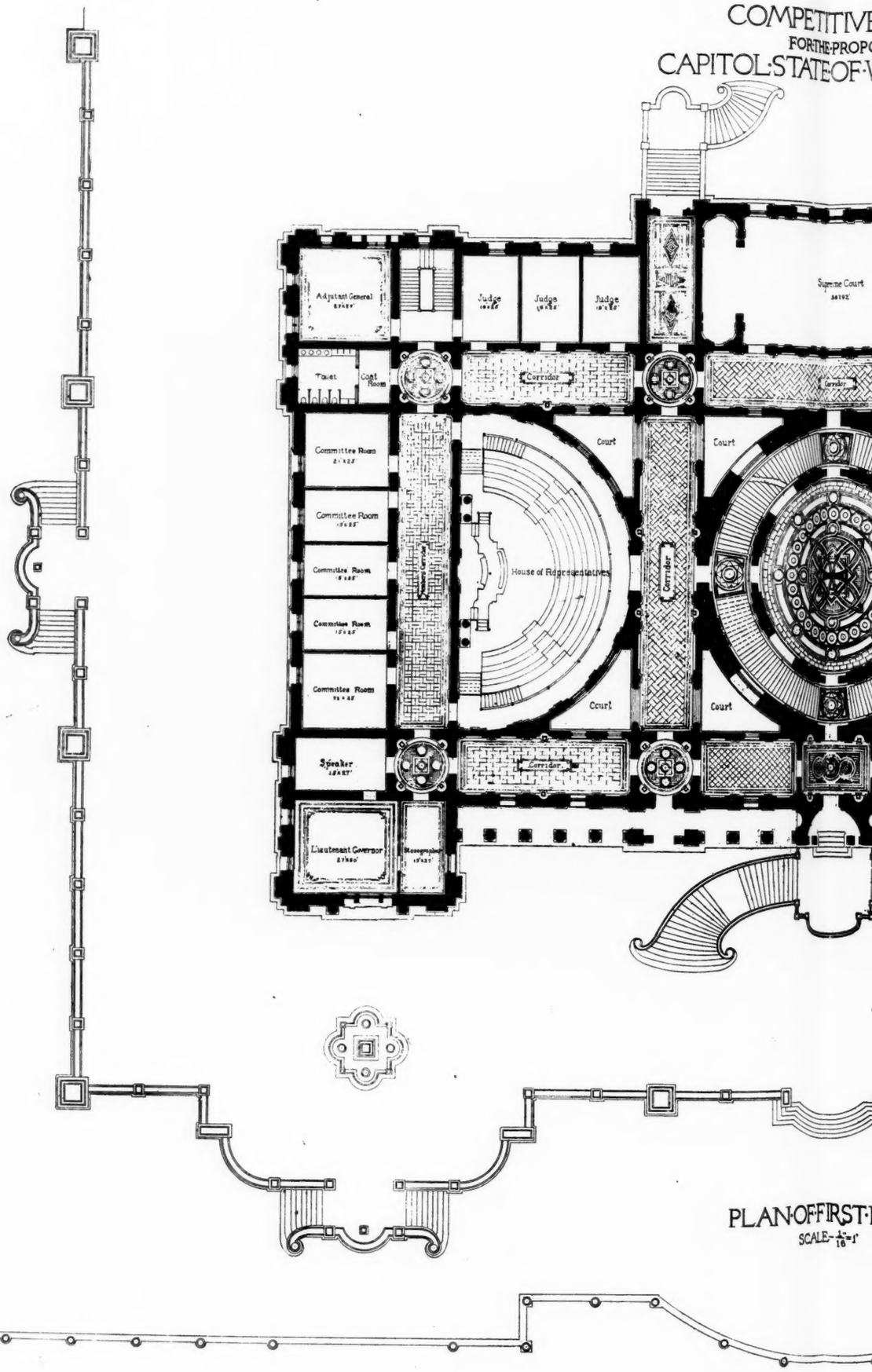


THIRD PRIZE DESIGN, COMPETITION FOR STATE CAPITOL, OLYMPIA, WASHINGTON.

SUBMITTED BY ARCHITECTS W. H. DENNIS, MINNEAPOLIS, AND O. P. DENNIS, TACOMA.

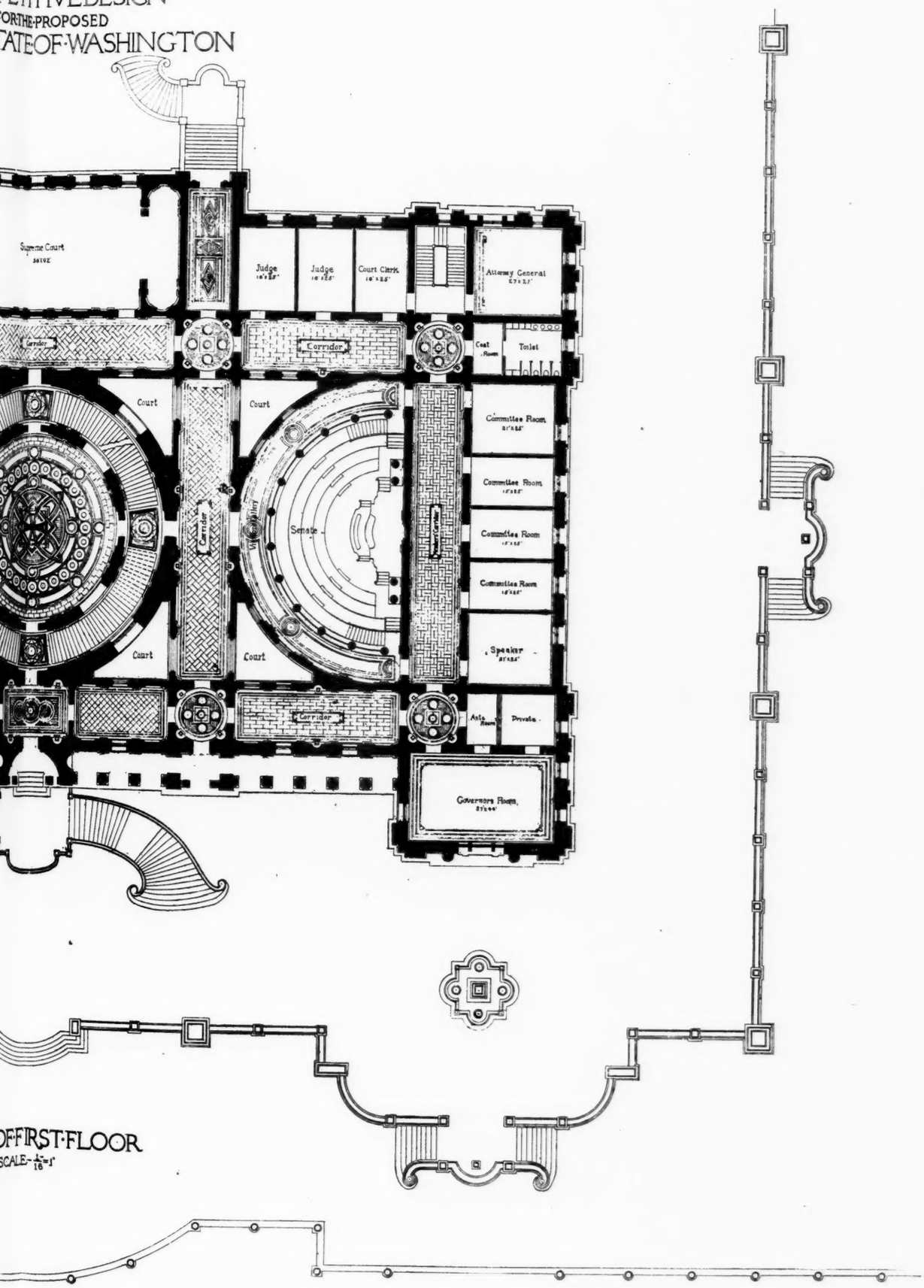
NEW
RESIDENCE
FOR
MRS. E. M. FERIOLOT
M. E. BELL
O. W. MARBLE
ARCHITECTS
CHICAGO ILL.

COMPETITIVE
FOR THE PROPO
CAPITOL STATE OF V



PLAN OF FIRST F
SCALE - $\frac{1}{16}$ = 1'

PETITIVE·DESIGN
ORTHE·PROPOSED
TATE·OF·WASHINGTON

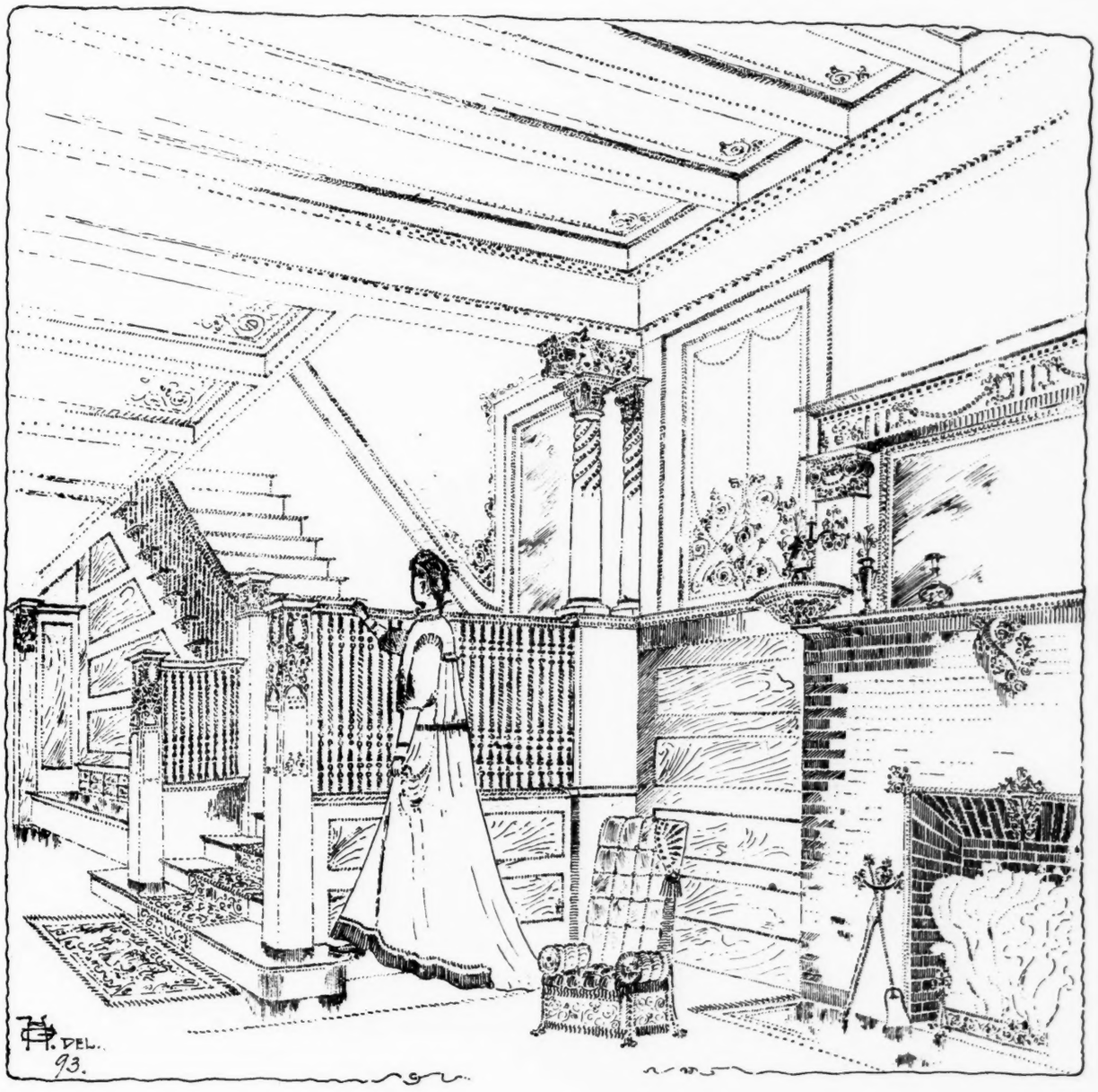


OF·FIRST·FLOOR
SCALE-$\frac{1}{16}$=1'

MECHANICAL ARTS BUILDING, CALIFORNIA MIDWINTER INTERNATIONAL EXPOSITION.

E. R. SWAIN, ARCHITECT.

INLAND ARCHITECT PRESS.

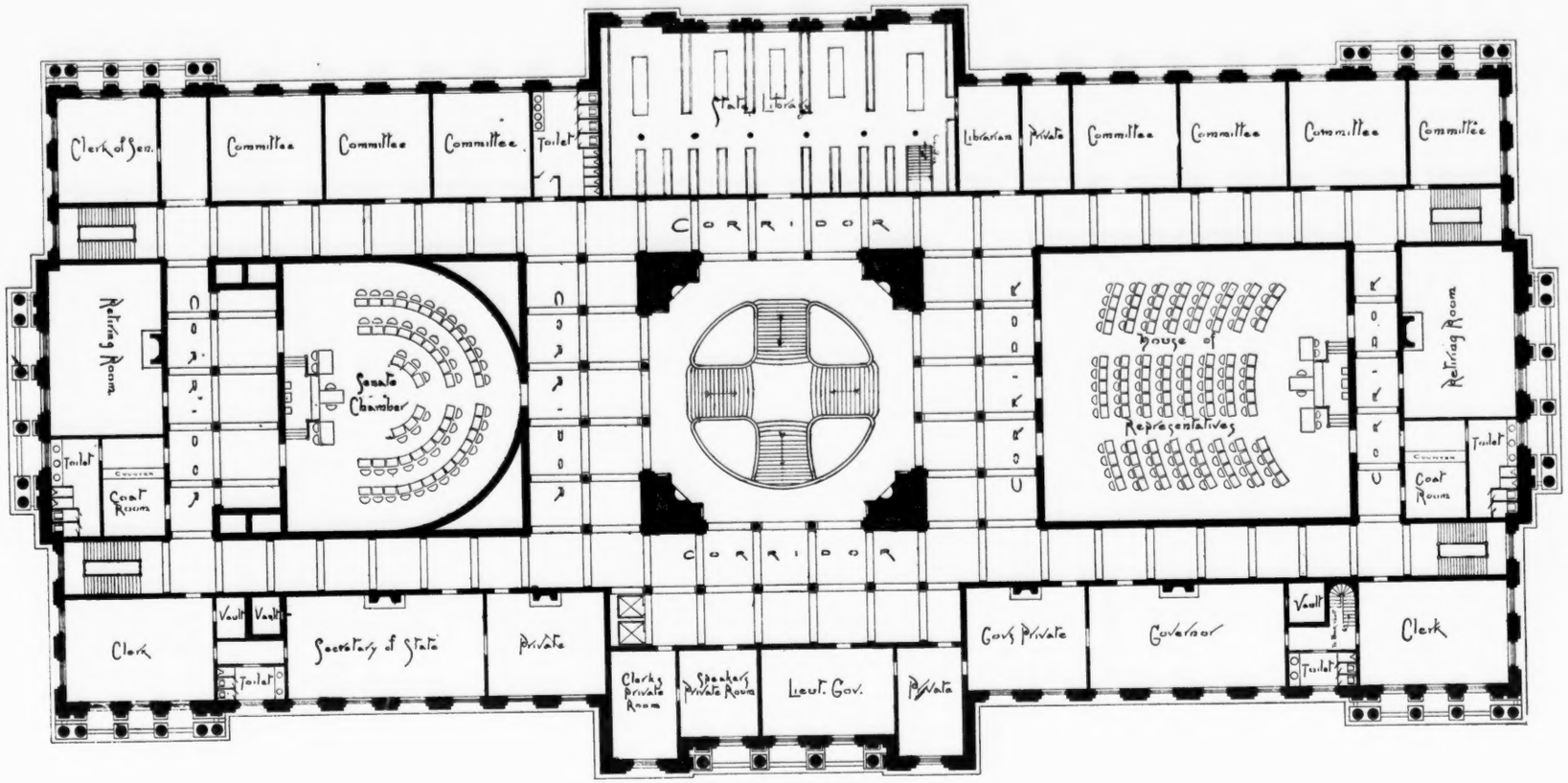


RECEPTION & STAIRCASE HALLS.

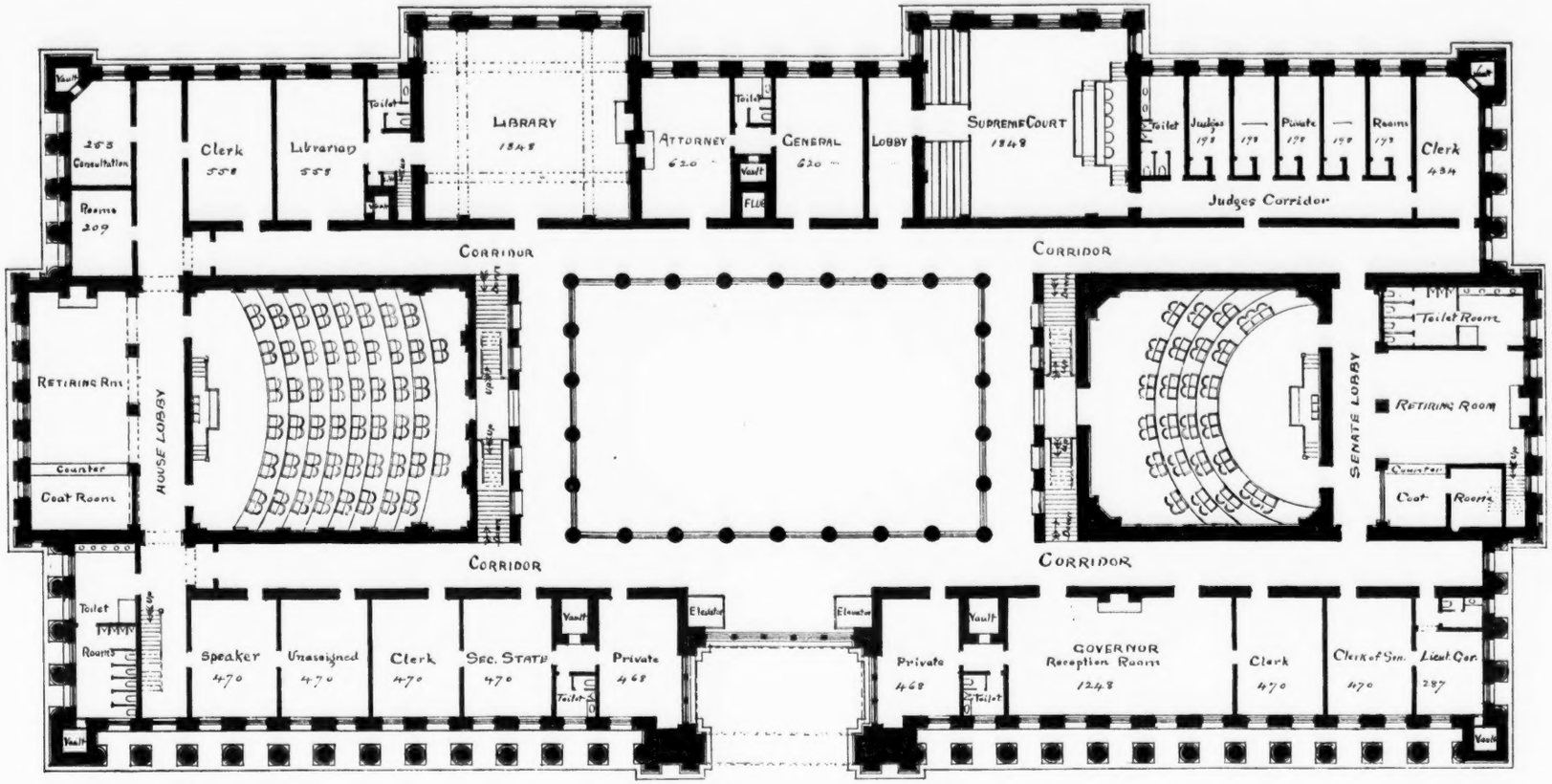
MR. D. F. CRILLY'S RESIDENCE.

FLANDERS & ZIMMERMAN.

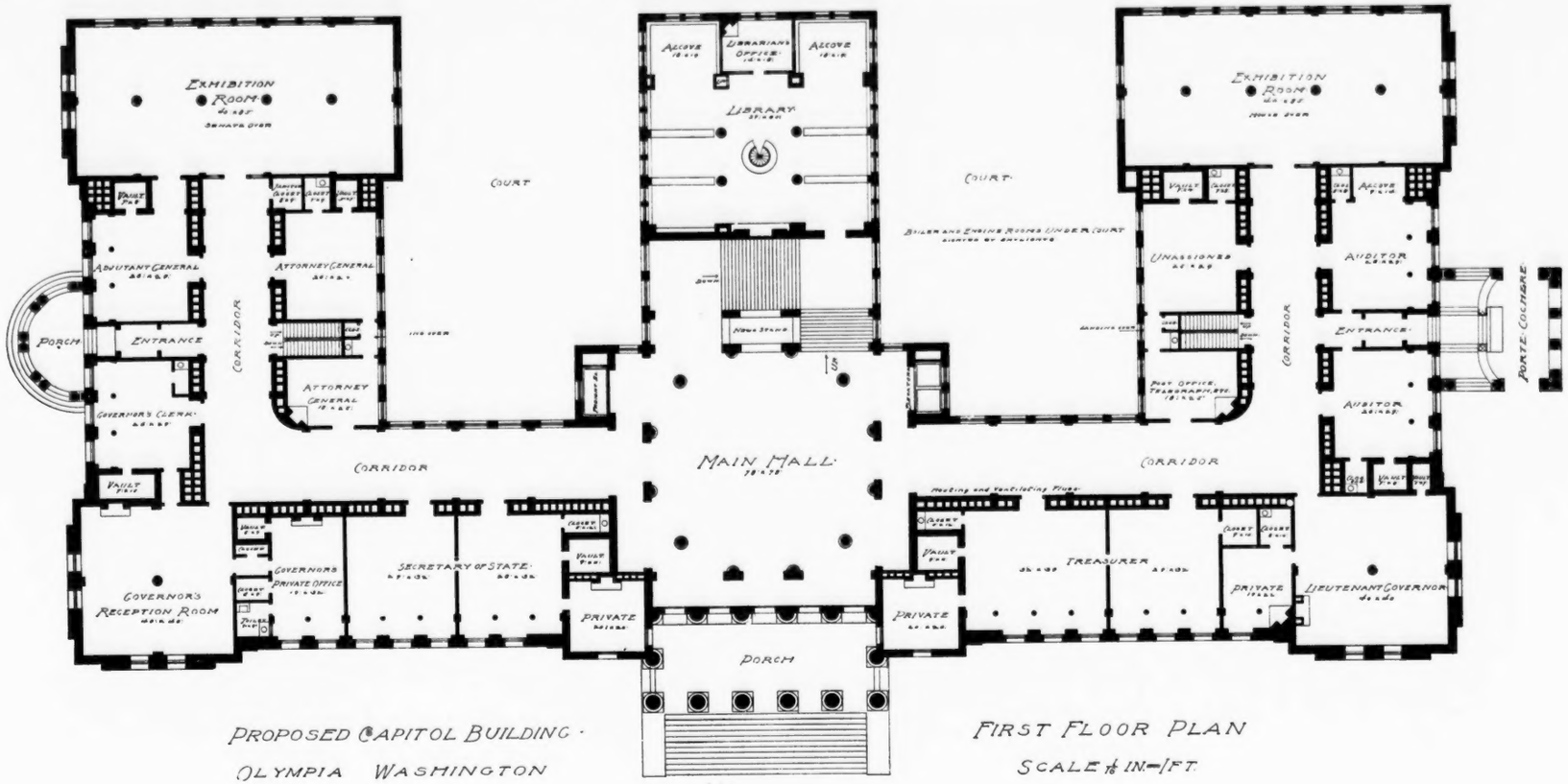
ARCHITECTS.



SECOND FLOOR PLAN.

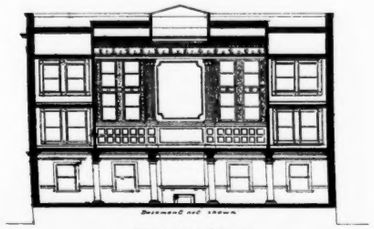


PLAN OF FIRST FLOOR.

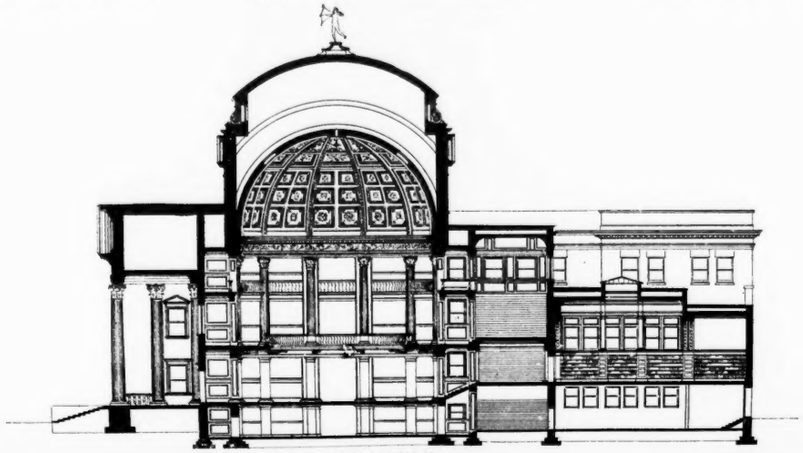


PROPOSED CAPITOL BUILDING · OLYMPIA WASHINGTON

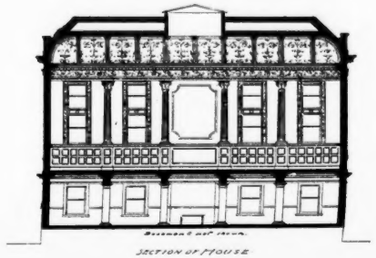
FIRST FLOOR PLAN
SCALE 1/16 IN=1FT.



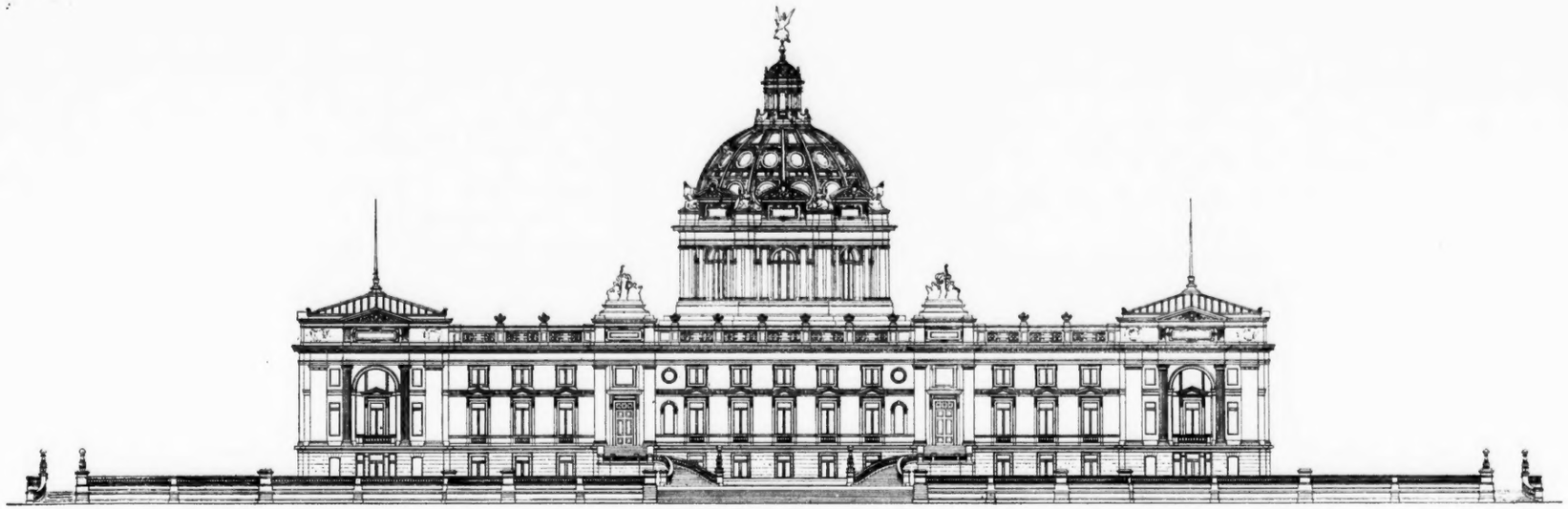
SECTION OF SENATE.



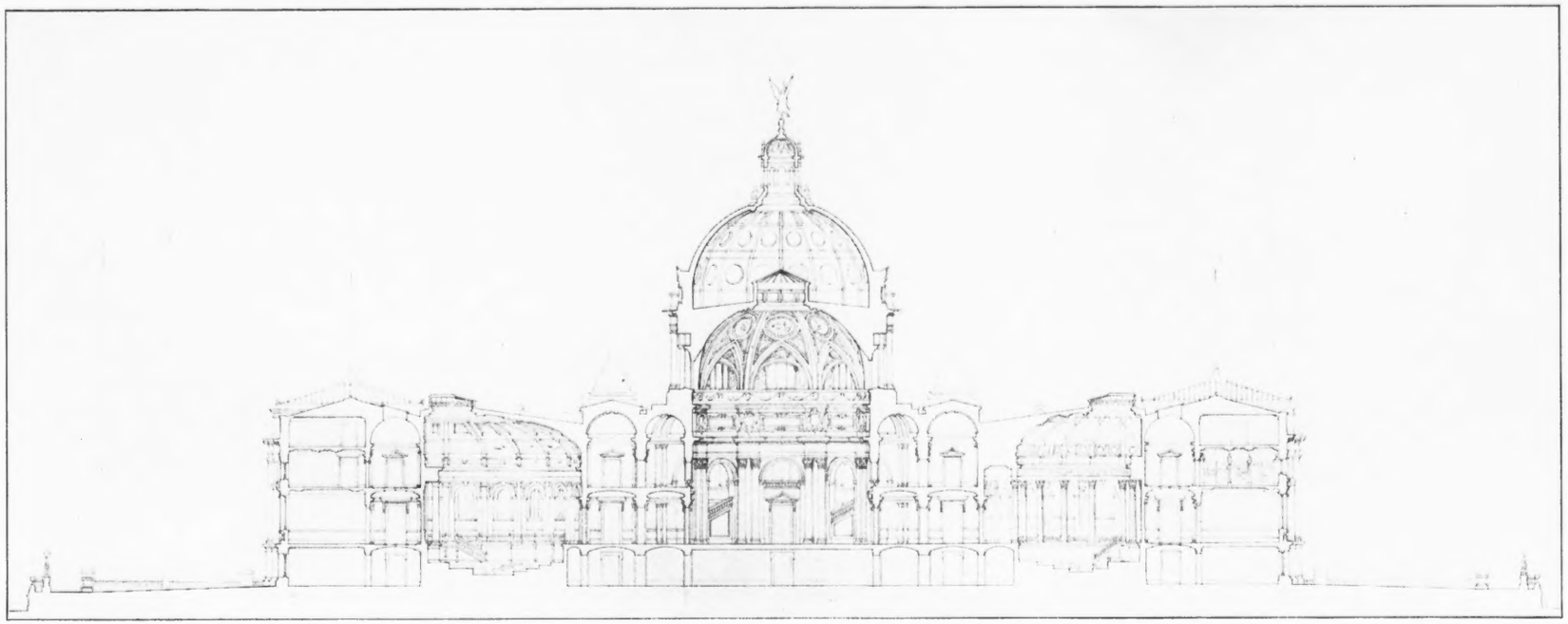
TRANSVERSE SECTION



SECTION OF HOUSE



REAR ELEVATION.



SECTION.

CENTRAL COLLEGE FAYETTE MO W.C. ROOT ARCHITECT