

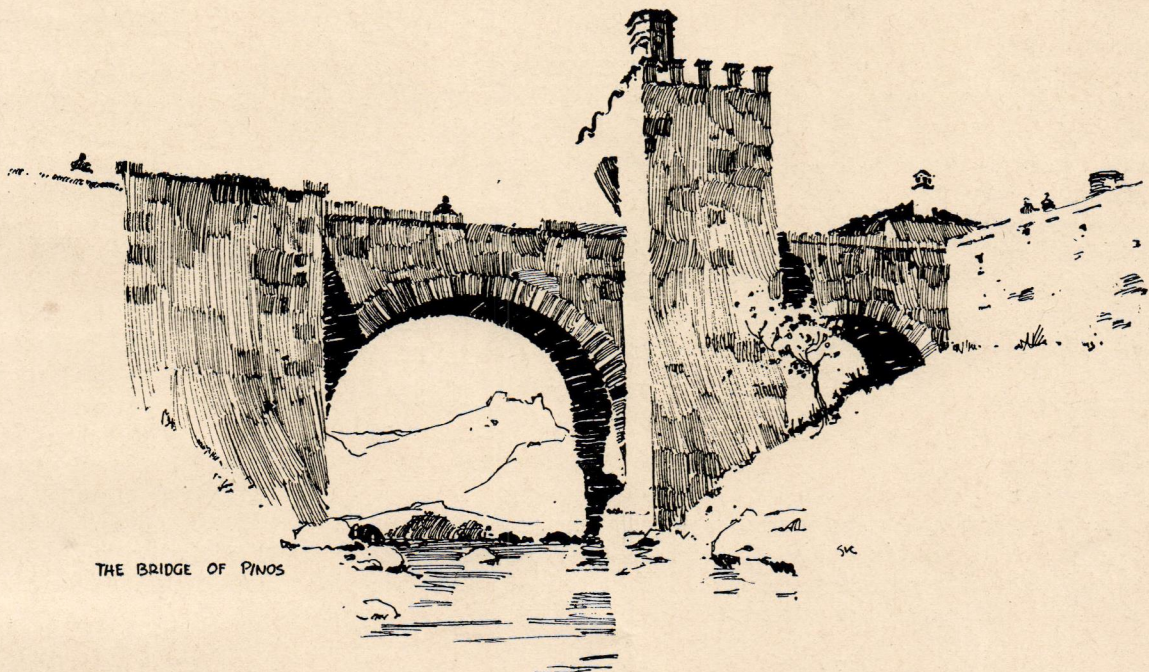
THE AMERICAN ARCHITECT

The ARCHITECTURAL REVIEW

VOL. CXXVI

WEDNESDAY, JULY 16, 1924

NUMBER 2450



THE BRIDGE OF PINOS

THE BRIDGE OF PINOS

A PASSING GLANCE *at* SPAIN

Random Sketches *and* flighty first Impressions *by* Samuel Chamberlain



ALPITANT architects on a maiden trip to Spain are due for many a surprise. However vague may be one's actual knowledge of that intriguing country, there is usually that preconceived and often preposterous picture: glistening, sun-bathed castles, blossoming orange trees, the caressing warmth of an Andalusian sun, bullfights, fandangos, gay, agile villains with daggers and castanets, mantillas and roses in clenched teeth. The cold reality, one is startled to find, is that Spain is too cold in the Winter and most of the Fall and too hot in the Summer for comfort—(Moral: go in the Springtime)—that, compared to France it is a very expensive place in which to travel; that bleak, barren hills usually substitute for orange blossoms, and that the enchanting

señoritas of the flowing mantilla and the rose, clenched teeth and other properties, are either non-existent or safely behind bolt, bar and blinder.

Sufficiently hard boiled travellers who adapt themselves readily to the life of primitive man find little to complain about in the Spanish comforts of life. The feminine angle, however, holds the hotels to be vile, the food to be execrable, the climate inexcusable, the people rude and staring, the railroads an exasperating joke. Strange, poignant odors permeate the corridors of all too many Spanish hotels, it is true. As nearly as the most predominant perfume can be pinned down with mere words, it resembles allspice thrown into the heavy atmosphere of an operating room. And the beds, from the point of view of repose afforded, have progressed little beyond

those of the stone age. But what of that? Spanish meals consist principally of meat and more meat, and still more meat during the bullfighting season, it appears, and they are savored a bit too strongly with rancid olive oil, it is true. The Spanish trains offer very nearly the ultimate in leisurely and sordid travel. A "de luxe" express (the quotation marks are sarcastic), has the relative dispatch of a Stamford local. The vision of a second class compartment at mealtime is not pleasing. Greasy fingers, stuffy fumes of garlic and red wine, egg shells, fish bones, nut shells, orange peelings under

it, must find a happy hunting ground there. Another decided surprise comes as soon as one steps from the railway station in Madrid, harassed by gilt lettered porters, pestered by baggage scorpions, but enchanted by the sight of that

forgotten flower, a genuine yellow taxi. Civilization, as exemplified by subways, skyscrapers, adding machines, typewriters and shouting newsboys is flourishing in a most fertile oasis, that much is evident. College cake eaters and the gay social bloods who have mastered the manual of polite Spanish conversation and are possessed of a plump pocket-book could have



THE HOSPITAL AT UBEDA

Also the art of frank and merciless staring is by no means a lost one in Spain. The shrinking violet almost withers and passes out. But when all these indictments are banded in one,

a wonderful time in Madrid. It has all the jazz, the luxurious apartments, the cabarets and the cut-throat cab drivers that can be found in the lower fifties of New York. It is distinctly a modern



PUERTA DE LA ALMOCABAR - RONDA

PUERTA DE LA ALMOCABAR, RONDA

they present a very weak argument to detain an architect from the trip through Spain. The same bristling source of opinion that condemns the comforts of the place admits without qualification that an architect, if he chose to look for

city. Every music store has elaborate displays of—dare I repeat the wearisome words?—"Yes, We Have No Bananas," which was respectably recent at that time. The old streets have been slashed and sliced and scraped to make way for

new boulevards of faultless asphalt. Skyscrapers, in the modest sense of the word twenty years ago, are rising up as they are in no other city in Europe. One of the newly created boulevards is lined with them, all in various stages of com-

less. The vast pyramids, spheres, leaping horses, gilded chariots and conglomerate gewgaws which are so much in favor here, possess an almost negligible *raison d'être*. There are other architectural phenomena to be found, most notably and



FROM THE ORIGINAL DRAWING BY SAMUEL CHAMBERLAIN

pletion. Some of them rise up a full thirteen or fourteen stories. As debutantes at this sort of thing, the Spanish naturally commit some rather terrible affairs. Most noticeable is the violent lack of scale of the elaborate and junky cresting which, like a rooster's comb, is apparently meant to lend a telling touch of elegance. This sort of thing is quite all right on a Riviera hotel, and it goes admirably with baby's building blocks, but on an office building it is entirely meaning-

notoriously a squad of caryatides in phalanx formation, each elbowing the other out of the way. But skyscrapers in Madrid were a surprise. One had a repeated presentiment that Park Avenue would be just around the corner. Those in quest of an old world atmosphere will find about as much of it here as in Gary, Indiana. Possessed of a fortune and a back slapping acquaintance with Alphonso XIII, it might be jolly to have an apartment at the Ritz for a month or so, other-

wise there is considerable wisdom in holding to the sparse schedule of the Prado, the Opera, several acres of the Escorial and the little outlying church on whose walls Goya slapped some of his impressionistic angels, and then heading for Toledo. It is all very modern; even a modern government is being installed, it is hoped.

There is no lack of evidence that a new military regime has the reins of authority in Spain. Rarely does one see such a polka dotting of soldiers. Primo de Rivera (how much more that sounds like a Havana cigar than a general), has flooded the country with them. In Burgos, for example, they parade the streets in informal dozens, they crowd the cafes to the choking point, they rend the air every



HOUSES ON THE EDGE OF THE GORGE, RONDA

the market places of Constantinople, the bazaars of Calcutta, none of which places have I seen. Blue capes, sky, Alice, indigo, bird's egg blue with tremendous collars, brown blanket coats spattered with vulgar mud, Sousa's band regalia with bell boy caps, coal scuttle patent leather crestings for the gendarmes, flaming red berets and trousers for some other type of official, these are but some of the military drappings. The officers were gilded sufficiently to play the parts of Chinese pheasants in a bird play, dangling with swords and pom-

poms and medals and golden rope long enough to come in very handy in a hotel fire. To look in the window of a military knickknack store was to gaze upon something wilder than the most



RONDA

five minutes with bugles and the metallic sound of marching hobnails on the cobbles. They have everything in color, cut, swank and lack of swank that can be found in the souks of Cairo,

riotous bit of scenery in the Chauve Souris. It is a military regime, there can be no doubt of that, but hardly a rule of terror, save for the unescorted señoritas who undergo a fearful fusi-

lade of badinage from the soldiers. But then, bless their hearts, soldiers are the same jovial, care free, fun loving lot the world over, as the dear old Boston lady remarked in the writing room. However they appear to be rather tough birds if they may be judged by the clusters in the cafes. They grimace like Beelzebubs, flash thorny teeth and hiss like boa constrictors when they talk, punctuating the conversation with the frequent cracking of a bony fist upon the table. I watched the card games with great interest to note if they stuck their stilettos in the table with their ante, as some romancer had insisted they did, but saw it not.

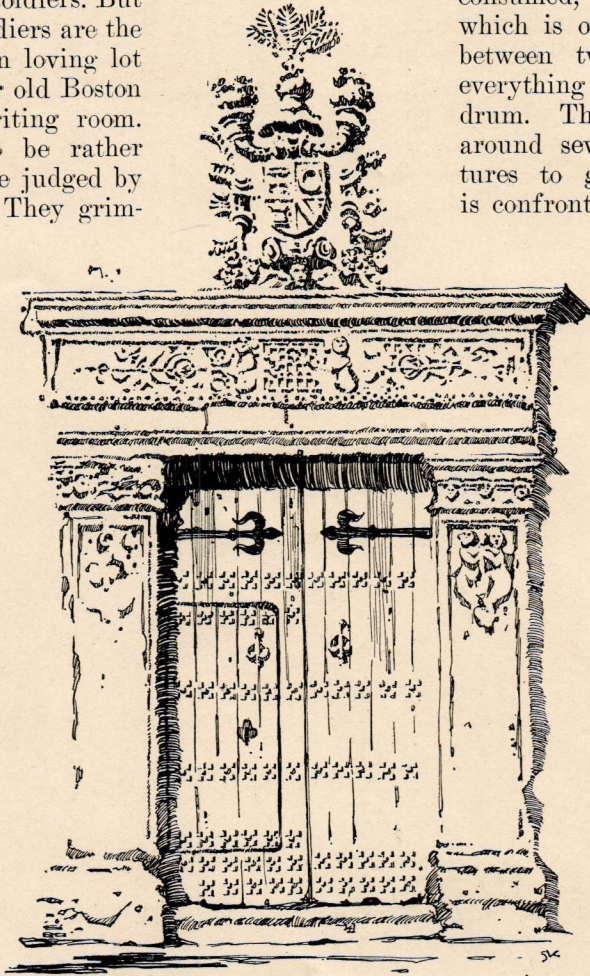
A very active (?) club life seems to be the rule in Spain. At first sight the glass fronted lounging rooms might be taken for very pretentious cafes, but a liveried giant in the vestibule quashes that idea. The club rooms are fitted with fat upholstered chairs, in each of which is slumped a paunchy clubman, looking sourly at the passersby and reaching laboriously for a Lilliputian cup of coffee.

The working hours in Spanish establishments are so arranged that a maximum of leisure is afforded the slouching clubman. Rarely does a store pull back its wooden blinds before nine in the morning. There is a period of truce around eleven so that a cup or two of black coffee may be

consumed, and in that time of the day which is often the busiest elsewhere, between two and four, practically everything is closed as tight as a drum. The time for tea seems to be around seven, and anyone who ventures to go to dinner before nine is confronted by nothing but empty tables and a very hurt and indignant head waiter. It is all very confusing, but one readily admits that if leisure and repose are the two cardinal requirements in a day's schedule, they receive their due consideration in Spain.

It is all very easy to ramble on about such trifling details. To observe the superficialities, to discern that Spain possesses an incomparable and ingenious wealth of architectural information are possible in a first gaping journey. But to render an appreciation, to "say a few words" about Spanish architecture would be even more flippant than to set

down the few foregoing irrelevancies. A passing paragraph decidedly will not do. It seems incredible, however, that anyone could be intelligently disappointed in the architecture in Spain. It glories in an undreamed-of splendor. All the shopworn superlatives in the undersized quota of words here available fall dismally flat in describing it. Only by wandering wide-eyed through the streets of Toledo and Segovia, the



A BATTERED DOORWAY IN SEVILLE



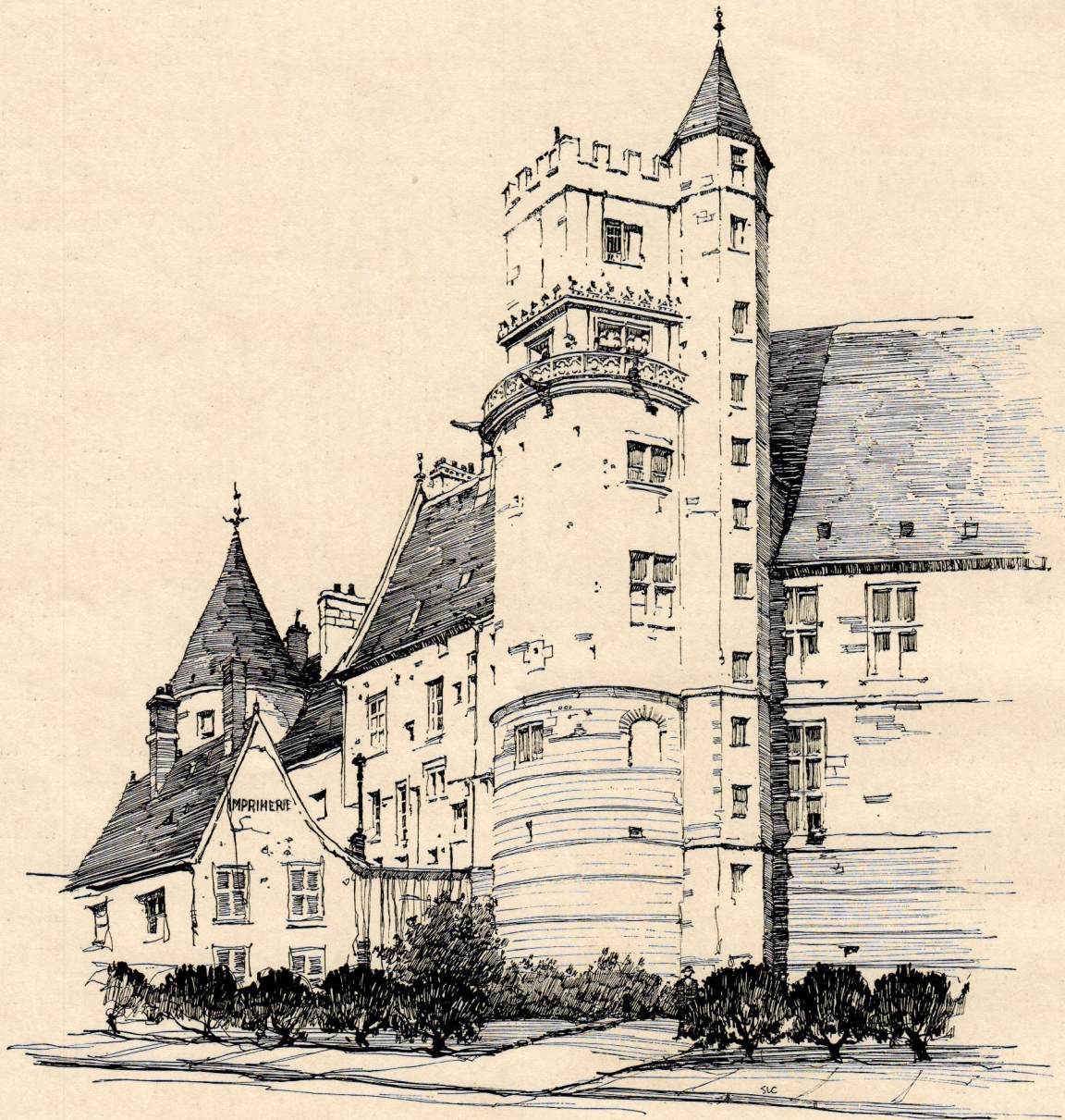
BAZA

BAZA

mosque in Cordova, the cathedral of Seville and the overworked Alhambra can that sensation of awed enthusiasm, so indescribable in words, be understood.

Until recent years Spain has been to the majority of architects a *terra incognita*, an undiscovered country. The artistic thrills that men

trained in architecture may experience by a visit to Spain are so wonderfully fine and the opportunities to acquire a knowledge of an art so good in all its aspects are so great that they should tempt them to visit Spain and by personal contact become familiar with its vast storehouse of art.



MAISON JACQUES COEUR FROM THE WEST, BOURGES

(From the original drawing by Samuel Chamberlain)

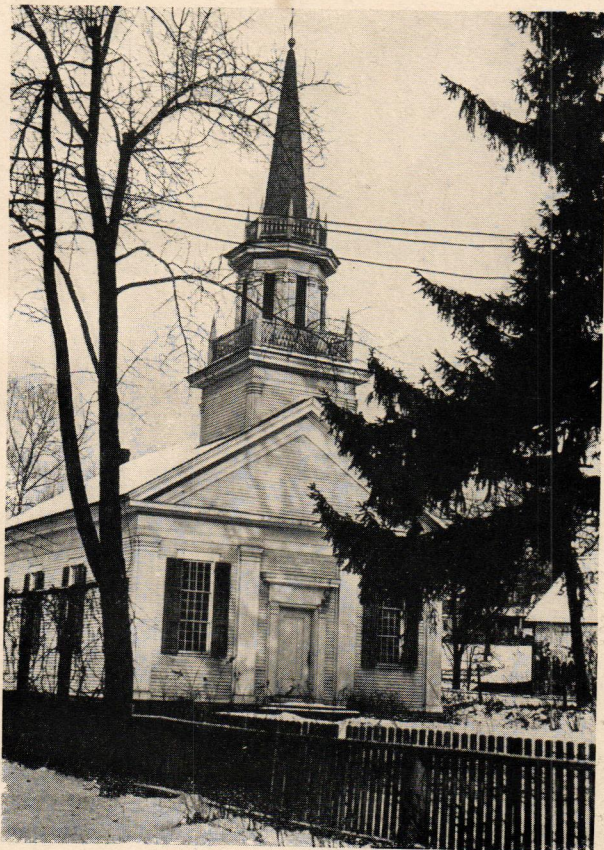
A GROUP of EARLY NORTHERN OHIO CHURCHES

BY I. T. FRARY

AMONG the buildings erected by the pioneers of Ohio, none are more interesting than the small churches, occasional examples of which have survived the zeal and ingenuity of successive generations of well intentioned iconoclasts. These old churches are usually severely simple, closely following the precedents to be found in similar New England towns. As was their custom in house building, the builders clung to the forms and details with which they had been familiar in their Eastern homes and which had been taught them during their apprenticeship, and by the few books which formed their professional libraries,—if they had any.



CHURCH AT BRECKSVILLE
BUILT 1844



CHURCH AT GATES MILLS
BUILT 1853

They built in a straightforward, unaffected manner, with no straining after originality, but following the simplest of plans and masses, enriched merely by classic details applied to doorways, entablatures and steeples.

The steeples were the distinguishing features, but although it was upon them that the greatest



CHURCH AT STREETSBORO
BUILT 1851

care was lavished, the desire for individuality rarely led the designers away from the bounds of good taste. The pioneers of the Western Reserve were as simple and conservative in their architecture as in their characters and religion.

The doorways were not different from those on their houses, merely larger in scale as befitted the greater size and importance of the structures. The windows too were like those of the houses, with small paned sash, and customarily, on the front at least, protected by blinds.

The pedimented facade was usually dignified by an order, either of columns or pilasters, and the steeple surmounted the pediment in line with the front.

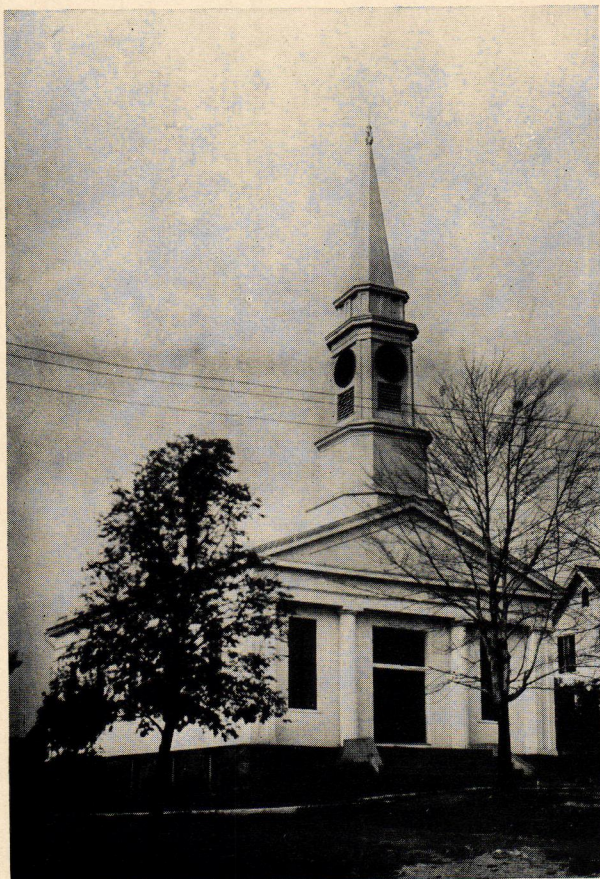
The ones illustrated here are at Twinsburg,

Brecksville, Streetsboro and Gates Mills, all located so closely together and showing such similarity of effect, especially the first three, that it seems quite probable the same builder may have been responsible for them all.

The designs are so simple that no description is needed; the photographs tell the whole story of the exteriors. The interiors are generally severely plain with but little of architectural interest.

It is regrettable that more appreciation has not been shown these fine old churches, for it has meant the mutilation or destruction of many that should have been preserved as inspiration for future generations of builders in small communities, the needs of which are admirably met by these simple meeting houses.

CHURCH
AT TWINSBURG



BUILT
A. D. 1848

ARCHITECTURAL EDUCATION *in the* UNITED STATES

ARCHITECTURAL education as conducted in the United States and by L'Ecole des Beaux-Arts, was discussed by Albert Ferran, former Professor of Design at the Massachusetts Institute of Technology. His paper was read before the Boston Society of Architects, May 6, 1924, on the occasion of the annual award of the prizes of the Society and the Rotch Traveling Scholarship. He is particularly fitted to discuss this subject as he was a winner of the Grand Prix de Rome and has had educational experience in this country. Professor Ferran prefaced his discussion of American educational methods by giving a very comprehensive historical account of the development of architectural education in Europe. The limitations of space prevent the publication in full of this very interesting and valuable paper. Professor Ferran has severed his connection with the Institute of Technology and has returned to Toulouse, France.

It is interesting to note, however, that the first school of architecture, the French Academy of Architecture, was founded in Paris in 1671 by Colbert, Minister of Finance under Louis XIV. The founding of the Academy was followed by the establishment of subsidiary schools in France and the movement led to the foundation of similar institutions in Berlin, 1703; St. Petersburg, 1757, and the Royal Academy of London, 1766. Colbert specified that the object of these first academies was to teach with public and free classes and not to consecrate talent and reputation.

Since 1807, very little change has been made in this organization, the most important being in 1863, when L'Ecole des Beaux-Arts was given an independent direction, the Academy retaining the Prix de Rome and using L'Ecole des Beaux-Arts for the competitions.

After much discussion the diploma was instituted in 1875. This was opposed by some who wished to retain the tradition of Colbert, that the school should not consecrate talent; while others predicted that the securing of a diploma would be the only aim of many students. The granting of diplomas was favored by others for the reason that anyone in France could call himself an architect and that the public had no other means of distinguishing those who had an architectural training from those without one. A further claim was made that the poorest student, having fulfilled a certain minimum of study which entitled him to compete for the diploma, was much better qualified than many so-called architects without any academic training.

At present the school conducts three regular ateliers and there are sixteen independent ateliers, the number of which is unrestricted. A student is permitted to register under any director of an atelier whom he may choose as a master. Admission is secured through competition and the number of competitors is about 350 at this time instead of over 450 before the war. Sixty students are admitted at each of the two semesters, of which 45 are French and 15 are foreign students, provided that the last foreign student has as many points as the last French student. During the 250 years of the school's existence, it can be said that the numerous conflicts and discussions which have characterized its development have never interfered with the aim of maintaining the high standard and ideals which have always distinguished it.

Of the elements which contribute to the success of this school, the most important are: The organization and conduct of the Academy and the School have always been entrusted to the most competent men of the time.

From the start, the Academy selected its students by entrance competitions. It always maintained a high standard, and the increasing number of competitors for the limited number of admissions, has gradually made it possible to require an increasingly higher standard for admission. A student of the school thus acquires a standing which is more honorable than that which would result from merely registering and paying a tuition fee.

In architecture, principles can be taught but in order to stimulate the student to learn that which he can only acquire by individual effort, successive competitions are held. The ambition to excel is always an incentive. It is the impartial judgments of these competitions which make them effective. The conditions controlling the award of the Grand Prix de Rome are such that it cannot be won by an unqualified student. In this way, only those who can make proper use of its advantages are able to enjoy them.

The diploma, the granting of which was instituted 200 years after the founding of the school, is evidence that the recipient thereof acquired the right to be a student by means of competitive examinations and that he maintained his standing by a consistent performance in competition with his fellows. In addition he must present a satisfactory certificate to the effect that he had been employed in active practice for at least one year.

Compared with conditions in France, we have

in this country no organization which has the exclusive right to issue diplomas to architects. This results in diplomas being issued by a large number of schools which are naturally of unequal merit. For this reason the value of a diploma which is granted in this country may be open to question.

The fact that a student is enrolled in an architectural school does not indicate any particular qualifications for such a course of study. In fact, such a student may not know, even a few months before matriculating, that he will study architecture. This condition, of course, lowers the quality of American architectural students as compared with those in France. The American scheme of education is to combine a general education with an architectural training. The schedule of subjects taught in the Massachusetts Institute of Technology, which is given below, is very similar to that of other architectural schools. With an added fifth year students will be taught the history of painting, landscape architecture and town planning. The working schedule, including preparation time, represents 142 working days per annum, or a total of 568 days for a four year course. The total number of days for all of the subjects mentioned, not including Design, is 417 days, leaving 151 days for Design, or the equivalent of five months. The question naturally arises, how competent in Architectural Design can any student become with five months' time devoted to that subject distributed over a term of four years? In the freshman year, ten days are devoted to Design; in the sophomore year, 28 days, making a total of 38 days devoted to this subject in these years. What comprehension can the student have of architecture even after two years of study in which only 38 days have been devoted to Design? The balance of 113 days is distributed through the junior and senior years. Some students acquire a degree in three years on a schedule arranged for nine hours per day. The following schedule shows the distribution of the 417 days' work mentioned above:

Physical Training	4½ days
Military Science	20
English and History	54
French	33
Architectural History	26
History of Ornament	1
Political Economy	20
European Civilization and Art..	46
Philosophy of Architecture	4½
Shades and Shadows	4½
Perspective	7½
Descriptive Geometry	10
Applied Mechanics	30
Building Construction	3½
Office Practice	8½
Professional Relations	5½

Freehand Drawing	42
Life Class	20
Water Color	6½
Mathematics	50
Constructive Design	20

417 days

This schedule of subjects is practically common to all technical schools and its use appears to be based on two reasons. One reason is that they are sufficiently diversified to furnish a basis for an adequate education, including office practice and professional relations. Another reason is that the school attempts to show that their curriculum includes more subjects than that of any other school. It is legitimate for a student to wish to learn that which is necessary for an architectural education, but it is not legitimate for schools to advertise to teach more than an immature student can learn in a four year course. Parents are misled into believing that students will be properly trained but the result is that students will have acquired nothing more than a smattering of everything. Nothing is more distressing than for a student, at the end of four years' study, to realize that he has only begun to know what architecture is. How could this be otherwise when in the first two years of the course, he has had only 38 days of Architectural Design and altogether a total of 151 days? A professor of French at Harvard is quoted as having said: "Education in America tends to lower the instruction to the level of the best results for a middle class of students." This is unfortunately true. Students are stopped half way and have nowhere to go.

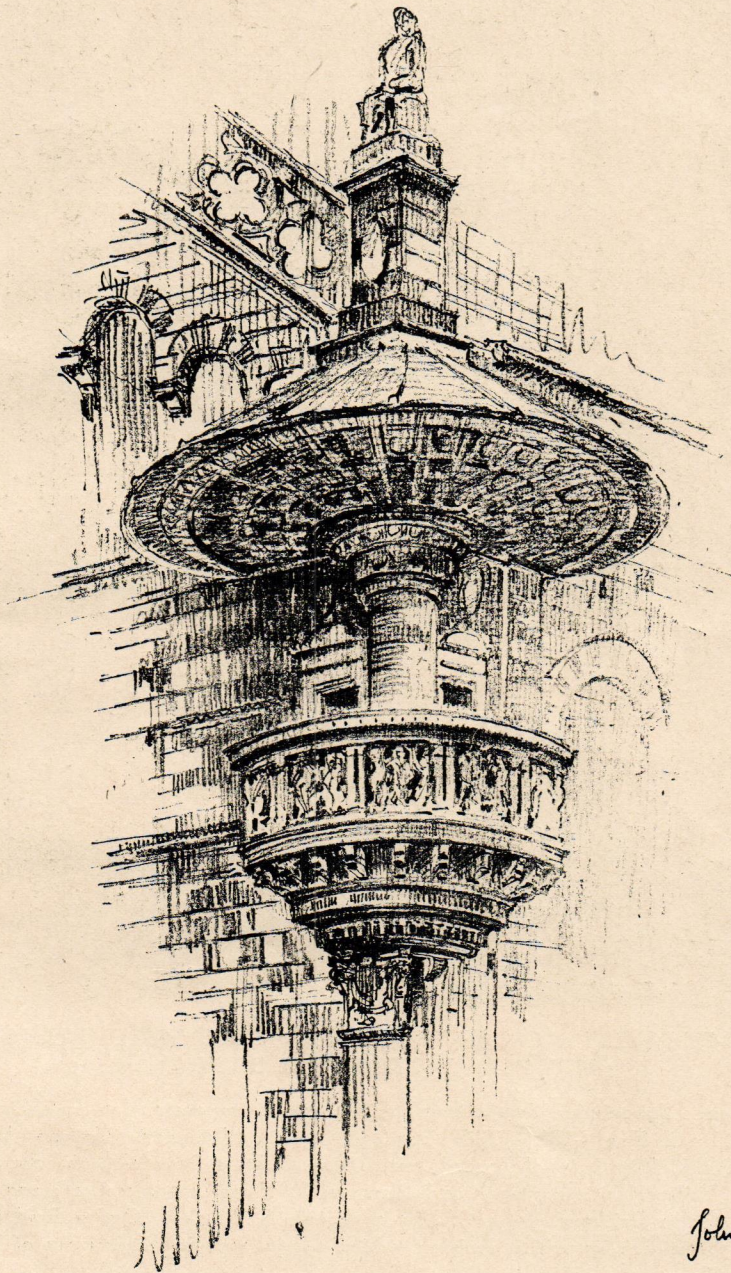
There was a time in the history of this country when it was found necessary to unite the states. In a like manner it appears that the future of architectural education depends upon a better co-operation between the universities. Unfortunately, co-operation demands sacrifices and sacrifices are always difficult to make. The defects of a solution of this problem will more likely be pointed out by those who are not going to benefit by it. Universities with high ideals should not wait until correctional measures are imposed on them.

A solution of this problem is suggested: That universities should agree to a co-operative relationship to a central school similar to the relationship of the independent ateliers to L'Ecole des Beaux-Arts in Paris. That schools or universities should require an entrance competition for a limited number of students. This would be contrary to the policy of some schools whose apparent aim is to attract as many students as possible, irrespective of their ability or qualifications and would provide for the elimination of unfitted students at the proper time. That the universities should

adopt schedules which would provide for a general education and an elementary architectural training in four years.

There are two institutions which might be made to serve the purpose of a central school; these are the Beaux-Arts Institute of Design of New York and the New York Institute of Design. An institution of this kind would award the prizes which carry with them European training. If, in this way, a superior training is provided, schools and universities would profit and the standard of education will be better than those "best results for a middle class of students." The universities should give the student an *architect-*

tural education and the higher school a *more advanced architectural training*. The success of architectural education in America depends upon that higher training, and the intent to accomplish that aim will bring about the means. This requires that one of the institutions above mentioned, or a similar one, be organized in such a way as to carry out the idea of the first American, Lloyd Warren, to obtain the diploma of L'Ecole des Beaux-Arts. The faithful and untiring efforts of this pioneer in architectural education in America can never be too highly praised, and Professor Ferran expressed his profound respect and admiration for Lloyd Warren.



John P. Morgan

DONATELLO'S PULPIT - PRATO NOV. 13-23

FROM THE ORIGINAL SKETCH BY JOHN P. MORGAN



WINNING DESIGN BY ERNEST CLEGG IN THE FIFTH AVENUE ASSOCIATION'S COMPETITION FOR ITS CENTENNIAL BOOK

The Fifth Avenue Association competition for the best cover design for its Centennial Book: "Fifth Avenue: Old and New—1824-1924," resulted in the submission of one hundred and twenty-five drawings. The Jury of Award, comprising Charles Dana Gibson, chairman, F. D. Casey, Charles B. Falls, Harrison Fisher and Penrhyn Stanlaws, art members; and Melville E. Stone, chairman, Arthur Brisbane, John C. Martin, Frank A. Munsey, Ogden Reid and Herbert Bayard Swope, lay members, gave the decision, which carries with it a cash prize of five hundred dollars, to Ernest Clegg.

The central feature of Mr. Clegg's design is the old map of Fifth Avenue and of New York, as of 1824. Around this map are scenes of long ago and of today, every detail authentic, and the contrast emphasized by the Fifth Avenue traffic tower (a symbol of engineering efficiency joined to architectural beauty) and the old horse-drawn vehicle of the middle of the nineteenth century. One insert is Fifth Avenue and Forty-Second Street today, the traffic tower flanking the Public Library.

EDITORIAL COMMENT

AMERICA LOSES Albert Ferran. Such a loss is not without cause and the cause is not one which is gratifying to our pride. Should this loss result in a better condition in architectural education, it will not have been in vain.

Attention is called to a resumé of Professor Ferran's address printed in this issue of *THE AMERICAN ARCHITECT*. It is with a distinct sense of disappointment that those of us who received our American academic training in architecture three or four decades ago, find so little improvement in architectural curricula since that time. It is a condition that is not promising. The factors involved have such a tremendous influence on our social and economic welfare that this condition must be corrected.

Professor Ferran found that our methods rendered it impossible, in his estimation, properly to educate architectural students and that he could not personally render the service which he should. His fine sense of duty forbade him to be a party to what might be a misrepresentation.

* * *

IT IS SURPRISING, in view of the undoubted fact that the planning of communities, especially the smaller cities, either helps or hinders the architect's proper work, that more attention is not given by the profession of architecture to town planning problems.

The Committee on Community Planning in a remarkably well considered report presented at the recent convention of the Institute, pointed out this fact and stressed the importance of a more lively interest in community planning. "While," states the report, "in all foreign countries the architects are the principal city planners, in America, others first created the mangled regularity of the gridiron and still control the form of our cities' growth."

There are many good reasons why an architect should actively participate in town planning matters. He is trained both along imaginative and practical lines. His professional experience daily prepares him for such work and if he would divest himself of an attitude of indifference and actively participate in town planning, he would sooner create the environment for his building that he so much desires.

States this report: "It is all but hopeless for architects to design sanely and beautifully unless

they can relate their individual works to a sane and beautiful community."

In the larger cities, town planning becomes a corrective problem, one that must consider abnormalities of growth and the relation of congestive areas. It is in the smaller communities where the services of architects may be of the greatest value. There is a wide difference between city planning and community planning. The small community is very likely, in time, to assume proportions of a large city. Its future will depend on the correctness of its original plan, the farsighted thought that is given to its inception.

Architects in small cities, striving for business, for professional recognition, can find no better way to impress their ability to serve than by actively working in town planning matters. In fact, it may be truthful to state that such activity becomes a civic duty.

Education carries with it a certain obligation of service, duties of citizenship. It seems as if the apathy of the profession of architecture in matters so vitally important may be open to criticism.

* * *

PARTY PLATFORMS are not considered by many persons, as something which will be carried out. This opinion arises from the fact that very seldom do any of these pronouncements materialize in works. The same opinion, to a large extent, obtains concerning the various codes of ethics which are adopted by professional organizations and this partly holds true of the codes of ethics of organized architects. It is only within recent years that contractors in this country have been organized in such a manner that a code of ethics was possible. The Associated General Contractors of America was one of the first organizations of that kind to adopt such a code and this example has been followed by many state and local contracting organizations, among which is the Associated Building Contractors of Illinois.

This action on the part of organized contractors is evidence of the improved status which the contractor has attained in the building industry. It is a further evidence that the contractor has a better understanding of his functions. In fact, it is through the efforts of the Associated General Contractors of America that contracting is becoming comparable to professionalism; and there is a reason for this. The complexities of build-

ing construction are of such a character that the contractor must equal in education, training, judgment and financial ability his professional brethren engaged in other pursuits.

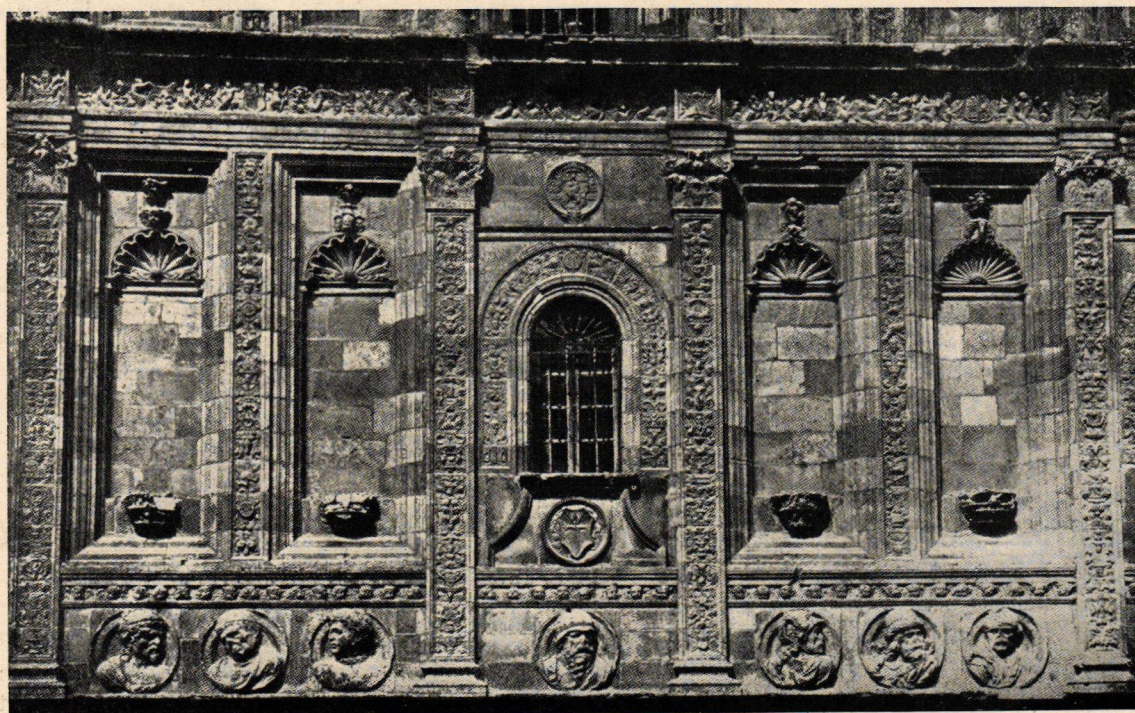
Both the architect and the contractor are essential elements of the building industry and the importance of each is not overshadowed by the other. It is desirable, then, that the codes adopted by each profession—architecture and contracting—should take cognizance of each other as there is an interdependence which cannot be avoided. Should these two professions co-operate in the formulation and adoption of reciprocal code provisions, it would not only make them more inclusive, but it would foster a more concordant spirit between them.

Their codes of ethics have been appraised in a rather cynical manner by many members of architectural organizations. It is difficult to understand how some things do occur which, according to the provisions of the code are unethical.

References have been made recently to the architectural history of a costly and important public building which is to be erected in a very large eastern city. A considerable number of years ago a competition was held for the purpose of selecting the architect. This competition conformed to the conditions set forth in the com-

petition code. Since that time, four well known architectural firms, who are supposed to operate under the conditions of the code, have been retained by the owners to carry on this work. Notwithstanding that the proposed building is owned by a large municipality and that political influence has its effect, it is difficult to understand how these four architects could ethically be employed as a result of the first and only competition. Because of this incident, one of the leading architects in this country has been led to characterize architectural codes of ethics as a mask for *safe opportunism* or *expediency*, permitting its violators to remain apparently within ethical law.

It is such incidents as this one and others, in which injustice is apparent, that leads to the breaking down of respect for professional codes. It would be far better, if these codes cannot be enforced, to amend them to such form that they will be respected by those who subscribe to them. In doing this it would not be desirable to lessen in any way the high ideals which should be maintained by professional men. This could be accomplished by so wording the code that its interpretation will accord with its spirit. The only means by which a code of ethics can command respect is for it to have unequivocal subscription to and compliance with its provisions.



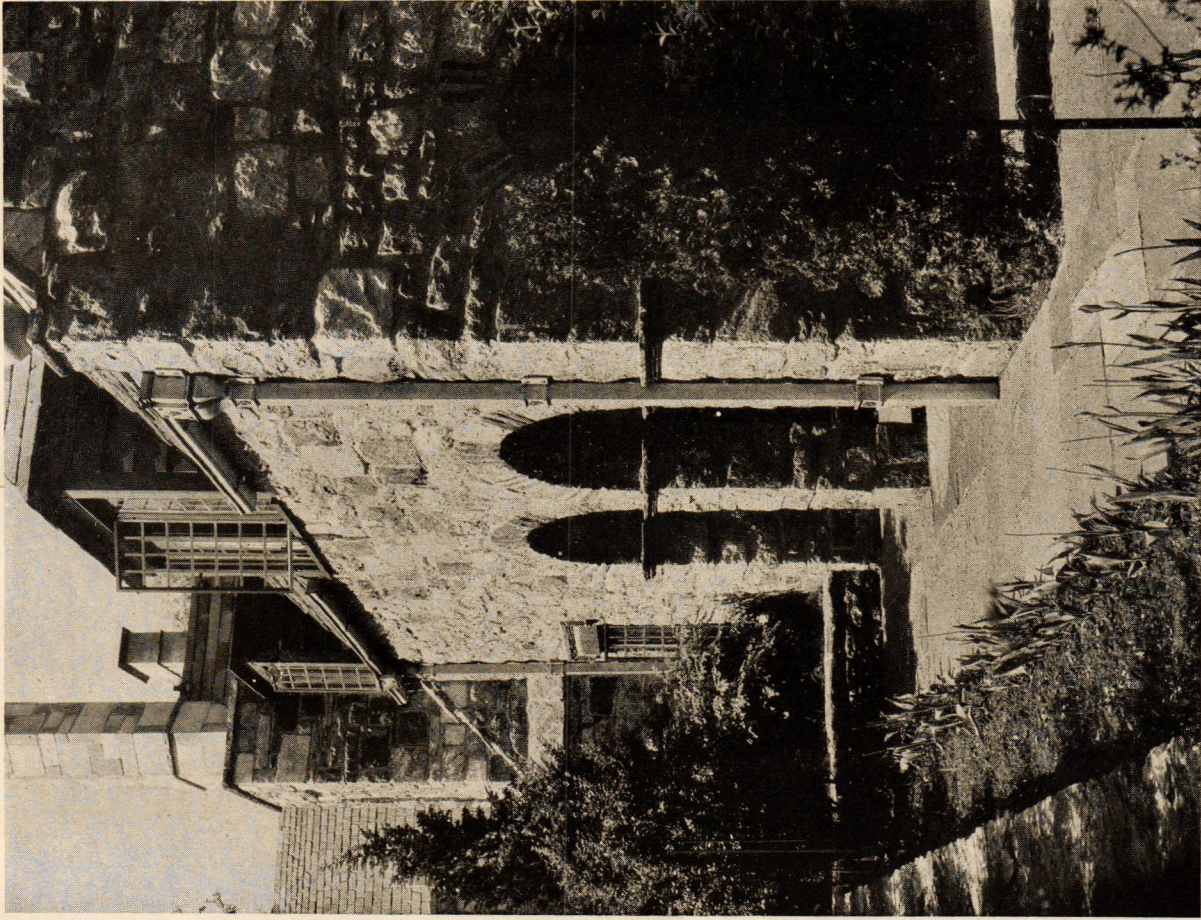
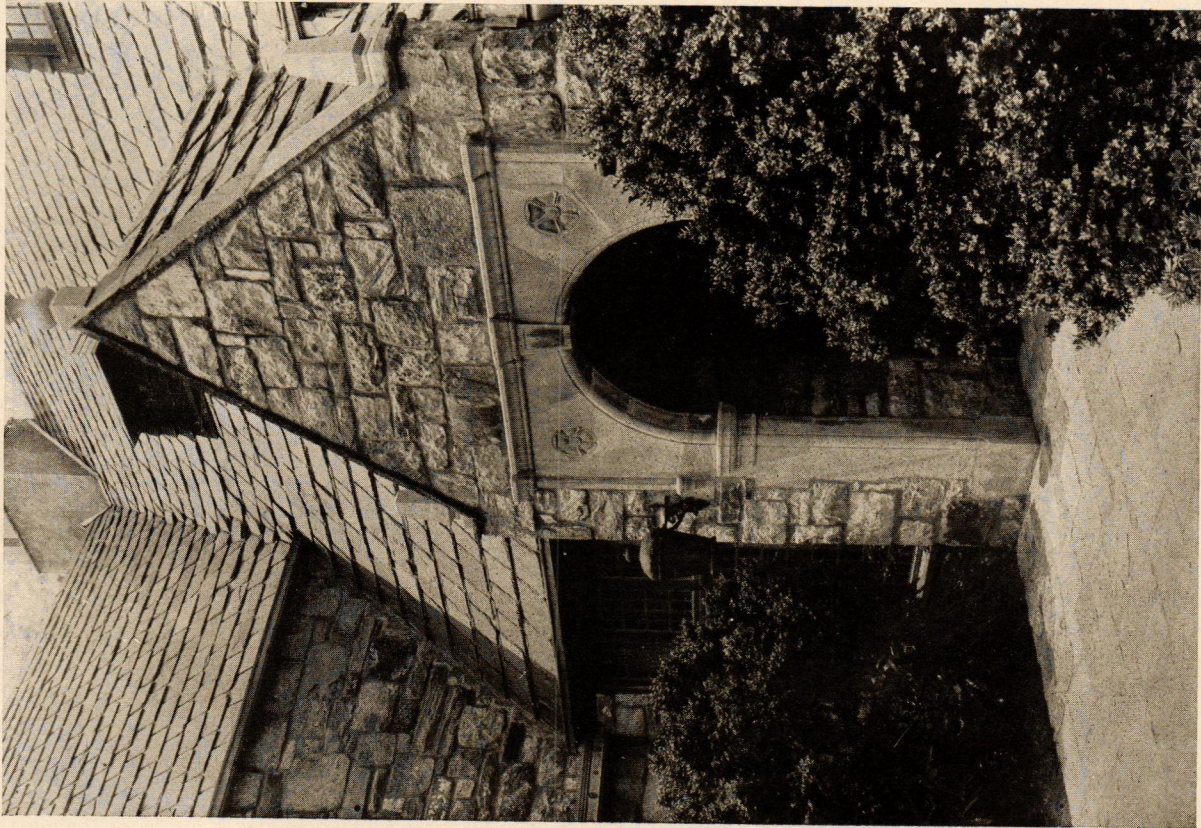
DETAIL FROM THE FACADE OF THE MONASTERY OF SAN MARCOS, LEÓN

(By permission of The Hispanic Society of America)

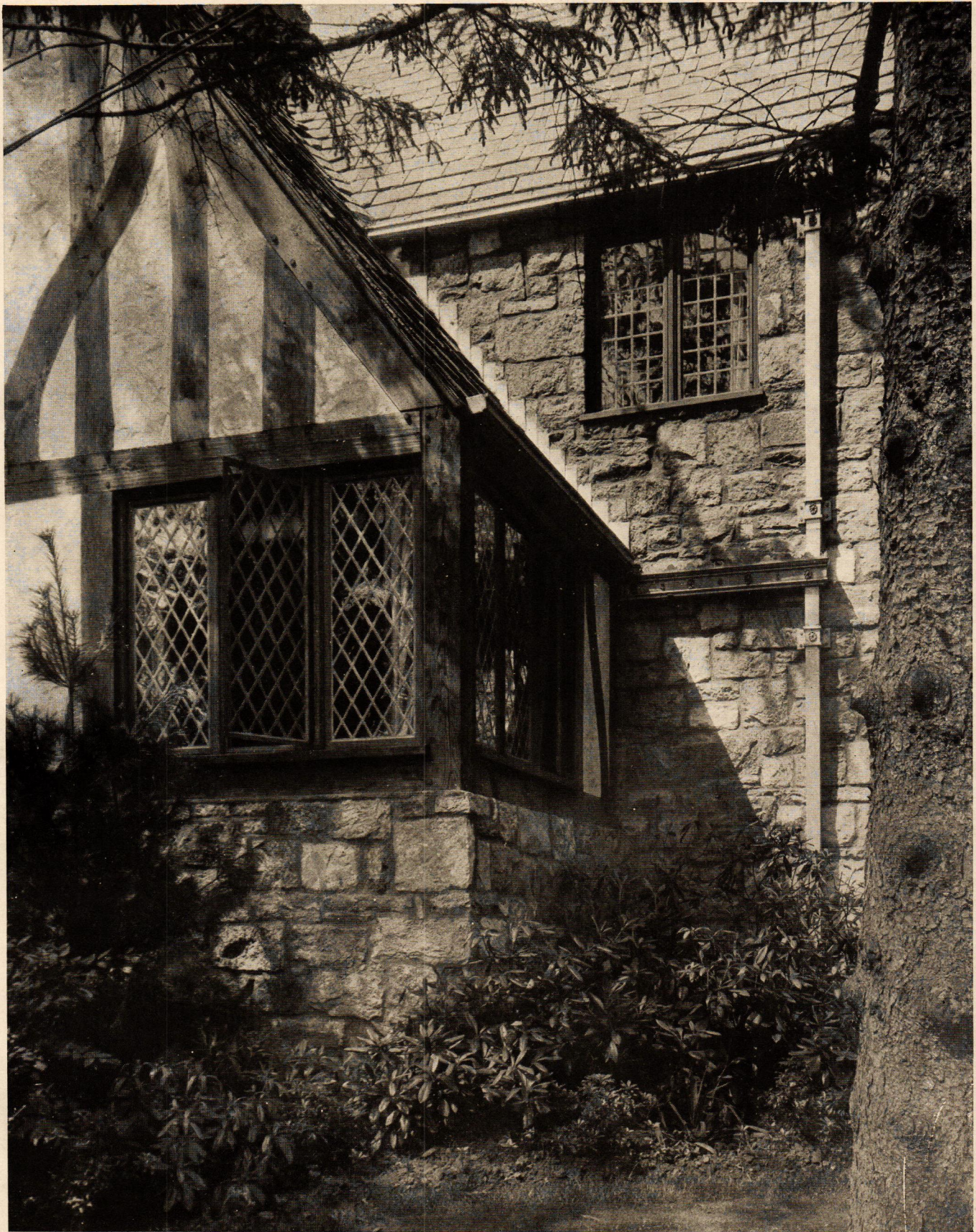


HOUSE OF MRS. LEWIS BOWMAN, BRONXVILLE, N. Y.

LEWIS BOWMAN, ARCHITECT



HOUSE OF MRS. LEWIS BOWMAN, BRONXVILLE, N. Y.
LEWIS BOWMAN, ARCHITECT



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LEWIS BOWMAN, ARCHITECT



HOUSE OF MRS. LEWIS BOWMAN, BRONXVILLE, N. Y.

LEWIS BOWMAN, ARCHITECT



HOUSE OF MRS. LEWIS BOWMAN, BRONXVILLE, N. Y.

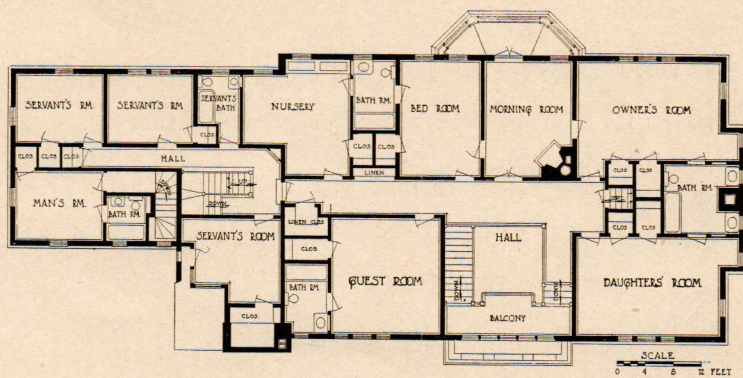
LEWIS BOWMAN, ARCHITECT



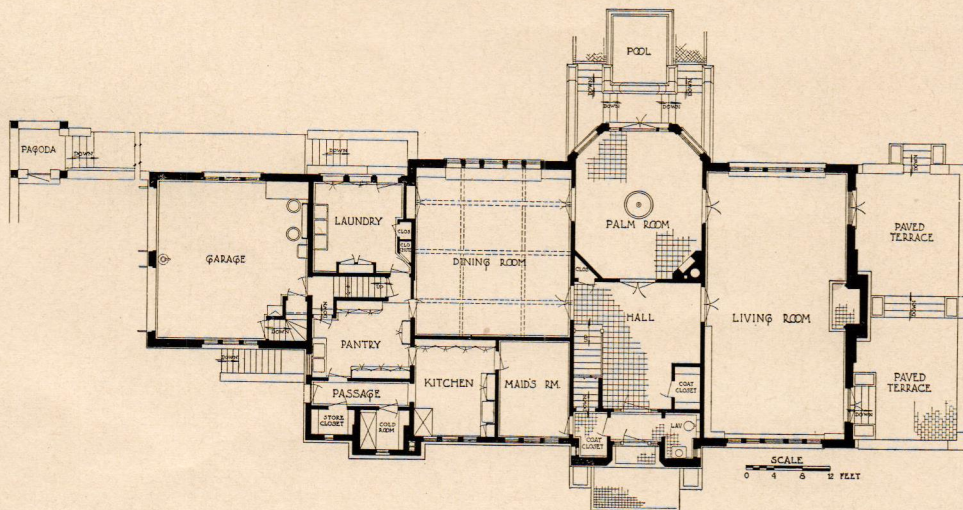
HOUSE OF L. M. OTTO, JR., VALLAMONT, WILLIAMSPORT, PA.

GIBB & WALTZ, ARCHITECTS

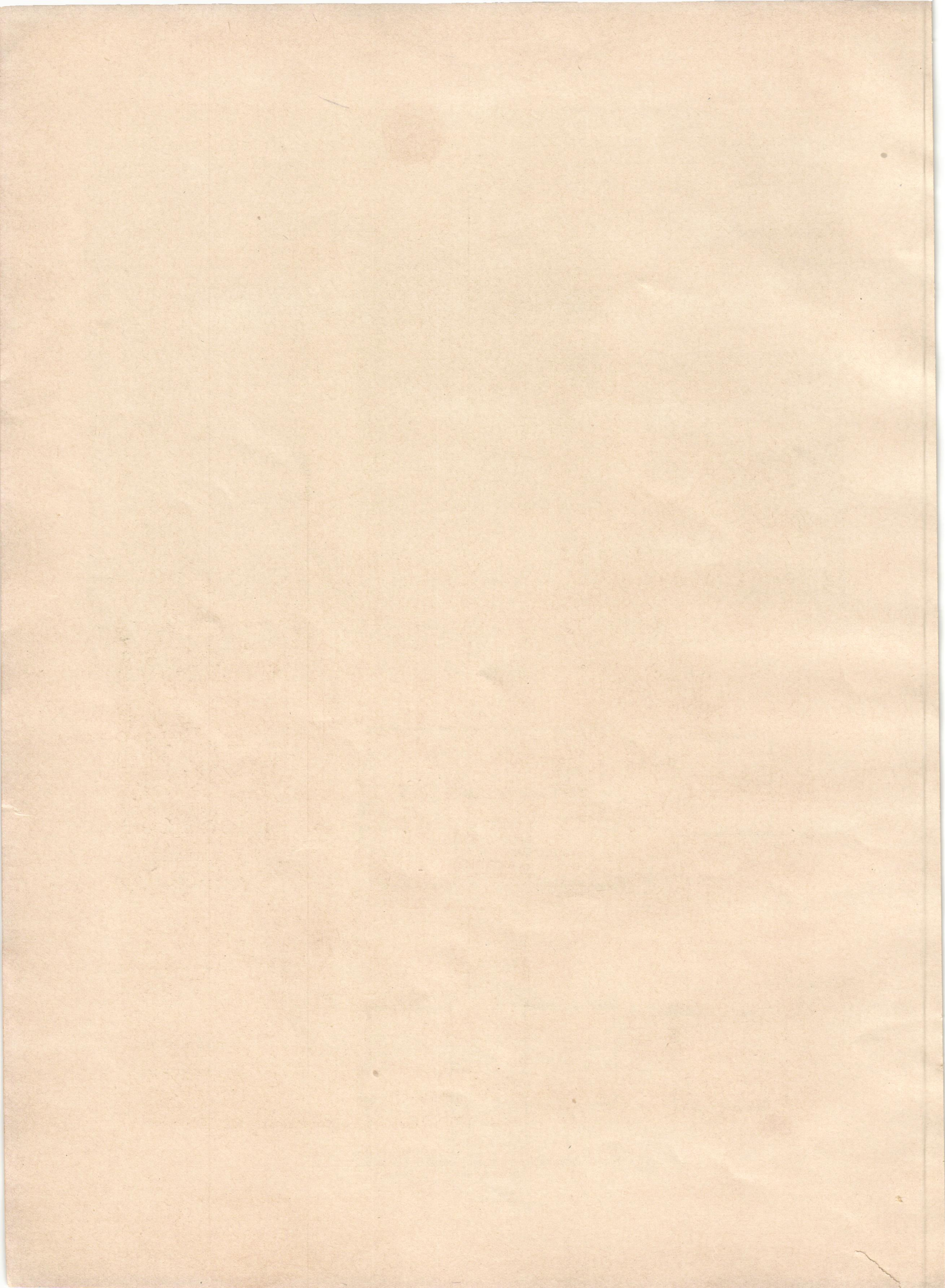
THE AMERICAN ARCHITECT
July 16, 1924, Plate 31



HOUSE OF L. M. OTTO, JR.,
VALLAMONT,
WILLIAMSPORT, PA.



GIBB & WALTZ,
ARCHITECTS





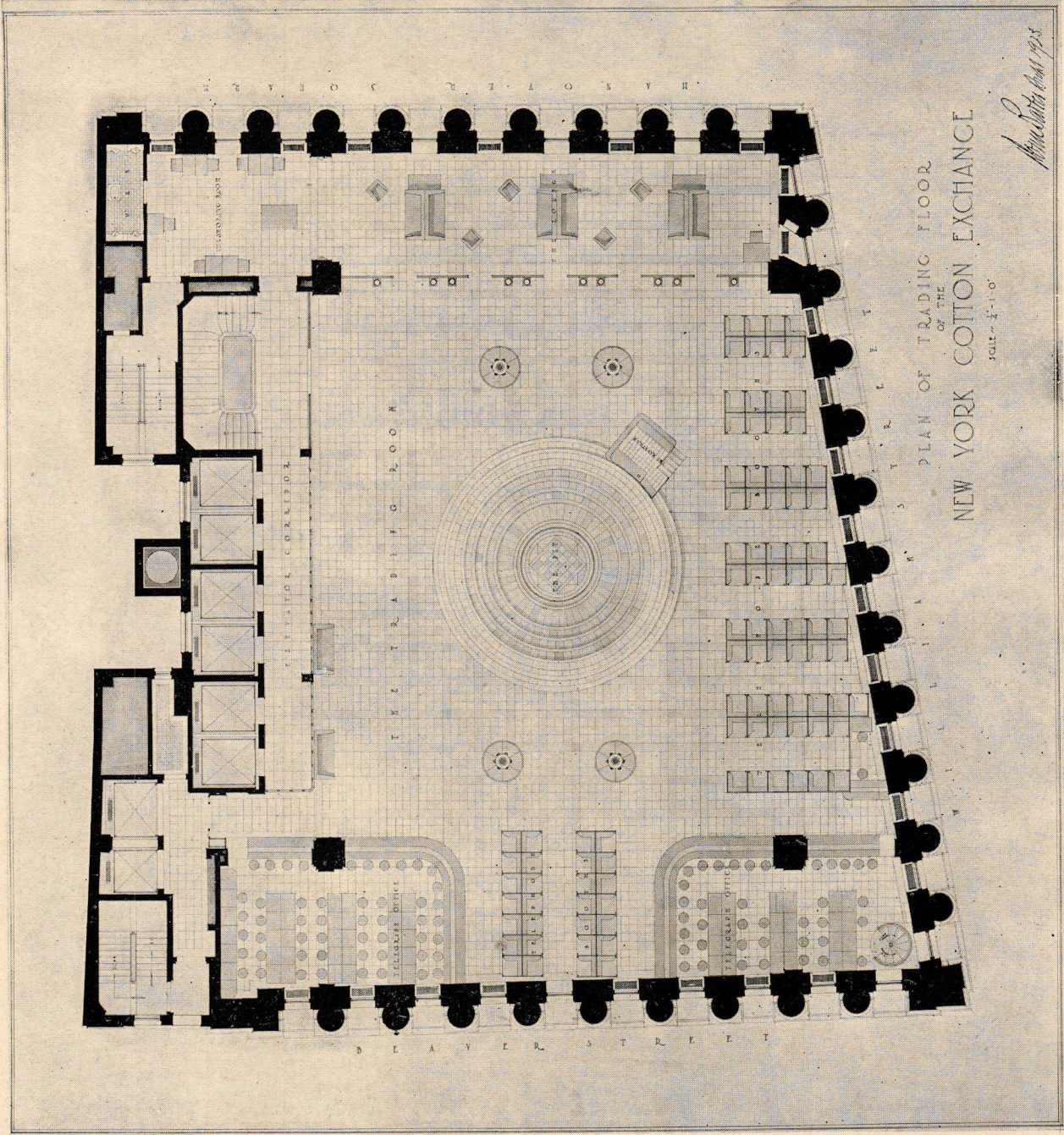
New York Cotton Exchange Bldg. C16292. Copyright 1923 by Irving Underhill
jyc

NEW YORK COTTON EXCHANGE BUILDING

DONN BARBER, F.A.I.A., ARCHITECT

Awarded Gold Medal by Downtown League of New York for best downtown building erected in 1923

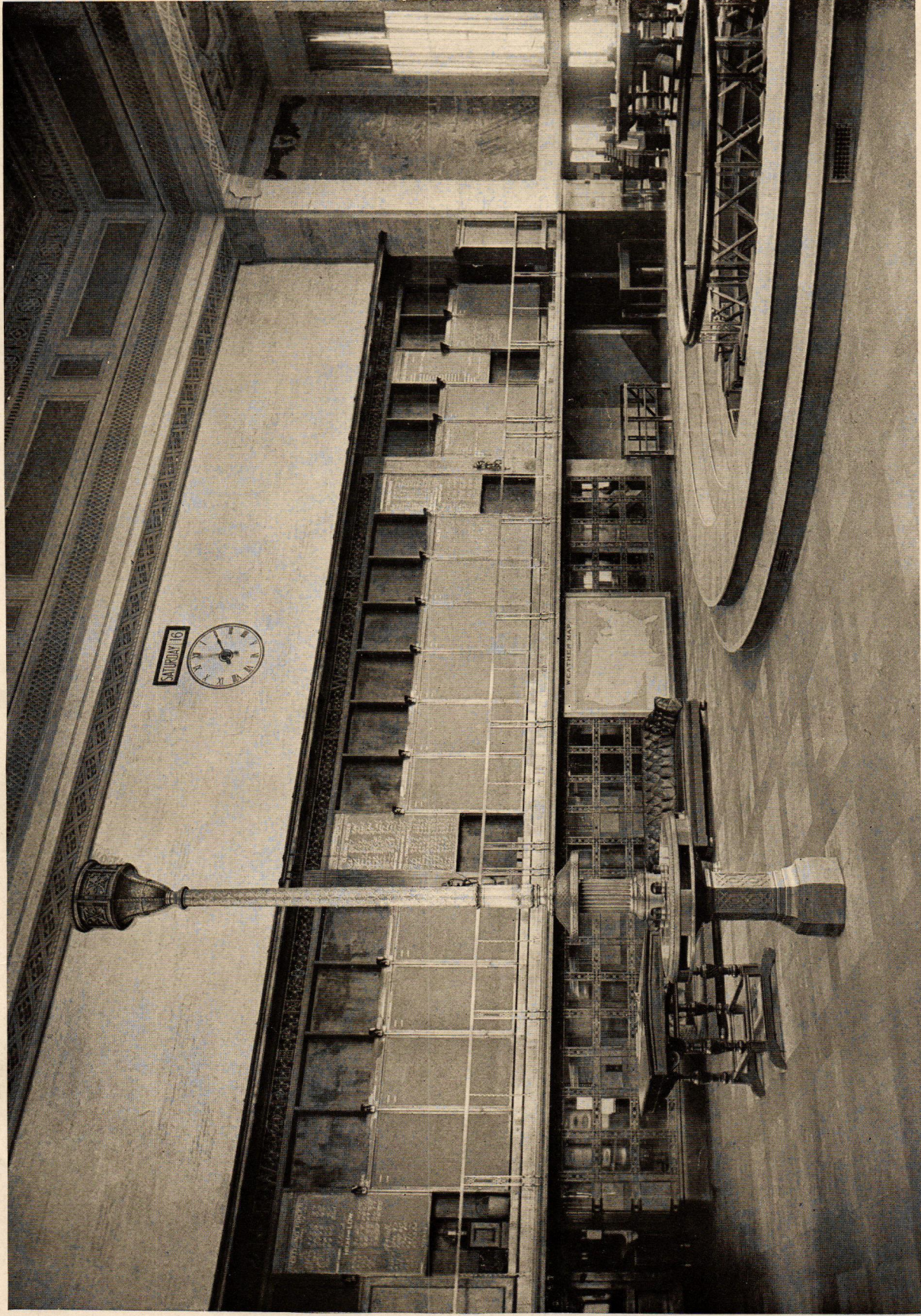
(See plan on back)



DONN BARBER, F.A.I.A., ARCHITECT



DETAIL OF MAIN ENTRANCE
NEW YORK COTTON EXCHANGE BUILDING
DONN BARBER, F.A.I.A., ARCHITECT



NEW YORK COTTON EXCHANGE BUILDING

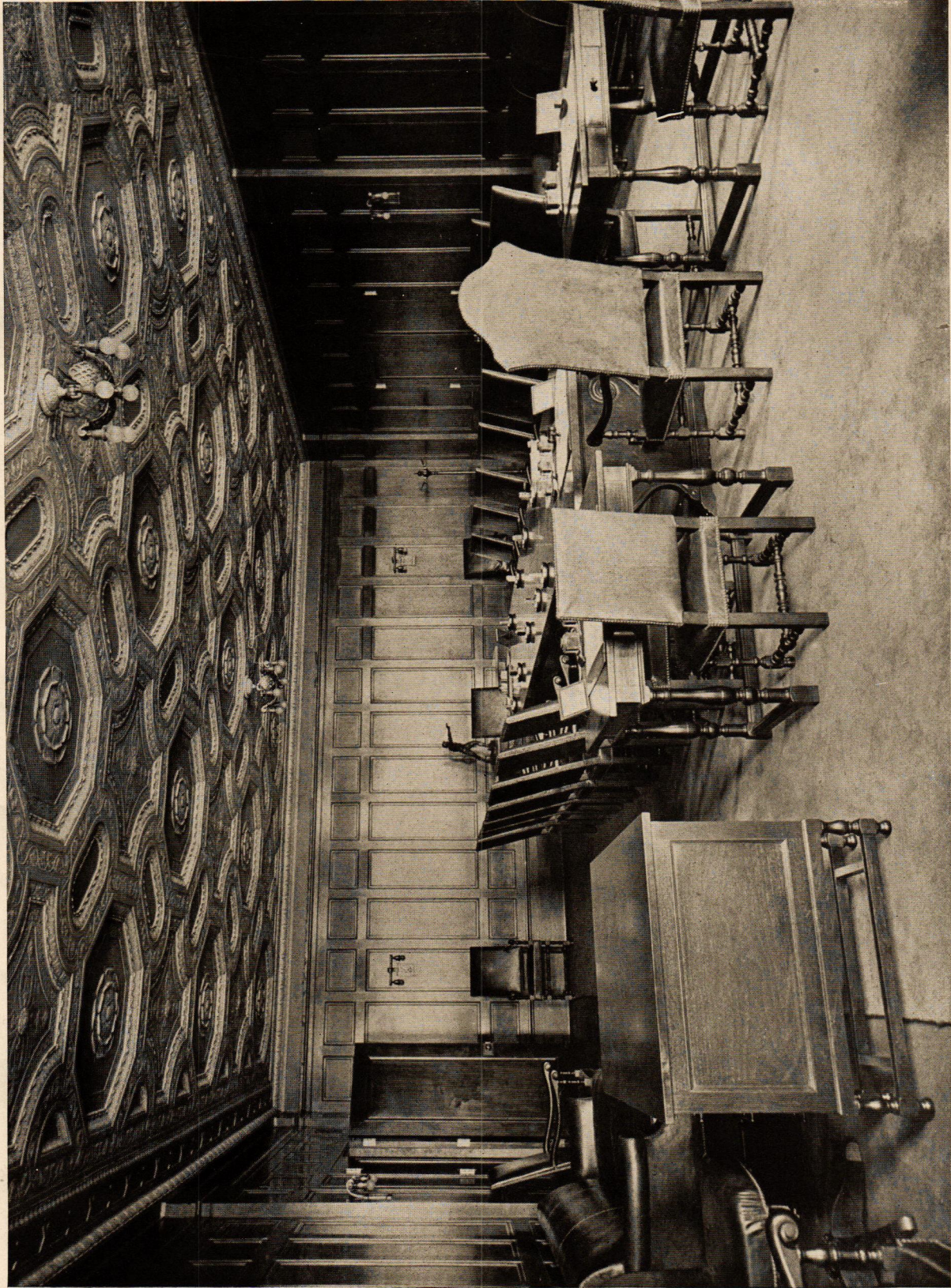
DONN BARBER, F.A.I.A., ARCHITECT

THE AMERICAN ARCHITECT
July 16, 1924. Plate 19



NEW YORK COTTON EXCHANGE BUILDING

DONN BARBER, F.A.I.A., ARCHITECT

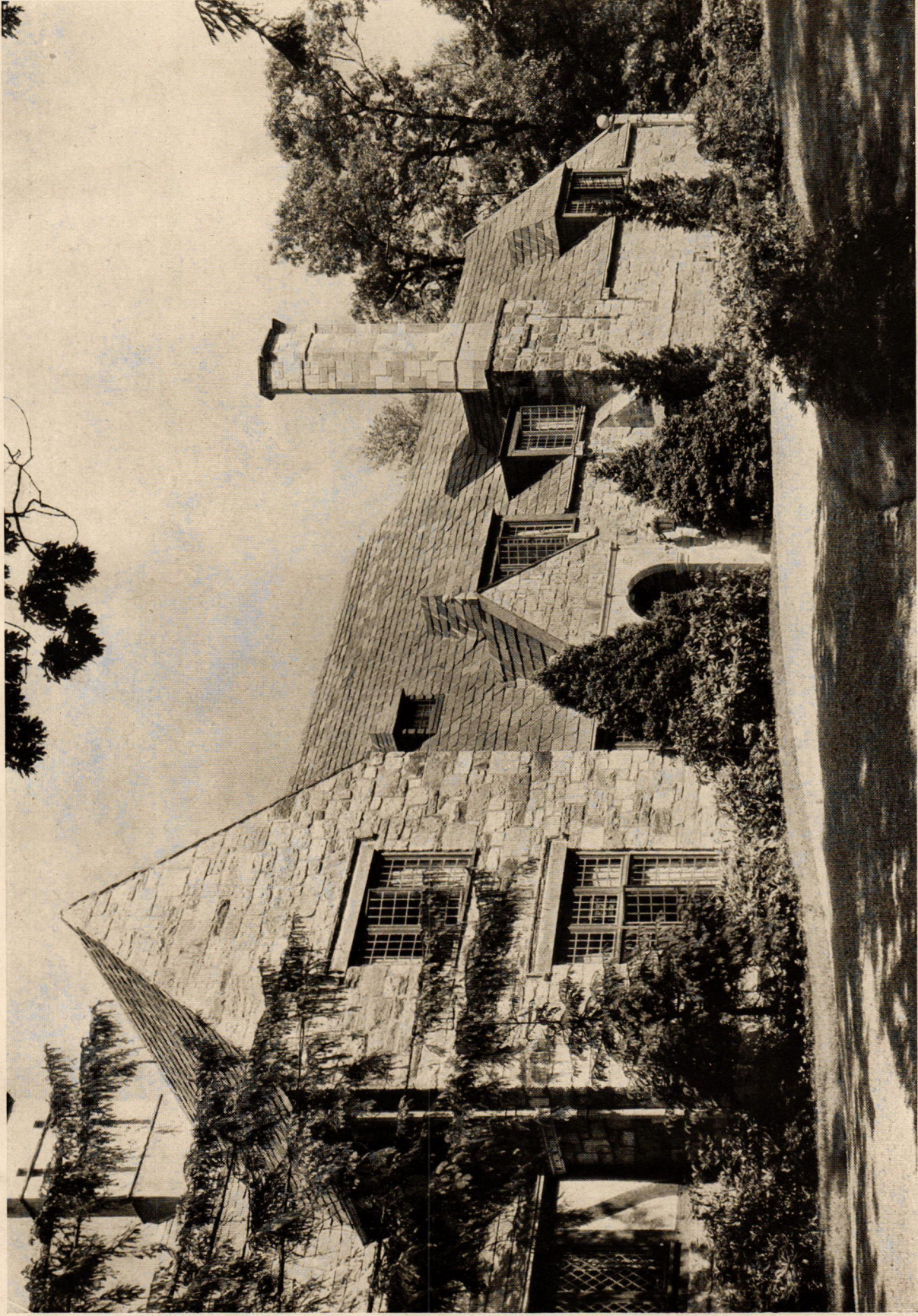


BOARD OF DIRECTORS' ROOM
NEW YORK COTTON EXCHANGE BUILDING
DONN BARBER, F.A.I.A., ARCHITECT



NEW YORK COTTON EXCHANGE BUILDING

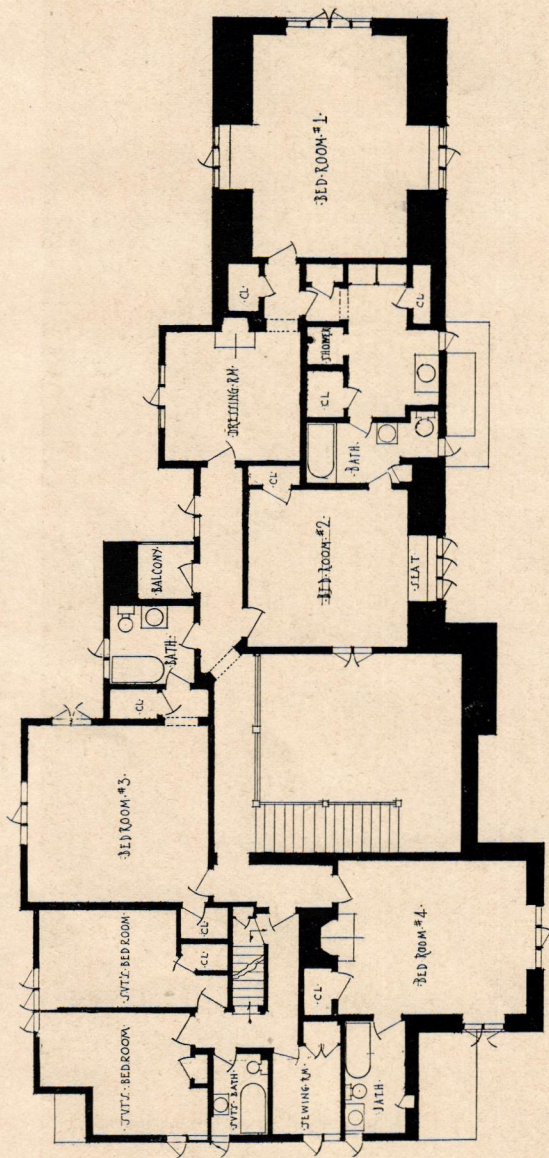
DONN BARBER, F.A.I.A., ARCHITECT



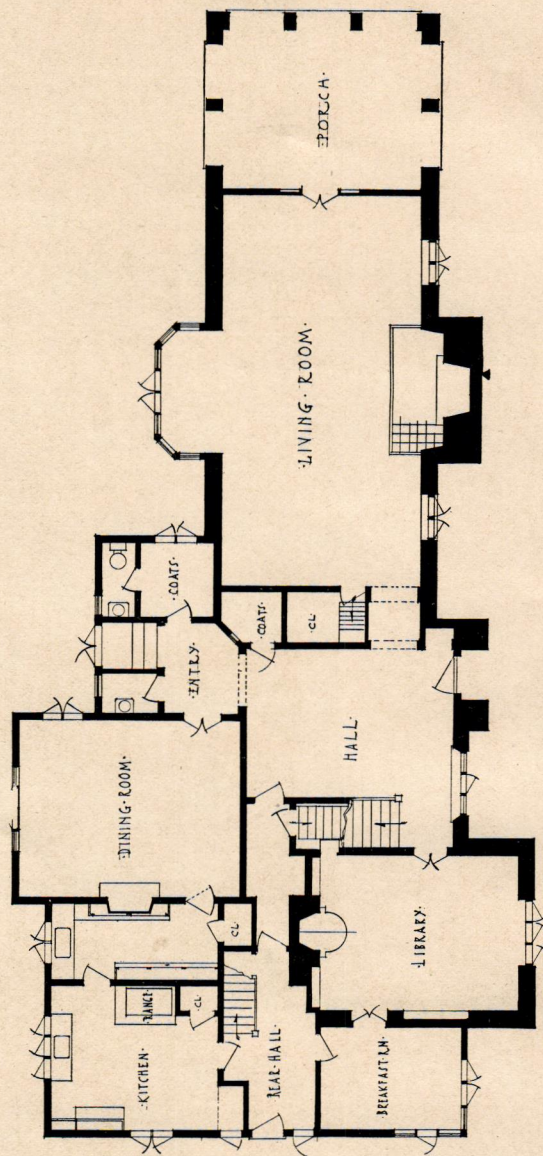
HOUSE OF MRS. LEWIS BOWMAN, BRONXVILLE, N. Y.

LEWIS BOWMAN, ARCHITECT

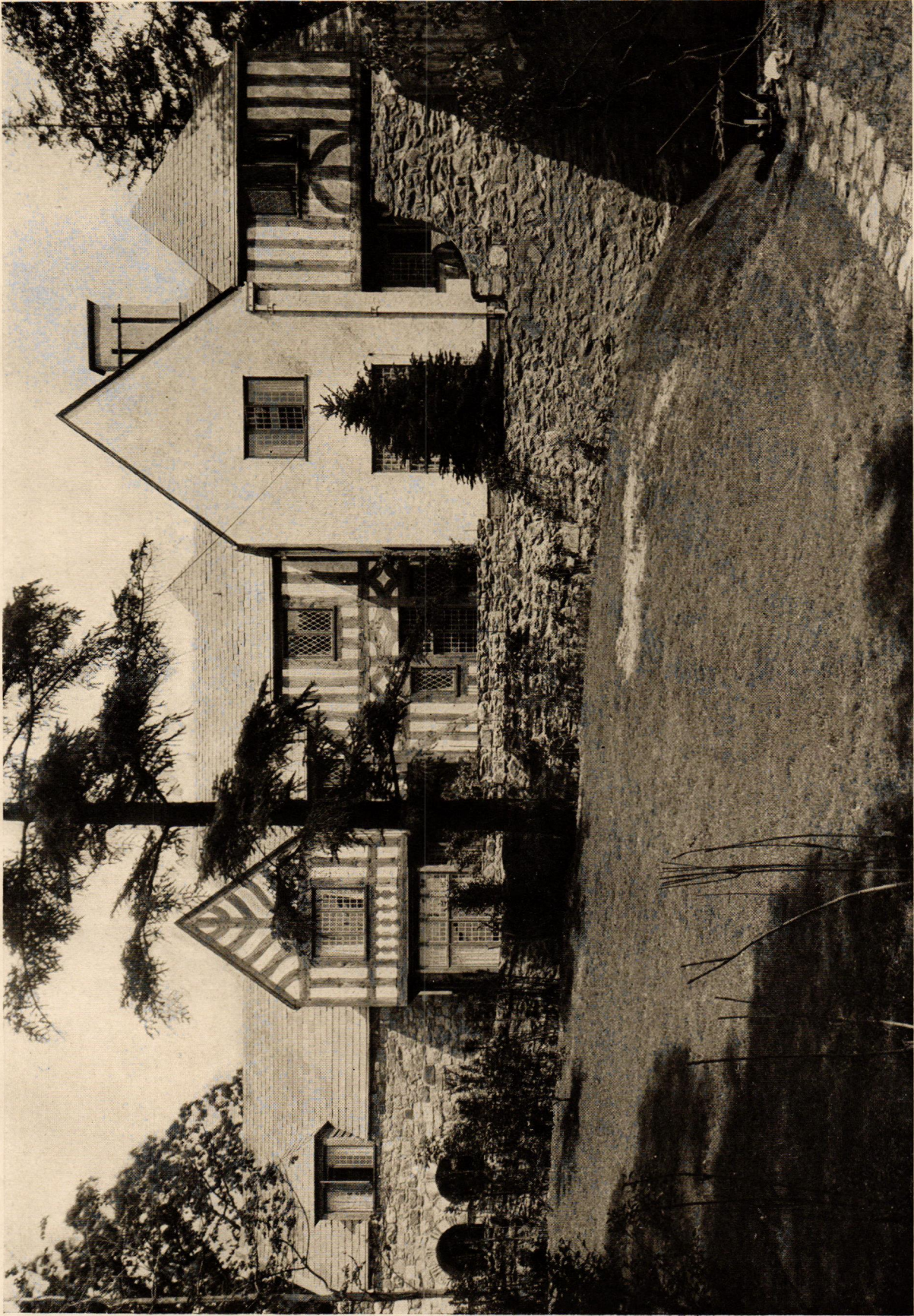
(See plans on back)



HOUSE OF
MRS. LEWIS BOWMAN,
BRONXVILLE, N. Y.



LEWIS BOWMAN,
ARCHITECT



HOUSE OF MRS. LEWIS BOWMAN, BRONXVILLE, N. Y.

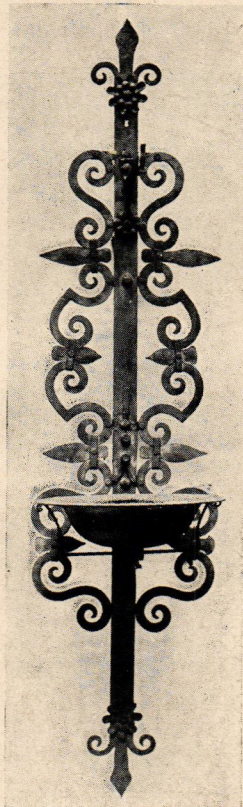
LEWIS BOWMAN, ARCHITECT

INTERIOR ARCHITECTURE

The Sun Porch—Its Decorations and Furnishings



SPURRED on by the spirit of economy with which we are all inspired in these days of high costs, and the consequent tendency to make use of all available space, a new room has recently been added to the house plan, known as the sun room. To be sure, it is nothing more than the old front porch enclosed with windows and doors to make it more private and livable, and supplied with heating facilities for use in cold weather, but its name is perfectly justified, for, as a porch, it was, no doubt, planned open to three points of the compass, allowing the sun to reach it during the greater



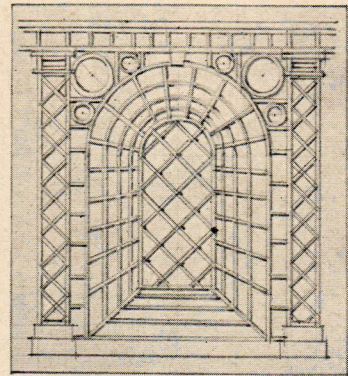
HANGING WALL JARDINIÈRE OF IRON, WHICH IS DECORATIVE AND PRACTICAL

part of the day, and the added glass enclosure interferes in no way with this arrangement. In many cases it is hard to realize that one is actually outside the main walls of the house, so much like any other room are its decorations and furnishings. But the room, actually a porch, should be treated as such, and the more the effect of the outdoor porch is carried out in its decorations and furnishings, the more attractive will be the room at any time of the year. We are all naturally in love with the great out-of-doors, and to be able to have in our homes a room in which we may comfortably lounge during the wintry blasts, expressing all the qualities of the summer outdoors, is a treat that none will deny. In winter, heated as any other room of the house and decorated with

flowers and plants brought there to survive the winter season, the sun room becomes a strong competitor of the living room. In summer, with its windows open wide to breezes of the three winds, it is often the most attractive room in the house.

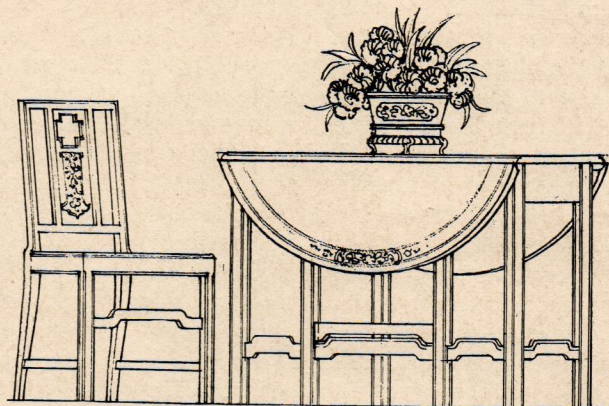
The decorations and furnishings of the sun room, as already suggested, should give one the impression of being outdoors. Colors of outdoor life, from which all colors originated, come first

to mind, and with them, painted furniture, upholstery materials in natural floral patterns and colorings, plants and flowers. Outdoor materials also come to mind: stone, brick, cement, wicker, iron, as well as wood. This seems to be a good nucleus from which to build a decorative scheme. The materials are unusual and interesting; abundant color is not only allowed, but demanded, so that with not more than ordinary skill, originality might be easily obtained.



A SUGGESTION FOR LATTICE TREATMENT ON A WALL OF THE SUN PORCH

The one expansive wall space of the sun room (for its other three will be considered as almost entirely of windows and doors) is often of whatever material the house may be built,—stone, brick, cement or wood. This does not have any particular bearing on the decorations and furnishings of the room, for against a background of any one of these, their outdoor qualities will be emphasized. Certain of these building materials do suggest, however, finer detail and lighter scale than others, which has its effect on the design of the furnishings, of course. For instance, stone or brick walls would much more readily suggest iron furnishings



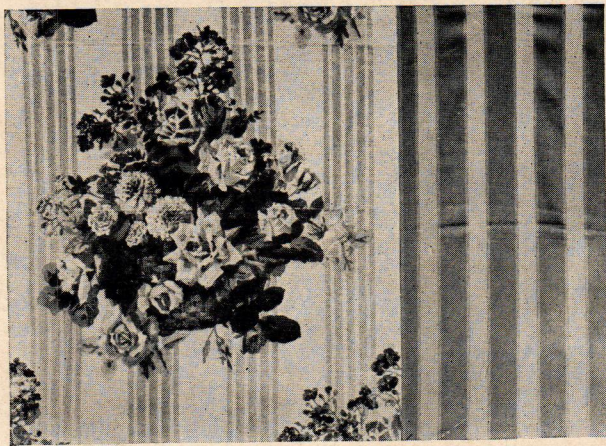
CHAIR
16x16x36" HIGH

ROUND DROP LEAF TABLE
40" DIAMETER

PAINTED WOOD FURNITURE IS APPROPRIATE FOR THE SUN ROOM, ESPECIALLY WHEN DESIGNED ALONG LINES THAT ARE IN STRONG CONTRAST TO THE FURNITURE USED IN OTHER ROOMS. THE DESIGN OF THE FURNITURE HERE SHOWN HAS A DECIDED OUTDOOR CHARACTER

than wood, while wood walls would call for wicker or painted wood furniture. Neither one, however, makes such selection necessary, for whatever would be suitable for outdoors would be suitable with either.

Quite frequently the sun room walls are finished in a plaster, in which case a rough finish is more appropriate than a smooth, as it is more suggestive of outdoors. Very interesting results may be obtained by treating the wall or walls with a lattice decoration, which gives the room at once an atmosphere of outdoors. The design for such lattice work can be made interesting on its own

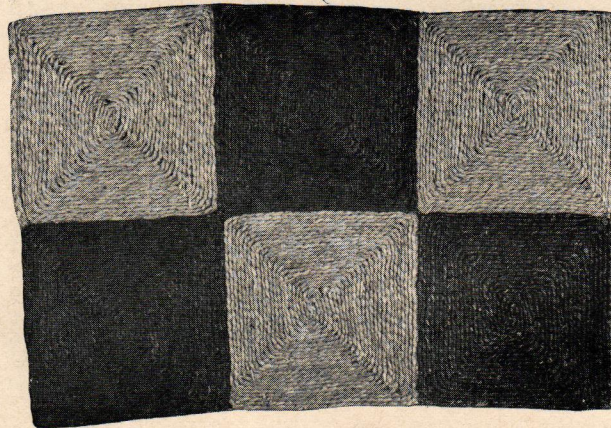


COMBINING A GLAZED CHINTZ IN A BRIGHT COLORED FLORAL PATTERN FOR THE WINDOW SHADES WITH A STRIPED SUNFAST FOR THE FURNITURE CUSHIONS

account at very little expense, and besides offers an opportunity for color which makes it further appropriate. An arch motive, with lines converging in the manner of perspective, makes an attractive panel decoration and gives depth to the room. (See sketch on page 57.)

There are three classes of furniture which are especially appropriate for outdoors: painted wood, iron, and wicker, reed or willow as one class. On account of the out-of-door quality which it is desirable to have the sun room portray, in contrast to the other rooms of the house, it is important that the furniture emphasize this contrast in both material and design. That would seem to eliminate wood furniture at the outset. In design and color, however, wood furniture can be made appropriate for outdoors, and radically contrasted to anything used in the interior of the house, and as such is never out of place. Wicker, reed or willow is generally considered most appropriate for sun room furniture. The material, on account of its outdoor growth, is suitable for out-of-door weather conditions, and is thus in harmony with the porch idea. Once more, its flexible qualities are greatly in its favor by adding real comfort to the furniture, and, besides, it is very adaptable to color. Some of these qualities are evident in iron. It will stand all kinds of weather, and is also very adaptable to color. Its flexibility is an-

other question. That depends a great deal on how it is used. Until quite recent years, iron, in this country at least, had been given very little consideration as a material for furniture construction. With the influx of old Italian and Spanish ironwork by the collectors and antique dealers, its possibilities were made known. The problem of executing such work was not so easily to be disposed of, for, being new to the country as a trade, there were no experienced craftsmen for handling it as a decorative product. Some of the old foreign ironworkers saw their opportunity and jumped at the chance, with the result that we now are manufacturers of many beautiful designs of iron floor and table lamps, iron flower stands, wall brackets, console tables and mirror frames. There is no doubt of the appropriateness of iron furnishings in a sun room, and even an occasional piece, amongst surroundings of other materials, lends a note of uncommon interest. Several suggestions are illustrated herewith.



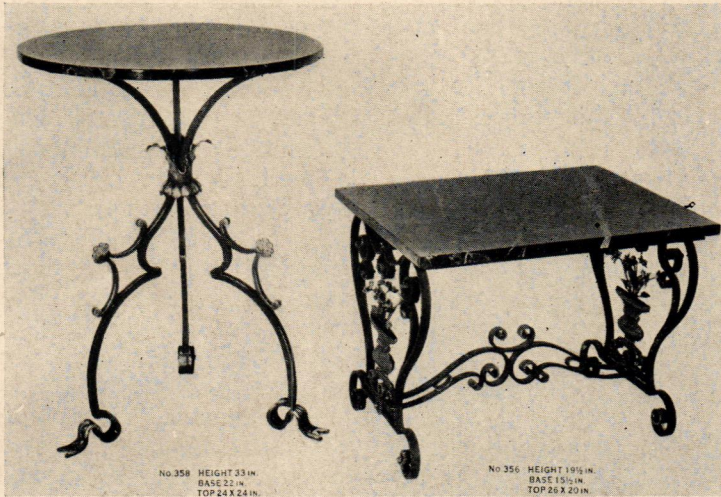
RUSH RUG, IMPORTED FROM JAPAN, WHICH IS VERY APPROPRIATE AND DECORATIVE FOR THE SUN ROOM. IT CAN BE HAD IN SEVERAL COMBINATIONS OF PATTERNS AND COLORINGS

Probably there is no other piece of furniture, if such it might be called, which is so distinctly suggestive of outdoors as the hammock. In fact, at first thought, it may seem too much that way. But the hammock has been made a real piece of furniture. It appears to be an ordinary davenport with a willow frame and seat and back cushions. But the swinging qualities of the hammock have been retained. One manufacturer calls it a gliding davenport, a very appropriate name. An illustration of this piece is shown on page 62.

Upholstery materials in natural floral patterns and colorings offer an unusually wide field of selection. But the outdoor quality is not always evident in materials of that description. Certain materials, by their process of manufacture, are more appropriate than others. Sunfast fabrics would be especially practical in this type of room, which is so flooded with sunshine, while glazed chintz, which is prepared to stand all kinds of weather, might be called truly an outdoor fabric.

walls seem best to embody all the requirements which go into the decoration of a successful sun room. Mounted against plain or rough plaster, stucco, cement or brick, lattice work is always appropriate. It offers an opportunity for added interest in the room by its design, which may take all kinds of attractive forms. Besides,

it presents an additional means for featuring color in the scheme. With it, many materials may be harmoniously combined which will add to the final decorative effect. An illustration is shown on page 59 in which an ornamental sgraffito frieze surmounts a lattice design. The frieze itself is formed of baskets of flowers and garlands, all



TWO TYPES OF TABLES SUITABLE FOR THE SUN ROOM, SHOWING THE POSSIBILITIES OF IRON AS USED FOR DECORATIVE FURNITURE

draperies are used, they are limited to one pair for a group of four or five windows or only a small valance, the reason for such a statement is not yet given. The fact is that windows of a sun room are open a good part of the time. Casement windows opening out make it hard on casement curtains which are attached to the sash and

brought out in their natural colors. This adds a decided outdoor atmosphere to the room and makes the lattice work below that much more appropriate.

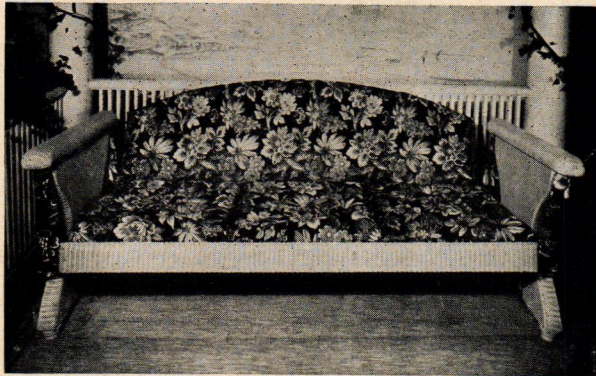
The question of draperies for the windows of the sun room, passed by rather hurriedly earlier in this article, is often a perplexing one. While it was said that, if heavy inside



SUN PORCH IN THE HOUSE OF GEO. W. SCHURMAN, EAST HAMPTON, L. I., N. Y.
ARTHUR C. JACKSON, ARCHITECT

Showing typical arrangement of windows and doors forming the glass enclosure. The reed furniture gives an outdoor quality to the room which is further emphasized by the tile floor and grass rug

which, consequently, open with the window. The strong sun and rain with which they thus come in close contact can do them no good, no matter how weatherproof they may be. This makes it desirable to have curtains that are not attached to



A HAMMOCK MADE UP AS A REAL PIECE OF FURNITURE. THE SEAT IS SUSPENDED ON CHAINS HIDDEN UNDER A WICKER COVERING AT THE ENDS

the windows, and can be used as a good argument for installing inside draperies. With the casements opening in, another problem is created. Sash curtains are now practical, but inside hangings interfere with the opening of the windows. Light pongee sash curtains with or without inside hangings are really necessary to break the glare of the strong sunlight, as well as to prevent outsiders from disturbing the privacy of the room by their glances. Heavy draperies are sometimes also necessary to draw together as shades in the evening, as well as to play an important part in the decorative scheme. Thus there seems always to be a problem.

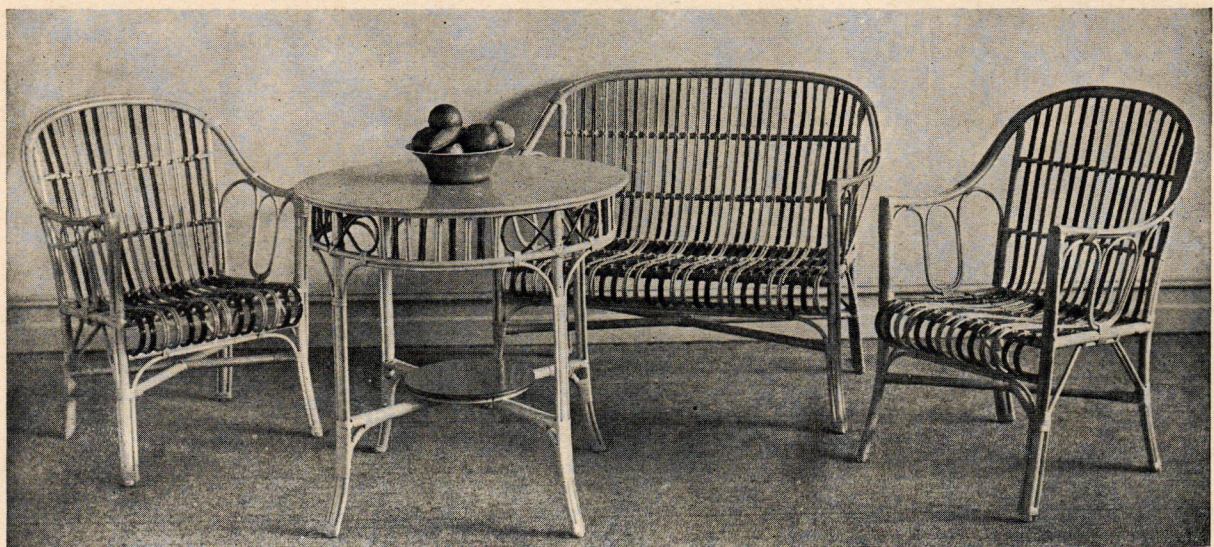
With three entire walls of a room taken up

with windows, each consisting of four or five pairs of casement sash, the effect of the four or five curtains, when not drawn, hanging so closely together is very monotonous and not at all decorative. The solution is, therefore, as suggested, to arrange one pair for each group of four or five windows, and, if the sash open in and interfere with the draperies, only one sash at each side needs to be sacrificed. Where there are transoms above the casement sash which do not open, a valance often suffices, as far as the decorative effect is concerned. In that case, roller shades attached to the sash make heavy inside hangings necessary. The solution of the problem of casement curtains on windows that open out seems only to lie in the choice of a fabric that will make some effort, at least, to withstand the attacks of the sun and rain.

Several combinations of different materials are here suggested:

WALL	FLOOR	RUGS	FURNITURE	CUSHIONS	SHADES	ACCESSORIES
Rough Plaster Stucco Cement	Composi- tion Tile	None	Painted Wood	Cretonne	Glazed Chintz	Iron
		Brick	Brick	Grass (Small) Wicker	Striped Sunfast	Glazed Chintz Wicker
		Stone	Tile or slate	None Iron	Glazed Chintz	Awning Material Iron
Wood	Wood	Rush (Large)	Reed	Cretonne	Mohair Iron	

Architects are invited to correspond with the editor of this department in regard to any problems of interior design or the availability of materials. Acknowledgment is made to the following firms for their courtesy in supplying illustrative material: Akawo & Co., Ltd., Decorators Furniture Co., Inc., Falkenbach Mfg. Co., P. A. Fiebiger, Manhattan-Rome Co., H. K. Mount & Co., Reed Shop, Inc., Stroheim & Romann.



REED FURNITURE OF THIS TYPE IS ESPECIALLY SUITED TO THE PORCH. IT IS COMFORTABLE AND COOL, AND IS OF SUCH DESIGN THAT IT MAY BE PAINTED IN SEVERAL COLORS

A DAY UNDER *the* BIG TOP*

IT is a delightful day that one passes under the Big Top with Irving K. Pond—a day in which he makes a study in life and art. With rare skill he pictures the evolution of the Big Top from the old time one-ring circus to the multi-ring canvas and the indoor show of this day. One lives again, most vividly, that day of days in the life of a normal western boy, the day so joyously anticipated during the two months intervening after the posting of the alluring show bills. Those were days that ended in complete satisfaction.

Art in the circus? Most surely. Pond demonstrates the artistic perfection of the circus most convincingly. No one is better qualified for the undertaking. He is an acrobat of no mean attainments and his position in the world of arts and letters is well established. Even to this day, approaching the allotted span of life, this beloved Old Roman of architecture is “doing ‘em” with agility, skill and perfection.

The acrobat possesses all of those talents that produce artists. Perseverance in efforts to attain perfection, energy, physical well-being, courage and an acute sense of relationship. This sense of relationship permits the acrobat properly to synchronize the transit of his moving body with the law of gravity, correlated with the factors of distance and space—a rhythmic performance embodying grace, skill and beauty. Some acts require as much as four years’ practice to attain surety of performance, involving perseverance, strength, energy and a fixed goal of perfection. Withal there must be the characteristic of courage. In these days of fervid athletics it is well to read: “The performer has in view only the achievement of beauty—never the desire to win or overcome; this conception of the ideal marks the wide distinction between acrobatics and athletics, respectively the poetry and the prose of physical endeavor.” There is nothing ennobling in the commercialized, wager-polluted athletics of this day, either professional or collegiate. It does not attain the dignity of ordinary prose but is rather self-relegated to blah.

Acrobatics and architecture? A close relationship exists. Acrobatics is not controlled by a formula—nothing artistic can be. No two performances of the same act can be exactly alike because they have the element of humanity. When rhythm can be reduced to a law, it becomes a lifeless element.

“Underlying all these beautiful movements in tumbling, in juggling, and in mid-air is ‘feeling’

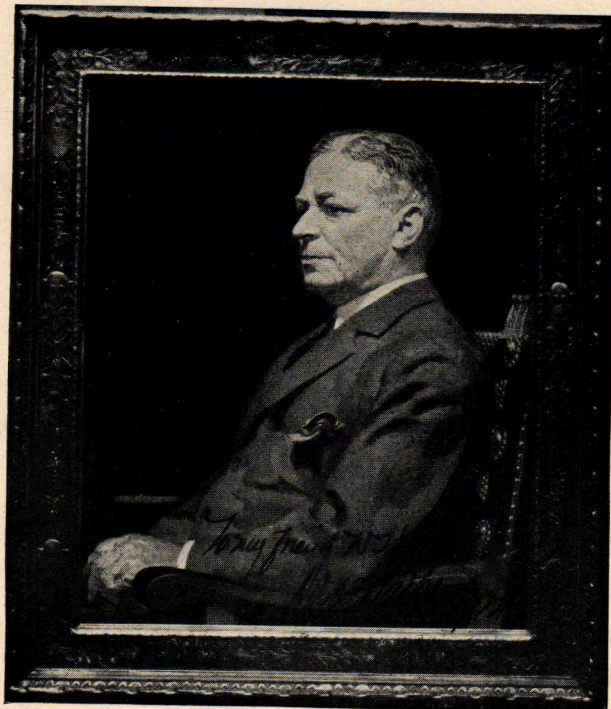
—intense emotionalism controlled by the mathematics of the mind. I am using mathematics as applied to aesthetics in its true spiritual meaning not in the vulgar, mechanical sense in which it is supplied by Dynamic-symmetrists, Ad-quadratumites, and those other mechanistic minds who would make all aesthetic expression in the plastic and graphic arts depend upon a previously constructed framework of geometry; whether of squares, rectangles, triangles, involving diagonals, or arcs, or any or all in combination. Undoubtedly a sufficiently learned and practiced mathematician, given all the factors of the equation, and they are multitudinous to a degree, could plot the curve of the center of gravity of the acrobat’s body as it traverses its beautiful path in space; and this conceivably might be done before, or after, the fact. But woe betide the individual, acrobat or other, who should attempt to achieve the ‘turn’ by following the mathematical formula. The first attempt would never be followed by a second. If the victim of the mathematical fallacy were to survive to essay another ‘turn’ he would call upon experience, instinct, and feeling rather than upon abstract mathematics. It is when brought into contact with a living art like acrobatics that these geometric and dynamic theories of design find themselves so palpably reduced to rank absurdity; as they do, also, when applied to architecture of other than the copy-plate type.* * * It has been intimated to me, now and then, that there is nothing new to be seen at the circus; that if you have seen one you have seen them all. The person who says that has never seen, really and truly seen, anything at the circus. What, by the way, has he seen at the annual art exhibitions? The same old landscapes, the same old nudes, the same old painting of draperies, the same old attempts at allegory and symbolism? However, an impression exists that all this is new each year to him that has the seeing eye. And what is new in architecture? Here I grant with sorrow that people of fine discrimination are aware that architecture in general is tending more and more to the copy-plate type, and that, except in rare instances, creation in architecture, and the power to create, are very mildly in evidence. * * * — acrobatics—an art which calls forth high qualities of virtue, such as courage, consideration, firmness, gentleness, judgment; high ideals, such as a passion for beauty, and a love of that perfection of achievement through which alone can beauty reach its fullest and most radiant expression.”

Here is the challenge to architecture. Has it the courage to deviate one fraction of a module from

**A Day Under the Big Top. A Study in Life and Art. By Irving K. Pond. P.P.A.I.A. The Chicago Literary Club. Printed for private circulation.*

some classic model, fearful that critics may decry a departure from precedent? Has architecture lost the power to create? Is engineering the only art that can create the things that satisfy all of the structural and mechanical demands that humans can devise? Has architecture the same qualities of virtue that acrobatics possesses—virtues without which greatness cannot be achieved?

to the components of a work of architecture, and the apostles of the conventions are not slow to press home the argument in opposition to those who are calling for a new movement in architecture. Architecture, they say, has an alphabet and a grammar that must be learned and kept to if utterance in brick and stone is to remain intelligible. The argument is sound, but those who advance it often wish to restrict its application to what may be termed old-fashioned language. They are not willing to admit new words to their vocabulary. They are quite content with the idiom of the eighteenth or some other century. Their language, indeed, is closed to expansion for ever, and the force of their argument consequently lost. Architecture, like language, is a living growth, and it must be allowed freely to expand if the new facts of building are to find their true expression.



DONN BARBER, F.A.I.A., A.N.A.

Architect of the New York Cotton Exchange, awarded medal by the Downtown League of New York for best building erected downtown in 1923

(Reproduced from the portrait in oils by Ezra Winter for the National Academy of Design)

DOWNTOWN LEAGUE OF NEW YORK AWARDS MEDALS FOR GOOD ARCHITECTURE

THE Downtown League of New York City has awarded the first prize for the best downtown building erected in 1923 to the New York Cotton Exchange Building, Donn Barber, architect.

First prize for the best alteration in 1923 was given to David Lang for his work in remodelling the premises 105-107 Fulton Street.

ARCHITECTURE AS A LANGUAGE

AN analogy is often drawn between architecture and language states a recent issue of *The Architects' Journal*. Victor Hugo made the comparison very strikingly in "Notre-Dame." Letters, words, sentences, do bear a structural relation

AWARD OF GOLD MEDAL

AT a recent meeting of the Boston Society of Architects the recommendation of the Executive Committee on the award of the Harleston Parker Gold Medal was accepted, and it was voted that the medal be awarded this year to Parker, Thomas & Rice for their design of the John Hancock Life Insurance Building, at Clarendon, Berkeley, and Stuart Streets, Boston.

BOSTON GOES UNDER ZONING LAW

BOSTON has just been placed under a zoning law. The measure, which has been adopted after long study of city conditions, will be of interest to city planning officials all over the United States and to realtors throughout the National Association of Real Estate Boards.

The Boston Real Estate Exchange took a leading part in the formulation of the zoning measure. The Exchange is entitled to be represented through one member on the Board of Adjustment which will determine future changes in the Boston zone lines. In order to separate this board from political considerations all members except two will be appointees from nominations made to the Mayor by civic bodies.

PLYM TRAVELING SCHOLARSHIPS

THE Department of Architecture of the University of Illinois announces the endowment by Mr. Plym of the following foreign traveling scholarships:

The Francis J. Plym Fellowship in Architecture.

The Plym Foreign Scholarship for Architectural Engineers.

ARCHITECTURAL ENGINEERING

CENTRAL RADIO RECEIVING SYSTEMS *for* APARTMENT HOUSES, HOTELS *and* HOSPITALS

BY CHARLES M. KELLY, JR., *Radio Engineer*

THE central radio receiving system as applied to apartment house, hotel and hospital radio installation has come to mean the reception, amplification and distribution of radio broadcast programs throughout a building from a central receiving point by means of a system of wiring similar to that of the electric clock, time recording or annunciator systems.

With radio taking such a prominent place in the home, and having been pronounced by emi-

proper construction is assured when the outdoor type is required. Second, with this system the minimum number of outdoor antennae will serve all the tenants in the building. Tenants will, therefore, find it unnecessary to have their own receiving sets and the resulting poorly constructed masts and unsightly antennae which now mar the beauty of so many buildings. From the tenants' point of view the lessening of interference now experienced, resulting from the reduction in num-



HOTEL PENNSYLVANIA, PHILADELPHIA, PA.

CLARENCE E. WUNDER, ARCHITECT

View in lobby, showing two grilles at the end of the room which cover the niches in which are placed the loud speakers

nent hospital superintendents as having great therapeutic value to patients it seems probable that architects are going to be called upon more and more to specify wiring for such a system for apartment houses and hospitals in particular.

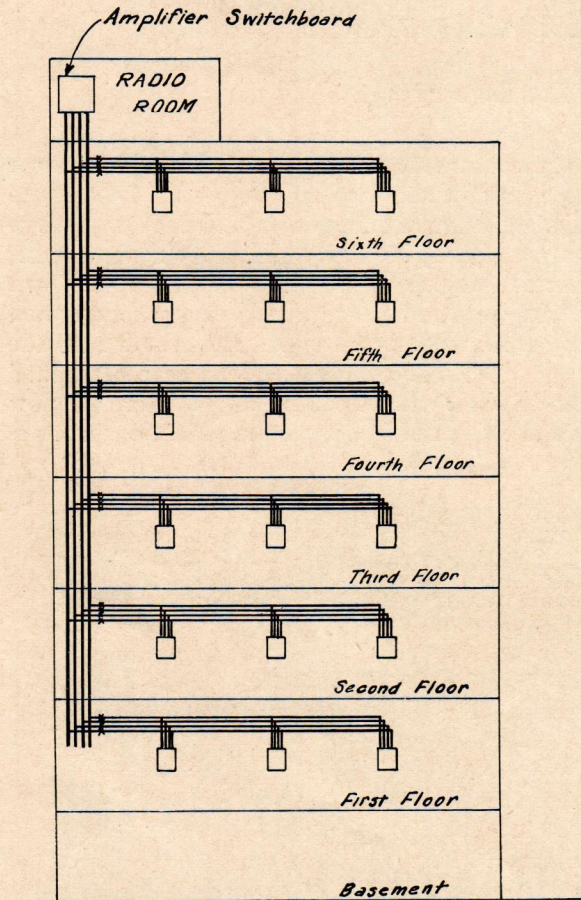
The system to be described should be of interest to architects and apartment house owners for two reasons. First, it permits the architect to design the necessary antennae and thus the

number of receiving sets in a building interfering with each other through oscillation, will be welcomed as a step in the right direction. Local receiving conditions will be improved and radio will be more enjoyable to all listeners in the building. Such a system operated by a person instructed in its care and operation can be maintained at a high state of reliability.

The central radio receiving system is the only

practical method whereby patients in hospital wards may enjoy radio programs without the use of loud speakers, which are undesirable for the reason that other patients too sick or not desiring to listen may be disturbed. With this system, using suitable amplifiers, hundreds of listeners may be connected in circuit by merely plugging a head set into a jack at the bedside. Reception

In most cases, viewed from the radio engineer's standpoint, it is desirable to locate the radio room as near the roof of the building as possible; preferably in a pent house on the roof in the case of apartment houses. Steel structures shield radio antennae from radio waves in much the same way that an opaque object shields light. Such a location as mentioned reduces the shielding effect of adjoining steel structures on the antennae system. The effect may be very great on the loop type of antenna in particular. The effect is to reduce the working range of the radio receiver. The radio room should contain the loop antennae, radio receivers, amplifiers, amplifier switching apparatus, batteries and battery charg-



RADIO SYSTEM RISER DIAGRAM

LEGEND

- One pair No. 14 B&S ga. R.C. wire
- One pair No. 19 B&S ga. twisted pair interior telephone wire.
- * 5 amp. D.P.S.T. switch.
- Jack Unit.

may be had at will by one or many persons without disturbing other patients. Likewise, hundreds of head sets or loud speakers may be connected to such a circuit when installed in an apartment building or hotel.

In presenting this subject only facts that are of interest to the architect will be treated, such as the location of the radio room, antennae, wiring requirements, apartment jack equipment and sound projectors. A typical schematic drawing is included.

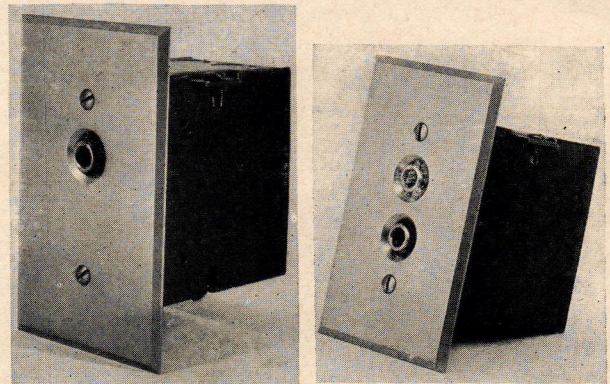


FIGURE 1

FIGURE 2

Figure 1. Single jack apparatus unit suitable for either one head set or one loud speaker. Depth of box 3". Figure 2. Two jack apparatus unit providing two radio channels

ing equipment. For installations in buildings covering a large area necessitating long feeder runs, the radio room should be located on the roof as near to the center of the feeder system as possible in order to reduce the resistance of the wiring. Such an arrangement provides at least two feeder circuits in parallel.

It may be stated generally that the antenna system will be one of two types. They are (a) the loop antenna used with the very sensitive receiving sets such as the superhetrodyne or the multistage radio frequency amplifying type, and (b) the outdoor antenna. The loop in its usual form consists of from eight to ten turns of wire wound on a wooden frame having an area of four to sixteen square feet and so arranged that it can be rotated for selective purposes. The outdoor antenna may be made up of a single wire or of several parallel wires from 75 to 100 feet long. The type of antenna to be used is dependent on the receiving set and the distance requirements of the service to be given.

The number of radio receivers and amplifiers used on a given installation is determined by the

number of radio programs received simultaneously to meet the wants of the tenants. In most cases it is found that four broadcasting stations will have to be received at the same time in order to give the tenants a good choice from which to select their entertainment.

The jack equipment for connecting the head sets or loud speakers in circuit consists of a standard switch box and an apparatus unit. The switch box should be no less than 3" deep to allow plenty of clearance for wires running between the jacks and the back of the switch box. The supplier of the radio and amplifier apparatus will furnish the apparatus unit containing the proper jack equipment for the installation. This equipment is mounted on a standard switch plate, such as is used on the push button type of switch. The jacks may be supplied mounted on gang switch plates. At present there are available single jack units suitable for connecting either a head set or

ments on that floor. The switch is provided to disconnect any distribution circuit which may be accidentally short-circuited in an apartment without putting the entire system out of commission. The lead-in circuits connecting the main feeders with the apparatus units located in the apartments may be of either No. 18 BX cable, interior twisted pair telephone wire in conduit or lead covered cable. Each lead-in should connect in parallel all the jacks similarly located in the switch plates throughout the building. Dumb-waiter shafts are very convenient and suitable for making the riser runs. In the case of the open court type of house which is spread over considerable ground, the pipe tunnels will be found con-

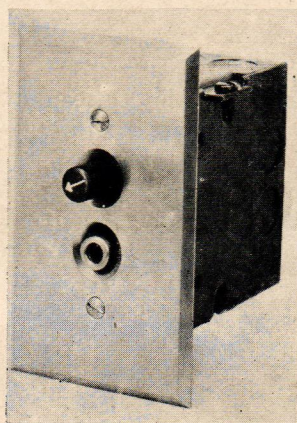


FIGURE 3

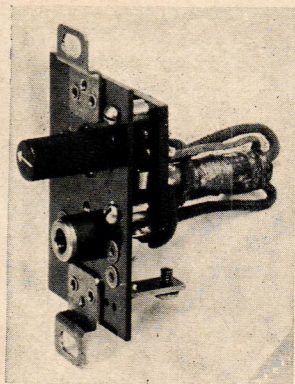


FIGURE 4

Figure 3. Single jack apparatus unit with volume control switch designed for use with loud speakers. By means of the knob with arrow, the volume of sound from the loud speaker may be regulated. Figure 4. Same as Figure 3, with box and face plate removed

loud speaker in circuit, two jack units for connecting two head sets, two loud speakers or a head set and a loud speaker, and a single jack unit containing a volume regulating switch. One type of apparatus unit is shown in the accompanying illustration.

The wiring for the radio system consists of the main feed lines and the lead-ins or laterals. One main feed line is run for each radio receiver. It should be of No. 14 B & S gauge rubber insulated twisted pair in conduit and should be run from the amplifier switchboard to supply the apartments or wards. Provided these feeders are No. 14 gauge *twisted pair* they may be run in one conduit. From each of the main feeders a lead should be taken off at each floor or ward through a double pole single throw snap switch to feed the apart-

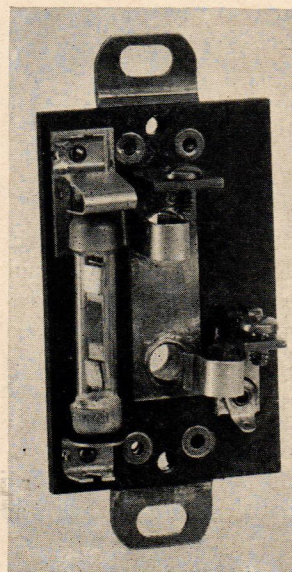


FIGURE 5

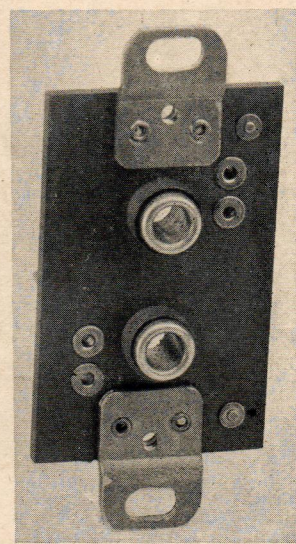


FIGURE 6

Figure 5. Rear view of assembly of two jack unit showing method of reducing energy level from loud speaker volume to level required by head sets. This provides a circuit for a head set and one for a loud speaker. Figure 6. Front view of Figure 5

venient for running the feeders. It is customary to insert at each floor in the riser a connecting block to which the lateral is connected. Additional wiring to the above is required in the radio room. Circuits must be run from the battery room to the amplifiers to provide the filament and plate current for them. The size of wire for the amplifier filament current is determined by the length of run and the number and size of the amplifiers installed. The size varies from No. 14 to No. 9 B & S. The plate current circuit should be installed to provide for 500 volts D. C. The current in this circuit will be negligible and probably will not exceed 0.3 ampere.

The present horns used on loud speaking receivers are far from satisfactory, on account of their size and general unattractiveness. The size

leads to difficulty in mounting them in inconspicuous places. Their design is such that it is difficult to adapt them to the decorative treatment of the rooms where they are to be installed and in most cases they do not fit in with the surrounding appointments. Cases have been found where it has been possible to place the horn type of projector in a recess in the wall of the room with the bell of the horn directed through an opening covered by a decorative grille or mesh. Other methods of mounting which are possible are to build the horns into closets and into built-in bookcases. When the cone type of projector or the wooden reflex horn is used the problem of mounting and rendering inconspicuous is simplified because of their relatively small size and compactness. When horns are permanently built into an

apartment house a modification of the apparatus unit equipment is necessary and slight changes in the circuit wiring are necessary. Instead of the apparatus unit containing jacks it will carry a selector switch for connecting the projector to any one of the various circuits running into the apartment. The advantage of this type of installation is that it is more foolproof and it is not easy for tenants to carry away the projectors.

One of the latest applications of this system is in a New York apartment house containing about 366 suites. On this project four radio receiving sets are being installed. Another application is in the various U. S. Veterans Hospitals throughout the country. In a later issue of this magazine descriptions of these installations will be given.

MAXIMUM SPANS FOR JOISTS AND RAFTERS

A SERIES of twenty-four tables has been prepared by Richard G. Kimbell of the National Lumber Manufacturers Association, Transportation Building, Washington, D. C. These tables were prepared primarily for the use of building officials to aid the inspection of plans submitted for permits. They are equally usable by architects and engineers in preparing the plans.

The tables for floor joists are made for eleven different uniform loads and those for ceiling rafter and roof joists are based on five uniform loads, all of which conform to the various building codes in this country. The table includes spans based on extreme fibre stresses, varying from 900 lbs. to 1800 lbs. per square inch, inclusive. By selecting the allowable fibre stress conforming to that mentioned in the codes, this table can be adapted to all kinds of structural wood.

The limits made by horizontal shear are given in separate tables with stresses ranging from 70 lbs. to 125 lbs. per square inch. The matter of deflection is also covered in a very simple manner. There are also included the weights of nominal sized timbers, floor, plastering and different types of roofing.

The allowable fibre stresses are recommended by the Forest Products Laboratory and have been officially adopted by the American Society for Testing Materials and the American Railway Engineering Association.

This publication is printed in loose-leaf form with perforations for binding. It is perhaps the most usable publication of its kind and credit should be given to the Association for its preparation and for the distribution gratis to architects and engineers.

FATIGUE TESTS OF LIMESTONE

THE series of tests made by the Bureau of Standards on limestone beams loaded to two-thirds of their breaking load has now been in progress for one year. The greatest amount of sagging observed during the year was .005 inch, which represents the increase of the deflection due to the constant load for one year. Two specimens of the series showed no increase while the average of the series was .002 inch. It is planned to increase the loads on these beams by small increments and continue the tests for several months, to determine if there is a fatigue effect in the stone.

FRAME CONSTRUCTION DETAILS

THE frame dwelling will maintain its relative position in the building industry for a great many years to come. Much study has been given, during the past few years, to this type of buildings. Conservation of material and reducing the fire hazard, have been the principal subjects of study and in no way has the factor of stability been ignored. One of the most important expositions of this subject is found in "Frame Construction Details" published by the National Lumber Manufacturers Association, Washington, D. C. This new second edition evidences its worth. Aside from the plans, the balance of the twenty-eight plates are drawn in isometric projection. These are so well drawn and shaded that they are very readily understood. Each kind of member of the frame is plainly indicated by name, making the drawings most useful for students.

This book is a valuable contribution to the literature of building construction and in every way creditable to its publishers.

The CALCULATION of THERMAL REQUIREMENTS in BUILDINGS by MEANS of a GRAPHIC CHART

BY J. N. VICTOR, Engineer*

TO estimate the heating requirements of a building, by means of an adequate formula, involves a tedious computation. When the formula is simplified to the "rule of thumb" class, the results are not much more accurate than a mere guess based on experience. The most commonly used "rule of thumb" formula is the well known "2-20-200." It is obvious that this is far from being correct as it includes only the glass and wall surface and the cubic contents to be heated. The wall construction, thickness of walls, infiltration about openings, and other very important factors are not considered in these short-cut methods.

Graphic charts heretofore published were usually made in such a manner as to include a limited number of types of construction and, generally, only for a constant temperature difference. Consequently, these charts cannot be used for other types of construction or when the temperature difference is greater or less. The difference between the inside and outside temperature varies, of course, with different localities in the United States.

The chart here given is not a simplification of any system of calculation but it embraces all of the mathematical operations used in the arithmetical methods for estimating radiation. By means of this chart these operations are solved graphically, giving a direct reading of the answer. The chart is adapted to the designing of steam, vapor, vacuum and hot water systems which employ direct, indirect or coil radiation and for all temperature differences. This includes all of the methods of heating that the architect or engineer may encounter, with the exception of hot air systems. The nomogram is based on the following formula:

$$D = \frac{(T_i - T_o) FA}{240} ER$$

Where D = the sq. ft. of radiation required for direct steam heating

T_i = temperature inside

T_o = temperature outside

F = B.T.U. loss per sq. ft. per degree difference in temperature

R = factor where radiator is standing in other than 70° F.

A = exposed area in square feet

E = exposure, south being 0.0

southeast 1.1

southwest 1.1

east 1.15

west 1.2

northeast 1.25

northwest 1.3

north 1.3

The factors used to convert the values of D for other systems of heating are as follows:

Steam Indirect = D 1.5

Steam Coil = D 0.8

Vapor Direct = D 1.2

Vapor Indirect = D 1.84

Water Direct = D 1.6

Water Indirect = D 2.4

Water Coil = D 1.2

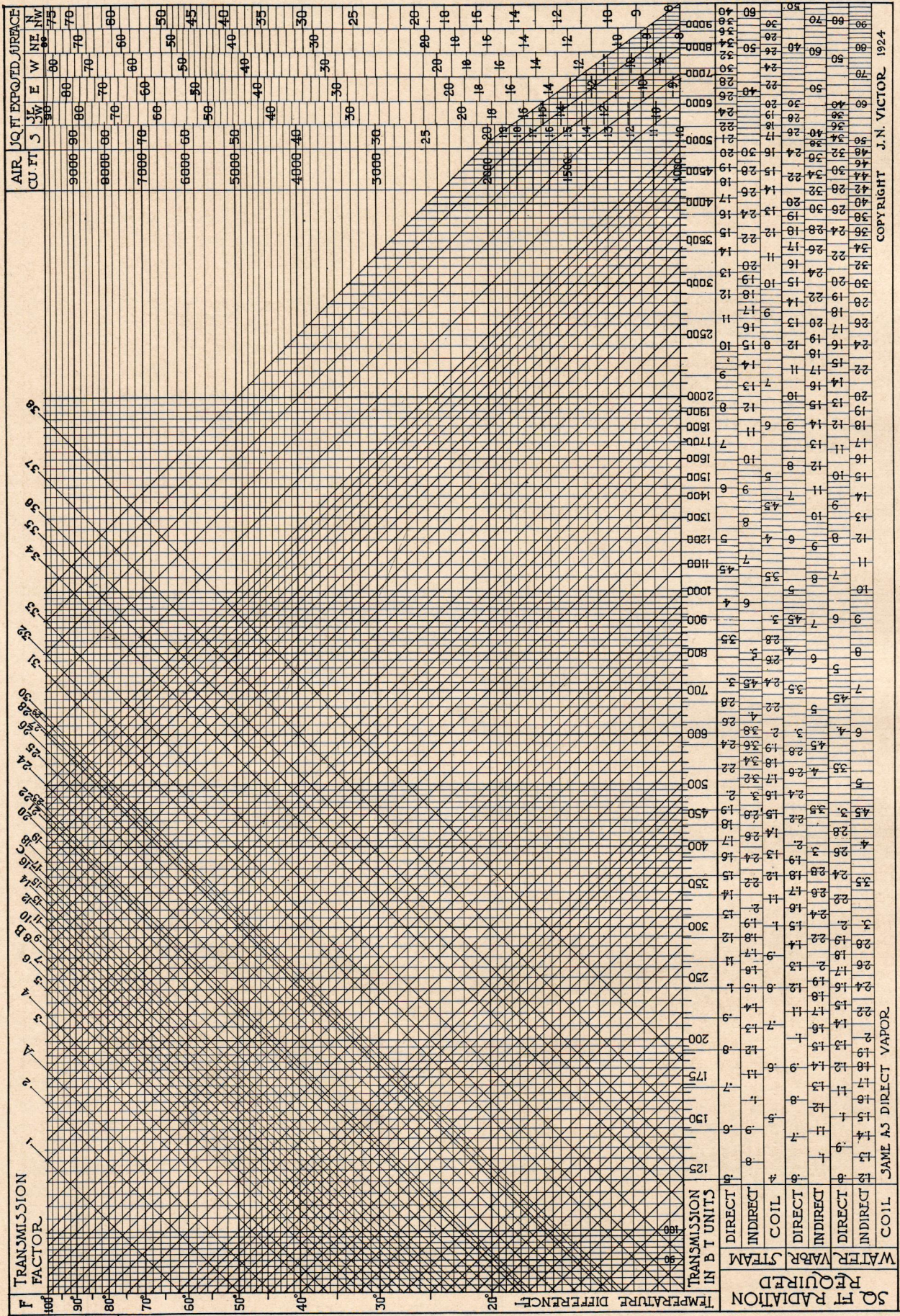
The calculations are based on standard conditions as follows: steam, 2 lbs. pressure at boiler; hot water, 180° F.; standard column radiation emitting 240 B.T.U. per sq. ft., per hour per degree difference in temperature; hot water radiation emitting 150 B.T.U. per sq. ft., per hour; vapor radiation emitting 200 B.T.U. per sq. ft., per hour.

Where radiators stand in air other than 70° F., multiply the sq. ft. of radiation required according to the chart, by the following factors:

Temperature of air surrounding radiator	Steam	Vapor	Water
50° F.	0.86	0.84	0.83
60° F.	0.92	0.92	0.92
70° F.	—	—	—
80° F.	1.08	1.09	1.10

To estimate the amount of radiation required to heat a room, determine the B.T.U. transmission separately for the walls, doors, windows and air changes and also for floor and ceiling where they adjoin unheated space, and then add the results. From this result the corresponding amount of radiation for the different systems of heating can be found on the chart. Before using the chart, find under transmission factors, the factor number for the type of surface or construction. Then enter the chart on the diagonal line having this factor number until it intersects with the horizontal line of required temperature difference (from the left). From this point move up or down along the vertical line until it intersects with the horizontal line corresponding to the kind and amount of exposed area (from the right). From this point move on a diagonal line toward the right to intersect with the lower line of the chart where are indicated the B.T.U. transmitted. Repeat this operation for walls, doors, windows and other heat transmitting surfaces and for air changes. The radiation required for air changes is found by entering the chart on the diagonals A, B or C until they intersect with the horizontal line corresponding to the cubic feet of air, no exposure considered, (from the right). From

*Day & Klauder, Architects, Philadelphia, Pa.



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CHART FOR ESTIMATING RADIATION

TRANSMISSION FACTORS

TYPE OF CONSTRUCTION		TYPE OF CONSTRUCTION		TYPE OF CONSTRUCTION	
	Factor No.		Factor No.		Factor No.
<i>Glass and Doors</i>					
Single Windows	35	12" Sand Stone & 4" Brick, Lath & Pl.	11	<i>Floors on Dirt</i>	
Double "	27	12" Sand Stone & 8" Brick, Lath & Plaster	6	Dirt as Flooring	4
Skylight or Monitor	36	12" Sand Stone & 12" Brick, Lath & Plaster	3	Cement or Tile on Dirt	12
Single Doors	20	Granite or Marble	23	Wood Beams Planked	1
Double "	9	"	18"	<i>Floors Exposed</i>	
<i>Walls</i>					
Plain Brick	4" 30	"	21"	3/4" Flooring on Joists	13
" "	8" 20	"	17"	Double 3/4" Flooring on Joists	6
" "	12" 12	"	24"	3/4" Floor, Lath & Pl. Under	5
" "	16" 7	Ditto Furred & Plastered	12"	Ditto with Double 3/4" Floor	2
Ditto Furred & Plastered	4" 14	"	18"	<i>Ceilings</i>	
"	8" 8	"	21"	Lath & Plaster No Flooring	24
"	12" 5	"	24"	Boards—Joists—Boards	10
"	16" 3	Cement Block	8"	Steel Ceiling—Joist—Boards	16
Brick Veneer	5	Ditto, Lath & Plaster	8"	Lath & Plaster with 3/4"	
Concrete	4" 33	Lath & Pl. Studding & Siding	21	Flooring above Joists	9
"	6" 31	Lath & Pl. Studding, Sheathing & Siding	9	<i>Roofs</i>	
"	8" 27	Ditto with Bldg. Paper	5	2" Concrete, Cinder, Tar & Gravel	32
"	12" 22	Studding, Sheathing, Paper & Siding	9	4" Concrete, Cinder, Tar & Gravel	27
"	16" 19	Lath & Pl., Studding, Paper & Siding	12	6" Concrete, Cinder, Tar & Gravel	25
Hollow Tile & Stucco	4" 26	Studding & Sheathing	23	Tile on Sheathing	19
"	8" 20	Corrugated Iron	37	Tile no Sheathing	34
"	12" 18	Ditto on 1" Boards	17	Sheet Iron	36
"	16" 11	Stud Partition, Plaster One Side	27	Slate on Lath	38
Ditto Furred & Plastered	8" 9	Ditto Plaster Both Sides	15	Slate on Wood Shingles	18
"	12" 6	Plaster on Metal Lath	28	Wood Shingle on Lath	29
"	16" 4			Wood Shingle on Sheathing	13
8" Sand Stone & 4" Brick, Plastered	16	<i>Air Change</i>			
8" Sand Stone & 8" Brick, Plastered	10	1 Air Change	A	Roof Paper on 1" Boards	21
8" Sand Stone & 12" Brick, Plastered	5	1 1/2 " "	B	Roof Paper on 1 1/2" Boards	13
		2 " "	C	Roof Paper on 2" Boards	8

this intersection move on the diagonal to the right and determine the transmission B.T.U. as before. Make a summation of all B.T.U. transmitted and at the lower line of the chart find the amount of this summation in column transmission in B.T.U. The amount of radiation for different systems of heating will be found directly below. For walls, ceiling and floors, except for floors on dirt, adjoining unheated enclosed space, use one-half of the temperature difference which applies to surfaces fully exposed to the south.

Example: Estimate the required amount of direct steam radiation for a room 15'-0" x 20'-0" x 10'-0" high, both end walls exposed, one facing north. Two single windows, 5'-0" x 6'-0" at each end. Outside walls 8" brick, furred and plastered. Lath and plaster ceiling with 3/4" wooden attic floor above (attic unheated). Desired inside temperature 70° F. with outside temperature 0° F.

(1) Two windows exposed to south, each 5'-0" x 6'-0"=60 sq. ft. Under Transmission Factors find, for single windows, factor number 35. Enter at the top of the chart on the diagonal numbered 35 and move diagonally toward the left until this line intersects with the horizontal line of 70° temperature difference. Move down along the vertical line until it intersects with the horizontal line of 60 sq. ft. of surface exposed to south. From this point move down the diagonal to the right, taking the transmission in B.T.U. at the bottom which=

(2) Two windows exposed to the north 5'-0" x 6'-0"=60 sq. ft. Proceed as above except take 60 sq. ft. of exposed surface under N (north) instead of S, which will give

(3) For wall exposed to south, 8" brick furred and plastered, 10'-0" x 15'-0"=150 sq. ft. minus 60 sq. ft. of window area=90 sq. ft. of wall. Find

transmission factor for 8" brick wall, furred and plastered (factor No. 8). Enter the chart with this factor number and proceed as in (1), which will give

(4) Wall exposed to the north 90 sq. ft. 1700

(NOTE: Exposed surface for north (N) is given only to 75 sq. ft., so instead of 90 take 9 and multiply the result by 10. This principle applies to all factors on the chart.) 2200

(5) For ceiling adjoining unheated attic, 15'-0" x 20'-0"=300 sq. ft. Temperature difference 70/2 = 35° F. 2950

(6) For air assume 1 1/2 changes per hour according to table given below. Take factor B for 1 1/2 air changes and proceed as above except take cu. ft. of air, where before we used areas only. Exposure not considered for air changes. 550

Total B.T.U. Transmission 19400

Move across the bottom of the chart until this total is found in the Transmission in B.T.U. and below this find the required radiation.

NOTE: That transmission is given only up to 10,000 B.T.U.—divide 19,400 by 10 and for 1,940 find 8.1 sq. ft. of direct steam radiation. Multiply this amount by 10, giving the total direction steam radiation, hence radiation required in room=81 sq. ft.

As a guide in determining the number of air changes per hour, the following table can be used.

Living Rooms—window one side	1	air change
Living Rooms—window two sides	1 1/2	air changes
Living Rooms—window three sides	2	air changes
Bedrooms	1	
Entrance Halls	2	
Public garages—ground floor	2-5	
Public garages—above ground floor	1	
Private garages	1-2	
Entrances to stores, theatres, churches, etc.	4-6	
In rooms with open fireplaces, figure at least two air changes.		

STRUCTURAL SAFETY

IT appears that more effective means of securing the structural safety of buildings is necessary. The situation has been considered by a joint committee representing the New York, Brooklyn and New Jersey Chapters, A.I.A., the New York and New Jersey Societies of Architects, the American Institute of Consulting Engineers, New York Section of the American Society of Civil Engineers, New York Chapter of the American Association of Engineers, New York Section of the American Railway Bridge and Building Association and the Brooklyn Engineers Club.

Although this joint committee is local to the New York Metropolitan District, the conditions which make its action advisable are common to all of our American cities. Therefore its report offers recommendations that should be considered by architects and engineers in other cities. This subject can be more effectively handled in the states where the licensing or registration of architects and engineers is required by law.

A survey of the subject made it apparent to the committee that responsibility for structural safety must lie with the owner and the designer jointly. Public supervision, if really effective, would result in an intolerable cost and there is no reason for shifting the responsibility to public authorities when it can be placed definitely with the owner and the designer. Such a procedure would not add any increased cost to a building that is intended to be structurally safe.

Structural insecurity can always be traced to one of two sources—ignorance or cupidity. The owner may have both of these characteristics. No moral control can be exercised over such an owner, as ownership can lie with the possession of the funds or credits that make a building operation possible. It is then apparent that responsibility must rest with the designer. Control of the designer can be maintained by means of a correctly drawn law delegating the power to confer registration upon competent designers and by enacting penal provisions for evasions. The recommendation follows:

RESOLVED, That it is the judgment of this Joint Committee on Structural Safety that a law should be prepared to embody the following requirements, governing the granting of permits and the execution of all building operations.

I. The owner shall be the applicant for the building or construction permit and shall be required to accompany his application for such a permit with the following:

1st Adequate plans and specifications prepared and signed by a competent registered architect or a licensed professional engineer experienced in structural design, hereinafter called the designer.

2nd A definite undertaking executed in legal form stipulating that, if the permit is issued to the applicant, he will have all working or shop drawings covering parts and details essential to the stability of the building and required to supplement the plans which accompanied his application, fully checked, approved and signed by the designer; that he will place the execution of the work under the direct supervision and continuous control of the designer; and that he will further undertake, with the co-operation of the designer and by employing only competent contractors and workmen, to perform faithfully the work proposed in strict accordance with the plans and specifications, in compliance with all requirements of law, and with due regard to public safety.

II. Before a certificate of occupancy is issued by a Bureau of Buildings, or by any State or local authorities having jurisdiction, the owner shall furnish to such authorities a duly executed certificate, signed by the designer, stating that he has faithfully supervised the entire work of construction, that it has been executed in accordance with the plans, specifications and working drawings duly signed by him, and that to the best of his knowledge and belief the finished work complies with all the requirements of law and is structurally safe for the use specified.

III. Failure on the part of the owner to comply with any of the above specified requirements shall be regarded as presumptive evidence of a violation of law, constituting a penal offense, and shall be punishable as such.

IV. If at any time after the certificate of the designer has been filed, conclusive evidence is furnished to the state licensing authorities that any statement in such certificate was false and intended to deceive, these authorities shall immediately take the necessary legal steps to have the signer put on trial for perjury, shall forthwith have his name stricken from the list of registered architects or licensed professional engineers, and shall give their action effective publicity.

V. It should be made possible at any time during the process here outlined to substitute a new owner for the original owner, provided that the new ownership is duly recorded on the original papers by affidavit and such new owner assumes all the obligations that would have been his had he signed the original papers. Likewise, a new registered architect or licensed professional engineer having structural experience may be substituted for the original designer of record provided that a like transfer of all obligations shall be recorded on the original papers and these obligations be assumed by the new registered architect or licensed professional engineer as if he had signed the original plans.

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Special Notice to Students

BY special arrangement with the Society of Beaux-Arts Architects, there appears in each issue of THE AMERICAN ARCHITECT an average of five pages devoted to the presentation of drawings selected from the Beaux-Arts Institute of Design exhibitions, and also the listing of awards and the promulgation of all notices to students. These matters will be exclusively presented to students of the Beaux-Arts Institute of Design through the pages of THE AMERICAN ARCHITECT. By arrangement with the publishers of THE AMERICAN ARCHITECT, a special student subscription rate of \$5.00 per annum has been secured. Further particulars with reference to this service to Beaux-Arts students may be obtained by addressing THE AMERICAN ARCHITECT, 243 West 39th Street, New York City.

OFFICIAL NOTIFICATION OF AWARDS

JUDGMENT OF APRIL 22, 1924

CLASS "B"—IV ANALYTIQUE

"A CARRIAGE ENTRANCE"

In Europe the approach to a public building of any pretension is greatly valued, and where conditions or lack of space do not permit an avenue or plaza, an entrance court or court of honor is frequently employed, giving access to the building group.

Such a court 100'-0" square, enclosed on three sides by the building itself, is to have the fourth side completed by an open colonnade or arcade, in the center of which is the carriage entrance. The top of the cornice of the first story of the building, with which the cornice of the colonnade or arcade should line, is 30'-0" above the ground. The carriage entrance motive may project above this to give a suitable silhouette.

JURY OF AWARDS:—F. A. Godley, H. O. Milliken, W. Warren, C. H. Aldrich, W. B. Chambers, A. C. Jackson, S. W. Morgan, A. E. Flanagan, G. S. Koyle, and F. C. Hitchens.

NUMBER OF DRAWINGS SUBMITTED:—179.

AWARDS:

FIRST MENTION PLACED:—A. P. Koman and R. S. McCaffery, Jr., Columbia Univ., N. Y. C.; M. L. Beck, Atelier Corbett-Koyle, N. Y. C.

FIRST MENTION:—J. C. Byers and T. Fiske, Columbia Univ., N. Y. C.; R. Quint, Atelier Corbett-Koyle, N. Y. C.; M. G. Sowder, Georgia Sch. of Tech., Atlanta; E. V. Hatch, Atelier Hiron, N. Y. C.; J. A. Barrows, Atelier Norfolk, Norfolk, Va.; N. Wood, Toronto Thumbtacks Atelier, Toronto; W. B. Tupper, Univ. of Southern California, Los Angeles.

SECOND MENTION:—R. Y. Goo and W. Dreifus, Armour Inst. of Tech.-Dept. of Archt., Chicago; C. C. Kenney, Arts & Crafts Club, New Orleans; J. H. Jewett, N. Granger, W. Jezierski, O. I. Silverstone, H. E. Lindstrom, M. S. Sharp, T. V. Henry, C. E. O'Hara, Jr., E. W. Maudevill, W. H. Kennedy, A. Halasz, H. Merz, J. Syracuse, R. A. Kimball, M. Lapidus, J. E. Richter, C. H. Baldwin, J. Megaro, Columbia Univ., N. Y. C.; H. B. Clark, G. W. Kelly, A. C. Wingold, M. W. Bastian,

N. F. Six, Carnegie Inst. of Tech., Pitts.; A. Post, J. E. Levering, B. T. Hirshman, D. A. White, A. W. Kurtz, Cleveland Sch. of Art, Cleveland; E. F. Hunt, Catholic Univ., Wash., D. C.; R. H. Cummings, Chicago Atelier, Chicago; A. F. Rosendorn and C. B. White, Atelier Cunningham, Wash., D. C.; J. R. Musick, Atelier Denver, Denver; W. H. Breen, J. A. Davis, J. O. Stakely, W. F. Wells, S. Franklin, M. H. Boots, G. Long, M. O. Saggus, J. A. Gramling, S. M. Ayers, C. W. Heery, Georgia Sch. of Tech., Atlanta; J. H. Abel, C. L. Bowen, J. S. Cromwell, G. E. Beatty, G. H. Riggs, J. M. Higgins, B. C. Edelin, A. T. Edwards, M. J. Schaub, George Washington University, Washington, D. C.; R. E. Harrison, Atelier Hiron, N. Y. C.; W. E. Green, Indianapolis Archtl. Club, Indianapolis; C. Gutmann, Catherine Merriman, R. Smith, G. H. Dey, John Huntington Poly. Inst., Cleveland; F. C. Barienbrock, H. B. Smith, Los Angeles Archtl. Club, Los Angeles; J. H. Williams and L. Norton, Atelier Licht, N. Y. C.; M. Miller, Patron-R. H. Segal, N. Y. C.; G. B. Hibbs, H. L. Virnelson, Atelier Norfolk, Norfolk, Va.; T. O. Menees, P. J. Weich, Atelier Parsons-Chic. Archtl. Club, Chicago; A. A. Sacco, Pratt Inst., Brooklyn, N. Y.; C. D. Seaman, Pennsylvania State College, Dept. of Archt., State College; H. S. Cruise, W. H. Dohner, Reading Archtl. Soc., Reading Pa.; W. Krzyzanowski, S. Podd, P. J. Eggenweiler, Atelier Rectagon of Buffalo, Buffalo; F. T. Houweling, R. H. Corliss, San Francisco Archtl. Club, San Francisco; D. K. Sargent, Syracuse Univ., Syracuse; G. C. Schweizerhof, C. S. Taggart, E. J. Conner, N. L. Pyles, H. L. Schuh, Jr., H. P. Beyer, "T" Square Club, Philadelphia; N. Manning, W. E. Barker, H. Savage, Toronto Thumbtacks Atelier, Toronto; E. C. Abrams, S. Shimoyama, E. E. Anderson, H. Belford, R. F. King, R. Allison, N. E. McIlvain, C. E. Smith, Univ. of Southern California, Los Angeles; M. Linscott, H. H. Watkins, E. C. Burke, Univ. of Kansas, Lawrence; B. P. Bailey, Jr., A. S. McIlhenny, Univ. of Texas, Austin.

CLASS "B"—IV PROJET

"A PRIVATE MUSEUM"

A gentleman of culture, having collected antiques and objects of art for many years, has decided to erect on his estate, either along the shore of his lily pond or at the end of a rectangular pool in the formal garden, a building to house his collection.

Among the objects are four handsome marble columns with cap and base complete, which he proposes to use in connection with the main facade of the building. Other large pieces of sculpture should be placed about the exterior, either on terraces or in niches or loggias. The smaller works of art, including paintings, furniture, etc., shall be arranged in attractive and appropriate groups in the main hall and the two or three smaller rooms of the interior. A small curator's room should be provided.

The building, exclusive of terraces, is not to exceed 100'-0" in any dimension.

JURY OF AWARDS:—H. O. Milliken, F. A. Godley, H. R. Sedgwick, L. E. Smith, A. C. Jackson, H. W. Corbett, R. Stanley-Brown, G. A. Licht, G. M. Simon, O. Faulton, A. E. Flanagan, S. W. Morgan, J. Hudnut, and F. C. Hitchens.

NUMBER OF DRAWINGS SUBMITTED:—318.

AWARDS:

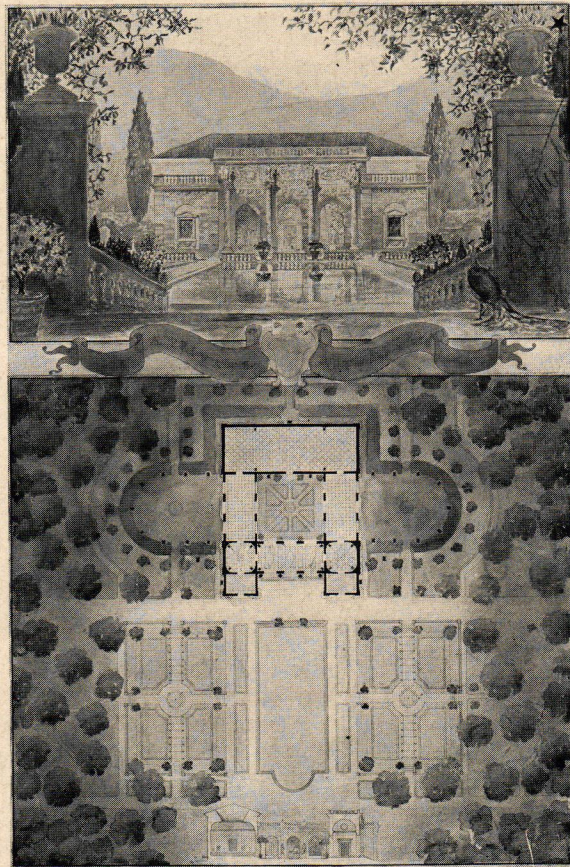
FIRST MENTION:—C. M. Cowan, R. P. Hughes, L. V. Schelski, A. Goodman, Columbia Univ., N. Y. C.; U. Schoenberger, A. K. Goehring, J. E. Tillotson, V. A.

McGowan, Carnegie Inst. of Tech., Pittsburgh; N. P. Thompson, W. C. Cobb, Georgia Sch. of Tech., Atlanta; C. L. Olschner, G. Gonzalez, Atelier Hiron, N. Y. C.; I. Vander Gracht, G. B. Dudley, Princeton Univ., Princeton; J. E. Jackson, "T" Square Club, Philadelphia; L. B. LaFarge, M. B. Smith, H. G. Lindsay, F. C. Johnson, P. M. Duncan, Yale Univ., New Haven.

SECOND MENTION:—F. C. Carson, Arbor Atelier, Ann Arbor, Michigan; E. G. Wheeler, A. C. Lackey, R. J. Kredel, W. S. Forsyth, L. C. Osborn, E. R. Roller, A. H. Rousseau, L. C. Stevens, A. M. Ham, R. V. Harkless, H. Fink, C. A. Lundquist, C. A. Markley, E. M. McMillin, H. Rosenberg, G. A. Deacon, H. E. Wagoner, D. C. Doig, H. R. Murray, A. M. Felstein, L. Swiger, J. F. Palumbo, H. N. Kelly, F. C. Boldry, R. I. Winters, R. R. Young, J. S. Douglass, H. H. Thayer, A. F. Muhl, Carnegie Inst. of Tech., Pitts.; J. I. Sobol, A. W. Lloyd, N. Rodriguez, W. B. Tubby, Jr., A. E. Milliken, W. D. Gillooly, P. Trapani, F. E. Sims, Jr., W. H. Willis, Jr., M. Grodinsky, C. H. Jagemann, J. J. Schlick, G. S. Dudley, H. B. Herts, Jr., R. Merwin, F. A. Galante, J. J. Black, E. G. Friedlander, Columbia Univ., N. Y. C.; W. E. Munn, R. M. Hovanetz, Cleveland Sch. of Art, Cleveland; P. H. Williams, E. A. Dacey, Atelier Cunningham, Washington, D. C.; J. M. Hodgdon, Chicago Atelier, Chicago; F. Gallardo, M. A. Peterson, G. T. Bassett, T. H. Locraft, E. B. Vorsanger, E. P. Schreier, Catholic Univ., Washington, D. C.; F. J. Roorda, Cincinnati Archtl. Soc., Cincinnati; J. Blumenkranz, W. G. Eichler, D. T. Ellis, F. Bellini, Atelier Corbett-Koyl, N. Y. C.; F. O. Kellman, A. W. Butt, Jr., W. G. Jamieson, Atelier Denver, Denver; C. M. Woodward, C. N. Wentworth, R. Gittelman, F. L. Soars, D. Sutton, George Washington Univ., Wash., D. C.; J. W. LeMay, J. E. Swain, Jr., D. L. Spooner, B. C. Hogue, B. C. Norton, A. P. Almond, P. F. Rosenblath, O. W. Long, T. W. Cothran, S. P. Bond, V. L. Manning, R. J. Conover, A. Shulman, R. Stanley-Hall, C. O. Dickson, C. M. McGarvey, W. Felker, J. E. Pieson, Jr., A. B. Merry, E. C. Blanks, M. Smith, A. L. Bartlett, Marthome E. Sanders, W. I. Gresham, Georgia Sch. of Tech., Atlanta; O. L. Warady, J. L. Delamarra, L. A. Turcotte, H. Swenson, J. M. Judge, J. J. Murno, Atelier Hiron, N. Y. C.; O. E. Williams, Indianapolis Archtl. Club, Indianapolis; F. Rennison, B. Krinsky, R. W. Pearson, John Huntington Poly. Inst., Cleveland; T. Fletcher, W. J. Meyer, I. L. Johnson, Los Angeles Archtl. Club, Los Angeles; T. Ross, Jr., Patron-J. G. Rogers, N. Y. C.; E. B. Sterrett, E. G. von Storch, F. C. Pearce, G. E. Wells, H. K. Urffer, D. E. Kennedy, Pennsylvania State College, Dept. of Archt., State College; R. McLaughlin, M. C. Fleming, Princeton Univ., Princeton; C. N. Diffin, L. Boulware, Pratt Inst., Brooklyn, N. Y.; W. Nevara, F. T. Ahlson, R. H. Carlburg, Atelier Parsons-Chic. Archtl. Club, Chicago; G. W. Travis, San Francisco Archtl. Club, San Francisco; N. C. Withrow, J. A. Scott, H. R. Trott, South-West Atelier, Little Rock, Ark.; L. S. Lowell, D. Edgerton, F. W. Hunt, G. H. Ketcham, Syracuse Univ., Syracuse; J. J. Kohler, F. J. Duane, F. R. Lyster, C. Ward, Jr., H. G. Rieber, J. Andrews, "T" Square Club, Philadelphia; E. T. Dunlap, C. M. Loving, Univ. of Virginia, Charlottesville; L. Brintnall, W. P. Cunningham,

H. Petersen, M. C. Hyre, R. Jenks, G. L. Geery, Univ. of Kansas, Lawrence; R. H. Kloppenburg, S. K. Kwan, C. T. Paul, K. Helms, W. E. Fraser, H. Sobel, K. G. Reeve, Mary T. Worthen, C. T. Miers, L. C. Hedrick, F. H. Naegele, J. L. Hamilton, Jr., Univ. of Illinois, Urbana; G. G. Decker, C. C. Simmons, W. Kleine, H. W. Willms, J. A. Williams, Jr., H. S. Gannaway, A. H. Howze, G. Harker, A. Fehr, Univ. of Texas, Austin; E. C. Lea, Univ. of Louisville, Louisville, Ky.; W. F. Young, Atelier N. T. Vorse, Des Moines; W. H. Schilling, E. Eastman Studds, I. C. Haight, Yale Univ., New Haven.

H. C.:—N. R. Mastrangelo, R. N. Tourtellotte, H. Steinkohl, Columbia Univ., N. Y. C.; V. Galier, "T" Square Club, Philadelphia.

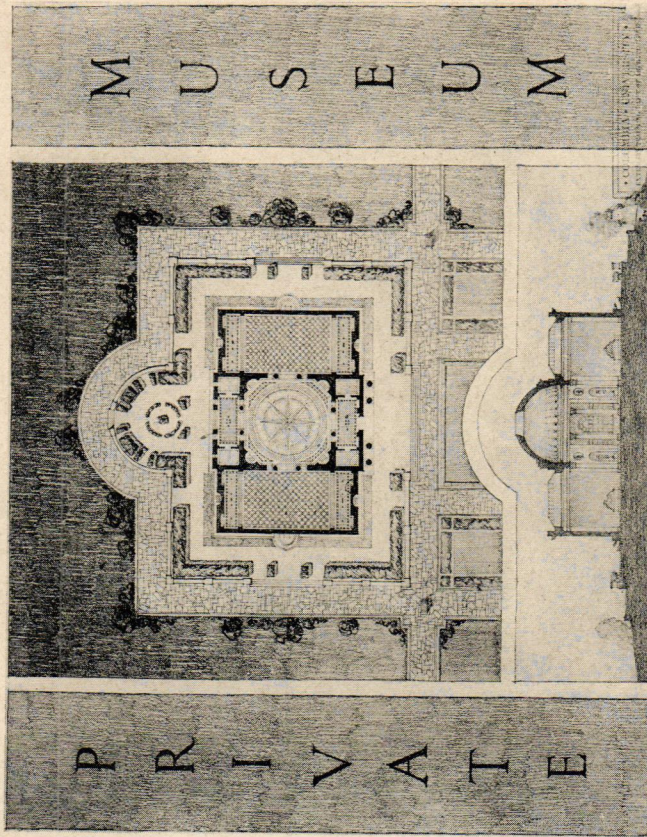
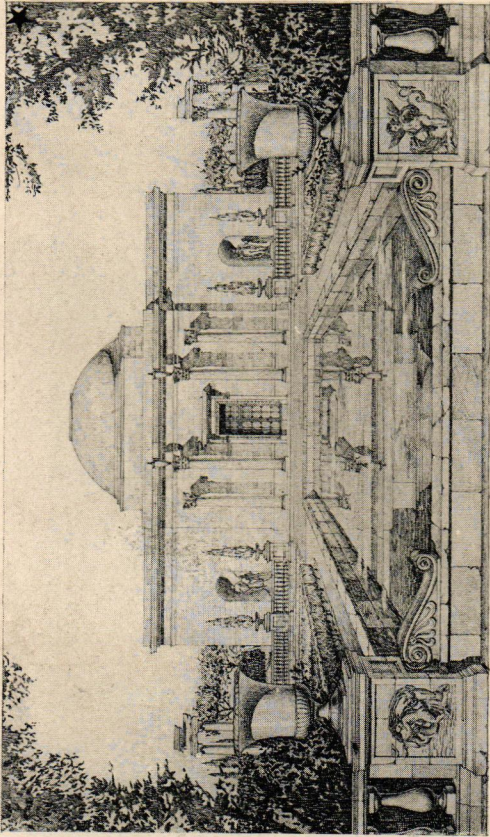


L. B. LA FARGE

FIRST MENTION

YALE UNIV.

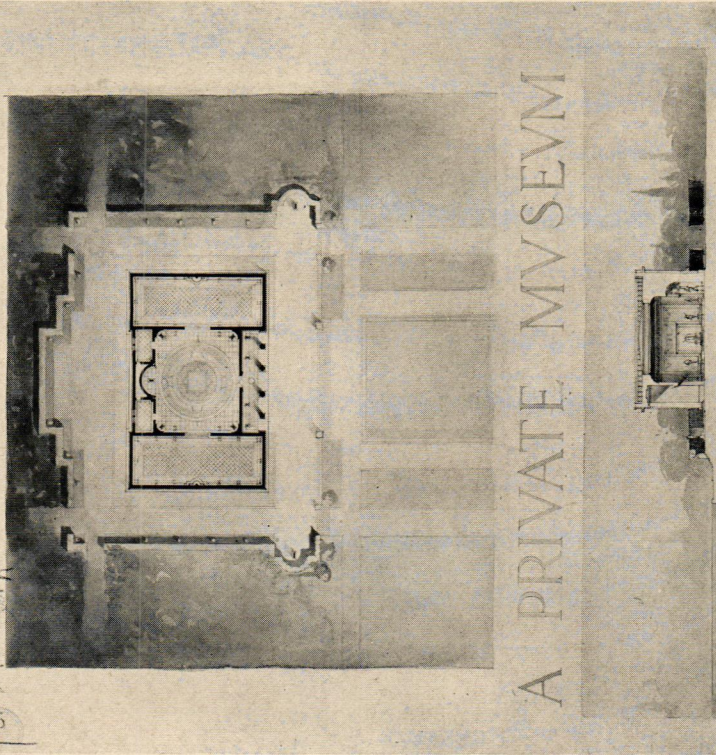
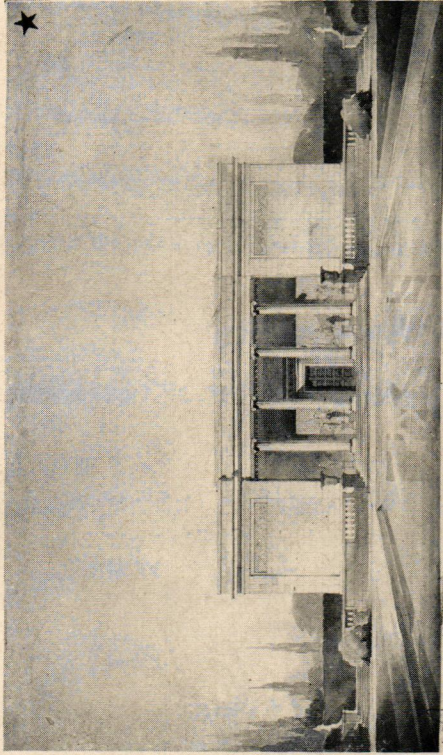
CLASS "B"-IV PROJET—A PRIVATE MUSEUM



R. P. HUGHES

FIRST MENTION

COLUMBIA UNIVERSITY



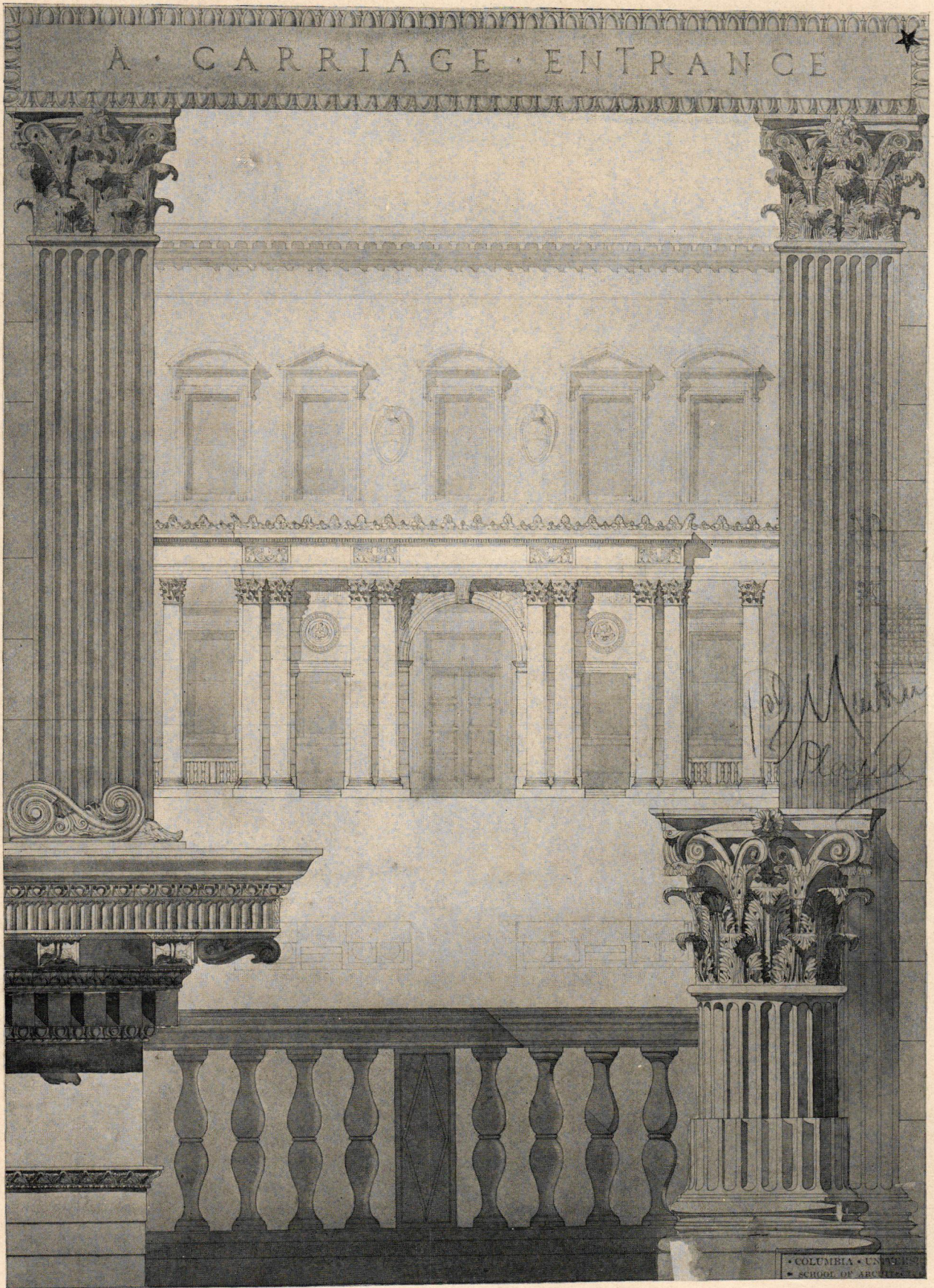
C. M. COWAN

FIRST MENTION

COLUMBIA UNIVERSITY

CLASS "B"-IV PROJET—A PRIVATE MUSEUM

STUDENT WORK, BEAUX-ARTS INSTITUTE OF DESIGN



R. S. McCAFFERY, JR.

FIRST MENTION PLACED
CLASS "B"-IV ANALYTIQUE—A CARRIAGE ENTRANCE
STUDENT WORK, BEAUX-ARTS INSTITUTE OF DESIGN

COLUMBIA UNIVERSITY

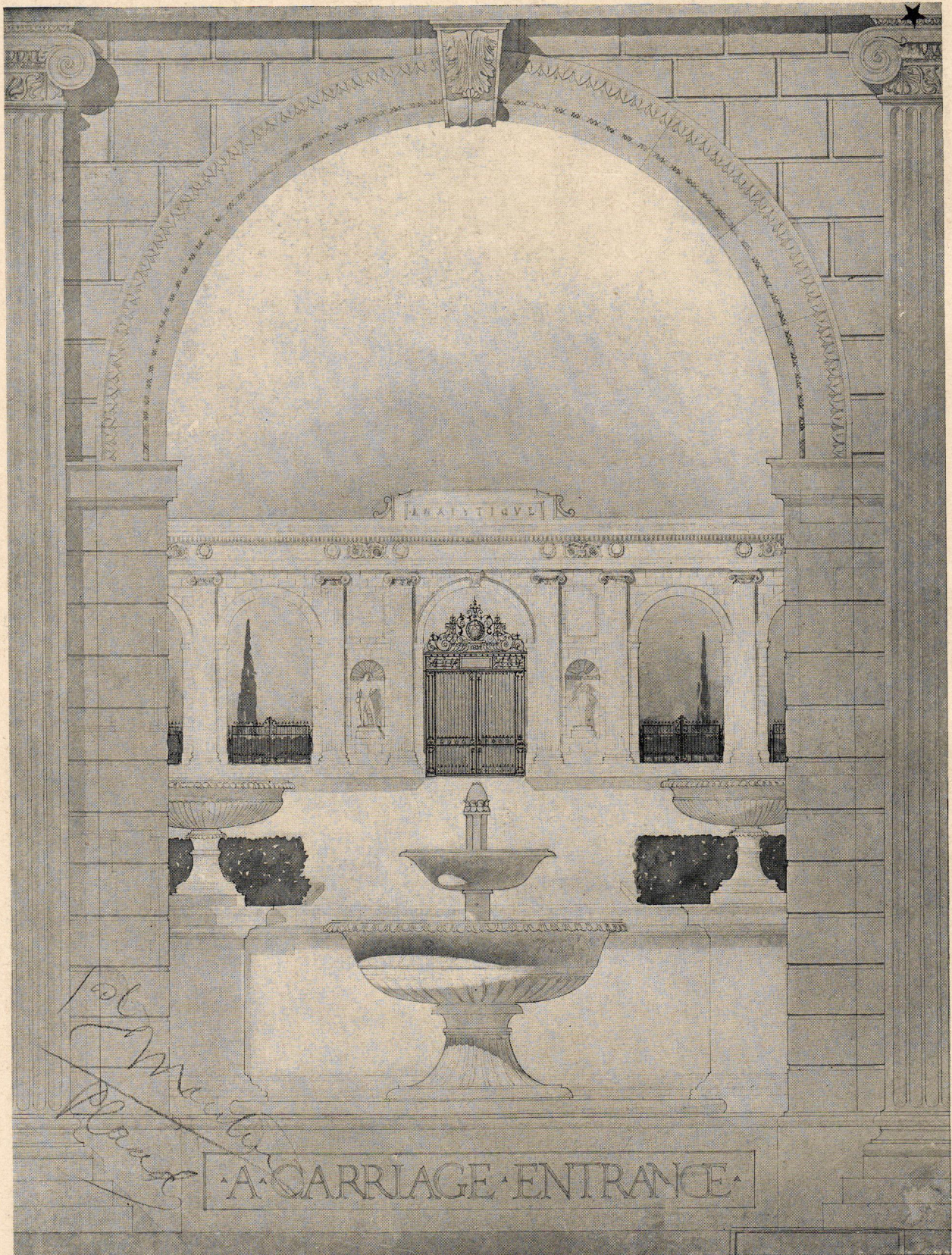


M. L. BECK

FIRST MENTION PLACED

ATELIER CORBETT-KOYL

CLASS "B"-IV ANALYTIQUE—A CARRIAGE ENTRANCE
STUDENT WORK, BEAUX-ARTS INSTITUTE OF DESIGN



A. P. KOMAN

FIRST MENTION PLACED

COLUMBIA UNIVERSITY

CLASS "B"-IV ANALYTIQUE—A CARRIAGE ENTRANCE
STUDENT WORK, BEAUX-ARTS INSTITUTE OF DESIGN

CLIENTS*

I HAVE decided after much thought to address you—students of architecture—on the subject of clients.

It is a subject so fraught with delicacy that it is almost ranked among the indelicacies of conversation. I do not remember ever to have heard a responsible architect with clients of his own speak publicly upon the topic. The reason for this lack of utterance may possibly lie in the fear that no man can possibly speak from experience of clients in the past without hopelessly alienating the clients of the future.

Do you all know what a client is? The word has a strange origin, and has in the course of history partly, I believe, through the action and attitude of lawyers, turned itself upside down.

A powerful Roman, on whom waited a hungry crowd of dependents, was wont to call himself their patron or *patronus*, and the dependents, who didn't mind what name they took so long as they got his favors, were dubbed clients. Literally, I understand, the word means one who listens eagerly, and, therefore, so long as our employers are waiting like faithful hounds with ears cocked to catch our lightest word we may appropriately call them clients. But in this age of ours the *queue* system for employers of architects is, I believe, confined to one or two rather grave cases, and until it becomes a nuisance of general application I am given to think that the word is, from an antiquarian point of view, rather misapplied. The patron was the legal protector of his clients. Hence came the modern application of the word client to a solicitor's or barrister's employer. The application soothes the lawyers, but I have never heard of a lawyer who went the length of setting himself up as a *patronus*.

Anyhow, there are the clients for you—or there may be—and I mean to talk about them, even if I venture, out of respect for the class, occasionally to call them employers.

A great part of your business, if you are going to swim and not to sink, will consist in the successful treatment of your employers. You will please observe that I have escaped using the word "management."

There is one very simple, very obvious, and very rational condition embodied from the very beginning in every transaction between an architect and his employer. It is so radical and integral that it astonishes me to find how frequently it is entirely overlooked by both parties.

The client's outlook on the coming job is hedged in like most fields of logical enterprise by two

data, which you may call, if you are in a logical mood, the major and minor premises. But since the word premises is liable to be misunderstood in connection with architecture, and since these two data are of equal cogency, and are not necessarily pulling in the same direction, I prefer to call them the two counterpoises.

One of these, of course, is the house (or other building) that the employer wants and the other is the sum of money he is content to spend. Observe, I do not say the house he first asks for or the sum he first names.

And when I thus differentiate I am not at all implying that he is going to be screwed up to a building more costly than he wants or can afford, but simply that you and he, acting on one another, may modify these conditions at a very early stage in various directions.

Anyhow, there are these two elements—the price offered and the building wanted. Will they fit one another? It is a hundred to one that they will not. If they do not, it is well to remember that this misfit is probably nobody's fault.

At this stage it will be your privilege to point out to your employer that something has got to give way. The original idea of the house must be reduced or the sum of money must be increased. If you are both honest and really capable, no embarrassment attends the explanation. But you must be quite sure in your own mind that you are capable of working without extravagance.

The expedient at this stage of deceiving your client or yourself with an approximate estimate based on an unreasonably low factor of price is, of course, unpardonable as well as very impolitic.

When you have satisfied your employer about price and he has satisfied himself about size and degree of luxury or simplicity, there remains still, as we all know, the great question of agreement on questions of taste. Here is, or may be, the hardest trial of all. You may, it is true, come to a parting of the ways at which your ways must literally be parted. Your conscience as an artist may compel the severance. But it should not come before you have made sure that it is art, not obstinacy, that is stiffening your backbone, and until you have realized that there is more than one way of doing even a work of art. Certainly you should never do a work of which you are ashamed, but there is a difference between shame and mere disappointment, and you may be able, by substituting simplicity for your own choice in display, to achieve a triumph—not of mediocrity, but modesty. It is in cases where your patron asks for the too much rather than the too little that your profession of faith is most likely to be put to the trial.

*An address to students by Paul Waterhouse, M. A., former president of the R. I. B. A.

Shall we remember here to come back for a moment to the more elementary essence of your craft, that architecture, as I have said elsewhere, is not so much a noun as an adverb. And the adverb is not "how much" but how.

The client pays for his house to be built. The builder builds it. The whole business of "how" it is built is yours.

It is with no disrespect toward clients that I tell you that they are of different kinds. Being human beings, they can hardly fail to differ. And these differences which make them so interesting as employers are partly differences of mentality and partly differences both of taste and of wealth. It is your business to be perfectly respectful students of these differences, not merely in your own interests but in theirs. Remember, it is you who stand, not as antagonists before your employers, but as mediators between them and the fulfillment of their own desires. There are some people who find great difficulty in expressing their needs. To them you will be helpful in guiding that expression. There are some who do not fully know their needs and who look to you for initiation into likely directions. Others there are who require your services chiefly because they rightly look upon an architect as the doorkeeper of building enterprise. It is well at the outset to discover by observation and with tact what is the light in which you are viewed, and if possible to make sure without any derogation from your office as artists that you do to the utmost of your ability supply, along with your artistry, that guidance, that prompting, or that specially businesslike alacrity which your employer quite legitimately seeks.

You will find some clients—both individual and bodies corporate—who do not trust you. I do not blame them, for their attitude is caused either by unhappy experience in the past or by incorrect information as to the nature of an architect. It is best in such cases to make sure at an early stage of your own intention to be scrupulously worthy of trust, and, if possible, to convince your client in such a way as to change his mind. I say this not for your sake, nor wholly for his sake, but for the sake of the job.

But there are other minds who equally need our respect. There are employers to whom the achievement of a really fine building is of greater importance than the saving of money.

It will happen to you if you become moderately busy men that you will be simultaneously the stewards of the finances of employers, some of whom are at opposite extremes in this respect, and I know nothing more difficult than the exercise of brain demanded by having to turn, perhaps in the very same morning, to the interests of those who demand rigid economy, those who look for a perfect building, and those, again, on whose behalf decisions have to be taken on doubts, in which the

counterpoise of perfection and cash has to be very evenly weighed.

No large building, however carefully planned and specified, gets through its whole course of creation without any variations. These variations are beset at every turn by the question of cost, and every question of cost has to be judged by one criterion only—that of the inclinations of the client. I say "of his inclinations," which is not the same as saying "his wealth," and by no manner of means the same as your personal wishes.

You will think that I am degrading architecture to the level of rather sordid finance. Let me put the thing in another light. If an employer were to bring you an irregular mass of costly marble, and were to say to you, "It strikes me that this queer-shaped but precious block might be so cut that we could obtain from it material for the jambs and pediment of a doorway. It is unique, no man can obtain more of it; it is so valuable that we must not leave any of it unused."

With what gaiety of heart would you set your ingenuity to work to get some original design achieved which would employ every ounce of that material and call for no more. My young friends, the stipulated price named for his building by a client whose means or legitimate wishes are limited is just such a block of precious metal.

If you HAVE *carte blanche* it is another matter, and if the *carte blanche* relates not to money only, but to a free exercise of your own fancy, you are lucky indeed. But, remember, the greater the trust the greater the responsibility; and remember also that the best architecture is wrought as a rule from the conflict with limitations.

Remember, again, that quite apart from the question of future favors there is no friend like an old client. The relationship of architect and employer is one of the most intimate and delightful nature when nothing mars its perfection. The architect is, on the whole, the more likely of the two parties to disturb the smooth surface of that delicate relationship, for he has more opportunities of failure and is more greatly at the mercy of chance. Therefore, be ever on the watch, remembering through all your difficulties the value which your appointment has outside altogether of its pecuniary and professional nature.

To this end be very loyal. You are, if your work is a domestic work, admitted to an interior knowledge of your client's family life, which is very near that of the doctor and very like that of the solicitor.

Never tell stories of one client to another. Consider the financial side of your transaction as a confidential secret and regard as sacred all intimacy to which you are admitted.

If trouble comes between you, search your own mind for the cause of it, remembering that your