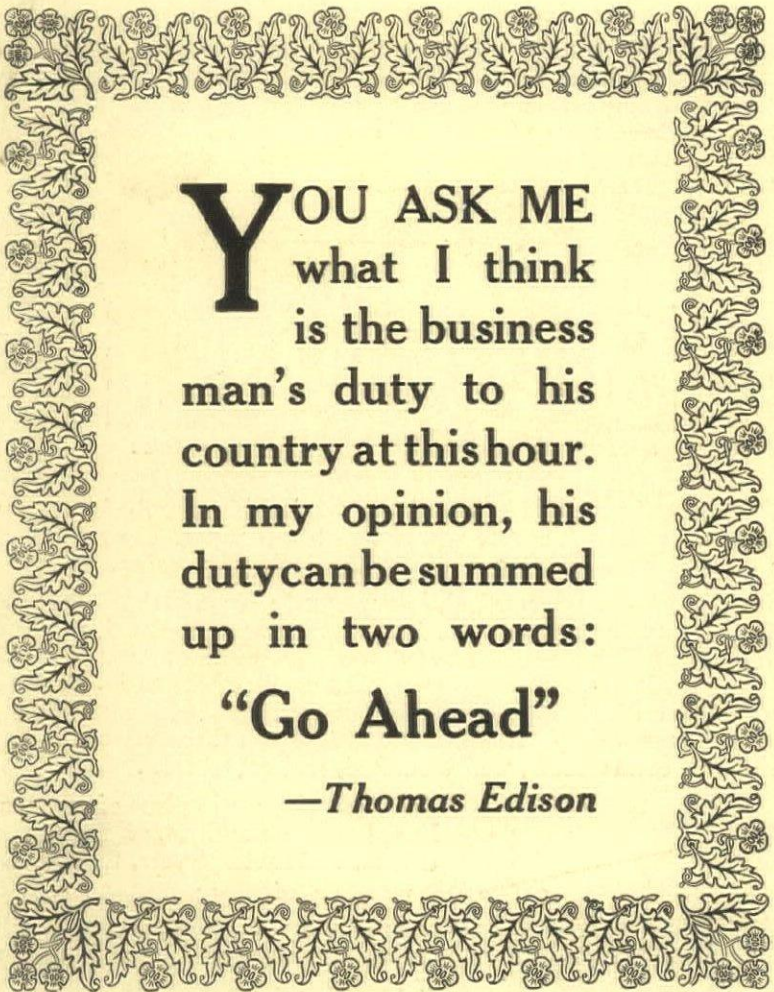


The AMERICAN ARCHITECT



YOU ASK ME
what I think
is the business
man's duty to his
country at this hour.
In my opinion, his
duty can be summed
up in two words:

"Go Ahead"

—Thomas Edison

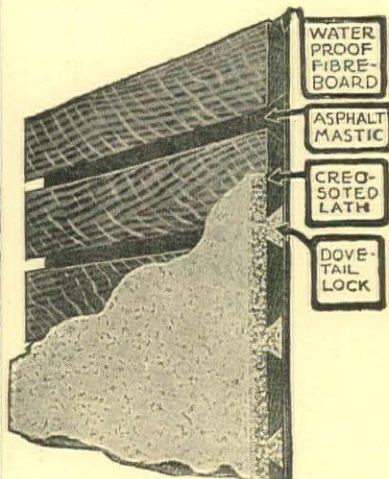
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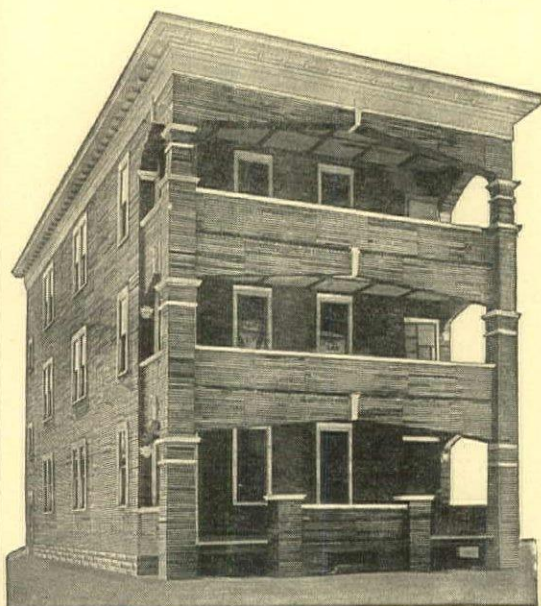
AMONG them are nationally known firms who do not compromise on doubtful construction; state architects; architects of schools, churches, clubs, public buildings, fine residences and popularly-priced homes.

The use of Bishopric Board for Stucco construction has increased 1000 per cent in six years. For these reasons: Wherever the right Stucco mixture has been applied to a Bishopric background the walls have remained rigidly intact—crackless, unsagging; there has been no rusting—no pulling away from the supports—because first, there is nothing in Bishopric Board to disintegrate; and second, it is nailed securely to studding or sheathing; it provides effective insulation; deadens sound; and often the saving it makes possible solves an economic problem for Architect and Builder.



The "lock-in-the-plaster" principle has made good in a big way. Architects have seen it hold Stucco with a bulldog grip through severe winter and hot summer. They have watched Bishopric Board stand all winter and be in perfect condition for Spring Stuccoing.

Stucco clings vise-tight to the dovetailed, heavy-wood strips which are creosoted against swelling, shrinking, warping, and weather change. These strips are imbedded, under terrific pressure, in a layer of tough Asphalt Mastic—a wonderful preservative and moisture-proof and fire-resisting. The heavy fibreboard backing is weather-proofed against heat and cold and it retards sound. Nailed as a unit to the building with joints broken every four feet for added rigidity, with the proper mixture of stucco applied to Bishopric Board how can the walls crack or crumble or the building be anything but comfortable, well-insulated, and sound free?



For interior use in place of ordinary lath, Bishopric Board makes sound-retarding walls, ceilings, and partitions, and saves plaster, time, and labor.

Bishopric Sheathing saves about 40 per cent as compared with $\frac{7}{8}$ -inch wood sheathing. Makes a compact, damp-proof, sound-proof wall. No joints or knot holes. Ask about it.

Note the absolute rigidity of construction of this 3-family apartment house in Utica, N. Y., built for John J. Doyle. This building stood through the winter before being stuccoed. Bishopric Board was nailed direct to studding, no wood sheathing being used. Bishopric Board was also used on interior.

All Architects and Builders should have our book, "Built on the Wisdom of the Ages." It describes and details the use of Bishopric Board; illustrates homes and institutions on which it has been used; tells how to get perfect Stucco work. It contains reports of scientific tests and letters from engineers, architects, builders and home owners. Get it—and samples of Bishopric Board and Bishopric Sheathing.

The Bishopric Manufacturing Company
904-Este Avenue, CINCINNATI, OHIO

THE AMERICAN ARCHITECT

VOL. CXV

WEDNESDAY, MARCH 12, 1919

NUMBER 2255

Build Now!

A Symposium on the Necessity for an Immediate Resumption of Building and the Method of Financing as Expressed by Leading Authorities in Banking, Real Estate, Building, Engineering, Supply and Architectural Fields

HOW will the expected boom in building be financed? In order that readers of *THE AMERICAN ARCHITECT* may have a more comprehensive understanding of a question of such timely interest, a symposium of interviews with leaders in the field of architecture, finance, real estate, building and material supplies has been carefully prepared, with a result that more than a hundred opinions on the topic have been received. While these opinions vary, the majority of statements hold that the conditions affecting an exceptionally active building season are steadily improving.

Although in the main the high costs of materials are held to be the chief obstacle, it is noted that many of the writers express the belief that the public should be willing to pay the price and reap the benefit in the reduction of unemployment, the absorption of the products of many industries, and the forwarding of many public works, of which there is great need. The increased revenue on the investment is also a big factor in starting new work quickly. As several executives consider it—"What can I do with my building after I get it?"—and not "What is going to be the first cost of the building?"

One of the most interesting views on this point is that of Samuel H. Beach, president of the Savings Banks Association of the State of New York, in which he says that "a strong feeling is prevailing in financial circles that small annual payments of principal should be required on all mortgage loans and under such a plan of loaning money the lender would be safe in making a fairly liberal loan even based on prevailing high costs, for the gradual reduction of the principal would counterbalance the possible eventual fall in values to a lower level."

According to the survey of the situation made by *THE AMERICAN ARCHITECT* all sections of the country report that despite the immediate factors

that might operate to hinder construction, the great need for additional buildings of every description and the growing feeling that nothing can be gained by waiting longer for reduced material prices and construction costs, will cause a resumption of building as soon as the weather permits.

Several of the larger financial institutions comment on what may be a difficulty in some quarters in securing loans for building on bonds and mortgage on account of probable heavy participation in the next Victory loan and also the fact that there are many attractive investments in the market that have the advantage of liquidity. Others are only too eager to lend money on good sound investments. That large loaning interests are going to do their share in the big construction movement may be judged from the view of Festus J. Wade, president of the Mercantile Trust Company of St. Louis, Mo., a well-known banker in the Central West, who says that the organization which he heads has been unable to secure enough loans to meet the requirements of its business. He says: "We are to-day ready and willing to finance any legitimate real estate enterprise where the property is improved with substantial buildings of the character that can be utilized for the benefit of the industrial, commercial and manufacturing interests of the country."

As to how the boom will be financed, Gerald R. Brown, comptroller of the Equitable Life Assurance Society of the United States, believes that "operations of any size in the near future will have to be accomplished by serial bond issues underwritten by investment bankers and title and trust companies who have a large clientele seeking investments of this character."

Within the last month new building projects have been announced which in number and importance

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exceed any structural operations, excepting only Government work, brought out since the early months of the world war. Plans for many of these projects are now complete, and work will undoubtedly be started as soon as labor troubles have been adjusted and contracts awarded. From the architect's viewpoint, D. Everett Waid, *F. A. I. A.*, states that there appears to him to be plenty of building work to do and that there will be a good volume of building, if not a boom, provided labor difficulties show some sign of early solution. He believes the problems of financing operations and even high prices are minor ones in comparison with the importance of some stability in labor conditions.

The prevailing opinion is that material prices will lower somewhat and that labor will work for a lower wage, due to the law of supply and demand. A prominent engineering firm of Boston favors maintaining labor prices at the highest possible point, but not even labor can go counter to the laws that control prices.

Among the many statements received by THE AMERICAN ARCHITECT, the following conclusively show the trend of opinion on the necessity for an immediate resumption of building and the method of financing:

* * *

From Samuel H. Beach, president, the Savings Banks Association of the State of New York:

"The slowing down on building was undoubtedly owing to the reluctance of real estate men and owners to start new projects during the uncertainties of a world war; to the steadily mounting prices of labor and materials and to the difficulty of financing ordinary building operations when every nation on earth was calling for money on an unprecedented scale and every manufacturing corporation was stretching its credit to the limit.

"But now, with war practically ended, with skilled carpenters and mechanics daily being released from cantonment erection, ship building and other war construction, coupled with the return of thousands of soldiers and sailors to their usual occupations, there is bound to be a strong reaction along all ordinary building lines.

"Farmers have prospered and are seeing the need of more properly housing their crops, tools, machinery and live stock. Fire from lightning and other causes every year plays havoc with buildings all over the land, and the reconstruction of the barns, houses and sheds which have thus been destroyed in the five-year war period will form no small part in the building demand.

"In the cities, with their constantly growing population, the housing need is especially pressing. The building of apartment houses, which in normal times goes steadily forward, has, with everything else, been at a standstill and the need along this line is particularly in evidence.

"Owing to the drastic changes which the going into effect of the recent prohibition legislation will cause, the demand for new stores will for some time not be urgent, but the remodeling and making suitable for other lines of business the places now occupied by the liquor trade will in itself be a great consumer of both labor and materials.

"The question naturally arises, 'How will all this work be financed?' And if conditions, such as have in the near past prevailed, should continue, this would be a difficult

question to answer; but conditions are changing; they have in fact already changed. Thousands, yes even millions of dollars, since the armistice was signed, have been steadily flowing into the savings banks, and while these institutions in common with the other banks in the country will have to do their full share in subscribing for the fifth Liberty loan, they will undoubtedly endeavor to supply the necessary building demand for money in their several localities.

"In making loans on new work not only savings banks but life insurance companies and building and loan associations must take into consideration the higher values now ruling. Many years must elapse before a building can be constructed at anything like the costs prevailing in the pre-war period. Lumber, a large factor in nearly every building, is just now seemingly very high in price; but lumber is a crop not produced in an ordinary human lifetime and, while the production of copper, concrete, iron and steel is limited only by the amount of labor employed, the production of lumber is not only limited by the scarcity of labor and the lack of sufficient snow this winter to render logging operations in the northern latitudes normally productive, but is every year having to be hauled from longer distances and obtained in less and less accessible places owing to the constant and rapid disappearance of our forests; and the present high level of prices must necessarily continue over a considerable period.

"A strong feeling is prevailing in financial circles that small annual payments of principal should be required on all mortgage loans, and under such a plan of loaning money the lender would be safe in making a fairly liberal loan even based on prevailing high costs, for the gradual reduction of the principal would counterbalance the possible eventual fall of values to a lower level."

* * *

From Ernest K. Satterlee, president, the Franklin Savings Bank, New York City:

"Just what may be expected to occur does not always occur as expected. Since the signing of the armistice the keen minds of the country have engaged the reconstruction problems and are endeavoring to wrest from them signs indicating how and when and in what manner men taken from productive industrial pursuits to defend the cause of the nation can be returned to their several occupations at a minimum expense of efficiency. At the moment they ceased to be 'producers' in the economic sense they became totally dependent upon the power of production of their fellow citizens for their means of support, together with those who in turn were totally dependent upon them. The manner in which the nation has shouldered the burden beggars description. Letting the burden down after the emergency has passed—and doing it without shock and strain—is the question which is stirring legislative bodies, newspapers, organizations and the multitudes of individuals whose forceful personalities always bring them to the forefront of any great agitation into the arena of opinionative conflict out of which will presently emerge 'the plan.' This is the American way—direct, blunt, courageous and ultimately sound. The Babel of conflicting ideas is after all healthy, because utterance has been given to every extreme and the fittest essentially will survive.

"Among the vitally important considerations we find the problem of housing a population which, in New York City, is increasing approximately twenty-five souls an hour, night and day. Try to find a suitable apartment, flat, hotel suite or lodging room in New York City today and you will gather rich material for a thesis on the subject of domestic surroundings.

"If we probe the subject, even to no great extent, we very shortly find ourselves staring straight at the principal reasons: (1) Shortage of space; (2) no new building, and (3) high rents.

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"It would appear to be a bit paradoxical that the complete stalling of building operations should continue when it is generally known that the deposits of all our banks are growing by leaps and bounds, but let us examine this point a little. It is not probable that all people understand that the enormous part played by banking and business corporations in absorbing the four Liberty loans was not entirely accomplished by the use of available cash but that these corporate bodies mortgaged their income for, in many instances, a year in advance, and until their cash equilibrium has been re-established the builder will continue to be deprived of one of his principal necessities—mortgage money—at least in the quantity needed to finance his operations. This, however, is not his only difficulty. Material and labor conditions finish brilliantly with the lack of money in the race to devitalize our most potent economic factor—the home builder. We are all, undoubtedly, on the side of the argument which espouses union labor in its general, broad principles, but it is probable that our espousal is tempered with the belief that there is a sparking point between the dollar and the man beyond which neither may venture without completely stalling our productive machine. Just now the dollar will not buy all the man needs and he calls into action the faculties at his command in order to obtain an additional dollar. The said additional dollar not answering to his summons, he proceeds to make war upon the dollar which is already serving as faithfully as a dollar can in the circumstances. Often he will contrive to get his dollar by giving less of his labor for it. The result is the same. Meanwhile the necessities of life—food, clothing and other vitally important things—move further and further out of his reach. Truly the dollar and the man should become better allies.

"This is a little beside the subject, but we all want, in our heart of hearts, to create and develop an American trait—the ability to bring our warring elements into harmony and apply the result to our general good.

"Savings banks are in generally the same position toward the building situation that other leading institutions are, with this possible difference—the necessity of restricting the loan to 60 per cent of the value as determined by the trustees. At once the present cost of building as against the estimate of actual value from the standpoint of the lending institution come into conflict and the desire of the borrower cannot be met unless he is in a position to meet the difference in building values out of his own resources. By this it may be readily seen that even if the savings banks felt entirely free to enter the mortgage market to any great extent the costs of material and labor exercise a controlling influence. There is in prospect further Government financing which will necessitate large participation by the banks, and this, for the present, serves to make a proportionate amount of money unavailable for the financing of building operations even in the face of the constant desire to supply our natural allies, the builders, with the money to conduct their operations.

"It is satisfying to note the improved feeling among savings bankers and the increased optimism that the conditions so briefly discussed here may, and probably will, improve to a point where there will be relief and the resumption of the relations between banks and builders so mutually helpful in the past."

* * *

From Festus J. Wade, president, Mercantile Trust Company, St. Louis, Mo.:

"Every reputable financial institution that usually loans money on real estate security is, in my judgment, perfectly willing to continue to make such loans when the security is adequate.

"We have never ceased to make loans on real estate since the war began. In fact, we have been unable to secure enough real estate loans to meet the requirements

of our business and we are today ready and willing to finance any legitimate real estate enterprise where the property is improved with substantial buildings of the character that can be utilized for the benefit of the industrial, commercial and manufacturing interests of the country."

* * *

From Gerald R. Brown, comptroller, the Equitable Life Assurance Society of the United States, New York City:

"It seems to us that the financing of real estate operations of any size in the near future will have to be accomplished by serial bond issues underwritten by investment bankers and title and trust companies who have a large clientele seeking investments of this character."

* * *

From Alex. P. W. Kinnan, president, Union Dime Savings Bank, New York City:

"There has been a large increase for the past three months in the deposits of savings institutions, and the banks are now loaning on bond and mortgage, and expect, after the placement of the next Liberty loan, to be in funds to take a large line of mortgage loans.

"Personally, I do not expect to see a large boom in building this Spring. While land can be bought upon favorable terms, the present price of building material and labor makes it almost impossible for a contemplating builder to figure out a successful termination of his venture, and unless the price of building material and labor arrive at a solution of the problem, I do not look for any real boom in building until the Spring of 1920."

* * *

From Albert L. Scott, treasurer, Lockwood, Greene & Co., architects and builders, Boston, Mass.:

"While it is true that material prices are high and labor is also high, yet these features are not, we feel confident, going to weigh too greatly with the concern which requires new buildings and equipment in order to maintain its position in the market, or to enter new fields. The important thing for every manufacturing executive to consider is, 'What can I do with my building after I get it?' and not 'What is going to be the first cost of the building?'"

"Our opinion is that material prices are going to soften materially and that labor will work for a lower wage due to the inevitable law of supply and demand. We are in favor of maintaining labor prices at the highest possible point, but not even labor can go counter to the laws which control prices."

* * *

From D. Everett Waid, *F. A. I. A.*, president of the State Board of Examiners and Registration of Architects, New York City:

"There appears to be plenty of building work to do and there will be a good volume of building, if not a boom, provided labor difficulties show some sign of an early solution. The problems of financing operations and even high prices are, I believe, minor ones in comparison with the importance of some stability in labor conditions. Owners will not willingly proceed so long as they fear a fluctuation in prices and a complete tie-up when a building is half constructed."

* * *

From Robert Willison, architect, Denver, Col.:

"What is the outlook for building? The outlook in Colorado never looked better. Inquiries show that the sentiment of our people is to get busy and make up for

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lost time. Among projects on which plans have been completed are: A hospital ambulatory ward building to cost \$75,000; a hospital medical building, \$25,000; hospital utility building with superintendent's and doctor's quarters, \$50,000; Home for Aged, \$50,000; hotels and theater buildings to cost \$250,000; many residences costing from \$5,000 to \$10,000, and a bridge across the Grand River in Mesa County. In Denver the School Board will have a vote on an \$8,000,000 bond issue for new high and grade school buildings; the City Council will call for a \$3,000,000 bond issue for a new city and county building and a criminal court building in connection with the county jail.

"There is also a half million dollar bank building to be erected as well as many apartment houses, as soon as conditions will permit, and investors now feel that the cost of construction has reached the limit of decrease, which is the all-absorbing factor in present proposed building operations in this section.

"Among other buildings to be constructed in the West are a twelve-story bank and office building in Salt Lake City; a large auditorium in Spokane, Wash.; a similar building in Sterling, Col., and there will be a large amount of school building put up throughout the West this year."

* * *

From John A. Murray, merchant and bank director, New York City:

"We have just emerged from a world war, in high spirits but very tired, physically. I believe business is relaxing from the tremendous nervous strain it has been under for the past two years. We are putting our house in order to prepare for business on a peace basis. We are going to have business and have it abundantly. The brains and wealth of the country cannot stand idle. We are built in this country.

"The serious problem before us today is the housing proposition. The solution of it is more buildings, and we are going to build. Supply and demand is the panacea which is going to light the discussion today of cheap labor, cheap material and the unemployed. Money lenders are eager to lend money on safe and sound investments.

"When we start in, it will be gradual, and develop as we proceed. I view in the months before us good business. And why not? We have the great need, the brains and the desire to go forward. We are all eager to get started. We have the money and our money-lending institutions are eager to get their money working. I view with alarm what may happen when we do start, owing to the diminished stocks on hand. It will be doubtful if the demand can promptly be supplied.

William M. Beebe, manager of the Long-Bell Lumber Company, St. Louis:

"It is evident that concerns that loan money on residences and flats in the city and prospective builders do not understand the underlying principles that are causing building material to maintain a very strong market, and even advance, when all other commodities show a decline from week to week.

"The reason for this is that building has been practically stopped for nearly two years. In the meantime lumber was in great demand for cantonments, so that it was almost impossible to produce enough lumber to keep pace with the demand. The stocks in the hands of manufacturers are not over 60 per cent of normal. A high level of lumber values will be maintained for two or three years.

"I predict that as soon as these conditions are thoroughly understood by prospective builders and concerns that loan money on new buildings, the building boom will start and will be the greatest ever known."

* * *

From Charles Hill, general manager, Southern Pine Sales Corporation, New York City:

"A satisfactory thing to do is to establish a banking arrangement for building purposes on the lines of the Federal Farm Loan Banks. I do not think that borrowers or lenders can expect to do business under present conditions on old methods. Possibly some arrangement could be made of the suggestion to the effect that loans made for buildings at the present time should be amortized to the extent of about 25 per cent within three years, which would protect the loaning institution on any fall in value, and as the builder will during the next three years receive high rentals, perhaps something can be done along this line.

"The manufacturing industry is perhaps in a rather unfortunate situation. There is a public demand for lower prices on basic materials. Unfortunately, the lumber manufacturing industry is not in a position to meet these demands."

A further large number of opinions which, unfortunately, space does not permit of presentation in this symposium, are along lines as set forth in the above communications. The necessity for an immediate resumption of building operations has never been more clearly demonstrated, nor the methods of financing more accurately set forth.

The Post-War Committee

Every architect should support the work of this committee. It is not one of the Institute alone, but representative of the entire profession in this country.

Send your suggestions promptly to the Committee at the Octagon, Washington, D. C.

A Circular of Advice

[The following amendments, eliminations and additions to the Circular of Advice and Code of Ethics of The American Institute of Architects are proposed by Henry K. Holsman, secretary of the Illinois Chapter of the Institute and Chairman of a Joint Committee on Reconstruction of the Illinois Chapter and The Illinois State Society of Architects.

The provisions as now constituted are printed in the left hand column with the new wording as proposed on the right. In the opening paragraphs, the italics indicate changes from the original reading.]

THE AMERICAN INSTITUTE OF ARCHITECTS, seeking to maintain a high standard of practice and conduct on the part of its members as a safeguard of the important financial, technical and aesthetic interests entrusted to them, offers the following advice relative to professional practice:

The profession of architecture *co-ordinates inventive, aesthetic, and mechanical design, specifications and execution in the creation of buildings*, and calls for men of the highest integrity, business capacity, *mechanical judgment* and artistic ability. The architect is entrusted with financial undertakings in which his honesty of purpose must be above suspicion; he acts as professional adviser to his client and his advice must be absolutely disinterested; he is charged with the exercise of judicial functions as between client and contractors and must act with entire impartiality; he has moral responsibilities to his professional associates and subordinates; finally, he is engaged in a profession which carries with it grave responsibility to the public. These duties and responsibilities cannot be properly discharged unless his motives, conduct, and ability are such as to command respect and confidence.

No set of rules can be framed which will particularize all the duties of the architect in his various relations to his clients, to contractors, to his professional brethren, and to the public. The following principles should, however, govern the conduct of members of the profession and should serve as a guide in circumstances other than those enumerated.

1. On the Architect's Status.

The architect's relation to his client is primarily that of professional adviser; this relation continues throughout the entire course of his service. When, however, a contract has been executed between his client and a contractor by the terms of which the architect becomes the official interpreter of its conditions and the judge of its performance, an additional relation is created under which it is incumbent upon the architect to side neither with client nor contractor, but to use his powers under the contract to enforce its faithful performance by both parties. The fact that the architect's payment comes from the client does not invalidate his obligation to act with impartiality to both parties.

The architect's relation to his client is primarily that of professional adviser; this relation continues throughout the entire course of his service. He may also execute the work he plans, as a builder, on a fixed or percentage fee basis, in lieu of a contractor, but not as a contractor on a lump-sum basis. When, however, a contract has been executed between his client and a contractor by the terms of which the architect becomes the official interpreter of its conditions and the judge of its performance, an additional relation is created under which it is incumbent upon the architect to side neither with client nor contractor, but to use his powers under the contract to enforce its faithful performance by both parties. The fact that the architect's payment comes from the client does not invalidate his obligation to act with impartiality to both parties.

2. On Preliminary Drawings and Estimates.

The architect at the outset should impress upon the client the importance of sufficient time for the preparation of drawings and specifications. It is the duty of the architect to make or se-

The architect at the outset should impress upon the client the importance of sufficient time for the preparation of drawings and specifications. It is the duty of the architect to make or

cure preliminary estimates when requested, but he should acquaint the client with their conditional character and inform him that complete and final figures can be had only from complete and final drawings and specifications. If an unconditional limit of cost be imposed before such drawings are made and estimated, the architect must be free to make such adjustments as seem to him necessary. The architect should assume no responsibility that may prevent him from giving his client disinterested advice; he should not, by bond or otherwise, guarantee any estimate or contract.

secure preliminary estimates when requested, but he should acquaint the client with their conditional character and inform him that complete and final figures can be had only from complete and final drawings and specifications. If an unconditional limit of cost be imposed before such drawings are made and estimated, the architect must be free to make such adjustments as seem to him necessary. The architect should assume no responsibility that may prevent him from giving his client disinterested advice.

3. On Superintendence and Expert Services.

On all work except the simplest, it is to the interest of the owner to employ a superintendent or clerk of the work. In many engineering problems and in certain specialized aesthetic problems, it is to his interest to have the services of special experts, and the architect should so inform him. The experience and special knowledge of the architect make it to the advantage of the owner that these persons, although paid by the owner, should be selected by the architect under whose direction they are to work.

On all work except the simplest, it is to the interest of the owner that the architect should take entire charge of the execution of the work, employ a superintendent or clerk of the works, and in many engineering problems and in certain specialized aesthetic problems, engage the services of special experts.

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4. On the Architect's Charges.

The Schedule of Charges of the American Institute of Architects is recognized as a proper minimum of payment. The locality or the nature of the work, the quality of services to be rendered, the skill of the practitioner or other circumstances frequently justify a higher charge than that indicated by the Schedule.

The Schedule of Charges of the American Institute of Architects is recognized as a proper minimum of payment for architectural services, without executive services as a builder. Circumstances frequently justify a higher charge than that indicated by the Schedule. The architect should fix for himself a scale of charges commensurate with his skill and ability and in accordance with the nature of the work and quality and quantity of service to be rendered and never cut his fee to secure work by competitive bidding against a fellow architect.

5. On Payment for Expert Service.

The architect, when retained as an expert, whether in connection with competitions or otherwise, should receive a compensation proportionate to the responsibility and difficulty of the service. No duty of the architect is more exacting than such service, and the honor of the profession is involved in it. Under no circumstances should experts knowingly name prices in competition with each other.

The architect, when retained as an expert, whether in connection with competitions or otherwise, should receive a compensation proportionate to the responsibility and difficulty of the service. No duty of the architect is more exacting than such service, and the honor of the profession is involved in it.

6. On Selection of Bidders or Contractors.

The architect should advise the client in the selection of bidders and in the award of the contract. In advising that none but trustworthy bidders be invited and that the award be made only to contractors who are reliable and competent, the architect protects the interests of his client.

The architect should advise the client that none but trustworthy bidders be invited and that the award be made only to contractors who are reliable and competent.

7. On Duties to the Contractor.

As the architect decides whether or not the intent of his plans and specifications is properly carried out, he should take special care to see that these drawings and specifications are complete and accurate, and he should never call upon the contractor to make good oversights or errors in them nor attempt to shirk responsibility by indefinite clauses in the contract or specifications.

As the architect decides whether or not his plans and specifications are properly carried out, he should take special care to see that these drawings and specifications are complete, clear and accurate, and he should never attempt to shirk responsibility by inadequate drawings or indefinite clauses in the contract or specifications.

8. On Engaging in the Building Trades.

The architect should not directly or indirectly engage in any of the building trades. If he has any financial interest in any building material or device, he should

The architect should not engage in any of the building, decorating or furnishing trades except for the execution of his own designs on a fixed or percent-

not specify or use it without the knowledge and approval of his client.

age fee. If he has any financial interest in any building material or device, he should not specify or use it without the knowledge and approval of his client.

9. On Accepting Commissions or Favors.

The architect should not receive any commission or any substantial service from a contractor or from any interested person other than his client.

The architect should not receive any commission or any substantial service or payment from a contractor or from any interested person other than a fee from his client.

10. On Encouraging Good Workmanship.

The large powers with which the architect is invested should be used with judgment. While he must condemn bad work, he should commend good work. Intelligent initiative on the part of craftsmen and workmen should be recognized and encouraged and the architect should make evident his appreciation of the dignity of the artisan's function.

The large powers with which the architect is invested should be used with judgment. While he must condemn bad work, he should commend good work. Intelligent initiative on the part of craftsmen and workmen should be recognized and encouraged and the architect should make evident the services supplied by other experts and his appreciation of the dignity of the artisan's function.

11. On Offering Services Gratuitously.

The seeking out of a possible client and the offering to him of professional services on approval and without compensation, unless warranted by personal or previous business relations, tends to lower the dignity and standing of the profession, and is to be condemned.

The offering to a possible client of professional services on approval and without compensation tends to lower the dignity and standing of the profession, and is unethical and unbusinesslike.

12. On Advertising.

Advertising tends to lower the dignity of the profession and is therefore condemned.

Injudicious, laudatory or extravagant advertising tends to lower the dignity of the profession and is unethical.

13. On Signing Buildings and Use of Titles.

The display of the architect's name upon a building under construction is condemned, but the unobtrusive signature of buildings after completion has the approval of the Institute. The use of initials designating membership in the Institute is proper in connection with any professional service and is to be encouraged as helping to make known the nature of the honor they imply.

Placing the name of the architect and his expert assistants upon a building under construction and the signature of buildings after completion, if done in an unobtrusive manner, are commendable means of advertising. The use of initials designating membership in the Institute is proper in connection with the architect's name and is to be encouraged as helping to make known the nature of the honor they imply.

14. On Competitions.

An architect should not take part in a competition as a competitor or juror unless the competition is to be conducted according to the

A formal competition is one in which two or more architects knowingly submit special designs for the solution of the same problem

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best practice and usage of the profession, as evidenced by its having received the approval of the Institute, nor should he continue to act as professional adviser after it has been determined that the program cannot be so drawn as to receive such approval. When an architect has been authorized to submit sketches for a given project, no other architect should submit sketches for it until the owner has taken definite action on the first sketches, since, as far as the second architect is concerned, a competition is thus established. Except as an authorized competitor, an architect may not attempt to secure work for which a competition has been instituted. He may not attempt to influence the award in a competition in which he has submitted drawings. He may not accept the commission to do the work for which a competition has been instituted if he has acted in an advisory capacity either in drawing the program or in making the award.

15. On Undertaking the Work of Others.

An architect should not undertake a commission while the claim for compensation or damages, or both, of an architect previously employed and whose employment has been terminated, remains unsatisfied, unless such claim has been referred to arbitration or issue has been joined at law; or unless the architect previously employed neglects to press his claim legally; nor should he attempt to supplant a fellow architect after definite steps have been taken toward his employment.

16. On Injuring Others.

An architect should not falsely or maliciously injure, directly or indirectly, the professional reputation, prospects or business of a fellow architect.

without adequate compensation for the work involved and service rendered. An architect should not take part in a formal competition as a competitor or juror unless the competition is to be conducted according to the best practice and usage of the profession, as evidenced by its having received the approval of the Institute, nor should he continue to act as professional adviser after it has been determined that the program cannot be so drawn as to receive such approval. An architect should not attempt to secure work for which a competition has been instituted, in any manner except by the terms of the competition and as an authorized competitor. He should not attempt to influence the award in a competition in which he has submitted drawings. He should not accept the commission to do the work for which a competition has been instituted if he has acted in an advisory capacity either in drawing the program or in making the award.

An architect should not accept nor attempt to secure a commission while the service of an architect previously employed has not been legally terminated, nor should he attempt to supplant a fellow architect after definite steps have been taken toward his employment.

An architect should not falsely or maliciously attempt to injure, directly or indirectly, the professional reputation, prospects or business of a fellow architect, or other person. The architect should be free to ask and be prepared at all times freely to give, friendly and constructive advice and criticism to a fellow architect on work in progress, to the end that every building erected may be the best possible.

17. On Duties to Students and Draughtsmen.

The architect should advise and assist those who intend making architecture their career. If the beginner must get his training solely in the office of an architect, the latter should assist him to the best of his ability by instruction and advice. An architect should urge his draughtsmen to avail themselves of educational opportunities. He should, as far as practicable, give encouragement to all worthy agencies and institutions for architectural education. While a thorough technical preparation is essential for the practice of architecture, architects cannot too strongly insist that it should rest upon a broad foundation of general culture.

18. On Duties to the Public and to Building Authorities.

An architect should be mindful of the public welfare and should participate in those movements for public betterment in which his special training and experience qualify him to act. He should not, even under his client's instructions, engage in or encourage any practices contrary to law or hostile to the public interest, for as he is not obliged to accept a given piece of work, he cannot, by urging that he has but followed his client's instructions, escape the condemnation attaching to his acts. An architect should support all public officials who have charge of building in the rightful performance of their legal duties. He should carefully comply with all building laws and regulations, and if any such appear to him unwise or unfair, he should endeavor to have them altered.

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An architect should be mindful of the public welfare and should participate in those movements for public betterment in which his special training and experience qualify him to act. He should not, even under his client's instructions, or the risk of being discharged, engage in or encourage any practices contrary to law or hostile to the public interest. An architect should support all public officials who have charge of building in the rightful performance of their legal duties. He should carefully comply with all building laws and regulations, and if any such appear to him unwise or unfair, he should endeavor to have them altered.

19. On Professional Qualifications.

The public has the right to expect that he who bears the title of architect has the knowledge and ability needed for the proper invention, illustration, and supervision of all building operations which he may undertake. Such qualifications alone justify the assumption of the title of architect.

The public has a right to expect that he who bears the title of architect has the knowledge and ability needed for the proper invention, illustration, supervision and co-ordination of all expert and trade services and the execution of all building commissions he may undertake. Such qualifications alone justify the assumption of the title of architect.

The Canons of Ethics

The following Canons are adopted by the American Institute of Architects as a general guide, yet the enumeration of particular duties should not be construed as a denial of the existence of others equally important although not specially mentioned. It should also be noted that the several sections indicate offenses of greatly varying degrees of gravity.

It is unprofessional for an architect—

1. To engage directly or indirectly in any of the building trades.

2. To guarantee an estimate or contract by bond or otherwise.

3. To accept any commission or substantial service from a contractor or from any interested party other than the owner.

4. To advertise.

5. To take part in any competition which has not received the approval of the Institute or to continue to act as professional adviser after it has been determined that the program cannot be so drawn as to receive such approval.

6. To attempt in any way, except as a duly authorized competitor, to secure work for which a competition is in progress.

The following Canons are adopted by the American Institute of Architects as a general guide, and the violation of any of them by a member of the American Institute of Architects or by an associate member or member of any chapter of the American Institute of Architects subjects him to liability of discipline or discharge from the Institute and chapter.

It is unprofessional for an architect—

1. To engage directly or indirectly in any of the building or decorative trades, except for the execution of his own designs for a fixed or percentage fee.

2. To accept any commission or substantial service from a contractor or from any interested party other than the owner.

3. To take part in any formal competition which has not received the approval of the Institute or to continue to act as professional adviser after it has been determined that the program cannot be so drawn as to receive such approval.

4. To attempt in any way, except as a duly authorized competitor, to secure work for which a formal, approved competition is in progress.

7. To attempt to influence, either directly or indirectly, the award of a competition in which he is a competitor.

8. To accept the commission to do the work for which a competition has been instituted if he has acted in an advisory capacity, either in drawing the program or in making the award.

9. To injure falsely or maliciously, directly or indirectly, the professional reputation, prospects or business of a fellow architect.

10. To undertake a commission while the claim for compensation, or damages, or both, of an architect previously employed and whose employment has been terminated, remains unsatisfied, until such claim had been referred to arbitration or issue has been joined at law, or unless the architect previously employed neglects to press his claim legally.

11. To attempt to supplant a fellow architect after definite steps have been taken toward his employment, *e.g.*, by submitting sketches for a project for which another architect has been authorized to submit sketches.

12. To compete knowingly with a fellow architect for employment on the basis of professional charges.

Adopted December 14-16, 1909.

Revised December 10-12, 1912.

5. To attempt to influence, either directly or indirectly, the award of a competition in which he is a competitor.

6. To accept the commission to do the work for which a formal competition has been instituted if he has acted in an advisory capacity, either in drawing the program or in making the award.

7. To injure falsely or maliciously, directly or indirectly, the professional reputation, prospects or business of a fellow architect.

8. To undertake a commission while the service of an architect previously employed has not been legally terminated.

9. To attempt to supplant a fellow architect after definite steps have been taken toward his employment.

10. To compete with a fellow architect for employment by cutting established fees for professional services.

Comments on a Proposed Revision of a Circular of Advice and Code of Ethics

By HENRY K. HOLSMAN

(a) The Circular of Advice is intended to advise both the architects and the public. The italicized definitive terms are inserted in the preamble to indicate that the architect is and should be responsible for the invention and business-like execution of not only the aesthetic elements but of all the varied mechanical and sociological elements of a building design.

(b) The added sentence in Article 1 advises how an architect may keep in close touch and control of his work without usurping the legitimate field of the general contractor. So long as he builds for a known fee, not for an unknown profit, he acts in a professional and proper ad-

visory capacity and holds his rightful power of execution for the benefit of the building and the client.

(c) The last clause is omitted from Article 2 because the architect in his business capacity and knowledge of the perfection of his drawings and specifications should be able to give his client at some stage in the progress of his work a responsible guarantee of the cost. Not to be able to do so propagates a disastrous lack of confidence in the architect's business and executive ability and this provision invites the incompetent and ill-equipped architect into practice which only a competent architect should undertake.

(d) The present form of Article 3 invites the owner to

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suspect that if his architect is not competent to handle certain vital engineering and aesthetic problems and not willing to be responsible for the payment of the necessary expert advice, he is not competent to select an expert for the owner to pay. It is better for both parties if the architect selects and pays for such assistance and charges the owner according to necessities and thus avoids a division of responsibility for the finished whole.

(e) Three alterations are suggested in Article 4. The Institute schedule of 6 per cent is probably proper for competent, experienced architects, but to imply that the incompetent and inexperienced may properly make the same charge as the gifted and well-equipped destroys confidence in the value of the entire profession.

When an architect is equipped to execute his design in detail without the intervention of another builder or general contractor he should charge for expert services rendered.

That each architect should fix his charges according to the services he can render and stick to his schedule is only good ethical and business device.

(f) The last clause of Article 5 is transferred to the last clause of Article 4 for the sake of better classification, and the revisions of Articles 6, 7, 17 and 18 are only for the sake of brevity and clarity.

(g) Article 8 is misleading. Many interpret this to mean that an architect should not buy materials or labor for his client, even on a known fee basis. The American Institute of Architects is on record in favor of the architect dealing directly with the several trades, without restricting the degree of subdividing the work. Some architects, and the public, have come to believe that the architect may only make the pictures and leave the general contractor to be known as the builder, even when he only sublets the work to the several trades, just as the architect might have done with much more grace and with much benefit to himself, the builder and his client. This function of the truly competent architect should be emphasized and encouraged.

(h) If the architect would give his expert advisers and assistants due credit for their work, as suggested in Article 10, he would have less trouble with the engineers and secure better service and more interest in his work from the allied arts and professions.

(i) The tone of Article 2 is altered. Surely the "seeking out of a possible client" is not "condemned." Offering services on approval and without compensation may not be unethical, but is certainly not good business. If it is not good in case of a possible new client, how can it be justified by "personal or previous business relations?" In fact, the practice seems to be that the friend is charged for sketches and the prospect gets plenty of worthless ones free. Moreover, in a "Circular of Advice," who "condemns?"

(j) Article 12 is revised to suggest that not all forms of advertising are ill-advised. If so, how does it happen that we all know so much about the works of a few illustrious and estimable architects?

(k) The suggested revision of Article 13 is to indicate that the Institute should advise what is good advertising. It is imperative that the architect should in some manner let the public know what he can do. This is but common justice to both parties. If the architect permits the public to get the impression that only the builder or the engineer has any responsible connection with the erection of a building, it will not occur to the public to go to the architect even when most in need of his services.

(l) Much confusion and trouble has arisen over Article 14 on "Competition." The Institute enjoins its members from taking part in competitions, except under certain conditions, in the first sentence, and in the second sentence gives a definition of "competition" that is wholly absurd and im-

possible of observance, thus nullifying the whole matter. The suggested definition is necessarily broad. It will be objected that the word "knowingly" leaves a loophole, but it is necessary; for a man cannot be censured formally or informally for not knowing what some other fellow has done. Competition in a real and ethical sense is essential to our economical welfare. So long as two or more architects are paid what is just for their labor in submitting sketches for the same project, it is wholesome for the profession and the public and should not be called a prohibitive "competition." Only those competitions wherein the services called for are not paid for should there be regulation and safeguards provided for the protection of the competitor and the owner.

(m) Much trouble has come to architects and much injustice has been done to owners on account of the complicated proscription on the ethical method of discharging an incompetent and securing a competent architect as set forth in Article 15. The first two clauses of this article have the effect of giving the unethical architect the advantage of the so-called "ethics" of the situation to the great disadvantage of the ethical successor and the injured owner.

(n) Article 16 might properly be omitted as being well-known common law and ethics. If it be deemed necessary to give advice on this subject the corollary suggested in a second sentence would seem to be germane and sometimes practical advice.

(o) In Article 19 the sense of executive ability should be added to the definite classifications intended to describe a thoroughly equipped architect.

(p) The Code of Ethics is intended to be a compilation of definite laws by which every member of the American Institute of Architects agrees to be governed under penalty of discipline or discharge for infractions thereof. The suggestion that there are other items "equally important," and the implication that one may be punished for the infraction of an "equally important" unexpressed code is quite untenable, either in law or ethics. Moreover, associate chapter members are subject to the same discipline, and this should be stated as in the revision suggested as indicating how important the canons are held to be.

Article 1 is revised to clear the existing status of the architect as a builder, as set forth under paragraphs a, b and g.

Article 2 should be omitted if the argument in paragraph c is valid and the architect may at all assume and charge for executive building responsibility.

Article 4 has already been stricken from the code.

In Article 5 the word "formal" is inserted to comply with the revised Article 14 of the Circular of Advice as set forth in paragraph l.

Article 10 is revised to clear up the troubles indicated in paragraph m.

Article 11 is impractical as an enforceable canon. It deals with the business prerogatives of the architect. No business man can reasonably be expected to know whether "definite steps have been taken" by his prospective customer toward the employment of another. The example is superfluous and has to do with competitions, which is even more untenable.

In Article 12 the word "knowingly" nullifies the code. Moreover, a young architect, for example, has the right to compete with a fellow architect "on the basis of charges," whether he knows what the older architect charges or not, which of course in practice he cannot know, and the owner has the right to pay in proportion to the value of services he may expect to get. Architects are not of equal ability. This article of the code is wholly adverse to ethical business principles and subversive of progress in architecture.

The Wentworth-Gardner House Portsmouth, N. H.

TO the man hurried and overworked in his machine-made surroundings, buried in a mass of tyrannical efficiency, few things contribute more to a reposeful and steadying reaction than the quiet study of a Colonial house.

That the City of New York presents abundant opportunity for such study is to be expected, and the appreciation with which visitors avail themselves thereof is manifested by the esteem in which old landmarks are preserved and the solicitous interest with which they are regarded. Fraunces Tavern, Jumel Mansion, the Van Cortlandt Manor House, the New York Historical Society's build-



THE WENTWORTH-GARDNER HOUSE, PORTSMOUTH, NEW HAMPSHIRE

ings, these are but a few of the places where one may thrill to the charm and beauty of old times, where one may trace in each detail the gradual changes which time has wrought since our fathers fought for freedom.

The Metropolitan Museum of Art, always in the front lines of progress toward the attainment of the proper admixture of art and utility, has recently purchased in toto the furnishings of a Colonial dwelling for installation at the Museum in its original state and in its original arrangement. This is the Wentworth-Gardner House erected in 1761 at Portsmouth, New Hampshire. It is obviously desirable that this property should be in the possession of a public institution where the skill of the eighteenth century craftsman may be preserved as

an inspiration to his descendants of the present day.

The house is built on a rectangular plan similar in the two main floors and follows the usual two-chimney type. It is divided symmetrically by the hallway upon which open the doors of the four rooms on each floor. The house faces the water, and in its original estate a large garden was laid out in the rear. The wooden exterior is typical of its period, well proportioned and symmetrical.

The chief interest centers in the interior. The front door opens directly into the entrance hallway, which is marked off from the stair hall by an elliptical arch spanning its width and growing out of a group of three fluted Doric pilasters at each end. A wainscot 38 inches high appears in both entrance and stair hall, where it follows up to the second floor. The great panel along the first flight of stairs is of a single piece of wood.

The stairway is of unusual excellence of design. The spindles of the rail are of three types, three to the tread, and take in succession the form of a thin Doric colonnette, a spirally turned column and a graceful gourd-shaped baluster. The newel post is in design a composite of these spindles. The hand-rail is broad and heavy.

In the eight rooms of the first and second floors the conspicuous feature is the fireplace walls which are panelled in wood from floor to ceiling. The upper hall is also panelled from top to bottom. The wall is separated into corresponding bays on either side by fluted Ionic pilaster strips which carry the cornice and coved ceiling. The symmetrically placed doors to the rooms are flanked by pilasters and the space between the two doors on each side is divided into six panels. The rooms present simplicity of design yet amplitude of decoration.

The whole house exemplifies in its plan and decorative treatment the restraint so characteristic of the New England Colonial building. Whatever the decoration may lack in imagination is gained in consistency of scale and motif. Throughout the house, the woodwork, the wall panelling, the stair landings and all the numberless other details are designed to give interest and are executed with considerable skill.

That the Museum has taken steps to make all of this excellent material available for a wider acquaintance with an always interesting phase of architectural development is one instance more of its important function in education and its valuable promotion of better execution in modern craftsmanship.

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The Architectural Improvement of Farm Buildings

THE movement to improve the architectural treatment of farm buildings inaugurated by George W. Maher, president of the Illinois Chapter of the American Institute of Architects, is rapidly growing in favor. There are printed in this issue, on pages 377-379 inclusive, extracts from a few of the large number of communications relating to this important matter which have been received from officers of agricultural colleges and schools. It will be seen that there is an absolute unanimity of opinion as to the necessity for a reform such as Mr. Maher has suggested, and there is general concurrence as to just how the result desired might best be attained.

Probably the least cumbersome and most effective manner would be through commissions appointed by the Governors of the various States. Of course, these commissions, to be effective, would necessarily be absolutely non-political, and their personnel comprised of representative men in banking, real estate, engineering and architectural fields, always including a certain number practically engaged in farming.

To get the matter under way as speedily as possible, and to avoid further loss of time, it would be well if the various agricultural colleges so keenly in sympathy with the movement would promptly consult with the State Chapters of the American Institute of Architects and the State Societies of Architects, and in co-operation bring the whole thing up with the various State governments.

The object to be attained is so very desirable, and its accomplishment something which all of the people would so quickly approve, that the appointment of a commission in one State would undoubtedly be followed by a nation-wide movement.

It will not be necessary to state that THE AMERICAN ARCHITECT will give the most serious support to a movement which so largely contributes to the moral, social and artistic welfare of workers whose industry is the largest in this country.

A Revision of the Circular of Advice

ON another page in this issue there is printed a proposed revision of the Circular of Advice, and the Canon of Ethics of the American Institute of Architects, submitted by Henry K. Holsman, secretary of the Illinois Chapter of the American Institute of Architects and chairman of a joint committee of the Chapter and the Illinois Society of Architects.

This revision has been made with the purpose of clarifying the status of the architect and consistently answering the criticisms that have in the past been aimed at the profession. It is now printed that it may stimulate discussion not only among Institute members but generally throughout the profession.

An expression of opinion on the part of readers of THE AMERICAN ARCHITECT is invited.

Build Now

IF, as has been maintained in these columns, architecture, while first of all an art is none the less a business, it is essential that any publication in the field of architecture should lay before its readers such important matters as vitally effect the executive aspects of practice.

With this belief, THE AMERICAN ARCHITECT has, after a careful inspection of the present conditions affecting building, secured from groups of men of high authority expressions of opinion on this now all-important question. These are presented in this issue.

If, during the progress of the war, it was patriotic to heed the Government's instructions in the matter of building, it is no less patriotic now to uphold the well-directed efforts of the Department of Labor in encouraging as far as may be possible

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a speedy return to normal building conditions. To build now, to set afoot every operation of building that possibly can be undertaken, becomes an actual and a patriotic duty.

The questions of supply and demand of material, the all-important one of labor, are in their solution bound up in the attitude of those who have building needs. To fail to proceed in these matters is only to retard the stabilization of prices of all the elements which go to produce a building.

WITH so large an amount of investment capital temporarily unavailable, it is important that new ways of securing money should be given careful consideration.

Building and real estate development are so closely related to the financial community that any serious setback reacts equally. Those with money to lend will, of course, require exact stability of collateral, and it is probable that the solution of the problem lies in a more general issuance of bonds guaranteed by well-placed mortgages. Investors have in such a method a perfectly safe and lucrative form of investment, and the opportunity at this time is so very favorable for investment capital that we may, perhaps, with confidence find that this will be the speediest and most logical solution to the questions involving building loans.

ALARMISTS who loudly proclaim pessimistic views as to the building outlook, and who counsel postponement of building operations, have somewhat dishonestly claimed that the correctness of their views is shown in what they state is the unwillingness of large insurance corporations to loan money on building projects.

As a matter of fact, any reluctance to finance building on the part of these corporations is not due to any mistrust as to the value of the collateral, but actually to the fact that they are not prepared, owing to shortage of loaning funds, to undertake business they would if they could, gladly accept.

The truth of this statement was very clearly shown by Walter Stabler, comptroller of the Metropolitan Life Insurance Company, in a recent address before the Real Estate Board. Mr. Stabler stated that it was authoritatively known that the drafts on the five largest insurance companies by the various Liberty Loans amounted to \$240,000,000, which, he further adds, equals the amount

these companies have had at their disposal in normal years for investment purposes.

Further, it was pointed out that the deaths during the epidemic of influenza had occasioned a heavy drain on these companies, one of which had been compelled to pay out for this cause alone no less than \$18,000,000.

These facts indicate that the present policy of insurance companies to invest in building loans is actually due to their inability, and not to their disinclination to enter this field of investment.

Definite Specifications

WHILE the concise, definite specification is now generally conceded in principle, "habits are stubborn things," and a specification writer who for years has masked his ignorance or indolence behind general terms, and has attempted to cover up omissions by "grandfather" clauses, experiences some difficulty in preparing an instrument that contains no ambiguities or uncertainties.

Probably the average practitioner does not realize just how susceptible of more than one interpretation his specifications are until they are put to the test. A case in point was that of a leading firm of architects in an Eastern city who recently submitted a set of plans and specifications for a project of some size to a Quantity Surveyor for the purpose of securing an accurate list of required quantities of materials, equipment, etc. Before the Quantity Surveyor could render his report he was obliged to ask for further or more accurate information concerning more than fifty items. This was a revelation to the architects, for it not only demonstrated the value of the survey in furnishing an exact basis for figures sought from building contractors, but it apprised them of the degree of indefiniteness which, without their full realization, had pervaded their specifications.

Perhaps this was an exceptional case, but the suspicion is strong that there are other offices in which conditions are not very different, and where only a test as noted above would convince the members of the firm of the actual situation.

Accepting the theory of the definite specification is only the first step toward the reform that is being made in this branch of architectural practice. Seeing that the theory is put into actual practice by testing the product of the specification department is no less necessary to real accomplishment.

Criticism and Comment

The Practice of Architecture

The Editors, THE AMERICAN ARCHITECT:

We have read your "Practice of Architecture" with interest and we do not see anything very revolutionary in it. Our business policy, in fact, has followed pretty closely the lines as laid down by you. In many cases promoting is not necessary, but we see no reason why it should not enter into the business end of an architectural office. Our office organization takes care of all service—architectural, civil, mechanical, heating and ventilating and lighting engineering. We give service in industrial layouts for manufacturing plants. We always consider our firm responsible for accuracy of plans, etc. We make a condition that superintendence for our building plans must be furnished by our office. We control business affairs as relating to construction of building. We have followed the plan as outlined above for the past fifteen years and find it works satisfactorily.

SMITH, HINCHMAN & GRYLLS.

Detroit.

The Post War Committee

The Editors, THE AMERICAN ARCHITECT:

Will you permit me to make a few comments on the publication in your edition of the 26th of the Program of the Post War Committee on Architectural Practice:

In the first place, I very much regret that the title placed at the head of my article referred to the committee as being "of the American Institute of Architects." To be sure, the committee was appointed by the board of directors of the Institute, but it was definitely instructed to consider itself in all its actions quite free of control by the institute. It was specifically instructed to add to its members from the profession at large, and more than that, it was suggested that the committee might well take in persons who were not architects, but who might contribute valuable aid in the discussion of the problems facing the building world.

The editorial note following the title may lead some of your readers to think that the article had already been published elsewhere. This is not the case. Not only the foreword is entirely different from that prepared by the committee, but the 14 items had been in a great part recast, and put into my own language, besides being supplemented by additional paragraphs. The committee as such is in

no way responsible for the article. It has decided, however, that the draft as published in *THE AMERICAN ARCHITECT* is a considerable step in advance of the original program published in the *Journal of the Institute*, and proposes to use the article published by you as the basis of its final program which is to be sent out in a few weeks.

The committee is unquestionably indebted to the editors of *THE AMERICAN ARCHITECT* for the interest they have shown in this most important move. Your paper can greatly assist this work by opening its columns to the discussion of various points of the program, particularly if your readers will keep clearly in mind that the committee is in no way interested in criticising the practices of the building world. Its sole purpose is to elicit constructive suggestions towards betterments where such are desirable. It merely repeats comments made from time to time by various persons with regard not only to the architectural profession, but to the practice of engineers, builders, contractors, etc. In the course of the next few months we expect to issue supplementary documents which will perhaps be equally provocative of discussion and which will more directly dwell on conditions in other parts of the building world.

ROBERT D. KOHN,

Executive Member Post War Committee
on Architectural Practice.

Waste Due to Building Codes

The Editors, THE AMERICAN ARCHITECT:

Reference is made to the article entitled "The Elimination of Waste Due to Building Codes," in *THE AMERICAN ARCHITECT* of Jan. 22, 1919. This is an excellent article—true right down to the last word. What are we going to do about it? Already my copy, like thousands of others, is laid aside.

The subject is a matter of the first importance. I believe that there should be a national code, just as there are national laws. The terms of this code should be such that they would be applicable to any part of the country. Should any state or municipality consider the national code insufficient to cover their requirements they could adopt a sub-code with additional requirements to meet their individual needs. The sub-codes would conform to the several state laws or municipal ordinances, and not conflict with the requirements of the national code.

As the matter stands, I must first digest the

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Illinois code before I can safely make even a sketch for an Illinois building, and so it is with the other states or cities. Having a national code and a local sub-code, being already familiar with the national code, I only need to glance over the local sub-code.

A commission should be created to establish such a code. This commission should appoint individuals expert in the several branches, each individual to make up a code for his special branch of the work. The commission should then correlate the work of the individuals. The result should be a national code. This could be made a law by Congress, or could be left for the several states to adopt at their option.

It seems to me that the American Institute of Architects should be a proper body to push this through. The men doing the work should be adequately paid for their services so that the work would be well done. I believe that *THE AMERICAN ARCHITECT*, as the foremost architectural publication, should be able to bring about the required action. Possibly the Government could be induced to take up this matter. I trust that something more substantial than the mere spreading on of printer's ink will come of this.

ELMORE R. DUNLAP.

Detroit.

The Art of Planning

The Editors, THE AMERICAN ARCHITECT:

There is bound up in the daily practice of architectural design an art so subtle that few laymen realize its existence, and indeed few architects themselves accord it a position which its importance should demand. Its practice is based upon information of such an exact nature that it might almost claim a place among the sciences as well as among the arts. We refer to the art of planning.

About all we get from the professional magazines bearing upon this most essential department of architectural practice exists in the reproduction of plans without any analysis or comment as to the principles from which they were evolved, or of the data upon which these principles were based.

Your analysis of schoolhouse standards, recently published, we believe is a step in the right direction, but only a step into what may be an inexhaustible field of valuable research. Gaudet is the only author whom we know to have gone into this very thoroughly or satisfactorily, but inasmuch as there has never been, to our knowledge at least, a translation of his work into English, what he has done is presumably beyond the reach of ninety per cent of American practitioners. Even were his work to be translated we doubt if it would have the full value of similar study made from the American viewpoint and under existing conditions. We believe the profession at large would appreciate immensely any effort undertaken in this direction, and we would appreciate at least your consideration as to its wisdom and feasibility.

EDWARDS & SAYWARD.

Atlanta.

A Correction

A correspondent advises that in the announcement published in the February 19th issue of the donation by J. Cleveland Cady of his architectural library to Trinity College at Hartford, Conn., it referred, in error, to Mr. Cady as being the senior member of the firm of Cady & Gregory "of Hartford." Mr. Cady has practiced the profession for nearly fifty years in New York City, with Mr. Gregory associated with him for the past thirty-five years. The firm's offices are at 40 West Thirty-second Street, New York.





PLATE 78

FORD BUILDING, 54TH STREET AND BROADWAY, NEW YORK

ALBERT KAHN, ARCHITECT, ERNEST WILBY, ASSOCIATE

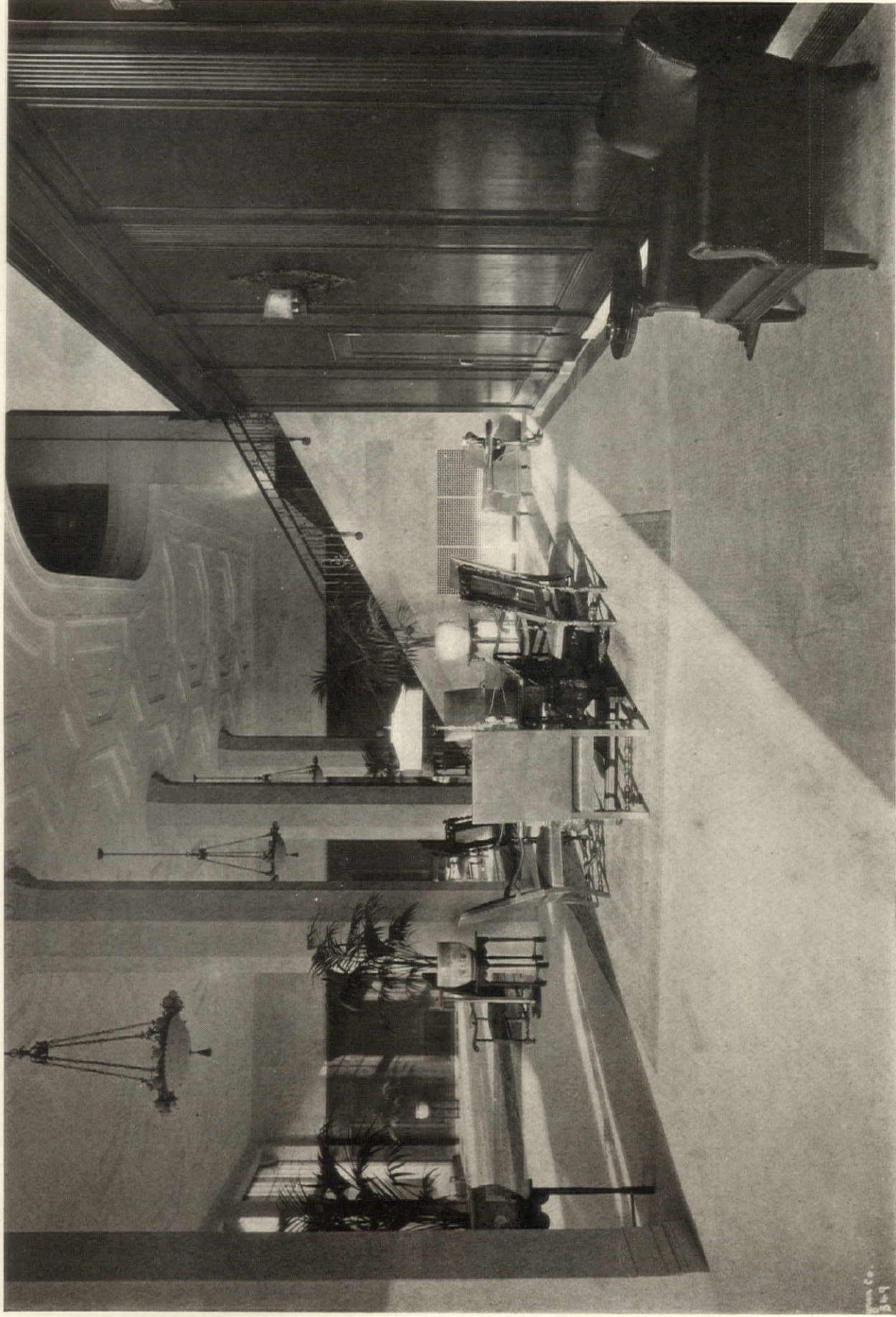
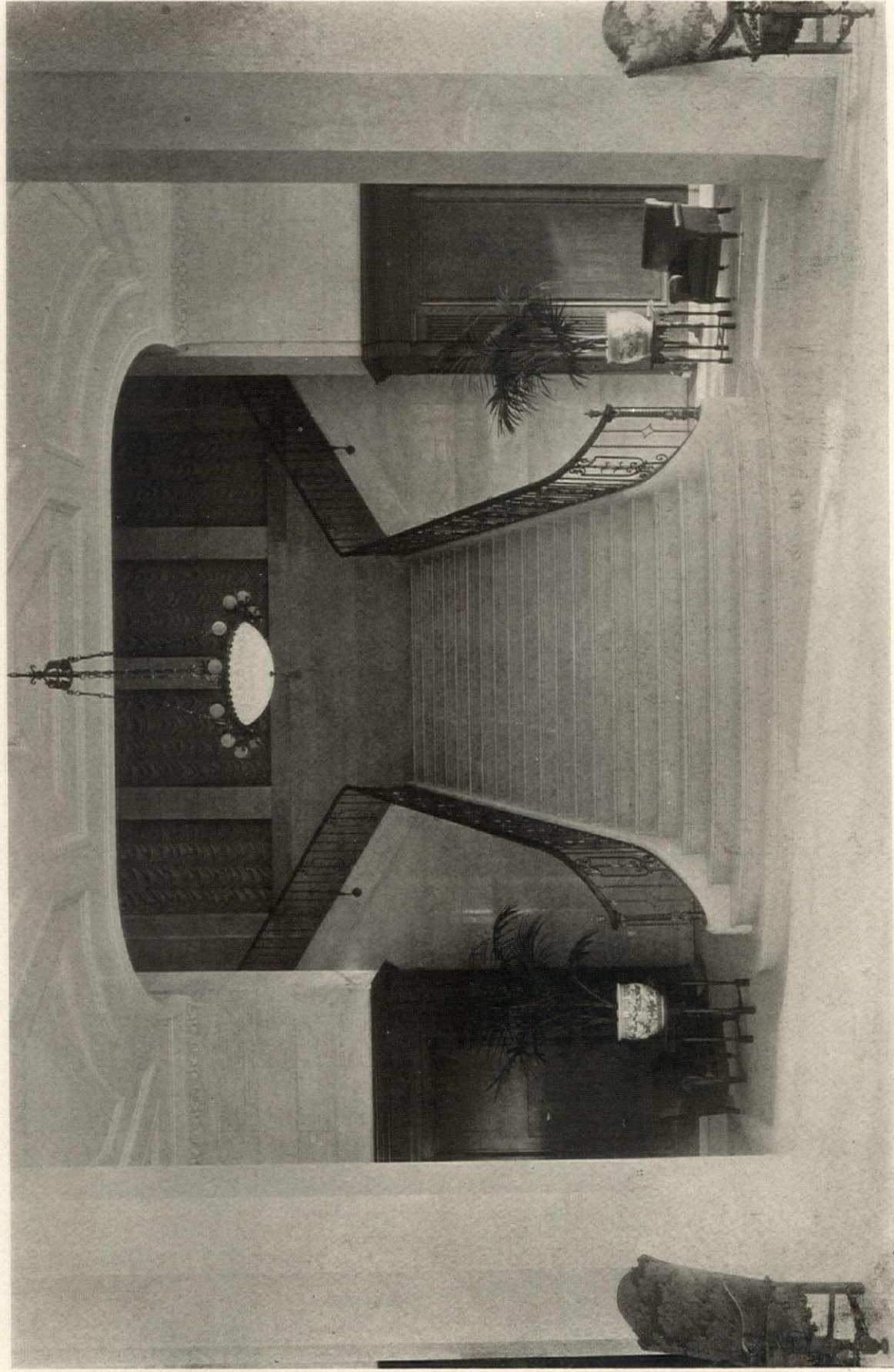


PLATE 79

MAIN SALESROOM

FORD BUILDING, 54TH STREET AND BROADWAY, NEW YORK

ALBERT KAHN, ARCHITECT, ERNEST WILBY, ASSOCIATE



MAIN STAIRWAY

FORD BUILDING, 54TH STREET AND BROADWAY, NEW YORK

ALBERT KAHN, *ARCHITECT*, ERNEST WILBY, *ASSOCIATE*



PLATE 81

FORD BUILDING, 54TH STREET AND BROADWAY, NEW YORK

ALBERT KAHN, ARCHITECT, ERNEST WILBY, ASSOCIATE

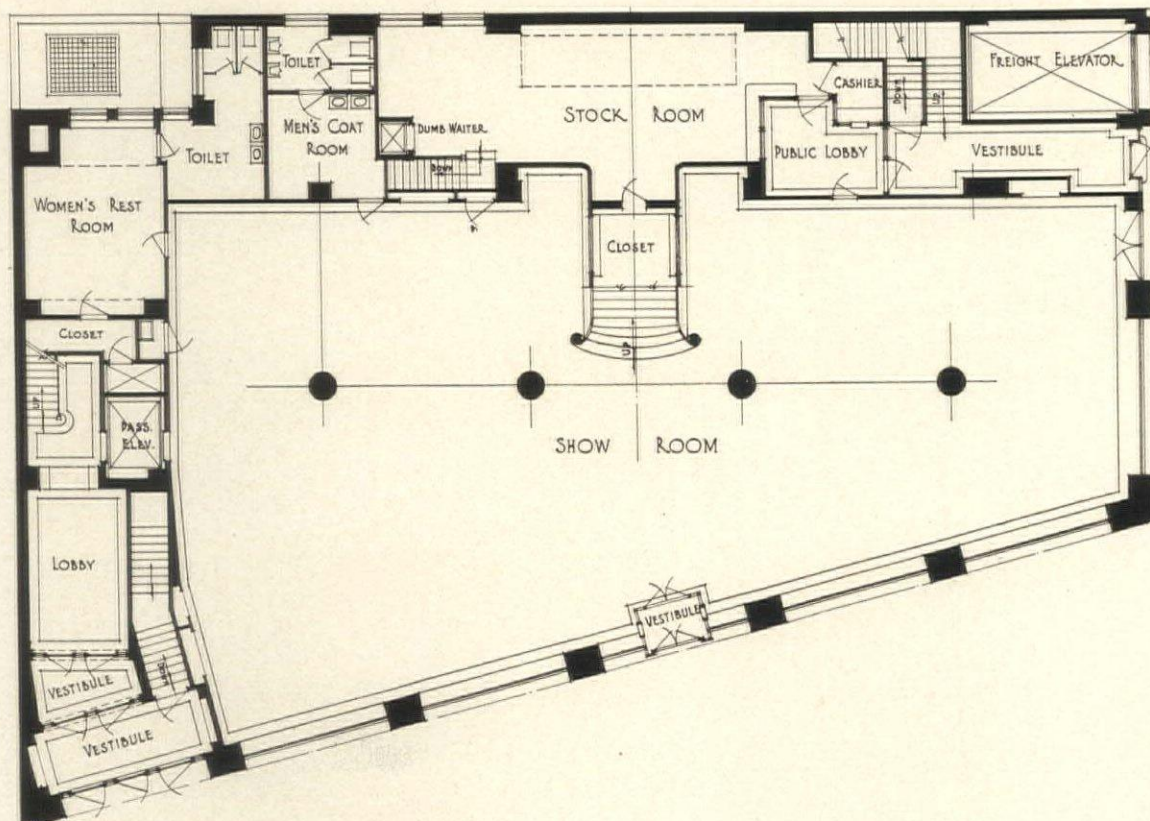
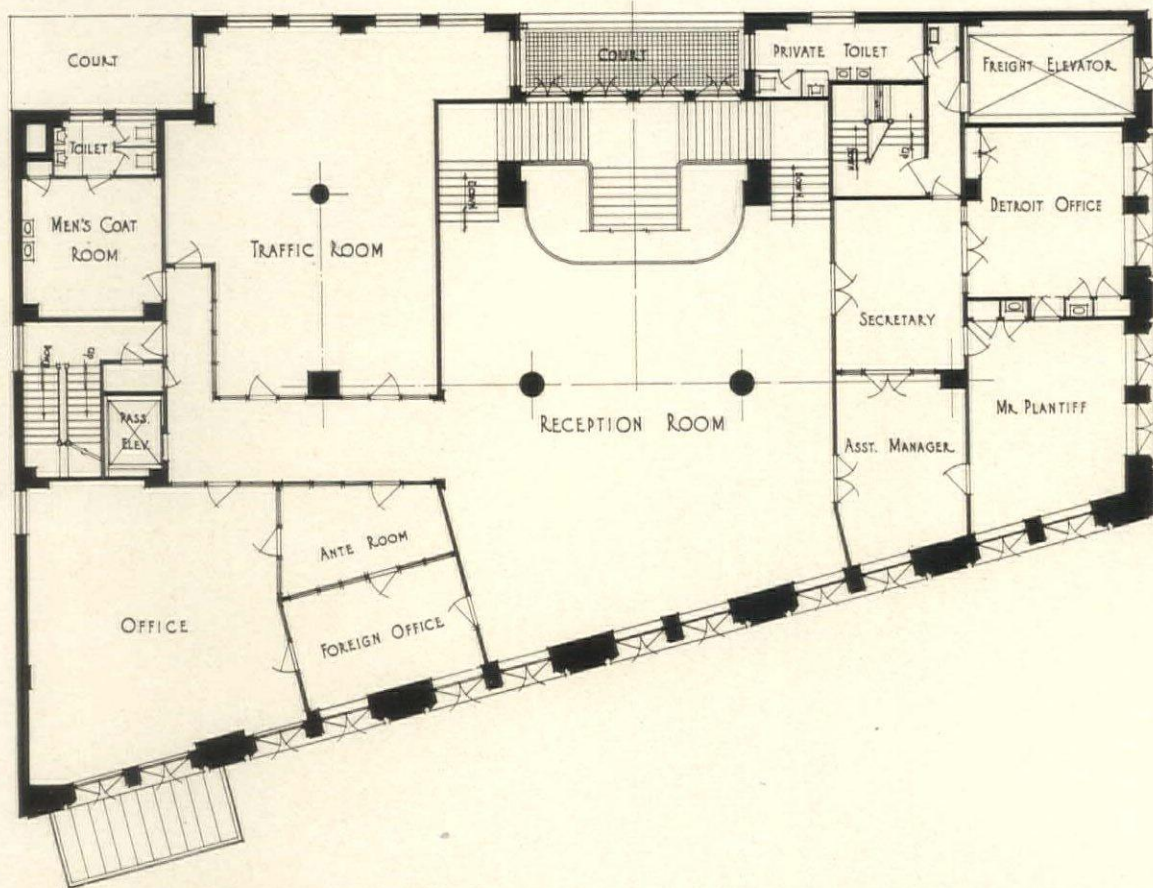


PLATE 82

FORD BUILDING, 54TH STREET AND BROADWAY, NEW YORK

ALBERT KAHN, ARCHITECT, ERNEST WILBY, ASSOCIATE

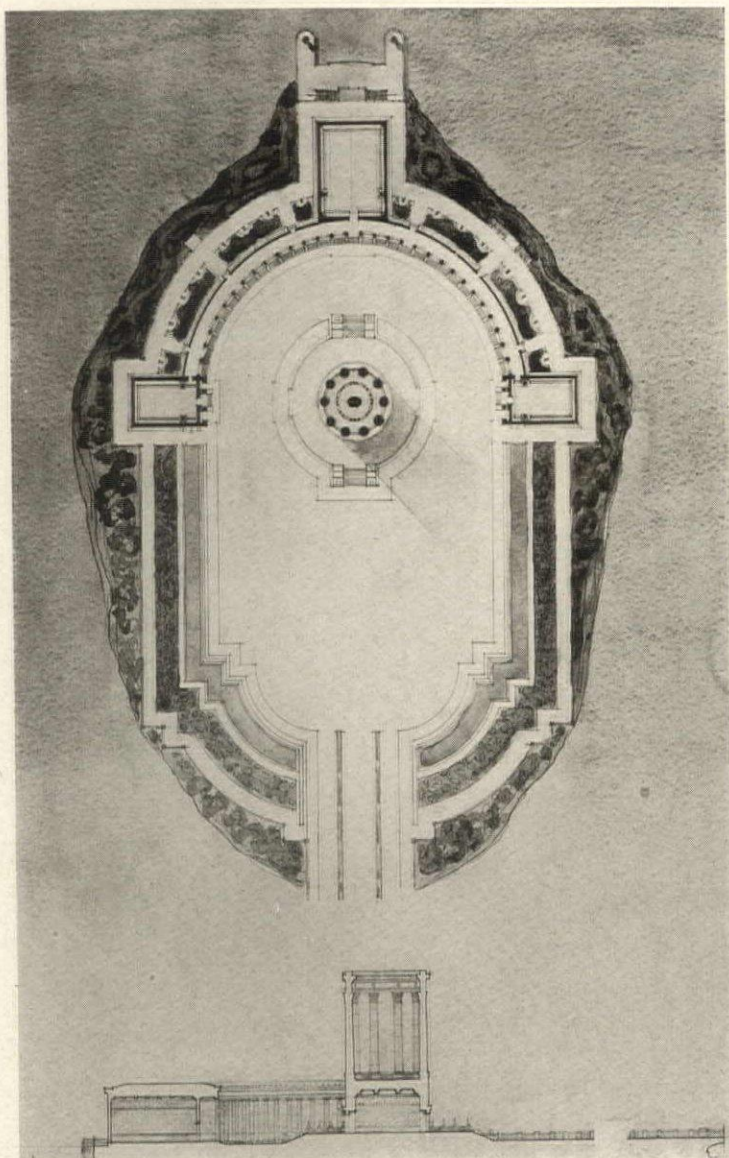


PLATE 83

J. P. ROBERTS, UNIVERSITY OF
PENNSYLVANIA
FIRST PRIZE AND FIRST MEDAL

CLASS A. II. PROJET
SPECIAL BOOK PRIZE
COMPETITION

AN ISLAND OF FREEDOM

STUDENT WORK
BEAUX-ARTS INSTITUTE
OF DESIGN

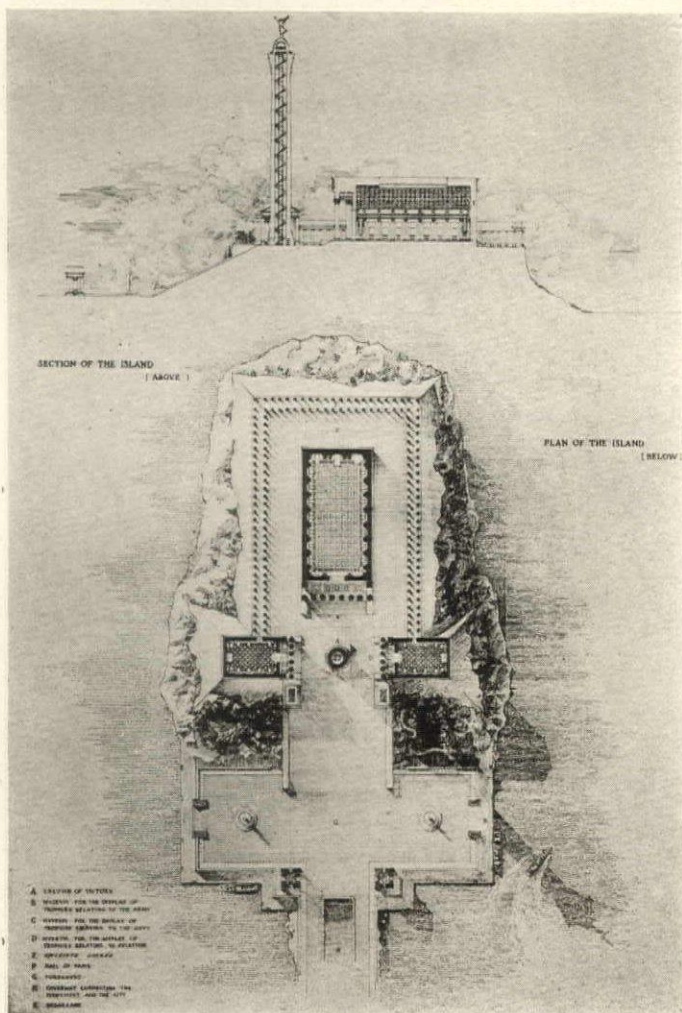
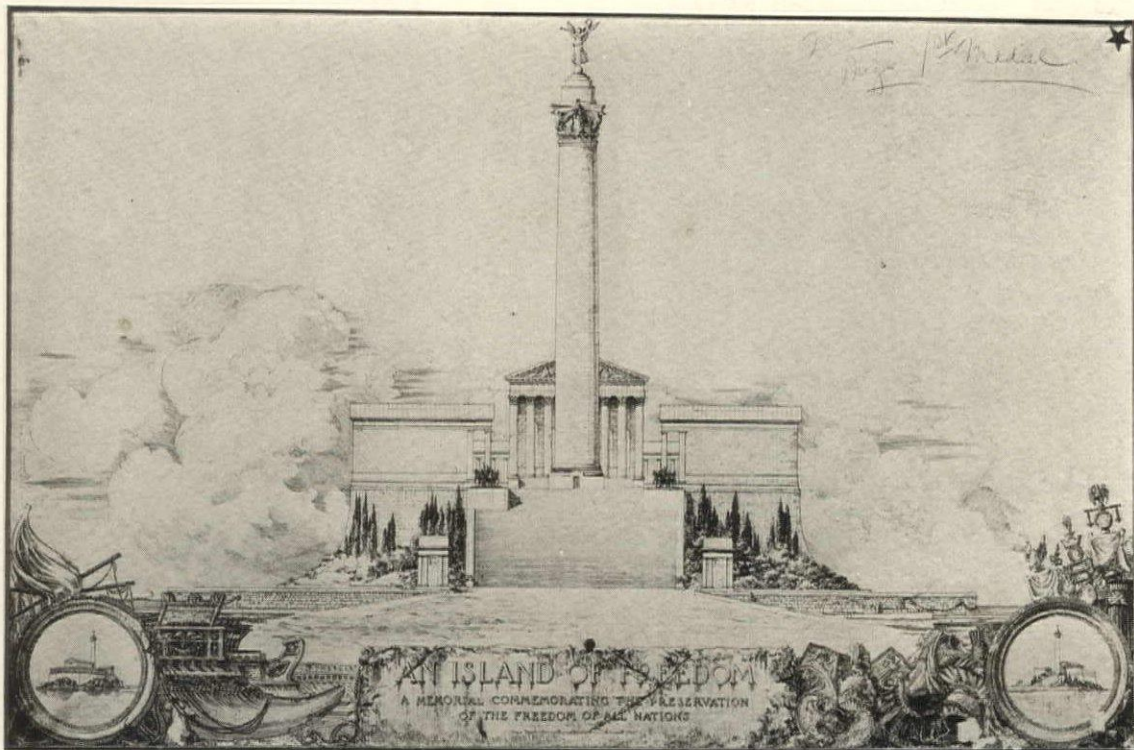


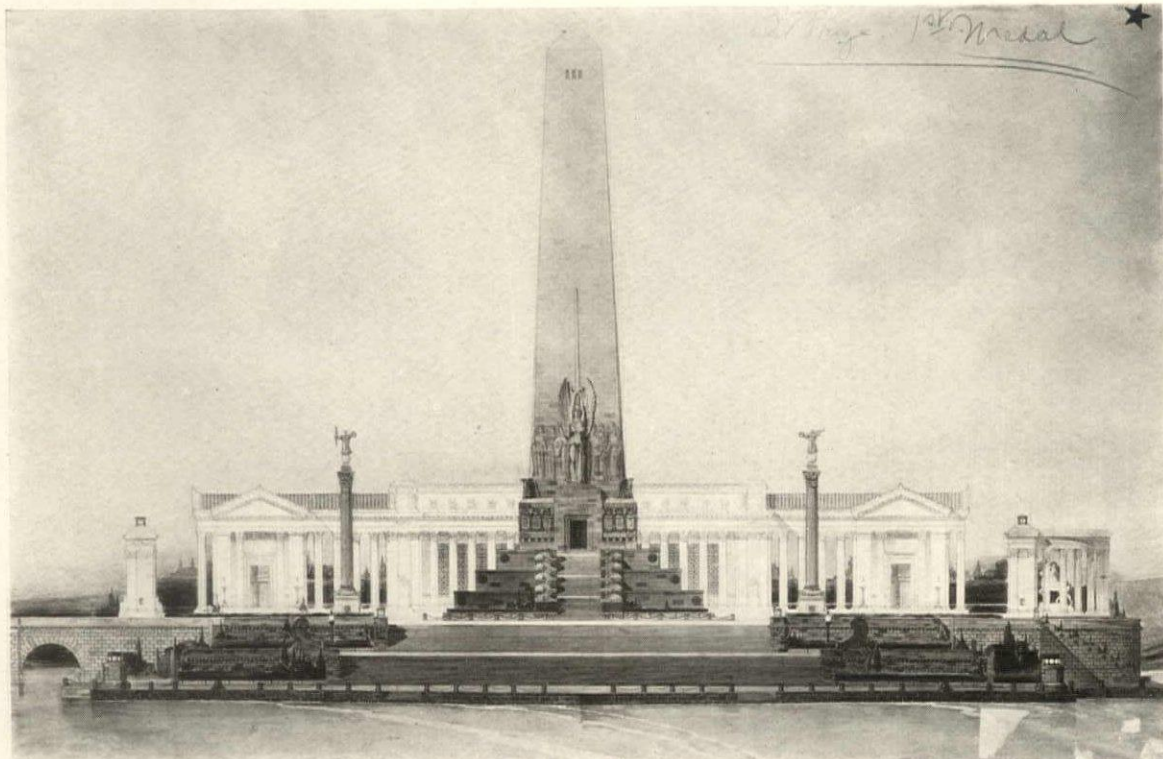
PLATE 84

L. WILLIAMS, COLUMBIA UNIVERSITY
—SECOND PRIZE AND FIRST MEDAL

CLASS A. II. PROJET
SPECIAL BOOK PRIZE
COMPETITION

AN ISLAND OF FREEDOM

STUDENT WORK
BEAUX-ARTS INSTITUTE
OF DESIGN

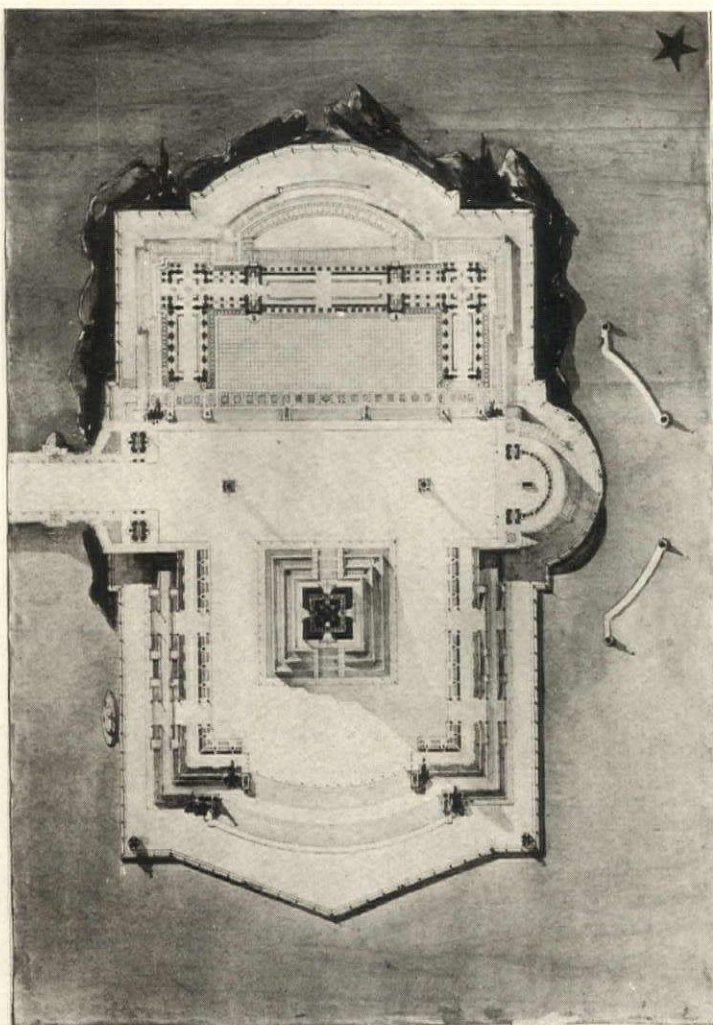


A. E. MIDDLEHURST, CORNELL UNIVERSITY—THIRD PRIZE AND FIRST MEDAL

CLASS A. II. PROJET
SPECIAL BOOK PRIZE
COMPETITION

AN ISLAND OF FREEDOM

STUDENT WORK
BEAUX-ARTS INSTITUTE
OF DESIGN



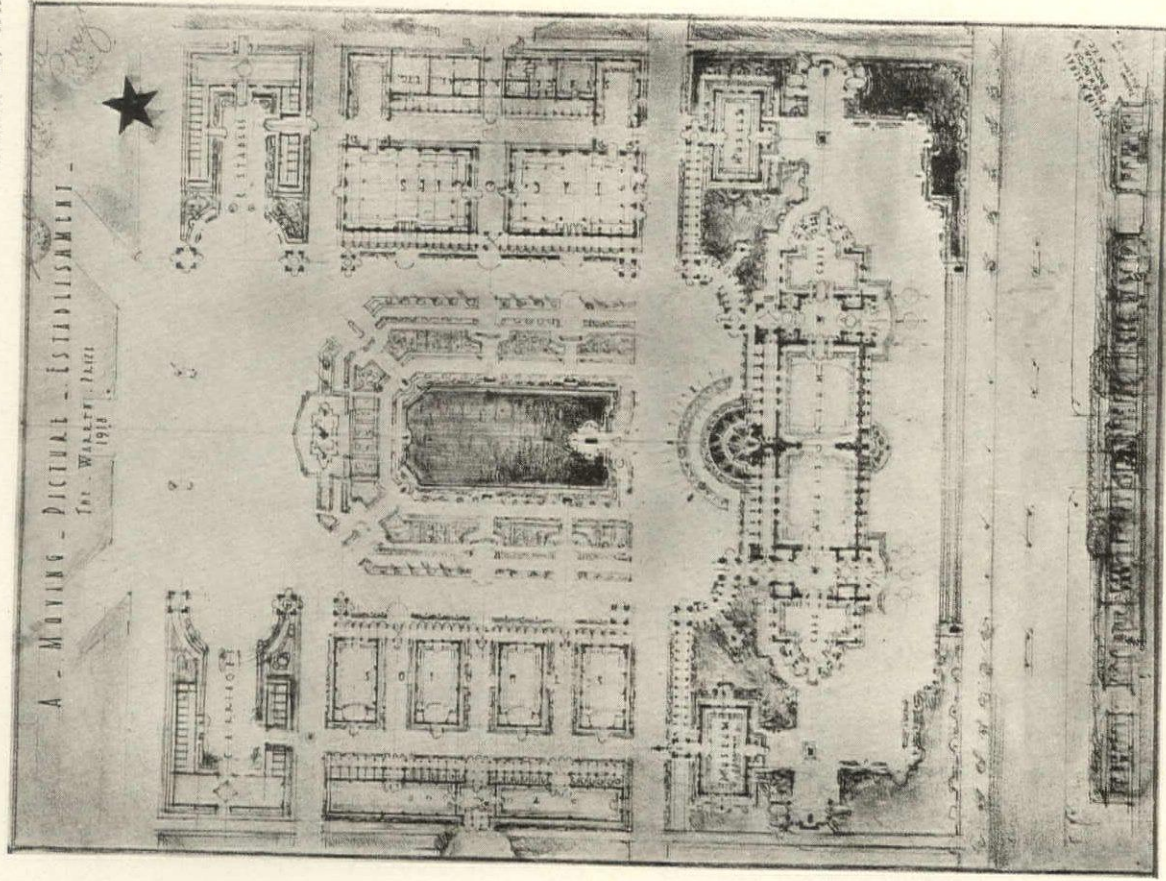
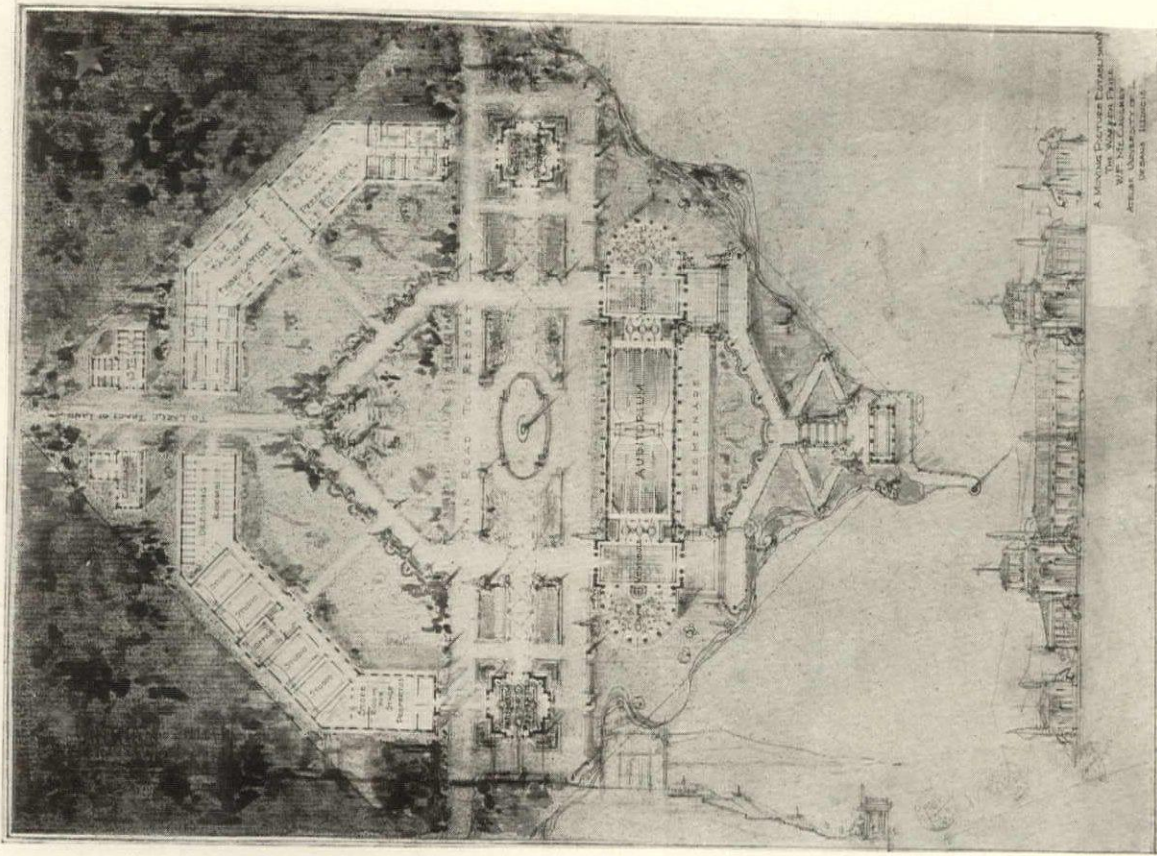
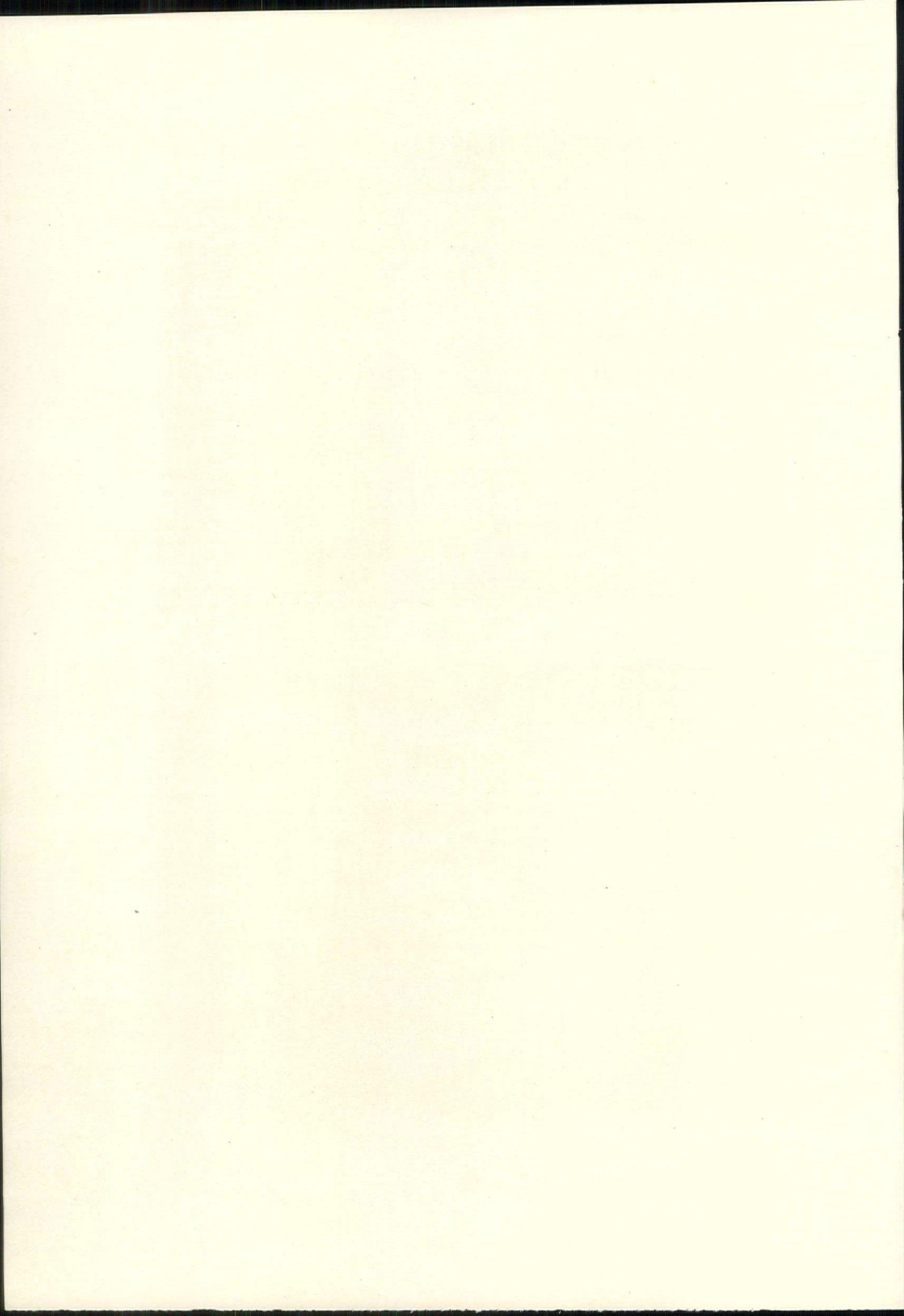


PLATE 86

W. F. McCAUGHEY, UNIVERSITY OF ILLINOIS

R. H. SEGAL—SECOND PRIZE, PATRONS G. & E. BLUM

WARREN PRIZE COMPETITION—A MOVING PICTURE ESTABLISHMENT
STUDENT WORK, BEAUX-ARTS INSTITUTE OF DESIGN



The Architectural Improvement of Farm Buildings

A Series of Communications from Various Agricultural Colleges Endorsing the Movement Inaugurated by George W. Maher, President of the Illinois Chapter, A. I. A.

The Editors, THE AMERICAN ARCHITECT:

Your valued article regarding the suggestion of Mr. George W. Maher, Chairman of the Illinois Chapter of the American Institute of Architects, that various states vigorously take up the subject of the improvement in design and plan of farm buildings, has been read with unusual interest. As a citizen of the State of Illinois, I am very proud of the fact that this suggestion came from an Illinois architect and wish to assure you that I am willing to do all within my power to assist in furthering the work of which you write.

My experience has brought me in contact with the farmers of Illinois and other states and I have found that these men are much interested in securing properly designed and constructed buildings at a reasonable price. Here at the University we have a large number of inquiries every year from the farmers of this and other states asking for information regarding farm buildings. With our present facilities the service which we can render is very limited.

There are a number of ways in which interest in farm building problems could be stimulated and assistance given to farmers who are desirous of erecting new buildings or remodeling old ones.

In the first place the State Commission which you suggest, could render a very valuable service by carefully investigating the conditions as they exist today and by making some broad, far-reaching recommendations regarding the importance of farm building work, and the influence which properly designed buildings may have in making farm life more attractive, and could offer suggestions regarding the desirable lines for future work. Such a report, if well done, would serve to bring the importance of the farm building problem to the attention of the public and furnish a basis for further development which does not exist at the present time. Such a commission should be very carefully selected. If it is to enjoy the support of the agricultural interest which it must have in order to make its work effective, its membership should be representative of the interests involved.

Such a commission should contain architects who have been born and brought up on a farm and who still have a genuine interest in things of the country.

Such men would bring to a work of this nature not only great technical skill in their professions, but also an understanding of and a sympathy for the things of the country.

This commission should have a number of representative farmers as members. These men should not merely own land, but should be living on it and operating it during the time which they serve upon such a commission. As our agricultural colleges and extension service materially assist in disseminating the information to the farmers, I believe it would be well to have them represented, as they would not only assist in carrying on the good work regarding farm buildings, but they would also bring to the commission the services of men who know farm problems and look at them from a scientific viewpoint.

Another important step which might be taken for the improvement of farm buildings is to enlarge the work of the farm building departments of our State Universities and strengthen the extension work relating to the same. Practically all of our land grant colleges have men who are devoting part or all of their time to the subject of farm buildings. Unfortunately some of the men engaged in this work are not well-trained architects, and in practically every case with which I am familiar the amount of money which the state is appropriating for this work is entirely out of keeping with its importance. No greater service could be rendered to the agricultural interests of our country than to bring about the appointment of well-trained architects, who understand country problems, to the faculties of our agricultural colleges and then to see that their work receives the needed financial support.

This work in our colleges should furnish instructions to students regarding farm building problems, take up investigation work relating to the arrangement, design, and construction of farm buildings, and then organize the extension work which will give the message to the farmers.

At the present time we are entering a new era in farm building construction. We are just now passing out of the pioneer stage. Today the farmers are looking for permanence in construction, convenient economical arrangement, and the artistic

THE AMERICAN ARCHITECT

design and grouping of farm buildings. There never has been a more appropriate time for taking up the work such as you suggest.

E. A. WHITE,
Division of Farm Mechanics,
University of Illinois.

The Editors, THE AMERICAN ARCHITECT:

Your article with reference to encouraging the farmers in the improvement of design and planning of their buildings, I consider a very worthy step, because there is, no doubt, a great need for better farm buildings throughout the country. Most of the state agricultural colleges are doing some work along this line. This department, at least, is urging better farm buildings and is furnishing plans through the Extension Service.

In connection with improving the conditions that now exist, I believe it would be wise to put on a vigorous campaign to create a greater interest along this line, and along with this campaign we should have something to offer the farmer. The special commission which you suggest might take this matter in hand and investigate to find out what material is now available for the farmer along this line, and also get this information before the public.

E. W. LEHMANN,
Associate Professor of Agricultural
Engineering, University of Missouri.

The Editors, THE AMERICAN ARCHITECT:

In taking up the subject of the improvement in design and plan of farm buildings, you have struck a very important and practical line of development for the entire rural population of America.

I have said frequently that from an economic standpoint there has been an immense amount of money wasted because of the crude building done on the farms of this country. I have also campaigned somewhat against the crude stuff in the small towns in the United States. There is no question but that the taste of the people must be appealed to and trained in order to prevent this enormous loss. We ought somehow to make it clear to the head of the family that to carry on a saving and industrious career for ten or fifteen years and to spend this savings in some unattractive sort of building is a pitiable dissipation of wealth. It seems that we might be able to impress this thought, that after these savings have been expended in this way the buildings soon become almost worthless because of their ugliness and because of their lack of plans suitable to the needs of a well-ordered home.

J. W. CANTWELL, President,
Oklahoma Agricultural and Mechanical College.

The Editors, THE AMERICAN ARCHITECT:

I am interested to note that you are beginning a campaign looking to the improvement in designing and planning of farm buildings. I am strongly of the opinion that such a measure is designed to be of great value because of the great backwardness in the matter of planning farm structures, not only as regards their utility, but as regards their beauty. This institution is greatly interested in the matter, and is using its Art Department, as well as its Mechanic Arts Department, in the furtherance of desirable plans.

Very truly yours,
E. G. PETERSON, President,
Agricultural College of Utah.

The Editors, THE AMERICAN ARCHITECT:

There are three important factors involved in the construction of farm buildings:

- (1) *Cost*, for farm buildings are built primarily for the purpose of earning dividends on the investment.
- (2) *Practicability*. The building must conserve the purpose for which it is built—housing animals properly and conserving labor.
- (3) *Beauty*.

We believe that these factors, although each is important, should rank in the order suggested. Advancement or progress in rural architecture, or the subject of "Farm Structures" as we prefer to call it, is something that must come about through public or co-operative effort.

J. B. DAVIDSON,
Professor of Agricultural Engineering,
University of California.

The Editors, THE AMERICAN ARCHITECT:

It is very true that the buildings found on the farms are mostly unsightly as well as unsuited for the purposes for which they are used. There is much evidence of a lack of plan or sense in the planning and construction of these buildings. However, those of us who are of the city life will have a difficult subject to handle in attempting to introduce any desirable changes into the life of our rural communities. The people of such are wedded to their own way of doing things and look with grave suspicion upon any movement inaugurated by outsiders.

The movement suggested in your letter, and in the printed matter accompanying it, is one worthy of consideration and support.

ALSTON ELLIS,
Ohio University.

THE AMERICAN ARCHITECT

The Editors, THE AMERICAN ARCHITECT:

The movement which you are fostering is in every way timely and imperative, in order to attract and hold the large numbers of people who will more and more be necessarily drawn to the farms during this period of readjustment.

This institution has for many years interested itself in helping the farmers of this section in the matter of improving their school houses and grounds, their churches and grounds, as well as their dwellings and surroundings. We have from time to time been glad to furnish, free of charge, such advice and plans from our specialists, as well as shrubbery and the personal supervision of our instructors as were necessary in the proper working out of their problems.

We shall of course be glad to co-operate in every possible way in furthering the work.

ROBERT R. MOTON,
The Tuskegee Normal and Industrial Institute.

The Editors, THE AMERICAN ARCHITECT:

This Division has been particularly interested in rural civic improvement with special reference to the improvement of rural school grounds. In many instances we have also taken up the designing and construction of rural parks and playgrounds, and everywhere over the state we have found a most general spirit of co-operation.

With reference to the designing and laying out of farm grounds and farm buildings, I may further advise that we have acted in a consulting capacity to the California Land Settlement Board along these lines and believe that results are beginning to show to advantage.

This Division will be particularly glad to associate itself with any movement along these lines.

J. W. GREGG,

Professor of Landscape Gardening and
Floriculture, University of California.



SQUASH COURT AND GARAGE OF ROGER B. MERRIMAN, CAMBRIDGE, MASS.

COOLIDGE & CARLSON, ARCHITECTS

Recent Legal Decisions

FAILURE TO REQUIRE CONTRACTOR'S BOND—TIME FOR BRINGING ACTION

A county contracted with a construction company for the erection of a courthouse. A materialman delivered material to the contractor which entered into the construction of the building. The bond furnished by the contractor did not contain the clause providing for the payment of labor and material required by the statute. When the building was partially completed the contractor abandoned the work, and the county took over the job. Section 2 of the statute provides a liability on the part of the county for its failure to require the proper bond. The materialman brought action to enforce this liability. Section 3 of the act limits the time within which an action may be brought to "ninety days from the acceptance of the work for which the same shall be claimed." The decision of the case depended upon the meaning of this section. The court said: "When we consider that the county is not immediately concerned with the relations between the principal contractor and subcontractors, and that the declared purpose of the act is to provide a remedy to laborers and materialmen who might otherwise be deprived of a remedy, and that none of the parties to the principal contract or subcontracts may be in position to know the outcome of the job within ninety days from the acceptance of a particular piece of work or material by the principal contractor, and that it is the ultimate outcome that is clearly aimed at in the act, it is not difficult to arrive at the meaning of said section three. It is clear to us that the word 'work' is used to comprehend and embrace the words 'erection, alteration, repair, or improvement,' found in the preceding section, and that it was so used to obviate the necessity of their repetition in section three. Or, in other words, it refers to the job to be performed under the contract between the public corporation and the contractor under and for whom the laborer or materialman furnished his labor or wares. The word is commonly so used in reference to building contracts."—*Gold Bros. Brick Co. v. Grant County*, *South Dakota Supreme Court*, 168 N. W. 855.

LEVY ON BUILDING MATERIALS

A written agreement between a building contractor and an owner provided that building materials delivered to the operation should be the property of the owner, and that after the operation was completed, the buildings should be sold, and the balance of the proceeds after payment of the

liens and claims should be paid to the contractor. The owner incurred obligations on the faith of this agreement. It was held that a judgment creditor of the contractor could not levy on building materials (consisting of brick, lumber, and structural iron) delivered to the operation; and especially was this the case where the judgment was for materials furnished to another operation. The contractor had no control over the materials except for the purpose of erecting the houses; and his sole interest was a right to an accounting after the houses were sold.—*Evans v. Campion*, 68 Pa. Superior Ct. 522.

MECHANICS' LIENS—TIME FOR FILING CLAIMS

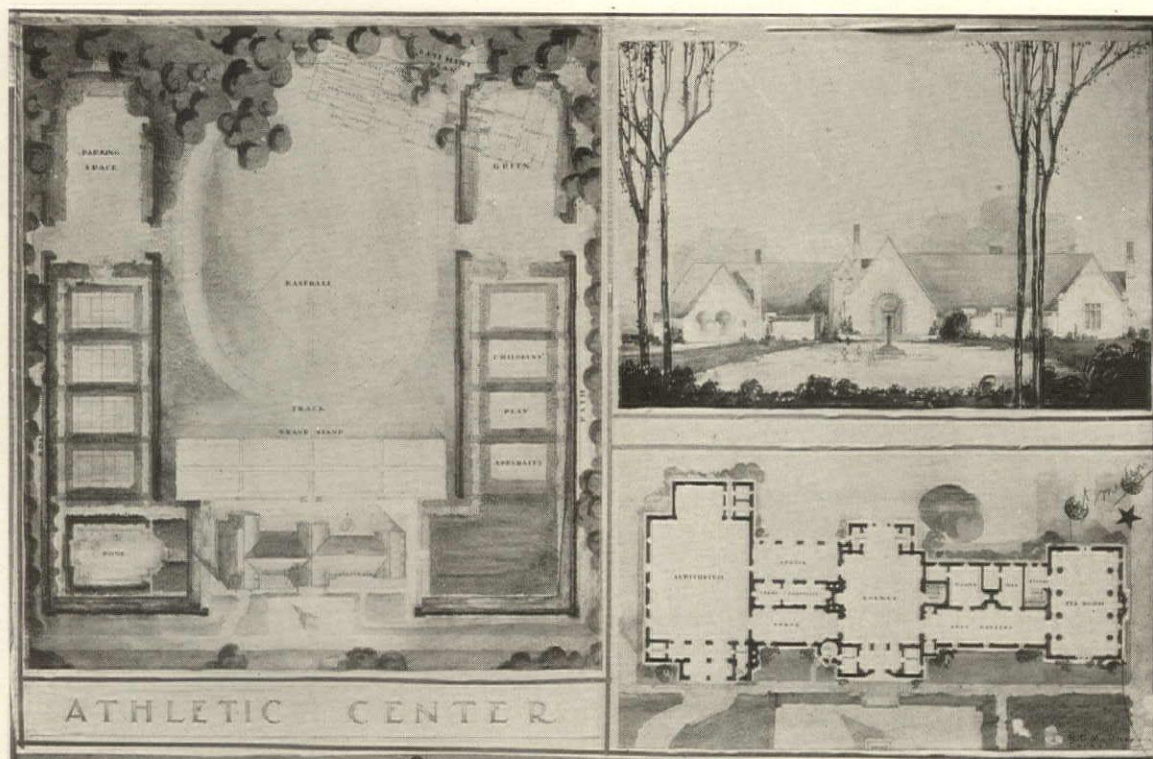
A materialman's delivery of 30 cents' worth of material at the premises, not by order of the contractor to be used in the building, but solely to extend the time in which to file a lien claim, is held not good faith delivery under a contract causing the time for filing claim of lien to run from its date.—*Lee Canfield Lumber Co. v. Heinbaugh*, *Iowa Supreme Court*, 168 N. W. 776.

CONTRACTS FOR ARCHITECT'S SERVICES

It is a common rule that a cashier of a bank has the apparent power to bind the bank in the bank's usual financial business. But it is held, in an action for the agreed price stipulated in an oral contract for architect's service, that the building of a two-story brick building for the use of the bank is not the ordinary financial business of a bank, nor is the making of a special contract for the professional services of an architect within the above rule.—*Reuter v. Utica State Bank*, *Texas Court of Civil Appeals*, 206 S. W. 715.

AGREEMENTS TO OBTAIN GOVERNMENT CONTRACTS

While public policy condemns agreements which tend injuriously to affect the public service, it is held in an action to enforce a contract between plaintiffs and defendant, that an agreement between the parties to use joint efforts to obtain from the United States Government a contract for the construction of a military camp, and to contribute to services and share in profits, is not against public policy. But if such an agreement tended, by necessary implication, to bring to bear upon officers of the Government secret or improper influences in awarding the contract, it would be condemned by the courts.—*Anderson v. Blair*, *Alabama Supreme Court*, 80 So. 31.



R. D. McPHERSON—FIRST MENTION, CORNELL UNIV.
CLASS B. II. PROJ. AN ATHLETIC CENTER

Beaux-Arts Institute of Design

DIRECTOR OF THE INSTITUTE, LLOYD WARREN

ARCHITECTURE, WILLIAM F. LAMB

SCULPTURE, JOHN GREGORY

INTERIOR DECORATION AND INDUSTRIAL ART DESIGN, ERNEST F. TYLER

MURAL PAINTING, ARTHUR CRISP

Official Notification of Awards— Judgment of December 30th, 1918

THE WARREN PRIZE

The gift of Messrs. Whitney Warren and Lloyd Warren offered for excellence in planning a group of buildings.

FIRST PRIZE—\$50.00. SECOND PRIZE—
\$25.00.

(For conditions governing this Prize Competition, see Circular of Information, Article VIII—Par. 2 and 3.)

PROGRAM

The Committee on Architecture proposes as subject for this Competition:

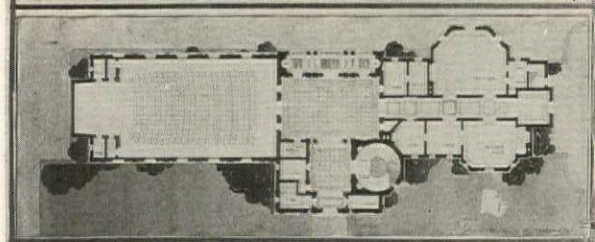
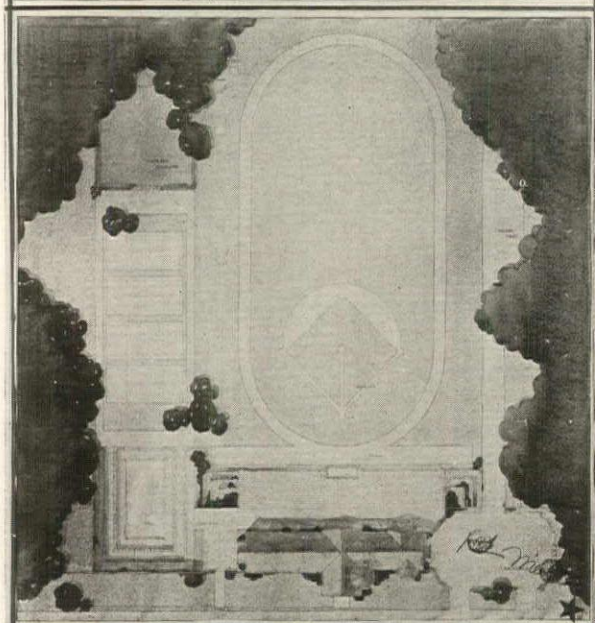
"A MOVING PICTURE ESTABLISHMENT" INTRODUCTION:

Near a large seaside resort it is proposed to establish a manufacturing plant for moving picture machines and films, and to have in connection with this plant museums, cafés, and a theater for the entertainment of the residents and visitors to the resort. A plot of ground 600 ft. x 600 ft. adjacent to a large tract owned by the company and used by it for experiments and special settings, has been arranged to receive the buildings required. These buildings with their approximate areas are:—(as stated below)

PROVISION MUST BE MADE FOR:

1st—A large rectangular auditorium 65 ft. x 160 ft. arranged with a transparent curtain hung in the

center of the long dimension for the purpose of subdividing the audience into two classes—each of which views the pictures from the correct distance. That half of the audience viewing the pictures in the reverse pay less for admission than that half who see the pictures from the side of the operator.



F. R. STEFFENS, JR.—FIRST MENTION, CORNELL UNIV.
CLASS B. II. PROJET. AN ATHLETIC CENTER
FOR AN INDUSTRIAL TOWN

2nd—A vestibule and café with toilets, retiring rooms, etc., form an additional part of each half of the large auditorium.

3rd—A public museum of stage furniture and properties—2500 sq. ft.

4th—A public museum of photography and appliances—2500 sq. ft.



A. C. WEATHERHEAD—FIRST MENTION, PLACED, UNIV.
OF OREGON

CLASS B. II. ANALYTIQUE

5th—A factory for the fabrication of moving picture machines—6000 sq. ft.

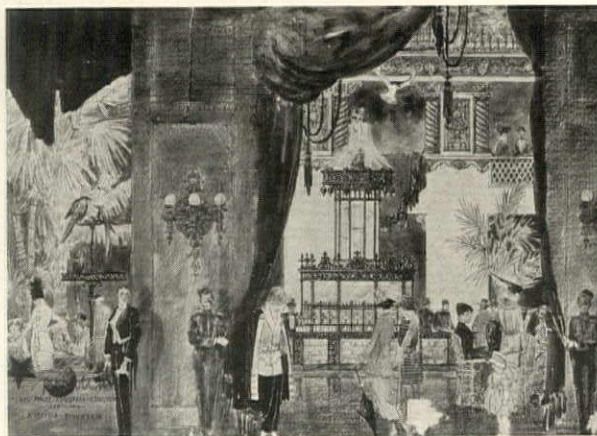
6th—A factory for the preparation of moving picture films—6000 sq. ft.

7th—Stock rooms, two (2) packing and receiving rooms, dark rooms, several small laboratories, etc., in connection with these factories.

8th—Four studios arranged with a stage, drop and movable scenery, each having an area of 2000 sq. ft. Access between these studios and the museum of properties is obligatory.

9th—Thirty (30) dressing rooms or booths for actors. A storage room for movable scenery having an area of 4000 sq. ft. should be arranged for near the above studios.

10th—A stable and carriage house near the large tract of land, referred to in the introduction, for special settings. This large tract of land may be on all sides of or on any one side of the plot of



R. L. GALBRAITH—MENTION—BEAUX-ARTS ATELIER
WASHINGTON, D. C.

CLASS A. III. ESQUISSE-ESQUISSE. A SODA
FOUNTAIN

THE AMERICAN ARCHITECT

ground set aside for buildings. It should be indicated in part on the plan to show its relation to the general scheme.

11th—Such vestibules, corridors, service, etc., and gardens, fountains, and pergolas as will unite all parts of the composition and add to its attraction are permissible.

DIMENSIONS:

The plot of ground to be used for the buildings shall be 600 ft. x 600 ft.

JURY OF AWARD: F. A. Godley, W. L. Bottomley and H. P. Pennington.

Number of drawings submitted: 13.

AWARDS

FIRST PRIZE, \$50: W. F. McCaughey, University of Illinois, Urbana.

SECOND PRIZE, \$25: R. H. Segal, Patrons—G. & E. Blum, New York.

PLACED THIRD: D. McLachlan, Jr., Atelier Hirons, N. Y.

PLACED FOURTH: L. Fentnor, Atelier Wynkoop, N. Y.

PLACED FIFTH: L. KURTZ, Atelier Wynkoop, N. Y.

OFFICIAL NOTIFICATION OF AWARDS— JUDGMENT OF FEBRUARY 11th, 1919

PROGRAM

CLASS "B"—II. ANALYTIQUE

The Committee on Architecture proposes as subject for this Competition:

"AN EXEDRA"

INTRODUCTION:

The term "Exedra" is applied usually to an important raised semi-circular seat with a high back; it is applied in the present case to a semi-circular colonnade under which there are seats. Such colonnades or porticos are most appropriate to formal gardens, where they may be used to end a vista, forming a setting to a statue, fountain or some other point of interest, or serving some other decorative purpose.

THE PROBLEM:

The Exedra in question will be situated at the end of a formal garden, overlooking beds of flowers above which it will be slightly raised. It will consist of a row of Ionic columns, which may be treated as a covered portico or as a vine covered pergola, the only dimension given being the radius from the center to the axis of the columns which is 20 feet. The back of the colonnade may be a high or low wall, or another row of columns.

JURY OF AWARD: R. M. Hood, H. R. Sedgwick, H. M. Woolsey, G. H. Bickley, M. B. Stout, F. C. Hirons and E. V. Meeks.

This Jury also served as Jury of Award for Class "B"—II Projet, Class "A"—III Esquisse-Esquisse and Class "A" & "B" Archaeology-II Projet.

Number of drawings submitted: 26.

AWARDS

FIRST MENTION PLACED: A. C. Weatherhead, University of Oregon, Eugene.

FIRST MENTION: E. F. Biresak, J. L. Fleming, H. Machamer and D. K. Frohwerk, University of Kansas, Lawrence; R. B. Thomas, Yale University School of Fine Arts, New Haven.

MENTION: A. N. Schaeffer and H. V. Murphy, Beaux-Arts Atelier, Washington, D. C.; A. F. Keymar, Atelier DeGelleke, Milwaukee; H. Bradley and T. S. Rowland, George Washington University, Washington, D. C.; E. L. Babitsky, John Huntington Poly. Institute, Cleveland; C. Davidson, 434 West 125th Street, New York; C. S. Thalheimer and F. M. Manker, "T" Square Club, Philadelphia; E. W. Moore and Julia Carman, University of Kansas, Lawrence.

PROGRAM

CLASS "B"—II. PROJET

The Committee on Architecture proposes as subject for this Competition:

AN ATHLETIC CENTER FOR AN INDUSTRIAL TOWN

A new industrial town, similar to "Yorkship Village" in New Jersey, or the one at Bethlehem, Pennsylvania, comprising a well planned community of fifteen hundred houses, has just been completed. The new town is a permanent one, and the houses are not only of permanent construction but also well designed and well grouped.

A tract of land six hundred feet square, situated on the outskirts of the town and bordering on the main highway leading to a nearby large city, has been set aside for recreational and athletic purposes. While the main portion of this ground is flat, that side of it along which runs the highway is considerably raised above the level of the rest of the property, and the highway itself is approximately, therefore, eighteen feet above the general level of most of the tract.

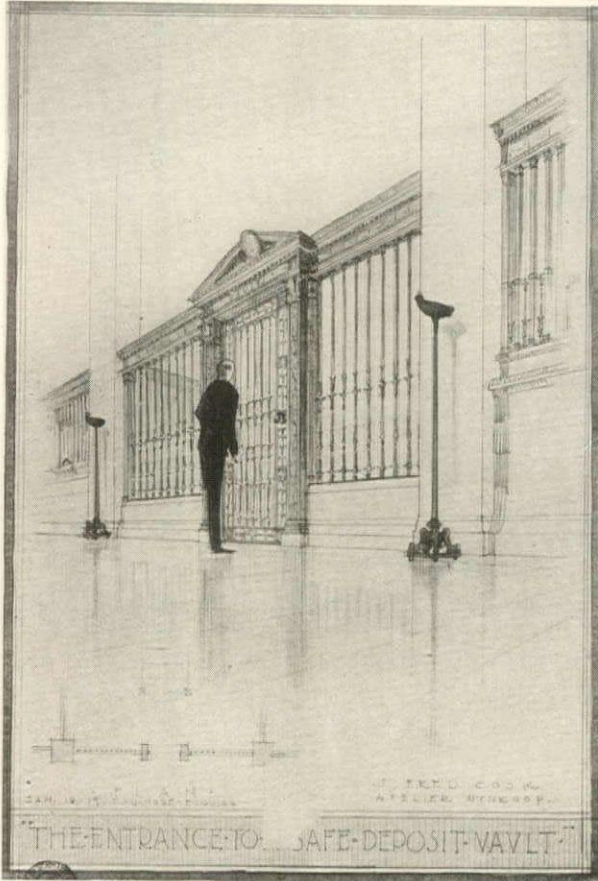
It is proposed to plan the property so that it shall be of the best possible use for the recreational activities of the town, both outdoor and indoor. To that end a building combining the features of a "social center" and "athletic clubhouse," including dressing and bathing facilities, is to be erected on the portion of the property adjoining the highway. This building must be of appropriate architectural character in keeping with an up-to-date, modern town of which it is one of the chief structures.

THE AMERICAN ARCHITECT

Incorporated into the plan of the building or closely adjacent thereto there must be a "Grand Stand" or bank of seats accommodating approximately fifteen hundred people, overlooking a baseball diamond, which diamond, from its very size, will form the principal feature of the general layout in plan.

The property must be so planned as to include:

1. A baseball field.
2. Four tennis courts.
3. An outdoor swimming pool.
4. A children's playground with apparatus.



J. F. COOK—FIRST MENTION, ATELIER WYNKOOP, NEW YORK

CLASS B. III. ESQUISSE-ESQUISSE. AN ENTRANCE TO A SAFE DEPOSIT VAULT

5. A running track as long and as conveniently arranged as possible.

The building proper in addition to the above mentioned "Grand Stand" or "Tribune" for fifteen hundred people, must contain:

1. Entrance or lounge hall with a small office and counter opening off it.
2. Auditorium with moderate sized stage and two dressing rooms with a balcony at the rear to accommodate moving picture apparatus.
3. Tea room with pantry and direct service to a

small kitchen, which may be placed in the basement.

4. Coat room and toilet arrangements for men and women.
5. Two bowling alleys.
6. Billiard room for two tables.



D. W. ORR—THIRD MEDAL, YALE UNIVERSITY. (SCHOOL OF FINE-ARTS)

CLASS A AND B—ARCHAEOLOGY. II. PROJET. A ROMAN TRIUMPHAL ARCH

7. Locker room containing three hundred lockers, and dressing and shower accommodation for men.
8. Locker room containing three hundred lockers, and dressing and shower accommodations for women.
9. Apartment for steward, to consist of two rooms and a bath.
10. Two small rooms to be used for card or committee rooms.

Besides the kitchen in the basement, the bowling alleys, billiard room and locker rooms may be placed there, as well as the furnace room.

Number of drawings submitted: 25.

AWARDS

FIRST MENTION: F. R. Steffens, Jr., R. D. McPherson and K. Carver, Cornell University, Ithaca; K. K. Stowell, Atelier Hiron, N. Y.

MENTION: T. Yokogawa, E. B. Mason and F. H. Robinson, Cornell University, Ithaca; R. Mackey, John Huntington, Poly. Institute, Cleveland; H. B. Preston, Syracuse University, Syracuse; R. L. Goldberg and E. Schmidt, "T" Square Club, Philadelphia; W. M. Icenhower, E. Pickering, J. L. Benson and L. F. Soxman, University of Kansas, Lawrence; L. J. Ellis and H. Johnston, University of Oregon, Eugene.

PROGRAM

CLASS "A"—III. ESQUISSE-ESQUISSE

The Committee on Architecture proposes as subject for this Competition:

"A SODA FOUNTAIN."

As a result of prohibition and the demand for a service for women corresponding to the bars and

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smoking rooms usually restricted to the use of men, some hotels include as one of their features a Soda Fountain or "Ladies' Bar." This is a combination of stand-up bar and table service of soft drinks and sweets and the sale of confections.

The subject of this problem is the design of such a room featuring the counter and its immediate surroundings. It should be borne in mind that space economy is a usual requisite while combining serviceability with effective display of the articles for sale. The use of rich materials, with ornament and color, is desirable to express the character of the place and of its customers.

Number of drawings submitted: 21.

AWARDS

MENTION: R. K. Galbraith, Beaux-Arts Atelier, Washington, D. C.; J. K. Smith and W. H. Livingston, University of Pennsylvania, Philadelphia; D. M. Allison, University of Illinois, Urbana.

PROGRAM

CLASS "A" AND "B" ARCHEOLOGY—II. PROJET

The Committee on Architecture proposes as subject for this Competition:

ROMAN TRIUMPHAL ARCH

The Romans, especially during the Empire, commemorated their victories by the erection of Triumphal Columns and Arches, a great many of which exist to this day. The Triumphal Arch, which forms the subject of this program, was perhaps more widely used, at least, there are many which still exist not only in Rome but in other parts of Europe and Asia Minor. In and near the Roman Forum are three of the best known and best preserved; the Arch of Septimus Severus, the Arch of Titus, which commemorated the capture of Jerusalem, and the Arch of Constantine. These express to a great degree by the richness of carving and sculpture the magnificence of the Roman civilization at that time.

The tradition of the Triumphal Arch has continued to the present day. The Portes St. Denis and St. Martins, the Arc de Triomphe, and the Arc de Carrousel in Paris, the Marble Arch in London, several arches about the Palace Stanislas in Nancy and some in our own country all show the influence of the great Arches of ancient Rome.

The subject of this problem is a Triumphal Arch of the Roman Empire, erected to commemorate a great victory. The only dimension given is the height, which, exclusive of any sculpture surmounting the arch should not exceed 60 ft. 0 in.

Number of Drawings submitted: 7.

AWARDS

THIRD MEDAL: S. B. Brown, "T" Square Club, Philadelphia; D. W. Orr, Yale University School of Fine Arts, New Haven.

MENTION: L. T. Obel, Columbia University, N. Y.; J. Lucchesi and M. Jaeger, Jr., Atelier Hiron, N. Y.; F. Martinelli, Patron—P. J. Rucker, N. Y.

PROGRAM

SPECIAL PRIZE COMPETITION

Special Prize offered by the Paris Prize Fund of the Society of Beaux-Arts Architects.

1st prize, Architectural books to the value of \$200

2nd prize, Architectural books to the value of 100

3rd prize, Architectural books to the value of 50

CLASS "A"—II. PROJET

The Committee on Architecture proposes as subject for this Competition:

AN ISLAND OF FREEDOM

It is proposed that an island situated in the harbor of an important seaport is to be dedicated to the ideals of liberty and freedom for the preservation of which the world has been fighting and has at last achieved.

The dominating feature of the composition should be a monument to Freedom which may take any form the competitors desire—a shaft, a column, a colossal statue or any other suitable interpretation of the idea. Placed about this monument should be three museums, one larger one for the display of trophies relating to the army and two smaller ones for those of the navy and aviation respectively. These three buildings should be suitably monumental in character and may be arranged upon terraces and connected if desired by colonnades or any other architectural motifs. The island is to be connected to the city by a long causeway.

In general, it is important to achieve an impressive ensemble, appropriate in character, and inspired by the idea that this island is to be for all time a memorial commemorating the preservation of the freedom of all nations.

The Island should not exceed 400 feet by 600 feet in its greatest dimensions.

JURY OF AWARD: F. A. Godley, A. Ware, R. H. Dana, Jr., H. Davenport, L. H. Burnham, J. Wynkoop, J. F. Harbeson, L. Ayers, F. H. Bosworth, Jr., and H. P. Pennington.

This Jury also served as Jury of Award for Class "B"—III Esquisse-Esquisse.

Jury of Award for Special Book Prize: F. A.

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Godley, R. H. Dana, Jr., H. P. Pennington, H. R. Sedgwick, F. H. Bosworth, Jr., L. Ayers, R. M. Hood and H. Davenport.

Number of drawings submitted: 29.

AWARDS

FIRST PRIZE (\$200 Architectural Books): J. P. Roberts, University of Pennsylvania, Philadelphia.

SECOND PRIZE (\$100 Architectural Books): L. Williams, Columbia University, N. Y.

THIRD PRIZE (\$50 Architectural Books): A. E. Middlehurst, Cornell University, Ithaca.

FIRST MEDAL: L. Williams, Columbia University, N. Y.; A. E. Middlehurst, Cornell University, Ithaca; J. P. Roberts, University of Pennsylvania, Philadelphia.

SECOND MEDAL: Charlotte Knapp, Columbia University, N. Y.; R. P. Raseman, Cornell University, Ithaca, G. A. Anderson and A. C. Bieber, University of Pennsylvania, Philadelphia.

MENTION: R. K. Galbraith, Beaux-Arts Atelier, Washington, D. C.; R. H. Segal, Patron—Blum, N. Y.; D. A. Fletcher, Columbia University, N. Y.; G. A. Yeomans, A. F. Darrin, E. Purdy, E. L. Howard and Y. C. Lu, Cornell University, Ithaca; J. W. Hershey, John Huntington Poly. Institute, Cleveland; D. R. Wilkinson, Los Angeles Architectural Club, Los Angeles; E. Hayward, "T" Square Club, Philadelphia; P. F. Taylor, L. D. Cook and J. C. Jenney, University of Pennsylvania, Philadelphia; L. Fentnor, Atelier Wynkoop, N. Y.

H. C.: W. F. Leppin, care of Satterlee & Boyd, N. Y.; M. C. Beebe, Atelier Hiron, N. Y.; R. E. DeWolfe, Cornell University, Ithaca.

PROGRAM

CLASS "B"—III. ESQUISSE-ESQUISSE

The Committee on Architecture proposes as subject for this Competition:

"THE ENTRANCE TO A SAFE DEPOSIT VAULT"

The safe deposit vaults for large banks are located in the basement below the main banking floor. The entrance to the stairway leading to their vaults is arranged in the marble and bronze banking screen separating the public space from the working space.

This entrance is the subject of the program. The door itself should be 3 ft. 0 in. x 7 ft. 6 in. and the banking screen 8 ft. 6 in. high. The entrance should be suitably accented in a decorative manner to give prominence to this important department of the bank.

Number of drawings submitted: 11.

AWARDS

FIRST MENTION: J. F. Cook, Atelier Wynkoop, N. Y.

MENTION: A. P. Herrmann, Carnegie Institute of Technology, Pittsburgh; H. T. Bell, Beaux-Arts Atelier, Washington, D. C.; E. F. Bircsak, University of Kansas, Lawrence.

H. C.: B. Hill, Cornell University, Ithaca.

The Post-War Committee

This Committee asks advice and cooperation not only from every architect, but also from those men engaged in occupations allied to architecture and building.

Write your views to the Committee at the Octagon, Washington, D. C.

Late News from Architectural Fields

Special Correspondence to THE AMERICAN ARCHITECT

A Price History of the War

Washington, D. C., March 5.—The price section of the War Trade Board, under the direction of Wesley C. Mitchell, is starting on the last lap of the colossal task that it assumed about six weeks ago, namely, the writing of a price history of the war, including a systematic record of the fluctuation of prices and analytical studies of various phases of these fluctuations, their causes and consequences. Data on upward of fifty different commodities have been compiled and are now being prepared for publication, so that a record of the effect of the war on prices of the different materials may be available for interested business men. One division of the work undertaken will be devoted entirely to building materials, comprising ten separate bulletins under the following topics: sand and gravel, quarry products, brick and tile, cement, lumber, glass, paints, naval stores, gums and varnishes and waxes.

The purpose of the study is to lend such aid as may be rendered by accurate information toward an equitable solution of the difficult problem of readjustment that now confronts the entire nation. The prices of materials and their inevitable relationship to the scale of wages, the causes of the rise in prices the relation of fixed prices to prices formerly prevailing, taxation and other forms of government control over business, are merely a few of the many problems upon which these bulletins will furnish enlightening data. Adequate readjustment and resumption of normal business activity can best be brought about by reference to price and wage conditions during and before the war.

In this connection, Homer Hoyt, of the War Trade Board, in an interview with a representative of *THE AMERICAN ARCHITECT*, described two methods of regaining business equilibrium and dispelling the "watchful waiting" attitude toward building activities. First, a continuation of the present status of business and hesitancy to take on new projects would sooner or later result in a period of depression, which, in turn, would mean a greater supply of labor, lower wages, and, consequently, lower prices and a lower price level. Second an artificial stimulation by the Government and municipalities of business activity in the form of public works construction at high wages would supply a source of employment to hosts of workers, and thereby tide business over, on a high price level, this time of uncertainty. Either process, however, would mean that wages and prices would keep step with each other, and the only hope for a reduction in the prices of materials would be a fall in wages.

"Lumber and cement," declared Mr. Hoyt, "were used more during the war than brick or stone, chiefly because the former were more readily adapted to rapid construction. The production of lumber imposed no burden on fuel regulations, because its own waste was used as fuel in its manufacture. In addition, lumber was a side cut of the military program of the war; for instance, in the Douglas fir regions, it was necessary to cut ten times as much lumber used for direct war purposes in order to get certain desired cuts. This excess was easily manufactured without imposing an added burden on the plant capacity, and was available for use in the construction of cantonments and the building of homes for war workers in munition plants and shipyards.

"The output of lumber during the war was only about 75 per cent of the normal production, while the average price of all kinds of lumber increased about double what it was before the war. The decreased production and the rise in prices may largely be attributed to the shortage of labor and the advance in wages.

"The advance in prices on building materials was about as

fast as the advance on other commodities, most of which increase can directly be credited to the high wages paid during the war. The chief item of cost in the production of most building materials is labor, being two-thirds of the expense in the manufacture of bricks, and one-third in the manufacture of cement. In the production of the latter material, however, fuel comprises one-third of the cost, which may explain why cement advanced only 70 per cent during the war period, price of fuel having lagged behind wages."

The output of cement during the war, like that of lumber, was about 75 per cent normal production, but due to restrictions of the fuel administration, cement companies had to operate on 75 per cent of their normal fuel supply. Cement found many uses in the war in the building of bridges, barracks, roads, coast and interior fortifications, bombproof shelters, tunnels, retaining walls, sewers, trenches, ships, etc. Reinforced concrete construction was greatly in demand during the war, because of the restrictions placed on structural steel. Approximately 11,000,000 barrels of cement were used for government purposes, while the normal export trade in cement kept up, and the stocks on hand at the end of last year were about equal to that of previous years.

The cement problem is less grave than that of brick, because the tremendous cost of machinery in the manufacture of cement will enable production on a large scale without an increase in the cost of production. And there is a likelihood, according to Mr. Hoyt, that large scale production may tend to lower the price of cement.

"The brick and hollow-tile business suffered greatly because of the war. In normal times, brick was manufactured under conditions of keen competition and small profits, and war measures restricted the use of these materials to about 50 per cent of their normal consumption. There was not a great demand for their use in necessary enterprises due to the shortage of skilled labor. Despite this lessened consumption, the price of common bricks doubled in the last eighteen months.

"The rise in prices in building materials may be attributed to three main causes: (1) higher wages; (2) increased cost of fuel; (3) diminished production at higher costs brought about higher per unit cost of production."

An Advisory Committee on War Memorials

Washington, D. C., March 5.—The American Federation of Arts has recently appointed an advisory committee to deal with the entire subject of war memorials in such a way as to afford assistance to officials, commissions and committees who are earnestly endeavoring to make the memorials of the war express in a permanently satisfactory manner feelings of honor, sacrifice and patriotism.

It is the opinion of the Federation that the American artist should be called on to design and to execute all structural memorials of the war, and that in every community the memorial should be an individual, artistic creation. The committee is not interested in any particular form of memorial, or any particular artist or group of artists, the only end in view being a memorial worthy of the community and the cause.

Among the many suggestions made by the committee is that of "a building, devoted to high purposes, educational or humanitarian, that whether large or small, costly or inexpensive, would through excellence of design be an example and inspiration to present and future generations,

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expressive of the refinement and culture which mark the highest order of civilization. It should, however, be understood that a building entirely utilitarian can not altogether satisfy the desire for a commemorative work of art. The transept of Memorial Hall at Harvard University is an example of the triumph of memorial feeling over utility and even architecture."

In describing the character of the memorial, the committee continues to suggest: "The most impressive monument is one which appeals to the imagination alone, which rests not upon its material use but upon its idealism. From such a monument flows the impulse for great and heroic action, for devotion to duty and love of country. The Arch of Triumph in Paris, the Washington Monument and the Lincoln Memorial are examples of such monuments. They are devoid of practical utility, but they minister to a much higher use; they compel contemplation of the great men and ideals which they commemorate; they elevate the thoughts of the beholder; they arouse and make effective the finest impulses of humanity. They are the visible symbols of the aspirations of the race. The spirit may be the same whether the monument is large or small; a little roadside shrine or cross, a village fountain or a memorial tablet, speaks the same message as the majestic arch, shaft or temple, and both messages will be pure, fine and perhaps equally far-reaching, if the form of that message is appealing and beautiful. Display of wealth, ostentation and over-elaborateness are unbecoming and vulgar. Elegant simplicity, strength with refinement, and a grace of handling that imparts charm are the ends to be sought. These ends require, on the part of everybody connected with the enterprise—committee, adviser and artist—familiarity with the standards of art, and above all, good taste. Only by a combination of all these elements can a really satisfactory result be obtained."

The annual meeting of the American Federation of Arts which will be held May 15, 16, 17 at the Metropolitan Museum of Art, New York, will be devoted to a discussion of the various phases of war memorials, with illustrations taken from past and present successes and failures in this country and other countries.

Building Revival in Small Projects

Washington, D. C., March 8.—Reports from various parts of the Middle West, received this week by the U. S. Department of Labor, show a decided revival in building, where small projects are concerned. While this may indicate to a certain extent the patriotic response of the individual or the urge of necessity at a time when the lack of housing is causing a serious problem in many communities, it is also in line with good business judgment, according to data gathered by the department's information and education service, through the division of public works and construction development.

Instead of surplus of labor in the United States, there is in reality a shortage when compared with demands during normal times. If the war had not destroyed the old order of things, approximately 2,000,000 immigrants would have come into this country in the last four years, and industry would not have lost the labor of 2,800,000 soldiers. The country thus has been deprived of the labor of several million men. For this reason it would seem that present-day demobilization problems are those of maladjustment.

The wealth of the nation is approximately two hundred and sixty-five billion dollars, which is greater than the wealth of four of the wealthiest nations in the world. It is estimated that nearly three-fourths of the world's tools of industry are here in this country. It is our problem to put these tools of industry into the best working condition and to place every specialized worker in his own particular groove. The nation invested a large amount of labor in the rearrangement of its industry for the increased production imperative during the war. It is necessary again to invest a large amount in a second rearrangement to meet

the demands of peace production, which are now measured by the high selling prices of commodities—prices that indicate reduced production.

A number of notable building projects are now under way throughout the country, involving the utilization of large quantities of building materials and employing a considerable number of workers.

South Bend, Indiana, has under consideration the development of a model industrial residence section. This will comprise at least 4,000 new homes for 12,000 additional employees of the Studebaker Corporation, which contemplates an investment of \$8,000,000 in a new factory. Other important projects include a department store, \$3,000,000, at Newark, N. J.; interurban station, \$2,000,000, Kansas City, Mo.; head house and six grain elevators, \$2,000,000, Sioux City, Iowa; Hotels and department store, \$2,000,000, Milwaukee, Wis.; office building and theatre, \$500,000, Allentown, Pa.

A force of men is working on the new \$4,500,000 railway station in Chicago. The contractors report that as the building progresses 5,000 men will be employed, preference being given to soldiers.

The Post-War Committee

Washington, D. C., March 5.—The executive council of the Post-War Committee on Architectural Practice, appointed by the American Institute of Architects, is arranging regional meetings through the medium of which members of the executive council and others intimately familiar with the work of the Post-War Committee as designated by the council will be brought in personal touch with all members of the Post-War Committee.

Replies to the announcement of the Committee's tentative program from Chapters and individuals indicate that architects and organizations appreciate the value of the investigation now being undertaken and are lending their support actively to forward its purposes.

Several Chapters of the Institute have already held or are planning to hold meetings especially for the discussion of the questions suggested by the Committee. The New York and Brooklyn Chapters held enthusiastic meetings recently, at which members of the Committee's executive council were present. At the New York Chapter meeting it was decided to arrange a regular program for future meetings, providing for discussion and debate, one by one, of the numerous questions to be studied by the Post-War Committee.

To Stabilize Price of Basic Materials

Washington, D. C., March 8.—A board to stabilize the prices of basic materials in such a fashion as to create a firm foundation on which the consumer can base his future purchases and the producer can form necessary production cost estimates has just been created by Secretary Redfield of the Department of Commerce. The full personnel of this board to consist of six carefully chosen men, has not been announced yet, but it has been assured that the chairman will be George N. Peck of Moline, Ill., former vice-chairman of the War Industries Board. The official representative of the Government on the new organization will be Thomas C. Powell, director of capital expenditures of the railroad administration.

"It cannot be too strongly emphasized," declared Secretary Redfield, "that the proposal that the Government shall co-operate in determining fair prices on basic commodities and in stabilizing these prices through government purchases is in no sense a price-fixing program. No one will be under any sort of compulsion to adhere to the price schedule arrived at. If a producer can find a market for his wares at a higher price no one can prevent his being free to avail himself. If a consumer is able to buy below these prices, it will be his privilege to do it."

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"In substance, we propose to bring capital, labor and the Government into common counsel together around one table and with one purpose—to do the best possible for the country."

One of the striking features of the present situation is the high prices demanded for practically all articles and commodities of trade and commerce. This high price condition is undoubtedly the cause of most of the business inactivity and, therefore, also is the cause of the widespread unemployment of labor.

Prices Reduced to Aid Building

Cleveland, Ohio, March 8.—Radical reductions in prices of building material in this city have been announced as part of the program of Mayor Davis' building committee, which has been at work several weeks in an effort to change building conditions from a war to a peace basis and to arrange material, labor, and financial conditions that there may be an early start in the 1919 building program.

Substantial reductions in tile, common and shale brick are announced. Building tile, sizes 5 x 4 x 12 inches, was reduced from \$41.25 a thousand to \$26. Other sizes were reduced from \$68.50 to \$109.75 a thousand to \$50 and \$76 respectively. Lime was dropped from 75 cents to 68 cents a hundred pounds and sand from \$2.75 to \$2.25. Brick and drain tile prices were reduced as follows: Common brick—Kiln run, old price \$14; new price \$12.50. Hard brick, old price \$16, new price \$14. Selected face, old price \$20, new price \$18. Shale brick—No. 1, old price \$18, new price \$16; No. 2, old price \$16, new price \$14; selected, old price \$22, new price \$20. Drain tile—3-inch size, old price \$31, new price \$23; 4-inch size, old price \$43, new price \$33; 6-inch, old price \$69, new price \$55.

Convention Backs "Build Now" Campaign

Milwaukee, Wis., March 8.—A forward push was given to the building industry of the country at a representative assembly of men from all lines of the building business in this city last week in attendance at the eighth annual convention of the National Association of Builders' Exchanges. The spirit of the convention was altogether optimistic.

Steps were taken at the convention to promote two specific movements with a view to stimulating the industry. Both movements will be backed by the government. One of these is a "Build Now" and the other is known as "Own Your Own Home" campaign. Prominent Washington offi-

cials gave the convention assurances that the government would use all possible efforts, even to the expenditure of large sums of money to advance both of these movements.

While the primary object of all the agitation will be to restore normal conditions in the building industry, second only in its importance to agriculture as a national industry, further and by no means unimportant aim will be to promote work for returning soldiers, sailors and marines.

Resolutions were adopted recommending that all possible repair work on buildings as well as alterations and remodeling be done during the next month or two, the present being considered especially opportune for this class of work. It was suggested that public bodies, boards of education and other authorities having to do with public and semi-public buildings proceed with the same without further delay.

Banks and building and loan companies were appealed to in the matter of building loans. The co-operation of the government in this matter was urged. These resolutions will be taken by delegates back to their different localities and local movements will be started in harmony therewith.

A significant action was taken in the approval of a movement to organize Building Trades Employers' Associations under the auspices of Building Exchanges as a means of bringing employers more directly into an effective organization to deal with the problems now confronting them.

A resolution calling for the return of the railroads to stockholders under private management under government supervision was adopted by unanimous vote. This resolution recommended that great care should be taken in any revision of freight rates so as not to place any additional burden upon the building industry, but rather that any revision should be in harmony with the government's undertakings to encourage building in all possible ways.

The convention sent a protest by wire to Washington against the rider in the agricultural bill doing away with the daylight saving plan. This action was by unanimous vote, indicating that daylight saving is in high favor with the builders in all parts of the United States.

An interesting feature of the convention was an address by George A. Rutherford of Cleveland on "Business Methods for Contractors." Mr. Rutherford illustrated his talk with a series of charts on estimating and cost keeping which enlisted keen interest. As a result of his address a movement was started for a nation wide campaign to improve the business methods of contractors. A committee was placed in charge of this movement, the object being to prepare standard forms so as to place the business upon a higher plane than heretofore.

The sessions of the convention were presided over by Col. John R. Wiggins of Philadelphia, who retired as the executive officer at the close of the meeting and was succeeded by Charles W. Bernhardt of Atlanta, Ga. Mr. Bernhardt appointed as his secretary Dan Carey, secretary of the Atlanta Exchange. The next convention will be held at Columbus, Ohio.

Personals

An office has been opened at Gaspar, Wyoming, by W. M. Green, architect. Mr. Green desires samples and manufacturers' descriptive literature.

Wilson Potter, architect, on March 1st moved his office from 3 Union Square to larger quarters at 22 East Seventeenth Street, New York City.

A new office has been opened for the practice of architecture by R. R. Markley in the Spooner Building, Harrisburg, Pa. Mr. Markley wishes to receive manufacturers' samples and catalogues.

After ten months devoted to war work, G. A. Fairchild, architect, has resumed his practice, and has opened a new office at 808 West Kalamazoo Avenue, Kalamazoo, Mich. Mr. Fairchild desires catalogues and manufacturers' samples.

The firm of Wilson & Sompayrac, architects at Columbia, S. C., has been dissolved, the practice being continued by Charles C. Wilson individually. Mr. Wilson has changed his address to 804-7 Palmetto Building, Columbia, S. C. Mr. Sompayrac is now located with the United States Shipping Board, in New York City.

The Responsibilities of Victory

SPEAKING of the responsibilities of victory, Francis H. Sisson, vice-president of the Guaranty Trust Company of New York, says it is of the greatest importance in working out this country's problems that there should be the closest co-operation between the financial, industrial and agricultural sections of the country, each of which is dependent upon the others for a large portion of its prosperity, and each in part serving the others.

Mr. Sisson believes that in the working out of our problems, no part of the country will have greater influence than the West—the granary of the world—where such a large portion of the nation's wealth is created, and whose spirit of enterprise and freedom of thought and action have given it a vast and proper power in our national affairs. In this land of far horizons and broad outlook, says Mr. Sisson, lies much of the hope for the nation's future, and upon its business men, the leaders of its thought and action, rests a great responsibility not only for the future of their own section, but for the future of the entire country.

"When the responsibilities imposed upon us by victory shall have been discharged, then," he continued, "and not until then, the United States will fulfill its manifest destiny and render the world-wide economic and practical humanitarian service of which we are so abundantly capable, and to which we aspire with the same splendid idealism that led us into the greatest of all wars.

"The last important responsibility of victory and of peace to which I would direct attention is that of establishing new relations between the Government and business. The critical railroad situation and other complications have made patent the necessity for mutual co-operation between these two vital elements of our economic life. The Government should learn that 'all great offices of state are occupied with commercial affairs,' and that 'commerce is the greatest of all political interests.' Great Britain, France, Italy and Japan have evidenced due appreciation of these axioms of statesmanship in their reconstruction programs.

"The peace plans of England, carefully worked out by the Government in co-operation with the country's varied interests, include the lowering of the costs of production of its manufactories; the speeding up of labor; the cheapening of raw materials by buying in enormous quantities; the abolition of wasteful competition among manufacturers;

the placing of Government funds at the disposal of producers who co-operate; the formation of big and influential associations of business men; the establishment of a commercial intelligence bureau of world-wide scope; the subsidizing of research bureaus for the benefit of manufacturers; the development of the inner arteries of the empire; the lowering of costs of transportation, and the granting of preferential rates to British goods.

"France proposes to lower the costs of production through standardization and modern methods; to effect an improvement in relations between capital and labor; to purchase raw materials, cultivate new markets, and ship finished products at common expense; to provide assistance to production; to enact liberal legislation in abolishing administrative restrictions; to initiate vast public works, such as road-building, railroad extensions, dredging rivers and harbors, and building a merchant marine.

"Italy's after-war program calls for a protective tariff; the establishment of credit arrangements for foreign business; for the liberation of new industries from taxation; for the construction of canals to convert Rome into a first-class port; for the abolition of taxation on certain essential industries, and on capital while it is producing for consular agents to act as the 'economic eyes' of the nation, and for the co-operation between financial interests and industry.

"Japan is preparing to give Government subsidies; immunity from taxation of certain industries; guaranteed dividends to certain subsidized industries; Government co-operation with big business interests; large Government appropriations for the developing of essential industries; the service of trade commissions to make detailed investigations and reports; the services of a commercial intelligence system, and the Japanese Government will insist that trades build for the future.

"In noting this world-wide trend toward combination, it is not surprising that the United States Chamber of Commerce should refer to its members for vote proposals to amend the Sherman and Clayton anti-trust laws. Unless we properly repeal or amend these statutes, and the La Follette Seamen's Act, we cannot hope to compete successfully for foreign trade. And we should awake to the fact that we have outgrown our home markets, so that foreign trade on a large scale is absolutely essential for the continuance of our prosperity."

A National Apprentice School of Design

As a result of a series of meetings held in New York during the past month, by various societies and associations interested in the development of the arts and crafts, there will soon be opened in New York the first unit of the National Apprentice School of Design. This movement, which is one to be very strongly commended, and also one that should receive the support and co-operation of architects, has taken definite form in the appointment of an executive committee of which H. Van Buren Magonigle, architect, is chairman, and William Laurel Harris, mural painter, is secretary. The committee includes representatives from the National Academy, the Architectural League, the American Institute of Architects, and a representation from the manufacturers directly interested in the development of American craftsmanship.

A teaching staff for the New York school has been recruited, and as soon as the school can be thoroughly organized, instruction will begin. The main subjects to be covered in the curriculum are furniture, tapestries, textiles, wrought metals and ornamental glass. It is the purpose to establish schools in other cities, each to have its governing body, but all under supervision of the national body.

In a statement prepared by Mr. Magonigle, the chairman of the joint committee, it is set forth that the three basic principles of instruction are: 1. The simultaneous instruction of students in craftsmanship and in design. 2. A method of teaching that shall be ruled only by actual practitioners of the crafts. 3. That design must be based upon historic precedent and not merely upon suggestions from nature. It is further stated that it is desired to accomplish two purposes in the one effort: To train designers to know intimately by actual work, the technical processes of the crafts for which they are designers and to train competent craftsmen who can make their own designs and not merely execute the designs of others.

Need for Housing Workers Still Great

In spite of the shift in population which is attending the change back to peace time industry, the need for housing accommodations for workers on Government projects continues pressing in many of the cities in which the United States Bureau of Industrial Housing and Transportation, Department of Labor, has undertaken construction. Proof of this need, according to officials of the bureau, is

afforded by the fact that practically all houses now under construction in these industrial centers are spoken for long in advance of their completion.

From Aberdeen, Md., word has just reached the bureau that "all houses have been allotted to tenants; also the dormitories, as soon as finished, will be occupied." Similar statements have come from Quincy, Mass. The dormitories erected in the latter city by the housing corporation are running to their full capacity—about 925 people being accommodated nightly. In the restaurants connected with this project about 2000 meals are being served to the workers each day.

Reports received from the ship equipment project at Bath, Me., indicate that all houses will be filled as soon as completed. Sixty-six are now under roof. The 176 houses which have been nearly finished at Hammond, Ind., will be in demand at once. In Philadelphia 159 houses are reported this week as lathed and plastered. Already it is indicated that all of these will be taken as soon as they can be made ready for occupancy.

Urge Building of Houses by State to Limit Cost

A plan whereby New York State would take up a new line of activity—the building of houses—has been outlined by Frank B. Williams to the members of the housing committee of the State Reconstruction Commission. Mr. Williams said:

"The state should be authorized to undertake and empowered to authorize its agencies to undertake housing enterprises on a large scale and in all their branches, in order to realize the resulting gains and make the incidental economies essential to adequate housing at low cost and to the safety of the investments of the state," he said.

"This would include power to purchase large tracts by the acre, provide transportation and develop and plan the tracts, imposing proper planning restrictions, including simple but adequate zoning regulations."

Mr. Williams, with others, favored the establishment of a permanent state housing commission or a similar organization to lay down and enforce the conditions needed to secure the state from financial loss. It was also suggested that the state might furnish financial aid to enhance the construction of much-needed dwellings. On this score he said:

"The state loans, for the most part at least, should not be made directly to individuals, but to municipalities and corporations with limited dividends. In this way, also, the state would secure the advantage of individual enterprise and initiative. Another

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method of accomplishing this result would be the purchase by the state, under proper safeguards, of the stock of housing corporations, or the guarantee of its bonds."

Clarence S. Stein, architect, representing the City Club; Robert D. Kohn, former chief of production in the housing department of the United States Shipping Board, and Richard S. Childs were among the speakers at the meeting.

Lawson W. Purdy, former head of the Department of Taxes and Assessments, declared that as long as the building costs are high there seems to be no hope for the erection of suitable buildings to rent for \$4 a room or less.

"The erection of such buildings on suitable plans might well be encouraged by a remission of taxes on such buildings for a sufficient term of years," he said. "With the tax rate over 2 per cent, the remission of the tax would be at least equivalent to a reduction of one-third in building cost. This would nearly compensate for the present increased cost of building."

Government May Dispose of 5,000 Acres of Land

If Congress accepts the suggestion of William E. Shannon, manager of the Real Estate and Commandeering Bureau of Industrial Housing and Transportation of the Department of Labor, opportunity to buy well-built, well-planned and attractively placed homes will be given to the public. Now that the war is over the need for certain industrial communities no longer exists. Mr. Shannon's idea is that the properties should be disposed of in the same manner in which they were bought, and that is through the whole-hearted co-operation of the leading citizens in the places where these properties are located.

In his report Mr. Shannon says:

"It would seem entirely feasible to dispose of the holdings upon such terms of partial payment and interest as shall encourage people of modest means to acquire homes and home sites in the communities where opportunity may permit them to settle."

Mr. Shannon in his report disclosed some statistics which are indeed interesting if not startling. He says that his commission bought more than 5000 acres of property for the Labor Department's use in fifty separate communities in twenty-one states. Of the 5000 acres 4460 were unplotted. The plotted area taken contained 16,766,300 square feet. It might be interesting to real estate men to know that the Government bought this property cheaply.

The report shows that these acres were secured for \$870,000 less than the valuation placed upon the land by conservative experts who held before their minds the needs of the Government and at the same time the welfare of property-owning interests. It is estimated that \$5,600,000 was

invested in real estate for the especial needs of the Labor Department. The 4466 acres were secured at a valuation of \$555 an acre and the plotted property was purchased for 16 cents a square foot.

Building Plans Show Decided Gain

A decided upward bound from December, 1918, to January, 1919, was taken by building activity in New York State. The increased expenditures for this period, as reported by the building departments of the first and second-class cities to the State Industrial Commission, amounted to 123 per cent. The only cities that failed to share in this rise were Albany, Troy and Utica, where the amounts expended for building declined 20, 1 and 50 per cent respectively.

This is the first time there has been a decided revival in building activities so early in the season, as this tendency is not usually manifest until late in March, says a commission statement on the subject.

The total amount for January was \$5,645,329, which is 9 per cent less than a similar sum reported in January, 1918. Building costs reported in January, 1918, 1917 and 1916 were, respectively, \$6,000,000, \$12,000,000 and \$15,000,000. The Boroughs of Brooklyn and Queens and the cities of Binghamton, Schenectady and Syracuse made larger expenditures for building in January, 1919, than in January, 1918. The Boroughs of Manhattan, Brooklyn, Bronx, Queens and Richmond, and the cities of Binghamton, Buffalo, Rochester, Schenectady, Syracuse and Yonkers reported larger expenditure in January, 1919, than in December.

Suggests Cemetery in France

Colonel William Boyce Thompson, chairman of the Roosevelt Permanent Memorial National Committee, has announced that one of the suggestions being considered as one of the memorials to Theodore Roosevelt was that an American National Cemetery be established in France in Belleau Wood, now called the Wood of the Marine Brigade. It was there that the American marines, fighting with other American troops, turned back the attack of the Prussian Guard regiments in the last German offensive on July 15th last.

The suggestion came from Miss Agnes Shufeldt of Johnson City, N. Y., who suggested that in this cemetery should be buried all the American soldier dead whose families wished them to remain where they fell in France. Not far from the spot suggested Quentin Roosevelt was buried when he fell in aerial combat with German aviators.

Department of Architectural Engineering



Buckman Village, Chester, Pa. G. Edwin Brumbaugh, Simon & Bassett, Architects. Photograph taken Dec. 16, 1918. Houses completed and street shrubs planted.

Quantity House Production Methods, Construction Branch, Emergency Fleet Corporation*

TRANSPORTATION of materials was in charge of Mr. R. D. Williams, Supervisor of Traffic. Mr. Williams, of San Francisco, was manager of Pacific Coast Traffic for the Erie Railroad and was loaned to the Emergency Fleet Corporation to do this work.

This department supervised the movement of about 25,000 cars. The material was unloaded so expeditiously and the cars so released, that the demurrage charges amounted to but a few cents per car. A traffic assistant was placed on each project who, in most instances, was an experienced railroad man. His duties were to handle the local problems in conjunction with the main office. The car tracing, except locally, was done by telegraph or long-distance telephone. It was found that this method of tracing and expediting was very successful and avoided the confusion incident to the

usual method of sending expeditors to the various yards and terminals.

A comprehensive system of daily reports kept the Traffic Department advised, at all times, of the shipments, location and condition of unloading of the cars. This greatly facilitated the handling of materials and assisted the Railroad Administration in conserving their facilities by the quick release of the cars and for this reason no embargoes were placed on any of the housing projects of the Emergency Fleet Corporation.

Mr. H. G. Coutts, an experienced building constructor, of Chicago, had charge of all the field work as General Superintendent, under whose direction were the local project superintendents. Working in close co-operation with Mr. Coutts and in charge of the construction problems in the main office, was Mr. Robert Glenn of New York.

Absolute co-operation in field and office work was

*Continued from our issue of February 5, 1919.

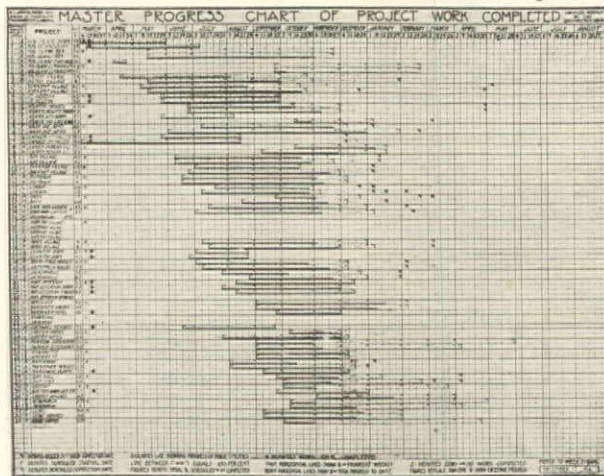
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Maniwoc, Wis. E. F. Miller, Architect. 100 houses and 1 dormitory. Started Aug. 1, 1918; photograph taken Dec. 15, 1918. Houses completed.

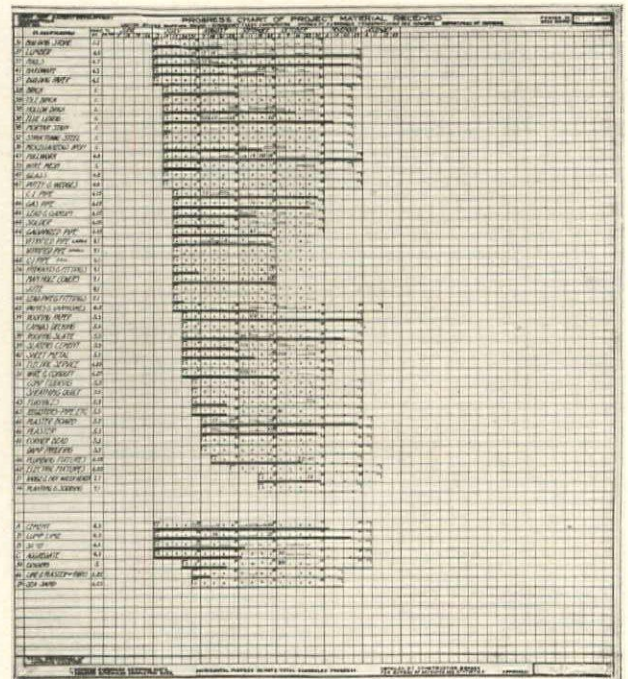
essential and this was successfully maintained. It was the duty of the General Superintendent to see that the contractor "got on the job" with an efficient organization and produced results according to a

the "plant," such as railroad sidings, temporary roads and water service, warehouses, offices, bunk houses, commissary, hospital, saw mill, tool house, stables and time keeping, checking and paying



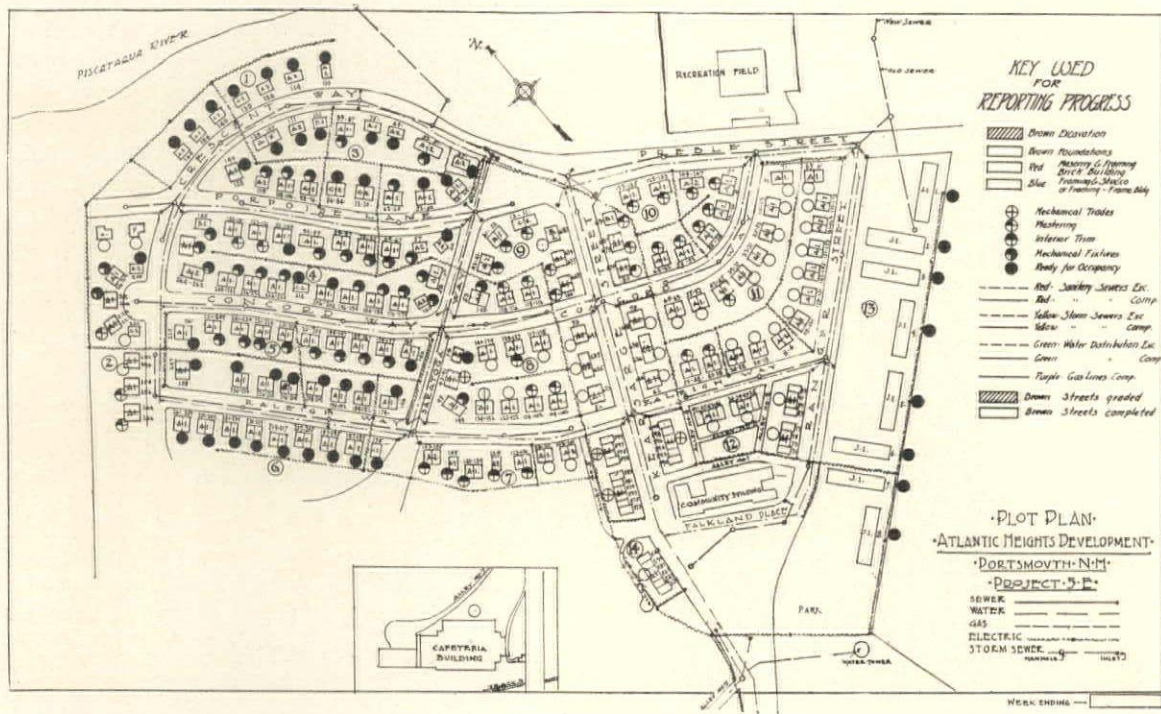
Master progress chart of project work completed. On this chart all of the projects are represented. The lower heavy horizontal lines show the per cent of total progress to date. The upper horizontal lines denote the progress of public utilities. Compiled weekly by Construction Branch.

definite time schedule; that he was instructed as to the established procedure and the requirements of the Construction Branch as to the handling of the details of the work. This included the lay-out of all preliminary and temporary work commonly called



Progress chart of project material received. On this chart the material received for one project is noted. Each kind of material is represented by a heavy horizontal line and the progress of receipt so noted. Compiled weekly by the Construction Branch.

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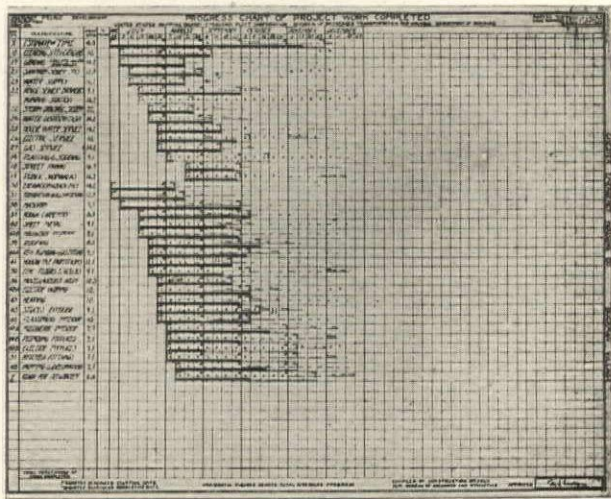


Project plot plan. A plot plan is made for each project on which is shown the location of each building and public utility. The utility and street improvement progress is indicated by colors. A circle is placed at each building in which cross-lines or shaded parts indicate the state of progress of each building. These plans are of uniform size and compiled each week by the Construction Branch.

booths. Definite instructions were given regarding the rental of equipment, local purchase of materials, make-up and salaries of office and field organization, the receiving, checking and transportation of materials; police and fire protection, labor recruiting,

office, thus keeping the flow of necessary materials, details, plans and decisions going through steadily and without interruption.

The General Construction Supervisor, Mr. Glenn, handled all construction questions in the office and



Progress chart of project work completed. On this chart each branch of work for one project is indicated and its progress noted by the heavy horizontal lines. Compiled weekly by the Construction Branch.

sub-contracts and reports. The General Superintendent spent most of his time in the field in close contact with the project organizations and the main

[illegible]

Cost supervisor's daily record, showing number of men employed, hours time, kind of work and location, amount of wages, quantity of work done, amount of work per hour per man and unit costs.

was in constant touch with all the projects by means of daily reports, by telegraph and telephone. He saw to it that daily reports from projects were

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checked up and all requests thereon for plans, decisions or materials were given immediate attention by the proper parties. A copy of all letters leaving the Construction Branch passed through his hands and, in this way, he was in complete touch with all matters in connection with the field work which

spot-cost checks, the reasons for the different project costs were ascertained. As this data and the reasons for the results were developed, the project superintendent and the contractor took steps to avoid all unnecessary cost of construction.

Mr. C. H. Thexton, of Chicago, Supervising Progress Engineer, had charge of tabulating the progress data and preparing the progress charts. These charts were prepared weekly for each project in detail and a master project chart showed the general condition of each project. The charts indicated

[illegible]

Cost supervisor's weekly report. One of six sheets.

required the attention of the main office. The contractor's overhead costs were reviewed each month and during the final stages of the work at least bi-monthly. The data as compiled showed the overhead cost per man per day for the auditing office, the field organization and the total of these.

The keeping of the cost records was in charge of Mr. H. B. Mulliken, of New York, Supervisor of Costs. He had a representative at each project, who made spot checks in order to detect any excessive costs as they might develop. Under the extraordinary conditions prevailing this was a very important matter and this work resulted in making large savings in the cost of construction. The spot checks were frequently made on each branch of the work and when the cost of work was not satisfactory, steps were immediately inaugurated to place the work on a satisfactory basis. By comparing these

SUMMARY CONDITION OF PROJECTS ON Dec 18, 1968						
CONSTRUCTION BRANCH - HOUSING DEPT - DIVISION OF PASSENGER TRANSPORTATION & HOUSING						
NO	PROJECT	CHARACTER OF PROJECT	NUMBER EXCAVATED	FOUNDATIONS COMPLETE	NUMBER UNDER ROOF	100 PERCENT COMPLETE
		4 Group Houses 414 Houses	4 414	4 414	4 414	4 708
1	HOG ISLAND	239 Houses 800 Houses	322 800	239 331	322 331	
2	HILGH VILLAGE	436 Purchased 307 Houses	436 307	436 307	436 307	436 307
3	WORMSHIP VILLAGE	200 Houses 228 Houses	200 228	200 228	200 228	200 228
4	ST. HELENA	250 Houses 250 Houses	250 250	250 250	250 250	250 250
5	ATLANTIC HEIGHTS	250 Houses 250 Houses	250 250	250 250	250 250	250 250
6	WASH AVE APTS	4 Apt Bldgs 100 Houses	4 100	4 100	4 100	4 100
7	115 HALLER HOUSES	92 Houses 3 stories	92 3	92 3	92 3	92 3
8	MORGAN VILLAGE	420 Houses 6 Apt Bldgs	420 18	420 18	420 18	420 18
9	JUN VILLAGE	278 Houses 21 Apt Bldgs	278 21	278 21	278 21	278 21
10	BUCKMAN VILLAGE	1 Building House 1 Building House	1 1	1 1	1 1	1 1
11	DUNDALK	328 Houses 2 Boarding Houses	328 2	328 2	328 2	328 2
12	LORAIN	232 Houses 2 Units & Apts	232 2	232 2	232 2	232 2
13	BATH	878 Houses 4 Dormitories	878 4	878 4	878 4	878 4
14	UNION PARK GARDENS	510 Houses 4 Apt Bldgs	510 4	510 4	510 4	510 4
15	HARRIMAN VILLAGE	42 Apt Bldgs 328 Houses	42 328	42 328	42 328	42 328
16	NOREG VILLAGE	423 Houses 4 Stores & Apts	423 4	423 4	423 4	423 4
17	ESSINGTON DORM	Many Dorm & Apts Many Dorm & Apts				
18	SOUTH PHILA. HOUSES	200 Houses 4 Stores	200 4	200 4	200 4	200 4
19	JACKSONVILLE	138 Houses 2 Stores	138 2	138 2	138 2	138 2
20	PORT JEFFERSON	138 Houses 1 Dormitory	138 1	138 1	138 1	138 1
21	VANCOUVER	20 Houses 1 Store	20 1	20 1	20 1	20 1
22	SAVANNAH	100 Houses 1 Store	100 1	100 1	100 1	100 1
23	CORNWALL HEIGHTS	583 Houses 6 Stores	583 6	583 6	583 6	583 6
24	FAIRVIEW EXTENSION	93 Apartments 10 Houses	93 10	93 10	93 10	93 10
25	WYANDOTTE	100 Houses 1 Old House	100 1	100 1	100 1	100 1
26	MANITOWOC	100 Houses 1 Dormitory	100 1	100 1	100 1	100 1
27	SUN HILL	284 Houses 42 Houses	284 42	284 42	284 42	284 42
28	GROTON	2 Dormitories 1 Heating Plant	2 1	2 1	2 1	2 1
29	HEMBURG	127 Houses 4 Apt Bldgs	127 4	127 4	127 4	127 4
30	CLYDE	100 Houses 1 Store	100 1	100 1	100 1	100 1
31	QUANTICO	100 Houses 2 Dormitories	100 2	100 2	100 2	100 2
32	EXCEPT	Lighting Fixtures & Ranges				

Summary condition of projects. Compiled weekly by the Construction Branch, showing the condition of excavated, foundations complete, under roof and 100 per cent complete.

the progress of construction work, receipt of materials, percentage of work done for the week and percentage of the total work completed to date. They are of the kind known as straight-line charts, and are a graphic illustration of the state of all of the factors which entered into the work. By a quick inspection, any weak spot in the progress of the project was apparent and the influence of the state of one factor on another was readily seen. By

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Newburgh, N. Y. Branch of Design, Housing Department and Ludlow & Peabody, Architects. 127 houses, 70 apartments and 2 stores in 13 apartment buildings. Work started Oct. 9, 1918; photograph taken Dec. 1, 1918.

means of these charts the main office was able to detect unsatisfactory progress and take immediate steps for its correction.

The effective co-operation of labor made possible

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Wage schedule for each project. This schedule is based on local wage scales and is agreed upon between the contractor and the Construction Branch at the time the work starts.

the execution of the program and this satisfactory relationship with labor was due largely to the work of the Supervisor of Labor, Mr. R. E. Pingrey, architect, of Chicago. The duties of this department included the dealings with the United States Employment Bureau for the supply of labor and with various other branches of the Government in regard to labor policies. Mr. Pingrey settled all labor disputes by direct dealings with labor representatives and the basis of all adjustments, rates and conditions being the Baker-Gompers agreement, entered into by the Secretary of War and Samuel



Noreg Village, Gloucester, N. J. Bissell & Sinkler, Architects. 457 houses and 1 apartment building. Started July 15, 1918; photograph taken Dec. 17, 1918.

Gompers, president of the American Federation of Labor.

Mr. Pingrey's duties were of great importance, and that his efforts were productive of very satisfactory results is evidenced by the fact that the work on all projects was executed with practically no strikes or labor troubles of any kind. This was due largely to the hearty co-operation of the Construction Branch and the representatives of organized labor, who realized their responsibilities to the Government and made every effort to avoid any stoppage of the war program.

The plans, as the fundamental factor of all construction work, must always be effectively handled, and when such a tremendous volume of work is under way, it requires an effective organization to prevent no delays due to them. The Supervisor of Plans was Mr. W. S. Church, architect, of Chicago. It was his duty to take charge of and settle all matters pertaining to information between the Architectural and Construction Branches; to receive and distribute all plans, specifications and details; to keep a complete record of all changes and see that proper notice and data concerning them were furnished to all interested parties and acting as a general bureau of information on all matters pertaining to architectural requirements.

The enormous amount of detail work in connection with the office routine was in charge of Mr. G. R. McEldowney, a building constructor from Chicago, who took charge of all correspondence, applications, service records, data on personnel, and many other things. This work is of great importance in a large organization, and must be effectively done in order to secure harmonious and prompt operation.

The accomplishment of such vast undertakings in construction, or any other activity, depends on the character of the organization directing the work. As clearly indicated, the local organization on each project consisted of a superintendent, traffic man, cost clerk and progress engineer. The lack of large and complicated organizations in both field and office made possible that close co-operation which resulted

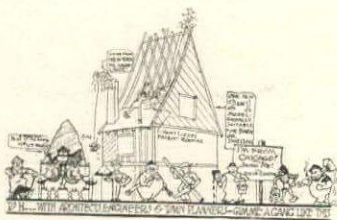
in great speed of operation through the elimination of red-tape. On March 1, 1918, Mr. W. G. Luce, Chief of Construction, a desk and a chair constituted the Construction Branch. Mr. Luce, of Chicago, a general contractor of large experience, proceeded at once to build up an organization to carry

on the work. Between the time the Construction Branch was inaugurated and Jan. 1, 1919, the buildings constructed would, if placed against each other, cover entirely a tract of 140 acres, with miles of streets, sewers, and water and gas mains.

Of this tremendous amount of work 35 per cent of the buildings were started within a week of June 1 and 40 per cent within a week of July 1, 1918. It can be seen that no extended period of time was

available to build up a complete organization before actual work began, but the making of the Construction Branch organization was, of necessity, done under stress of high-speed production. Due to Mr. Luce's long experience with large operations, his wide acquaintance among architects, contractors, engineers and labor representatives, together with his judgment, far-sightedness and executive ability, made the success of this work possible. The results obtained are due to complete harmony, from which came quick decisions and quick action which made results possible.

In this way, towns complete to the minutest detail, were quickly built, including the temporary structures needed to house the construction forces, hospitals and commissaries.



From the menu of the banquet of the Division of Housing and Transportation, U. S. Emergency Fleet. Dec. 6, 1918.

The Code, the Building Department and the Architect

NO law should be enacted which is not susceptible of enforcement. It is equally true that no law should be written based on the hypothesis that the citizens are too ignorant or dishonest to comply with or enforce it. With special reference to building codes, it can be said that whatever man can build, its construction can be governed by a law which can be adequately enforced.

The widespread opinion among American municipal building departments is that the laws must be ultra-conservative. This is a tacit acknowledgment of their inability to properly render the service that they engage to do by virtue of their accepting their official positions. Their theory is that the law must be framed for a condition of incompetent

designing, and incompetent, with possibly dishonest, execution on the part of the contractor.

Designing is to-day an exact science, known to competent architects and engineers. The competency of architects and engineers is not guaranteed at the present time owing to totally inadequate restrictions governing the practice of those professions. It is true that the tendency is toward regulating the practice of these professions, but as yet the results are not of great importance. To safeguard the public against improper designing, building departments have been instituted whose function it is to check the designs as to their compliance with the building code and to inspect the work as it progresses. In other words, the municipality has

very properly undertaken to safeguard the public against the erection of buildings that are unsafe structurally, inadequate as to fire resistance, and unsanitary. This is a proper function for a municipal government to undertake. In formulating these codes, however, they are premised on the assumed characteristics of the designer and contractor, as before stated. In doing this they so restrict the designing that a real burden of waste is imposed on those who invest in buildings.

A railroad company is not amenable to law in regard to the bridges that they erect, in so far as the structural design is concerned. Their designs are the best and most economical that they can produce. The shop and field inspection is carefully and accurately made. Their work is made to conform to the requirement that the structure shall be safe for the public and for themselves. They do take the benefit of all of the advantages of scientific progress in design and manufacturing because they only render an accounting to themselves rather than to municipal governments.

The construction of buildings is not entirely analogous to the work of the railroads. The motive of the railroad is safety with economy. The motive of many owners of buildings is, unfortunately, too often that of revenue based on the least possible cost. In striving to attain this objective they resort to employing architects and engineers who compete for their work on the basis of cheapness of building construction regardless of the demands of safe construction. Until this condition is overcome by raising the standard of all those engaged in the practice of architecture and engineering the public must depend on the ability of the building department for protection.

The large majority of owners, except in some localities, desire safe and permanent structures, and aim to employ competent designers. At the same time they have a perfect right to take advantage of scientific developments properly incorporated in design, first-class fabrication of materials and thoroughly good construction. No law should deny such rights, for such denial, through ultra-conservative code regulations, is simple confiscation of property through the waste of labor and materials.

This situation can be improved.

The fault is charged to the public in some instances. This is notably a result of a recent occurrence in Boston. The disastrous collapse of a 2,379,000-gal. molasses tank, which resulted in fourteen persons losing their lives, sixty persons injured, and a very large adjacent property damage, caused Judge Bolster to so place the blame. In this investigation it appeared that the building department engineer approved the plans for the reason that the plans were assumed to be adequate because

the application and plans bore the name of a civil engineer. The testimony also disclosed the fact that he was unable to compute the static pressure in a container of this kind. The honorable court found that:

"The chief blame rests upon the public itself. This single accident has cost more in material damage alone than all the supposed economies in the building department. Laws are cheap of passage, costly of enforcement. They do not execute themselves. A good law poorly administered is worse than a poor law well administered. A public, which, with one eye on its tax rate, provides itself with an administrative equipment 50 per cent qualified, has no right to complain that it does not get a 100 per cent product, and so long as it accepts political influence as the equivalent of scientific attainment in positions which demand such attainment in a high degree, so long it must expect breakdowns in its machinery."

* * * * *

"It is no part of the business of this court to find a scape-goat to order for an indifferent or niggardly public on the demand of the inevitable prophet after the event. The only assignable crime involved is manslaughter, through negligence. But error of judgment is not negligence, and if the public is content to buy a mere draftsman for a position demanding a high degree of technical training and skill, it can hardly complain that he is negligent in not exercising a skill which he confessedly does not have, and in view of his compensation cannot be expected to have."

* * * * *

"The men who failed are entitled to be judged to their lights."

* * * * *

"In short, these steel plans passed through a department created for the primary purpose of safeguarding life, without any checking up of the all-essential matter of structural sufficiency. So far as that department is concerned the plans licensed themselves."

* * * * *

"The only excuses offered were extreme rush of business in an undermanned department, which is probably true, and that such a tank was not a building or structure within the meaning of this law. The latter plea will hardly serve, considering that the department in fact took jurisdiction. But I am clear that the tank was a structure within both the letter and the spirit of the law. In justice to the present department it should be kept in mind that this occurred in 1915."

Fortunately, the conditions found by the honorable court do not obtain, as a rule, in American municipal building departments in the measure that they obtained in this case. The keynote of the whole proposition is found in the first quoted paragraph. To enforce a highly technical law requires honest and technically trained brains, and brains cost money. "Laws do not execute themselves," but they are necessary, and require building departments to administer them. "A good law poorly administered is worse than a poor law well administered." This is true. THE AMERICAN ARCHITECT, however, has always contended that we should have *good laws well administered*, and that it is entirely within the ability of the American people to accomplish this thing. It defines "good laws" to be those which permit the use of the higher fiber stresses that have

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been proved to be safe in connection with proper design and high-grade construction, the elimination of useless requirements that are the heritage of former and existing laws, precedents accepted "as is."

THE AMERICAN ARCHITECT has recently published articles by Mr. W. Stuart Tait advocating the increase in fiber stresses in reinforced-concrete work and changes in methods of computation, all tending to lessen the cost of construction without loss of structural safety. He proposed a method of supervising the design of such work, providing an elastic scheme of administration, which is really necessitated by the rapid advances in engineering knowledge, especially in relation to reinforced-concrete construction. Our present inelastic regulations tax the building industry during periods of the several years required to alter a building code and keep it abreast of scientific developments adequately demonstrated.

Considering the administering of a law controlling the use of reinforced-concrete construction, it is well to take cognizance of the Cleveland method. From the Cleveland code we quote:

SEC. 173-11. SPECIAL INSPECTOR ON CONCRETE CONSTRUCTION

(a) When reinforced concrete is used in construction, the owner shall provide a special inspector, who shall be satisfactory at all times to the Inspector of Buildings, and who shall be on the work continually during the mixing and placing of concrete and steel and the removal of forms. Such special inspector shall make daily written reports to the Inspector of Buildings on the progress of the work. Before placing concrete, the owner or contractor shall notify in writing the Inspector of Buildings the time at which he intends to begin the placing of concrete.

(b) Before the reinforced concrete work is started the owner shall name in writing the special inspector, who shall pass such examination as may be required by the Inspector of Buildings to determine his competency.

(c) When reinforced concrete is used in construction, the owner shall provide for and have made such tests and inspection of cement, inerts and steel as is required by the Inspector of Buildings.

The City of Cleveland also provides inspectors of concrete work, whose duty it is to see that the special inspectors, provided as above described, perform their work in a proper manner. In reference to this work, Mr. E. W. Cunningham, Commissioner of Building, city of Cleveland, writes:

"In this particular instance it may be of advantage to know that Cleveland has successfully carried out the policy of special inspection for concrete

work, and I feel that a great deal would be accomplished in the way of successful construction if such a policy were followed out in all large cities.

The results obtained under these provisions have been quite satisfactory, and architects, contractors and owners have come to appreciate the value of this work, and we very seldom have any complaint on the basis of added expense on this account.

We have had a number of concrete tests made during the past year (1918), the samples being taken from concrete being placed in the field, and in most cases these tests have shown a concrete better than 2000 lb. per square inch in compression, the poorest samples obtained showing a very wet concrete with a very material reduction in strength, apparently on this account. I believe that both engineers and contractors are beginning to realize that the regulation of the amount of water used in concrete is quite as essential as the amount of the other materials."

Thus the very admirable Division of Buildings in the city of Cleveland has taken a step in advance toward the proper administration of building laws, and has shown one method of enforcing good laws. Undoubtedly, Mr. Cunningham can, as a result of his experience, suggest other methods for increasing the efficiency of municipal building departments.

The desirable things, good laws well administered, have a tremendous influence on the prosperity of every community, and they must be brought about. The architect, engineer and contractor are vitally interested, as these laws regulate the conduct of their business. This being true, they should be the controlling factor in the writing and administering of them. If they do not assume this control, either individually or through their professional organizations, they have failed in their duty to themselves and to the public, and the public must look for relief from other sources.

The revival and maintenance of the building industry is adversely affected by the present conditions, and now is the time to act. This necessitates that the architect, engineer and contractor, the realtor and investor, should make every possible effort to completely function as a professional and business man and as a true citizen. This involves political action and contact with politics, but without assuming these conditions any effort will fail, as it should.

Industrial Information

In this Department there is published each week information as to the development of materials and methods, derived from reliable sources.

Portable Ozonators

In a leaflet printed for the Sprague Electric Works, 527 West Thirty-fourth Street, New York, a summary of the value of ozone in the maintenance of fresh, breathable, odorless air is set down.

The main source of physical discomfort existing in the air are excessive heat, moisture and unpleasant odors. Engineers have given considerable attention to the first two factors, and the heat and moisture of rooms may now accordingly be controlled by suitable methods of heating and ventilating.

Although the subject of objectionable odors has been somewhat minimized, it is also one of importance. While the presence of such odors is not necessarily nor even generally indicative of poison in the air, its result is to restrain the normal breathing and tend to lessen physical vitality and efficiency. These odors may be caused by cooking, smoking, trade processes or uncleanness. Ventilation may considerably assist in reducing annoyance and depression by diluting these odors with fresh air, but their complete removal may best be accomplished by other means.

Ozone is known to be a form of oxygen which is so extremely unstable as rapidly to oxidize or burn up any organic matter with which it comes in contact. It is formed from the oxygen of the air as it passes through an electrical discharge, and its presence is often noticed after a severe thunder storm, this being one of nature's ways of purifying the atmosphere. In practical work, the electrical discharge is produced between two concentric tubes, between which a flow of air is maintained.

In buildings where for any reason a ventilating system cannot be installed, Portable Ozonators may be employed. These ozonators are provided with fans which by keeping the air in motion insure a thorough distribution of the ozone produced. Portable Ozonators are built by the Sprague Electric Works in two sizes, the Household and the Universal. These are practically identical except as to capacity. These ozonators are approved by the National Board of Fire Underwriters. The Household Ozonator is used mainly in the home for destroying kitchen and other household odors. This type is especially suited to keeping the air fresh during the winter when windows and doors

may be tightly closed. It is also used in offices, small theaters, restaurants, toilet rooms, etc., to aid in the general purification of the air and counteract the effects of tobacco smoke and body odors. The Universal has four times the ozone capacity of the household type, and may be used in large offices, cold storage rooms, factories, hospitals and moving picture houses for similar purposes.

Atwood Vacuum Cleaner

Quite apart from the appeal that the "nothingness" in a vacuum cleaner is a power to be counted on for active service, the conservation of energy resulting from its use is something to be reckoned with in any household.

Having placed on the market a vacuum cleaner of wide adaptability and effectiveness in performing its functions, the Atwood Vacuum Machine Co., Rockford, Ill., has proceeded to tell why and how in a catalog recently received. Herein it is stated that the Atwood is of great durability and operates with the least possible noise. These qualities are obtained by the use of a large, slow-speed pump rather than a small, high-speed one. Any form of power will run this machine—electric motor, gasoline engine or any other available. This machine has an endless belt drive. An Atwood Gravity Idler is incorporated in each machine and always maintains the belt at correct tension. The belt may be instantly removed and the motor used for any other machine. All shaft bearings are unusually large and automatically lubricated by ring oilers. Oil reservoirs are generous in size and fitted with dustproof hinged plates. Motor and exhauster are mounted on a heavy cast-iron base, giving the machine a solid foundation. A valuable feature is the fact that the vacuum is under control. The Atwood Automatic Unloading Valve is set and locked at the factory to operate at the correct vacuum. This valve is so designed as to relieve the motor when the cleaner is started or run with all the inlets closed, but instantly brings the machine to full capacity as soon as any tool is put in use. Tools cover a wide variety for all the general and specific needs.

The average vacuum cleaning system is called upon to do a varied work. It is put on heavy rugs which require relatively high vacuum and small volume of air, and also on bare floors and walls where the conditions are reversed. The Atwood type of ex-

THE AMERICAN ARCHITECT

hauster automatically makes possible these nice combinations. Various sizes are made providing for the whole range of buildings, from small bungalows to large hotels and public buildings.

The Ja-Nar'

To be able to conceal the usually unsightly radiator and at the same time automatically regulate the warmth of the room to an even and constant temperature is the twofold function of the Ja-Nar'. The Fulton Company, Knoxville, Tenn., issues a booklet on this subject of more than usual interest.

From the description presented, the Ja-Nar' has much to commend it. First, there is the element of comfort and health. A room constantly too hot or too cold cannot be comfortable. A room that is spasmodically hot and then cold is still worse. The repeated necessity for opening and closing the window or regulating the valve of the radiator dissipates the comfort of a restful evening. The Ja-Nar', we are told, does away with this inconvenience. It brings two kinds of comforts: the physical comfort of always having the desired temperature in the room, and the mental ease of knowing it in advance.

To architects the exposed radiator has always been disconcerting. When, with the comfort assured by the Fulton Company, there may be had a distinct addition to the artistic aspect of the room, one is justified in seeking acquaintance with a cabinet which achieves these desired results.

The Ja-Nar' is a piece of furniture which fits over the radiator, and is finished to match mahogany, oak, walnut and white or tinted enamel. It makes, it is claimed, a better use of the heat than the naked radiator; it prevents the streaky, faded spots on the wall above, and the warping of woodwork around; it provides an appropriate place for flowers, books and statuary, and contributes another decorative touch to the intimacy and personality of the room.

The working of the Ja-Nar' is extremely simple. Its installation requires no change of a single detail in the heating system; no connections of pipes or tearing up of floors are required. The thing works on tried and known principles. It operates without any outside interference, and conserves fuel in the process.

Ja-Nar' is fully guaranteed as to workmanship, material and operation. The Fulton Company will send further details upon request.

Fires and Flues

"Clay Products for Building Construction" is the title of a booklet printed by the Sewer Pipe Manufacturers' Association, Akron, Ohio. The recommendations for the safe and sanitary construction of buildings made therein are founded on statistics compiled as the result of investigations of losses caused by unsafe and unsanitary construction of various types of buildings. These recommendations embrace the suggestions of architects, health officers, fire engineers, city building commissioners and others with related interests.

Buildings are no longer constructed where the use of inferior materials is sanctioned for the sake of restricting costs. Societies are being formed everywhere to instil the need of safe and sanitary construction in the minds of the public. This education, valuable as it is, must be followed by action. It will not do tacitly to admit the importance of a certain policy only to pursue one diametrically opposed.

What is called "the wooden-house habit" is traced from its earliest development in this booklet, and its relation to fire hazard is clearly set forth. The part of the flue in spreading or limiting a fire once under way is emphatically disclosed. The necessity for proper flue construction cannot be overlooked.

It is not, perhaps, generally appreciated that the expenditure of only a few dollars will permit of lining chimneys and flues with a fire-resisting material which will prevent the collection of soot and reduce the danger of fires from sparks; that will, further, prevent gases, sulphur, etc., from disintegrating the mortar in the chimney, dissolving out the lime, making it crumbly, and weakening the structure of the flue.

It is reasonable to believe that if the building public would more carefully scan the facts governing the origin of fires, many unsafe construction customs, notably that of leaving a chimney unlined, would be abandoned, not from compulsory legislation, but from choice.

Architects might well follow their impulse to send for this booklet and trace the matter to its source



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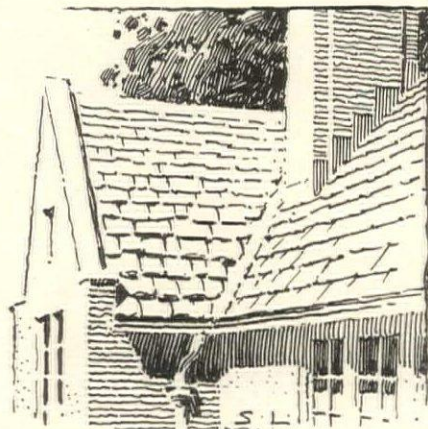
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The Quantity System provides that bids shall be based on uniform quantities. The contractor is relieved of any responsibility for the quantities for bidding purposes. The quantities become the basis of the contract.

We tried out a real ad writer last week with results that are not satisfactory to us. Something slipped in the routine of work and our first ad in this paper, which appeared last week, contained some statements to which we do not wish to subscribe.

WM. GRAVES SMITH, Pres.

The Quantity Survey Company, Inc.

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New York City

BUILDING NEWS

To be of value this matter must be printed in the number immediately following its receipt, which makes it impossible for us to verify it. Our sources of information are believed to be reliable, but we cannot guarantee the correctness of all items. Persons in charge of proposed work are requested to send us information concerning it as early as possible; also corrections of any errors discovered.

ALABAMA

ALBANY, ALA.—Board of Education plans to build high school. \$150,000.

BIRMINGHAM, ALA.—City plans to issue \$3,000,000 bonds. Part proceeds will be used for rebuilding Central High School, also building high school in eastern end of city. J. Kendrick, City Engineer.

ARIZONA

HUMBOLDT, ARIZ.—A. H. Nelson, clerk Board of Education, proposes building school here. R. N. Lamberth, Hotel St. Michael, Prescott, Architect.

HUMBOLDT, ARIZ.—Board of Trustees, Humboldt School District No. 22, Yavapai County, Ariz., will construct public school building. A. H. Nelson, clerk, Board of Trustees. R. N. Lanworth, Architect, Hotel St. Michael, Prescott, Ariz.

TUCSON, ARIZ.—University of Arizona plans to build twelve new buildings and additions to dormitories, dining hall and library. \$425,000.

CALIFORNIA

CUTLER, CAL.—National Bank of Cutler let contract to build brick and concrete bank and store building to R. Pedersen & Co., Fresno. \$150,000.

EL CENTRO, CAL.—T. O. Luckett, W. L. Lyon and associates plan to build hospital here. \$60,000.

FRESNO, CAL.—Madray Planing Mill Co., Kern and H Streets, will build one-story, 150 x 280 ft., reinforced concrete planing mill on Santa Clara and H Sts. \$200,000.

FRESNO, CAL.—San Joaquin Light & Power Co., H and Tulare Streets, will rebuild 20,000-hp. reinforced concrete hydroelectric plant on San Joaquin River, near Macy Flat, to cost \$1,750,000. Other work to cost \$55,000,000.

GLENDALE, CAL.—Holy Family congregation is having plans prepared by A. C. Martin, Architect, 430 Higgins Building, Los Angeles, for group consisting of church, school, parish house, guild hall, etc., large building of brick, others frame construction, reinforced concrete flooring, concrete foundation, on Louise Street and Lomita Avenue. \$100,000.

LOS ANGELES, CAL.—Board of Education, Security Building, is having plans prepared by W. J. Bliesner, Architect, 223 South Flower Street, for brick gymnasium at Polytechnic High School. \$75,000.

LOS ANGELES, CAL.—F. T. Woodman, Mayor, appointed committee to formulate plans for civic center, to include city hall, library, police headquarters, etc. W. Mulholland, chief engineer Public Service Department, chairman. \$10,000,000.

LOS ANGELES, CAL.—A. Pantages, Pantages Building, will build eight-story, 150 x 150 ft., reinforced concrete, steel and brick theater, office and store, Seventh and Hill Streets. \$600,000.

MERCED, CAL.—Merced Union High School District is having plans prepared by Allison & Allison, Architects, Iberian Building, Los Angeles, for constructing group of one and two-story brick buildings, consisting of academic administration and assembly building, domestic science, manual training and commerce building, power house and gymnasium. \$180,000.

OAKLAND, CAL.—Oakland Labor Temple Association plans to build ten-story temple and hotel on Broadway, between Seventeenth and Eighteenth Streets. G. C. Davis, manager. \$700,000.

SAN DIEGO, CAL.—Naval Public Works Office, Timken Building, San Diego, will construct seven permanent barracks at the Marine Brigade Post on Dutch Flats. The buildings will be reinforced concrete, hollow tile construction. \$1,000,000.

SAN JOSE, CAL.—Producers Warehouse Co. plans to build addition to warehouse. \$200,000.

COLORADO

BRIGHTON, COL.—National Beet Harvester Co. plans to build factory and foundry here. \$30,000.

DENVER, COL.—Albany Hotel Co., Seventeenth and Stout Streets, plans to rebuild hotel. S. R. Dutton, manager. \$500,000.

DENVER, COL.—City and Denver County plan election to vote on \$1,500,000 bond issue for building city and country administration building, courthouse and county hospital.

CONNECTICUT

BRIDGEPORT, CONN.—Progressive Building Co., 1215 Main Street, will build four-story, 72 x 125 ft., brick and concrete apartment hotel on Lafayette and Liberty Streets. \$150,000.

HARTFORD, CONN.—City is having plans prepared by Whiton & McMahon, Architects, 36 Pearl Street, for building public market on Connecticut Boulevard. R. J. Kinsella, Mayor and chairman of Commission. \$100,000.

HARTFORD, CONN.—Supervising Architect, Treasury Department, Washington, D. C., authorizes extending and enclosing mailing platform at the United States Post Office and Custom House here.

MIDDLETOWN, CONN.—State Legislature, Hartford, petitioned to appropriate \$250,000 to build state armory here.

NEW HAVEN, CONN.—C. W. Ratner, 1476 Chapel Street, will build four-story, 90 x 101 ft., brick, reinforced concrete and steel apartment hotel on Chapel Street and Winthrop Avenue. \$90,000.

NEW HAVEN, CONN.—Grace Hospital Association, 1418 Chapel Street, proposes erecting five-story, 100 x 140 ft., brick, steel and reinforced concrete hospital on Orchard Street. C. S. Palmer, 191 Church Street, Architect. \$250,000.

NEW HAVEN, CONN.—Pallotti, Andretta Co., 630 Chapel Street, will build three-story, 76 x 90 ft., brick, steel and concrete bank building on Olive and Chapel Streets. D. Guerriero, 630 Chapel Street, Architect. \$100,000.

NORWALK, CONN.—Norwalk Realty & Improvement Co., care of M. N. Maychoff, 31 West Avenue, is having plans prepared by G. F. Shepard, Architect, 14 Kilby Street, Boston, for building brick and steel hotel, concrete foundation, on Wall Street. \$100,000.

STAMFORD, CONN.—Stamford Extract Mfg. Co., Cove Road, plans to rebuild manufacturing plant recently destroyed by fire with loss of about \$900,000.

WATERBURY, CONN.—Board of Health proposes building two-story brick, steel and reinforced concrete isolation hospital on Watertown Avenue. Cross & Cross, 681 Fifth Avenue, New York City, Architects. \$200,000.

ILLINOIS

BLUE ISLAND, ILL.—American Wire Fabrics Co., 208 South La Salle Street, Chicago, purchased site near here and plans to build large plant. \$1,000,000.

CHICAGO, ILL.—Passevant Memorial Hospital, 149 West Superior Street, plans to build hospital. \$1,000,000.

CHICAGO, ILL.—J. Vogelsang, 177 West Madison Street, proposes building seventeen-story, 85 x 189 ft., hotel and restaurant on Madison Street, near Wells Street. Holabird & Roche, 104 South Michigan Avenue, Architects. \$1,000,000.

CHICAGO, ILL.—Holabird & Roche, Architects, 104 South Michigan Avenue, have plans for building six-story, 27 ft. 9 in. x 108 ft., brick and steel store and office, at 127-129 South State Street here for L. E. Waterman & Co., 191 Broadway, New York City. \$175,000.

CHICAGO, ILL.—Mundie & Jensen, Architects, 39 South La Salle Street, have prepared plans for one-story, 133 x 520 ft., brick factory on Forty-seventh and Whipple Streets for J. S., H. C. and H. Phipps, 787 Fifth Avenue, New York City. Marshall Field Co., 22 East Washington Street, lessee. \$225,000.

GILLESPIE, ILL.—J. W. Kennedy, Architect, Cahokia Building, East St. Louis, has plans for building two-story, 140 x 154 ft., brick and reinforced concrete high school for Board of Education. \$125,000.

WOODRIVER, ILL.—J. W. Kennedy, Architect, Cahokia Building, East St. Louis, has designed a two-story, 90 x 150 ft., brick and reinforced concrete high school for Board of Education. \$90,000.



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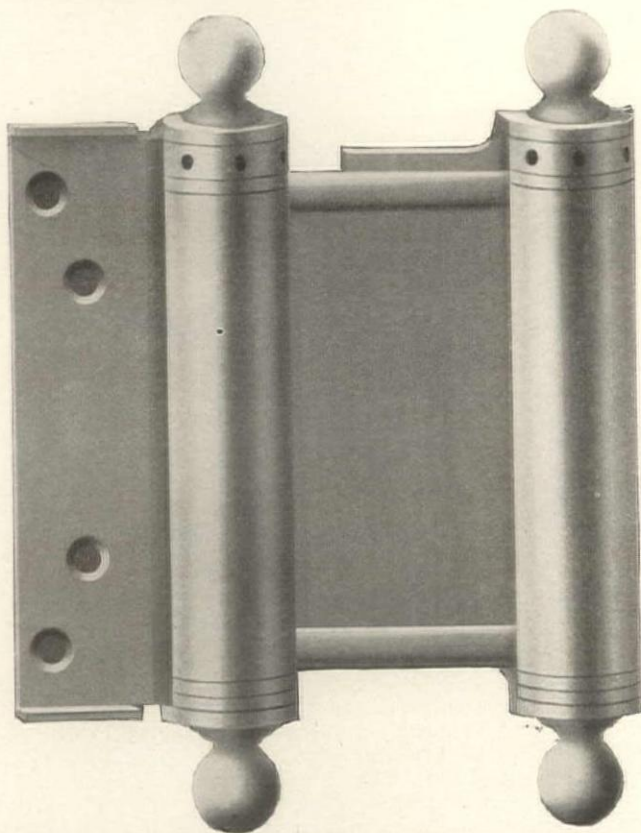
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INDIANA

DECATUR, IND.—Old Adams County Bank is having plans prepared by C. R. Weatherhogg, Architect, Hamilton Bank Building, Fort Wayne, for bank building here. \$65,000.

ELKHART, IND.—Board of Education plans election to vote on \$120,000 bonds to build new school.

GARY, IND.—The Methodist Episcopal Hospital Board of Indianapolis is contemplating the construction and equipment and operation of a \$260,000 hospital on a site here which has been given by the Gary Land Co.

IOWA

BLOOMFIELD, IOWA.—Davis County Red Cross plans campaign to build county memorial for soldiers. \$100,000.

COUNCIL BLUFFS, IOWA.—Independent School District will hold election to vote on \$100,000 bonds to purchase site and build school. R. H. Williams, secretary.

DAVENPORT, IOWA.—Standard Oil Co., 715 Federal Street, proposes building oil filling station on Fourth and Warren Streets. A. Flanagan, assistant manager.

SIOUX CITY, IOWA.—Willis M. Pritchard, County Auditor, will construct county home building and boiler house on county home site, three stories and basement, brick structure main building. Wm. L. Steele, 502 United Bank Building, Sioux City, Iowa, Architect. \$150,000.

WASHINGTON, IOWA.—United Presbyterian congregation let contract for building two-story brick church to Shrader, Worlary & McKeane, Washington. \$50,000.

KENTUCKY

LEXINGTON, KY.—Burley Tobacco Co. plans to build 160 x 800 ft. warehouse here. C. Lebus, president. \$100,000.

MARYLAND

BALTIMORE, MD.—Johns Hopkins University received anonymous gift of about \$400,000 to build three-story brick and steel woman's clinic as an adjunct to hospital on North Broadway. Archer & Allen, Central Savings Bank Building, Architects.

BALTIMORE, MD.—J. Freund, Jr., Architect, 16 East Biddle Street, has plans to construct four-story reinforced concrete, brick and steel addition to bakery, 50 x 143 ft., four stories, on North Gay Street, for City Baking Co., Equitable Building. Total estimated cost, \$50,000.

BALTIMORE, MD.—City Council contemplates purchasing site at Fayette and Asquith Streets to build school, also establishing park adjoining school. Total cost, \$250,000.

CHESTERTOWN, MD.—Third National Bank purchased site on High and Cross Streets and plans to build 85 x 100 ft. steel, brick and concrete bank, office and store building. Address A. L. Sparks, Chestertown. \$75,000.

ST. HELENA (BALTIMORE P. O.), MD.—Raymond Concrete Pile Co., 922 Munsey Building, Baltimore, will build one-story reinforced concrete, steel and brick ship repairing and concrete pile casting plant on Colgate Creek. \$100,000.

TEXAS, MD.—Commissioners of Baltimore County, Towson, are having plans prepared by W. H. Emory, Jr., Architect, 827 Munsey Building, Baltimore, for concrete, steel and brick almshouse. Cost between \$75,000 and \$100,000.

MASSACHUSETTS

CAMBRIDGE (BOSTON P. O.), MASS.—H. Harlow, Architect, 101 Tremont Street, Boston, will build four-story brick, steel and concrete apartment hotel for F. S. Harlow, care of Architect. \$100,000.

CHELSEA (BOSTON P. O.), MASS.—Griffin Wheel Co., 42 Gerrish Avenue, has awarded contract for building one-story brick, steel and concrete foundry, machine shop, core room, cleaning room, etc., to F. F. Jonesberg Co., 294 Washington Street, Boston. \$300,000.

DORCHESTER (BOSTON P. O.), MASS.—Upham Market Co. had plans prepared by W. Bacon, Architect, 27 Kilby Street, Boston, for two-story market, 84 x 117 ft., reinforced concrete, on Ramsey Street here. \$100,000.

HOLYOKE, MASS.—Board of Education had plans prepared by G. P. B. Alderman & Co., Architects, 437 High Street, for building two-story brick, steel and reinforced concrete school. \$275,000.

LOWELL, MASS.—Standard Oil Co., 50 Congress Street, plans to build garage and office on Main and Canada Streets. \$80,000.

WORCESTER, MASS.—M. Barski, 21 Green Street, let contract for building one-story, 134 x 200 ft., brick and

concrete garage on Green Street to Federal Engineering Co., 518 Main Street. \$50,000.

WORCESTER, MASS.—B. Press, 1 Granite Street, is having plans prepared by E. T. Chapin, Architect, 340 Main Street, for building one-story, 50 x 90 ft., brick and reinforced concrete garage on Vernon Street. \$25,000.

WORCESTER, MASS.—Board of Education plans to build addition to high school on Irving Street, to contain gymnasium, administration rooms, etc.

MICHIGAN

BESSEMER, MICH.—Arthur Lintleman, secretary Board of Education, will construct fireproof school building. C. J. Anderson, Architect, Ironwood, Mich.

DETROIT, MICH.—Heyn's Bazaar, 147 Woodward Avenue, is having plans prepared by A. Kahn, Architect, Marquette Building, for eight-story, 40 x 100 ft., brick, steel and reinforced concrete store on Woodward Avenue. E. Heyn, president.

DETROIT, MICH.—E. Kern Co., Woodward and Gratiot Avenues, is having preliminary plans prepared by Smith, Hinchman & Grylls, Architects, 710 Washington Arcade, for eight-story, 94 x 100 ft., brick, steel and concrete store.

DETROIT, MICH.—Book Estate is having preliminary plans prepared for five-story, 60 x 100 ft., office on Washington Boulevard and Grand River Avenue. H. S. Ellington, 1225 Book Building, engineer.

DETROIT, MICH.—Holley Carburetor Co., 145 East Willis Avenue, is having plans prepared by A. Kahn, Marquette Building, for one- and two-story, 60 x 224 ft. and 40 x 94 ft., brick and reinforced concrete factory on Epworth Boulevard and Vancouver Street.

DETROIT, MICH.—J. G. Kastler, Architect, Chamber Commerce Building, has plans to build two-story, 50 x 180 ft., brick, concrete and steel garage on Chene Street and East Grand Boulevard.

DETROIT, MICH.—Newcomb-Endicott Co., 190-200 Woodward Avenue, let contract for twelve-story, 60 x 110 ft., steel building on Woodward and Grand River Avenues, to Batchelder-Wasmund Co., Jefferson Avenue, W.

EAST LANSING, MICH.—State Legislature, Lansing, petitioned to appropriate \$300,000 to build library at Michigan Agricultural College here.

FLINT, MICH.—Board of Education is having plans prepared by Malcolmson & Higginbotham, Architects, 404 Moffat Building, Detroit, for two-story brick and concrete grade school for Union School District. \$200,000.

GRAND RAPIDS, MICH.—C. A. Connor Ice Cream Co., Owosso, plans to build plant here. \$150,000.

LANSING, MICH.—Board of State Auditors, Lansing, soon receives bids for office building here. \$1,000,000.

PORTLAND, MICH.—C. L. Crane, secretary Board of Education, will construct high school building. Thos. E. White, Architect, Lansing, Mich.

MINNESOTA

DULUTH, MINN.—City plans to build four-story reinforced concrete, brick and steel hall on West First Street. L. A. Ayres, City Hall, engineer. \$1,000,000.

FARIBAULT, MINN.—State Board of Control, State House, St. Paul, plans to build epileptic colony here. \$150,000.

HIBBING, MINN.—C. Foster, engineer, care of Hibbing Power & Light Co., proposes building three-story, 104 x 158 ft., power house, reinforced concrete, brick and steel, on Main Street. Holstead & Sullivan, Palladia Building, Duluth, Architects. \$150,000.

MANKATO, MINN.—Eckman Bros. are having plans prepared by H. C. Gerlach, Architect, Mankato, for two-story, 30 x 50 ft., garage, 17 x 40 ft. office, 10 x 15 ft. stockroom and 50 x 88 ft. workshop.

ST. CLOUD, MINN.—Standard Oil Co., Fourth and Oak Streets, Minneapolis, expects to build one-story, 40 x 150 ft., filling station; one-story, 40 x 80 ft., barn, and two-story, 30 x 118 ft., warehouse here. \$100,000.

MISSOURI

JEFFERSON CITY, MO.—St. Mary's Hospital plans to rebuild hospital recently destroyed by fire. \$150,000.

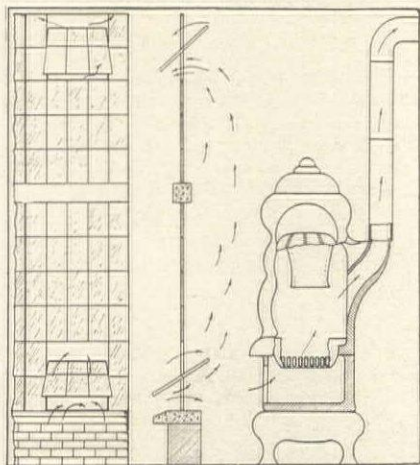
ST. LOUIS, MO.—Corporation is being formed to build terminal building on river front, modeled after Bush Terminal of Long Island. E. Gengenbach, Chamber of Commerce, engineer. \$5,000,000.

ST. LOUIS, MO.—A. B. Groves, Architect, Merchants Exchange Building, has plans for one-story, 120 x 260 ft.,

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reinforced concrete addition to factory for Bemis Bag Co., 601 South Fourth Street. \$100,000.

ST. LOUIS, Mo.—Missouri Farmers Association, care of A. Dunlap, representative, Gallatin, plans to build flour mill here. \$350,000.

NEVADA

WINNEMUCCA, NEV.—Commissioners of Humboldt County are having plans prepared by F. J. De Longchamps, Architect, Nixon Building, Reno, for building two-story reinforced concrete and stone courthouse. \$150,000.

NEW JERSEY

JERSEY CITY, N. J.—Board of Freeholders, Hudson County, is having plans prepared by E. Rowland, Architect, 100 Sipp Avenue, for new insane asylum. \$200,000.

NEWARK, N. J.—Newark Athletic Club, Ordway Building, had tentative plans prepared for building ten-story, 100 x 125 ft., concrete, steel and brick club. \$600,000.

NEWARK, N. J.—H. & J. Kruvant, 31 Walnut Street, let contract for building five-story, 68 x 150 ft., concrete, steel and brick hotel at 24-26 Park Street, to H. Kruvant, 189 Bloomfield Avenue. \$300,000.

UNION, N. J.—The Board of Education is contemplating the construction of a school building, brick and reinforced concrete construction, 190 feet and 4 inches by 105 feet and 5 inches. Joseph D. Lugosch, Architect. Weehawken, N. J. J. Byers Holbrook, engineer, New York City. \$300,000.

WASHINGTON, N. J.—H. Christine, mayor, O. Menkel and associates build two-story, 48 x 140 ft., brick hosiery mill. \$100,000.

WEEHAWKEN, N. J.—Township Commission plans to build new municipal building. \$150,000.

NEW YORK

ALBANY, N. Y.—State Legislature, Capitol, petitioned to acquire site and build Senate and Assembly office.

BROOKLYN, N. Y.—Bushwick Maternity Hospital, 761 Bushwick Avenue, proposes building four-story, 75 x 100 ft., steel and brick hospital on Bushwick Avenue and Cedar Street. Carlson & Wiseman, 226 Henry Street, Architects. \$70,000.

BROOKLYN, N. Y.—Board of Education, 500 Park Avenue, New York City, has plans for building P. S. No. 29, five stories, 118 x 192 ft. steel and brick, on Henry and Harrison Streets. C. B. J. Snyder, Municipal Building, New York City, Architect. \$543,474.

FAR ROCKAWAY, N. Y.—T. W. Lamb, Architect, 644 Eighth Avenue, New York City, has prepared plans for building one-story, 44 x 250 ft., steel and brick theater on Central Avenue for Far Rockaway Strand Theater Co., Forty-seventh Street and Broadway, New York City. \$100,000.

LAKE PLACID, N. Y.—Bowman Hotel Co., 405 Lexington Avenue, New York City, plans to build ten-story hotel on Grand View Hill. \$300,000.

MANLIUS, N. Y.—St. John School is having plans prepared by J. M. Scrafford, Architect, for building additional barracks. W. Verbeck, president. \$100,000.

NEW YORK, N. Y.—H. Jaekel & Sons, 16 West Thirty-second Street, will build six-story, 25 x 155 ft., brick and steel addition at 546 Fifth Avenue. Starrett & Van Vleck, 8 West Fortieth Street, Architects. \$75,000.

NEW YORK, N. Y.—Eagle Pencil Co., 703 East Thirtieth Street, is having plans prepared by Buchman & Kahn, Architects, 56 West Forty-fifth Street, for six-story, 75 x 200 ft., reinforced concrete addition on Avenue D, between Thirteenth and Fourteenth Streets.

NEW YORK, N. Y.—Brown Bros. & Co., 59 Wall Street, let contract for building four-story, 44 x 88 ft., steel and brick bank at 81-83 Beaver Street to Marc Eidlitz & Son, 30 East Forty-second Street. \$150,000.

NEW YORK, N. Y.—M. A. Hoyt, 28 East Thirty-sixth Street, let contract for altering office building at 40-44 Pine Street into bank, brick and limestone, to Marc Eidlitz & Son, 30 East Forty-second Street. Mercantile Bank of America, 38 Pine Street, lessee. \$300,000.

NEW YORK, N. Y.—New York Stock Exchange, Broad Street, let contract for altering three-story brick and steel bank at 170 Broadway to G. Richter, 100 William Street. Zimmerman & Forshay, 9 Wall Street, lessees. \$50,000.

NEW YORK, N. Y.—Daughters of Jacob, 157th Street, Findlay and Tuller Avenues, let contract for building

five-story home, 100 x 150 ft., steel and brick, in Bronx Borough, to G. R. Davis & Co., 30 East Forty-second Street. \$600,000.

NEW YORK, N. Y.—E. K. Stalle Estate let contract for building thirty-story, 51 x 99 ft., steel and brick addition to office on Forty-second Street, between Broadway and Seventh Avenue, to Subway Central Building Corporation, 1482 Broadway. \$1,500,000.

NEW YORK, N. Y.—B. W. Levitan, Architect, 7 West Forty-fifth Street, receives bids about Feb. 28 for building two-story, 100 x 171 ft., steel and brick garage on Lenox Avenue between 110th and 111th streets for Swartout Realty Co., 26 West Thirty-first Street. \$200,000.

NEW YORK, N. Y.—Pictorial Review Co., 222 West Thirty-ninth Street, is having plans prepared for twelve-story, 107 x 147 ft., brick and steel printing plant on Seventh Avenue and Thirty-ninth Street. Renwick, Aspinwall & Tucker, 8 West Fortieth Street, Architects. \$1,000,000.

SYRACUSE, N. Y.—Board of Education let contract for building three-story school, 100 x 150 ft., steel and brick, on Madison Avenue and Walnut Street, to Schaefer Construction Co., 5 West Thirty-first Street, New York City. \$230,000.

SYRACUSE, N. Y.—Syracuse Trust Co., 328 South Warren Street, plans to expend about \$50,000 and \$100,000 for converting present buildings at 509-511 North Salina Street into bank; also build new quarters in South Genesee Street.

SYRACUSE, N. Y.—Onondaga Milk Producers Co-Operative Association plans to build concrete and steel milk condensary. Address C. L. Amos, 1204 James Street, director. \$150,000.

SYRACUSE, N. Y.—Overland Syracuse Co., East Genesee Street, plans to build three-story, 96 x 100 ft., brick service station to replace present building on Grape Street; also build third story to existing building on East Genesee Street.

UTICA, N. Y.—Wilmer & Vincent 1451 Broadway New York City are having plans prepared by E. C. Horn & Sons Architects 1476 Broadway New York City, to alter existing building and construct three-story, 75 x 100 ft., addition to same, on Bleacher Street. \$100,000.

WHITESBORO, N. Y.—Board of Education will construct new school building. H. B. Cary, clerk Board of Education, 103 Main Street, Whitesboro.

NORTH CAROLINA

WINSTON SALEM, N. C.—Hanes Rubber Co. plans to extend plant here, including construction of warehouses and forty cottages. Lockwood, Greene & Co., Healy Building, Atlanta, Ga., engineers.

NORTH DAKOTA

GRAND FORKS, N. D.—J. Kavanaugh is having plans prepared by Buechner & Orth, Architects, Minneapolis, Minn., for three-story brick theater on De Mers Avenue. \$100,000.

OHIO

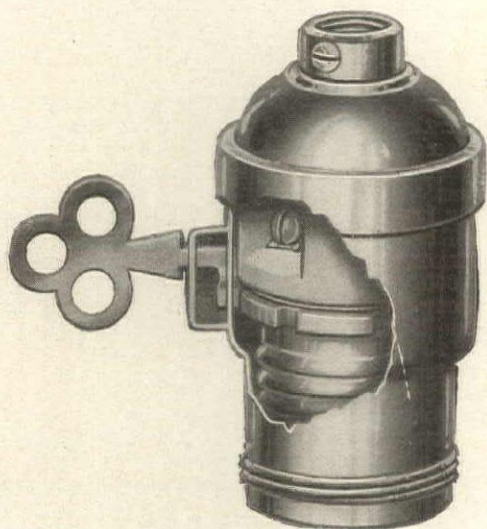
CLEVELAND, OHIO.—City is having plans prepared by F. H. Betz, Architect, City Hall Building, for three two-story brick, steel and reinforced concrete fire stations, one on East 187th Street and Nottingham Road, to cost \$75,000; one on West Sixty-fifth Street and Denison Avenue and one on East 131st Street and Corlett Avenue, to cost \$60,000 each.

CLEVELAND, OHIO.—East Ninth Street Euclid Co., care of C. H. Beardslee, East Ninth Street and Euclid Avenue, plans to remodel eight-story, 70 x 163 ft., building at above address into office. \$100,000.

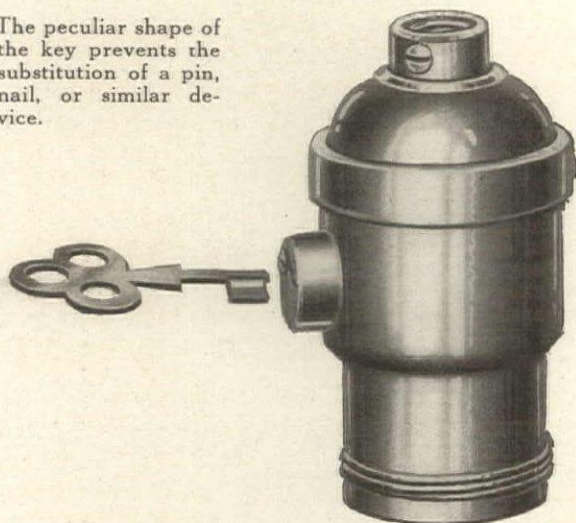
CLEVELAND, OHIO.—City is having plans prepared by F. H. Betz, Architect, City Hall Building, for two-story brick, steel and reinforced concrete police station on West One Hundredth Street and Denison Avenue, also one on East 131st Street and Corlett Avenue. \$75,000 each.

CLEVELAND, OHIO.—Rialto Amusement Co., care of P. E. Essick, Stork Theater, West Twenty-fifth Street and Lorain Avenue, plans to build two-story, 70 x 175 ft., concrete, brick and steel moving picture theater. \$150,000.

COLUMBUS, OHIO.—Clinton Cowen, State Highway Commissioner, plans prison camp buildings and all equipment located on Section "K" of the National Road, I. C. H. No. 1, Wills Township, Guernsey County, near Middlebourne, Ohio.



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General Office  **Company** Schenectady, N.Y.

DAYTON, OHIO.—Custer Specialty Co., 2628 North Ludlow Street, is having plans prepared by R. E. Gebhart, Architect, 73 Calahan Bank Building, for three-story, 60 x 80 ft., factory on Franklin Street.

DAYTON, OHIO.—Consolidated Automobile Co., 222 West Third Street, plans to build four and five-story reinforced concrete business block. \$300,000.

DAYTON, OHIO.—L. F. Schwind Realty Co., Schwind Building, 25-27 Ludlow Street, is having plans prepared by Schenck & Williams, Architects, Mutual Home Building, for building 100 x 120 ft. reinforced concrete theater on First and Main Streets.

KUNKLE, OHIO.—J. B. Bradhurst, Board of Education, Kunkle Rural School District, will construct brick composite type school building to be located adjoining the present school building here. W. H. Nicklas, Architect, 1900 Euclid Avenue, Cleveland, Ohio.

OKLAHOMA

BLACKWELL, OKLA.—First Baptist Church will construct two-story brick church building. A. C. West, secretary Building Committee; J. A. Tharp, chairman.

WOODWARD, OKLA.—Supervising Architect, Treasury Department, Washington, D. C., will construct United States post office and courthouse here.

OREGON

BAY CITY, ORE.—Miami Lumber Co. will build addition to sawmill to increase capacity to 175,000 ft. daily. Plans include filling, dredging, building loading docks, etc.

EUGENE, ORE.—State Legislature, Salem, petitioned to appropriate \$100,000 toward building women's building at University of Oregon. \$200,000.

PENNSYLVANIA

ALLENTOWN, PA.—Wilmer & Vincent Theater Co., 33 West Forty-second Street, New York City, is having plans prepared by Hoffman Co., Architects, Finance Building, Philadelphia, for seven-story concrete, steel and brick theater and office.

ALLENTOWN.—Plans are being prepared for the construction of a theater and office building, seven stories, brick, steel, stone and concrete construction. Hoffman Co., Architects, Philadelphia, Pa. \$450,000.

CHESTER, PA.—H. P. Bartow, 612 Newmarket Street, is having plans prepared for three-story, 20 x 100 ft., printing house.

JOHNSTOWN, PA.—Board of Directors of School District proposes building main school building and boiler house for group of six buildings known as William A. Cochran School in Eighth Ward. C. H. Meyer, secretary.

PHILADELPHIA, PA.—L. W. Hirsch Co., 923 Market Street, let contract for remodeling five-story, 46 x 200 ft., building adjoining present store into addition for its own use, to Melody & Keating, 1322 Race Street. \$195,000.

PHILADELPHIA, PA.—J. E. Sjöhsom, Inc., 1715 North Tenth Street, plans to build three-story, 68 x 102 ft., brick factory. \$50,000.

PHILADELPHIA, PA.—Palm Theater, Kensington Avenue and Norris Street, plans to alter theater and build new reinforced concrete balcony. R. Beard, Commonwealth Building, Architect. \$50,000.

PITTSBURGH, PA.—McCann & Co., Market Street, plans to build eight-story offices and store on Market and Diamond Streets. \$200,000.

YORKHAVEN, PA.—Yorkhaven Water & Power Co., engaged Gannett, Seelye & Fleming, engineers, 204 Locust Street, Harrisburg, to make complete study and report on improvements and enlargement of 20,000 h.p. hydro electric plant.

SOUTH CAROLINA

CHARLESTON, S. C.—State Assembly authorized building of "Citadel" (State Military School) on 43-acre site in Hampton Park donated by city. First unit to cost \$100,000; total cost, \$300,000.

TENNESSEE

MEMPHIS, TENN.—State Legislature, Nashville, petitioned to appropriate \$300,000 to build tuberculosis hospital here.

NASHVILLE, TENN.—E. M. Gardner, Architect, Nashville, submitted plans to Market House Association for new market house. Cost between \$150,000 and \$300,000.

TEXAS

ABILENE, TEX.—Gulf Well Machinery Mfg. Co. plans to build factory here, also make other improvements. \$250,000.

DALLAS, TEX.—W. B. Ittner, Architect, Board of Education Building, St. Louis, Mo., has plans for building second unit Oak Cliff High School, to include auditorium, art rooms, music rooms, rest rooms, lunch rooms. \$200,000.

DE LEON, TEX.—Chamber of Commerce plans to build hotel here. \$150,000.

ELECTRA, TEX.—D. T. Cross plans to build hotel here. \$70,000.

FORT WORTH, TEX.—W. T. Waggoner, First National Bank Building, proposes building sixteen-story office, 75 x 95 ft., reinforced concrete and steel, on Eighth and Houston Streets. Cost between \$750,000 and \$1,000,000. Sanguinett & Staats, First National Bank Building, Architects.

PARIS, TEX.—First Methodist congregation is having plans prepared by Van Slyke & Woodruff, Architects, Burk Burnett Building, Fort Worth, for church building here. \$100,000.

WACO, TEX.—Geyser Ice Co. plans to build cold storage plant here. \$100,000.

UTAH

SALT LAKE CITY, UTAH.—J. G. McDonald, 159 West Broadway, proposes building six-story, 55 x 145 ft., reinforced concrete addition to factory. Headlund & Kent, Dooley Building, Architects. \$100,000.

WASHINGTON

OLYMPIA, WASH.—State Legislature appropriated \$325,000 to build new armories at Olympia, Everett and Aberdeen.

SPOKANE, WASH.—Albers Milling Co. plans to build flour mill here. Address L. Palmerton, 1101 Nora Street. \$150,000.

WALLA WALLA, WASH.—First National Bank purchased site and plans to build eight or nine-story bank on Second and Alder Streets. J. H. Pedigo, attorney.

WENATCHEE, WASH.—Cashmere Apple Co. had plans prepared by H. M. Braggan, Architect, for three-story, 90 x 107 ft., warehouse on Wenatchee Avenue and Spokane Street.

WISCONSIN

ATKINSON, WIS.—Better Sox Knitting Mills Co. plans to build one-story, 20 x 50 and 25 x 30 ft., addition to factory. D. S. Becker, manager.

LA CROSSE, WIS.—Bentley & Merman, Architects, Linker Building, will construct two-story reinforced concrete, brick and steel plant on Front and Main Streets, 60 x 60 ft., for the Tri-State Ice Cream Co. \$60,000.

MADISON, WIS.—Board of Education is having plans prepared by F. L. Kroenberg, Architect, 18 North Carroll Street, for building brick addition on Johnson and Carroll Street to vocational and high school. \$200,000.

MANITOWOC, WIS.—Dixie Motor Co. is having plans prepared by Juul & Smith, Architects, 801 North Eighth Street, Sheboygan, for building two-story, 75 x 180 ft., reinforced concrete and brick garage on North Eighth Street here.

MILWAUKEE, WIS.—City plans to build police station. W. D. Hayes, City Hall, engineer. \$225,000.

OSHKOSH, WIS.—Citizens petitioned City Council to build addition to high school. N. G. Rimmel, Mayor. \$150,000.

RACINE, WIS.—E. C. Tecktonium Mfg. Co., 1224 Thirteenth Street, is having plans prepared by D. R. Davis, Architect, 526 Wisconsin Street, for two-story, 100 x 160 ft., addition to factory, with 50 x 80 ft. wing, reinforced concrete, brick and steel.

SUPERIOR, WIS.—J. O. Bach, Architect, Superior, will design garage for D. S. Webb, 1607 Twenty-first Street. \$35,000.

TWO RIVERS, WIS.—Plans are being prepared for constructing two-story, brick, school building, 60 x 100 ft. Van Ryn & De Gelleke, 726 Caswell Block, Milwaukee, Wis., Architects.

TWO RIVERS, WIS.—Board of Education is having plans prepared by Van Ryn & De Gelleke, Architects, Caswell Block, Milwaukee, for addition to high school. \$95,000.

WALES, WIS.—State Board of Control is having plans prepared by A. Peabody, Architect, Capitol, Madison, for two-story, 40 x 140 ft., infirmary here. \$100,000.

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Of Manufacturers' Data

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Dixon Crucible Co., Jos., Jersey City, N. J.

CASEMENT WINDOWS

METAL:

Pomeroy Co., Inc., S. H., 30 E. 42d St., N. Y.

CEMENT AND PLASTER

CEMENT:

Atlas Portland Cement Co., The, 30 Broad St., New York. Manufacturers of Atlas Portland Cement and Atlas-White Portland Cement. Sales Offices: Chicago, Philadelphia, Boston, St. Louis, Minneapolis, Des Moines, Dayton, Savannah, Mills; Northampton, Pa.; Hudson, N. Y.; Hannibal, Mo. Sales Manager: C. A. Kimball.

PLASTER:

National Kellastone Co., The, Chicago, Ill.

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Truscon Steel Co., Dept. 68, Youngstown, Ohio. Representatives in principal cities. Corner beads, "Kahn" curb bars, "Trus-Con" slotted inserts; "Kahn" adjustable inserts; "Trus-Con" National socket inserts; "Kahn" elastic filler and armor plates for expansion joints.

STUCCO:

National Kellastone Co., The, Chicago, Ill.

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American Steel & Wire Co., Chicago-New York. Berger, The, Mfg. Co., Canton, Ohio.

Truscon Steel Co., Dept. 68, Youngstown, Ohio. Representatives in principal cities. "Kahn" System reinforced concrete; "Kahn" bars; "Rib" bars; "Rib" lath; "Florestyles," "Floredome," etc.; flat and beamed ceilings of all types.

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(See Water and Dampproofing)

DAYLIGHTING

Berger, The, Mfg. Co., Canton, Ohio.

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HOLLOW STEEL DOORS:

Interior Metal Mfg. Co., Jamestown, N. Y.; Bankers Trust Bldg., 501 Fifth Ave., New York. Hollow steel doors in all standard sizes.

SLIDING DOOR EQUIPMENT:

Richards-Wilcox Mfg. Co., Aurora, Ill.

STEEL ROLLING EQUIPMENT:

Edwards Mfg. Co., The, 319-349 Eggleston Ave., Cincinnati, O. Send specifications for estimate.

THIS department is intended to assist our subscribers in readily determining the names and addresses of manufacturers of products in which they may be interested, together with brief data about their material.

The headings and sub-headings are arranged alphabetically and have been selected in accordance with the intent of meeting the architect's thought in preparing his specifications.

If the information desired is not found here, it will gladly be supplied by the Service Department of THE AMERICAN ARCHITECT.

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DOOR OPENERS:

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LIGHTING SYSTEMS:

General Electric Co., Schenectady, N. Y.

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General Electric Co., Schenectady, N. Y.
Hart & Hegeman Mfg. Co., Hartford, Conn.

PANEL BOARDS:

Structural Slate Co., The, Pen Argyl, Pa.

RECEPTACLES:

Hart & Hegeman Mfg. Co., Hartford, Conn.

SOCKETS:

Hart & Hegeman Mfg. Co., Hartford, Conn.

SWITCHES:

General Electric Co., Schenectady, N. Y.
Hart & Hegeman Mfg. Co., Hartford, Conn.

WIRES AND CABLES (Insulated):

General Electric Co., Schenectady, N. Y.

ELEVATORS AND HOISTS

CONVEYORS:

Otis Elevator Co., 11th Ave. and 26th St., N. Y. C. Gravity spirals.

DOOR EQUIPMENT:

Richards-Wilcox Mfg. Co., Aurora, Ill.

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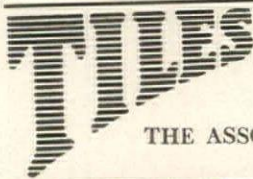
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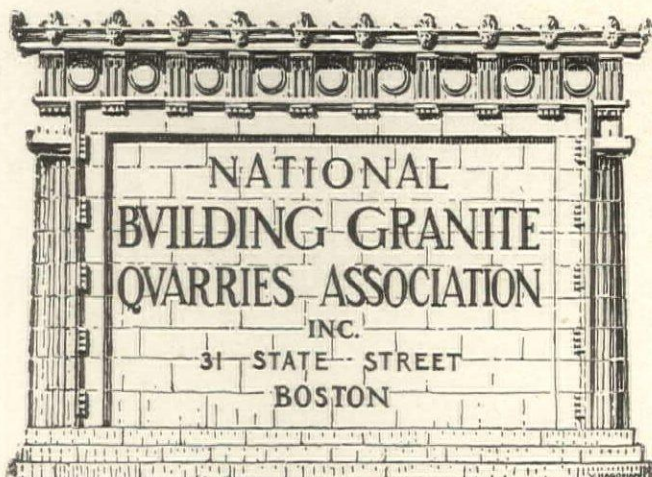
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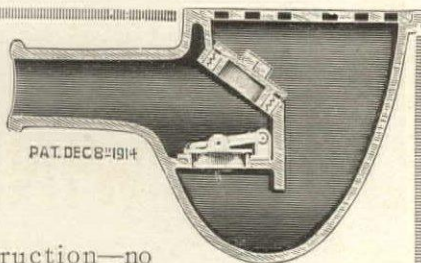
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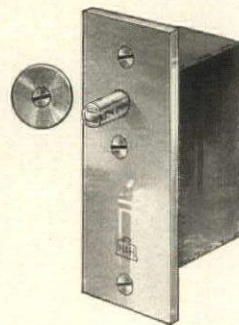
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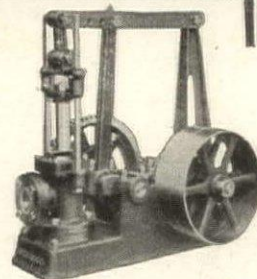
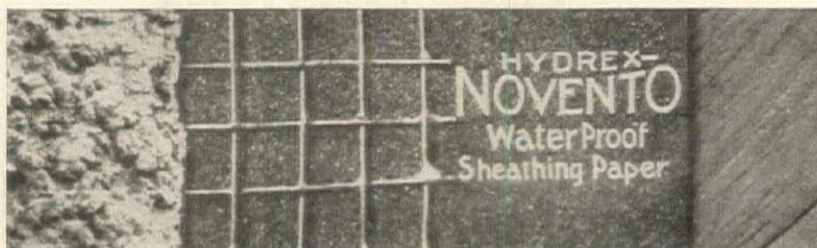


Fig. 62. Deming deep well working head for use in wells 350 feet deep or less, depending upon the size of the cylinder.

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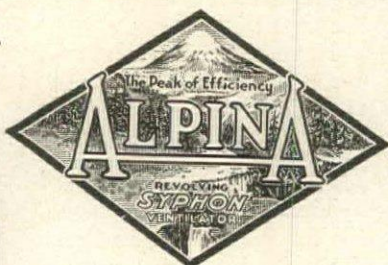
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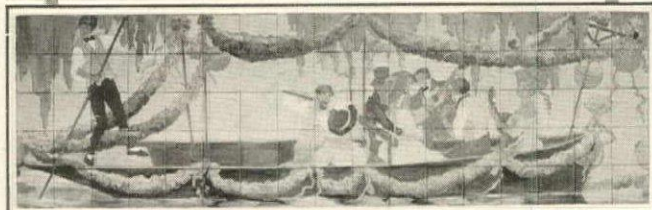
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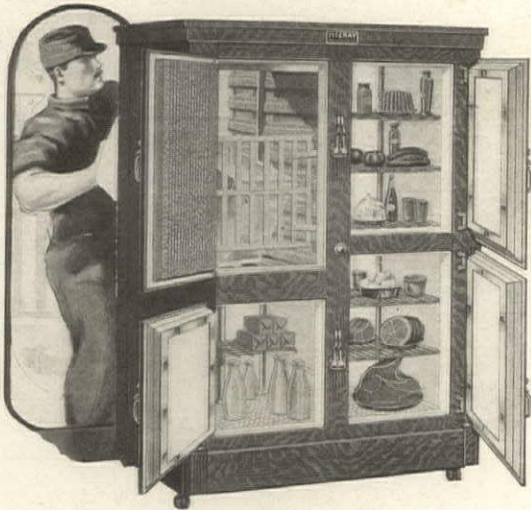
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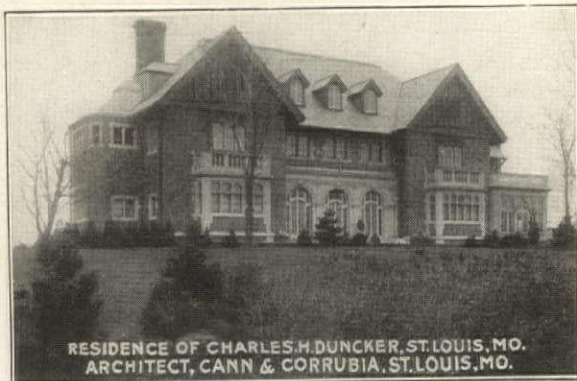
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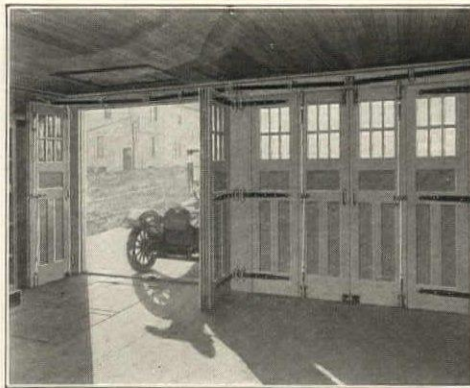
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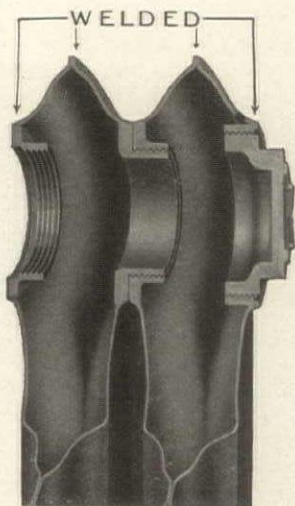
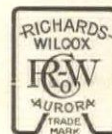
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Light in Weight



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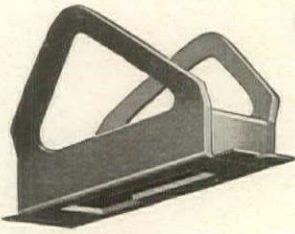


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Saves Time, Fuel
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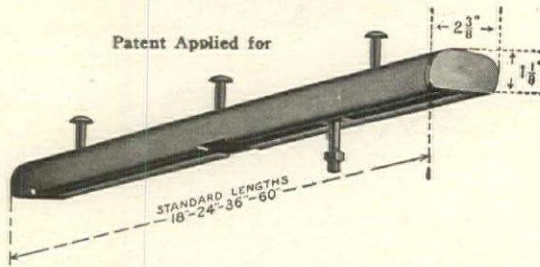


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Manufactured from the highest grade of pressed steel and suitable for $\frac{5}{8}$ " or $\frac{3}{4}$ " bolts. Only $\frac{1}{8}$ " deep, permitting reinforcing steel to pass over it without reducing the strength of the construction.

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Made from pressed steel of highest quality and furnished tapped for $\frac{1}{2}$ ", $\frac{5}{8}$ " and $\frac{3}{4}$ " bolts. Particularly adapted for work where arrangement has been determined before start of construction.



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Moline Heat Radiator Supply Valve

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Construction Different from any other Supply Valve on the market. It is tremendously more than a mere cut-out valve.

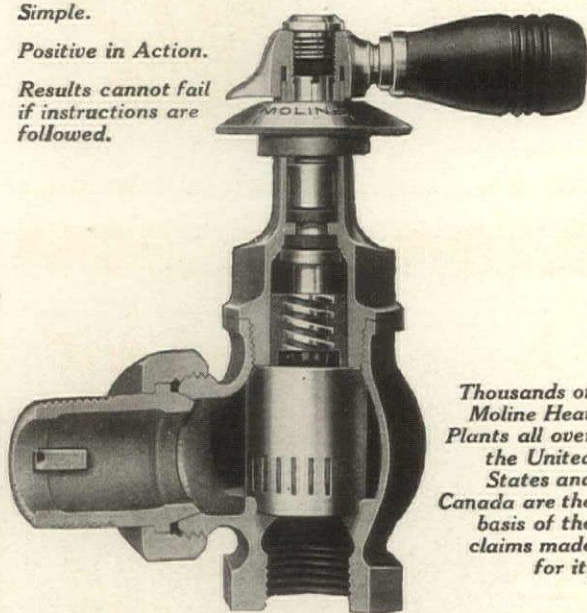
It is an exceptionally heavy, well made, packless, ground union, nickel plated, Jenkins Disc Radiator Supply Valve, made in $\frac{3}{4}$ -in. size only, for all capacities of radiators up to 150 sq. ft. Made in either Lever Handle or Lock and Shield type.

It contains a brass sleeve, or cylinder, in which the disc holder rises and falls, like a piston, as the valve is opened or closed.

Simple.

Positive in Action.

Results cannot fail if instructions are followed.



Thousands of Moline Heat Plants all over the United States and Canada are the basis of the claims made for it.

The sleeve is slotted, with one or more rectangular slots of fixed area, the length being equal to the disc rise.

The number of slots is determined by the size of the radiator and its estimated condensing capacity.

This construction gives a fixed maximum area of orifice for steam flow that is pro-

portionately varied by the extent to which the valve is opened or closed.

The removable sleeve can be readily changed, but meddlers cannot tamper with it.

This construction is patented.

Function: The Moline Heat Radiator Supply Valve represents one of the most vital principles of Moline Heat application. Its uses are—

To give a flow equal to the maximum condensing capacity of the radiator at a pressure of $\frac{1}{2}$ to 1 pound, depending upon the quality of the steam, with a proportionately less flow with decreased pressures.

To interpose enough resistance to flow to radiators so that the entire feed main will fill with steam before any radiator heats, so that all radiators will heat simultaneously

To give better control of the delivery of heat from boiler to radiators than hot water heating without operation of the radiator valves.

To permit uneven heat losses from premises, due to winds or other circumstances, to be compensated by setting valve for less maximum flow, simply by partly closing it.

To insure speediest release of heat from the steam in radiators, by reason of sudden expansion, after admission at high velocity.

To insure constant differential pressure between supply mains and return mains, through radiators, without dependence on any automatic valves or other automatic parts. This is one reason for the low maintenance cost of Moline Heat plants.

To reduce excessive wastes when tenants open windows in preference to operating radiator valves. Moline Heat Radiator Supply Valves prevent radiators exposed to cold drafts condensing more steam than the maximum set by the designer.

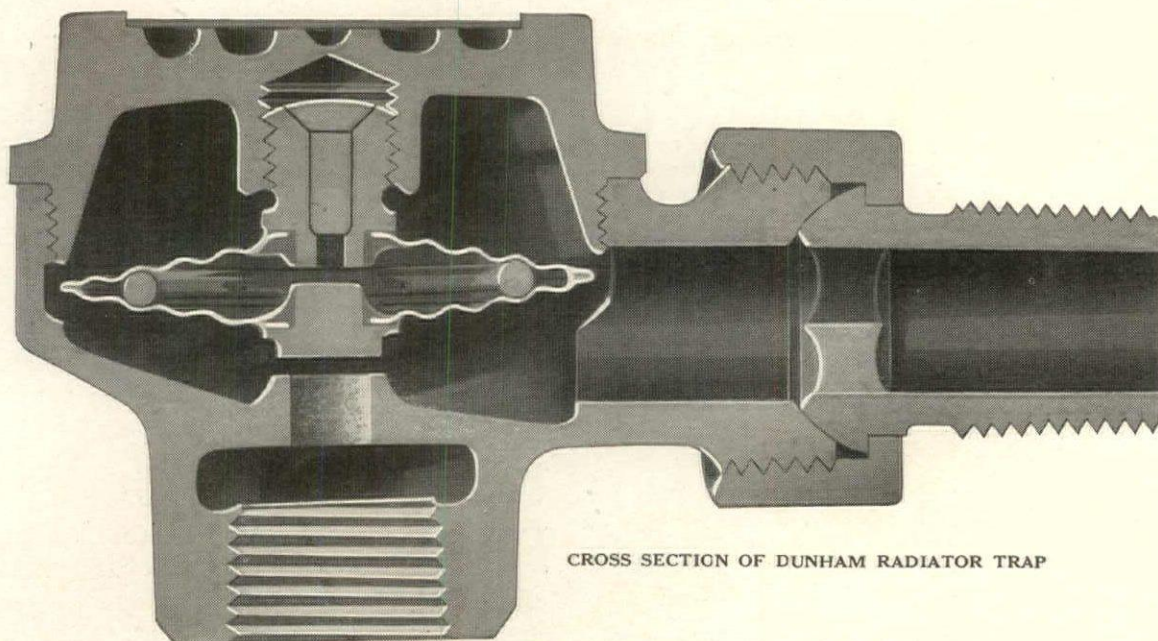
Refer to Sweet's Catalog.

Every one who specifies heating, needs first-hand, accurate information concerning Moline Heat principles and application.

Moline Heat?
EVERYWHERE

Moline Illinois

Able designers in all parts of the country use it. Inquiries are solicited.



CROSS SECTION OF DUNHAM RADIATOR TRAP

Inside the Dunham Radiator Trap

There are only three parts: a body, a cover and a corrugated thermostatic disc which is secured in the cover.

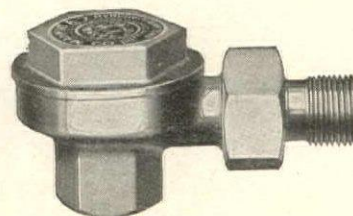
The thermostatic disc is fully exposed to the conditions *within* the radiator and responds instantly to any temperature change. Numerous laboratory and service tests give ample proof of its ability to function perfectly under conditions varying from ten pounds pressure to 15 inches of vacuum—and *without any adjustments*.

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The more you know about the Dunham Radiator Trap, the more you will appreciate it as an essential to a perfect heating system.

Complete information on the Dunham Radiator Trap and other elements in the Dunham Heating Service, may be found in Sweet's Index; pages 916-921.

The DUNHAM
HEATING SERVICE



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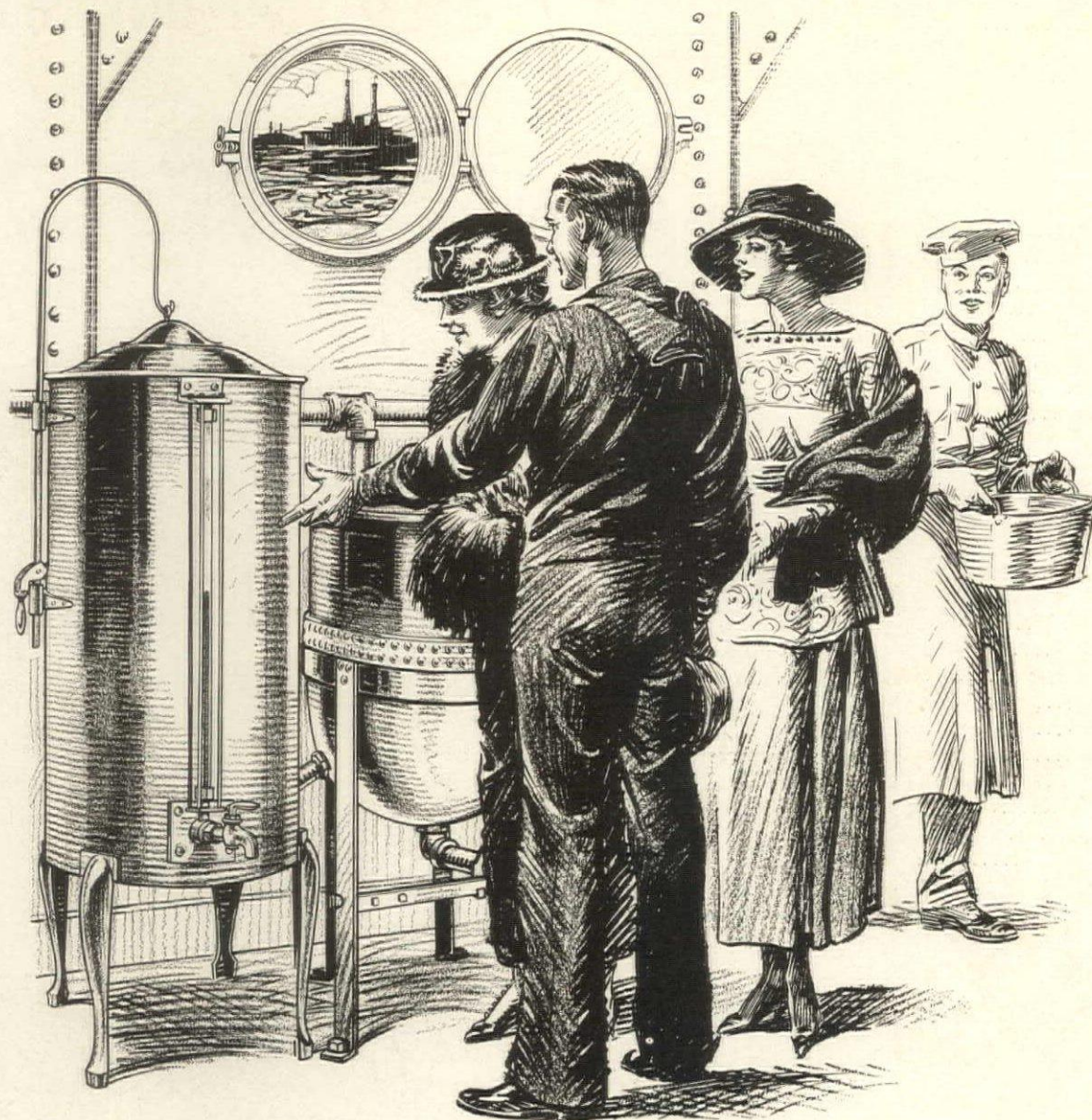
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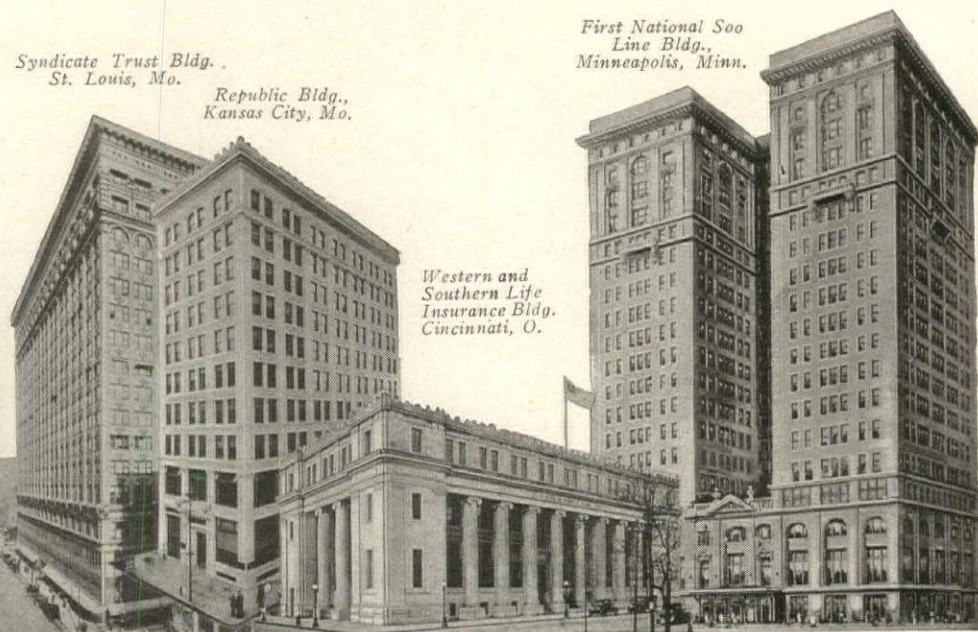
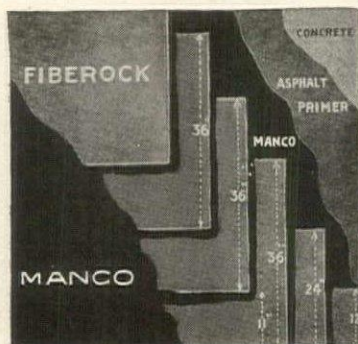
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1268 TRUSCON BUILDING DETROIT, MICHIGAN



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We invite inquiries from architects, as we desire to show how the Truscon Steel Building can be properly included in the planning of an industrial project.

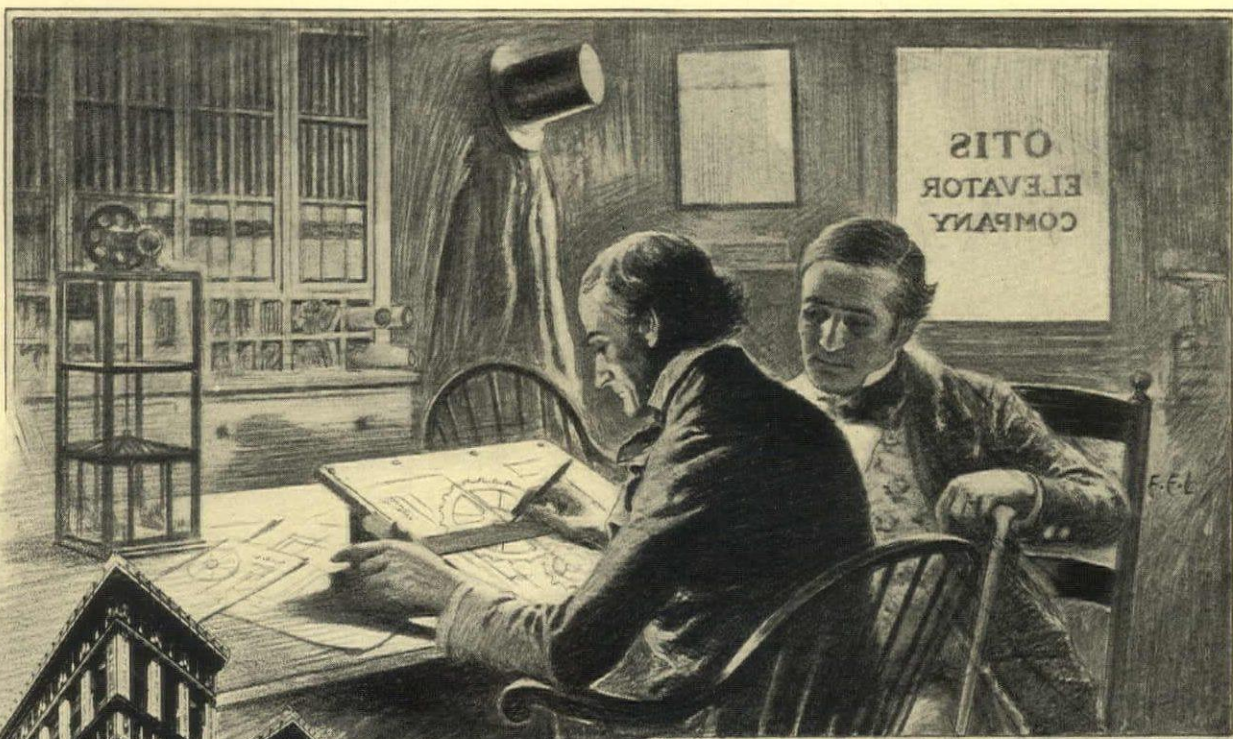
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YOUNGSTOWN, OHIO.

WAREHOUSES AND REPRESENTATIVES IN PRINCIPAL CITIES





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ST. LOUIS, MO.

ARCHITECTS, EAMES & YOUNG

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- 2 Otis Hydraulic Plunger Elevators
- 1 Otis Combination Pass. & Fr. Elevator

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LOOKING back from the Otis efficiency of today to the early elevators produced under this now famous name, it is interesting to note that the first models were built without drawings other than rough, free-hand sketches — sometimes prepared while the prospective buyer waited.

Despite this handicap even the earliest Otis elevators were marked by a stanch reliability which won them the immediate esteem of users.

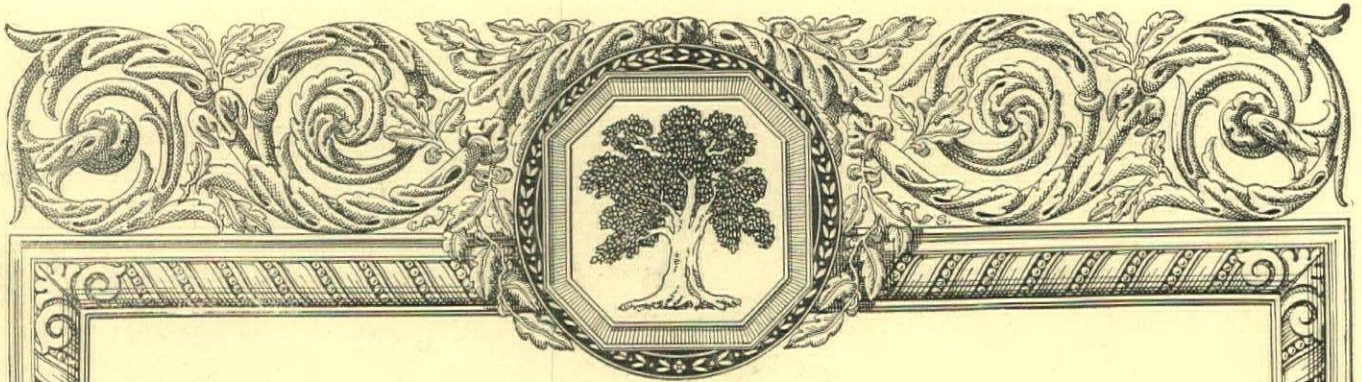
Throughout more than sixty years this esteem has constantly increased, due to the fact that Otis elevators have always represented the most advanced designing, the best engineering principles, the highest standards of manufacture.

The dominant position of Otis elevators today before architects and builders is the result of a policy which has never tolerated anything short of absolute satisfaction for Otis elevator users.

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And we feel that we, too, have been and will be of real service not only to the individual home builder, but to the nation.

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