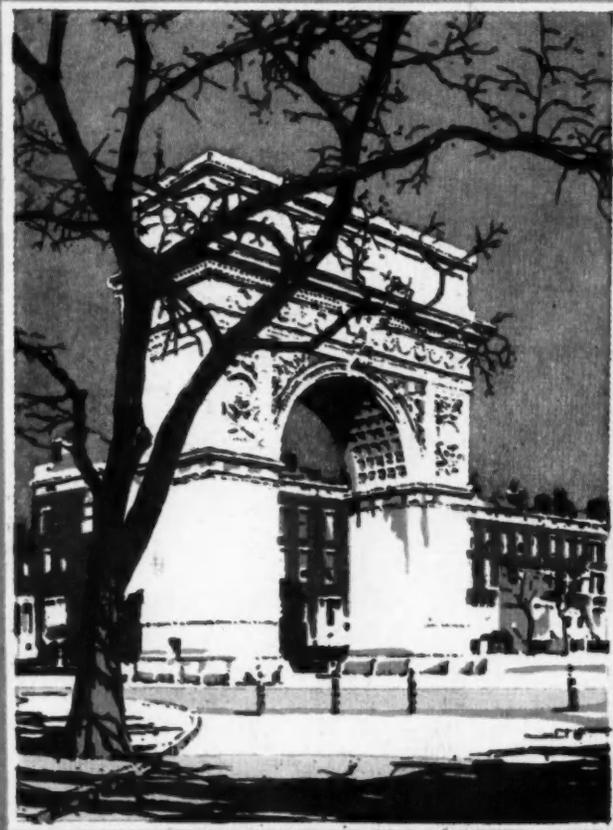


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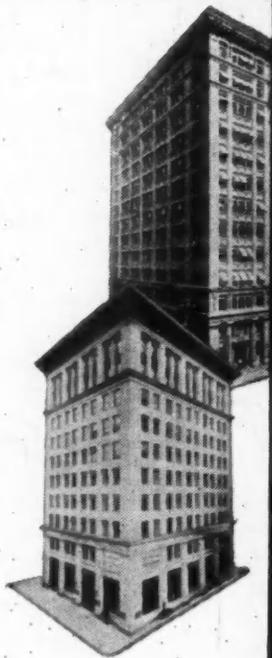
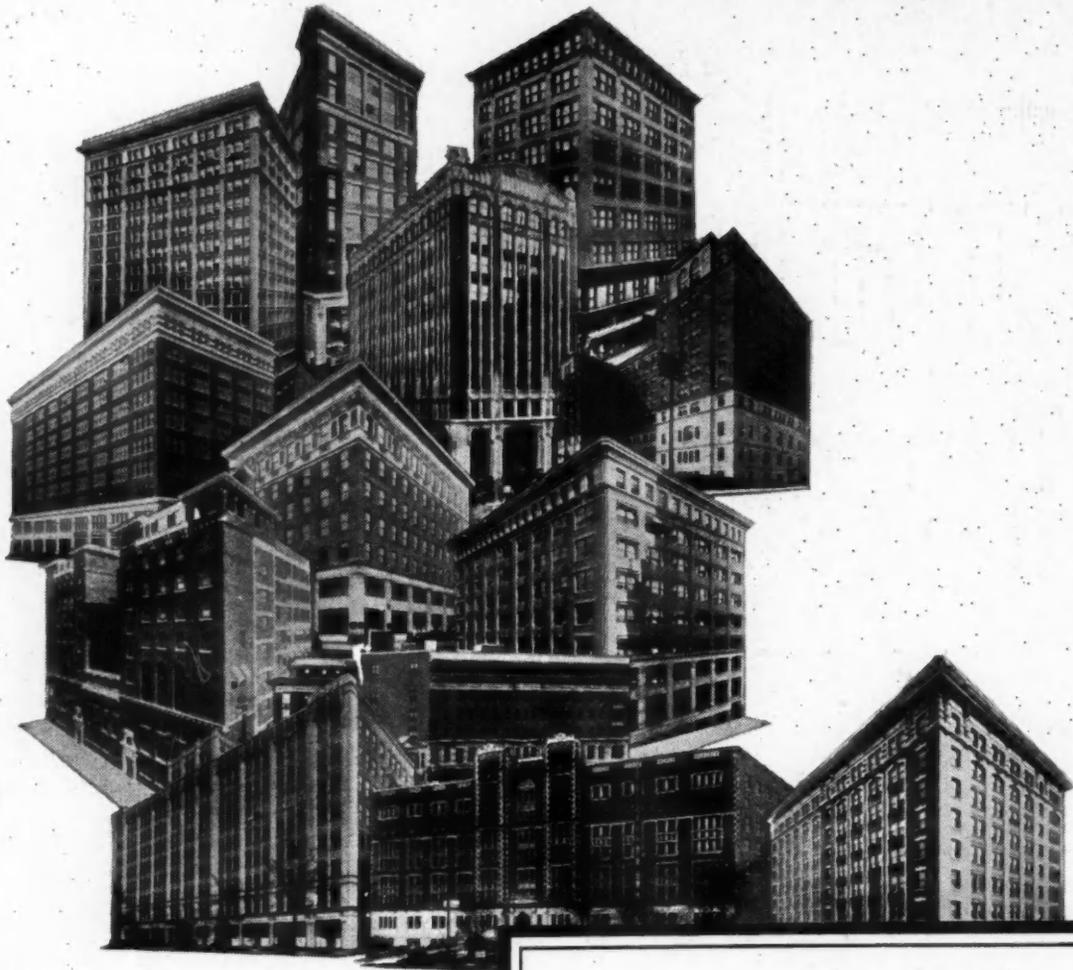
THE ARCHITECTURAL FORUM



DECEMBER 1926

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The ARCHITECTURAL FORUM

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Number 6

The Value of Memorial Architecture

By HARVEY WILEY CORBETT

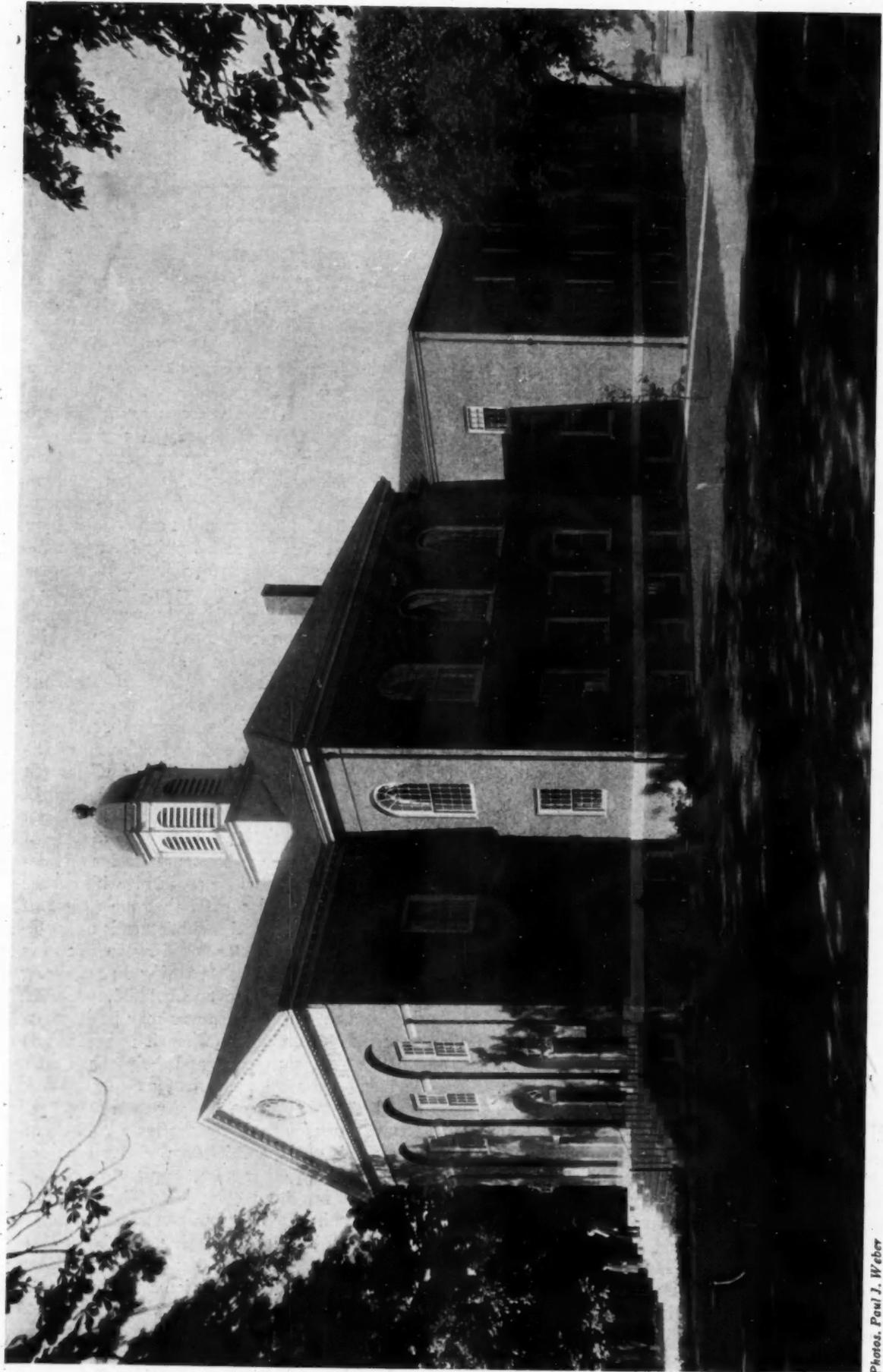
IN discussing the value of any particular type or kind of architecture, we are all likely to draw comparisons. We might say, for example, that motion picture theater architecture is more valuable than home architecture, because most people don't stay at home nowadays, but do go to the "movies";—that factory, office building or store architecture is more valuable than "movie" architecture because people must spend their working hours in some such building;—and then again, that people go to church only once a week (if that) and see a bit of memorial architecture only occasionally. If we make our comparison in terms of financial outlay, investment or productivity, we are again confronted with the thought that memorial architecture has the least value of any type. In fact, if we judge the matter on any commercial basis in this super-commercial age, we might very well ask ourselves why consider it at all, why think about it or, much less, why write about it.

Yet there are certain aspects of memorial architecture which demand very careful consideration. In the middle ages there were but two kinds of architecture,—domestic and religious;—the people lived in hovels and worshiped in cathedrals. The hovels were poorer than anything known today; the cathedrals greater than anything man can now produce. The material life of that time offered little that could be called attractive, and the spiritual life was the only compensating reward that poor humanity enjoyed. The home provided the bare necessities of existence,—hardly that, in fact. With the advance of civilization many relationships have changed. Material well being, comfort and cleanliness have replaced squalor, suffering and plague, and instead of only two kinds of architecture we have at least "57 varieties," all different, functioning to increase material happiness or worldly wealth. "Spiritual architecture" has an ever-diminishing rating on the ledger of modern life. Does this mean a diminishing value? Quite the contrary. Spiritual architecture, and in that we would include religious as well as memorial, as they are very much the same in purpose and should be classified together, is the last remaining bulwark of the soul of man. Instead of being of the least value, it is of the greatest. No type or kind of architecture is more important. No other form of building has

such vital significance, and certainly no other kind of architecture demands such study, such imagination, such vision. It is the one and only architecture in which the problem must be treated abstractly,—in which the message it carries is more important than the form, the material, the style, or even the use.

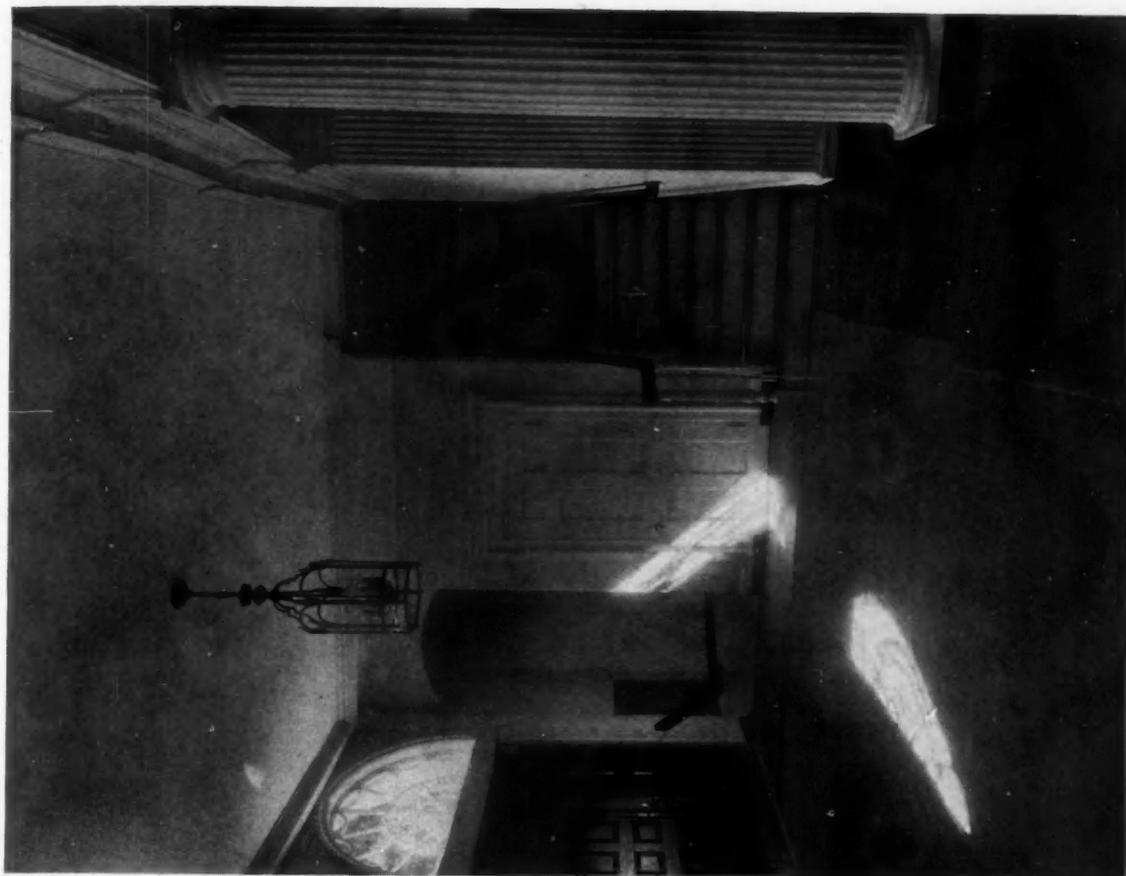
The problem from the architect's point of view is the most difficult, and therefore the most fascinating and alluring. Memorials are not built for a generation, to be "scrapped" when land values demand new and modern structures. The present-day architect, if he doesn't "pass out" in his early youth, lives to see many of his masterpieces torn down and rebuilt, generally by another man. But memorial work is different. Its spiritual significance defends it against the encroachments of a material age, and the man who has the opportunity of designing and producing in this field may feel fairly certain that coming generations will at least see it, and that if he does it well, if he holds strongly to the spiritual thought which inspired it, if he but carries the message, not alone by the graven word but also by the dignity of form and proportion, the refinement of color and detail, future generations will also admire his work!

It might be urged, of course, that the extent of what is here called memorial architecture is not sufficient to warrant its being developed by anyone as is done, for example, with the designing and planning of hotels, churches or apartment buildings. The designing of a memorial, whatever may be its character, comes to an architect (when it comes at all) as part of his general practice, and the problem must be solved and the work done just as a solution is found and attention given in any other type of architectural work. For there is, after all, no essential difference between architecture of this type and architecture of any other variety; the function of architecture, it has been said, is to "build beautifully," and architecture's purpose is served when a structure of any kind possesses inherent beauty, although perhaps there is need for rather more than usual care, thought and inspiration where memorial architecture is concerned. Since a memorial is likely to occupy a position of prominence, as has already been suggested, its very permanence creates an obligation to posterity which the architect will do well to heed.



Photos. Paul J. Weber

PLYMOUTH MEMORIAL BUILDING, PLYMOUTH, MASS.
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MAIN ENTRANCE HALL



SIDE EXIT FROM AUDITORIUM

PLYMOUTH MEMORIAL BUILDING, PLYMOUTH, MASS.

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MEMORIAL HALL



AMERICAN LEGION ROOM

PLYMOUTH MEMORIAL BUILDING, PLYMOUTH, MASS.

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Memorial Buildings

By EGERTON SWARTWOUT

THE title, I'm afraid, is a bit misleading. It might be confusing to the casual reader, if indeed there is a casual reader of architectural articles, or any reader at all for that matter; so let us start again in the subjunctive, and say that if there should be a casual reader, and if he should start to read this casually, he might, in his casual way, imagine that he would find here a complete historical dissertation on the subject of memorial buildings, with an indexed list and footnotes and references and pictures and, above all, evidences of painful research. Now that isn't my idea at all. I have only the vaguest kind of a notion of the historical side of it, and I have not the slightest intention of reading up the subject, for I particularly loathe painful research. Let us treat the subject in a different way.

All I intend to do is to ask a question and answer it myself, to my own satisfaction I hope, if not to that of the casual reader. And the question is:

Should buildings be erected as memorials, or rather, should memorials be buildings and not arches, or statues or fountains or shafts? A very simple sort of question, perhaps, but rather hard to answer to anyone's satisfaction; in fact I think the only answer is that there is no answer, and that it all depends on the subject to be memorialized and the type of building proposed. If it is the intention or the testamentary obligation to commemorate the industrial capacity and business acumen of a highly successful manufacturer, say of Chiclets or Esquimo Pie, I can imagine that there might be built, in close proximity to the factory of the deceased, a neat Pompeian swimming pool or an early English billiard parlor, or an entirely modernesque hall for movies and a place of meeting for the social activities of the local Rotary Club. Or I can imagine the very proper and appropriate erection of a gymnasium or a baseball cage or swimming pool as a memorial to



Elks' National Memorial, Chicago

Egerton Swartwout, Architect, J. Hollis Wells, Advisory Architect



DETAIL, MEMORIAL HALL, ELKS' NATIONAL MEMORIAL, CHICAGO
EGERTON SWARTWOUT, ARCHITECT; J. HOLLIS WELLS, ADVISORY ARCHITECT



ELKS' NATIONAL MEMORIAL, CHICAGO
EGERTON SWARTWOUT, ARCHITECT; J. HOLLIS WELLS, ADVISORY ARCHITECT



Detail, Tennessee War Memorial

some distinguished athlete who has been an honor to his university or college or school, as for instance the skating rink built as a memorial to "Hobey" Baker at Princeton. Or again a family, wealthy enough to do it properly, might well build a much needed college building as a memorial to a son who was an alumnus; I can imagine a number of instances in which buildings would be appropriate, but I cannot imagine the erection as a memorial, whether by a state or municipality, of a strictly utilitarian building which should properly be paid for by taxation.

In some good sized town, for example perhaps, there is a proposition on foot to erect a memorial to the men of the town who were killed or were wounded or who served in the Great War. Quite a respectable sum has been raised by subscription, and a happy idea strikes some of the city fathers. They need a new high school, or a town hall, but they don't want to raise the tax rate; it is not good politics to raise the tax rate; hence the great idea. Let us, say the city fathers, build this school or this town hall as a memorial; under the guise of a memorial, that is, really; let us incorporate in the building an auditorium with a tablet of names somewhere, and perhaps a statue, or at least some sculpture about it. How much better, they say, to do some good for the people; how much more practical this would be than to put up a shaft or a statue or some such gimcrack. And the deed is done. There



Minor Facade, Tennessee War Memorial, Nashville
Edward Dougherty and McKim, Mead & White, Associated Architects

is a town meeting at which much is said of patriotism and of modern common sense and practicability, and the good of the dear people, but no open allusion is made to the non-increase of the tax rate; that is done by a whispering campaign. And so the school or town hall is built as a memorial, and there is an impressive ceremony at the corner-stone laying and another at the dedication; patriotic speeches by distinguished military and political personages; the band plays, and flags are plentiful, and then—the school in a year or so is just known as the Elm Street School, and the memorial town hall has become merely the offices of the mayor or the common council, and the auditorium is used for movies or an occasional town meeting. No one passing through the place would ever imagine either building was a memorial! The townspeople themselves have forgotten there was a memorial. The flags are gone and the band is gone, and the inscriptions on the tablets are nearly obliterated by dust and neglect. The memorial idea is forgotten, not because of any lack of feeling or of patriotism, but because we as a people are likely to forget quickly unless we have some visible and beautiful object to awaken our remembrances. Suppose, for example, those in charge of the Washington Monument had decided to build a new wing to the capitol instead of the majestic shaft which is now the center of the mall treatment. It would have been a practical thing, to be sure, but



Detail, Tennessee War Memorial



Main Facade, Tennessee War Memorial, Nashville
Edward Dougherty and McKim, Mead & White, Associated Architects

who in 50 years, or in five years either, would have remembered the saving to the tax payers, or who would know that the new wing was a memorial?

Generally speaking, no memorial, if it is to be a real memorial, can serve any useful purpose; or to put it in another way, no structure can serve two purposes. It is either a memorial of some great act or sacrifice or of some great man, or else it is merely a school or a town hall. There can be no half way, and yet on the other hand it is conceivably possible to introduce in a distinctively memorial building certain subordinate features that may be of a practical nature. I hesitate to take as an example a building of my own, but as I have said before, I have no time or inclination to do any research for material. I perforce take what is at hand. There are, I'm quite sure, many other more appropriate examples and better buildings, but as a concrete example the Elks' Memorial in Chicago will serve. This building is a national memorial to those members of the order who have served in the World War, and the feature of it is a great memorial hall, circular in form with a domical treatment; the interior is of richly colored marble and of bronze, decorated by distinguished artists with mural and sculptural decorations which are in progress but not yet in place. There are, in addition, three other monumental rooms which serve as retiring rooms or anterooms. It is so far all monumental, and serves no utilitarian purpose. It is not intended as a meeting place or hall of any

kind; there are no lodge rooms. In the side wings, however, there are certain utilities; the grand secretary of the order has his permanent offices in one wing, and in the other are the headquarters of the Elks' Magazine, but they are quite separate from the monumental part of the building and have their own exterior entrances. They are treated frankly as accessories and do not interfere with the monumental appearance of the structure and, as it is generally seen from the front, the wings count as pylons rather than as utilitarian buildings; the basement windows have ample light but are completely hidden by the terrace wall; the domical central mass, the circular colonnade, the piers of the subordinate order screening the court, the great niches, and the steps and terraces, all these suggest to the passing stranger that here is a memorial to somebody or something, and he generally reads the inscription to find out just what it is. He may not like it architecturally, he may prefer a square to a round, but still he has no doubt of its character. At least that's the way it seems to work out actually. But enough of the Elks' Memorial. I only mentioned it as an example.

And this is my thesis. I have tried to show in a few words that under certain circumstances memorials can be practical buildings and still retain their monumental character, and that in many cases they cannot. I have put a question and tried to answer it, and if the casual reader doesn't like the answer, he may write his own version. It is a matter of opinion.



Details, Memorial Hall, Elks' National Memorial, Chicago
Egerton Swartwout, Architect; J. Hollis Wells, Advisory Architect

Memorials—Columns, Shafts, Cenotaphs and Tablets

By PAUL P. CRET

BEFORE we consider particularly the types of monuments grouped in the heading of this page, it should be remembered that the class of architecture which may serve the purposes of commemoration is large. Almost any type of architectural work can be given a commemorative character, and plazas like the Place Vendome, or the Place de la Concorde, built to commemorate the two kings, Louis XIV and Louis XV respectively; fountains, like those in Rome built by the popes; hospitals, libraries, auditoriums and bridges are examples of a very large number of memorials in which provision for public utility or enjoyment is included in the design. While utility may undoubtedly be an advantage that need not interfere with the essential requirements of any work of memorial architecture, it seems obvious that in a memorial the end to be achieved, primarily, is the perpetuation of the mem-

ory of a great man or a great event to future generations. This object being granted, it follows that permanency and a clear and arresting expression of the commemorative idea are essentials of the program; and that the most appropriate memorial is that which may best withstand the changes of centuries, and by the beauty and dignity of its design arouse to attention and respect the heedless mind of the wayfarer and that of the wayfarer still to come.

Tested by their fulfillment of these basic requirements, a number of our memorials, despite their present popularity, must be classed as of doubtful value. The memorial trees or groves in our public squares and parks, for instance, can hardly be regarded as fitted for long survival, and many of the auditoriums, libraries and convention halls which fill the land fall short both in point of permanence and in the expression of the commemorative idea.



Battle Monument, West Point, N. Y.

McKim, Mead & White, Architects



Monument to Steel, Sesqui-Centennial Exposition,
Philadelphia

The construction of some of these buildings, in the first place, though adequate certainly for ordinary use, is not often of a sort to stand the wear of centuries; and, secondly, the constant changes in the requisite programs render them quickly antiquated; lastly, the commemorative idea is very frequently lost sight of in the utilitarian, so that thought of the man or the event to whose glory a building has been erected may well be the last that comes into the minds of the people who pass in and out of its doors.

We, perhaps no less strongly than did our forefathers, feel the desire of keeping alive the memories of our great men and of our patriotic achievements, but how much of our building will bear testimony, five hundred years from now, to our spiritual life of today? The earlier civilizations knew better how to apportion effort to the result to be achieved. If their commercial and domestic buildings were not designed to last for more than a few generations, and have in consequence almost entirely disappeared (but for the exceptional case of Pompeii), their memorial and civic architecture is still standing because they *wanted* it to stand, and so gave to it all



Photo. Underwood & Underwood

The Battle of Princeton Monument, Princeton, N. J.

Frederick MacMonnies, Sculptor

their skill in design and construction. Thus our knowledge of the architecture of antiquity has come down to us through its finest forms, and to this perhaps the glamour of the past is in no small part due. Does our belief in "utility,"—however temporary that utility may be,—denote a spirit superior to that which inspired the apparent extravagance of the Egyptians or the Roman builders, who, intent upon conquering time, were willing to pay the price required, or does it bear witness only to a mean and short-sighted parsimony? But this is not the place for such a discussion. Suffice it to say that a work of commemorative architecture which has little chance of enduring is hardly worthy of the name.

Among the important forms of this class of architecture, designed solely to commemorate men or events, are shafts, arches, cenotaphs, tablets and columns. Such types have been in use from the earliest times, and their tradition is all but as old as man's own hope of immortality. The shafts and obelisks have inherited from their common ancestor, the sacred upright stone, a rugged strength which seems to defy the elements; the Egyptian obelisks testify



The Patriots' Monument, Stamford, Conn.
George Freeman, Architect



Photo, Underwood & Underwood

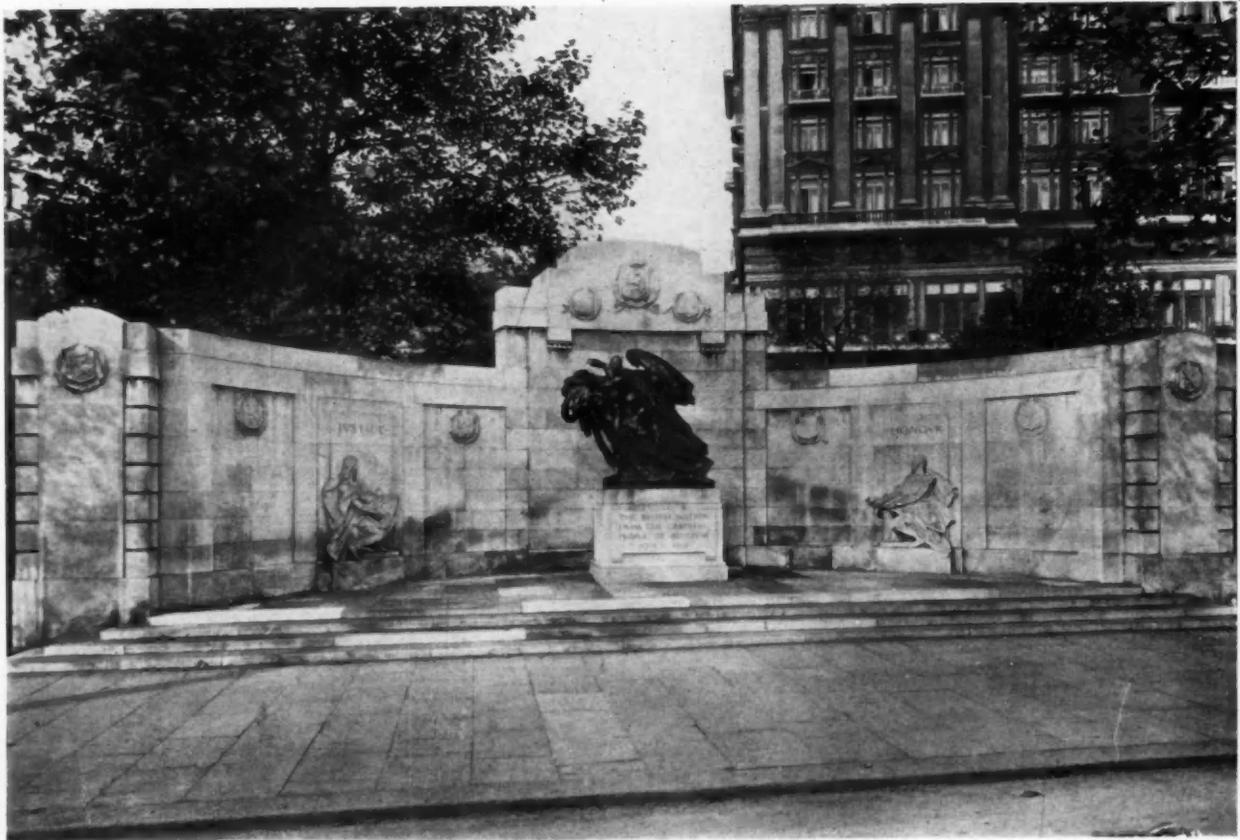
War Memorial at Harrogate, England



Memorial to the Employees of the Midland Railway
Sir Edwin L. Lutyens, Architect

to us of the splendor of royal dynasties of 40 centuries ago, whether they are at present in their birthland, Egypt, or in London, Paris, Rome or New York. This form is particularly effective in large monoliths. The Egyptian obelisk measures on the average 75 feet without the base, and has slightly convex sides. The pocket editions in our cemeteries, and the "monumental" versions with intricate pedestals and "heroic" sculpture are decidedly not an improvement on the original form, and the inscriptions, easily accommodated in the vertical writing of the Egyptians, have now to be confined to the pedestals. But there are fine examples of the later types in Italy and France, and of the modern in the Washington Monument, this last a satisfying example.

Columns have been still more popular as commemorative monuments. It is in vain that the purists have protested against the use of a support independent of the thing to be supported, or with some reasoning to that effect. The Greeks, who were pretty good judges in such matters, set the pernicious precedent, none the less, and the Romans and moderns have followed. It has merely added another example to the long list of constructive elements turned into decorative types. When a constructive form has through successive improvements become beautiful, it is not long before the idea of its original use is lost sight of, and the beautiful form is used more or less for itself. The city gate then becomes the triumphal arch, the pediment a door-crowning motif,



The Belgian Memorial, Thames Embankment, London
Sir Reginald Blomfield, Architect
M. V. Rousseau, Sculptor

and an order becomes the jamb of a mantelpiece. Thus the Greek column becomes the votive column, and from it have been evolved the Column of Trajan or Duilius in Rome, the columns of the Place Vendôme and of the Place de la Bastille in Paris, the column of the prison ship martyrs in Brooklyn, and the memorial column at West Point. These few examples among the thousand that exist are sufficient at least to convey the suggestion that the individuality of the artist, to assert itself, has no need of any brand new theme. The architect of tomorrow may find in the good old program of the commemorative column an opportunity for work just as characteristic of his times as the examples we have cited are vividly characteristic of their own periods. There is no time-worn theme, but only time-worn ways of treating it as well as methods which are fresh and new.

The cenotaph is a form of memorial that has been less often used in this country than in Europe, especially in the Europe of the Renaissance. As its name implies, it is a memorial monument in the shape of a tomb, but which does not receive the remains of the man to whom it is erected. The tomb proper was usually near by,—under the pavement of the church, for instance, where the cenotaph stood against the wall. The Romans have left us such a number of fine examples of this type of memorial that the following generations have been satisfied with variations of one or another of their designs. All the churches of Europe have beautiful examples of the



War Memorial, Calcutta
John Greaves, Architect



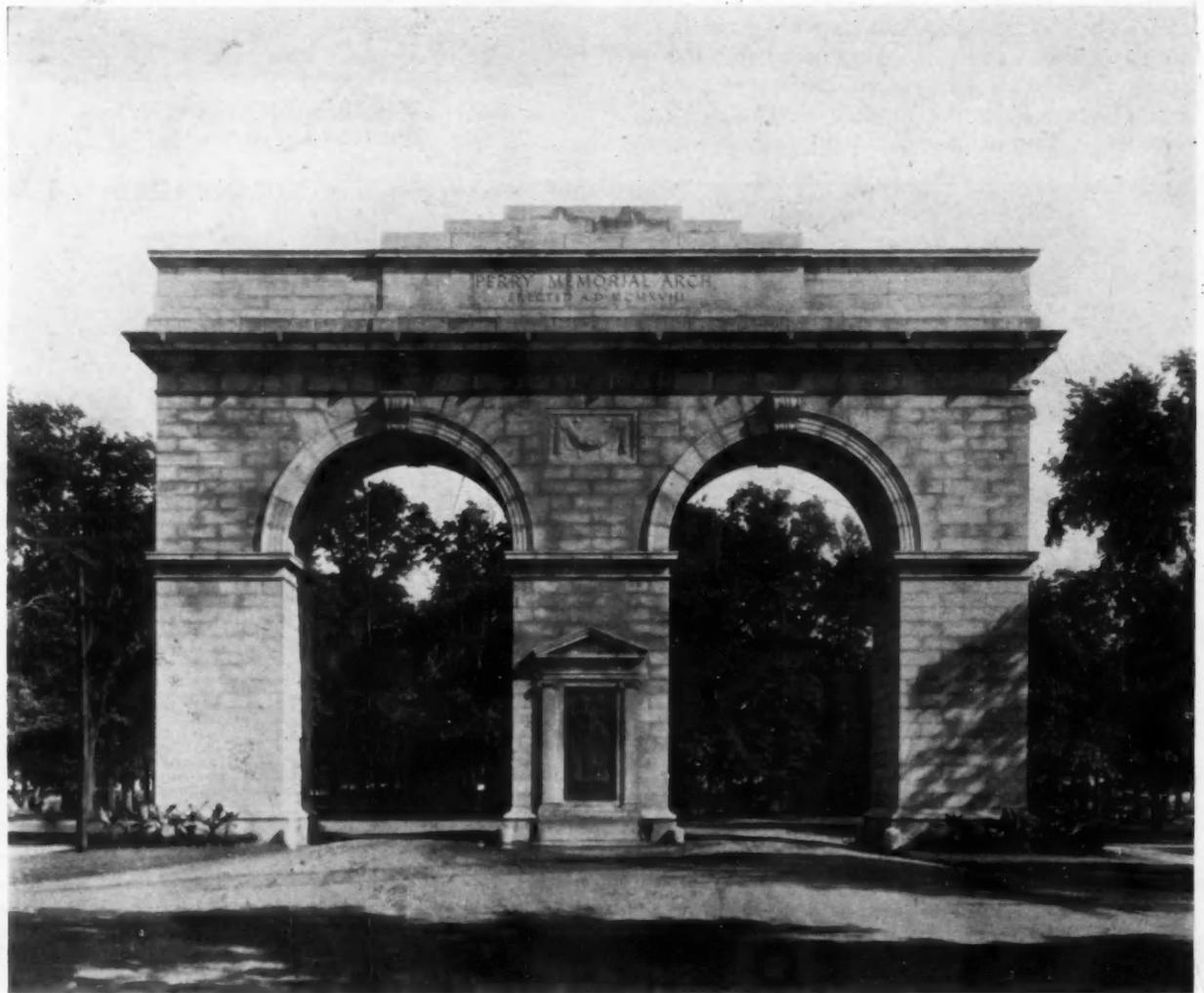
War Memorial, Milton, Mass.
Coolidge, Shepley, Bulfinch & Abbott, Architects
Daniel C. French, Sculptor

cenotaph, and among the recent we can mention the Cenotaph at Whitehall, the work of Sir Edwin L. Lutyens. The main element in this austere type of memorial is the empty sarcophagus, and perhaps a reason for its disfavor among our contemporaries is their aversion to so direct a reminder of death, even when it is closely associated with the idea of immortality. Stern suggestions are losing favor with the modern public. Everything must be made pleasant.

The inscribed tablet is today the most widely and favored form of memorial. It may be as inexpensive as is desired, a place for it is easily found, and it has at least the permanency of the building to which it is attached. If it does not attract attention as readily as do some of the forms we have already described, it tells its story no less completely. A large part of our knowledge of many civilizations is in fact derived only from such inscriptions; 30,000 or 40,000 Greek inscriptions have been catalogued, and the number of Roman inscriptions is much larger,—which speaks well for the tablet as an enduring form of memorial. It should be said in passing, however, that bronze tablets have shown a bad habit of disappearing in times of crisis, whether during the in-

vasions of the barbarians at the time of the fall of the Roman Empire, or the invasions of northern France during the World War. Of the treatment of the tablet, it should be said that over-crowding the lines is a fault; the text must be written in such a way as to lend itself to harmonious distribution. To such apparently simple work as much talent can be devoted as to the most ambitious and worthy building. The iconography may play an important part, as may be seen in the Shaw Memorial in Boston, or the text can be the dominating feature, as in the Gettysburg Speech Tablet in the Lincoln Memorial.

These forms which we have considered in some detail are, as we have said, far from being the only types of memorial architecture, and if they have received special attention, it is because they are representative of the commemorative purpose in the strictest sense. In these works, which even in their strongest and noblest examples are but frail symbols of man's eternal hope to secure his glories and perpetuate his memory to future generations beyond the grasp of time, utility is, perhaps, best subordinated to beauty and simplicity of form, and to that reverent care in execution for which even time shows respect.



Perry Memorial Arch, Bridgeport, Conn.
Henry Bacon, Architect

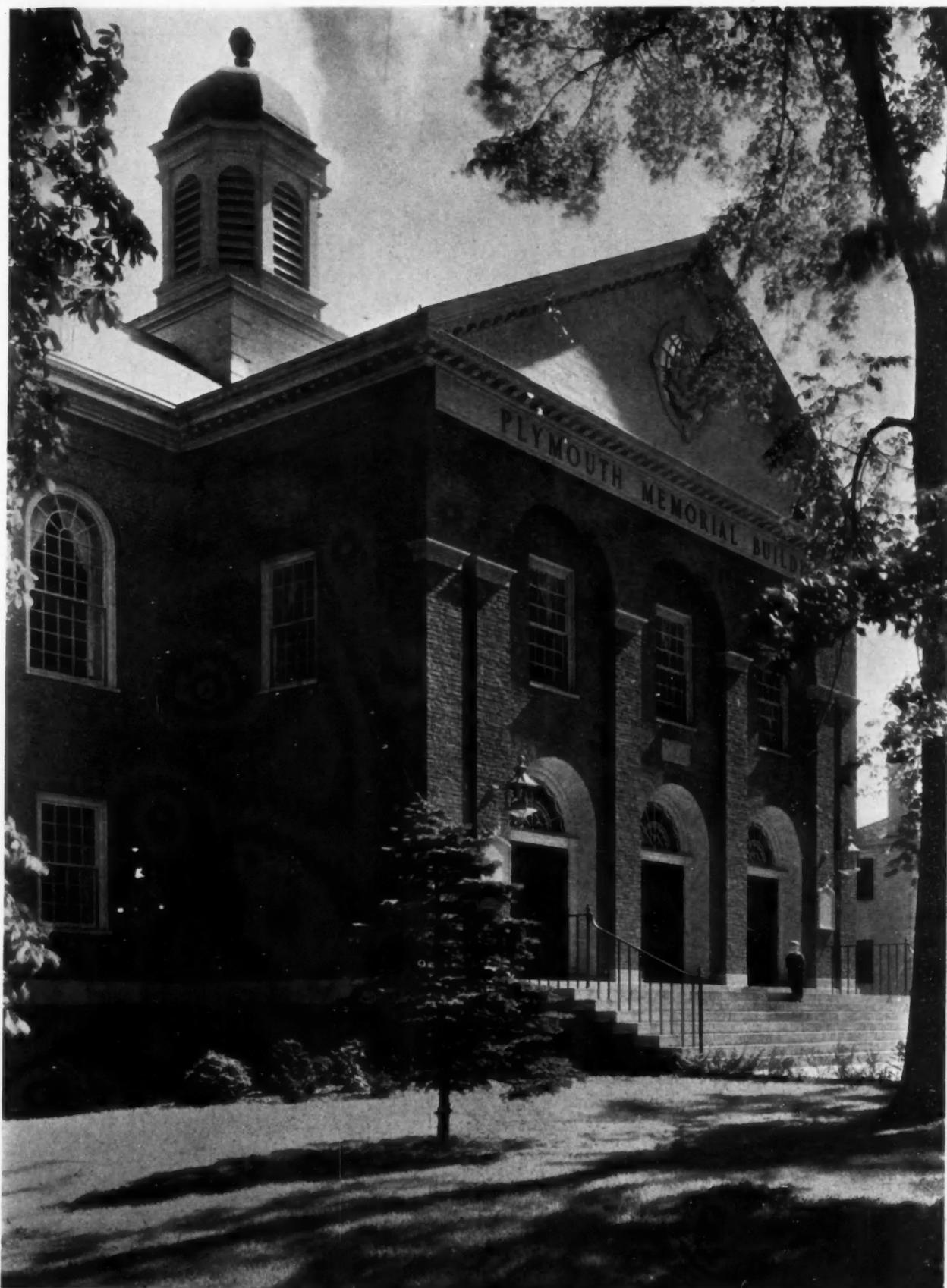


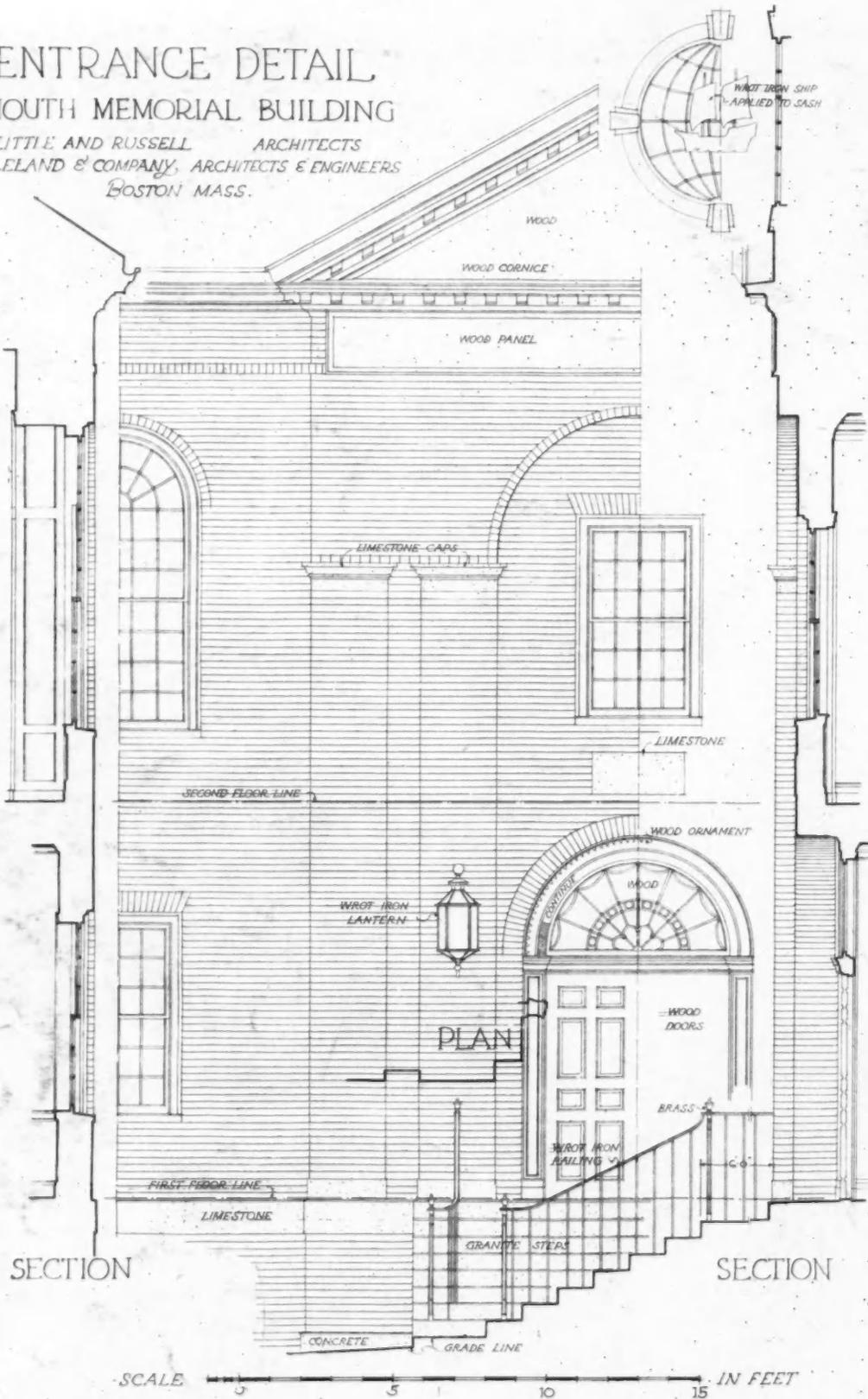
Photo. Paul J. Weber

Measured Details on Back

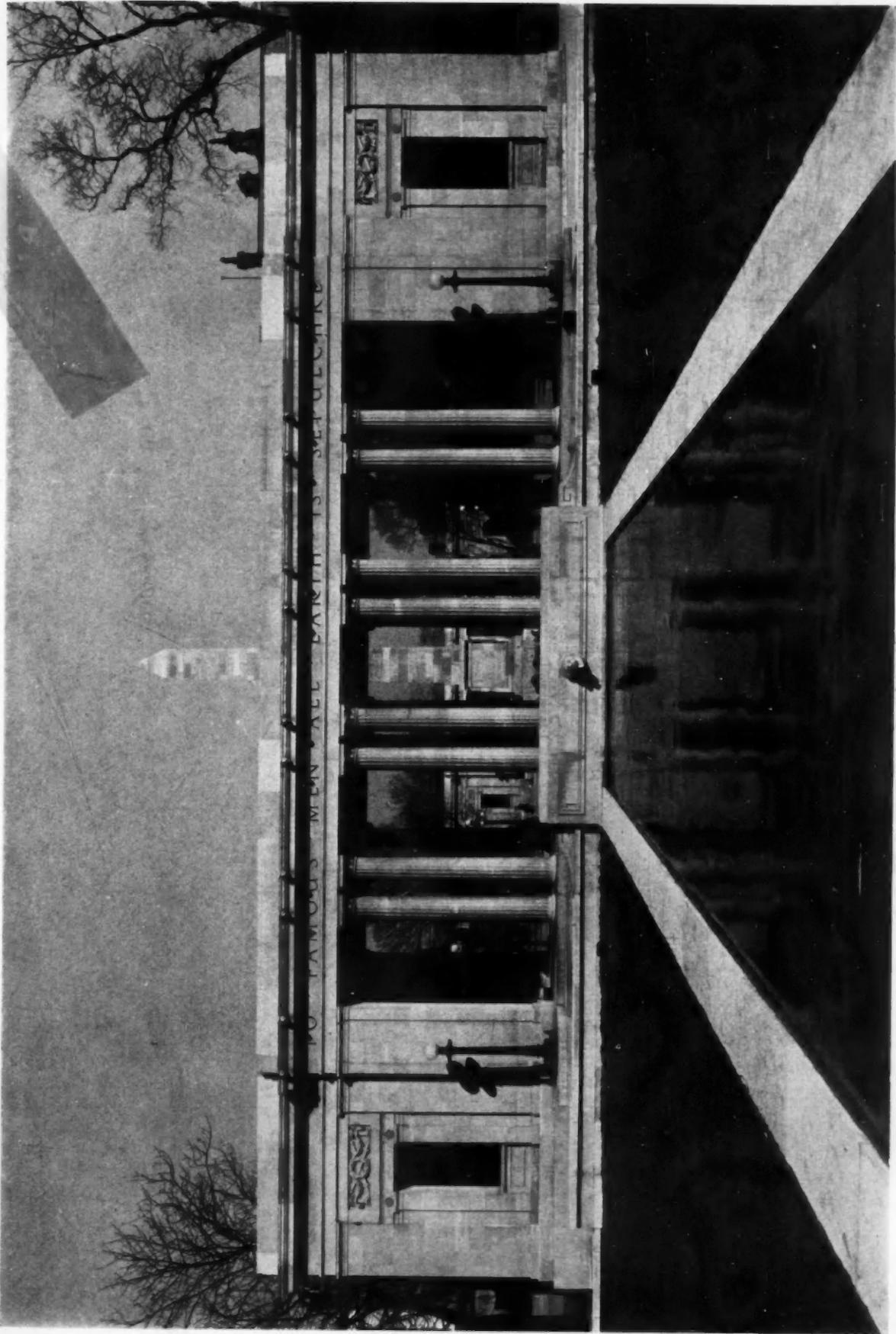
DETAIL, PLYMOUTH MEMORIAL BUILDING, PLYMOUTH, MASS.
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ENTRANCE DETAIL PLYMOUTH MEMORIAL BUILDING

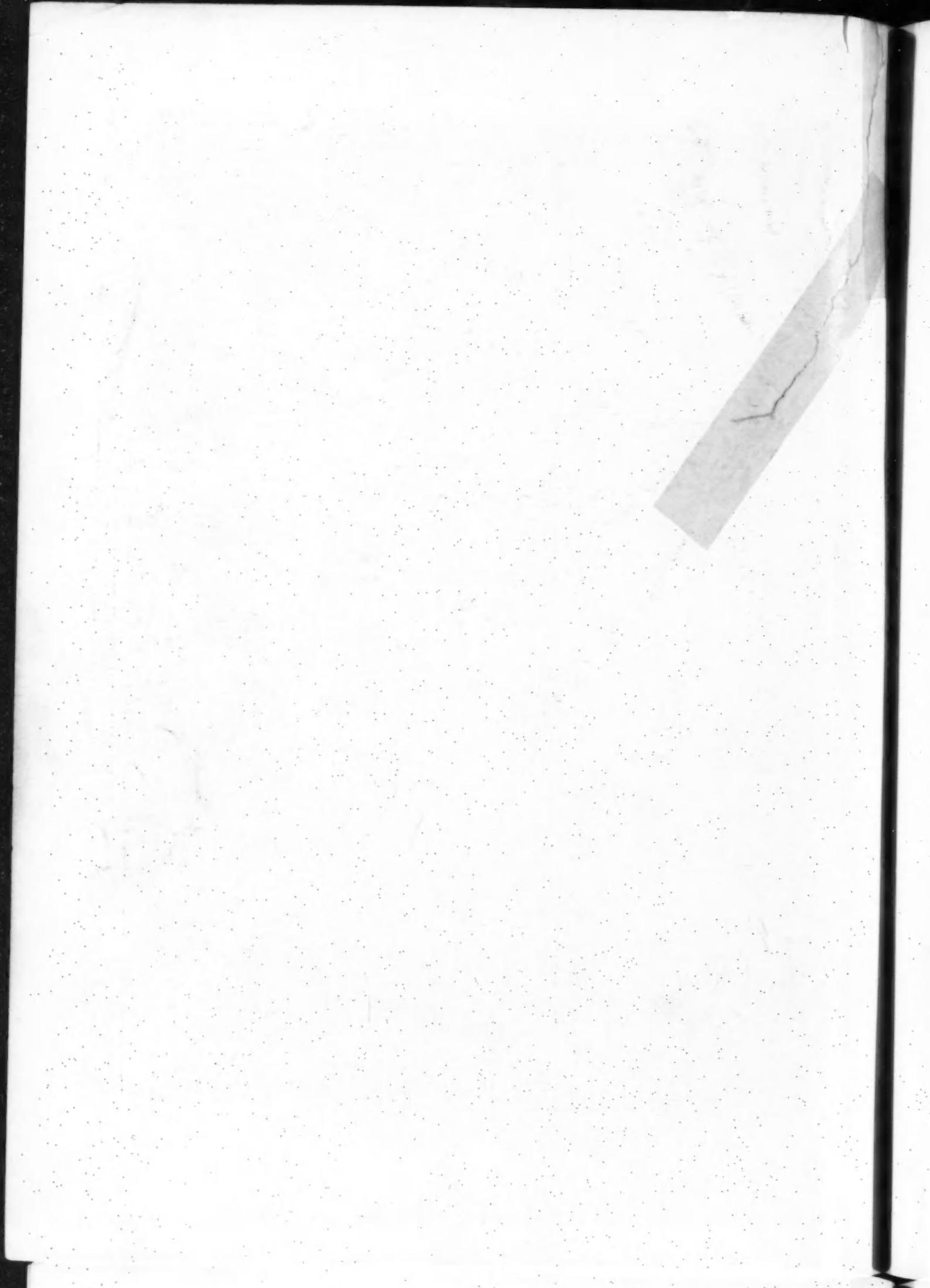
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The ARCHITECTURAL FORUM DETAILS



WAR MEMORIAL, SOUTHPORT, ENGLAND
GRAYSON & BARNISH AND A. L. MacMILLAN, ASSOCIATED ARCHITECTS





DETAIL, WAR MEMORIAL, SOUTHPORT, ENGLAND
GRAYSON & BARNISH AND A. L. MacMILLAN, ASSOCIATED ARCHITECTS



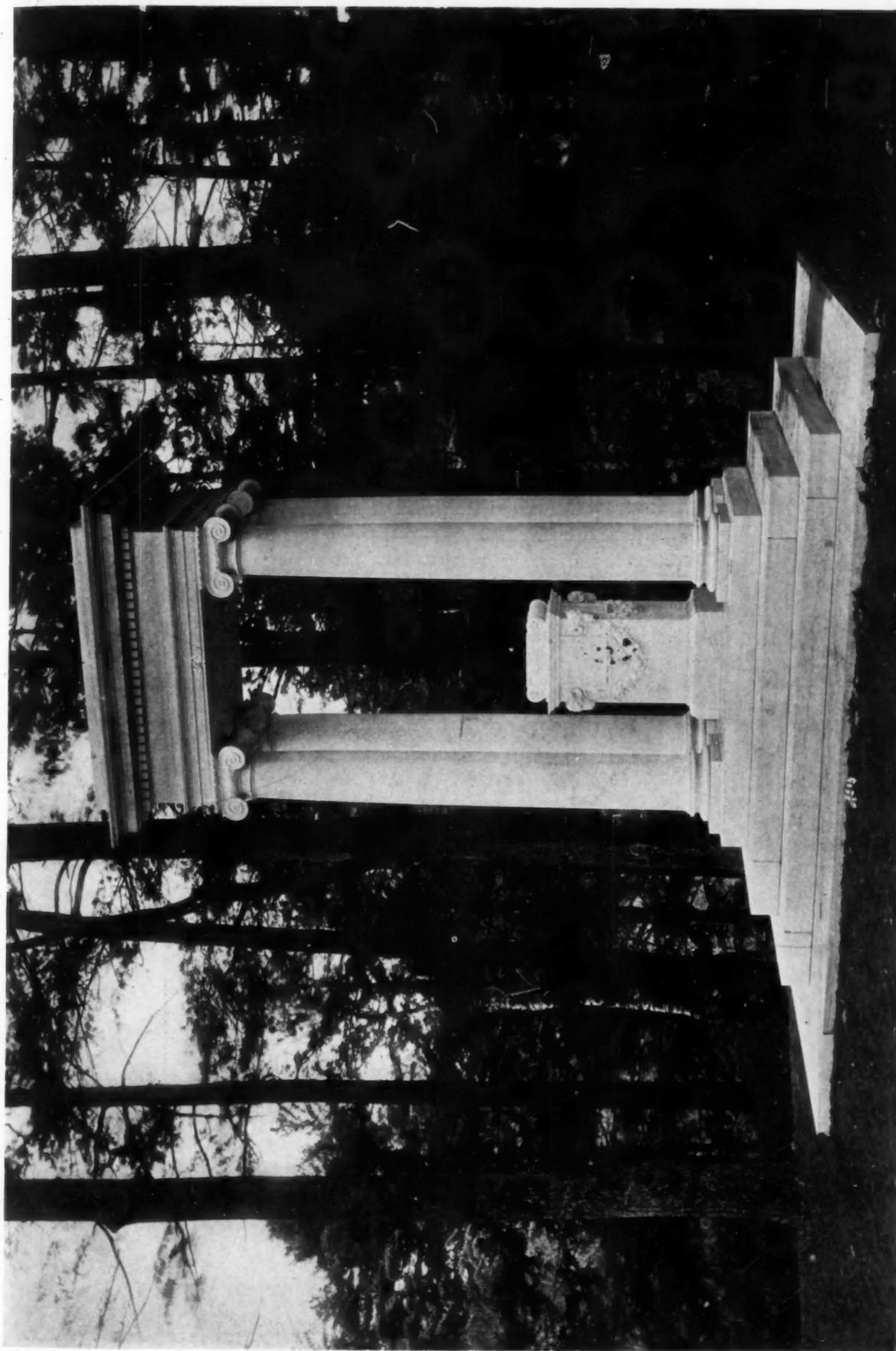


Photo. George H. Van Anda

WAR MEMORIAL, RIDGEWOOD, N. J.

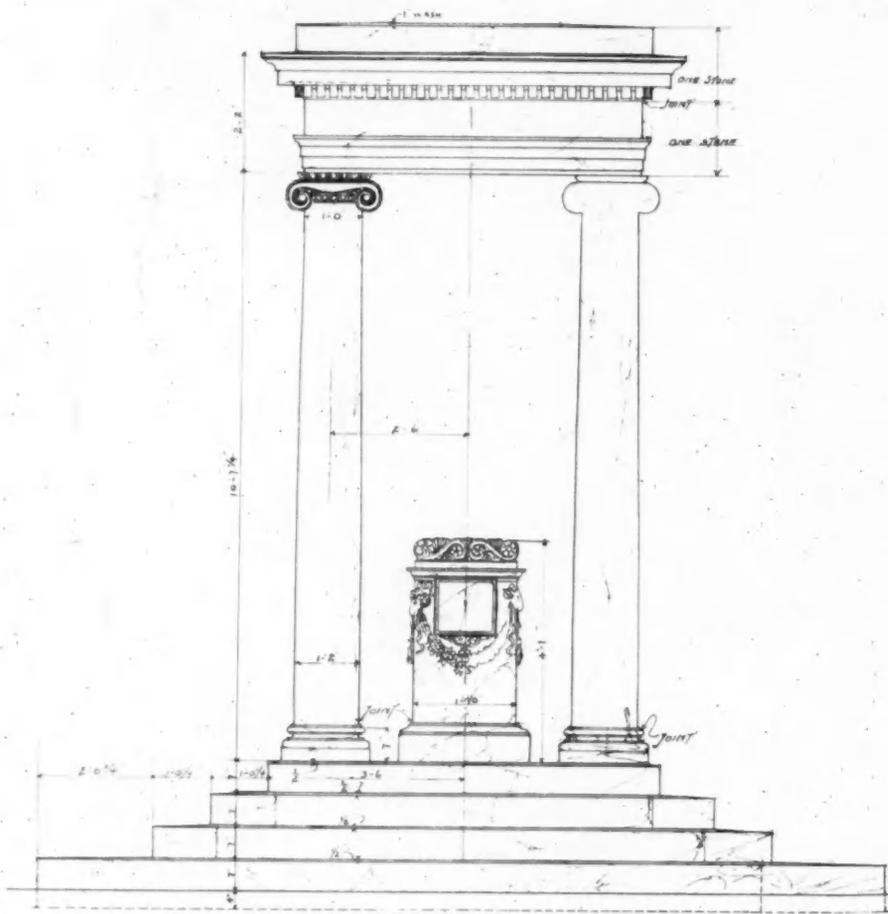
HENRY BACON, ARCHITECT; HENRY HERING, SCULPTOR



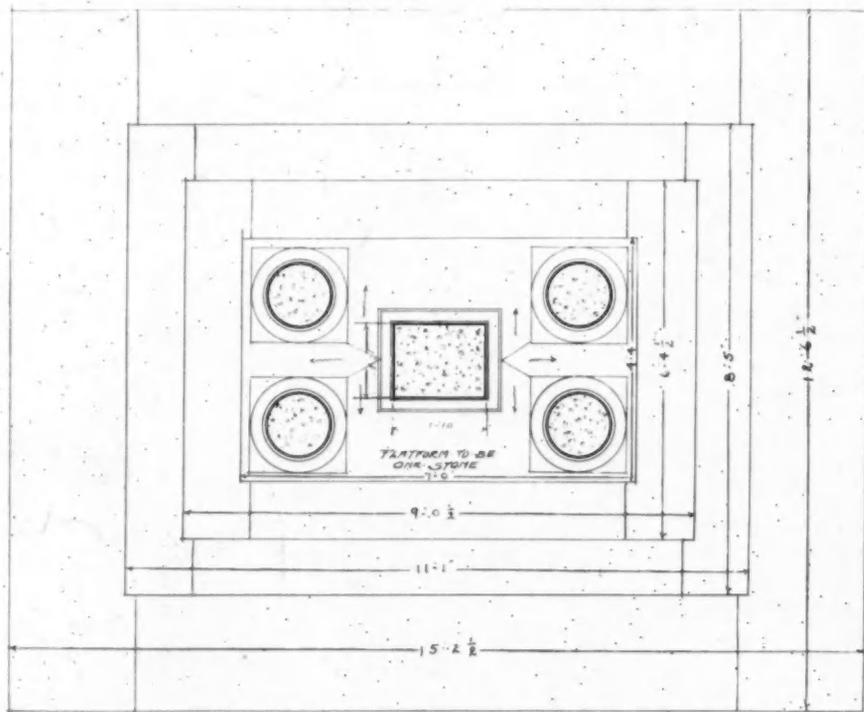


Elevation and Plans on Back

MEMORIAL TO AUGUSTUS ST. GAUDENS, CORNISH, N. H.
DESIGNED BY HENRY HERING, SCULPTOR
McKIM, MEAD & WHITE, ARCHITECTS

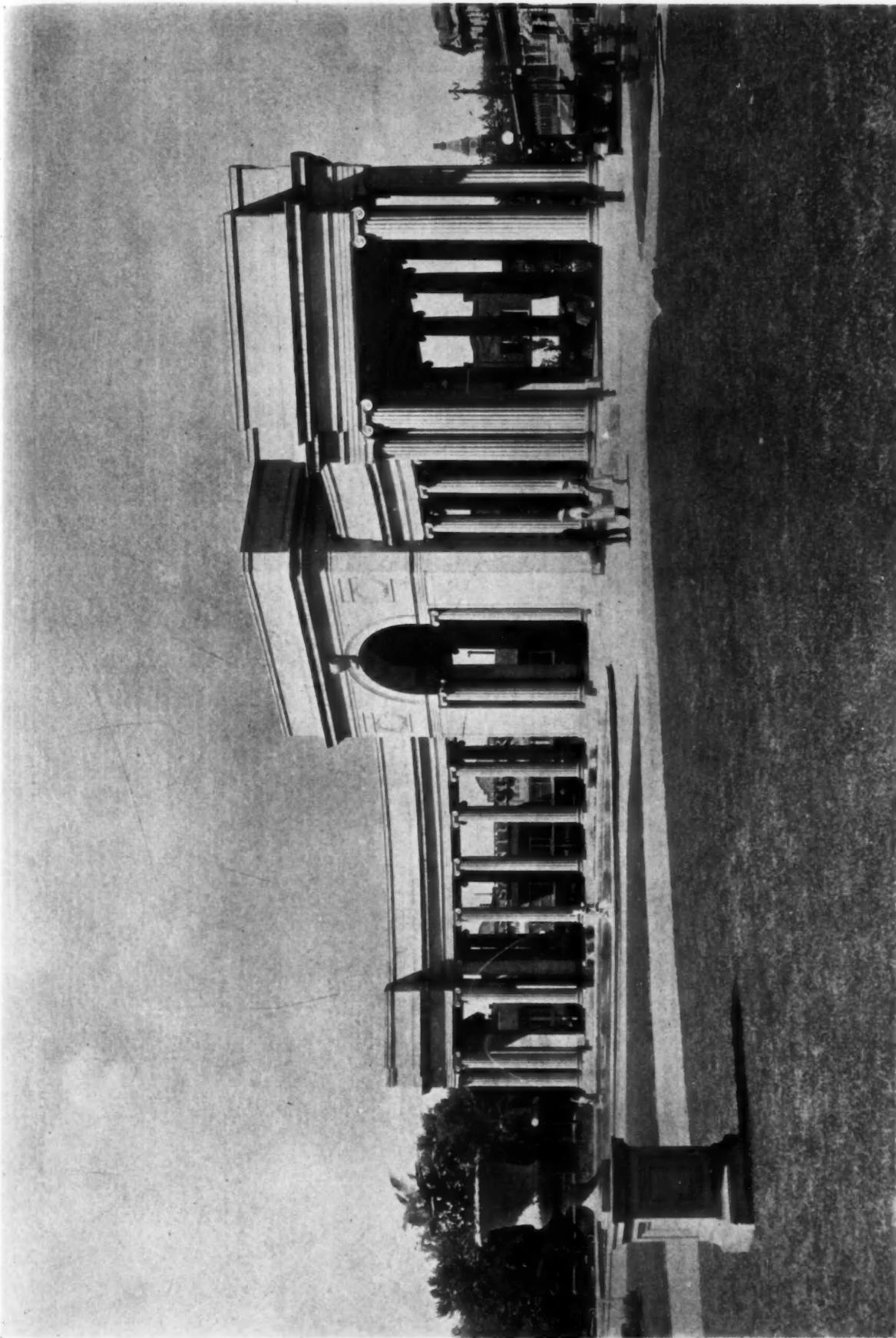


ELEVATION



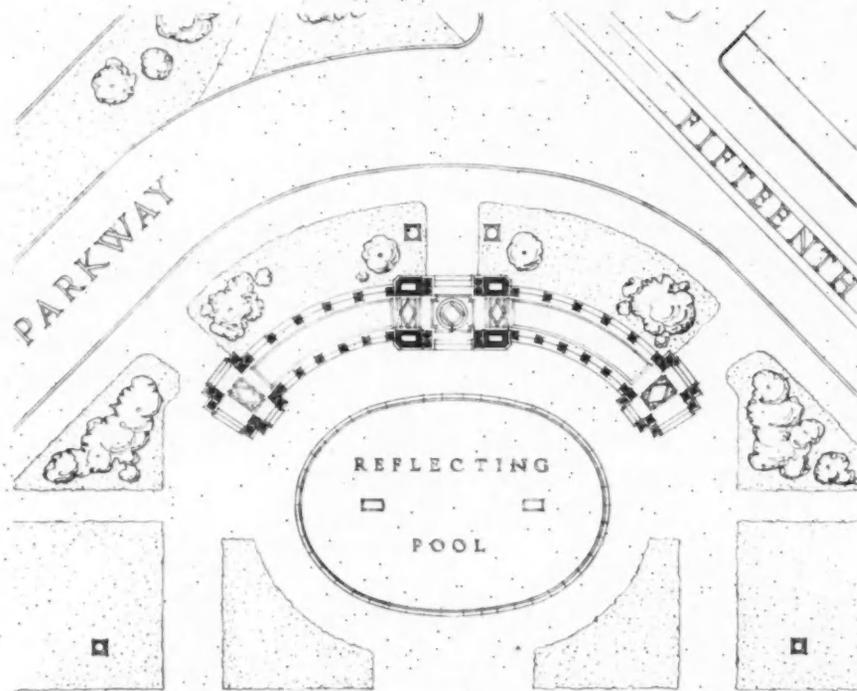
PLAN

✓ MEMORIAL TO AUGUSTUS ST. GAUDENS, CORNISH, N. H.
 DESIGNED BY HENRY HERING, SCULPTOR
 McKIM, MEAD & WHITE, ARCHITECTS



Plan on Back

VOORHIES MEMORIAL, DENVER
W. E. & A. A. FISHER, ARCHITECTS



PLOT PLAN, VOORHIES MEMORIAL, DENVER

W. E. & A. A. FISHER, ARCHITECTS

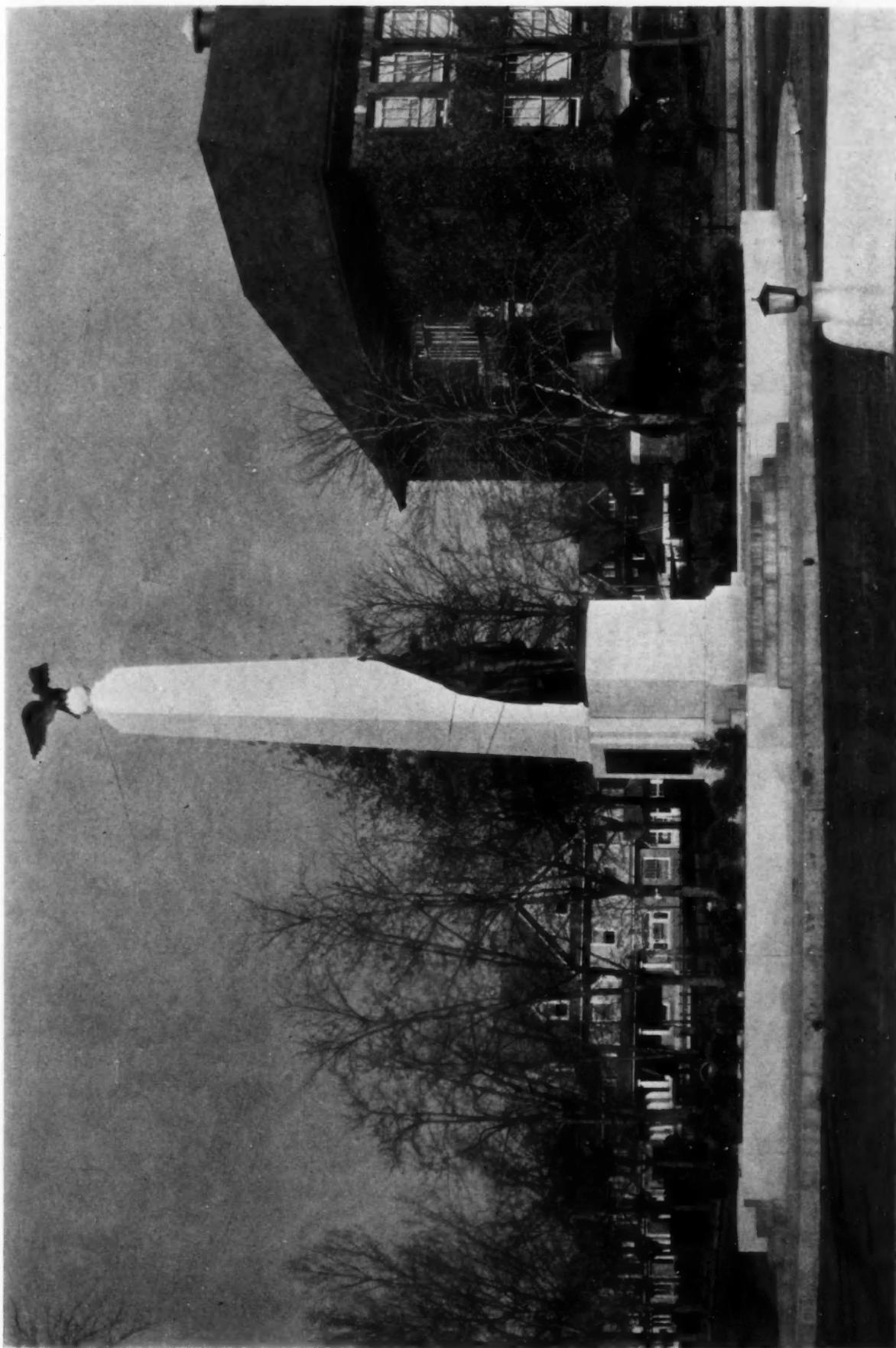


Photo. George H. Van Anda

WAR MEMORIAL, ENGLEWOOD, N. J.
KENNETH W. DALZELL, ARCHITECT; HARRY LEWIS RAUL, SCULPTOR





Photo. George H. Van Anda

WAR MEMORIAL, NEW ROCHELLE, N. Y.
EDMOND T. QUINN, SCULPTOR; LOUIS METCALFE, ARCHITECT



✓ Bridges as Memorials

By WILLIAM EMERSON

WHAT are the essential characteristics that should find expression in every memorial? Not to put too fine a point upon it, shall we not answer,—durability, serviceability, and beauty?—durability, expressing the material aspect, as does beauty the spiritual, while serviceability introduces that human relation, without which a memorial can never be enduring, withstanding the changes of time.

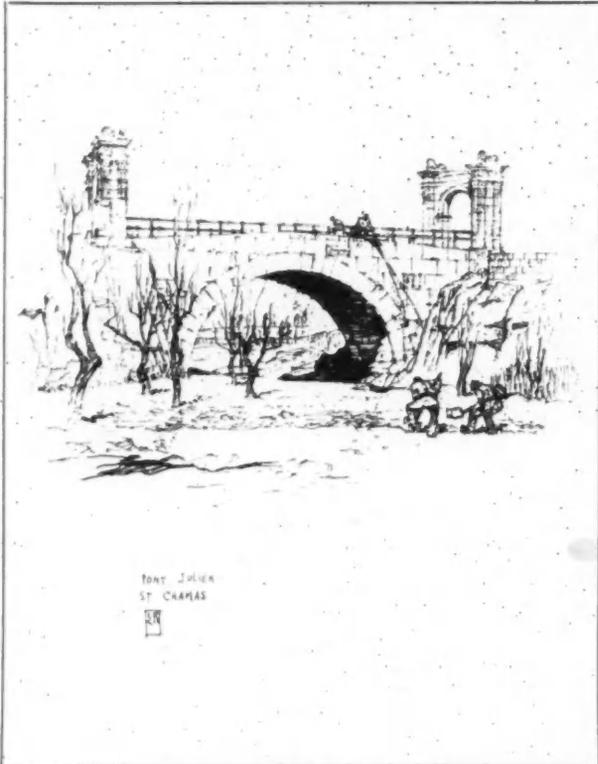
Does not each of these characteristics find convincing expression in the masonry bridge? Surely its material is durable; time only mellows and adds beauty of color and texture to the original beauty of line. As for serviceability, it is one of the inherent characteristics of a bridge. The bridge is indeed essential to the daily life of both highway and river, whose different uses it serves, helping the one without hindering the other. Beauty, perhaps, is less definitely associated in our minds with the characteristics of a bridge than is either durability or serviceability. That the lack of this last quality is more the fault of our times and our ignorance than of any inherent inappropriateness to the nature of the bridge, is what I shall try to demonstrate. In so doing I hope further to convince the reader of the peculiar suitability of a bridge when established as a memorial.

Lest what follows may appear to have no more weight than a purely personal opinion, and in order that one may agree with me as to the beauty of the bridges that have come down to us from other centuries, let me quote the loving appreciation that M. Victor Laloux, *Membre de l'Institut* and dean of French architects, expressed in regard to the architectural beauty of the bridges of France: "Perhaps there is nothing surprising in this, for does not the very essence of architecture, whether we are intimately or only generally acquainted with it, lie in this haunting quality of beauty? Is there a single constructive problem that the talent of the designer cannot, at a given moment, develop and embellish to the point of profoundly moving us?" And again: "The conscience, talent, and taste which a man like the Burgundian Gauthey has brought to the solution of the most elementary bridge problems, such, for example, as those in the suburbs of Auxerre and of Chalon, show better than any mere theorizing that the purely utilitarian character of a programme imposes upon the constructor neither indifference nor vulgarity." The architect's supreme effort is demanded.

The quality of beauty in these old structures has won recognition from other generations as well.



Old Bridge at St. Generoux, Poitou



Roman Bridge at St. Chamas

Drawn by Louis C. Rosenberg for "Old Bridges of France,"
Press of the American Institute of Architects

Jean Jacques Rousseau was so moved by his visit to the Pont du Gard that he thus expressed himself: "It was the first work of the Romans which I had seen. I hoped to see a monument worthy of the hands that had raised it; and for the first time in my life my expectations were surpassed by the reality. It belonged only to the Romans to produce such an effect. The aspect of this simple and noble work struck me all the more that it was in the midst of a desert where the silence and solitude increased the effect. . . . I walked along the three stages of this superb construction with a respect that made me almost shrink from treading on it. The echo of my footsteps under the immense arches made me think I could hear the strong voices of the men who had built it. I felt lost like an insect in the immensity of the work. I felt, along with the sense of my own littleness, something nevertheless which seemed to elevate my soul: I said to myself, with a sigh—'O that I had been born a Roman!' I remained several hours in this rapture of contemplation. I came away from it in a kind of dream, and this reverie was not favorable to Mme. de Larnage (the latest of the numerous objects of Rousseau's sentimental attachments). She had been careful to warn me against the attractions of the young women of Montpellier, but not against the Pont du Gard. One cannot think of everything." Thus the old Roman Pont du Gard!

What is it, then, that gives these bridges of Eu-

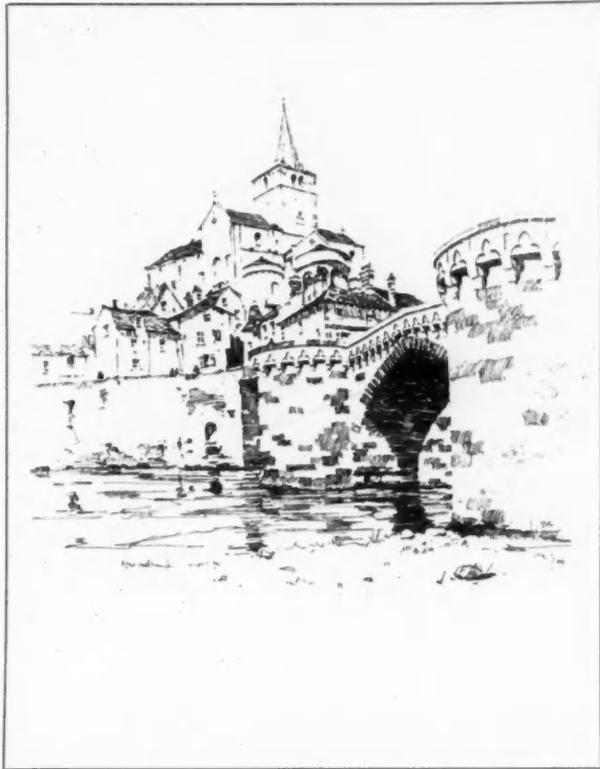


© Compagnie Aérienne Française

Ile de la Cite, Paris, Showing Connecting Bridges
Pont Neuf at lower left.

rope a quality, a spirit, a personality, that with rare exceptions seems lacking in those of our own time and country? Why do the very stones and lines of their compositions inspire our imagination and satisfy our eyes? It is, to my thinking, not alone the historical associations that they recall, nor is it the skill with which they meet the practical purposes that they are intended to serve; but rather, that while meeting the needs of the pedestrian above as well as the boatman below, they are conceived with so true and inherent a love of beauty that they have been thus glorified into masterpieces that are the delight of the centuries,—enduring memorials to the sincerity, ability, and instinctive love of beauty that animated the original builders, but often wanting today.

Let us look at some of the great bridges that the world has inherited;—Spain, France, Italy, Syria, Africa, China,—these and many other countries glory in such treasures; not constructed as memorials, it is true, but built beautifully to meet the needs of their civilization, and lasting today as a lesson from which we might derive infinite profit and delight, but which we tend to ignore. In almost every one of these countries it is the hand of mighty Rome that we recognize. Roads and bridges, waterways and aqueducts, were essential to her Empire building, but lasting beauty was ever a part of the enduring workmanship with which these monuments of her progress were built. There can indeed be no denying



Old Bridge at Montmorillon

Sketch by S. V. Chamberlain for "Old Bridges of France,"
Press of the American Institute of Architects



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Pont du Gard, Remoulins



John W. Weeks Memorial Bridge, Cambridge, Mass.
McKim, Mead & White, Architects

the beauty of these old bridges. Their durability and serviceability are alike attested by their present existence and use. Can we, then, escape the conclusion that the bridge is composite of those qualities that should find expression in every memorial? Does not this conclusion point the way toward the creation in our own time of bridges that are as truly beautiful as they are already durable and serviceable?

The need of bridges as public utilities is infinitely greater now than ever it was in the old world, and this need we have satisfied from the practical stand-

point with great skill; but in doing so we have generally omitted beauty as one of the essential requisites, with the result that our modern bridges only half fulfill their possibilities. May we not, in consequence, decide that in that which is useful there lies hidden the very germ or essence of beauty? Any museum showing the utensils of the Egyptians, Greeks and Romans reveals how much thought they gave to making these humble accompaniments of their daily lives a delight to behold without impairing in the least their usefulness. We, in the hurry



Lt. Richard Mortimer, Jr., Memorial Bridge, Hamilton, Mass.
Peabody, Wilson & Brown, Architects; Ralph W. Gray, Associated



Memorial Bridge Across the Potomac at Arlington, Va.
McKim, Mead & White, Architects

of our modern lives, are likely to find a place for beauty only when we are convinced that it will add to our incomes or to our importance. Its intrinsic excellence is little recognized. So with our bridges; the great proportion of those with which we are familiar are so exclusively utilitarian that there is no suggestion of beauty about them. They serve their purpose,—which is well,—but is it enough? Do they add dignity to the approaches of our great cities? Infrequently. Those that do so form a group of rare distinction. Do they add any line of

beauty to their surroundings? Do they offer to our citizens any inducement to add to the beauty of their own lives? Do they, in sooth, inspire the beholder with any loftier vision, any finer conception of life? Very rarely. And yet, I hold that they may; and that in their very nature lurk untried possibilities, all but infinite in their variety, and so full of suggestion and inspiration as to tempt the imagination of our ablest designers. In these times a little thought will insure to the bridge its place, not merely as a utility that in a purely mechanical and rather un-



Memorial Bridge to Charles Eliot, Blue Hill Reservation, Boston
Designed by Arthur A. Shurtleff and A. W. Longfellow in consultation with Frederick Law Olmsted

lovely way serves its purpose, but as a thing of beauty and a source of pride, meeting the needs of a growing city and at the same time offering a most inspiring subject for the creative genius of the modern architect. It is an opportunity full of possibilities.

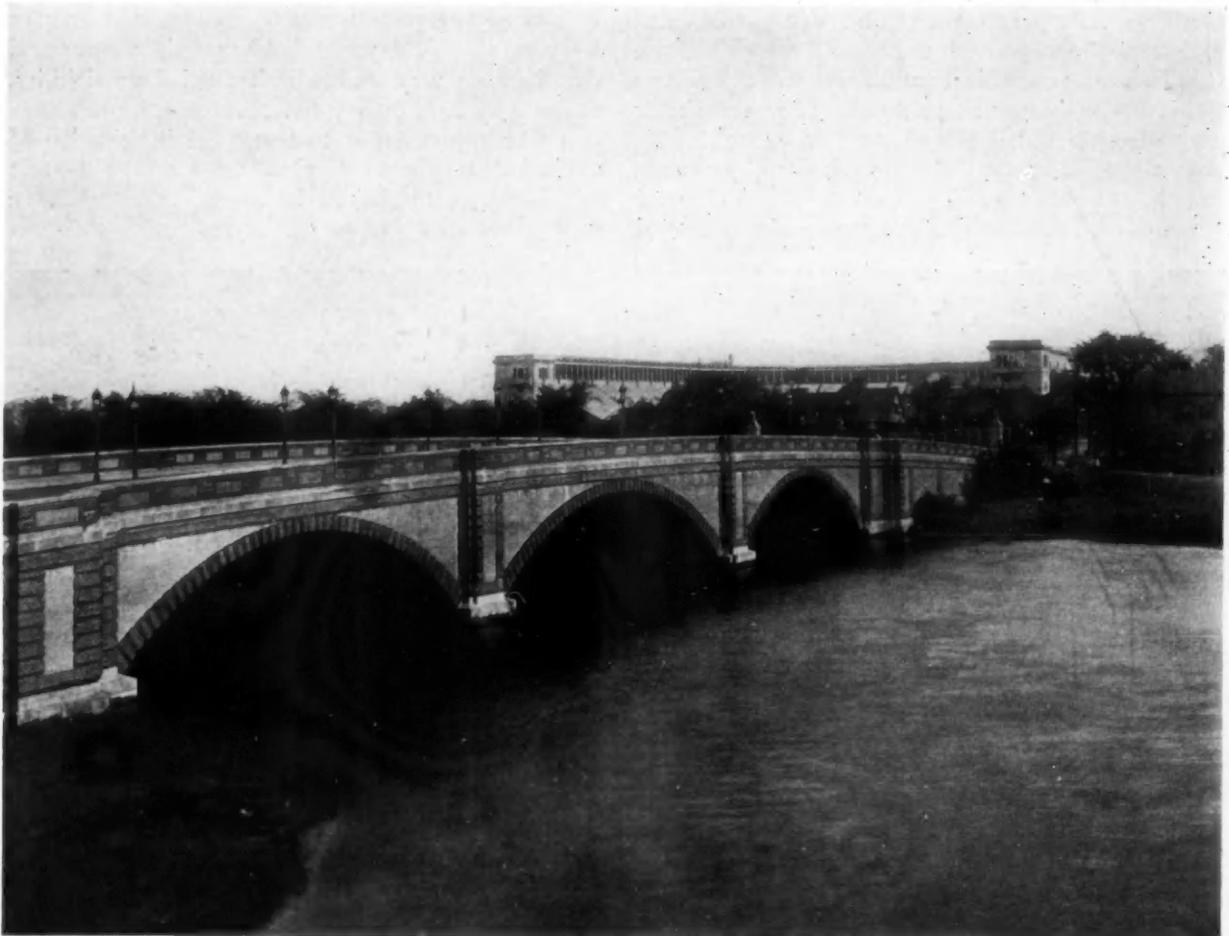
The world at large since the period of the Armistice has sought something that might best symbolize the spirit that animated those who freely gave their lives in the hope that their countries might live in peace. Every sort of war memorial has been erected, each and every one doubtless dedicated to the same spirit, but showing such variety of solutions and, in many instances, such hopeless ugliness of form, as to make the observer wish that he might have been left with his own mental picture of the spirit that was to be symbolized rather than the sad travesty on beauty that confronts him in a material so durable as to offer little hope of its early dissolution. May not, then, a bridge be in many instances an appropriate alternative? It would solve many a problem.

That there is a growing recognition of the suitability of the bridge as a memorial by engineers as well as by architects is apparent from some of the illustrations that we include here. How nobly the bridge at Arlington, Va., immortalizes the sacrifices made in our Civil War! What a graceful addition to the growing group of Harvard's buildings is the

John W. Weeks Memorial Bridge! With this the earlier Larz Anderson Memorial Bridge introduces a most harmonious and suitable note between the Colonial college buildings on the one hand and the modern stadium on the other. Springfield, Mass., may well be proud of its bridge across the Connecticut River, a memorial to the citizens of Hampden County who gave their lives or means that the city might prosper. The memorial to Charles Eliot is a particularly appealing and appropriate piece of work,—a lasting tribute to the foresight of a landscape architect, set in the surroundings which his vision had secured for the enjoyment of the public.

At Hamilton, Mass., is perhaps the most perfect solution that we have found. This bridge could hardly be better suited to the lines of the road and stream, or more charmingly suggestive of its memorial purpose. These smaller bridges are excellent examples of the intimate character that may so properly find expression in a memorial, and are convincing evidence that it is not necessary for a bridge to be large to be effective from any point of view.

In addition to the three characteristics that we have found essential in any memorial, we should note how perfectly the best of these bridges, whether old or new, harmonize with their surroundings, and how essential it is that in our admiration for the past we



Larz Anderson Memorial Bridge, Cambridge, Mass.

Haven & Hoyt, Architects

should avoid the repetition of features that are of only archæological interest. We should bend our energies to insure the solution of our problem first as a bridge problem, and then to incorporate with it the memorial character, which is highly important.

See how perfectly the bridge at Montmorillon, in France, lends itself to the conformation and character of the town beside it! It seems to become an integral part of it! What distinction and beauty are expressed in the old Roman bridge at Saint Chamas! Incidentally, how appropriate are its triumphal arches for use in a memorial! The leisurely repetition of the arches in the bridge at Saint Generoux is perfectly in keeping with the quiet country side and the half-hidden church with which it is composed.

Limitations of space preclude the showing of other examples, but many handsome modern bridges exist in this country, such as that at Harrisburg, Pa., and the railroad bridge over Hell Gate, in New York, which have been studied and achieved with a fine feeling for beauty. Together with these accomplishments there should be mentioned the excellent policy adopted by many of our park commissions of adding to the beauty of the landscape by securing carefully studied bridge designs across waterways. The work of the Metropolitan Park Commission of Boston affords a notable and most successful instance. Nor

should we fail to mention the efforts of individuals who through their positions in the community and through never hesitating to voice their convictions have been a power for progress on the lines that we have suggested. Such a one was Colonel William A. Hayes, of Cambridge, Mass., whose belief in the suitability of a bridge for memorial purposes he never failed to express, urging its appropriateness particularly as a Harvard war memorial.

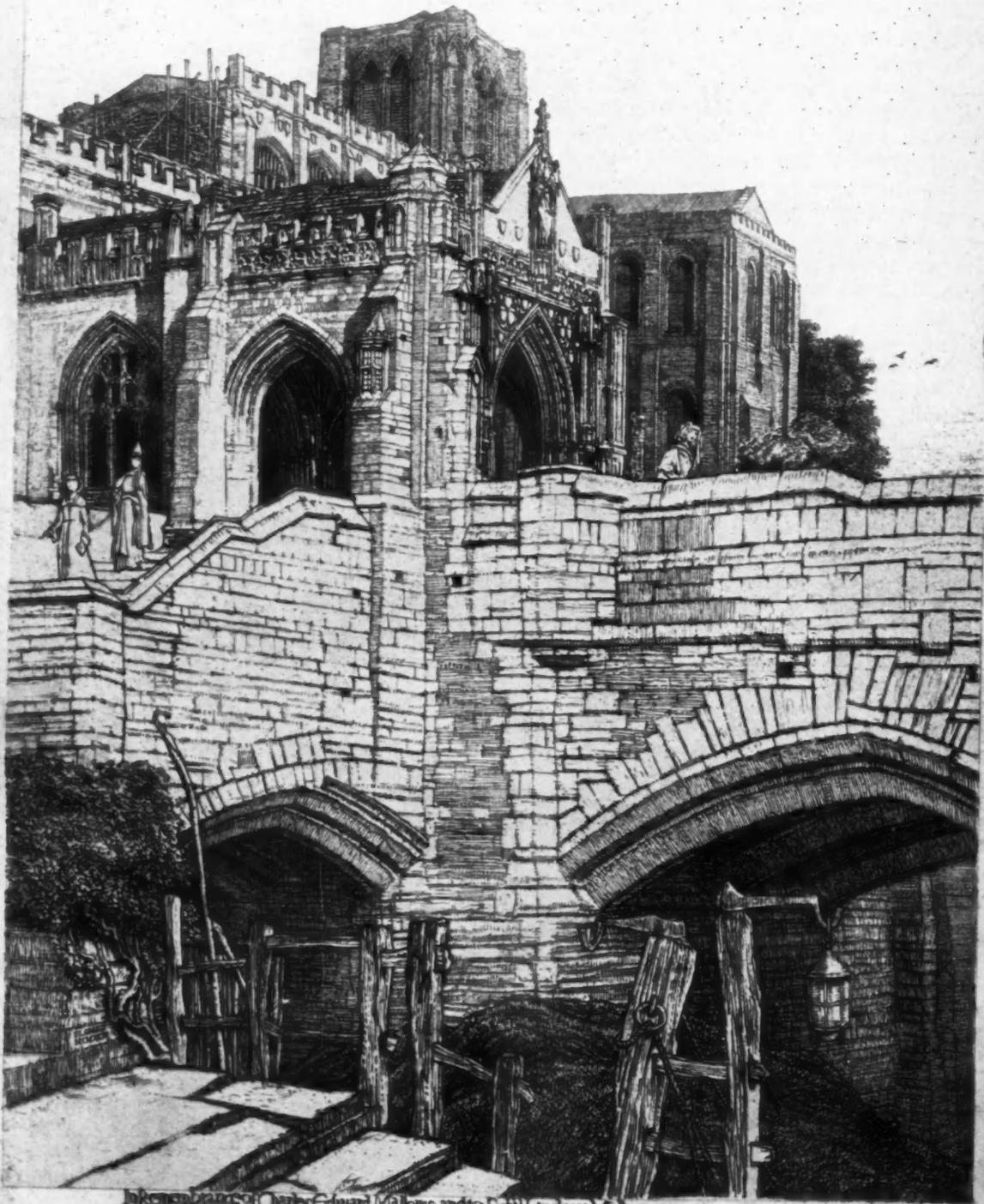
Those who would look further into the possibilities of bridges as memorials I refer to the suggestive etchings and water colors of Brangwyn, to the masterly water colors of Vignal, or to the sketches of Rosenberg and Chamberlain. Perhaps no one has recognized how manifold and fascinating are these possibilities from the point of view of composition better than the English etcher, F. L. Griggs. His architectural training, coupled with a fertile imagination, has taught him how to combine the simple bridge elements in great variety, with marvelous results.

In conclusion, let us realize that although practical necessities, aside from any consideration of beauty, are even more exacting in bridge building than in other architectural problems, it is often in the satisfying of these requirements that we find the very essence of our problem. In frankly meeting the practical we often discover the truly beautiful.



Memorial Bridge at Springfield, Mass.

Fay, Spofford & Thorndike, Designing and Supervising Engineers
Haven & Hoyt, Advising Architects



Courtesy of Kennedy & Co.

BRIDGE COMPOSITION
FROM AN ETCHING BY F. L. GRIGGS

Royal Artillery Monument, London

ADAMS, HOLDEN & PIERSON, Architects

C. S. JAGGER, Sculptor

THIS is one of the most interesting of the numerous splendid war memorials and monuments which have been erected in England during the past eight years. Both in mass and detail this memorial has great appeal. The interesting bas-reliefs showing artillery in action, as well as the model of the latest type of cannon which surmounts the monument, are executed in the same stone as the bulk of the memorial itself, which gives a consistency and solidity to the entire design, and creates a suitable background for the several bronze figures, executed in heroic size, which ornament each face of the monument. Although the scale of the sculptured bas-relief is only life size, no inconsistency is felt because these bas-reliefs are treated as a decorative frieze on the monument itself. The inscriptions themselves form one of the chief decorative features. The price of valor is suggested by the heroic bronze figure of the dead artillery man.



Two Views of the Royal Artillery Monument, London



White Memorial Fountain, Public Garden, Boston
Henry Bacon, Architect; Daniel C. French, Sculptor



Spencer Trask Memorial, Saratoga Springs, N. Y.
Henry Bacon, Architect; Daniel C. French, Sculptor

✓ The Relation of Sculpture to Architecture

By CHARLES O. CORNELIUS

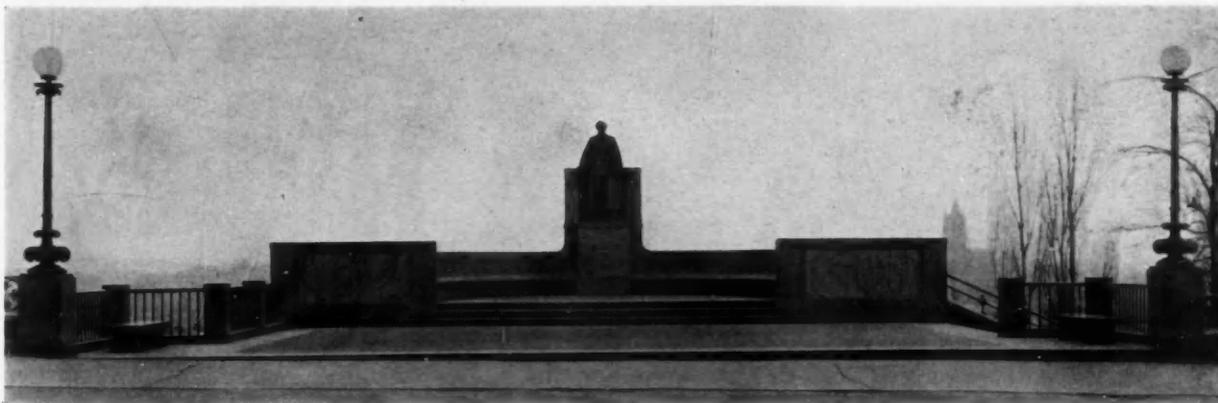
OF the many arts which contribute to the major art of architecture, none seems to present to its creators such difficult problems for solution as does that of architectural sculpture. At the same time there is no element in the composition of a complete architectural design which is of greater importance to the whole.

There must indeed be reasons why so many failures have been registered among the increasing number of examples of building in which architectural sculpture plays an essential part. The chief of these would seem to be a divergence between the points of view of the architect and the sculptor. The architect thinks primarily in terms of constructional composition,—part precisely related to part. The whole composition is built up in his mind not only as a pattern in light and shade or in voids and solids but also as a primary scheme upon a basis of weight and support. He thinks chiefly in terms of form and of light and shade. The sculptor, on the other hand, is a rather free agent, usually expressing himself in his work. The limitations of an architectural setting often hamper him and hinder to some extent the full swing of his genius. If, on the other hand, these limitations are not imposed, he is likely to go the full limit of the conception which is in his mind, interrupting perhaps the movement of the general design. On one hand we have the architect, to whom the sculpture is an enrichment for his building; on the other the sculptor for whom the building is a setting for his sculpture. It is a happy medium between these two which produces the finest results,—the sculptor working untrammelled, but conscious none the less of the limitations and requirements of his problem; the architect in his design properly placing the decorative sculpture so that it contributes to his structural design as a whole. The placing of the sculpture is chiefly the architect's province. Here too many mistakes are made, the decorative relief frequently serving to negative the structural composition.

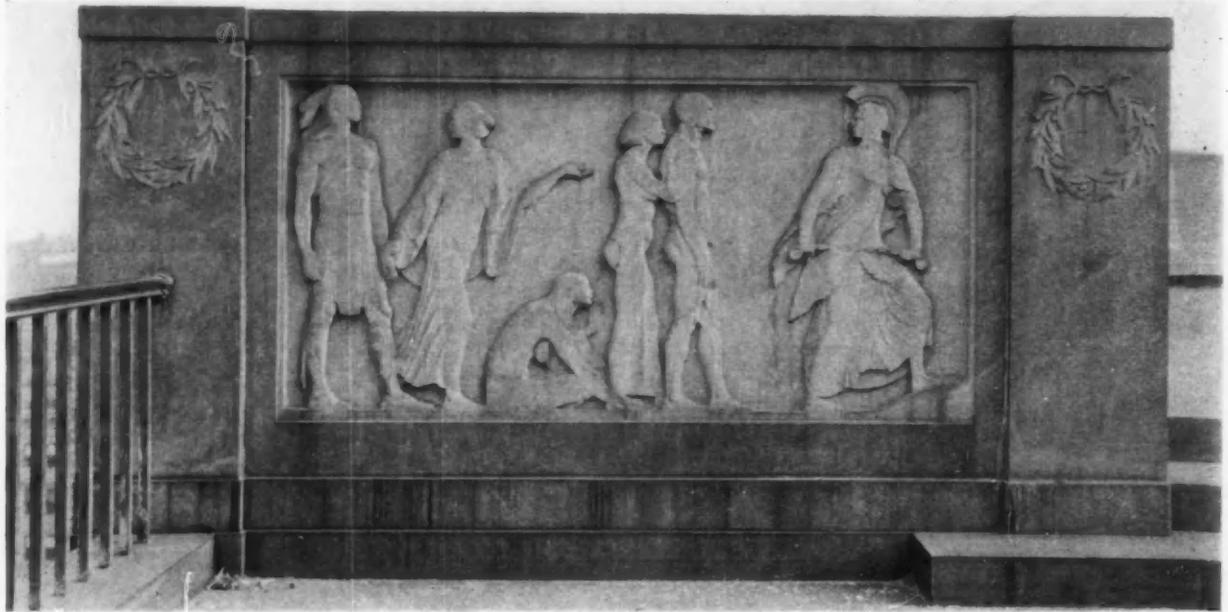
There are two general basic requirements to be met in the creation of good architectural sculpture. The first of these is the accurate relation between the sculpture itself and the architectural design of which it forms a part. The degree of its relief, its mass and form, its pattern in light and shade must all harmonize with certain lines and proportions, and with the scale and mass of the main composition. Secondly, the idea expressed by the sculpture, usually an abstract idea, should be clearly yet subtly suggested, and its connection with the uses of the building should be quite definite and apparent.

There is endless precedent for the placing as well as for the character of the sculptured work which is directly architectural. Perhaps a higher percentage of successes may be found in Greek work than in any other, although even here we must admit degrees of successfulness. The metope sculpture would seem to be almost always adequate. The cella frieze of the Parthenon and the drums of the columns at Ephesus are almost flawless and perfectly fresh creations. Pediment sculpture is not always equally successful. Tomb and theater reliefs are generally spirited and full of definite architectural character.

In much of the Greek work there is a surprising freedom of treatment within the limitations of the general design. The observance of basic lines or directions of the design seems only to have inspired a greater intensity in the sculptor. In Gothic usage the sculpture is more cramped by the architecture. Expressing a different approach and point of view, it is none the less equally successful. There probably remain to us today a greater number of examples of completely satisfying architectural sculpture in Gothic form than in any other. The hieratic tradition which carries into this Gothic sculpture is peculiarly suited to the structural feeling of the architecture. The formalized and restrained expression of emotion in the figures, the quaint grotesquery of the animals are all contributing influences.



Carl Schurz Memorial, New York
Henry Bacon, Architect, Karl Bitter, Sculptor



Panel on Carl Schurz Memorial, New York
Henry Bacon, Architect; Karl Bitter, Sculptor

The first requirement for the successful use of architectural sculpture, that of its relation to the building behind it, is controlled by the architect. He has here opportunities of emphasizing vertical or horizontal lines in his design, of accenting particular points or areas, and of gaining richer coloristic effects in light or shade. Often a too insistent vertical may be softened by the sculpture, or an exaggerated horizontal broken up at proper points. A subtle building up of mass is achieved by proper sculptural grouping. All of this sculptural treatment is closely associated with the carving. The sculpture and carv-

ing should be distinct, the latter,—usually of repeated motifs and seldom possessing any other than a decorative idea,—emphasizes the architectural lines.

If we can form any conclusions from the past to serve as a guide for the future, we may say that sculpture, when not used for itself alone, has been best placed in some position not primarily structural. The Greeks are seen using it most successfully in metopes,—spaces originally between beam ends which merely formed screens against the weather. The same is true of the great pediment sculpture of that nation. In tomb sculpture even less structural consid-



Courtesy of H. H. Martyn & Co., Ltd.

War Memorial, Salisbury

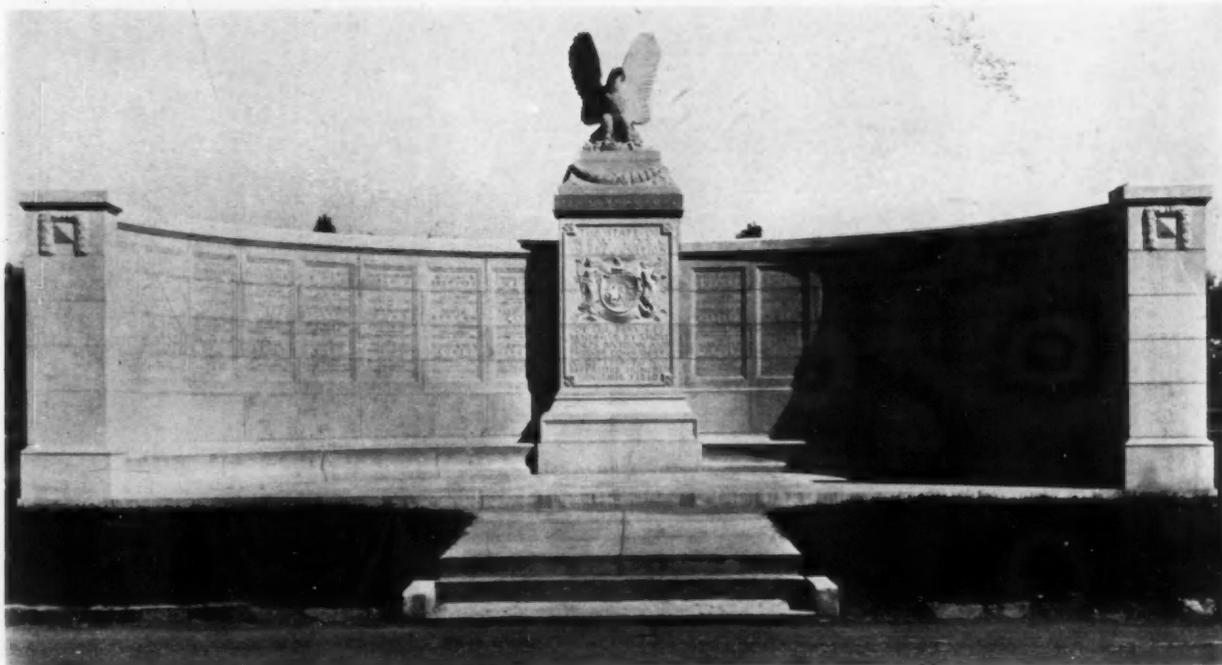


Panel on Carl Schurz Memorial, New York
Henry Bacon, Architect; Karl Bitter, Sculptor

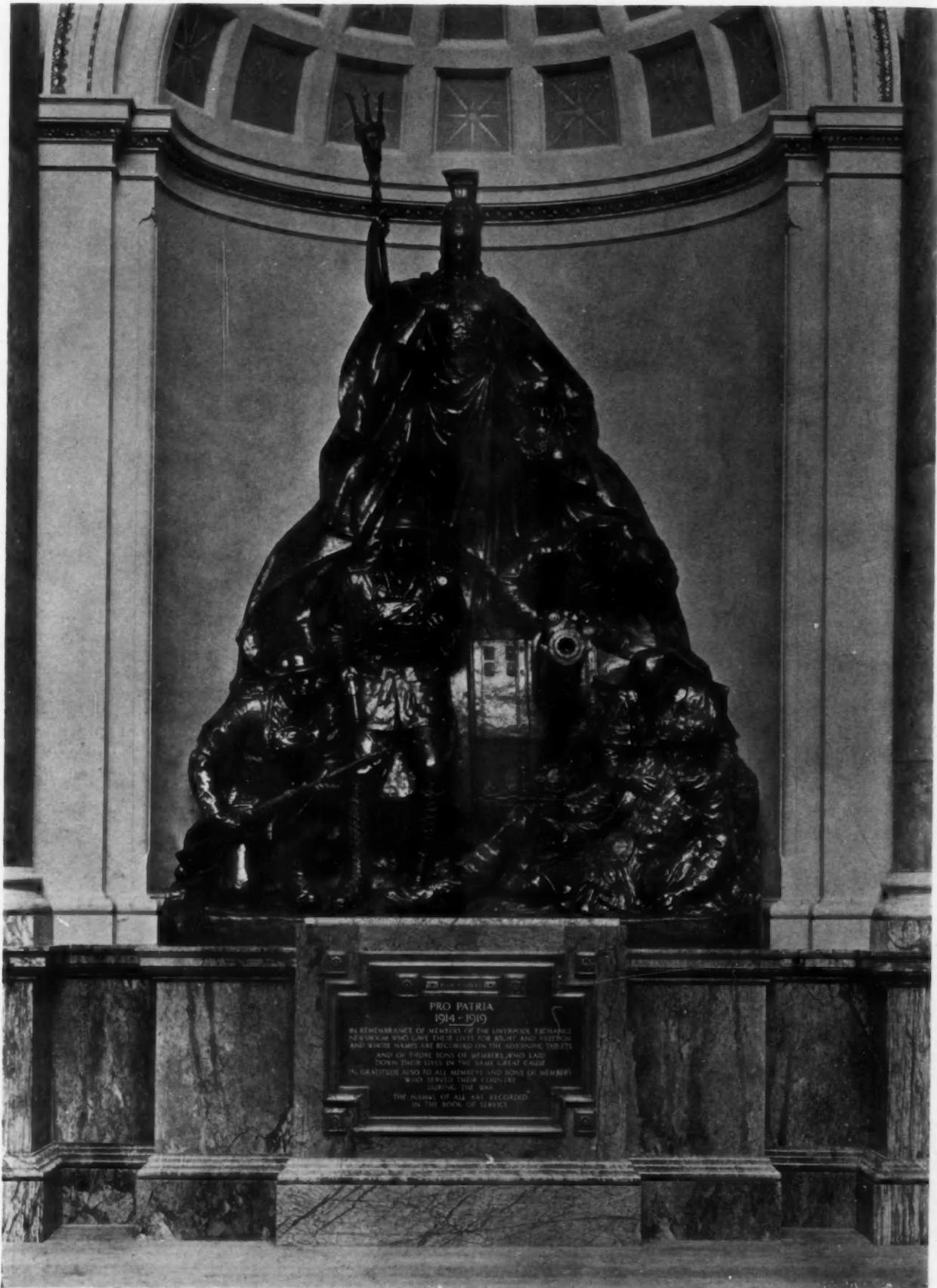
eration is required. In panels such as those on the Tower of the Winds, we again have pure decoration on a screen wall just as we have it in the Athenaic frieze of the Parthenon. Architecturally less successful than these treatments is the use of the caryatid where peculiar beauty or effectiveness lies in other qualities. In the Gothic usage this deduction holds true to a large extent. The many exquisite statues about great portals or across facades are set with architectural enframement. Gargoyles project where variety in line or silhouette of mass is desired. Finials rising high above a buttress or roof line may carry

some soaring figure. This, then, is one conclusion to be drawn,—that sculpture in itself is not a strengthening element. It is rather an adjunct which may be employed to increase or subtract from the strengthening elements of the main architectural design.

Now as to methods in which this can be achieved. Standing off some distance from the sculpture, we may observe that the form of the main mass will serve to emphasize some subtle balance or proportion of the design behind it. Coming closer we will note that the predominating lines of the piece will carry out those of the architectural design, whether



New York State Memorial, Gettysburg Battlefield
Edward P. Casey, Architect



Courtesy of H. H. Martyn & Co., Ltd.

© Stewart Bale

**WAR MEMORIAL TO MEMBERS, LIVERPOOL EXCHANGE NEWSROOM
W. P. HORSBURGH, ARCHITECT**



VICTORY MEMORIAL, CAMBRIDGE, ENGLAND
R. TAIT McKENZIE, ARCHITECT

actually modeled in light and shade or more subtly suggested in the natural line of support of the group or figure. This will hold true whether the sculpture is free-standing, set against a facade or crowning its cornice, or whether it is in panel form breaking up into a certain tonality the surface of a screen wall. The actual treatment of the surfaces comes into this part of the discussion. One of the first requirements is a certain degree of formalization of pattern. Pure, free realism, while often splendidly gay used in connection with architecture, cannot well be made an essential element in so formalized an art. Formalization calls for simplification not only of form and line but also of surface. Broad surfaces of light throwing fine surfaces of shadow are requisite.

Too literal a following of such general ideas as are expressed here can lead only to insipidity. It is merely as a general thought that they are offered. When we think of some of the great architectural sculpture of the eighteenth century in France or that of the Baroque in Italy, we find what would seem to be almost a complete contradiction to our general conclusions. Yet upon closer examination we would find that the same general ideas would hold true, though perhaps interpreted on a special scale. Scale plays a very important part in architectural sculpture. A sculptural motif can often be brought into harmony with its adjacent architecture by a proper employment of scale in its modeling.

The abstract idea expressed by the sculpture calls less upon architectural than upon literary and iconographic knowledge. We may have representative scenes, such as the Egyptian, or semi-representative or allegorical, such as the Greek. Here figures are shown, usually in repose, but suggesting by their

juxtaposition some idea associated with their place in the history of religion or thought. Actual characters from history or mythology may suggest the abstract qualities which are associated with them in men's minds. Often, in such types of sculpture, inscriptions must identify the characters. Another usual method is the personification of abstract qualities such as Justice or Probity,—figures equipped with attributes which identify them to the knowing. Much of modern subject matter in architectural sculpture is based upon either classical mythology or upon Christian iconography, both frequently interpreted from Renaissance models.

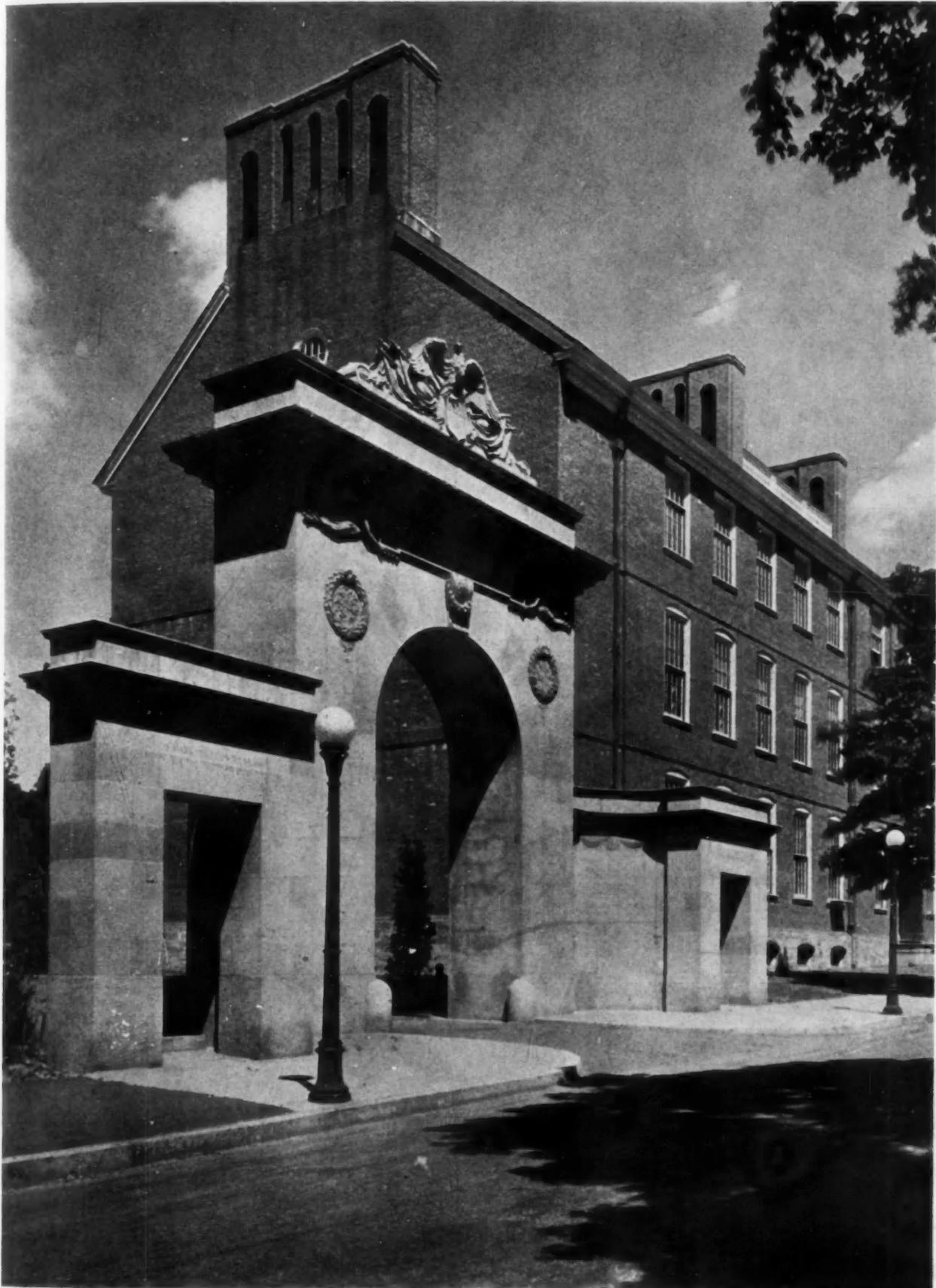
More intelligible, even if less subtle, is the personification of abstract qualities or the representation of the arts and sciences whose attributes are a clue to their identity. Association of ideas, too, is utilized in applying motifs whose repeated use in the past has led to their association with certain buildings devoted to special uses. In the purely modern school it seems possible to dispense with any very precise ideas, relying more upon the pure æsthetic pleasure to carry the design. Spirited dancing figures or musicians at play seem adequate both from the point of view of design and meaning to express the uses of many buildings. Mourning figures or others in dignified procession might express an opposite extreme of feeling. This idea, while finding its place in modern usage, is nothing new, but a carrying on of the finest conceptions of ancient times. The famous balcony of musicians, for which Donatello is responsible, the Pisan pulpits, the tombs of the Dukes of Burgundy all express in sculptured form the sensations of joy or grief combined with an abstract quality of beauty which gives its own thrill.



Lafayette Memorial, Prospect Park, Brooklyn
Henry Bacon, Architect; Daniel C. French, Sculptor



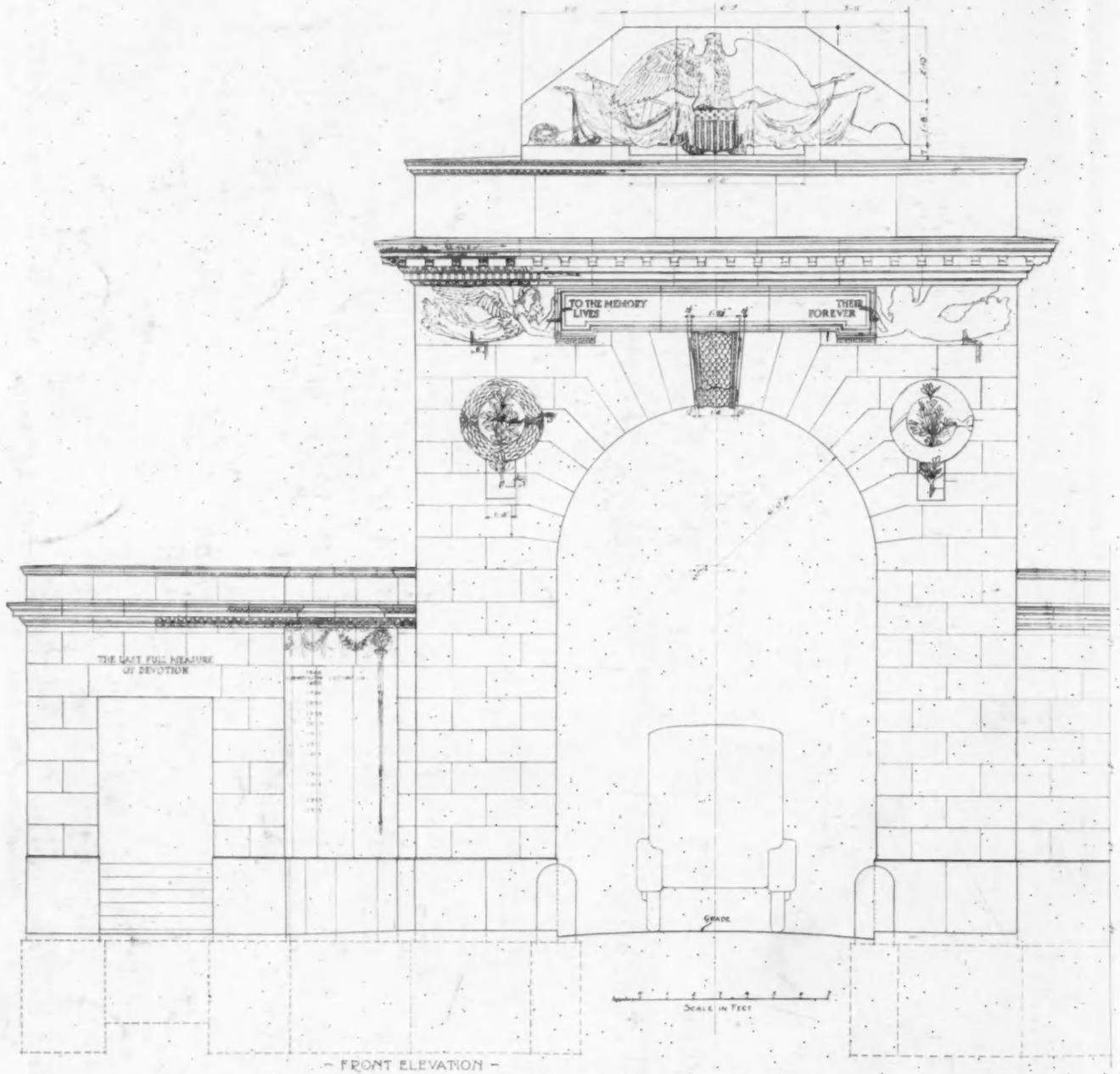
Baker Memorial, Parliament Buildings, Ottawa
R. Tait McKenzie, Architect



Photo, Paul J. Weber

✓ SOLDIERS' GATE, BROWN UNIVERSITY, PROVIDENCE
COOLIDGE, SHEPLEY, BULFINCH & ABBOTT, ARCHITECTS

Measured Details on Back



DEC
1926

DETAILS, SOLDIERS' GATE, BROWN UNIVERSITY, PROVIDENCE
COOLIDGE, SHEPLEY, BULFINCH & ABBOTT, ARCHITECTS

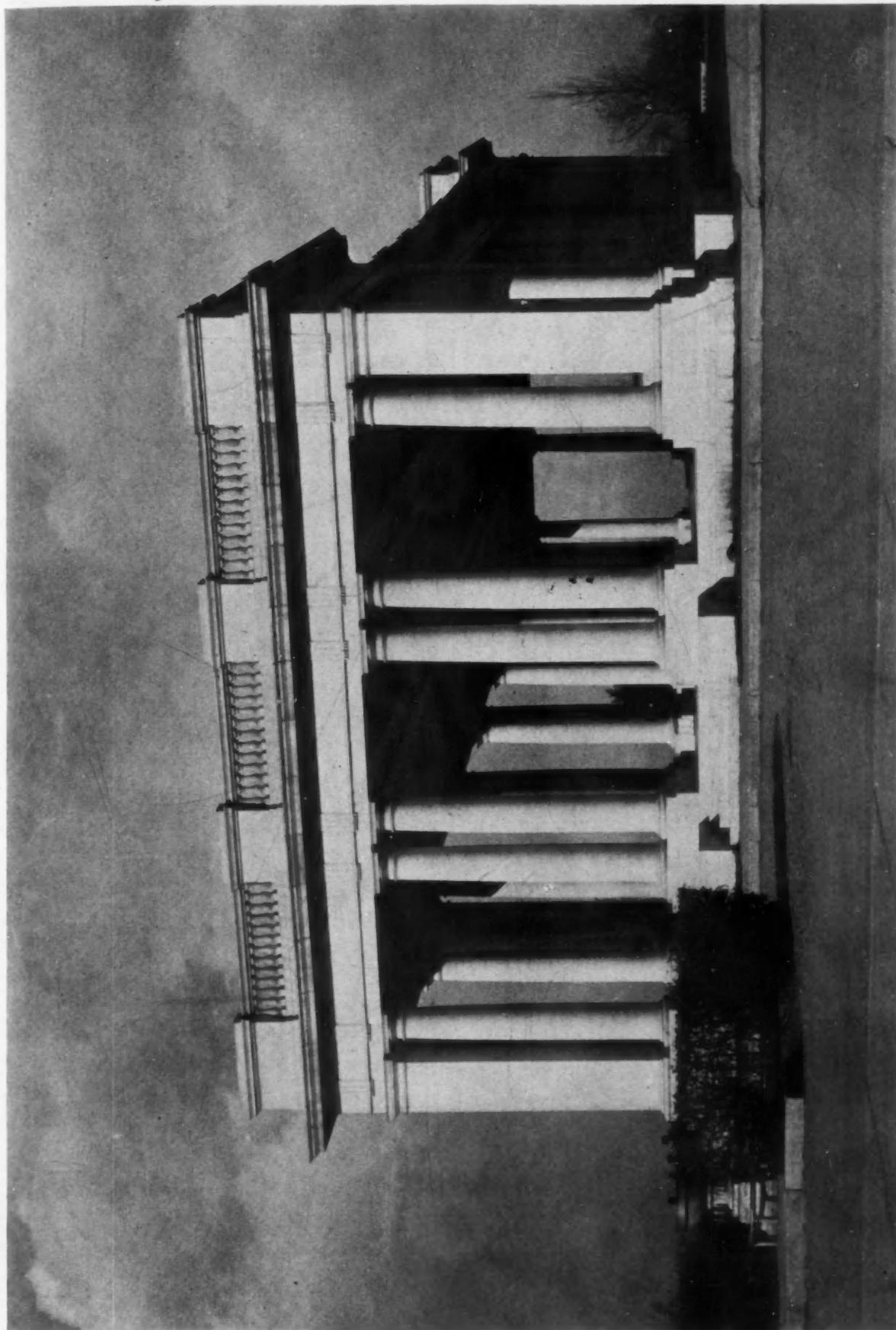
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The ARCHITECTURAL FORUM DETAILS



WAR MEMORIAL, BURY, LANCASHIRE
SIR REGINALD BLOMFIELD, ARCHITECT; HERMAN CAWTHRA, SCULPTOR

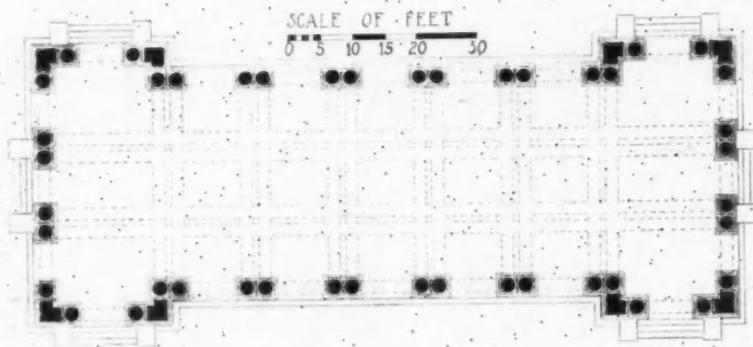




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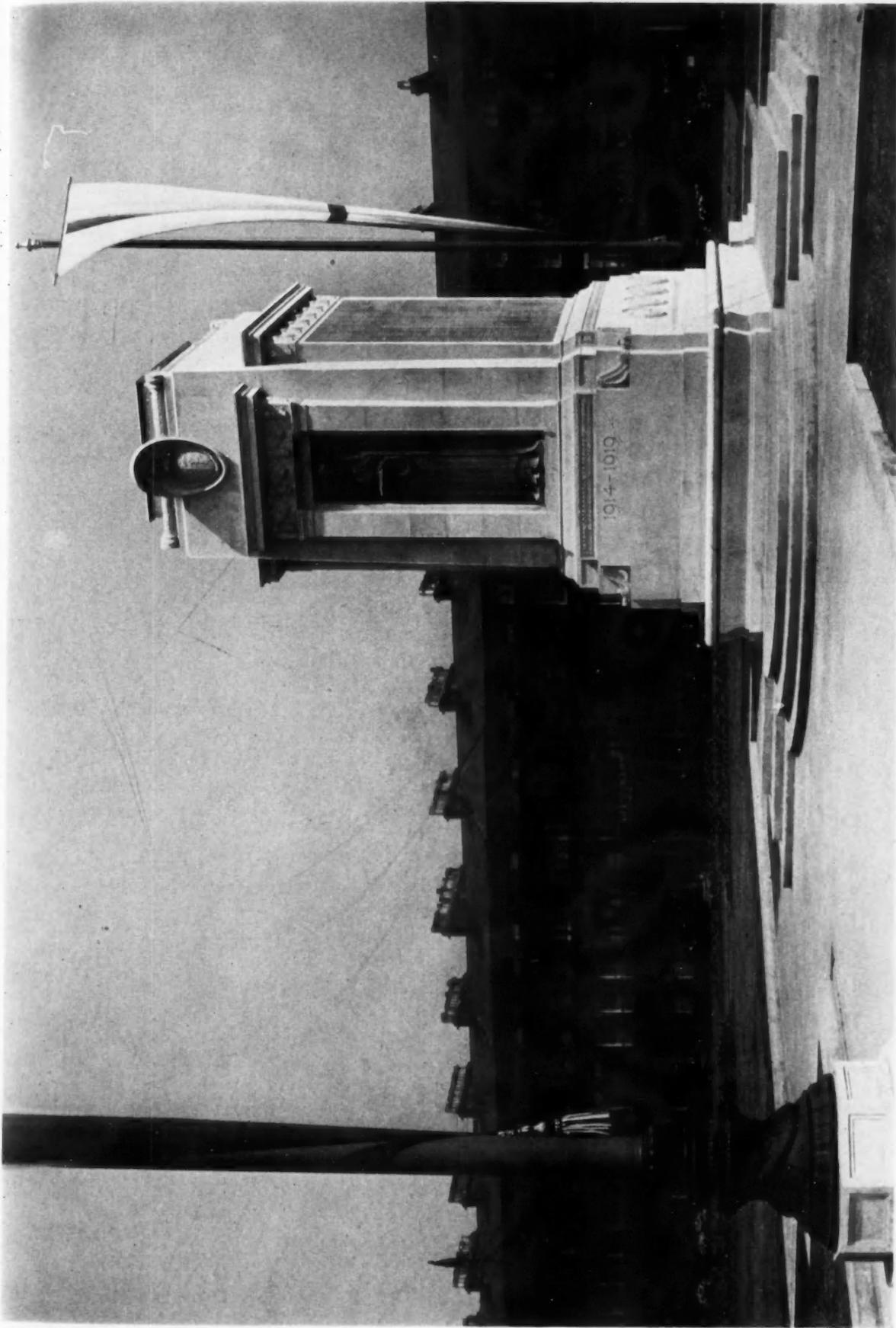
✓ CHEESMAN MEMORIAL PAVILION, DENVER
MAREAN & NORTON, ARCHITECTS

Photo. C. B. Cooper



PLAN, CHEESMAN MEMORIAL, PAVILION, DENVER

MAREAN & NORTON, ARCHITECTS



WAR MEMORIAL, BIRKENHEAD, ENGLAND
LIONEL B. BUDDEN, ARCHITECT



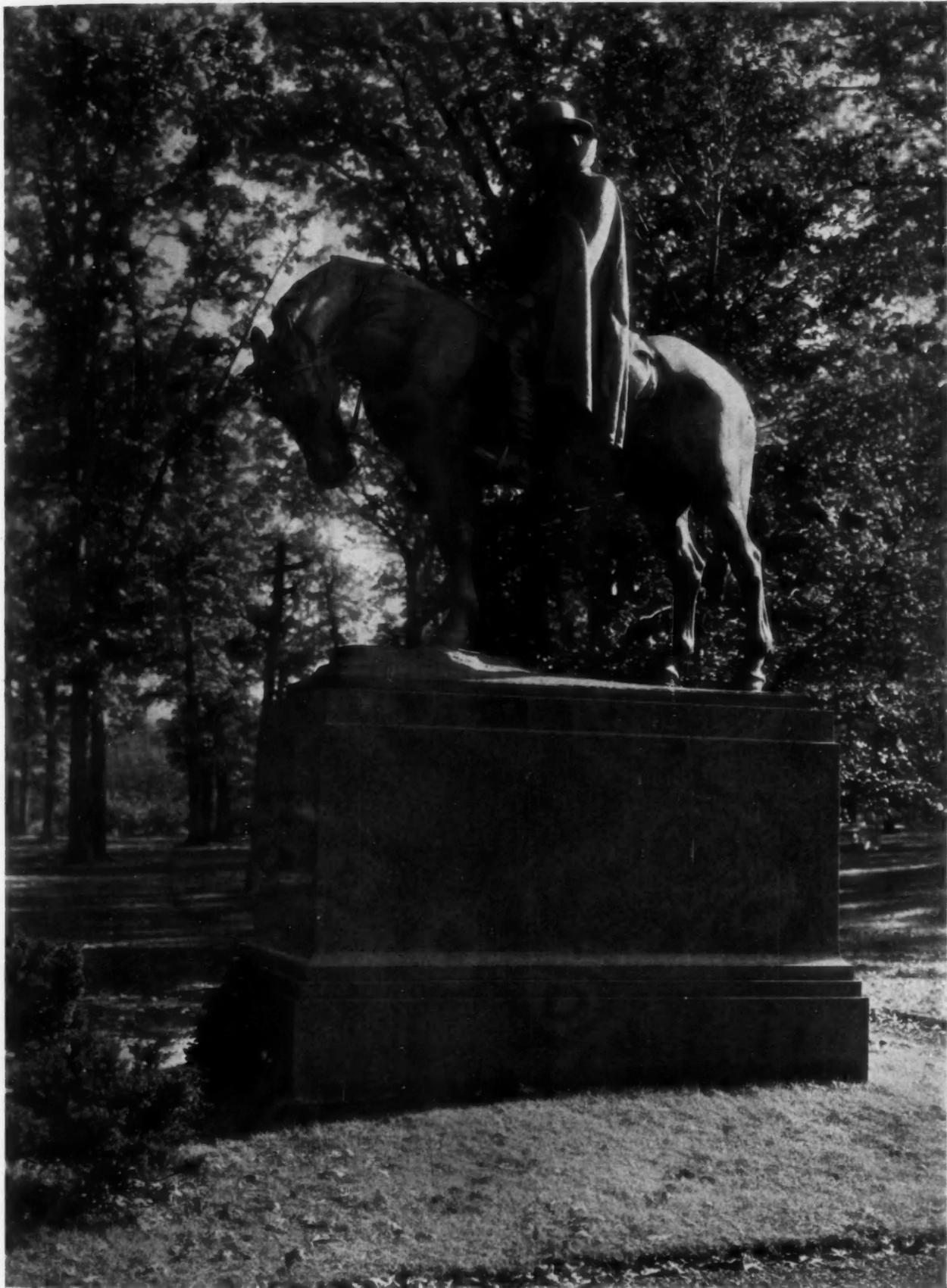


Photo. George H. Van Anda

STATUE OF FRANCIS ASBURY, DREW THEOLOGICAL SEMINARY, MADISON, N. J.
AUGUSTUS LUKEMAN, SCULPTOR





WAR MEMORIAL, EXETER, N. H.
HENRY BACON, ARCHITECT; DANIEL C. FRENCH, SCULPTOR

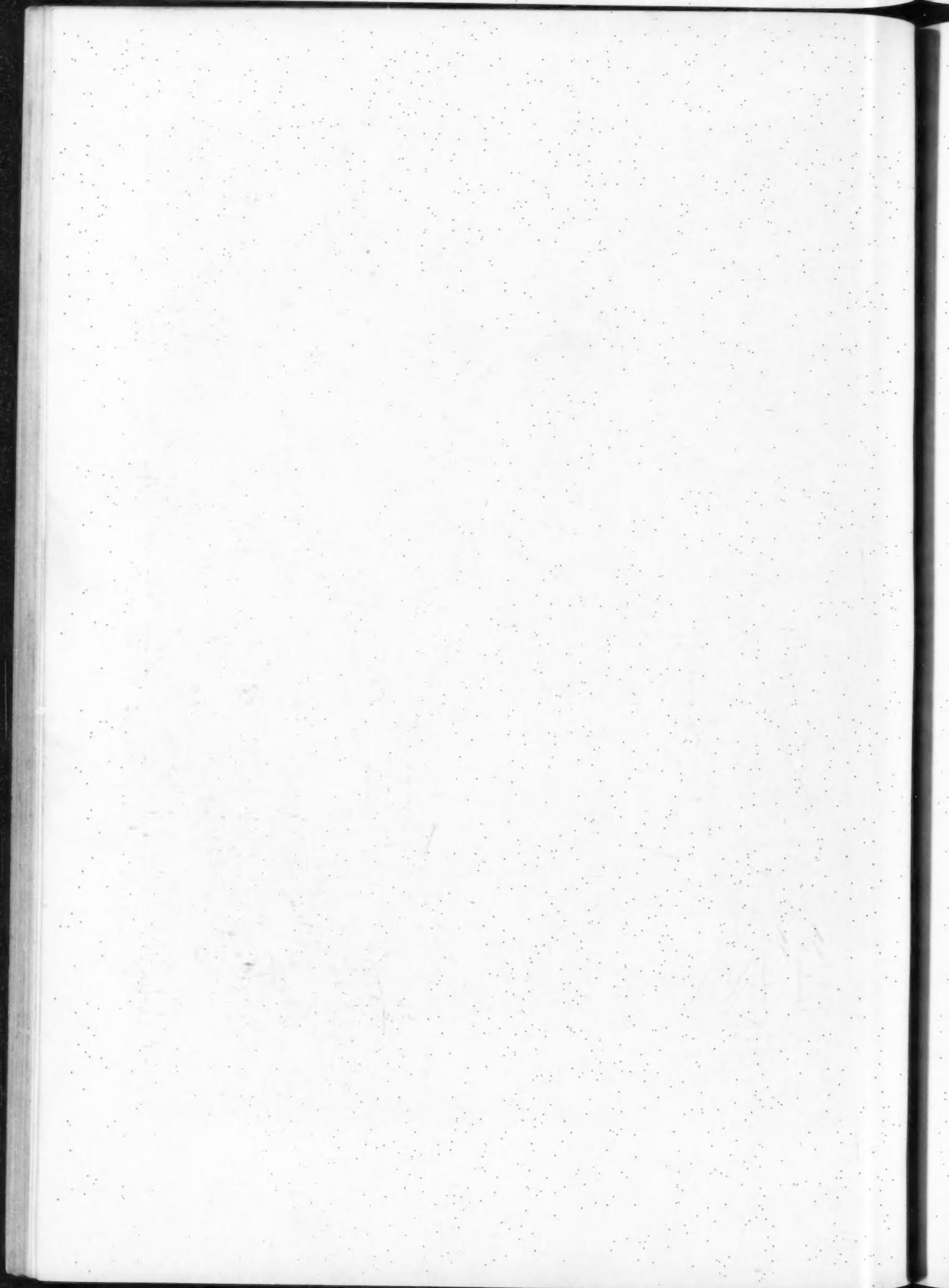
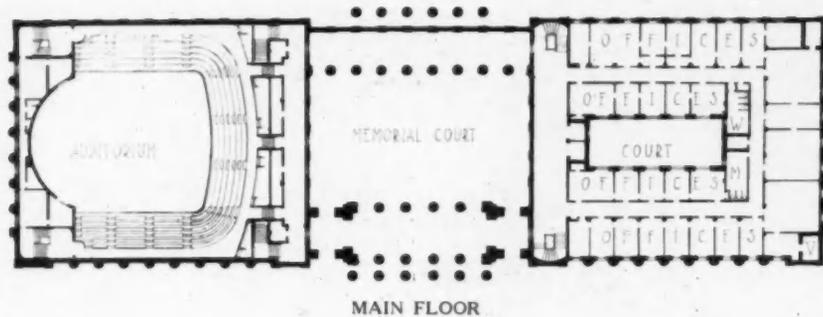




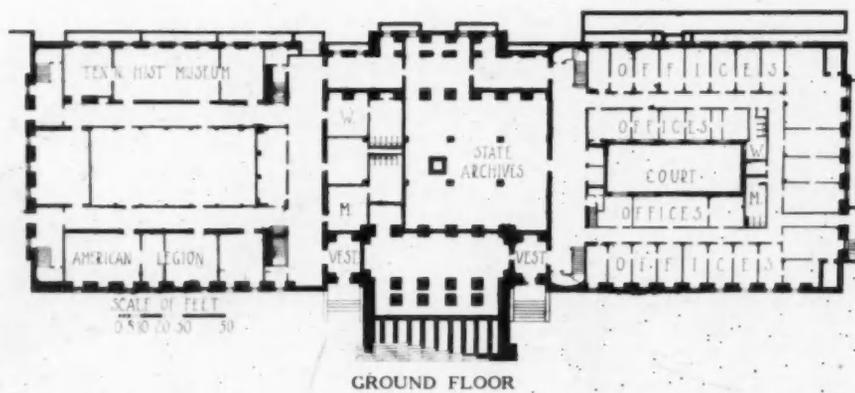
Photo. Tebbs & Knell

Plans on Back

TENNESSEE WAR MEMORIAL, NASHVILLE
EDWARD DOUGHERTY AND McKIM, MEAD & WHITE, ASSOCIATED ARCHITECTS



MAIN FLOOR



GROUND FLOOR

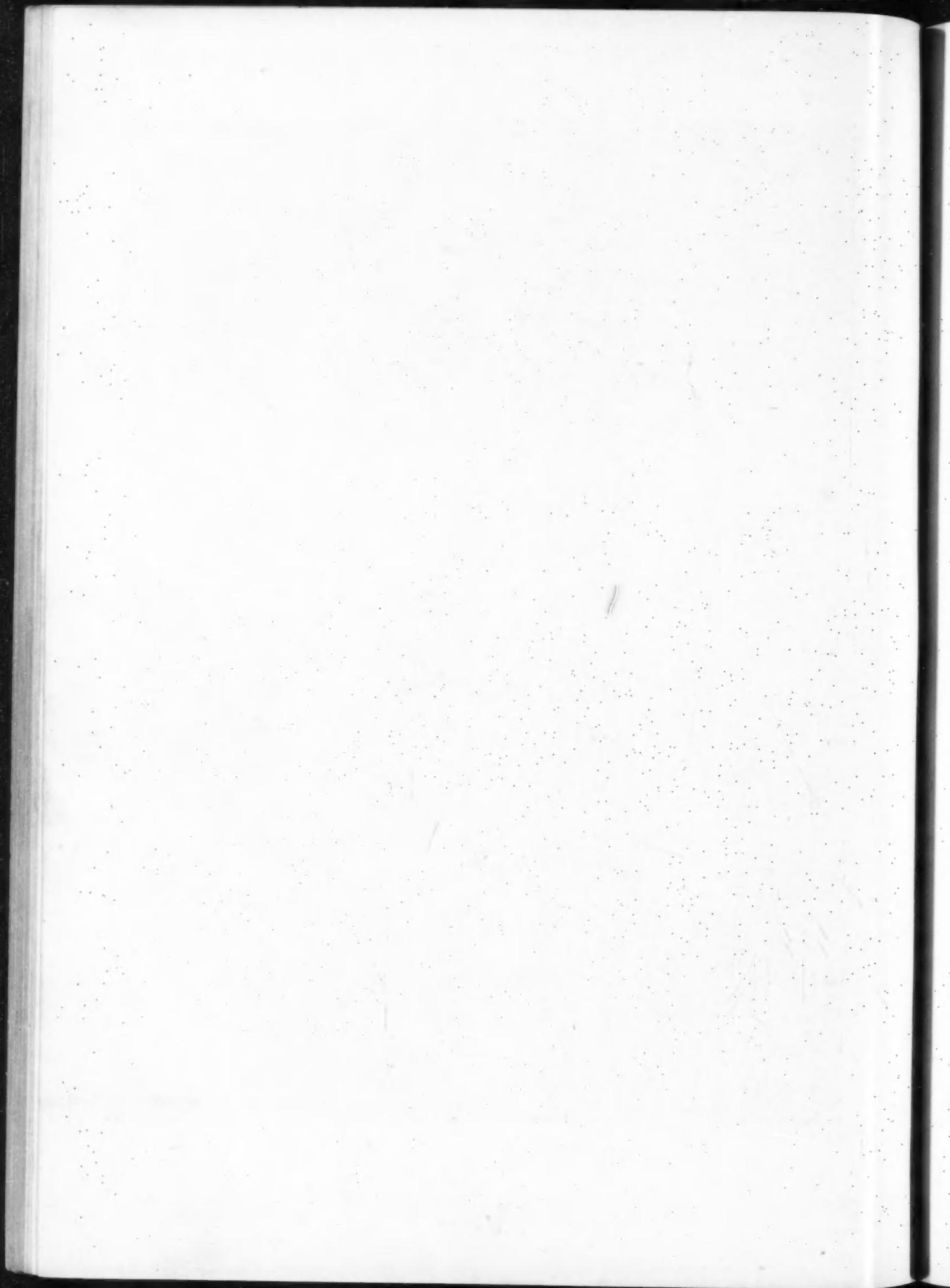
PLANS, TENNESSEE WAR MEMORIAL, NASHVILLE

EDWARD DOUGHERTY AND McKIM, MEAD & WHITE, ASSOCIATED ARCHITECTS



Photo. Wurts Bros.

WAR MEMORIAL TABLET, CHAPEL OF THE INTERCESSION, NEW YORK
BERTRAM GROSVENOR GOODHUE, ARCHITECT



The Winchester College War Cloister

By SIR HERBERT BAKER, Architect

ALL the war memorials at Winchester are of one type; they are memorials pure and simple, making but one direct appeal; they have been designed not to serve any practical purpose but to consecrate a part of our daily way to or from school or chapel, so that those who run may read.

The War Cloister, which commemorates the Great War, is built upon the lines of Wykehamical tradition and in close connection with the South African War Gate; together they form a *Via Sacra* for commoners, leading to work and worship. William of Wykeham made magnificent provision of gateways and courts for his 70 scholars; but he could not foresee that in the twentieth century five-sixths of the school would be living outside his original precincts. Fortunately commoners still come there day by day to worship in chapel or chantry, and the cloisters have become accessible to all. Great and simple architecture has a direct message for youth as well as for age, and it exercises an untold influence upon those who live under its spell. Therefore it seemed right, in commemorating the greatest event in our history, to endeavor to correct the architectural balance between college and commoners and between the east and the west side of "Meads." This was done by removing some unsightly buildings which hid the old flint wall, and by raising in their place a greater "Commoner Gate" in the form of a War Cloister, which harmonizes in material and design with the spirit of the founder's work. While these changes do much to enhance the beauty of Meads, which is the special garden of college men, they add even more to the heritage of commoners, who during centuries to come will pass through the War Cloister many times a day.

The new building confronts, but does not attempt to challenge, Wykeham's peerless cloister; they are both flint-faced, stone-dressed and bonded, roofed with oak, and are approximately of the same dimensions; but the resemblance ends there; they have nothing in common in general style or in detail of structure. Although a cloister in shape and suggestion, gaining in dignity and repose from the fact, our memorial differs, both in use and association, from the normal Gothic cloister. It will be used less as a place of rest or meditation than as a thoroughfare, and its associations are all of a special kind. Its architecture, sculpture, heraldry, and symbolism all



Garth, Winchester College Memorial
Sir Herbert Baker, Architect

tell how the fellowship of Wykehamists was merged, by service and sacrifice, in the unity of the British Empire and allied nations in the memorable years of War.

The exceptional character of the War Cloister is expressed by the original style of its architecture. It has round arches which rest on simple pillars set in pairs to bear the roof stresses, and on each of three sides there

are two buttresses to carry the thrusts of the arched roof trusses inside. The style is not so much eclectic as elemental; the forms are simple and austere and depend for their beauty upon proportions, texture and color. Four ashlar-faced domes occupy the corners of the Cloister and are dedicated to the greater dominions and to India, whose quick response and heroic service stirred the heart of Great Britain. It is a great tribute, though no tribute could be too great to commemorate their valor. Use of the flintwork, with which the inner as well as the outer walls of the Cloister are faced, is an original treatment, and forms a beautiful background for the stone arches and marble columns as seen from the open garth, and a rich setting for the interior gems of arms, symbols, inscriptions, bas-reliefs, and name tablets. A narrow bed of flowers, in which roses and lilies predominate, makes a fringe to the grass squares where they touch the arcades. The main entrance, that from Meads, is a circular arch 15 feet high; a pair of iron gates has been wrought for it, but they are seldom closed in term time. Above the arch is a gable containing a niche with a statue of the Virgin and Child, and her monogram is inlaid in flintwork. On either side is a tablet; one records the fact that the foundation stone was laid July 15, 1922, and the other the fact that the Cloister was opened May 31, 1924.

Most of the shaped stones which formed the face of the old wall opposite the racquet court and museum, or were found buried in its core, are used as bonding stones in the new flint walls, while a few interesting pieces of moulded and carved stone have been placed in the museum. There are some "temples" among them, and there are others in the long piece of Wykeham's wall, which was hidden behind the squash racquet court and has now been repaired and strengthened; all these were relighted for the first time after many years at "illumina" in December, 1923. There has been excellent use of old material.

The other chief entrance is in the southwest cor-



Detail, Winchester College Memorial

ner. Commoners enter by the South African War Gate from Kingsgate Street and look through a high round-arched doorway directly down the south gallery of the Cloister. They tread exactly the same path which commoners have long been treading. There is a little forecourt, ten yards in length, with the entrance to the armory on the right and on the left a stone tablet set in the old wall. It bears famous words from Pilgrim's Progress: "Then said he, 'My sword I give to him that shall succeed me in my pilgrimage, and my courage and skill to him that can get it. My marks and scars I carry with me, to be a witness for me that I have fought His battles Who will now be my Rewarder.' So he passed over, and all the trumpets sounded for him on the other side." The four lion heads placed right and left in this open

court were discovered embedded in the stone wall. Above the doorway, by His Majesty's gracious permission, are placed the royal arms. The large door and the small blocked doorway in the northwest corner have been provided to connect the Cloister with school buildings which may some day be built on the north side. The remaining door, on the south side, the "Door of Victory," leads to the racquet court, the gymnasium, and the college sick house.

Inside the Cloister, the center and circumference both strike the note of Christian sacrifice. Where the four paved ways of the garth meet between the grass squares there is an octagonal monolith, inscribed "*Esto fidelis usque ad mortem et dabo tibi coronam vitæ.*" From this base a stone shaft rises, crowned with a cross inscribed in Greek, "Christ is risen," while two sentinel crusaders, facing east and west, guard the symbol of sacrifice. The long inscription of solid stone letters set in a background of knapped flints forms the circumference and runs right round the Cloister in a continuous band 9 feet from the ground. It

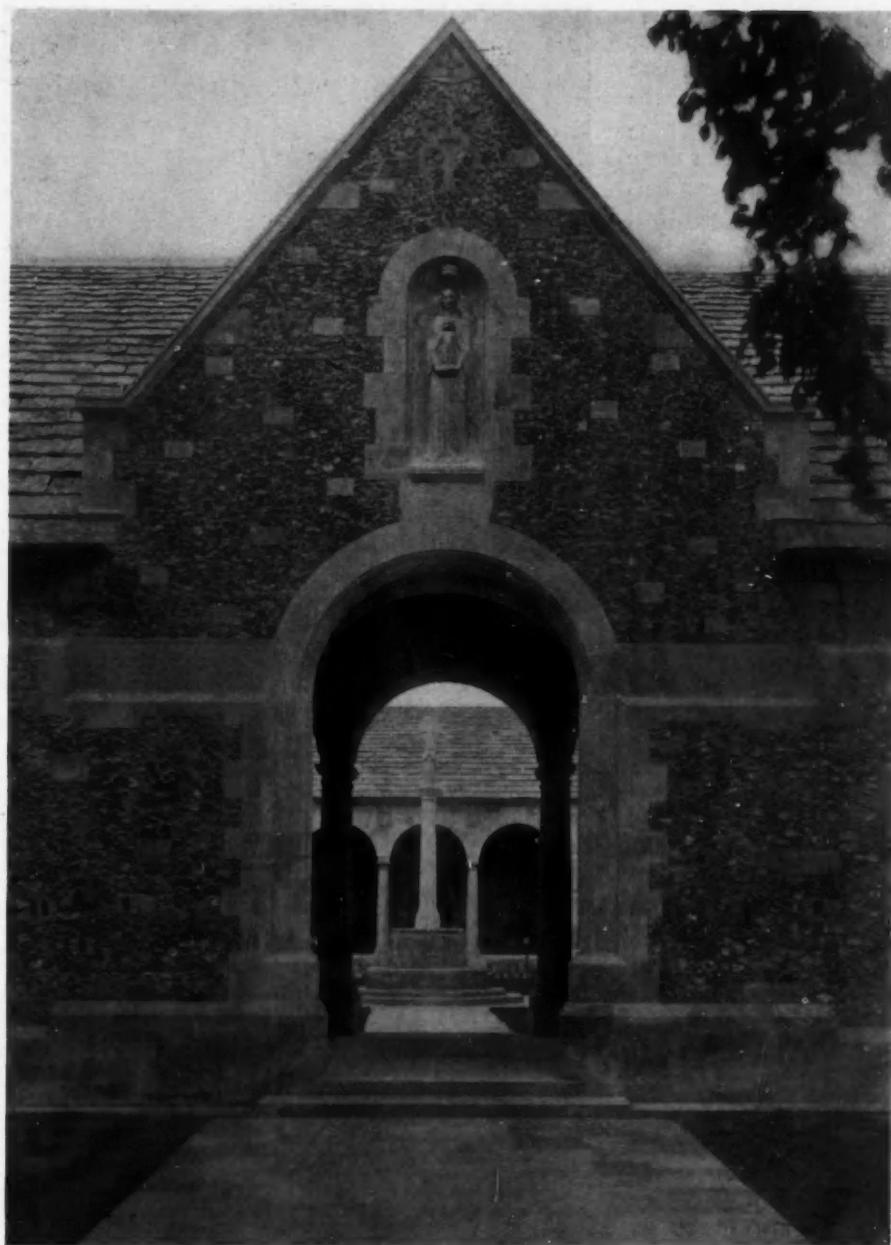
is not an inscription in the usual sense of the word, but a prose poem, which fell naturally into Biblical language. The Lombardic script has been designed, with much labor and skill, to suit the special qualities of flintwork. The words are these: "Thanks be to God for the service of these five hundred Wykehamists, who were found faithful unto death amid the manifold chances of the Great War. In the day of battle they forgot not God, Who created them to do His will, nor their country, the stronghold of freedom, nor their school, the mother of godliness and discipline. Strong in this threefold faith they went forth from home and kindred to the battle fields of the world, and treading the path of duty and sacrifice laid down their lives for mankind. Thou, therefore, for whom they died, seek not thine

own, but serve as they served, and in peace or in war bear thyself ever as Christ's soldier, gentle in all things, valiant in action, steadfast in adversity." Such are the lines.

Round the garth, in the spaces between the arches, are arms and badges, symbols of all the national thoughts and home thoughts which haunted and inspired our soldiers in the war. On the east side, the arms of the four nations—England, Scotland, Ireland and Wales — occupy pride of place, and the four national emblems, rose, thistle, shamrock and leek, are set right and left of them. As we come westward, there are (in pairs) facing one another, badges of the royal navy and the mercantile marine; of the infantry and the artillery; of the flying corps and the Red Cross; of rewards of valor (typified by the V. C.) and high command (typified by the crossed baton and sword of a lieutenant-general); of foreign policy (represented by the arms of Lord Grey of Fallodon, Foreign Secretary) and government of the empire (by the arms of Lord Chelmsford, Viceroy of India). Toward

the west, in the center are the arms of William of Wykeham and of the see of Winchester; right and left, the arms of the city of Winchester and a symbolic device for Hampshire; the arms of the universities of Oxford and Cambridge; and finally, as representing the school at this epoch, the arms of Lord Selborne, warden (1920-1925), and of Dr. Rendall, head master (1911-1924). On the inside walls are built tablets of gray Derbyshire marble inscribed with the names of the 500 Wykehamists who fell in the war,—16 tablets in all, grouped in pairs, between each pair a stone recording the great battles of the war. Above stand the arms of the allied nations, and the leopard of England is linked with them in cords of friendship.

Among the stones which bond the flint facing to



Entrance, Winchester College Memorial

the core of the wall are larger and more regular stones carved in low relief—like the little stone shields—on either side of the porch of the college sick house—representing the arms of the dominions and the provinces of India and symbols of the dependencies, groups of dependencies, islands, and mandatory states of the empire, and also some battlefield areas outside the territories of the allies. These symbols, like the arms recently granted to the provinces of India and here displayed for the first time, attempt to express historical, geographical, mythological, and other dominant facts and influences of those portions of the empire. The four corners of the Cloister are dedicated to dominions, colonies, and India. They are vaulted with stone domes, their keystones being carved with the imperial emblems. In the pavement are

large circular slabs, which have been quarried in the dominions of India and generously given for the memorial by their governments. Inlaid in these paving slabs are symbols in brass to be polished into gold by the feet of the future centuries' generations of Wykehamists.

Badges of 120 regiments, in which the 500 Wykehamists served, are blazoned on the corbels and tie beams of the

roof; the remaining four badges, which belong to the regiments most closely associated with Winchester, are carried by angels on the oak struts of the roof over the arches. On other struts shaped as angels and on the bosses, where the curved roof trusses meet, are other carved symbols. There are two sculptured reliefs, of Victory and Peace, opposite each other at the center on the north and south walls. For a general system of low-toned illumination, electric lights are set high up in the walls behind pierced stones, in the manner of the traditional "temples." Provision has been made for hanging lanterns, if required, from the roof beams. In the outside north wall, close to the northeast angle, stands a craftsmen's stone, recording the names of the architect,—Sir Herbert Baker, A.R.A.; and the sculptor and carver,—Alfred Turner, A.R.A., who, under the generous instruc-



Wall Tablets, Winchester College Memorial

tions of the builders, Messrs. Holloway Brothers, treated the interests of his employers and the school as one. Below the names are carved the words: "*Non sibi sed Deo et mortuis.*"

There are others who must not be forgotten; it was a joy to all at Winchester to see the foundation, a raft of steel-enforced concrete, laid deep and strong; to watch the walls rising

day by day, hour by hour; to mark the swift and continuous growth of this building. But most pleasant of all was it to observe the energy and pride which the men (practically all of them of Winchester) displayed in their work; their hammers, hods and chisels were never idle; we were back in the good old days. The Cloister was indeed a work of willing coöperation, in which artists and craftsmen felt the spell of Wykeham's art and tradition, were inspired by the greatness of their task, and were encouraged by the generous trust and ready assistance of the committee. While essentially modern in form and spirit, the War Cloister fits well into its position among the other collegiate buildings which during centuries have been growing up in this historic old city. It typifies the spirit of Winchester, essentially modern, yet carefully regarding tradition.



One Side of the Cloister



Corner of the Cloister

The Charlesfort Monument, Parris Island, S. C.

By ALBERT SIMONS and SAMUEL LAPHAM, JR.

CHARLESFORT was established in 1562 on what is now Parris Island, S. C., by Jean Ribaut, acting under a commission from Admiral Coligny. The purpose of this settlement was not only to extend the domains of the King of France, Charles IX, but also to form a colony that would be a refuge for Huguenots. On the seaward end of Parris Island was built Charlesfort, and here Ribaut erected a small octagonal stone column to mark the land as belonging to Charles IX and to France. The little settlement existed until 1563, when mutiny arose among its members. The fort was abandoned, and having built a small ship, the garrison attempted to return to France. Shortly after its departure the site was visited by the Spanish, the fort burned, and the column carried away.

For many years it was supposed that Charlesfort, while on Port Royal Sound, was not on Parris Island. Led by his interest in historical matters, Col. John Millis of the U. S. Corps of Engineers, assisted by Gen. Harry Lee of the Marine Corps, began a search for the site in 1917. The World War intervened, but after it was over the search was resumed by General Lee and Major G. H. Osterhaut, under authority from the Secretary of War and with aid and suggestions from prominent citizens and authorities on South Carolina history. Full reports of the search can be found recorded in "Transactions of the Huguenot Society of South Carolina," so we quote herewith only part of General Lee's report on the final result:—". . . when men were available, Major Osterhaut was placed in charge of the work with directions to clear the site and then to run deep and narrow trenches at right angles across the sup-

posed location of the fort and within the area traced by the old moat. After digging, the trenches disclosed the butt ends of cedar posts, generally their tops and sidings, some 2 or 3 feet below the surface of the ground. The trees within this area had markings on them showing where the old parapet had been, and eventually complete traces of the old stockade were disclosed. . . ." With the exception of the old stone tower at Newport, this fort on Parris Island is certainly the oldest structure erected by the white race within the present limits of the United States of which any discernible trace remains today.

Upon being told of what was found, the Huguenot Society of South Carolina conceived the idea of building an appropriate monument on the site; its officers appealed to the state's congressmen and senators for aid in securing an appropriation for a monument, and this was later approved and passed by congress. A committee composed of the Secretary of the Navy, the Commandant of the 6th Naval District, and the President and Secretary of the Huguenot Society was appointed to handle the matter, and they selected Messrs. Simons & Lapham, of Charleston, as the architects for the proposed memorial.

The *parti pris* had already been made, and it was decided that the monument should consist of an octagonal shaft, bearing the royal arms of France, reminiscent of the marker set up by Jean Ribaut. The general character of this marker was known, since Ribaut had set up two, the other being on the River of May, in Florida, and Jacques Le Moyne, an artist, accompanying Laudonniere on another colonizing voyage to Florida in 1564, had sketched it. This engraving is contained in the "*Brevis Narratio*."



Landward Side, Charlesfort Monument, Parris Island, S. C.

Simons & Lapham, Architects

For the Charlesfort monument's design, however, the details, sketchily indicated in LeMoynes engraving, had to be exact, and it was therefore necessary to verify the French arms of the time of Charles IX and to identify the order that surrounded the shield. This presented a line of research which led to correspondence with students and authorities of military insignia and heraldry, especially Capt. G. M. Chandler, U. S. A. and Col. R. L. Collins, U. S. A., who took a personal interest in the search. Thanks to the rather extended efforts of Col. Collins, the details were definitely verified by descriptions in the "*Promptuaire Armorial et General*" by Boisseau, published at Paris in 1657, and in the "*Manuel du Blazon*" by Parois, published at Paris in 1854. Through the enthusiasm of Col. Collins, Lt. Col. Falls became interested and supplied a definite check on the heraldic correctness by obtaining and presenting the architects with rubbings from a coin minted in the reign of Charles IX, which showed the French shield and crown, and with a rubbing of the medallion of the collar of the Order of St. Michel, probably dating from the early eighteenth century, both taken from specimens in the collection of the American Numismatic Society. From these and from an illustration in the files of the architects, showing the royal arms above the fireplace in the ballroom at Fontainebleau, the details were determined beyond peradventure. The arms consist of a shield bearing three *fleurs de lys*, surmounted by the royal crown and surrounded by the grand collar and pendant of the Order of St. Michel. This order, it may be said in passing, was founded by Louis XI in 1469 to commemorate the heroic resistance of the fortress-monastery of Mont St. Michel to the English invasions, and consisted in the beginning of 36 chevaliers.

In setting up the monument it was possible, through the coöperation of the personnel of the Public Works Office of the Marine Reservation, to carry out one of those minor refinements which have added to the interest of the work. A calculation was made of the reckoning of Parris Island from Dieppe, and the angle bearing the royal arms was set by the compass on that reckoning facing toward the coast of France and the homes of those brave colonists. The reverse or landward side was designed by the architects to present a contrast to the pomp of royalty. The open Bible is surmounted by the sacred monogram "I. H. S." and supported by a scroll bearing the words "Religion, Freedom and Trust." These might be interpreted as symbols of freedom of conscience, tempered by that divine humanity that leads to the goal of enlightenment and truth. The double wreaths at the top recall the sacrificial garlands placed on Ribaut's marker by the Indians when they worshiped it as a totem, as shown in the engraving by Le Moynes. In the approval of the drawings by the National Commission of Fine Arts, the Commission suggested the use of native plant forms as more significant than the usual highly conventionalized forms of decoration. The wreaths are therefore composed of pine, magnolia and sycamore leaves and branches, all native to the place.

The problem of the inscriptions for the monument involved two legends, being brief in order that the letters be in scale with the heroic size of the shaft. The inscription below the Bible was prepared by John Bennett, the author and historian, and that below the French arms by Miss K. B. Mazyck, Librarian of the Huguenot Society. The orthography used for the proper names was verified by W. C. Miller, the President of the Huguenot Society.



Marker Erected by Ribaut in 1562 at Charlesfort
From an Engraving by Le Moynes, 1591



SEAWARD SIDE, CHARLESFORT MONUMENT, PARRIS ISLAND, S. C.
SIMONS & LAPHAM, ARCHITECTS



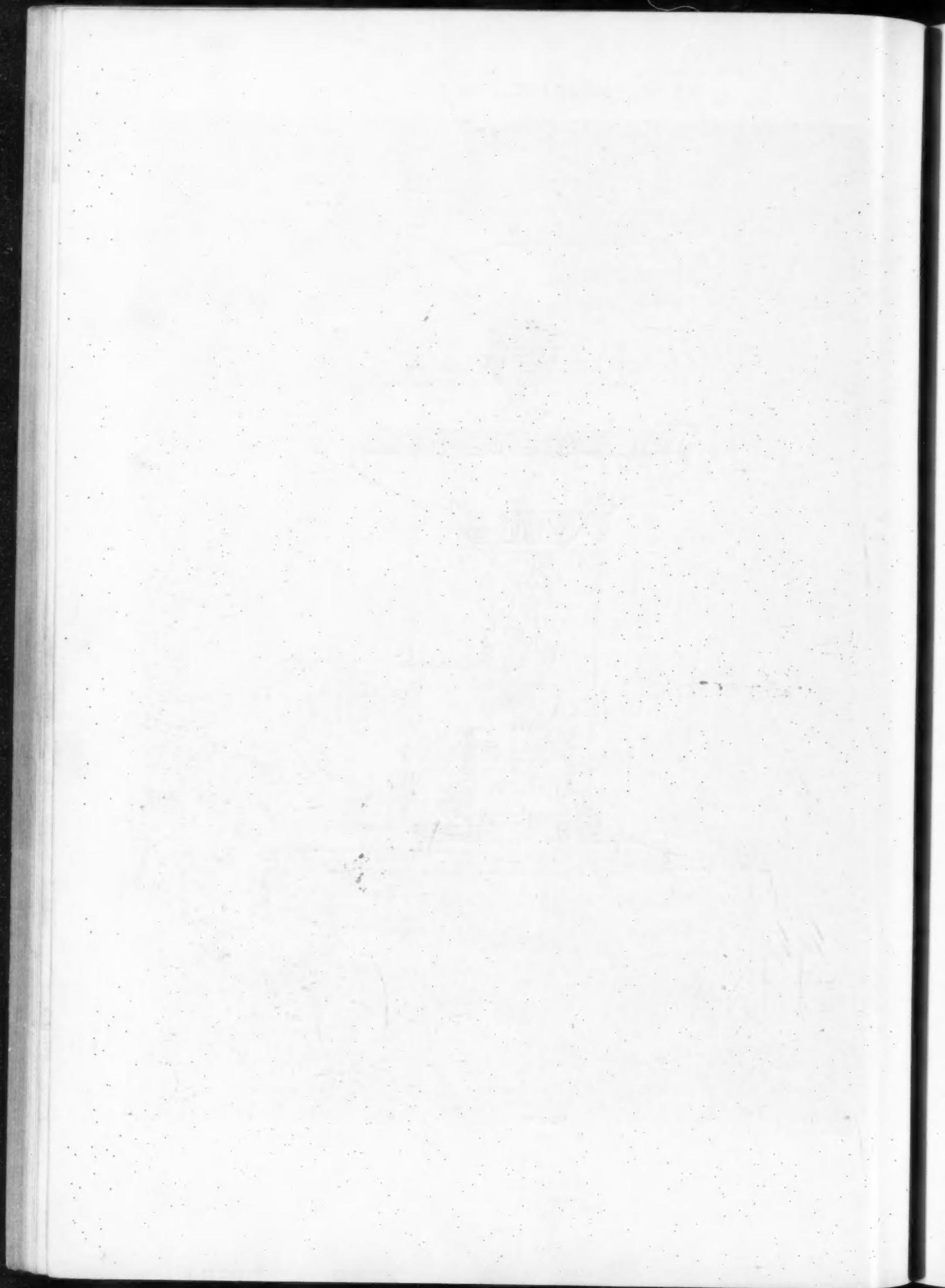
MONUMENT TO THE A. E. F., NEAR ST. NAZAIRE
GERTRUDE V. WHITNEY, SCULPTRESS
ELECTUS D. LITCHFIELD, ARCHITECT

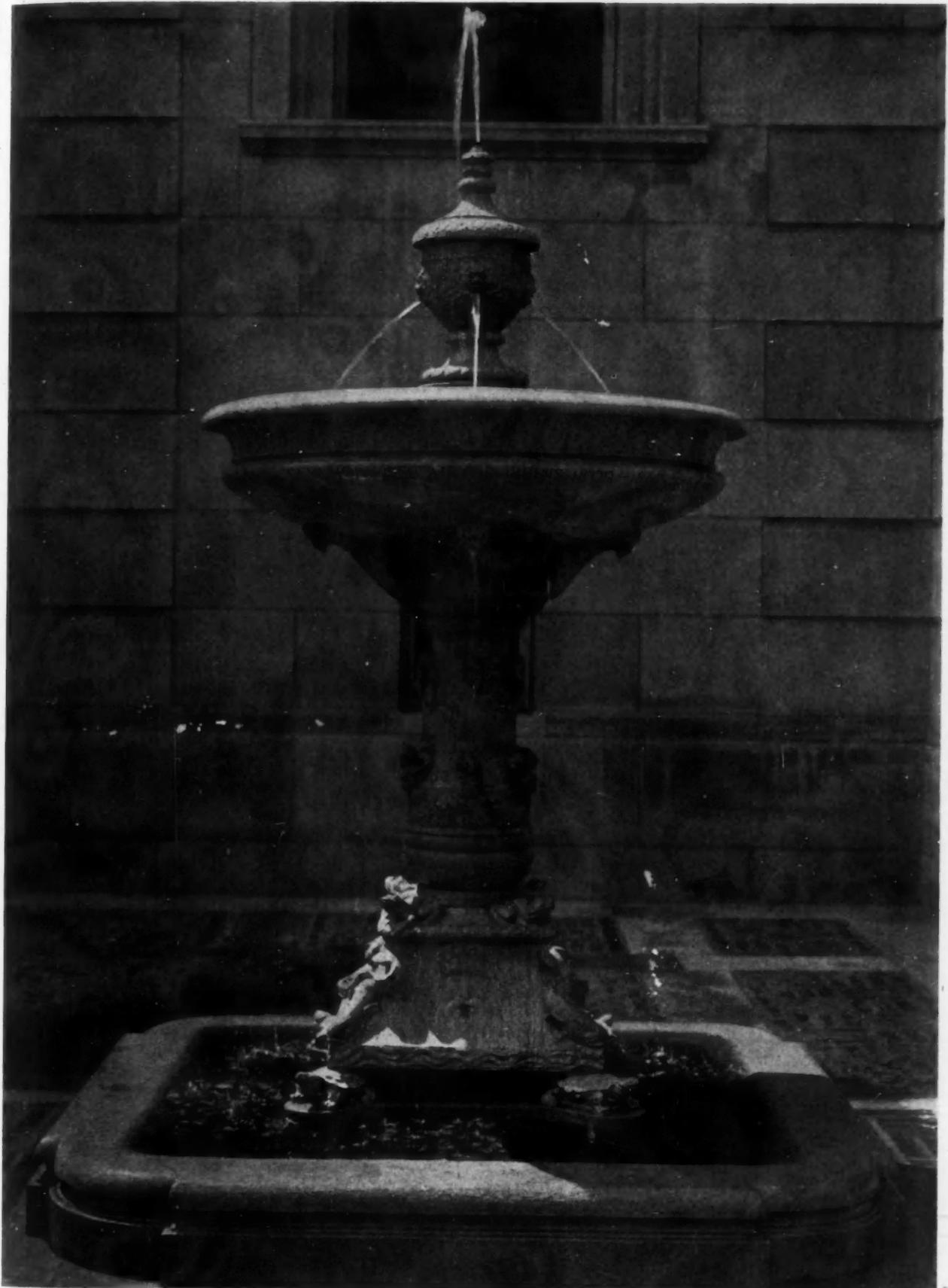


Photo. John Wallace Gillies

COMMODORE THOMAS MACDONOUGH MEMORIAL, VERGENNES, VT.

JOHN RUSSELL POPE, ARCHITECT





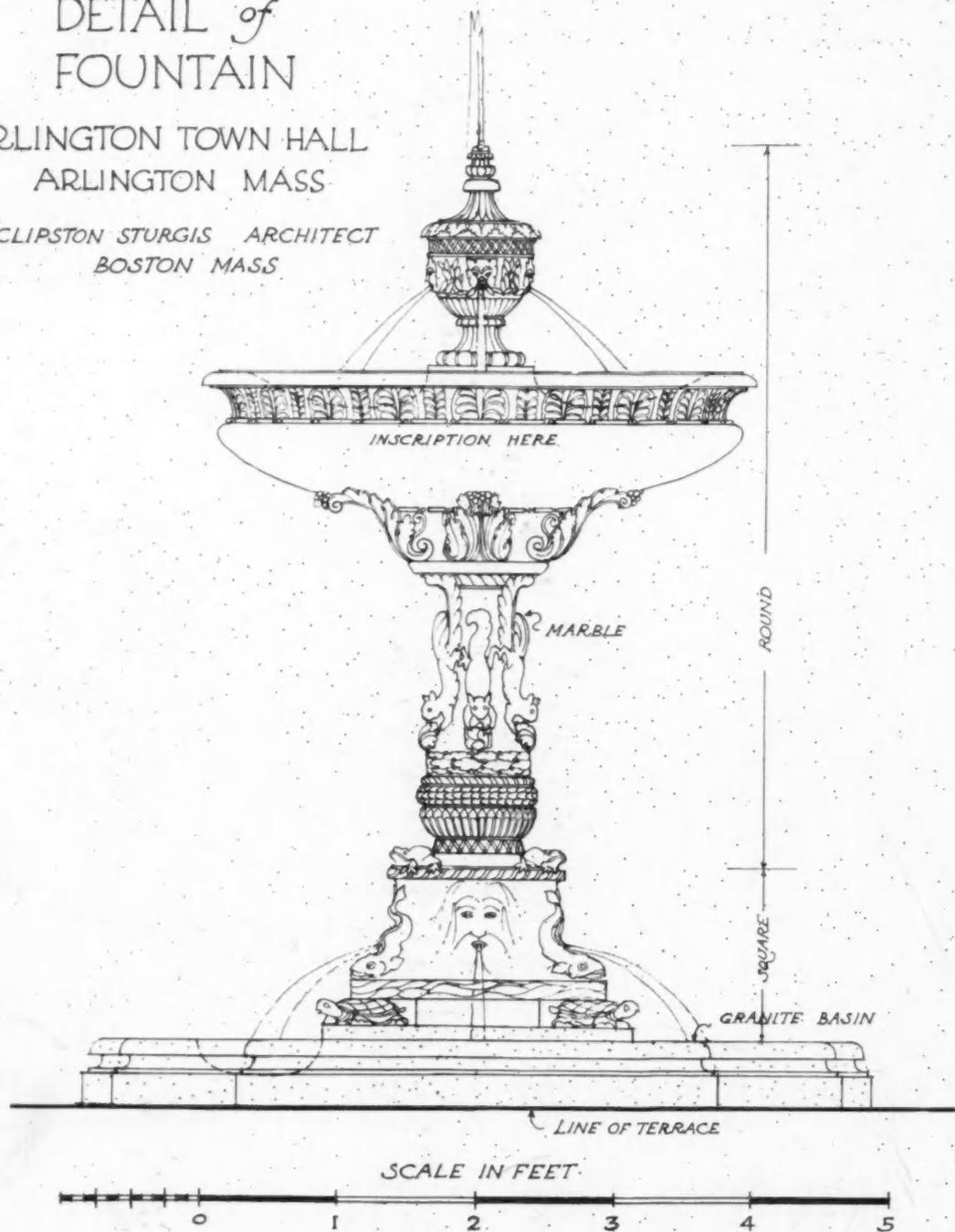
MEMORIAL FOUNTAIN, ARLINGTON, MASS.
R. CLIPSTON STURGIS, ARCHITECT

Measured Details on Back

DETAIL of
FOUNTAIN

ARLINGTON TOWN HALL
ARLINGTON MASS

R. CLIPSTON STURGIS ARCHITECT
BOSTON MASS



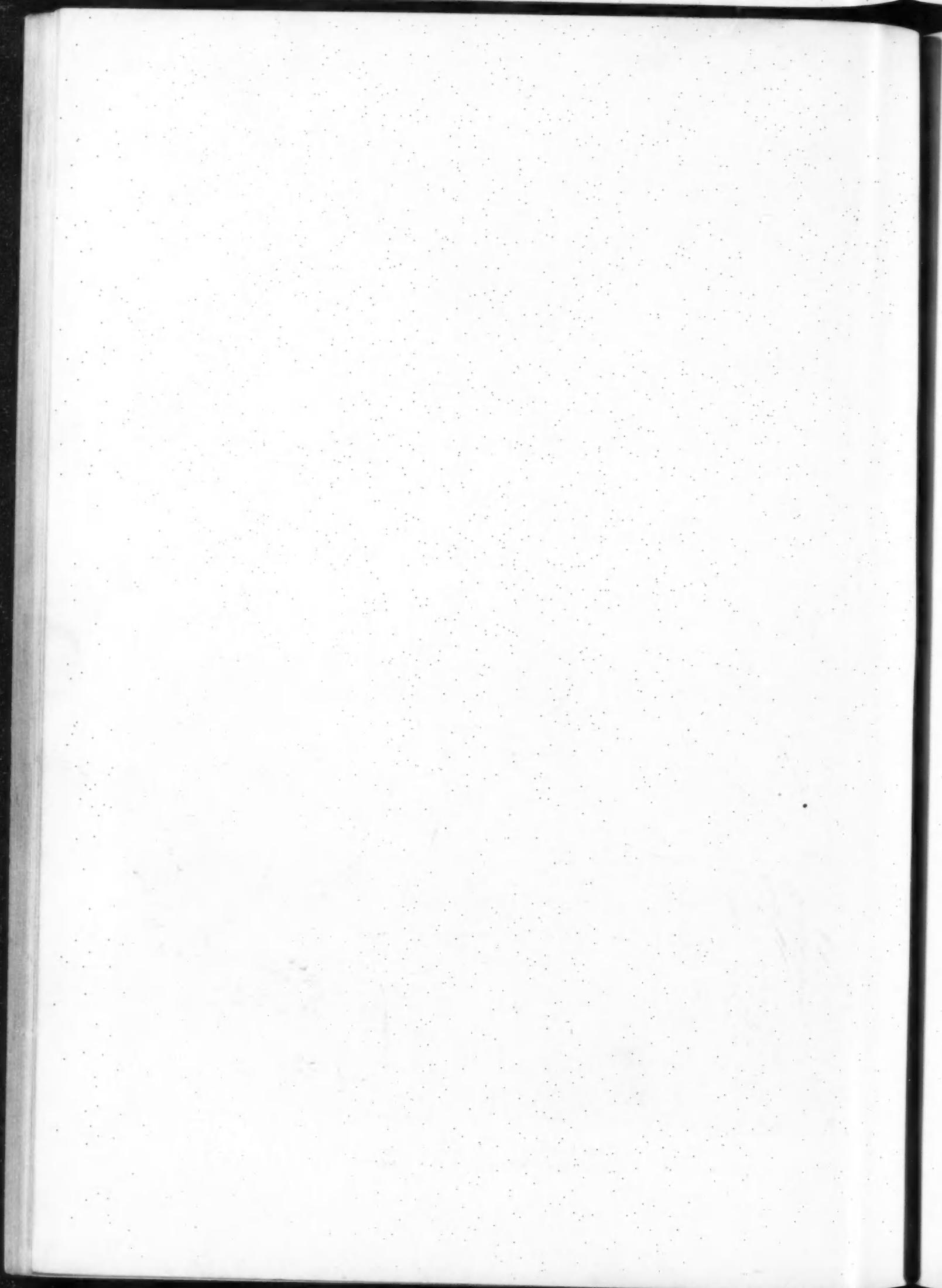
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The ARCHITECTURAL FORUM DETAILS



ROYAL AIR FORCE MEMORIAL, LONDON
SIR REGINALD BLOMFIELD, ARCHITECT; REID DIRK, SCULPTOR



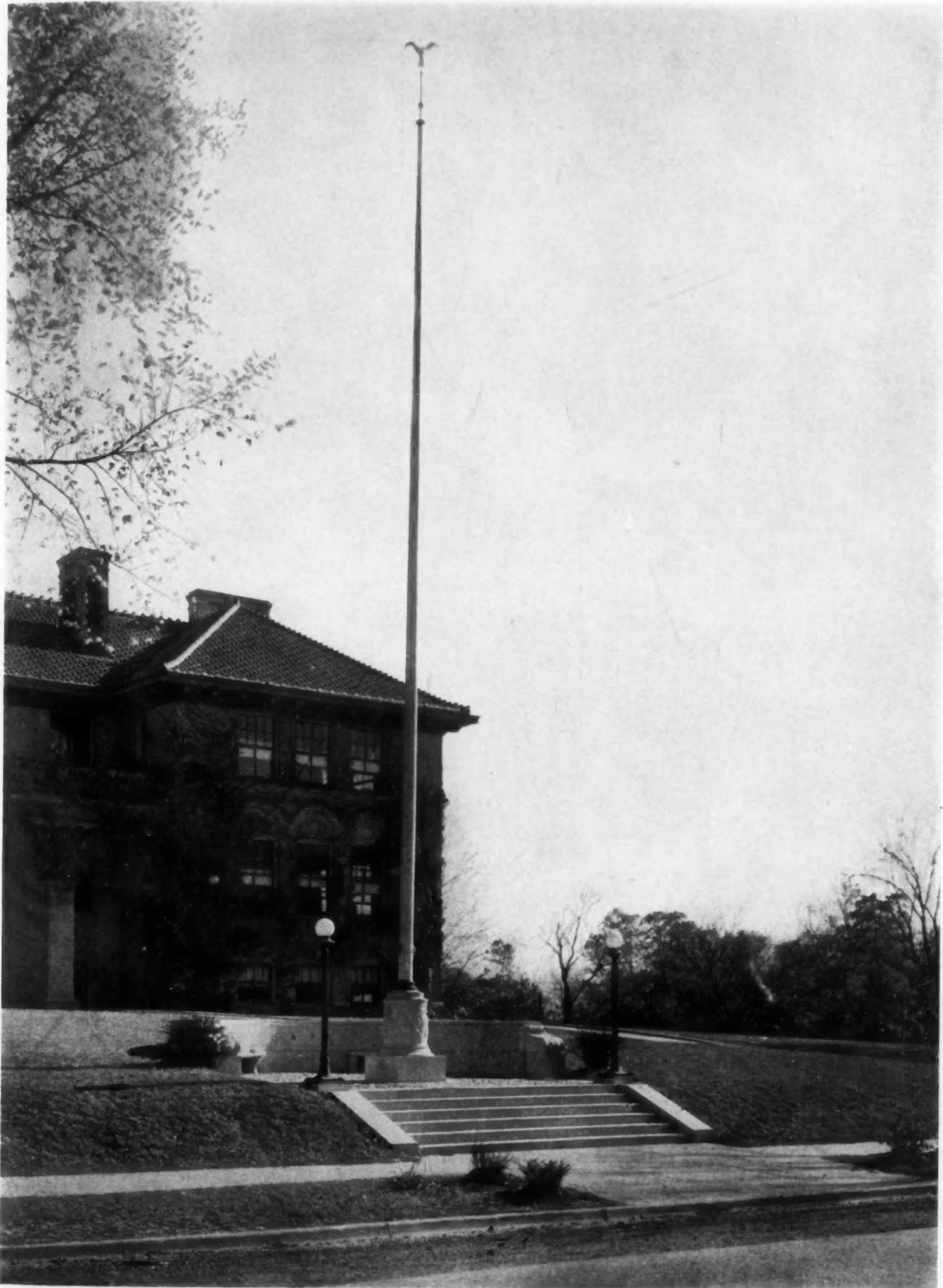


Photo. Tebbs & Knell

WAR MEMORIAL, GLEN RIDGE, N. J.
WILLIAM EDGAR MORAN, ARCHITECT

Measured Details on Back



Photo. Gabriel Moulin

MEMORIAL TO ROBERT LOUIS STEVENSON, SAN FRANCISCO
WILLIS POLK, ARCHITECT; BRUCE PORTER, SCULPTOR

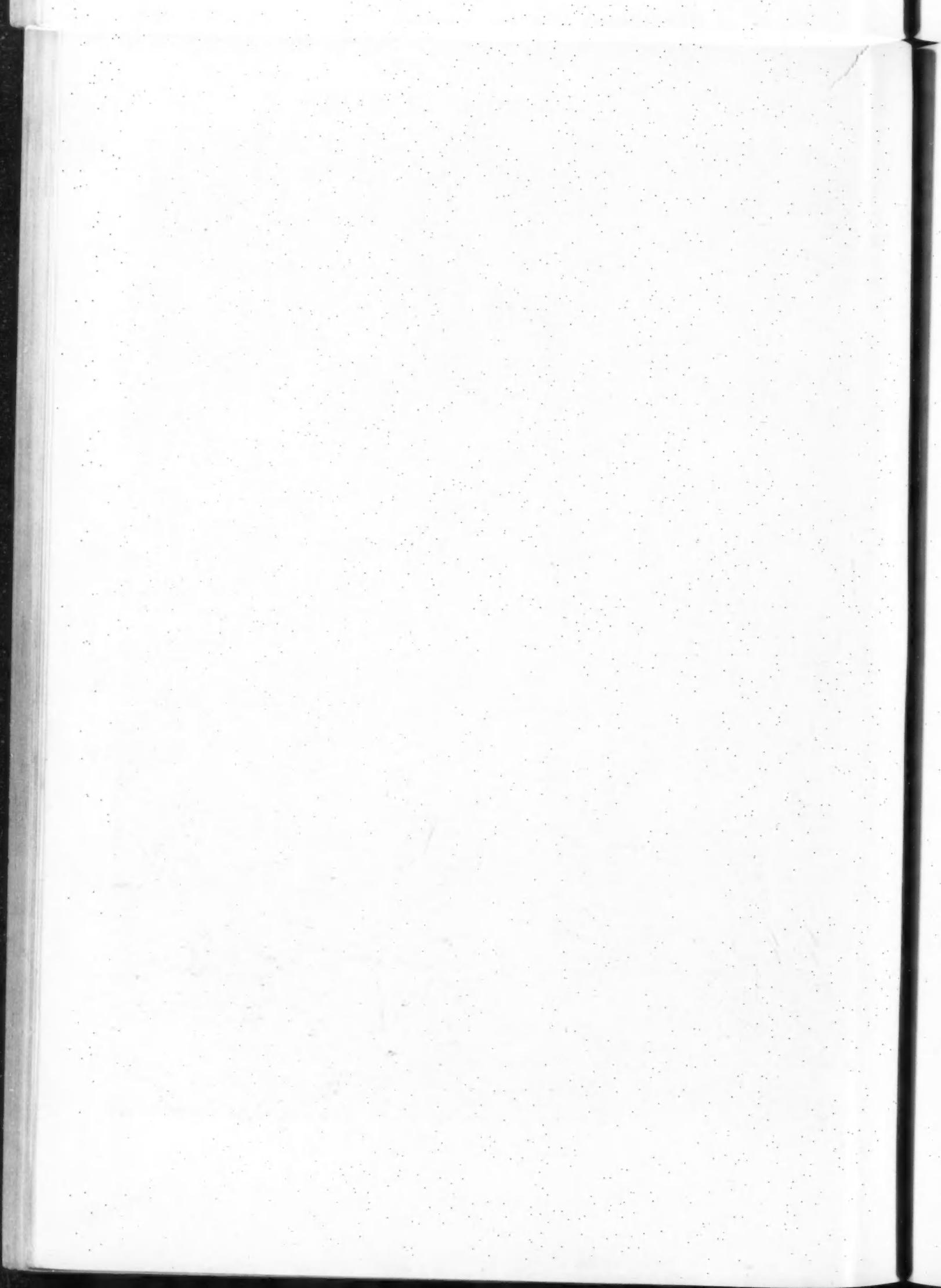
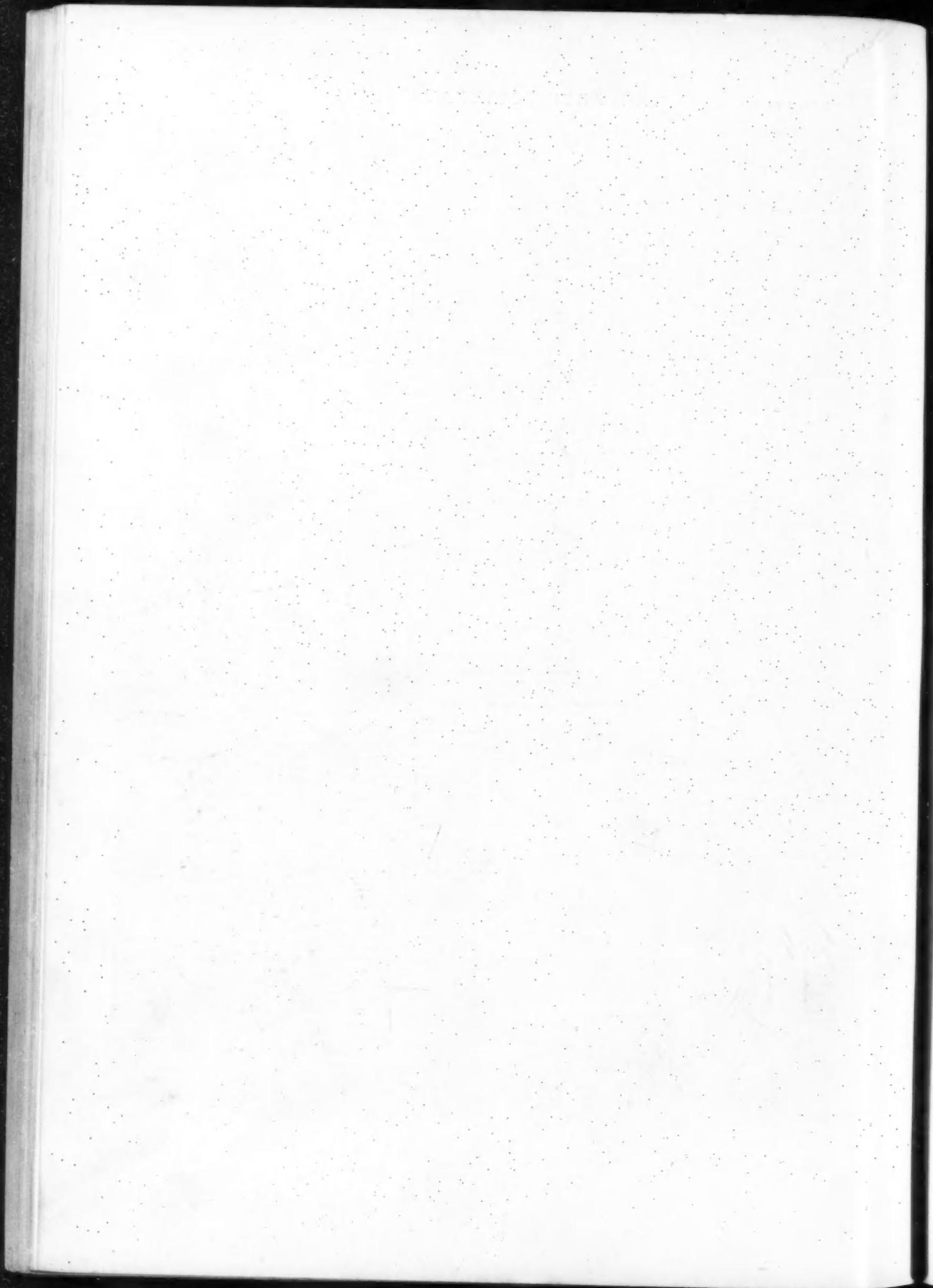
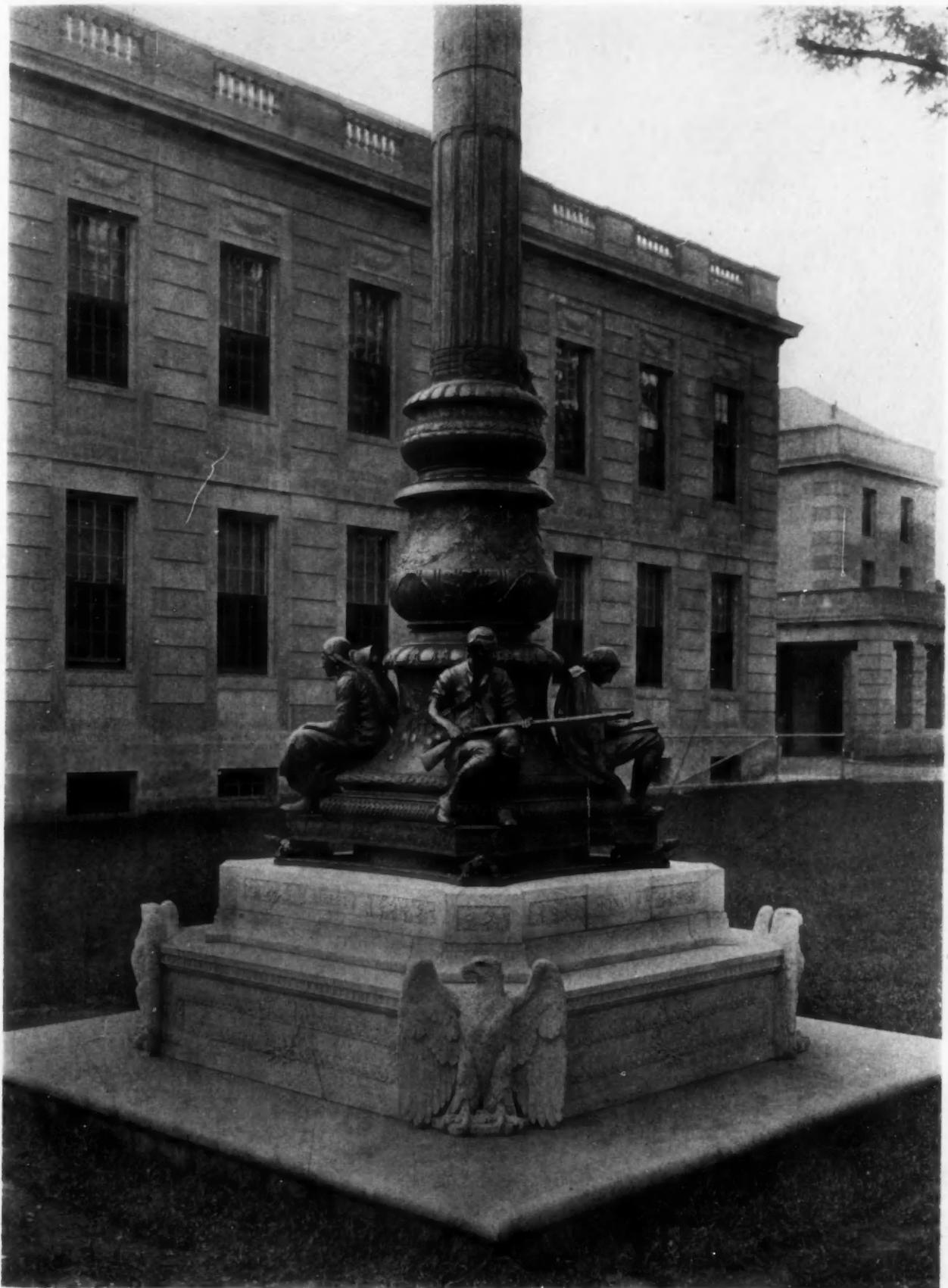




Photo. Paul J. Weber

MONUMENT AT THE STATE HOUSE, BOSTON



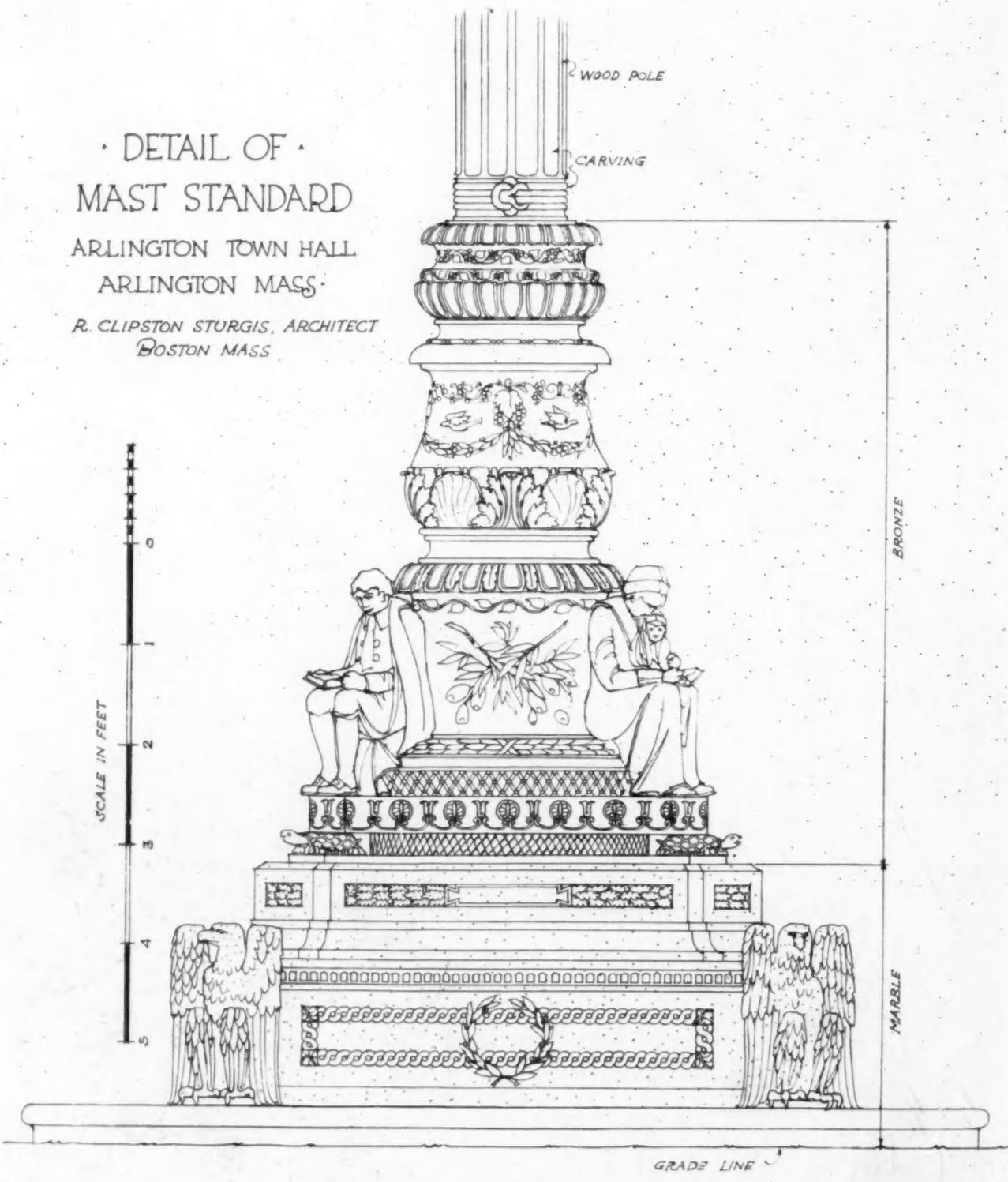


BASE OF FLAG STAFF, ARLINGTON, MASS.
R. CLIPSTON STURGIS, ARCHITECT

Measured Details on Back

· DETAIL OF ·
MAST STANDARD
ARLINGTON TOWN HALL
ARLINGTON MASS.

R. CLIPSTON STURGIS, ARCHITECT
BOSTON MASS.



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1926

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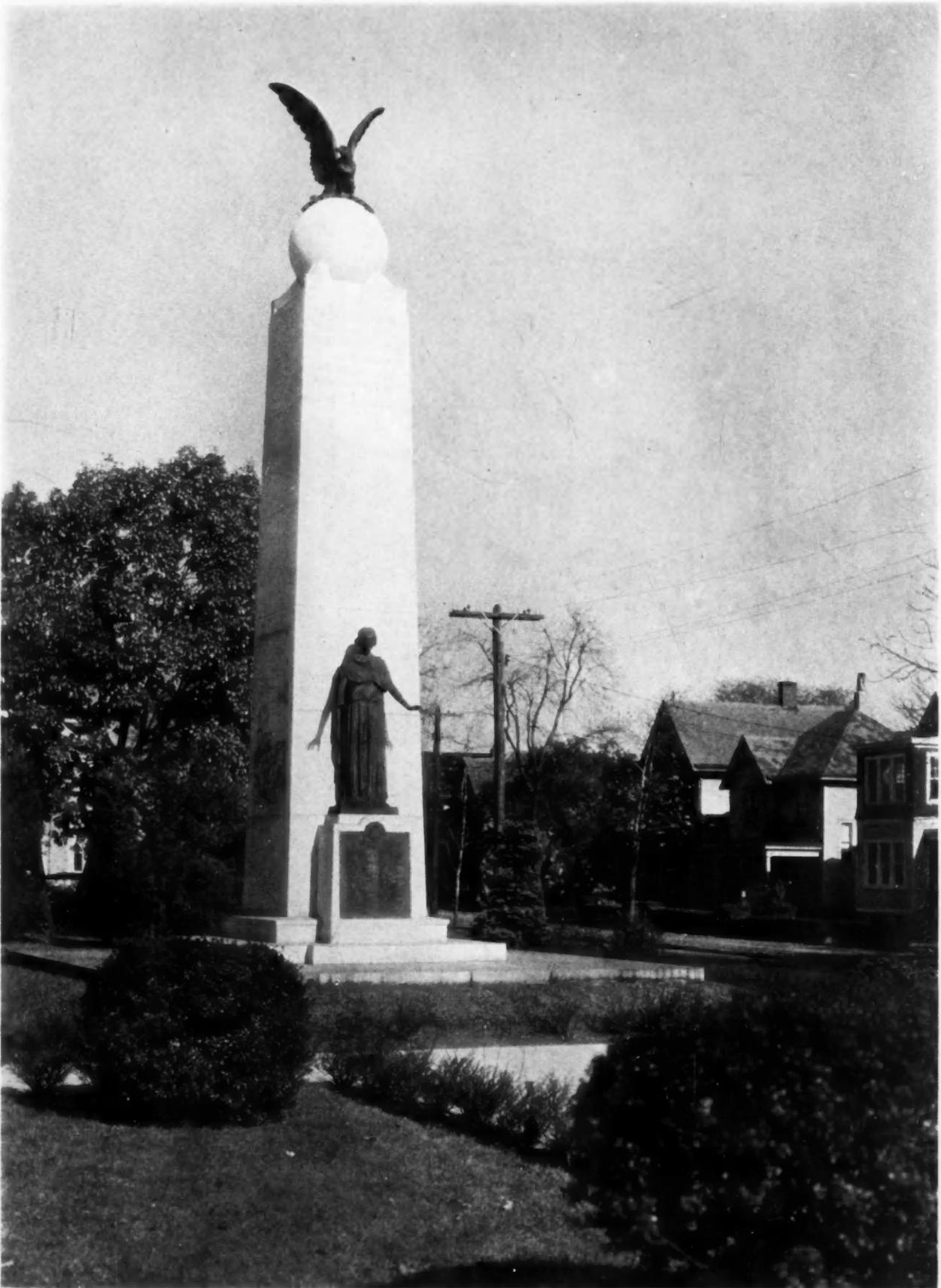
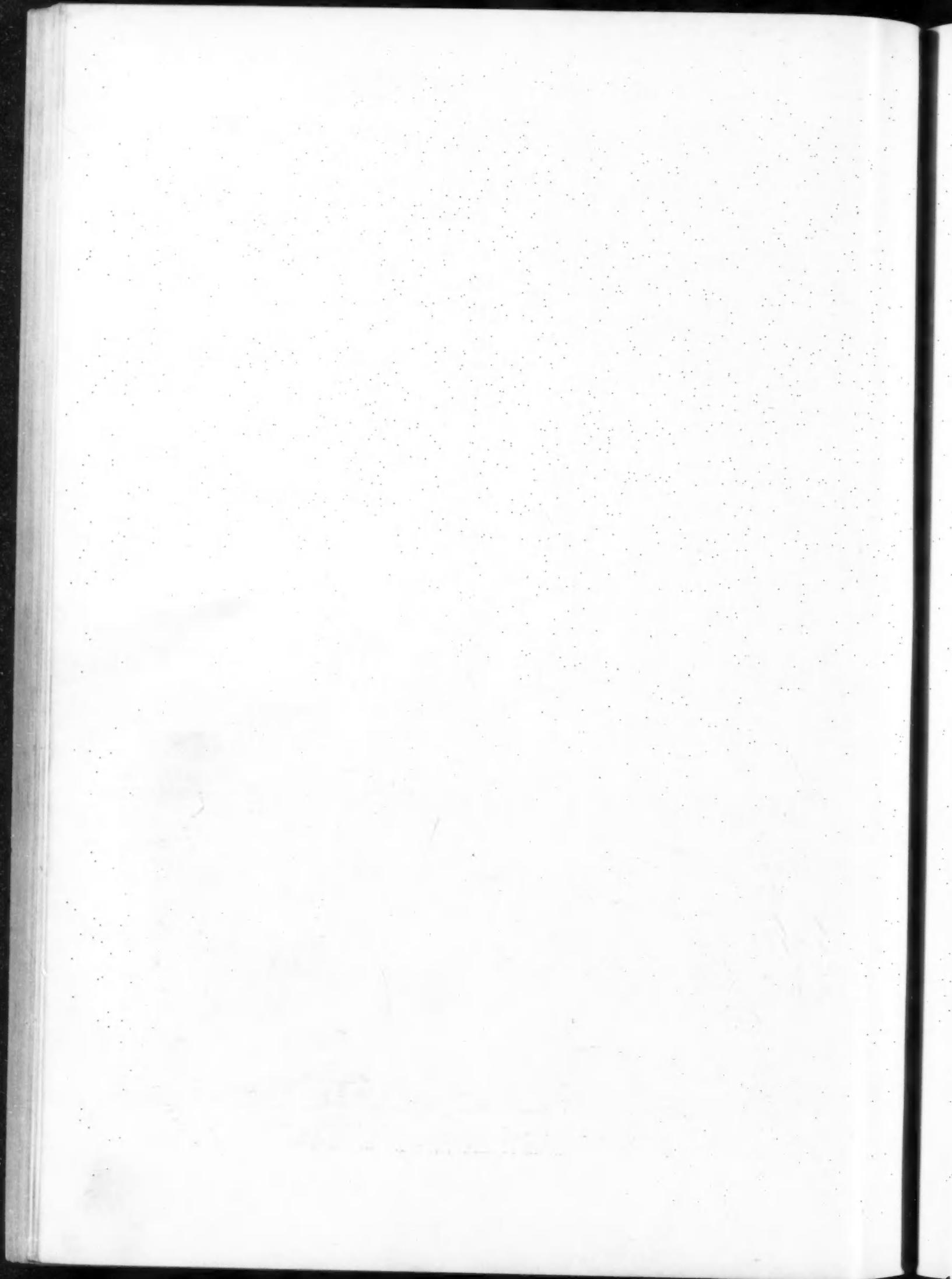


Photo. George H. Van Anda

WAR MEMORIAL, KEARNY, N. J.
JULIUS LOESTER, SCULPTOR



Memorial Tablets

By ROBERT P. BELLOWS

IN some localities there has been, of late, a surprising improvement in the quality of indoor memorials. For instance, at the top of Beacon Hill, within a 200-yard radius of my office, there are enough examples to suggest the text and illustrations for this article. This survey, therefore, will be confined to the work, old and new, in King's Chapel, to the new War Memorial in the Boston Architectural Club Library, and to that most surprising series of wall tablets lately erected by Boston architects in the stairway hall of the New England Historic Genealogical Society, at 9 Ashburton Place. If the reader wishes to go slightly farther afield, he will find recent memorials of merit in the Massachusetts State House, and in the Old North and First Churches. The work of R. Clipston Sturgis in these churches deserves an article by itself. He set a pace in the Old North which no doubt has influenced the other Boston architects, mentioned here for their work on Ashburton Place. Most of these tablets, as will be seen, hark back to old times. Wall tablets erected today in such historic buildings as King's Chapel or the Old North must necessarily conform to the eighteenth century character of those delightful old edifices. The New England Historic Genealogical Society on Ashburton Place, in commemorating worthies of other days, has sought to maintain the same character, which clothes with architectural dignity these memorials to some of New England's pioneers.

Among the most delectable spots on this hemisphere for the study of wall tablets in historical sequence, is King's Chapel. This gracious building dates from 1749. As we tread its venerable, historic aisles, between the high-backed, damask-covered pews, we view a succession of mural monuments dating from the building of the church to the present day.

1746. "*M. S. Franciscæ Shirley*"—

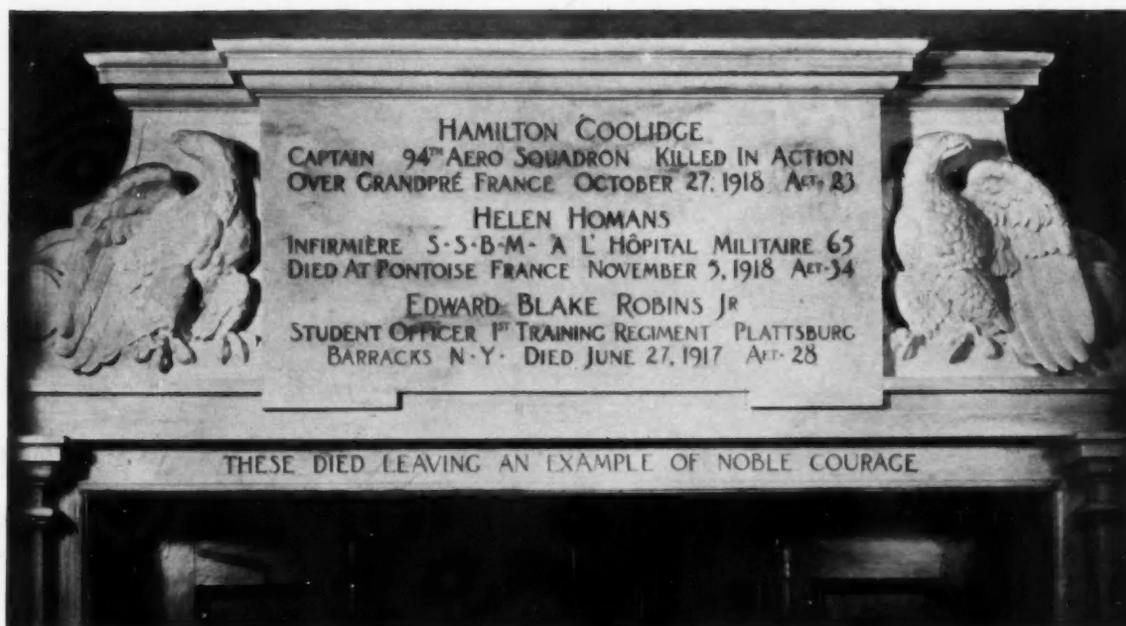
Her many virtues and those of her daughter require some 54 lines of Latin for their enumeration. Though we may stumble at their meaning, the well cut letters are a delight.

1758. "*M. S. Caroli Apthorp*"—

Another lengthy inscription, cunningly placed upon a square white marble field. Though death provides its theme, the monument is full of life and color. The insets of tawny red marble, the urn of yellow, the golden torches (these of wood!), the painted arms and the lamenting cherub are the work of "Hen: Cheere," for he has so signed his name and "*Fecit*" after it. What a thrill was felt when we found this same name in a book devoted to the London of the eighteenth century! There Mr. Cheere figured as a worker in marble and a maker of mantelpieces. It is not to be doubted that these wall monuments of the grander sort were ordered from London, made there, and shipped to the colonies. Here is another, perhaps in certain respects the best.

1766. "*Sacred to the Memory of Samuel Vassall, Esq.*" He was "a steady and undaunted asserter of the Liberties of England." His fortunes suffered from "the rage of the times." Yet his great-grandson, Florentius, of the island of Jamaica, found the wherewithal to commemorate his ancestor most handsomely. For once the script is in English. Much is to be recounted. Two columns of praise are deemed necessary. But what style to the lettering, what a telling spacing and arranging of the resounding phrases! The author has signed his work, "*W. Tyler, Sculpsit, London.*"

Dr. Oliver Wendell Holmes, (himself the subject of a large tablet in King's Chapel), has well voiced the sentiment awakened by these memorials:



War Memorial Tablet Over Doorway, King's Chapel, Boston
Robert P. Bellows, Architect



VASSALL MONUMENT, KING'S CHAPEL, BOSTON
 W. TYLER, SCULPTOR, LONDON 1766



MEMORIAL CHIMNEYPIECE, BOSTON ARCHITECTURAL CLUB LIBRARY
BELLOWS & ALDRICH, ARCHITECTS



Crapo Tablet, New England Historic Genealogical Society, Boston
Brainerd & Leeds, Architects



Monument to Gen. Richard Montgomery, St. Paul's Chapel, New York
Pierre Charles L'Enfant, Designer

"Lightly we glance the
fresh-cut marbles
o'er;

Those two of earlier
date our eyes en-
thrall:

The proud old Briton's
by the western door,
And hers, the Lady of
Colonial days,

Whose virtues live in
long-drawn classic
phrase,

The fair Francisca of
the southern wall."

The poet refers to the Vassall and Shirley monuments. And so on down the years, the scholars' Latin giving way to good English, the lengthy eulogies becoming more direct and (praise God!) shorter. Alas, the design and lettering are losing much of their earlier distinction and architectural character.

By Civil War times, the art of designing memorials had sunk to its lowest level. There is true pathos in such inscriptions as "Cabot Jackson Russell, Captain 54th Reg't. Infantry Mass. Vols. Killed at Fort Wagner, S. C., July 18, 1863 æ 18." Note that this boy-captain was only 18 when he laid down his life for his country! This is one of 14 glorious names, all of sons of the Chapel, set forever in ugly block-cut letters on shiny chamfered marble. Many words are abbreviated. The one attempt at Latin, "æ" is wrong. The standard is lower.

Now don't let us suppose that this decline in the art of designing mural tablets was due to lack of reverence or care. Our fathers and grandfathers had lost touch with the niceties of the eighteenth century productions. They had been

too busy with other things to work out their own artistic salvation. Art was "down, but not out." Gradually the quality of the tablets became better again. A recognition of the beauty of lettering *per se* was once more evident. McKim's firm glorified the Roman letter both in the Public Library and in the Shaw Memorial. Frank Chouteau Brown in his book taught the architects a wide range of delightful alphabets. The ancient graveyards gave up their best script. Typography improved. President Eliot reduced the bulk of many an inscription to a few impressive lines. The wording was calculated to fill acceptably a definite space. That quiet, persuasive and beloved stone carver, John Evans, knew much more about such things than his clients, the architects. But *all* were learning. Is it any wonder that those who cared became dissatisfied with the stock block letter long admired and used by the stone cutter?

In recent years only a restricted number of carefully considered memorials have been placed in King's Chapel. One of the last is that to Robert S. Peabody, "Architect, Warden of this Church." After the erection of this simple tablet, all the available space seemed to be taken. Odd corners and the stair walls to the galleries alone remained, and they were soon filled up also. In 1918 the architects of Boston erected an unusually attractive slate tablet to Peter Harrison, architect of the building. It was placed in the vestibule, unfortunately somewhat overshadowed by the



Underwood Tablet, New England Historic Genealogical Society, Boston
Strickland, Blodgett & Law, Architects



Apthorp Monument, King's Chapel, Boston
By Henry Cheere, London, 1758



Peter Harrison Tablet, King's Chapel, Boston

Edwin J. Lewis, Jr., Architect



Havens Tablet, New England Historic Genealogical Society, Boston

Gordon Allen, Architect

wooden cleat of an ancient and very necessary bell rope.

Despite the fact that "all available and proper wall space on the main floor of the church was used up," the Great War induced a reconsideration of this pronouncement. Again the children of the Chapel must be honored,—those who had "died leaving an example of noble courage." A solution was found by taking the scant space above the western door, the main door of egress under the organ gallery. The required tablet and surrounding architecture were united to form the new Memorial Doorway. The old doors remain between their richly classical columns.

At the house of the Boston Architectural Club, 16 Somerset Street, a similar problem presented itself. In the new Memorial Library, the fireplace, mantelpiece and over-mantel are designed to form one composition. The tablet with the names of those members of the Club who lost their lives fighting in the Great War is the motif dominating the room.

Now comes the most interesting part of this narrative. A few years ago the New England Historic Genealogical Society invited contributions to a fund. Several subscribers under certain conditions were asked to name ancestors of worth for commemoration. It was planned to place tablets up and down the walls of the central staircase of the Society's new building. The response was impressive, and the Society found itself under the delightful obligation of placing a large number of tablets. There was, of course, only a limited amount of money to spend on the individual tablets together with the architectural

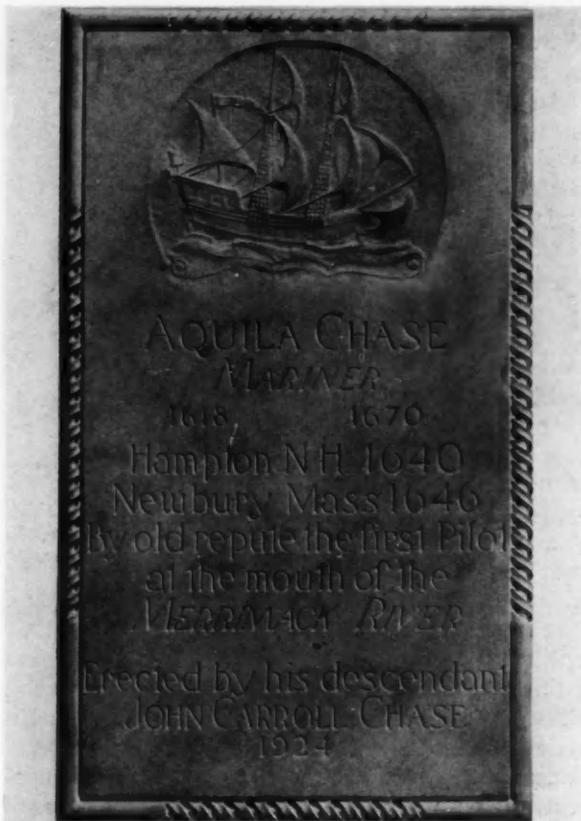


Deering Tablet, New England Historic Genealogical Society, Boston

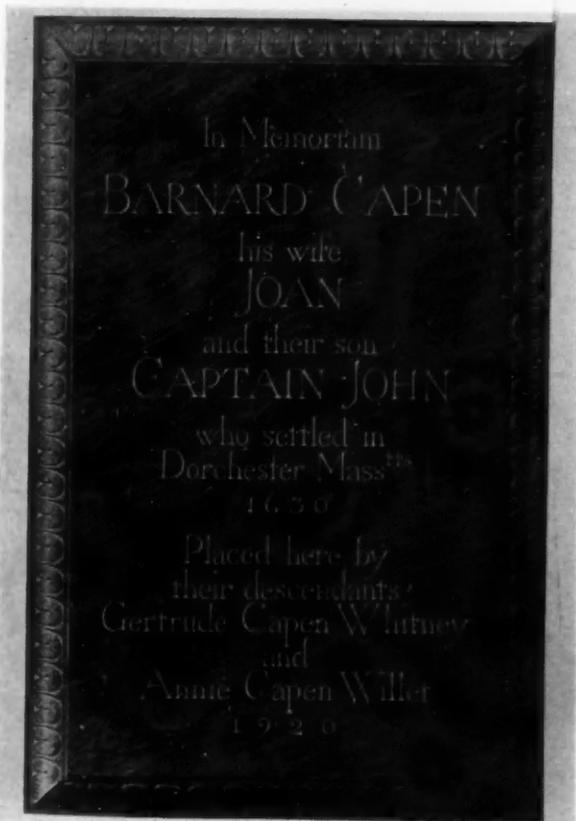
Strickland, Blodgett & Law, Architects

services involved. Fortunately the Society had the good sense to turn for advice and counsel to one of its members, William T. Aldrich, architect. It is to the everlasting credit of Mr. Aldrich and the architects he invited to share the work with him that they accepted this difficult and unremunerative commission. But the idea appealed to all of them. Here was a chance to try themselves out in friendly rivalry. The architects who designed the tablets, now placed up and down the Society's stairway, are William T. Aldrich; Gordon Allen; the firm (now dissolved) of Bellows & Aldrich; Brainerd & Leeds; Alexander Emerson; Ralph W. Gray; Little & Russell; the late Lawrence Park; Stanley Brampton Parker; and Strickland, Blodgett & Law. The monument to Abraham Lincoln, given by his son, the late Robert T. Lincoln, was designed by Frederic Allen, sculptor.

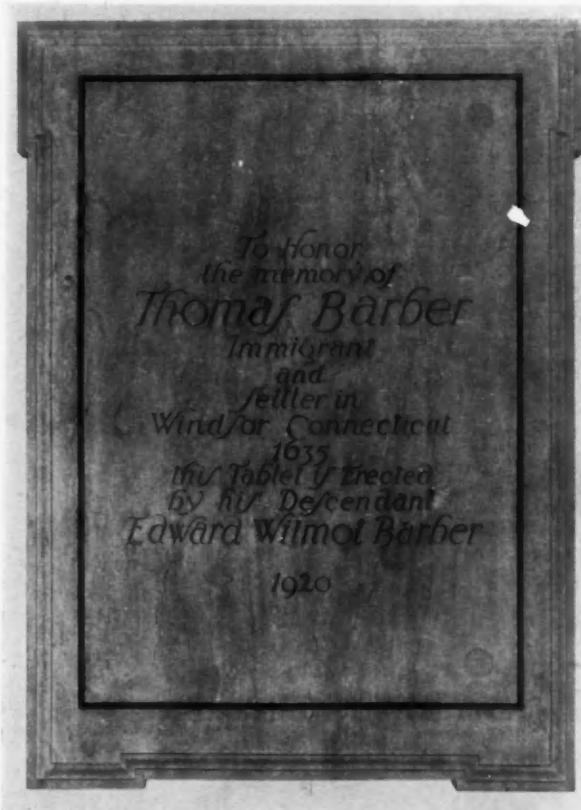
Much of this information as well as permission to use its photographs is due to the kindness of the Society. William Prescott Greenlaw, Librarian and Assistant Treasurer, was the originator of the scheme and has been kindness itself. Mrs. Florence Conant Howes, Assistant Secretary, has won many a distracted architect's appreciation by her helpfulness and tact in carrying out the work. There are about 60 tablets in place. Some of the designers did more, some less. The work has gone along quietly for eight years, and is not wholly finished yet. The tablets average about 10 square feet in area. No two are of the same pattern. There are limestone, slate and marble tablets. A few are of wood. Some



Chase Tablet, New England Historic Genealogical Society, Boston
Strickland, Blodgett & Law, Architects



Capen Tablet, New England Historic Genealogical Society, Boston
Gordon Allen, Architect



Barber Tablet, New England Historic Genealogical Society, Boston
Ralph W. Gray, Architect

are of brass or of bronze. Several show a combination of materials. Some are frankly experimental. Color has been introduced by the use of contrasting materials. The application of paint or enamel has been particularly successful where coats of arms form parts of the designs. Paint has also been used with good effect, in some cases, to bring out the lettering. A wise committee kept down the number of words in each inscription to a minimum. Much time and thought must have been put into the simple, condensed phrasing. Then it was up to the architects. They were given their locations and told to "go to it." The results have justified the scope given by this generous treatment.

The expensive nature of such memorials was a check on over-elaboration. There was, however, a chance for well carved lettering, a simple enframement, and perhaps a bit of ornament. But this was as far as it was possible to go. The architects' designers worked their heads off over the lettering! The local

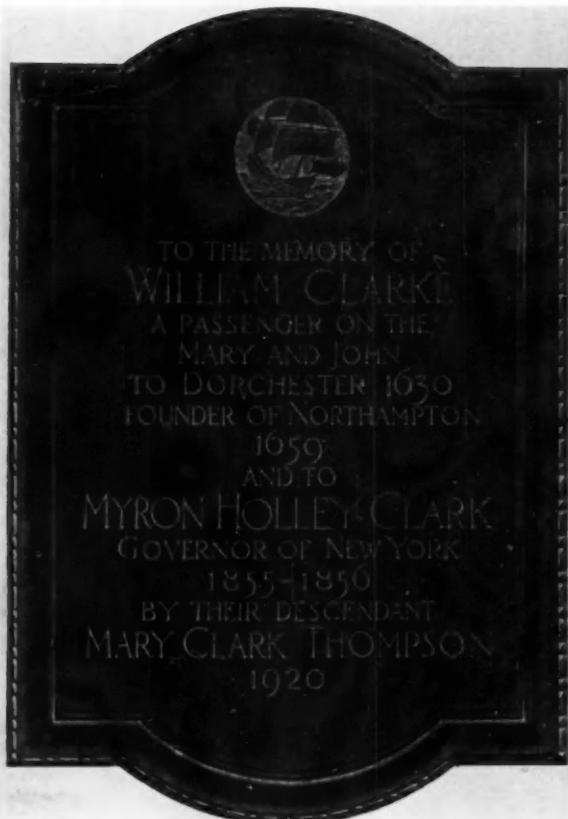


William Hamersley Tablet, New England Historic Genealogical Society, Boston
Bellows & Aldrich, Architects

antiquities, such as those already here described in King's Chapel, were never scrutinized so sharply before; and cobblers' wax was rubbed across white paper on many a headstone in the Granary Burying Ground or that on Copp's Hill. English books on memorials became the "best sellers" in architectural circles, for the English for the most part are doing this sort of thing better than we. Occult words pertaining to lettering such as "spur" and "serif" and "flourish" be-

came common in office parlance. It is incredible how well some of this lettering is designed and executed. It is readable and full of variety. It shows a high regard for emphasis and balance. But few will ever know at what cost of toil and study it was produced! The enframement and ornament were much easier.

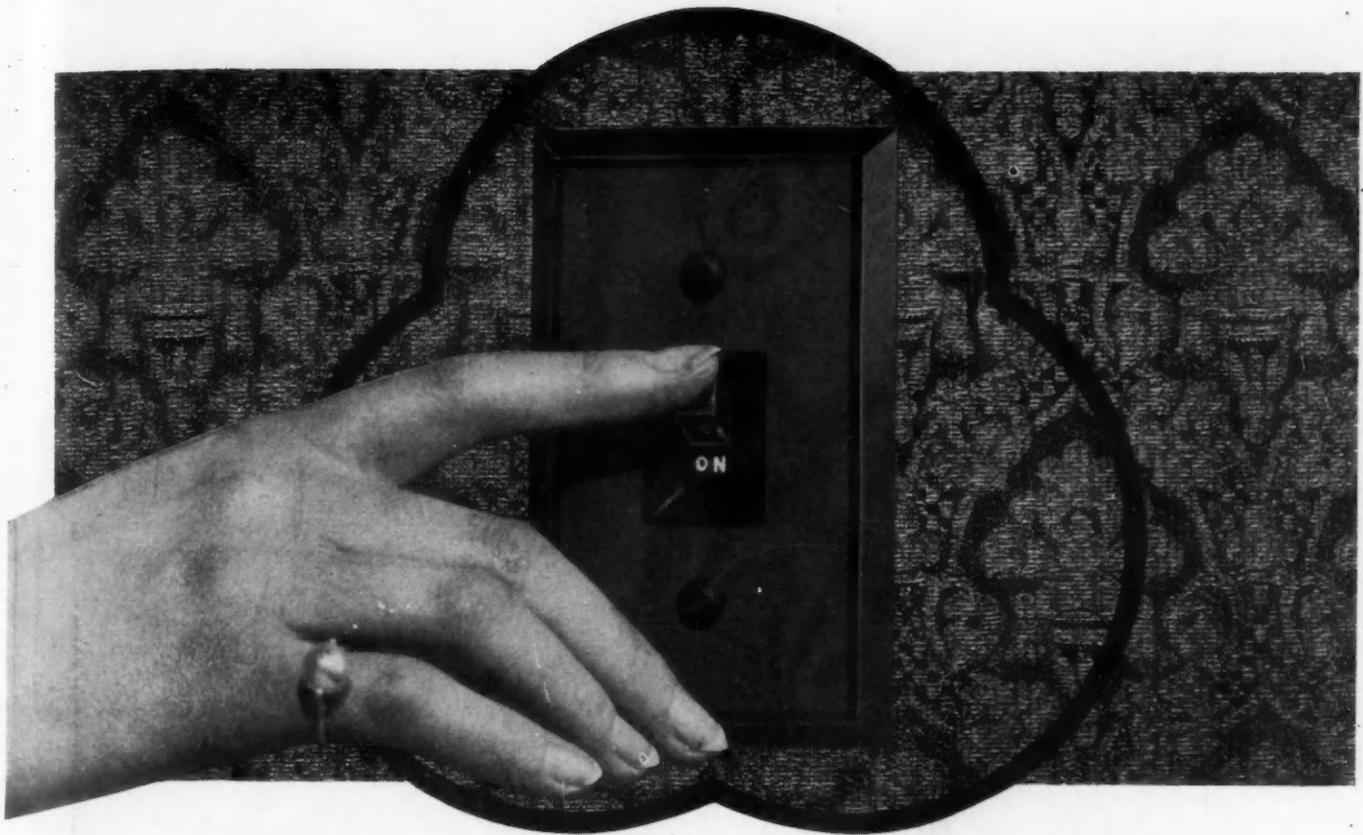
Sometime, we hope a book will be published in handsome form giving each of the tablets a full page. At that scale it would be possible to give more than a mere suggestion of their merits and their distinction.



William Clarke Tablet, New England Historic Genealogical Society, Boston
Ralph W. Gray, Architect



William Henry Wilson Tablet, New England Historic Genealogical Society, Boston
Gordon Allen, Architect



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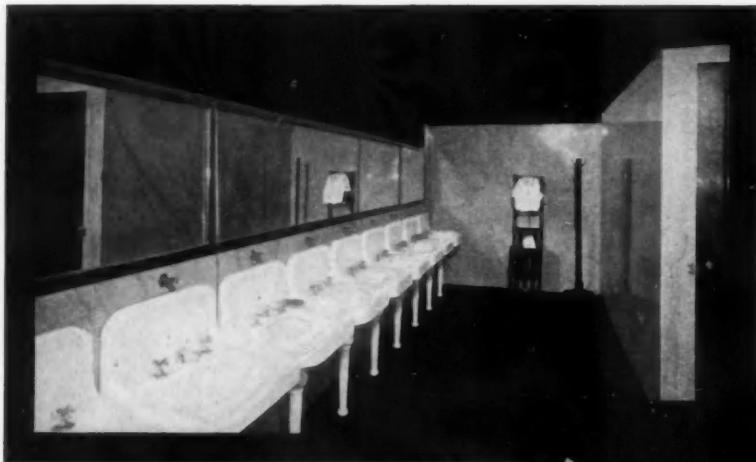
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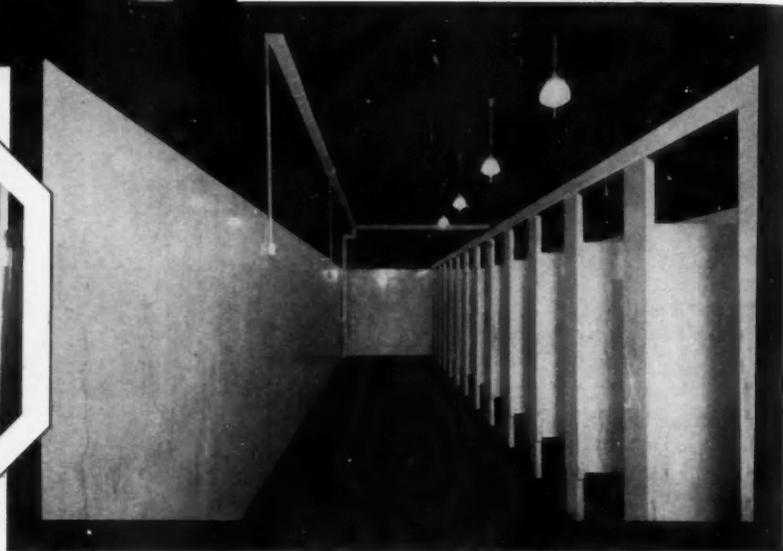
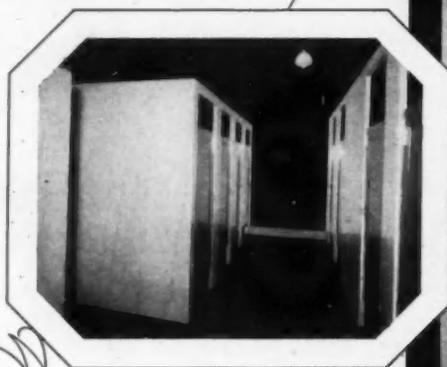
THE ARCHITECTURAL FORUM

Number 6

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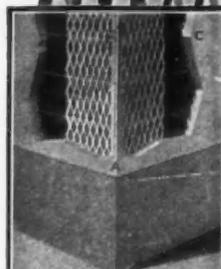
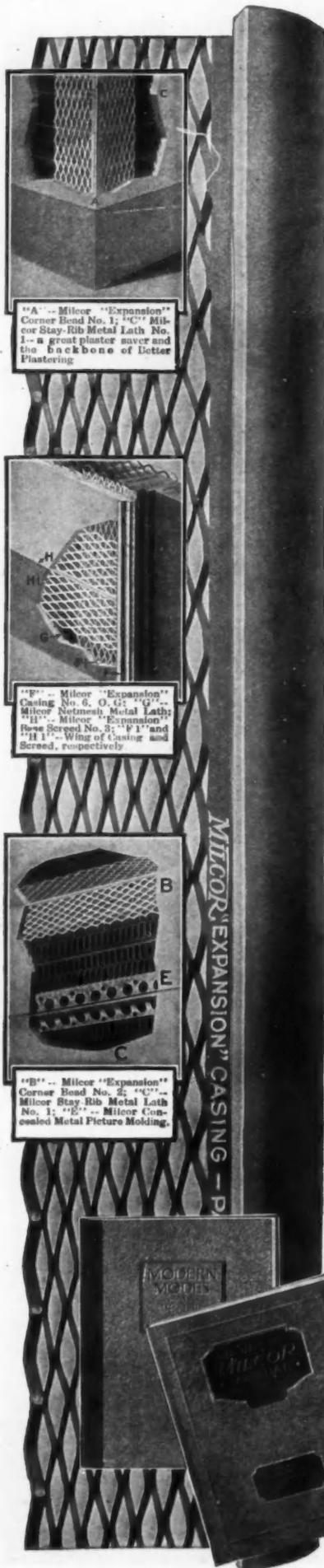


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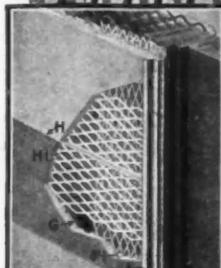
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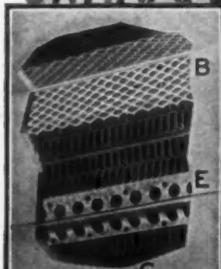
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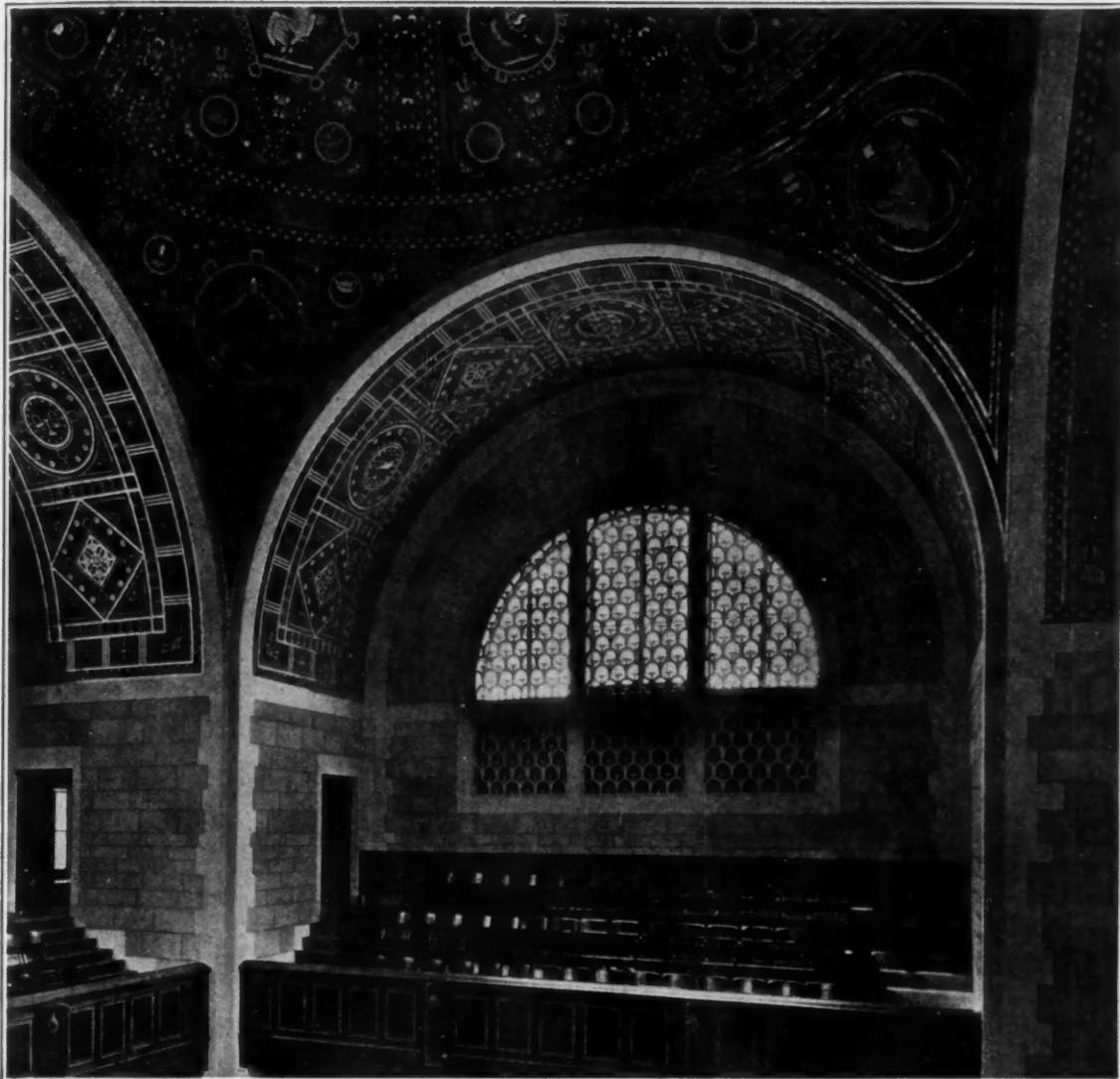


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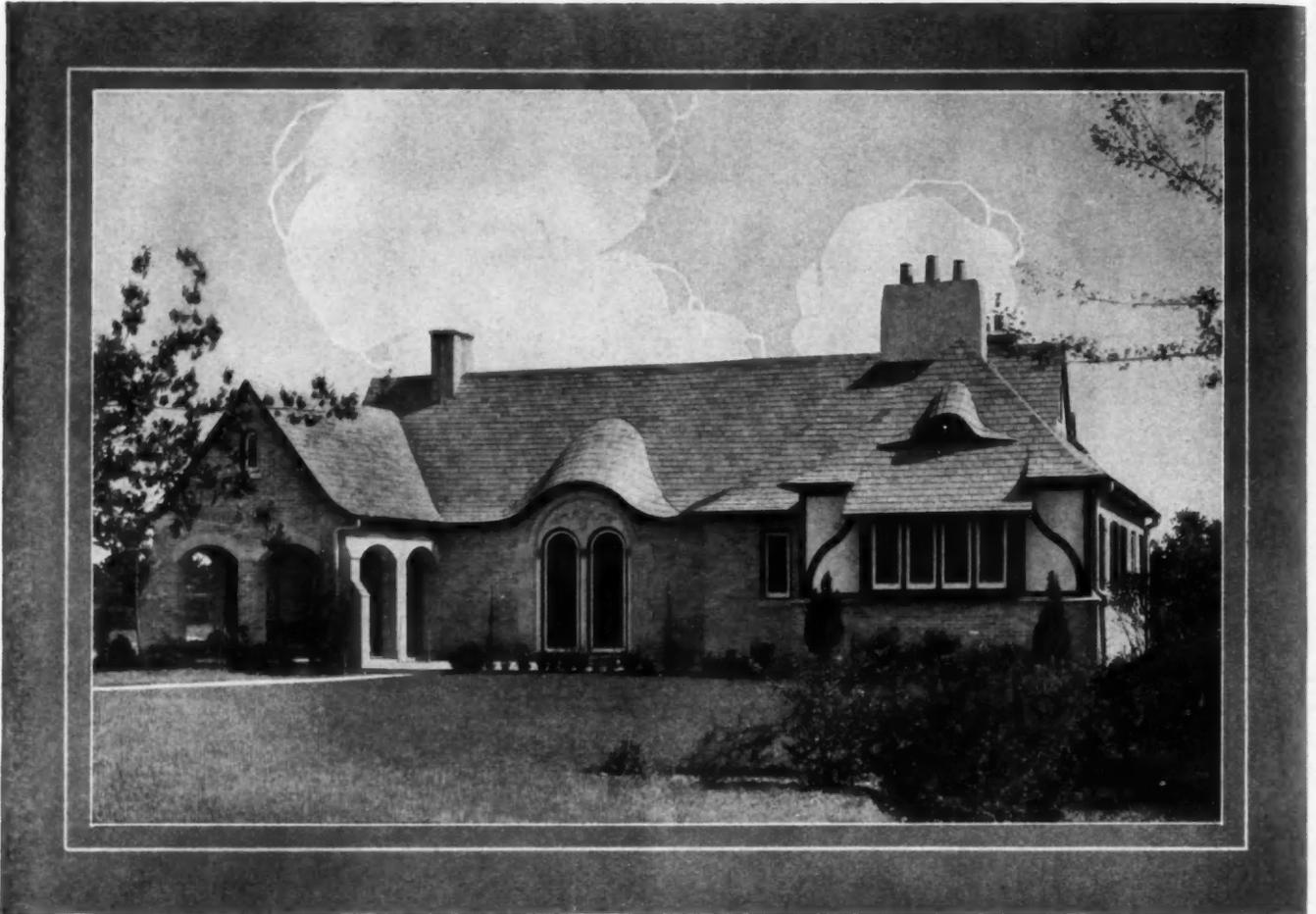
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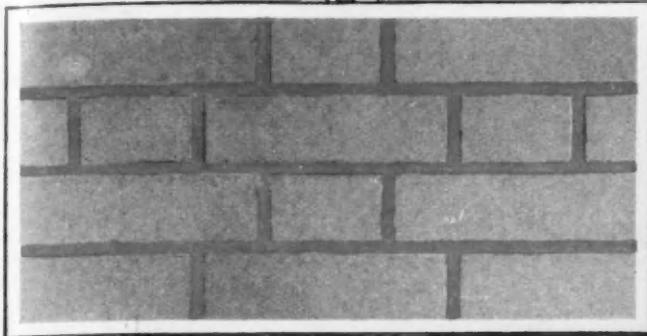
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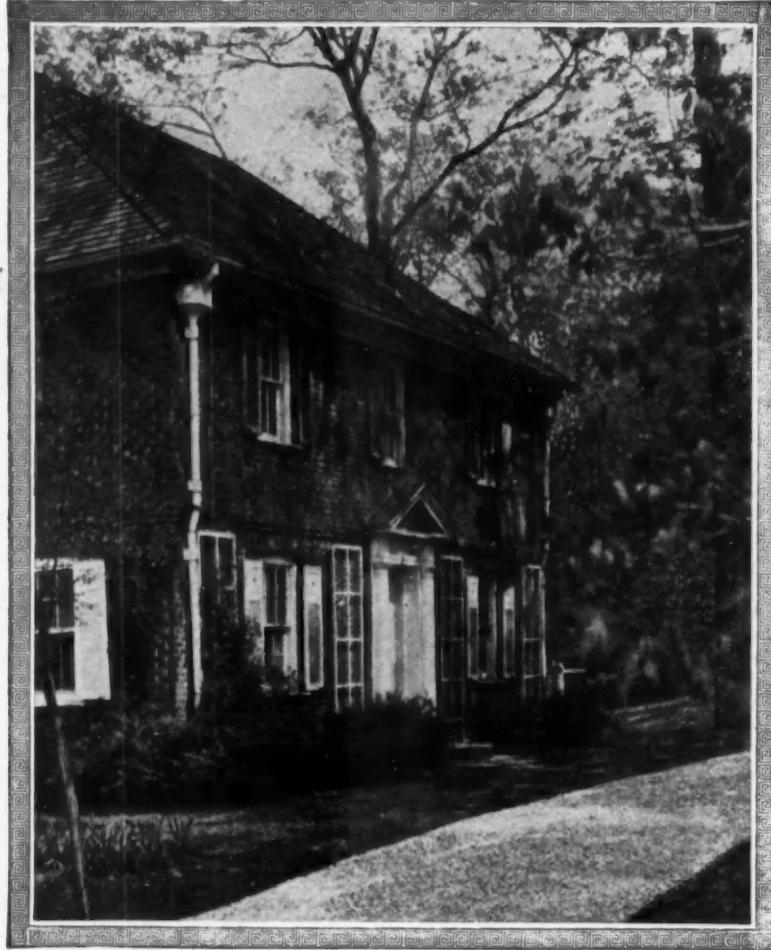
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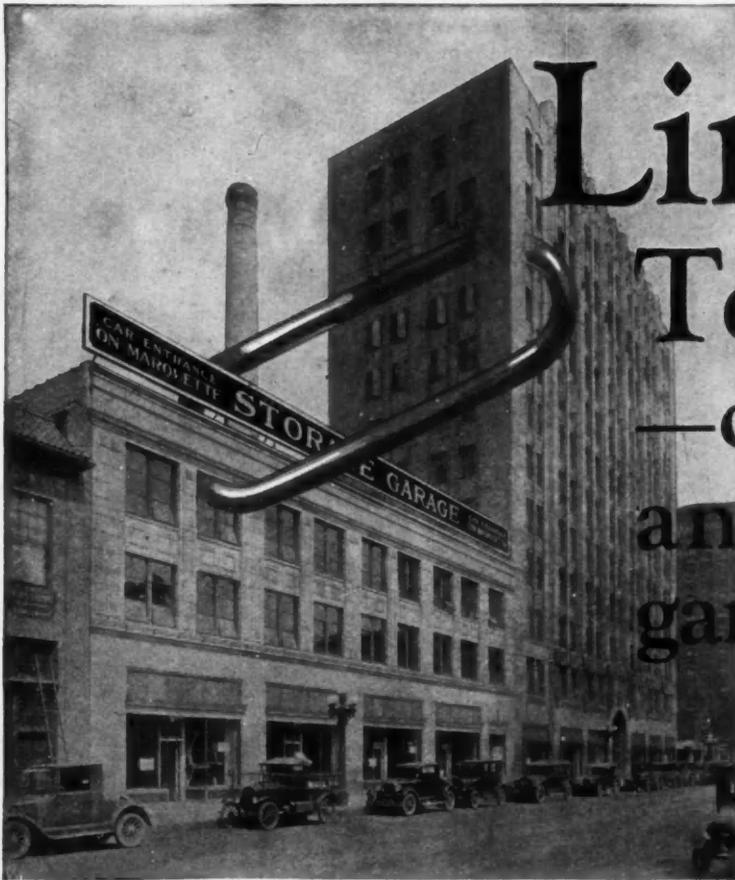
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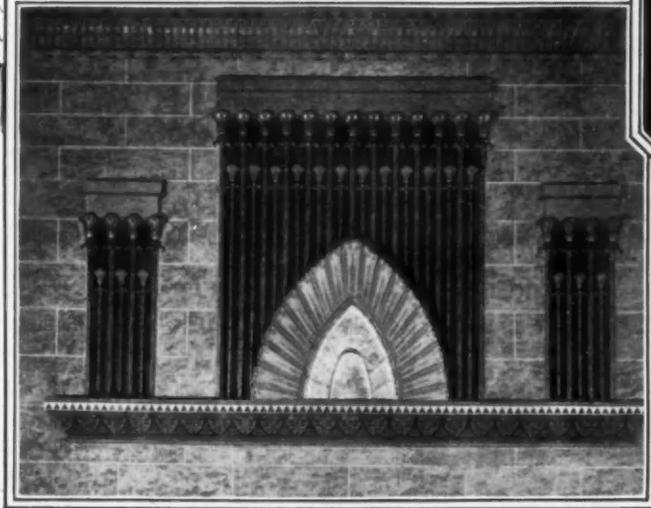
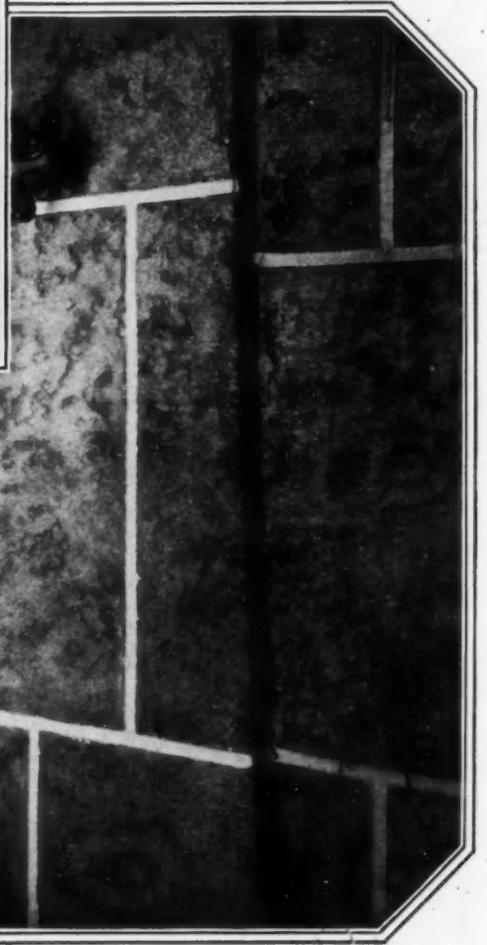
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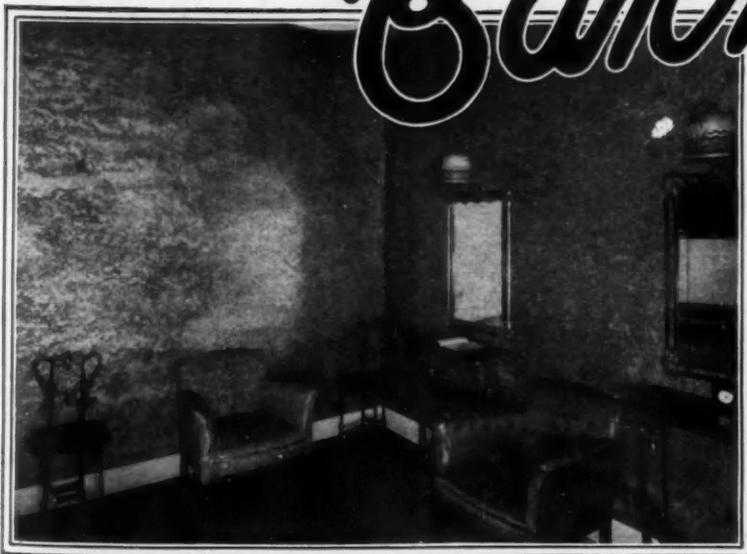
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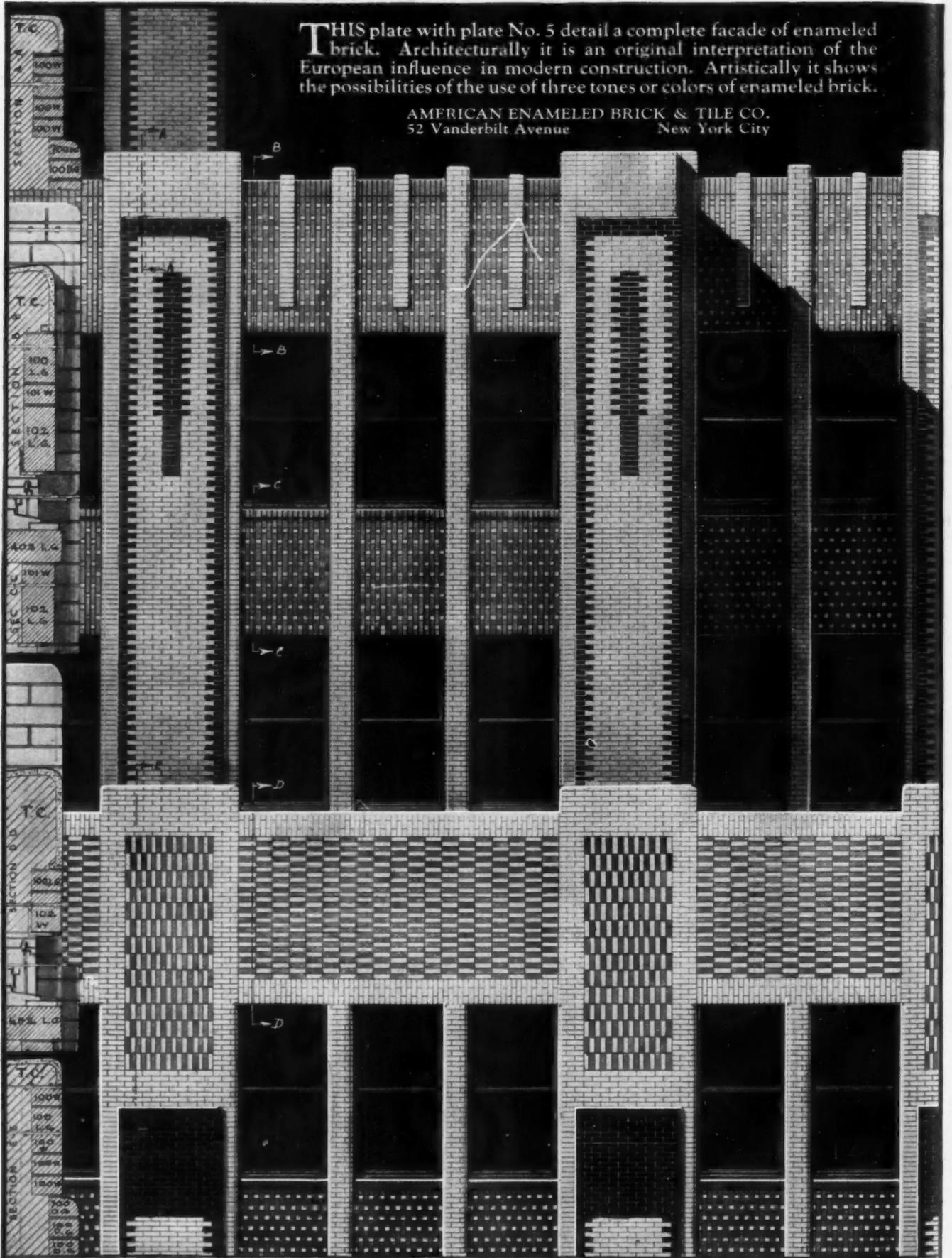
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ENAMELED BRICK PLATE NO. 6

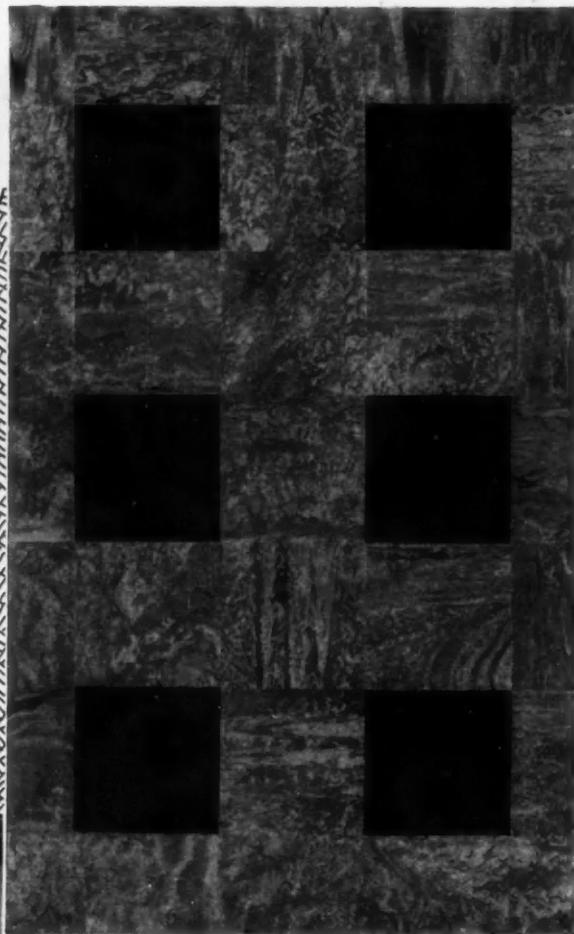
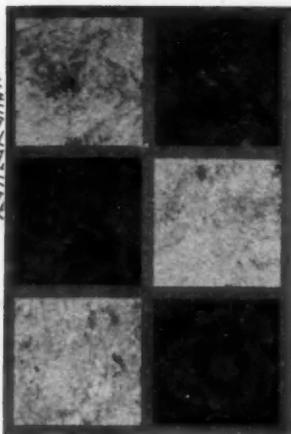
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Blocks are 3 inches wide

A corner in the architectural suite of Thornton and Roedecker, Indianapolis architects. The floor of Armstrong's Marble Inlaid No. 76 (12 x 12-inch blocks) was appropriately chosen.



Color, Pattern, Permanent Beauty—These Floors Have All—and More

THE HOME-PLANNER today looks to his architect for complete details of interiors.

Take, for example, the home of Spanish design that must be built at moderate cost. You specify wall-texture, the wrought-iron effects, and other notes that will help your client complete the decorative treatment. You can go a step further without increasing the cost—and perhaps even save money—by specifying floors that also contribute to the interior design.

In Armstrong's Linoleum you can get a design to fit almost any type of room. And these floors, cemented

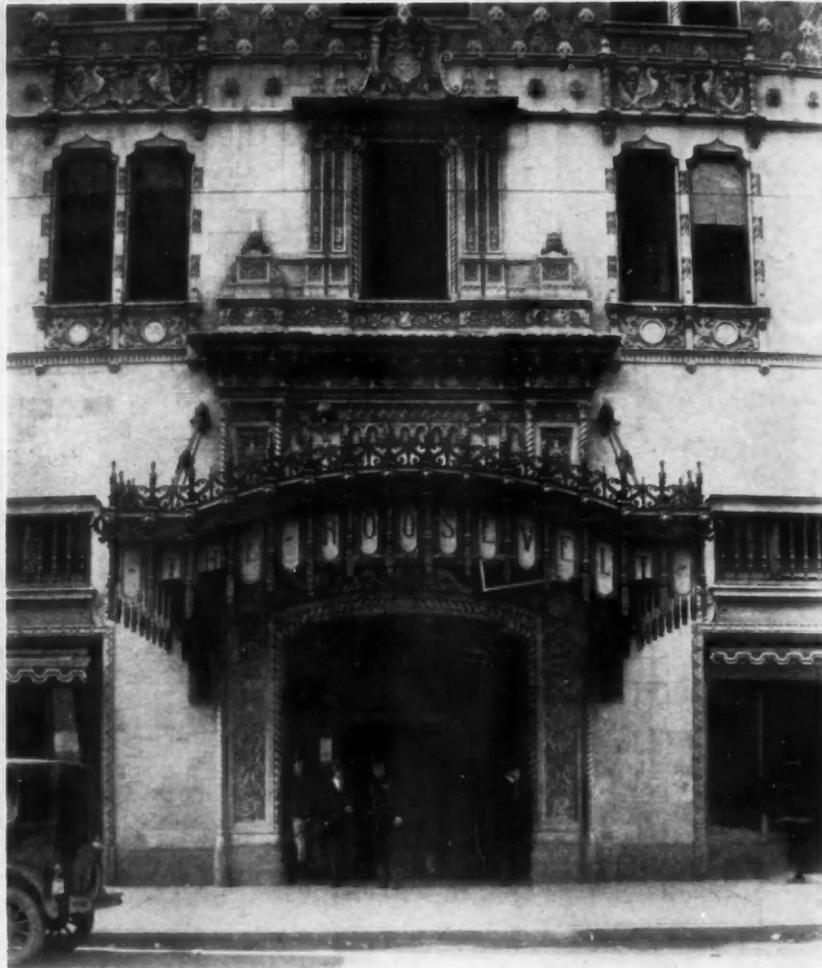
in place over a layer of builders' deadening felt, are a structural part of the building. The first cost is the last cost,

When considering any decorative floor-treatment, you will find there is an Armstrong floor to complement ideally the other units you have in mind. Our Bureau of Interior Decoration will be glad to send you reproductions of the newest designs in linoleum floors, or even help you in planning your color schemes. You may find good use for some of the suggestions which our decorator will gladly send you, without obligation, upon request.

Look for the
CIRCLE A
trade-mark on
the burlap back



Armstrong Cork Company, Linoleum Division, Lancaster, Pennsylvania



Entrance, The Roosevelt Hotel, New Orleans, La., Favrot & Livaudais, Architects. Lower story ashlar and ornamental enrichment in unglazed buff-grey Terra Cotta.

The Decorative Value of
TERRA COTTA

For lower story finish and effective enrichment of entrance features Terra Cotta offers you unsurpassed possibilities.

Messrs. Favrot & Livaudais demonstrate in this building the success attending a well chosen motif reflecting local atmosphere and beautifully detailed.

Note: Architects will also find many fine motifs in "Terra Cotta of the Italian Renaissance" published by this Society, \$3.00 per copy.

NATIONAL TERRA COTTA SOCIETY
 19 WEST 44th STREET
 NEW YORK, N.Y.



Pattern and color contrast are contributed by this new wide-spaced inset tile floor—
GOLD SEAL INLAID, Belflor Pattern No. 2172/2. The 6-inch tiles are 18 inches apart.

New—a distinguished tile design by Nairn

An inlaid linoleum which gives the appearance of a custom-laid floor while permitting the economy of the usual one-piece installation. This is the unique combination of advantages presented in the extra-wide spaced *Belflor Inset Tiles*—a new group of patterns exclusive with **NAIRN GOLD SEAL INLAIDS.**

Here, indeed, is a valuable addition to the architect's resources for enhancing the individuality of an interior and providing a thoroughly permanent flooring at moderate cost.



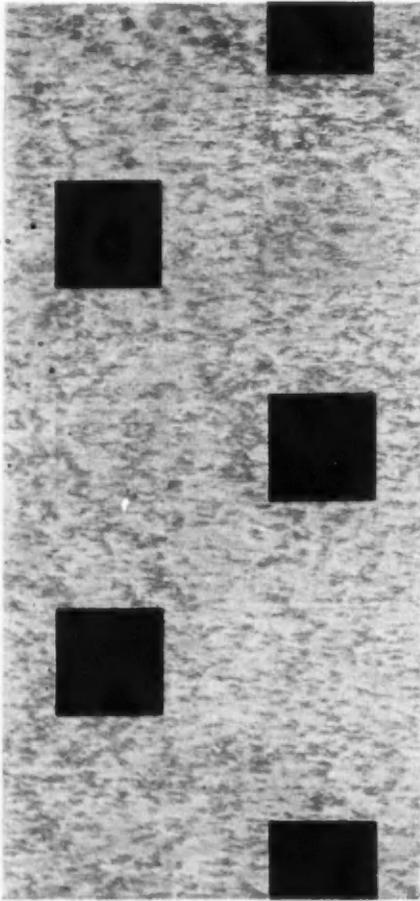
The interior above illustrates how the wide-spaced islands of color provide an interesting element of contrast absent in plain one-color flooring, yet avoid any sense of crowding or excessive regularity.

But it is not alone to residences that these new *Belflor Inset Tiles* are adapted. Their singular suitability for offices, stores, lobbies, club-rooms and similar interiors is self-evident.

Further descriptive data will be found on the back of this page.

(See next page)

NAIRN **GOLD SEAL INLAIDS**



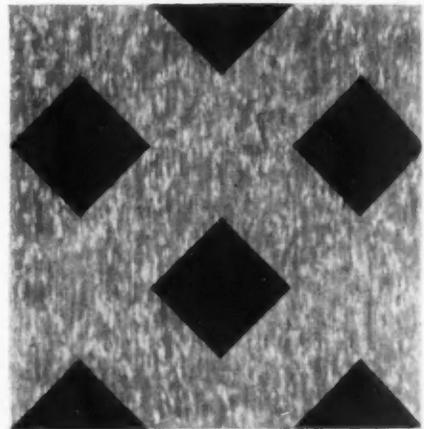
GOLD SEAL INLAID
Belflor 4 1/2" Inset Tile.
Pattern No. 2171/2

The New Belflor Inset Tiles

Here appears another of the new wide-spaced *Belflor Inset Tile* patterns. The pleasing open effect of this type of design comes from setting the tiles considerably further apart than in other inset patterns. This arrangement is found only in Nairn GOLD SEAL INLAIDS

Instead of the usual solid-color inset some of the patterns carry the distinctive *Belflor* mottled colorings in the tiles as well as in the field. Many different color combinations are offered in this new group of *Belflor* patterns. Lithographed reproductions of any of the patterns in actual size will be forwarded on request.

GOLD SEAL INLAID
Belflor Inset Tile.
Pattern No. 2168/1



Recent Advances in Nairn Quality

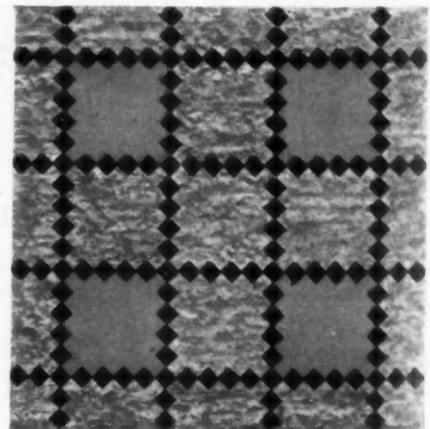
Architects who have seen the new inlaid linoleums that are being produced by Nairn have noted several outstanding features. The highly perfected wax finish is unsurpassed. It protects the goods against dirt and cement stains during installation, thus insuring a clean, handsome-looking finished job. Both flexibility and resilience—factors which make for easy laying—represent the highest standards of linoleum manufacture.

These qualities, plus the Gold Seal Guarantee of Satisfaction, permit architects to specify Nairn GOLD SEAL INLAIDS with entire confidence that they are serving their clients' best interests.

CONGOLEUM-NAIRN INC.

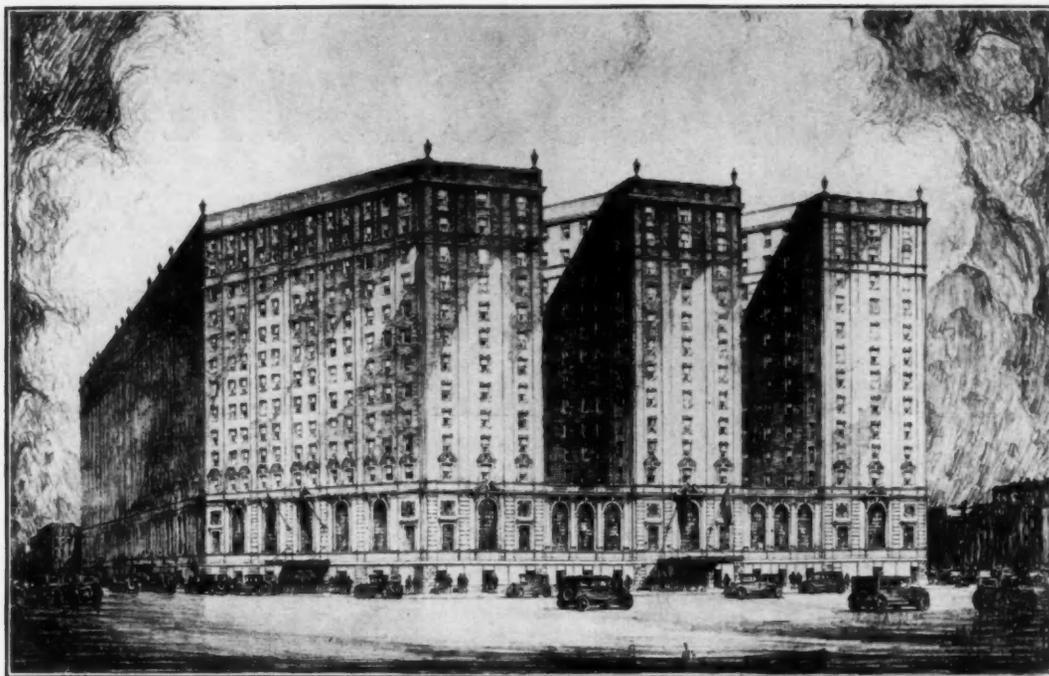
Philadelphia New York Boston Chicago Kansas City San Francisco
Atlanta Minneapolis Cleveland Dallas Pittsburgh New Orleans

(See preceding page)



GOLD SEAL INLAID
Belflor Pattern No. 7169/4

NAIRN GOLD SEAL INLAIDS



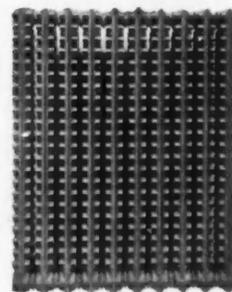
Hotel Statler, Boston, Mass., 1300 rooms, 1300 baths.
 Architect, Geo. B. Post & Son; Consulting Engineers, Tenny & Ohmes; Electrical Engineer,
 Karr Parker; Heating Contractors, J. W. Danforth Co.; Blower Company, B. F. Sturtevant Co.

In the newest Statler Hotel— **VENTO CAST IRON HEATERS**

In the new Hotel Statler in Boston, Vento Cast Iron Heaters will furnish perfect warmth.

Vento was chosen for this installation because under every kind of test Vento Heaters proved so dependable. They are becoming more and more popular because they bring so many advantages and yet cost less. They are permanently tight—do not wear out, do not leak—and they withstand all the unusual conditions found in heating and ventilating, cooling, air washing, humidifying and drying processes.

We shall be glad to send you our "Engineers' Data Book on Vento," in which are tables showing the results of the most thorough tests ever applied to Blast Heaters.



A typical stack
 of Vento Cast Iron
 Heaters

AMERICAN RADIATOR COMPANY

Showrooms and sales offices: New York, Boston, Providence, New Haven, Newark, Philadelphia, Baltimore, Washington, Richmond, Buffalo, Pittsburgh, Cleveland, Detroit, Cincinnati, Atlanta, Chicago, Milwaukee, Indianapolis, St. Louis, St. Paul, Minneapolis, Omaha, Kansas City, Denver, San Francisco, Los Angeles, Seattle, Toronto, London, Paris, Milan, Brussels, Berlin

Makers of IDEAL BOILERS and AMERICAN RADIATORS and other products for heating, ventilating and refrigerating

Interlocking-

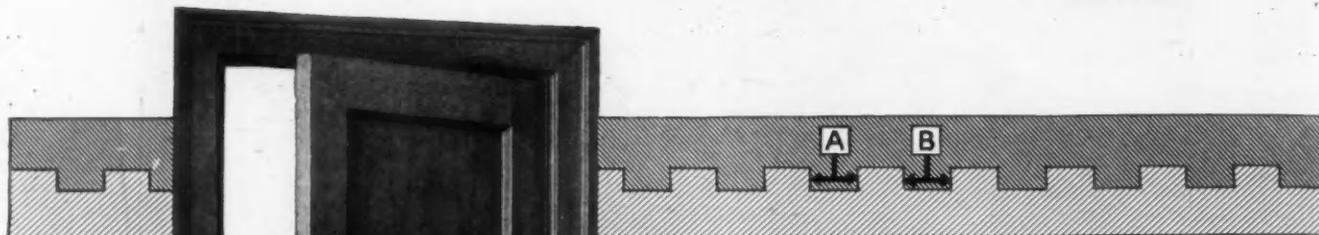


Diagram shows Compound Veneer interlocked to core, enlarged to twice its actual size. Compound veneers are $\frac{1}{8}$ " in thickness. Panels five-ply. Core, $\frac{1}{2}$ " laminated softwood.

Compound's Source of Strength

The veneers of Compound Doors are compounded to the core by tongue-and-groove construction, a unique union which has two distinct advantages over the ordinary face-to-face joint:

1. Gluing surface is doubled.
2. Resistance is also increased by the shearing pull made necessary on surfaces A and B, parallel to the strain that is tending to pull veneer and core apart.

This results in a very definite increase in COMPOUND'S strength over the usual method of applying veneer flat. What do you figure the exact increase to be? We'd like to have your answer.

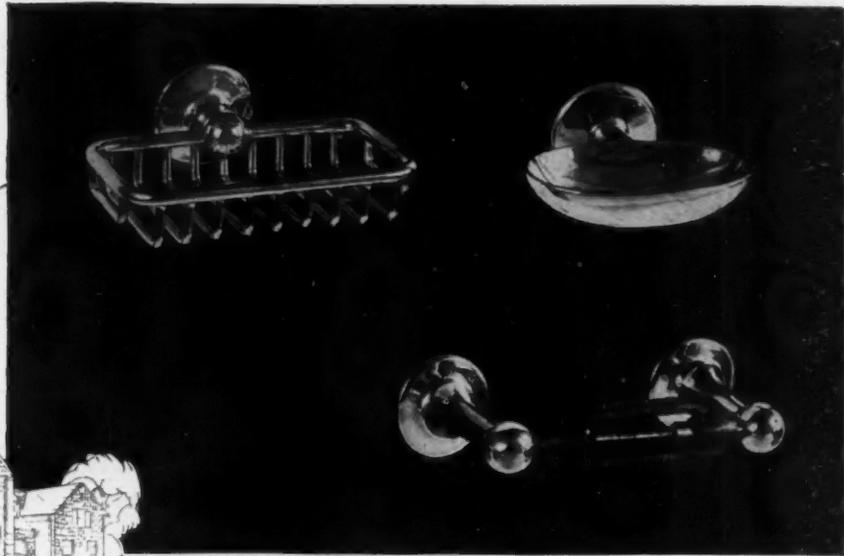
Send for more detailed information, and sample of Compound construction.

THE COMPOUND & PYRONO DOOR COMPANY
ST. JOSEPH, MICHIGAN

Compound
VENEERED DOORS

MADE BY AMERICA'S OLDEST VENEERED DOOR SPECIALISTS

The Elizabeth Town and Country Club, Elizabeth, New Jersey. Clifford C. Wendehack, Architect. Crodon-plated equipment by J. A. Hoegger, Inc.



FOR PERMANENCE

Architect and House Committee Agree on Crodon Finish

IN the new Elizabeth Town and Country Club CRODON has been specified as the finish for all of the exposed metal fixtures throughout the building.

By this means all maintenance charges for metal polishing as well as future assessments for the replacement of worn fixtures, have been eliminated. For CRODON will last as long as the building itself.

CRODON is a chromium electro-plate with a brilliant, mirror-like lustre. Used as the standard finish for many metal products of quality, its unusual features have brought it general recognition.

Even in salt atmosphere CRODON surfaces will never tarnish or peel.

CRODON prevents the formation of verdigris and resists steam, high temperatures, the majority of acids, and all alkalis. An occasional wiping with a cloth to remove grease or other foreign matter maintains the original lustre. No metal polishes are ever required.

Manufacturers of quality products carry

CRODON-plated products in stock or can supply them by having them CRODON-plated in one of our plants.

Upon request our Architects' Service Department will give any desired details or estimate the probable cost of CRODON for any building project. Write the Chromium Corporation

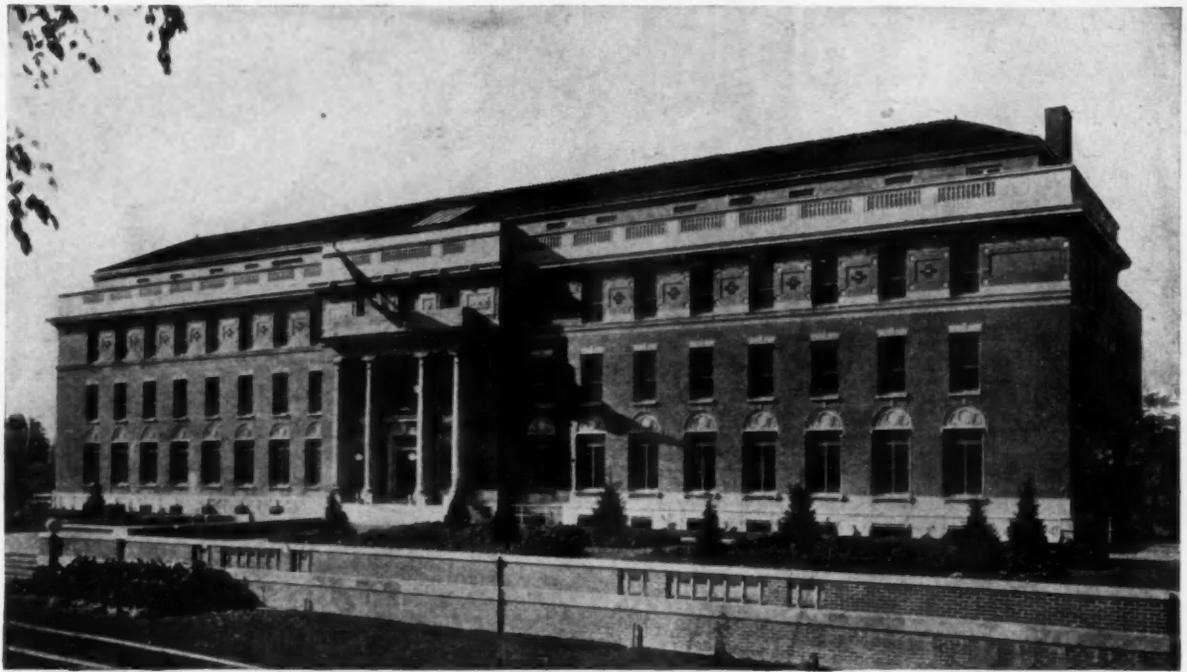
of America,
26 Broadway,
New York City.

Specify CRODON for:

Plumbing Fixtures, Bathroom Accessories, Flush Valves, Builders' Hardware, Door Plates, Door Knobs, Door Hinges, Electric Lighting Fixtures, Electric Fans, Switch Plates, Elevator Hardware, Hand Railings, Sprinkler Hydrants, Cuspidors, and Other Miscellaneous Exposed Metal Surfaces.

CRODON

*The Chrome Plate
Applied Only to Quality Products*



MASONIC SOLDIERS AND SAILORS MEMORIAL HOSPITAL, UTICA, N. Y.

H. P. Knowles, Architect

Build Everlasting Memorials of Beautiful Face Brick

HERE a living monument to Masonic War Veterans has been built of sturdy colorful Face Brick. As a result its stately dignity will be enhanced by the passing years.

Ever since the days of ancient Chaldea, Babylon and Egypt, through all the centuries, in every land, men have erected their revered and hallowed Memorials of hard-burned brick because of its eternal beauty.

Today, as ever, the enduring qualities of Face Brick make it exceptionally well-suited to the requirements of important Memorial Buildings.

"Architectural Details in Brickwork," a portfolio of many halftone plates showing excellent examples of fine brickwork. Sent postpaid to any architect making a request on his stationery.

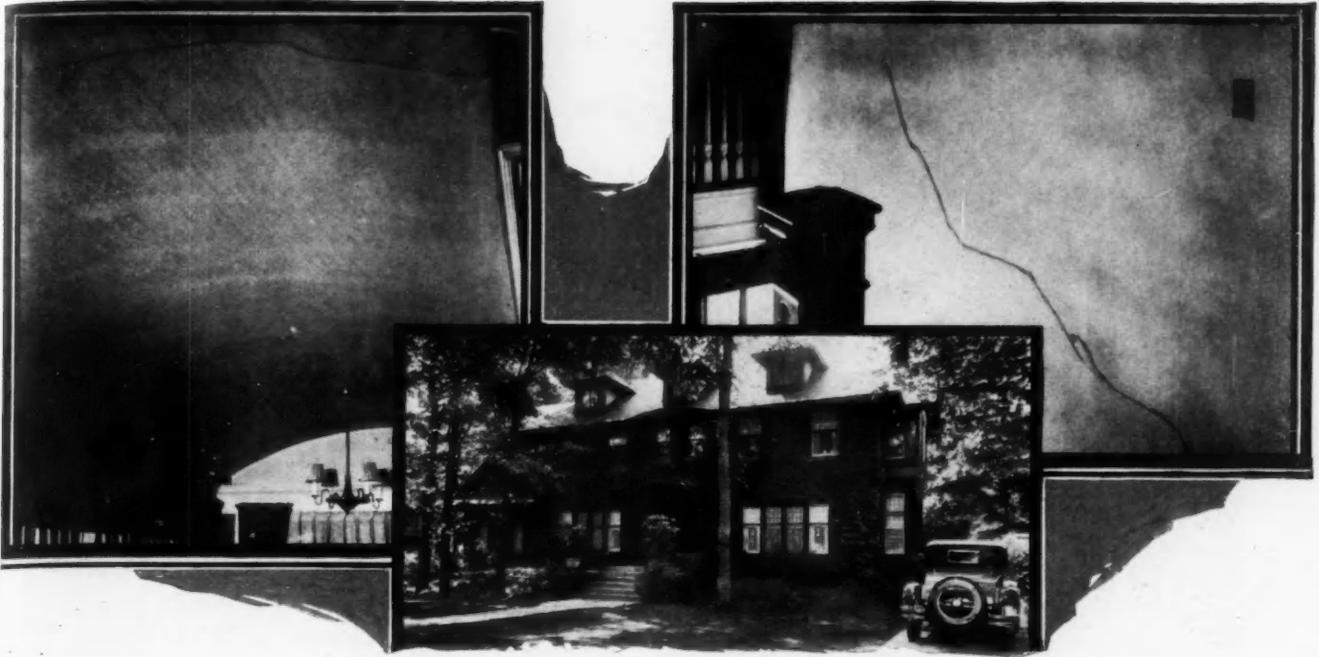
"English Precedent in Modern Brickwork," a 100-page book, beautifully illustrated with halftones and measured drawings of Tudor and Georgian types and American adaptations; sent postpaid for two dollars.

"Brickwork in Italy." 298 pages, an attractive and useful volume, especially for the architect, profusely illustrated with 69 line drawings, 300 halftones, and 20 colored plates with a map of modern and XII century Italy. Bound in linen, six dollars postpaid. Half morocco, seven dollars.

AMERICAN FACE BRICK ASSOCIATION

1751 Peoples Life Building
CHICAGO





Nothing To Do, But Redecorate Again!

A beautiful home in a beautiful setting. But look at the interior!

The sun room ceiling streaked and discolored! The stair well and other portions of the house, cracked—disfigured. Nor is it the plasterer's fault. He did his best with the materials which were specified.

The owner made one mistake. He insisted on a cheap lathing base which did not give satisfaction. In other respects the owner of this home is delighted. But he can never forget that omission. The marks of it are ever before his eyes.

That is the great trouble in cheapening the

plastering job, and the plastering base. The result is invariably dissatisfaction because the earmarks of that saving keep cropping up in the most noticeable places.

Isn't it worth a little extra effort to keep your clients from being just a trifle dissatisfied with the job? Explain the reason for a Better Plastering on metal lath specification to any client and you will be surprised what a ready ear he will turn to your remarks.

If you have not already received a copy of "Better Plastering in Modern Homes," we will be glad to send it to you. It will help you to put this point over to the "tightest" owner.

THE NATIONAL COUNCIL FOR BETTER PLASTERING
1305 Madison Square Bldg., Chicago, Ill.

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New Home of Knights of Columbus 51st St. and 4th Avenue, New York City

Contractors, McEntee & Sperling, Inc. 551 Full Range "Greendale Matts" used.

Edw. F. Fanning, Architect, New York.

THE New Home of the Knights of Columbus adds another building to the growing list of conspicuous structures in New York City and vicinity faced with beautiful "Greendales."

Whether allowed the rare opportunity of perfect expression amid perfect surroundings or working under the close restrictions of commercial limitations, many architects are finding that they can turn to "Greendales" with equal confidence.

"Greendales" owe their wide popularity to their universal adaptability, pleasing texture, wonderful color harmony and great durability. They are distributed throughout the United States and in Canada and Cuba.

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for WALLS



Towering majestically above the streets of storied Louisville, this Inter-Southern Life Insurance Building is an achievement of which D. X. MURPHY & Bros., its architects, may well be proud.

Beaver American Gypsum Block throughout

This eighteen-story Louisville office building is one of hundreds of large structures where Beaver American Gypsum Block is giving excellent service.

Beaver American is the gypsum block that is recognized for its fire-proof, sound-deadening, structurally efficient qualities. And the new "Her-Born" process, now employed

in its manufacture, gives it uniformity of weight and dimension. Each block follows closely the specifications of the Underwriters' Laboratories and The American Society for Testing Materials.

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Satisfactory results are guaranteed by the resources of an organization with sixty years of business experience.

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T-M-B Flooring

A permanent quiet flooring with a durable, rubber-like texture. It is applied over cement or wood, forming a seamless, sanitary surface easy to clean. It gives distinctive beauty at a cost often less than for other floorings. Made in red, brown, green and black. Used in all kinds of buildings.

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Specially compounded to serve as a flooring that guarantees perfect electrical insulation. It is also waterproof and seamless. Extensively used by public utilities and in electrical departments of schools and colleges.

Dance Floor

Applied over any cement or wood surface, resulting in a smooth floor easily waxed to the desired slipperiness. Available in several colors. Unaffected by rain, snow, heat or cold. Used as outdoor dance floors in many leading amusement parks throughout the country.

Outdoor Floor

Composed of imperishable minerals that successfully defy frost, heat, rain and snow. Ideal for roof gardens, porches, roofs used for recreation, etc.

Moulstone

A permanent fire-proof floor for stores, lobbies, reception-rooms, toilets and offices. An ideal flooring for making new floors over old ones. In variety of colors, permitting border, panel and inlay design. Can be scored to resemble tile. Applied over cement, wood sub-floors or old wood floors.

Moultyle

A resilient tile floor of unusually durable texture. Green, red and brown tiles afford almost any combination desired.

THOS. MOULDING BRICK COMPANY

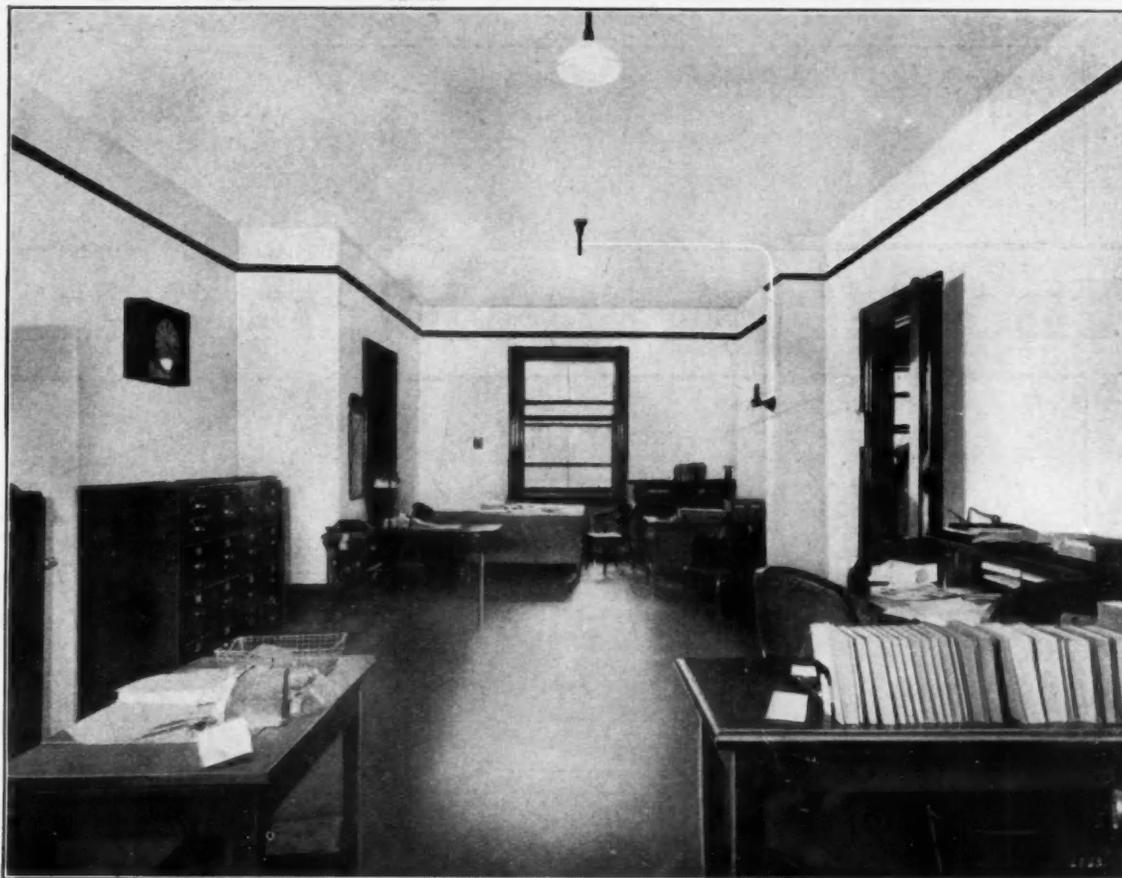
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Chicago, Illinois

Grand Central Terminal Bldg.
New York, N. Y.

Moulding's **T·M·B** *Flooring*
FLOORING

MADE, LAID AND GUARANTEED BY US—60 YEARS OF RESPONSIBILITY

A Blabon floor of Plain Linoleum was chosen for this room in the State Capitol of Minnesota.



Look for this label on the face of all Blabon's Linoleum.

Specify these beautiful wear-resisting floors!

Consider the smooth, sanitary Blabon floor of Plain Linoleum in this room of the State Capitol of Minnesota. Its waxed and polished surface is pleasing to the eye. Its resiliency makes it comfortable to walk upon; it deadens the sound of moving feet and chairs. It is easy to keep clean, and economical to maintain. In fact, this Blabon floor is ideal for such a room in this substantial, imposing building.

Particularly so, because it is cemented down over builders' deadening felt, which makes the seams watertight and practically invisible. Moreover, it is adapted to fireproof construction.

These are reasons architects are specifying Blabon floors for public buildings, skyscrapers, libraries, churches, homes and wherever they want this combination of qualities not found in any other floor, or desire to achieve unusual decorative effects.

Our Advisory Bureau of Interior Decoration will gladly cooperate with you without charge.

We will mail, upon request of architects, our reprint from Sweet's Architectural Catalog, box of quality samples, and our new 1927 Pocket Size Pattern Book.

The George W. Blabon Company, Nicetown, Philadelphia
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Hazel H. Adler, author of books on interior decoration, gives valuable suggestions for harmonizing furniture and draperies with walls and floors, in our 36-page book, "Planning the Color Schemes for Your Home," illustrated in full color. Sent anywhere in the United States upon receipt of 20 cents.

BLABON'S Linoleum



The Blue Bag Means Quality—

Three bags of Blue Bag Hydrated Lime are shown. The largest bag in the foreground is labeled 'GOLD MEDAL FINISH' and 'HYDRATED LIME'. It features a circular logo with a gold medal and the text 'THE WOODVILLE LIME PRODUCTS COMPANY', 'FOR ALL BUILDING PURPOSES', 'QUALITY HIGHEST', and '50 LBS. PLANT AT WOODVILLE OHIO'. Behind it are two other bags: one labeled 'WHITE LILY FINISH' and another labeled 'BLUBAG'. The 'WHITE LILY FINISH' bag also has a circular logo with a lily and similar text. The 'BLUBAG' bag is smaller and partially obscured. The entire advertisement is framed by a decorative border.

Quality from
Stone to Finish

In this age of hustle and bustle—when speed counts—the building trade demands even *more* than quality in building materials.

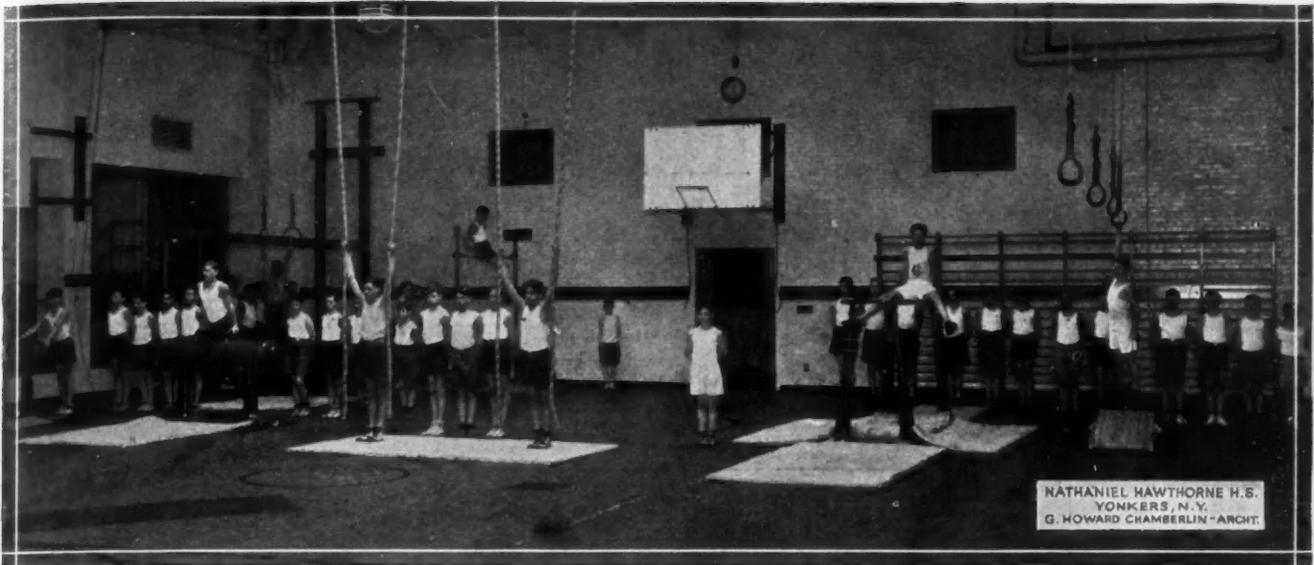
A quick, easy and convenient way of identifying this quality is also wanted. There is no time for wondering, investigating or guessing.

For this reason the adoption of blue bags for our brands of finishing and building hydrated has met with enthusiastic approval.

It is now possible to pick our brands of finish out as easily and as quickly as pointing your finger. The distinctive blue bag positively identifies our brands. No mixups, mistakes or confusion. The blue bag means quality when its filled with Finishing Hydrated Lime.

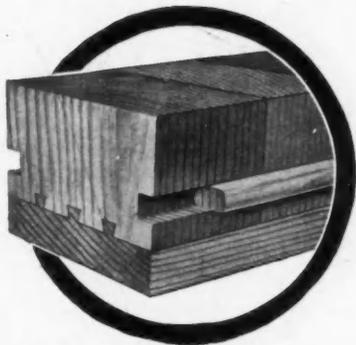
The Woodville Lime Products Co.
Toledo, Ohio

**WHITE ENAMEL ~ GOLD MEDAL
AND WHITE LILY
FINISHING ~ HYDRATED ~ LIME**



The gymnasiums and shops of the Roosevelt and Hawthorne Schools and the gymnasium of the Franklin School, all at Yonkers, N. Y., have been floored with Bloxonend. G. Howard Chamberlin, Architect.

A Wood Flooring that cannot splinter or sliver



Bloxonend comes in 8 ft. lengths with the Southern Pine blocks dovetailed endwise onto baseboards. Laid directly over the old or new concrete or wood floors. Sleepers unnecessary.

A butcher's block cannot splinter—neither can a BLOXONEND floor. In one respect both are identical—the tough end grain of the wood forms the wearing surface.

BLOXONEND is the only wood flooring adaptable to gymnasium use that is splinter and sliver proof. This advantage alone has gained for BLOXONEND the approval of many architects and physical directors who have observed the seriousness of those injuries to players caused by splintered-slivered floors.

BLOXONEND is a resilient floor. It is bright, clean and attractive, affords a firm, safe foothold, stays smooth and is far more durable than the ordinary types of wood flooring. Prominent architects specify it extensively for gymnasiums, shops and school corridors.

Write nearest office for Architectural Specifications

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KANSAS CITY, MISSOURI

Branch Offices in Principal Cities—See Sweet's

BLOXONEND
Lays Smooth **FLOORING** *Stays Smooth*



A well known architect has this to say about Coldak Electric Refrigeration . . .

GEORGE NELSON JACOBS
ARCHITECT & ENGINEER
9 BOSWORTH STREET, BOSTON, MASS.

May 24, 1926.

Coldak Corp. of N. E.
889 Boylston Street,
Boston, Mass.

Gentlemen:

After investigating the various refrigerating systems for apartment houses, I decided on Coldak as being the most satisfactory for Lowell Manor. Many of the suites are occupied by the students and these suites are vacant during the summer.

With Coldak, it is possible to shut off the unused refrigerators and shift the load to one machine, cutting down materially on the operating expense.

No attention is required other than oiling the motor once in three or four months. The system has been in operation for several months and it has proven most satisfactory.

I cannot speak too highly of Coldak and I should be glad to answer any inquiry.

Yours truly,
George Nelson Jacobs

Architect for Lowell Manor
Prescott Street,
Cambridge, Mass.



“Shut off the unoccupied apartments ... shift the load to one machine”

Coldak is the only system of Electric Refrigeration that has this advantage

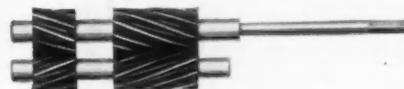
IN the Lowell Manor there are 80 apartments. All of them get perfect electric refrigeration from 4 Coldak machines, installed as a central plant in the basement. The machines are connected in multiple. When the load permits, three machines can be shut off and *one* machine does all the work. This is made possible by the Coldak “open circulating” system. It is an exclusive Coldak feature. No other system of electric refrigeration has it!

Coldak supplies all the apartments with the same automatic electric refrigeration they would get with a separate machine in each apartment. But it has this great advantage—Coldak does the job from *one central plant*. There is no machinery, no servicing in the living quarters. One Coldak machine supplies as many as 25 apartments. Fifty apartments need only two machines, 75 apartments 3 machines—and thus the system can be expanded indefinitely.

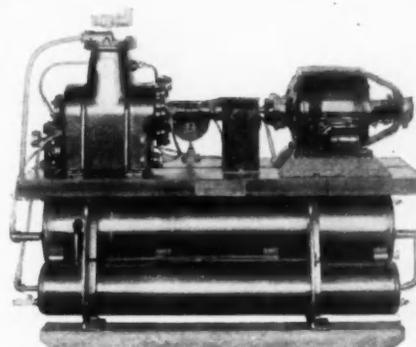
Coldak is not a brine circulating system. It requires no large, insulated pipe lines. The Coldak feeder pipes are only $\frac{3}{8}$ inch! They require no insulation whatever. And Coldak needs no watchman or engineer to operate it. Consider the saving!

Coldak simplifies the whole problem of apartment house refrigeration. It does the work of the most complicated central plant system, yet it has all the operating advantages of a small household machine—and needs no more attention. No other system is like it!

More complete information about Coldak has been put in booklet form. Mail the coupon and get a copy for your files.



Coldak is the most rugged electric refrigerating machine made. Simple too! It has no belts, pulleys, pistons, crankshafts, reduction gears or reciprocating parts—just two sets of rotary gears do the job.



COLDAK CORPORATION

Eight West Fortieth Street, New York City

Coldak under J. G. White Management

The Coldak Corporation is managed by the J. G. White Management Corporation, whose services were secured after their own investigation had proved the superiority of Coldak.

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A.F. 12-26

COLDAK CORPORATION,
8 West 40th Street, New York City

Please send me additional information about the Coldak System of electric refrigeration for apartment houses.

Name.....

Street.....

City..... State.....

CAEN STONE CEMENT INTERIORS

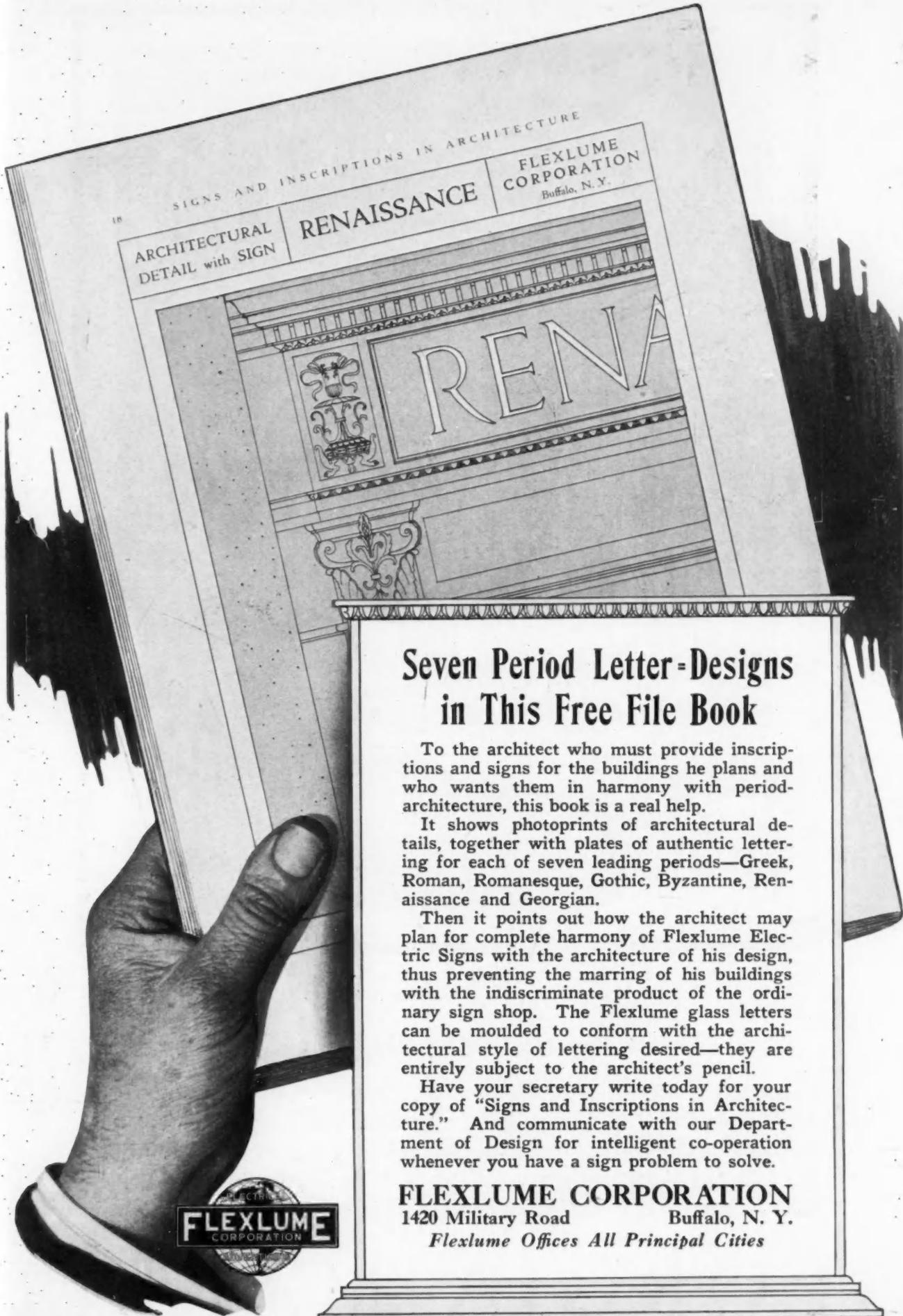
For the new building or the
remodeling job

DIGNITY and beauty are realized by the use of Caen Stone Cement. You need never fear a "dull brown plastery" appearance. Caen Stone Interiors have all the charm of the natural Imported Caen Stone.

Caen Stone Cement is applied to wall surfaces like plaster; plain moldings are run with templates; details are cast in glue molds.

Send for AIA Specification Book

PALMER LIME & CEMENT COMPANY
103 Park Avenue
NEW YORK, N. Y.



Seven Period Letter-Designs in This Free File Book

To the architect who must provide inscriptions and signs for the buildings he plans and who wants them in harmony with period-architecture, this book is a real help.

It shows photoprints of architectural details, together with plates of authentic lettering for each of seven leading periods—Greek, Roman, Romanesque, Gothic, Byzantine, Renaissance and Georgian.

Then it points out how the architect may plan for complete harmony of Flexlume Electric Signs with the architecture of his design, thus preventing the marring of his buildings with the indiscriminate product of the ordinary sign shop. The Flexlume glass letters can be moulded to conform with the architectural style of lettering desired—they are entirely subject to the architect's pencil.

Have your secretary write today for your copy of "Signs and Inscriptions in Architecture." And communicate with our Department of Design for intelligent co-operation whenever you have a sign problem to solve.

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Flexlume Offices All Principal Cities





GUARDIAN SAVINGS AND TRUST COMPANY, CLEVELAND, OHIO
WALKER & WEEKS, ARCHITECTS

LARGE SCALE INTERIORS

The warm glow which greets one who enters this bank is due to the use of texture finished Pink Georgia Marble. This is a good example of the pleasing results obtained with Georgia Marble for spacious interiors. The Georgia Marble Company, Tate, Georgia; New York, 1328 Broadway; Atlanta, 511 Bona Allen Bldg.; Chicago, 456 Monadnock Bldg.

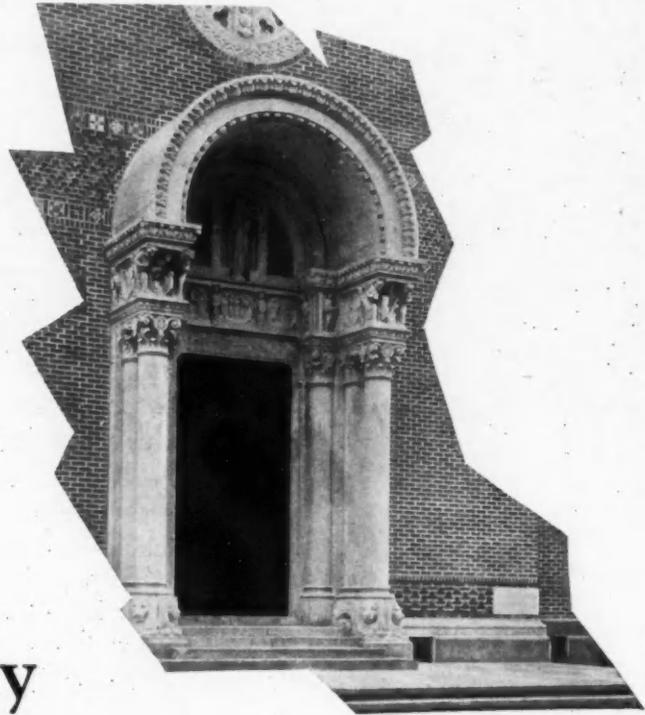
GEORGIA MARBLE

Just another weary, wasted footstep—a waste of time and energy! Only one of thousands left by tired women trudging needlessly about in offices and schools. Needless walking, because Western Electric Inter-Phones would halt that waste of time and footsteps. Prove it for yourself. Look into the places where the architect's wise advice on Inter-Phones has been adopted—you'll see people talking to each other over the Inter-Phone—you'll see no wasted footsteps. There are lots of places like that; lots of places where people appreciate the wisdom of the architect who suggested the Inter-Phones that conserve their time. And there are many architects who value highly the very real assistance given them by the Inter-Phone specialist from Graybar, distributor of Western Electric Inter-Phones.

We
wasted footsteps are
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It would be next to blasphemy to allow staining and discoloration to mar the beauty of this stone doorway. Clear DRIWAL was used—and will preserve the original beauty, color and texture of the stone work for years.



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Clear DRIWAL eliminates the absorption of water—and without the aid of moisture,

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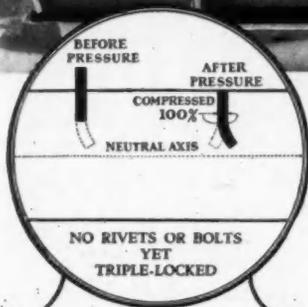
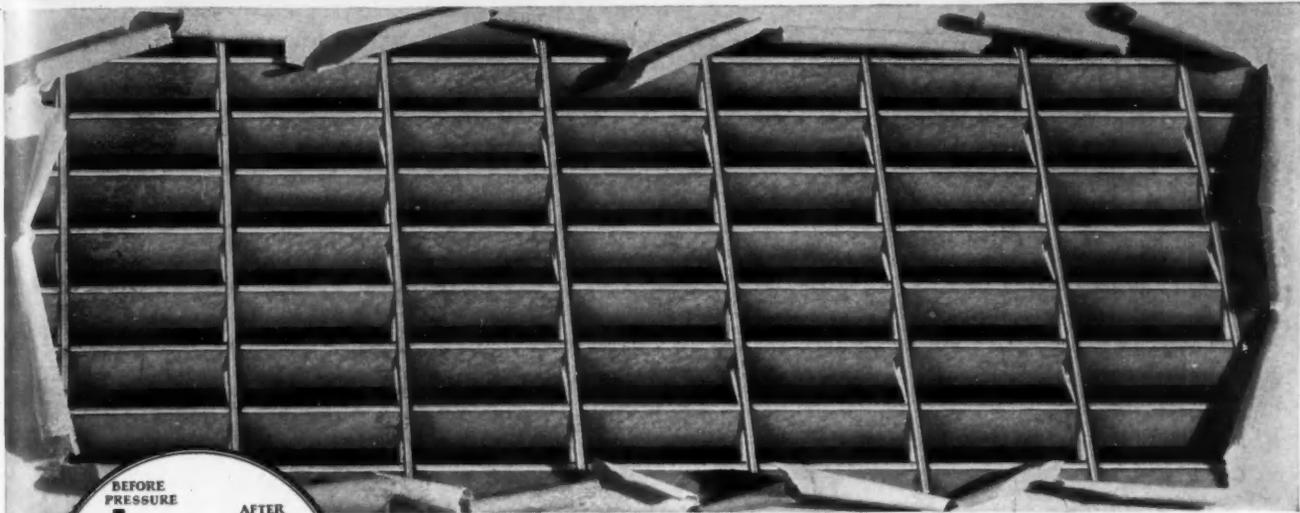
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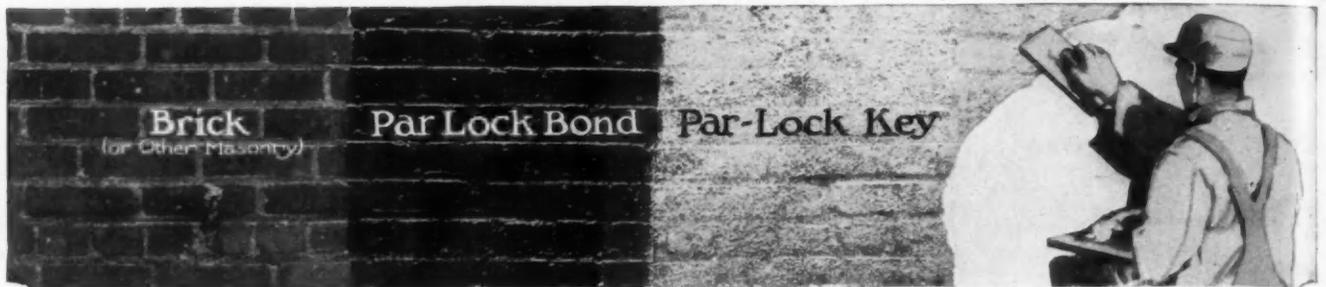
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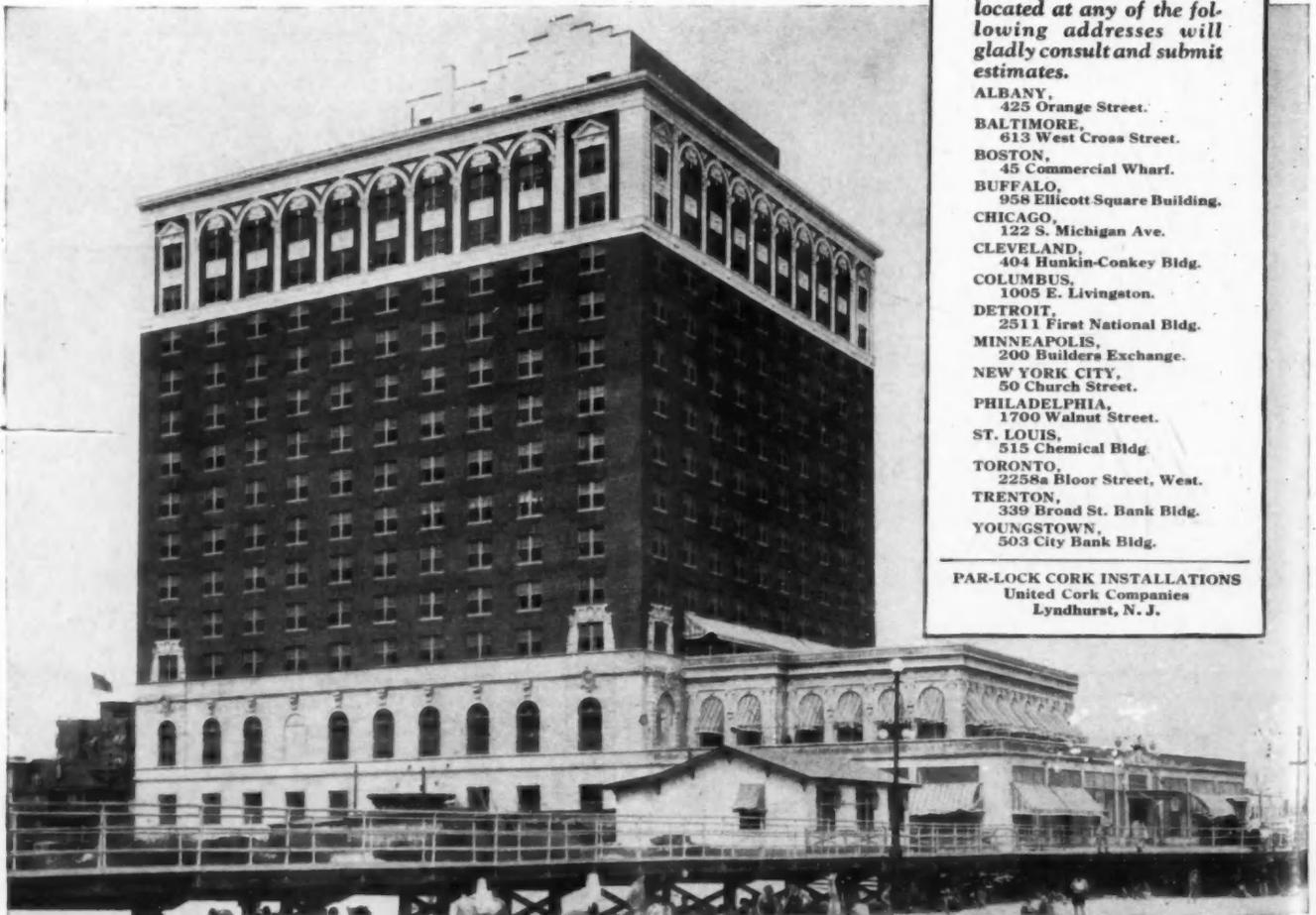
*The President Hotel, Atlantic City, N. J., Louis I. Brooks of New York, Architect.
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Par-Lock applied by The Par-Lock Appliers of New Jersey.*

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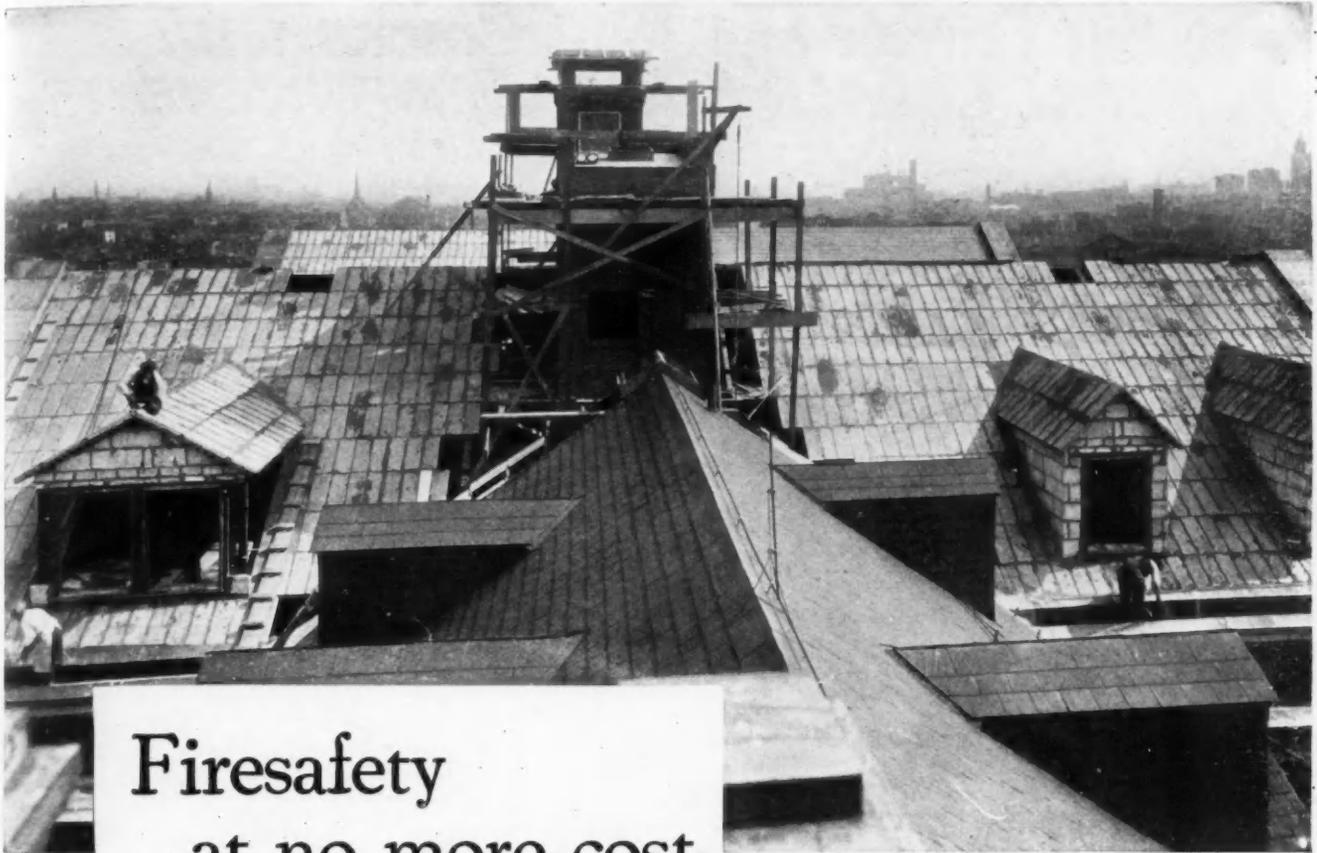
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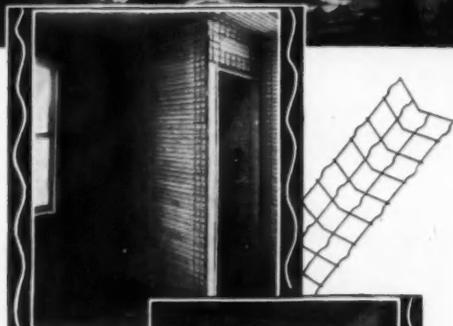
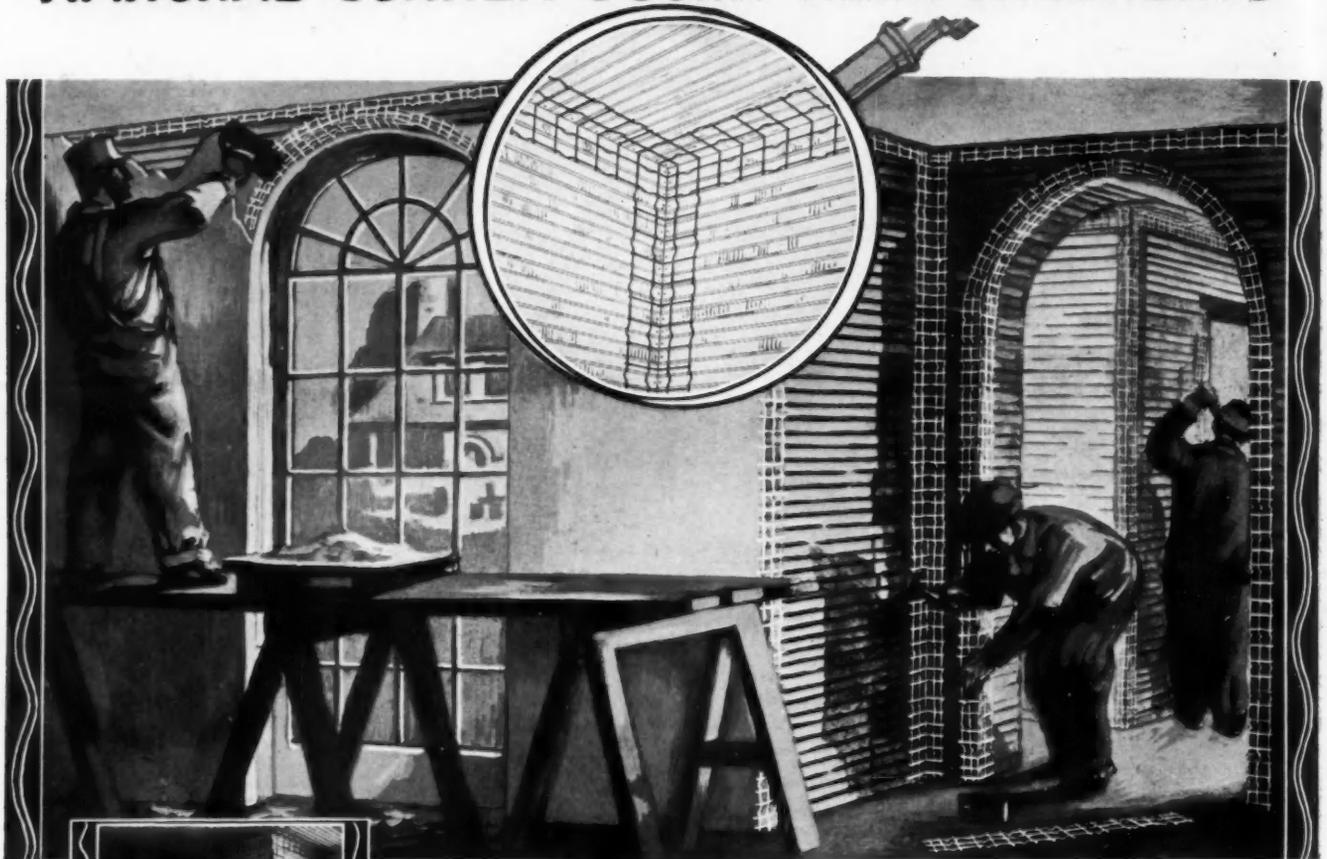
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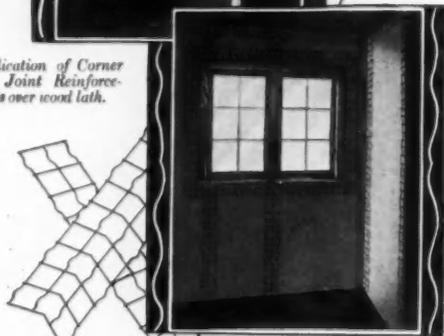
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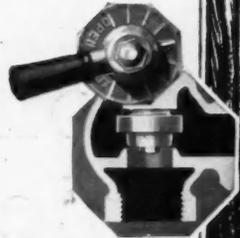
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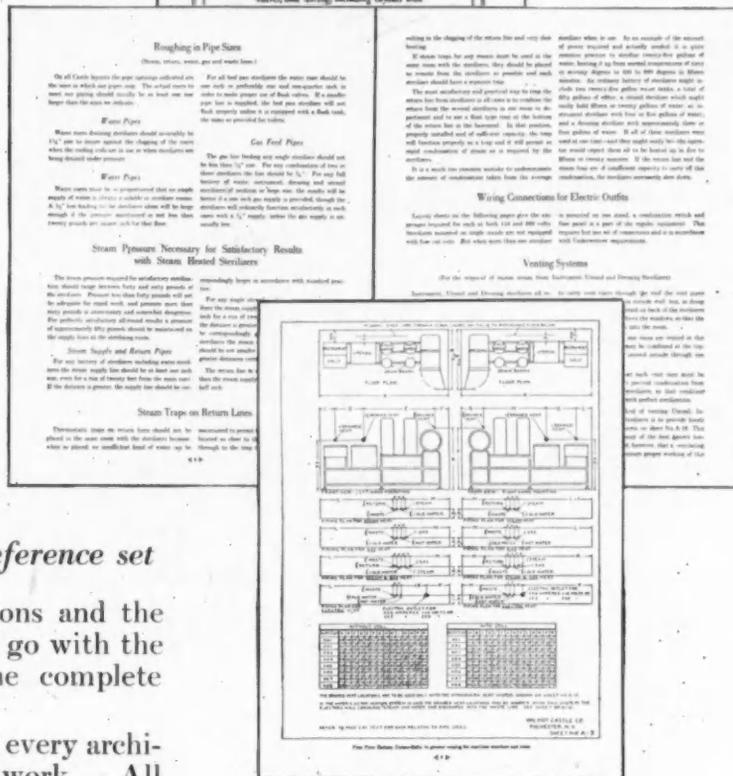
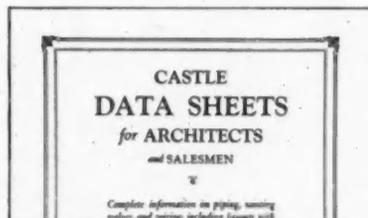
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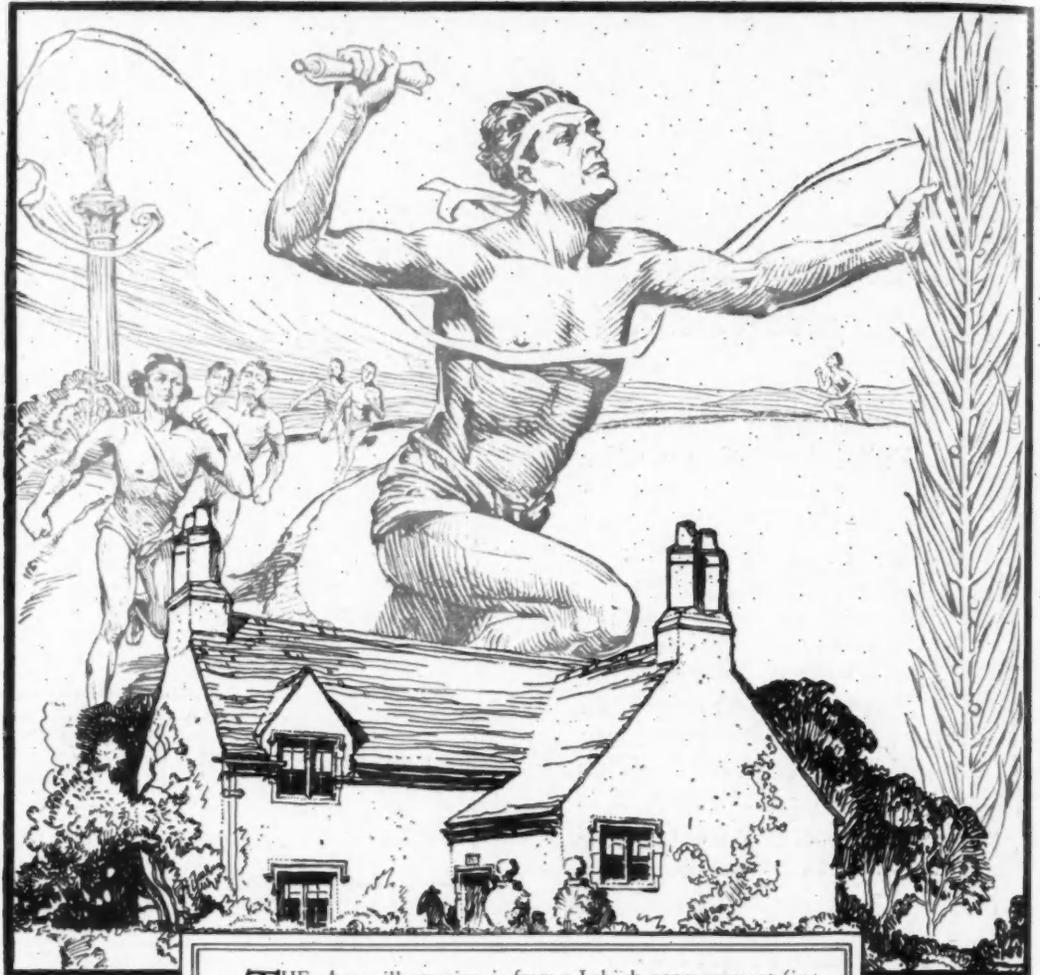
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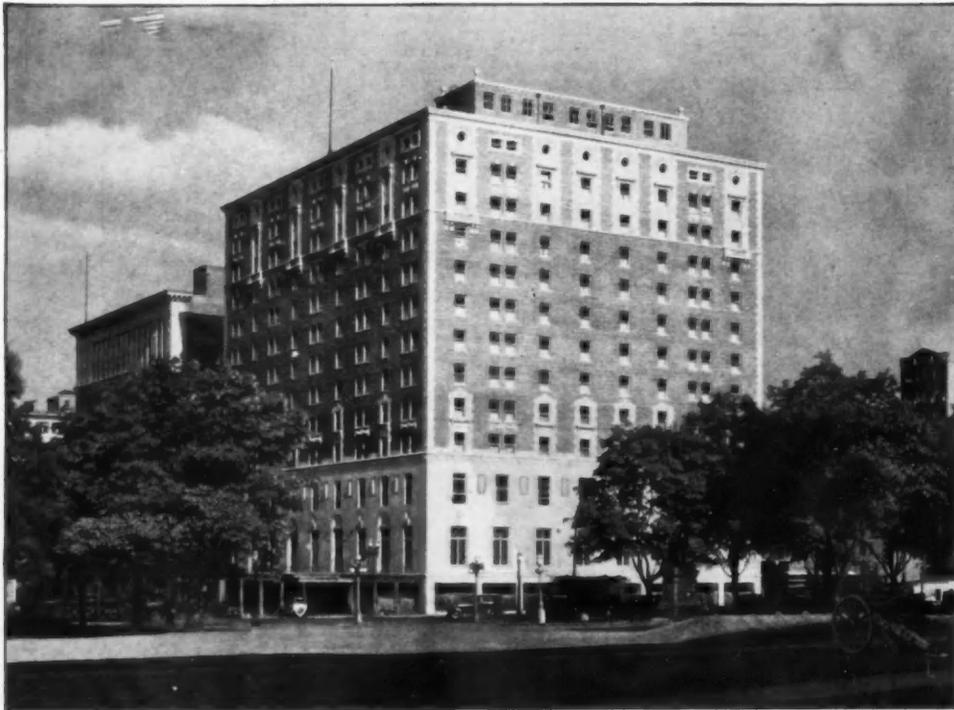
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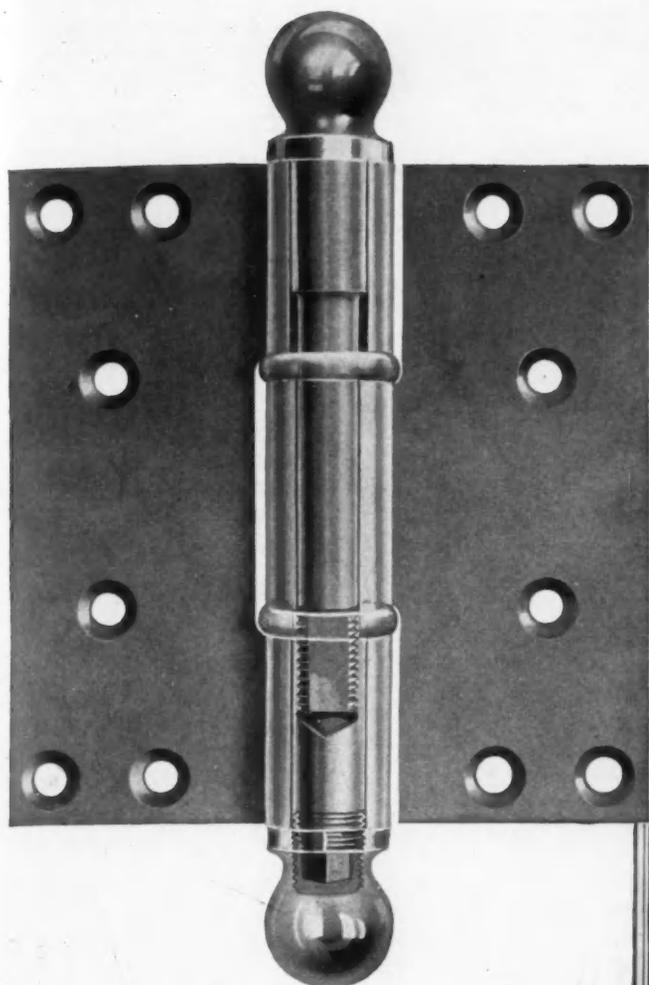
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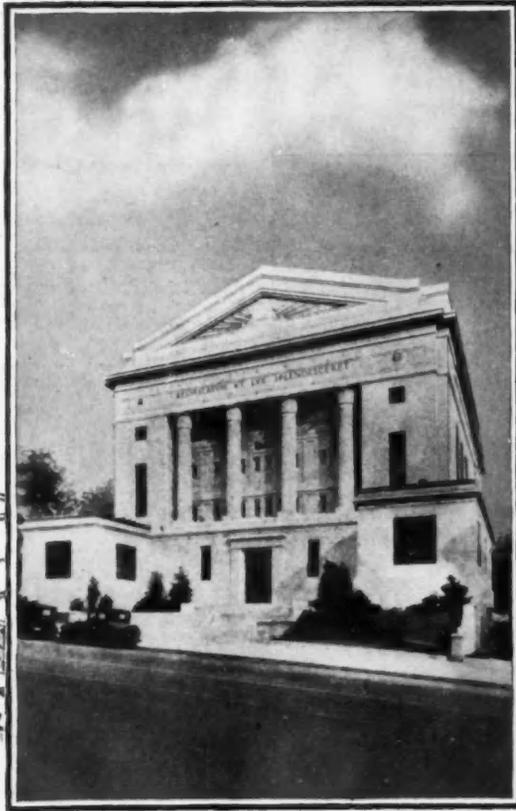
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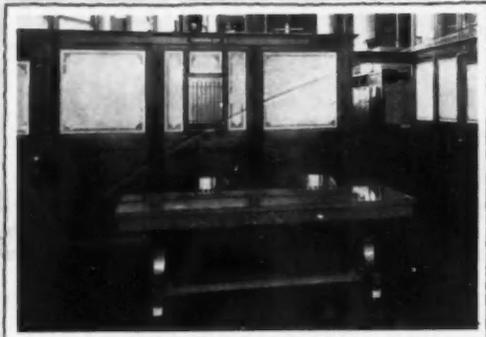
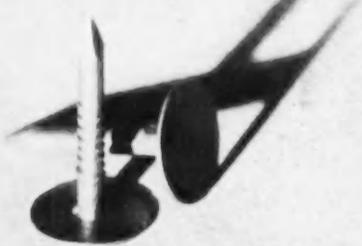
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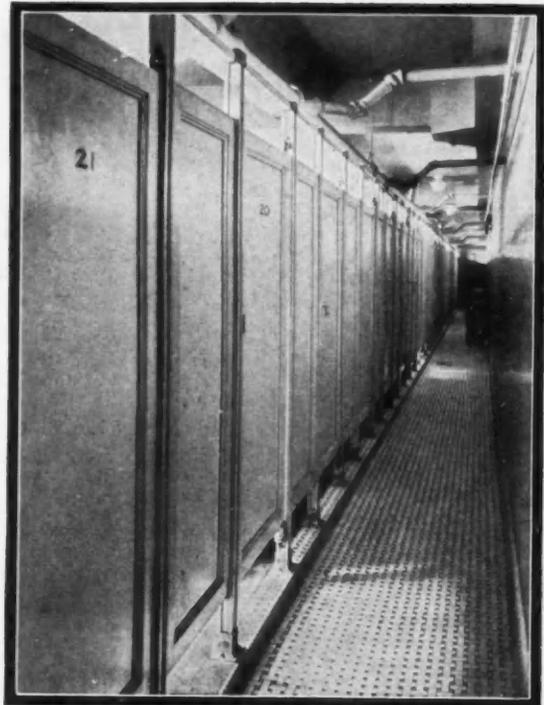
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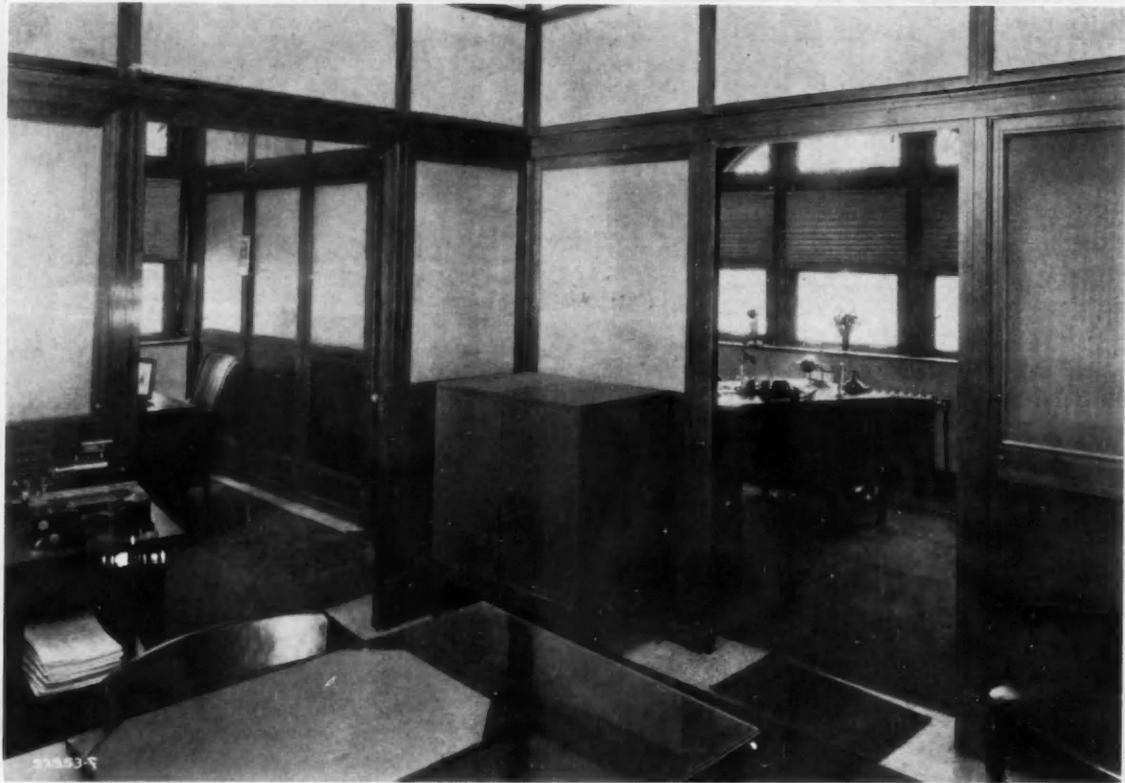
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BOOK DEPARTMENT

Architecture in England Under the Later Georges

A Review by VICTOR C. GIFFORD

IN this volume there is given a general view of the architecture of the reign of George III, with some account of the various men who produced it, from architects of prominence, such as Robert and James Adam and Lord Burlington, to the work of little known and merely provincial men, showing that so long as a single style was dominant, its forms and proportions could be established and used with success by men of moderate abilities and narrow training.

The English in 1760 were tiring of Palladian pedants and Rococo designers. Many architects, though they may have desired to express themselves in a new or individual manner, clung somewhat closely to established form. Chief among these were James Paine and Sir Robert Taylor, who had neither the natural originality nor the acquired knowledge to stamp them as originators of a style. Robert Adam left England for Rome in 1754, and made full use of his time and abilities, and in his endeavor to get away from mere "temple" architecture he visited Spalatro, where Diocletian's palace in great measure survived. Adam absorbed all that was earliest and best in the architecture and decoration of the Italian Renaissance before the beginning of its Baroque phase, and establishing himself in London in 1758, he rapidly made his reputation as the leading light of the new school. From the time of his return from Italy may be dated a very remarkable improvement in building construction and furniture design in London and throughout England. A representative but not exhaustive list of the men who produced the domestic architecture of the day includes the brothers Adam, Robert and James; William Chambers, who was appointed to teach architecture to the Prince of Wales, afterward George III, and who in 1759 published his "Treatise on Civil Architecture,"—George III allowed him to use a knight's title, and he became known as Sir William Chambers; James Gandon, a pupil of Sir William Chambers, who published the fourth and fifth "Vitruvius Britannicus"; Henry Holland, who held the appointment of architect to His Royal Highness until his death, and who remodeled Carlton House when it was assigned as a residence to the Prince of Wales when he came of age in 1783; and James Stuart, known as "Athenian Stuart," through his "Antiquities of Athens," published in 1762.

There was also James Wyatt, whose exhibition of his designs for the Pantheon, a building which in 1771, although still incomplete, amazed Horace Walpole, and which raised general enthusiasm when it was opened in 1772. In a few years he had outdistanced even Adam then preëminent in the extent of his country practice.

The volume is superbly illustrated and sets forth the excellence of the Georgian architecture of that day. Included among the illustrations are those of Ashridge Park, built on the site of an old home of his ancestors by the seventh Earl of Bridgewater from designs by James Wyatt. Bayfordbury, south of Hertford town, was built in early Georgian style by Sir William Baker in 1759-1762, but his son enlarged and remodeled it in the neo-



Library, Kyre Park, Worcestershire
An illustration from "English Homes, Later Georgian Period"

Greek manner in 1809-1812. Tabley House, near Knutsford in Cheshire, was built for the Leicester family in 1761 by Carr of York, who also carried out later additions. Mention is made of Jacob Tonson of Sedbury, a well known bookseller, who ran the famous "Kit Cat Club" and owned portraits of its members. The chief treasure and delight of his home, Bayfordbury, consists, in the opinion of most people, not of its architecture, its furniture, or its trees, excellent as these are, but of its paintings, for among them there still remains that remarkable and historic set of portraits of the members of the Club. We are told by Thomas Hearne, in an entry he made in his diary in 1705, that the "Kit Cat Club came to be so called from one Christopher Cathing (a pudding pyeman) with whose puddings and conversation the first founders of the society were extremely well pleased." A letter written by Vanbrugh in 1763 refers to his building a room in his house, "Barn Elms," now the Ranelagh Club, wherein to entertain the Kit Cat Club and to hang the portraits of its members painted expressly for him by Sir Godfrey Kneller. In this section of the volume there are reproduced the portraits of Sir John Vanbrugh, William Congreve, John Dryden, Joseph Addison, Sir Richard Steele, Jacob Tonson, Senior, and Sir Robert Walpole, the Duke of Grafton and Lord Mohun, and other lights in the architectural and literary worlds:

ENGLISH HOMES; Period VI—Volume 1; Later Georgian, 1760-1820. By H. Avray Tipping. 402 pp., 10½ x 15 ins. Price \$25. Charles Scribner's Sons, New York.

Any book reviewed may be obtained at published price from THE ARCHITECTURAL FORUM

Spanish Details

A Highly Practical Work on
the Spanish Renaissance

By William Lawrence Bottomley



IN this volume there is presented a collection of illustrations and measured drawings of carefully selected details of Spanish Renaissance architecture. The work of a New York architect who has been notably successful in attractive use of Spanish motifs in his own practice, the volume presents not so much work of a striking and magnificent character as what is comparatively moderate in scale and therefore adaptable for present-day use in America.

The volume is replete with illustrations of well chosen, simple Spanish facades, doorways, windows, balconies, balustrades, exterior stairways and the grilles of wrought iron or carved and turned wood which are used at gates, windows and doorways. Interior details include the arcades of patios, ceilings, chimneypieces, floors, doors, shutters, wall fountains, etc., and since in most instances the illustrations are accompanied by measured drawings the reproduction of these details is not difficult.

Of all the recent works on the Spanish Renaissance this is perhaps the most practical for actual use.

Frontispiece in color; 104 plates and measured drawings, 11 x 13 $\frac{3}{4}$ ins. In portfolio form, \$12.50; if bound, \$15.

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MEXICAN ARCHITECTURE, DOMESTIC, CIVIL AND RELIGIOUS. Text and Illustrations from Photographs by Atlee B. Ayres. 150 Plates, 12 $\frac{1}{2}$ x 16 ins. Price \$25. William Helburn, Inc., New York.

WRITERS on subjects connected with architecture have many times emphasized the fact that the architecture of probably no other country is as little known to Americans as that of Mexico, a land separated from our own not by vast expanses of ocean, but by the narrow Rio Grande. Various American architects and writers have explored the countries of Europe,—particularly during late years have they explored and studied Spain,—producing works of incalculable value to architectural designers as well as to writers and historians; but for one reason or another the really noble and splendid architecture of Mexico, particularly of religious buildings almost at our very doors, remains relatively unknown.

The architecture of any country must necessarily be studied in the light of the country's political history. The American colonies, outposts for the most part of English civilization, produced upon these Atlantic shores architecture modeled as closely as was possible upon that then current in England. Mexico developed something patterned after what prevailed in Spain, for Mexico was for ages a possession of Spain, and the wealth which she poured into the coffers of the mother country supplied in large part the means which made possible much of Spain's architectural development. With Mexico's exploitation almost completely in the hands of Spanish generals, governors, soldiers and ecclesiastics, to say nothing of architects and engineers, and with almost limitless resources closely at hand, there came into being marvelous works in the way of engineering, superb cathedrals and churches, and well ordered cities and towns modeled upon the Spanish pattern, and all this when the American colonies were barely emerged from their early primitive stages; and notwithstanding war, domestic upheavals, and the chronic state of revolution which has been Mexico's portion, these achievements, and many of a later day, remain for the embellishment of American architecture.

The value of Mr. Ayres' work to architectural designers will be great. He has been rarely successful in obtaining photographs of buildings which while not of the first magnitude as to size or cost are those which are most useful as models here in America. This usefulness applies particularly to illustrations of domestic structures and religious buildings,—perhaps especially to those of religious buildings, for of late there seems to have come into vogue in America in planning churches a certain appreciation of what one might call "structural integrity"—building which is real and genuine rather than of the "office building" type, and many of these fine old Mexican churches, afford examples of this integrity and offer examples of structures which may be developed upon scales either modest or lavish. Like almost all books dealing with Mexican or Spanish architecture, this volume devotes considerable space to illustrating interiors made beautiful by work in the form of metal forging, wood carving and the making of pottery and tiles, forms of art which sometimes seem to be almost as full of appeal as architecture itself. Possibly if it were not so feudal and its history so dramatic, the impression of vast strength gained from the architecture of Mexico, would not be so impressive. Mexico's inborn pride and her isolation gave whatever she did a distinct national flavor.

BUILDING FOR RELIGIOUS EDUCATION. By Henry Edward Tralle and George Earnest Merrill. 186 pp., 5¼ x 8 ins. Price \$2. The Century Company, New York.

AS the art among all the arts which sustains the closest relations with life, architecture is of course influenced by all the changes which time brings to human existence. In no sphere of architecture is this being more strikingly illustrated than in that which has to do with structures planned and built to serve purposes directly or indirectly connected with religion. Over a great part of the religious world there have come, during the last 50 years, changes in point of view which seem to have been of the first magnitude. Growing indifference to dogmatic teaching has brought into new prominence the importance of what is today known as "social service," practically unknown a half-century ago, but now frequently depended upon to hold the interest of people to whom doctrinal teaching or belief has ceased to exert any very strong appeal. This change has brought into wide favor buildings devoted to, in addition to Sunday School purposes, club or social uses, Boy Scout and Camp Fire organizations, gymnasiums, swimming pools, bowling alleys, kitchens and many other adjuncts which are necessary or at least very helpful where much is made of social service; and many of these buildings, since they are often the work of experienced architects, are models of everything which such structures should be.

It is, of course, extremely helpful to have presented in book form an account of the progress thus far made in work of this character, particularly by men as widely experienced as Dr. Tralle, a specialist in religious education and author of "Psychology of Leadership," "Dynamics of Teaching" and several other works, and Mr. Merrill, who in addition to being a member of the American Institute of Architects, is one of the authors of "Planning Church Buildings." In the volume there are described and illustrated by plans and views of interiors the most advanced and highly specialized of the numerous buildings devoted to this work. The volume is obviously intended to be an aid to clergymen and building committees entrusted with the carrying out of plans and erection of buildings for these forms of effort, and the thoroughness with which the authors cover every detail of the subject should be an immense help toward their achieving success in an admittedly difficult field.

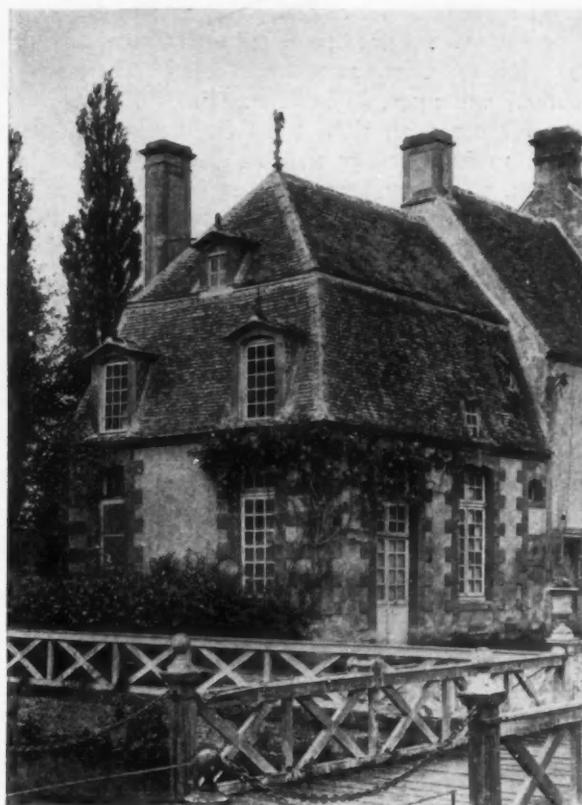
SOME LESSER KNOWN ARCHITECTURE OF LONDON. By James Burford and J. D. M. Harvey. Text and 70 pp. of illustrations. 7¼x9¼ ins. Price \$6. William Helburn, Inc., New York.

PROBABLY because in America relics of an interesting and worthy architectural past are so few (and rapidly becoming fewer), the student is likely to look to other countries for that inspiration in the way of domestic architecture which is so largely denied to him at home,—to England chiefly, for there the spirit of progress moves at a less rapid gait than in America, and it deals rather more gently with the obstacles in the form of old buildings which interfere with its line of march. Not that countless treasures in the way of English architecture are not either gone or going; the fate of a large number of London's old churches seems to be even now trembling in the balance, famous Regent Street has disappeared, and there are frequently heard disturbing rumors regarding the impending fate of more treasures, rumors which warn the student to delay no more than is neces-

FRENCH PROVINCIAL ARCHITECTURE

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and HENRY OOTHOUT MILLIKEN



SOME of the most graceful and distinguished architecture in the world exists in French provincial towns, small villages and in tiny hamlets which cluster about the great chateaux—small manors, half-timber cottages, shops and buildings of other kinds. Much of this wealth of design is applicable to American use—the exteriors largely for suburban or country houses, and the interiors for residences or apartments. The authors, with unerring architectural taste and judgment, have selected just those details which possess proportions and suitability for present-day use. The volume contains illustrations, plans and measured drawings worth considerably more than the cost of the work.

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sary his sojourn in England if he would find that inspiration and enjoyment of architecture of which he goes in quest. Very little of architectural interest may remain.

But if interesting old buildings must disappear, let us at least have some record of their glories, lest their charm be entirely lost to the world, and this volume preserves in the form of illustrations many minor details of architecture in and around London which, while not in imminent peril of destruction, are likely eventually to go the way of much which has already vanished. There are countless localities in London or in the spread-out suburbs which lie on every side,—Chelsea, Southwark, Chiswick, Highgate, Stepney, Blackheath and many others,—where the charm of earlier days still lingers, often in stages of more or less picturesque decay, and the authors of this helpful volume have gathered from these and from other forgotten parts of London illustrations of certain old buildings, brick town houses in rows or in groups for the most part, their fine facades, porticos, hoods, entrance doorways and the ironwork in the form of railings, fences or gates which so frequently goes with them; or else of equally fine old structures which stand detached,—manor houses, perhaps, or the homes of prosperous merchants before they descended in the social scale to the status of almshouses,—but even as almshouses still boasting their pedimented gables, rich details of door and window surrounds, quoins of stone or of brick, and often their fine brickwork, laid in many excellent bonds and with keystones or string courses of brick or stone disposed in ways which often add high architectural dignity to an exterior which would otherwise be commonplace. Several of the most valuable plates show

piers of brick or of brick and stone placed as parts of gateways or as supports for the iron fences which pre-Victorian architects knew so well how to use, while other plates deal with the "memorial tombs" which are seen in so many of London's old and half-forgotten graveyards, tombs which make excellent use of classical details and funerary urns, motifs which are much used today.

BUILDING MECHANICS. By W. G. Sheppard. 264 pp., 5½ x 8¼ ins. Price \$4. Oxford University Press, New York.

THE relations between architecture and engineering, which are so close and intimate that it is difficult to designate the point at which one ends and the other begins, lend to any department or division of the subject of engineering an interest to architects who might be supposed to be concerned chiefly in design. This work by a well known English structural engineer is an attempt to fill one gap in what might be called the literature of engineering. There are several treatises on the theory of structure, but they are as a rule so written that a complete knowledge of higher mathematics is demanded of those who would profit by them. The subject by its very nature is one which would hardly engage the attention of the inexperienced, and this volume has been prepared with the needs of students in technical schools chiefly in view. As engineering involves a number of problems of different sorts, to help the student the supplementary matter at the end of the book gives a complete table of the dimensions and properties of British standard steel joists. The fact that it is based on English rather than American engineering practice does not impair its value to students of the subject but increases it by giving a wider view and many constructive hints.

PROVINCIAL HOUSES IN SPAIN

By Arthur Byne & Mildred Stapley

ARCHITECTS value Spanish types of domestic architecture because of their simplicity of design and plan and also because they are easily developed in materials inexpensive and easily had. Spain offers a choice of several kinds of residence architecture, types sufficiently different from one another to afford considerable range of selection, yet all possessing the same strength and virility, the excellent lines, the same graceful but unaffected grouping, and the discriminating use of detail which renders distinguished so many Spanish domestic buildings.

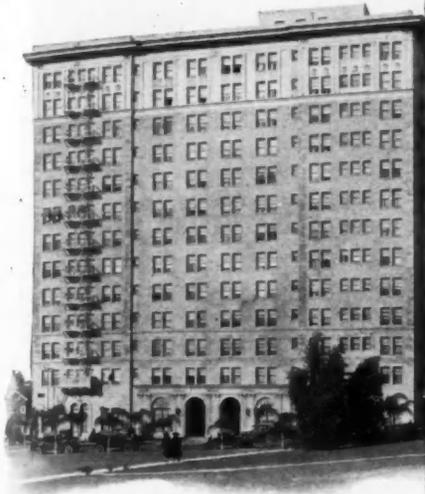
Houses in various parts of the Spanish peninsula, particularly the buildings of medium size in rural districts or provincial towns, offer excellent precedent for use in different parts of America where climate conditions are about what prevail in the provinces of Spain.



IN this volume two well known writers on Spanish architecture and decoration review the various forms which are given to the small or medium sized house in Spain. To render the work as helpful as possible to architects, the authors have included many plans and drawings of different kinds, details of such exterior parts of buildings as friezes, cornices, windows, timber overhangs, soffits and balconies, or of such interior parts of the structure as ceilings, fireplaces, doors and stairways. Part of the work deals with the tiles, pottery, ironwork, plaster in relief and the other forms of craftsmanship which contribute so much to the excellence of domestic architecture in Spain. It is a work likely to be invaluable to the designer.

The book contains text and 190 plates 12½x16 inches, and is bound in cloth. Price \$25, postpaid.

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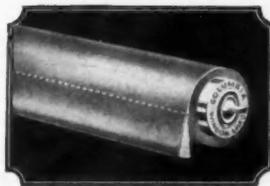
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PARKER MORSE HOOPER, A.I.A., Editor

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TO the recent necrology of American architecture, a passage of necrology already impressive by reason of its length, more names must be added,—the names of Charles I. Berg, Frank W. Ferguson, Andrew C. McKenzie, George W. Maher, and James Hollis Wells.

CHARLES I. BERG

BORN in Philadelphia in 1856, Mr. Berg received the greater part of his architectural training at the Ecole des Beaux Arts, and during many years he was prominently identified with the Society of Beaux Arts Architects as well as with the Architectural League of New York and with the American Institute of Architects, of which he was a Fellow and for three consecutive terms Secretary of its New York Chapter. Mr. Berg was also a member of the Players' Club, the National Arts Club, and of various other organizations whose aim is to promote the development of architecture and the other fine arts. His death occurred on October 13, 1926.

FRANK W. FERGUSON

IN 1889 Mr. Ferguson became identified as a construction engineer with the Boston firm of Cram & Wentworth, to be admitted to partnership when the firm was reorganized later as Cram, Wentworth & Goodhue, and still later as Cram, Goodhue & Ferguson. During some 35 years Mr. Ferguson was "the solid, enduring, and ever-reliable foundation" on which the work of his organization was established and developed. "Self-effacing and modest to a degree, he never came prominently before the general public, but through the fair weather and foul of the formative years of the firm he was constantly present in all the material affairs of the office, and was the directing head of all its building operations. Possessed of unflinching patience, a serene philosophy and sense of humor, he bridged every difficulty and invariably brought order from threatened chaos.

"It was not his function to contribute to the artistic product of the firm, but æsthetics, after all, are only a part of architecture. For nearly a quarter of a century he saw to the material working out of the dreams and visions of his less practical associates, and therefore he played an equal part in whatever his firm produced." Besides being a member of the Boston Society of Architects, Mr. Ferguson was a Fellow of the American Institute of Architects. He died at his home in Boston October 4, 1926.

ANDREW C. MCKENZIE

BORN in Dunkirk, N. Y., and educated in Buffalo, Mr. McKenzie came to New York in 1884, and became associated with Babb, Cook & Willard. He later was associated with Cyrus L. W. Eidlitz, with whom he became a partner in 1902, at which time

they designed the Times Building in New York. Upon the retirement of Mr. Eidlitz in 1910, the partnership with Stephen F. Voorhees and Paul Gmelin was formed. While he was a member of this firm, McKenzie, Voorhees & Gmelin designed the West Street Building of the New York Telephone Company, the Telephone Buildings in Albany and Buffalo, the Brooklyn Edison Company Building, the Municipal Building of Brooklyn, and many others. Mr. McKenzie was a member of the American Institute of Architects, the Architectural League of New York, the Union League Club, Canadian Club of New York, the Railroad Club, the Briar Hills Country Club, and St. Andrew's Society, and the City Planning and Survey Committee of New York. His death occurred October 10, 1926.

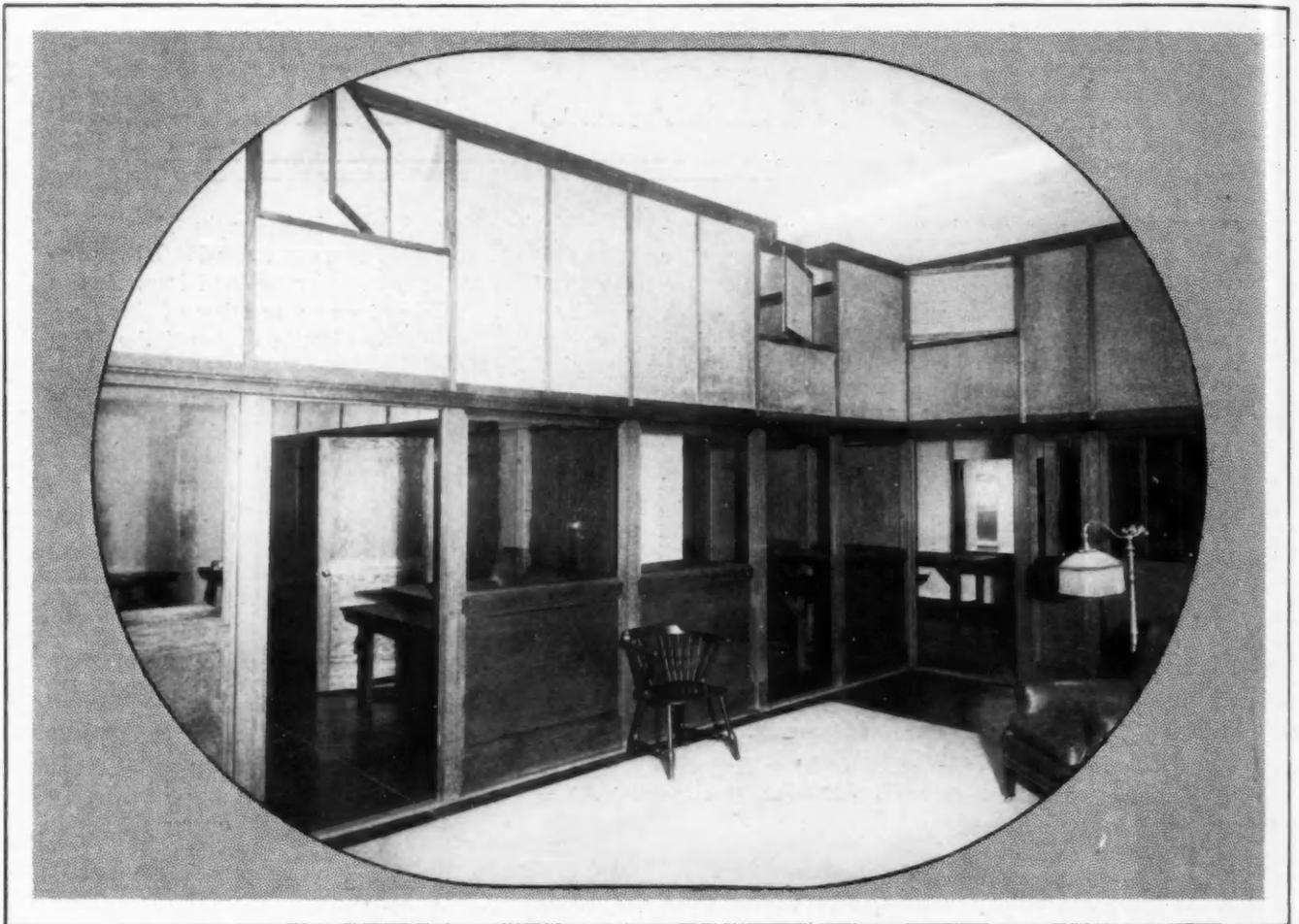
GEORGE W. MAHER

BORN in Michigan on Christmas Day, 1864, Mr. Maher was identified with the architectural development of Chicago and its vicinity during their highly important formative era and during the period of astonishing growth which has been going on since the ending of the World War. As an architect he possessed to an unusual degree that business acumen which must guide any successful architectural practice, along with other somewhat different qualities which pertain to the sphere of æsthetics. Added to these qualities he possessed to an extent wholly unusual that public spirit without the support of which many of the activities connected with present-day architecture would languish if not perish. He was a Fellow of the American Institute of Architects and a past president of the Institute's Chicago chapter.

JAMES HOLLIS WELLS

A FIGURE prominent in more than one sphere of New York life was removed by the death on September 24 of James Hollis Wells, senior member of the firm of Clinton & Russell and for many years in command of the 71st Regiment, N. Y. N. G. Born in England in 1864, he received the degree of Civil Engineer from Lehigh University in 1885 after having received his earlier education in the public schools of South Bethlehem, Pa., and having taught in the grammar schools of the same place. In 1886 he was appointed Inspector of Pavements in New York, and later was connected with a well known contracting firm before he became identified with the construction projects of the Vanderbilt interests, still later becoming associated with Clinton & Russell, the firm of which he finally became the senior member.

Colonel Wells during the 33 years of his service in the National Guard occupied many posts of honor in New York's "Seventh" before going to the 71st, of which he was for so many years colonel, and as a major he saw active service with the flag in Cuba.



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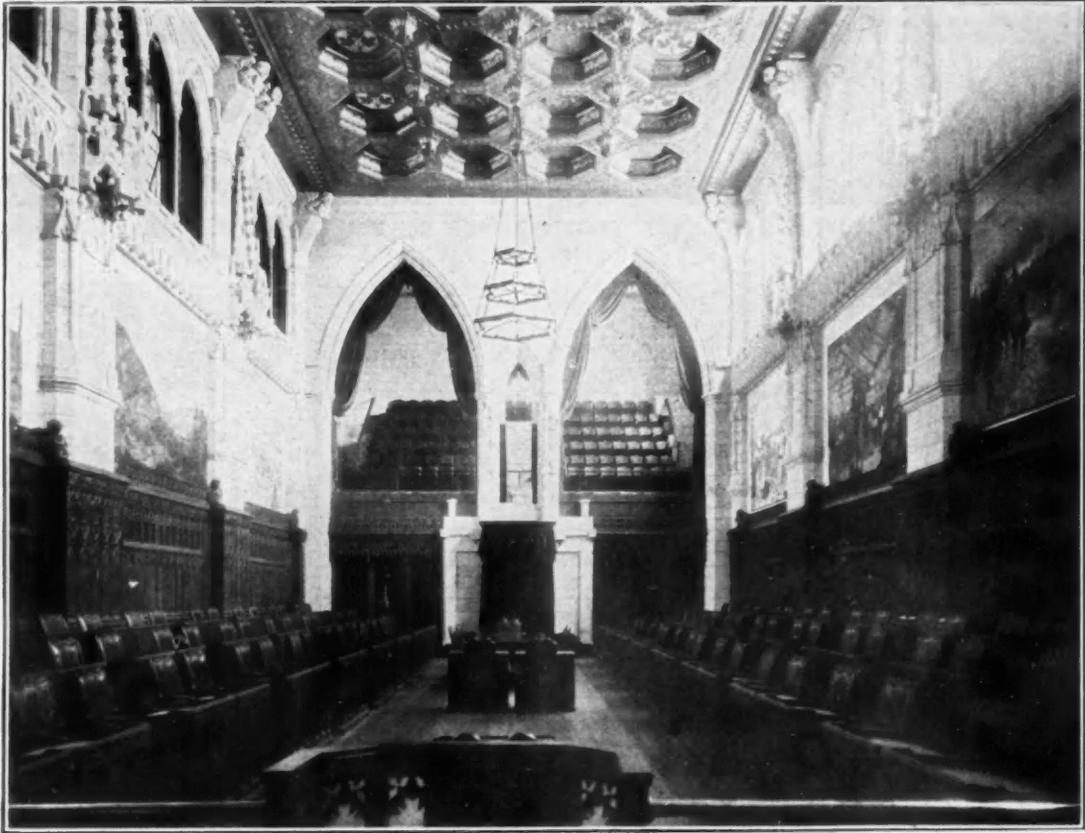
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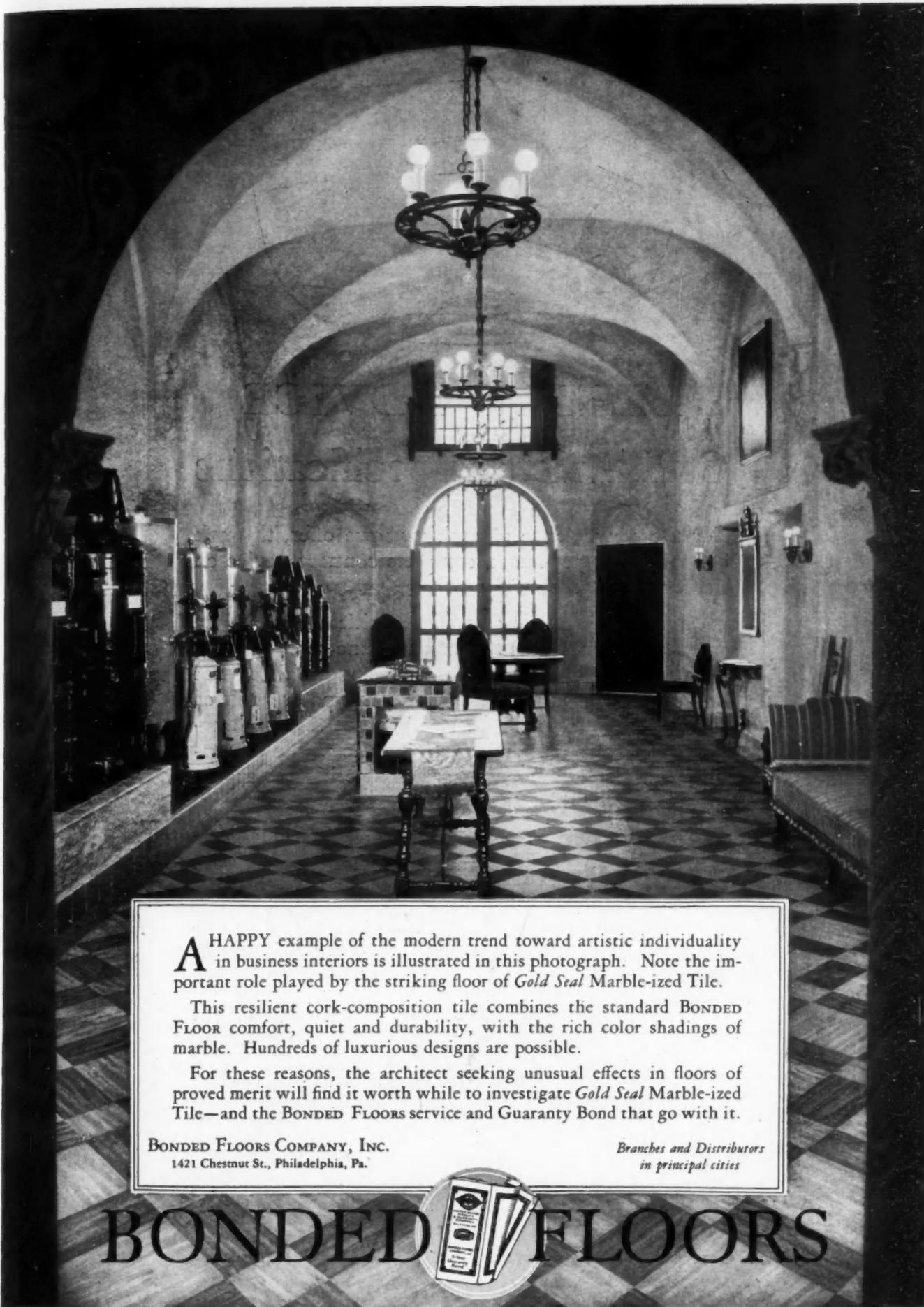
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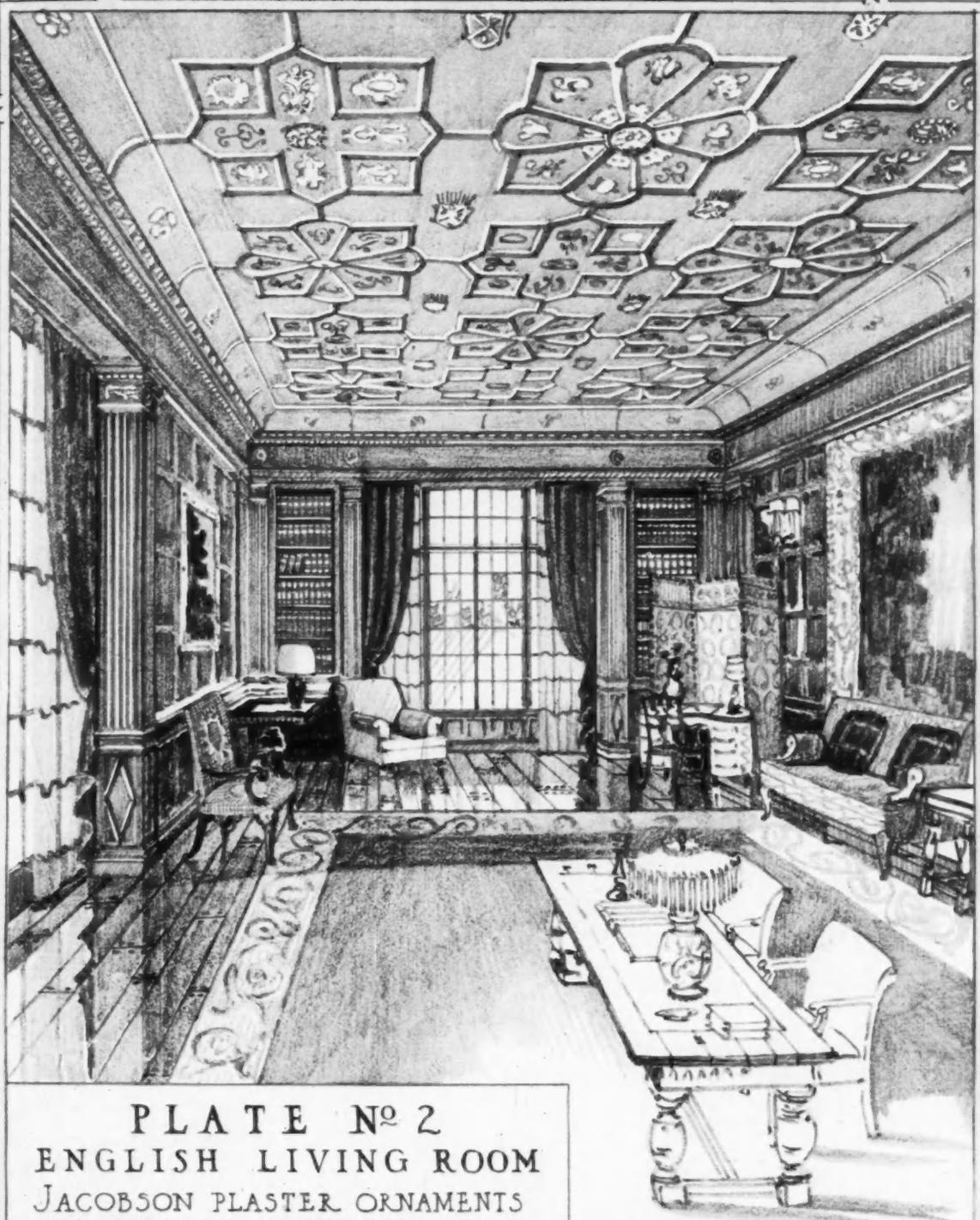
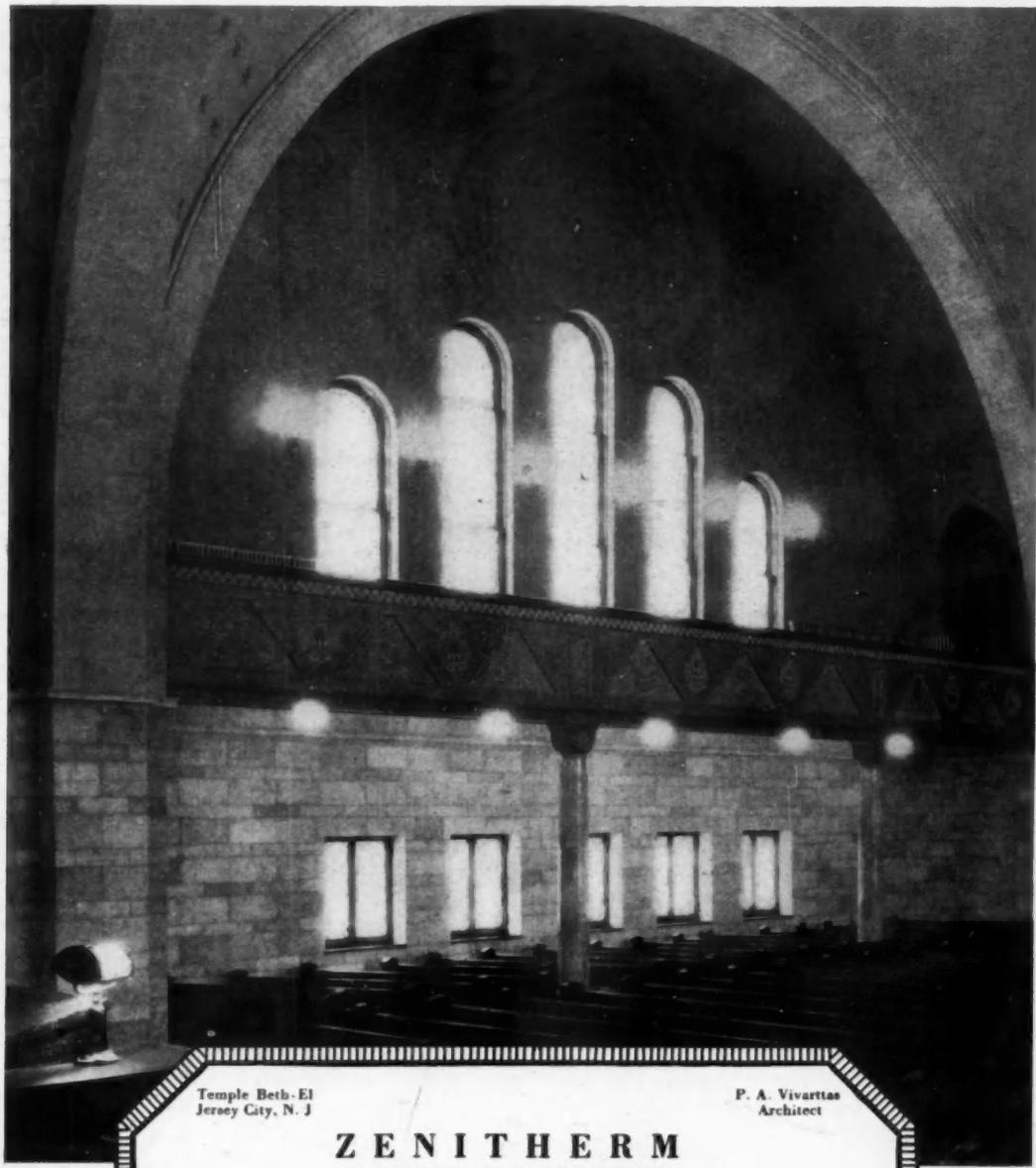


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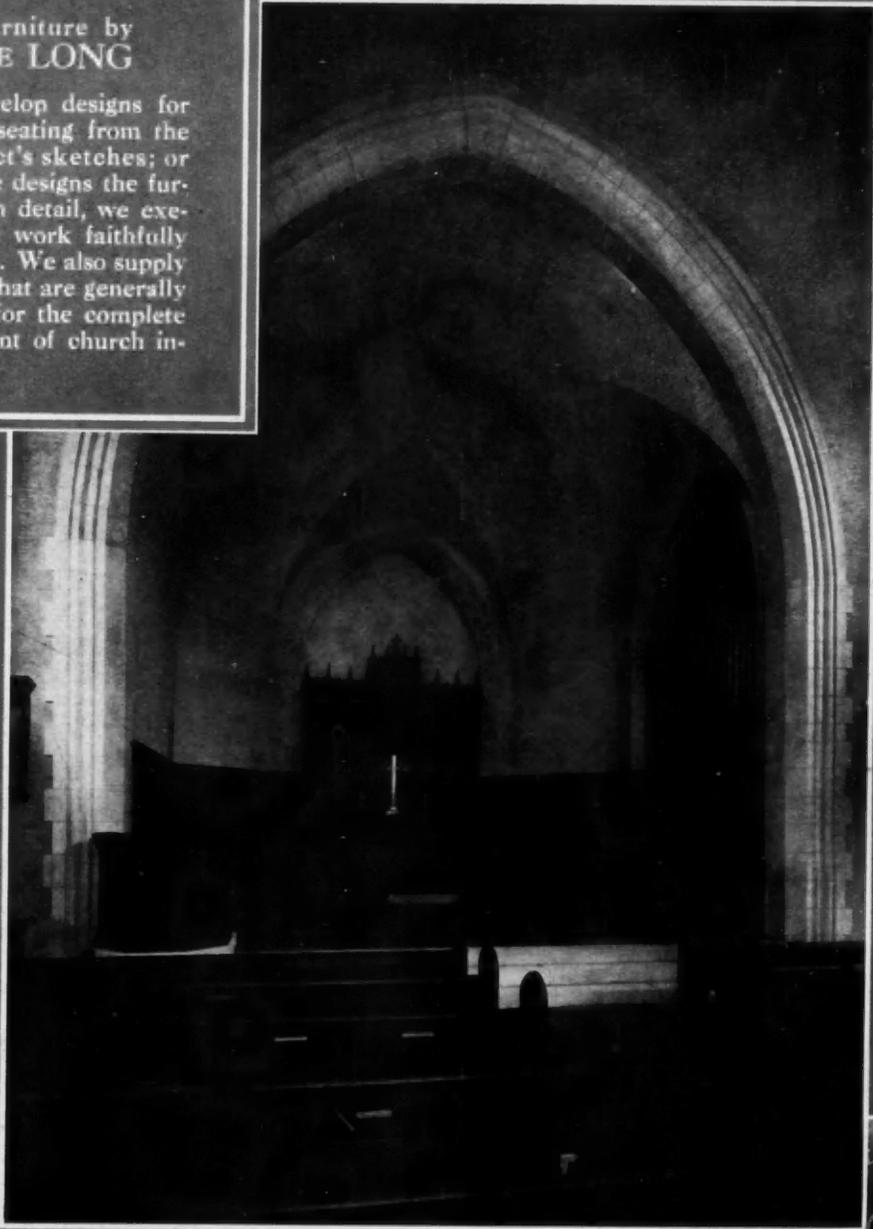
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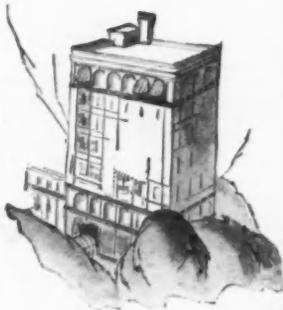
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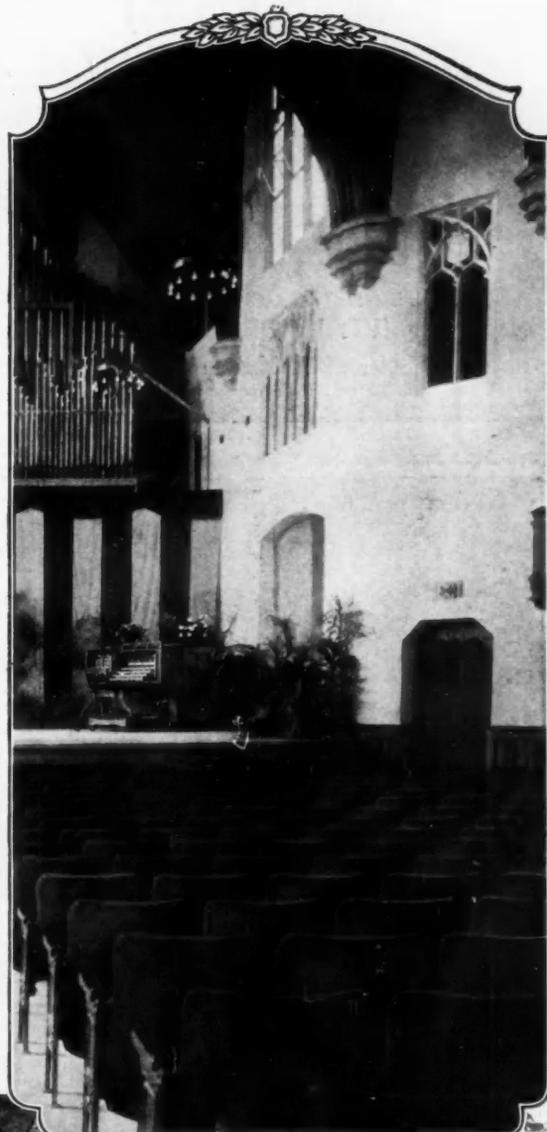
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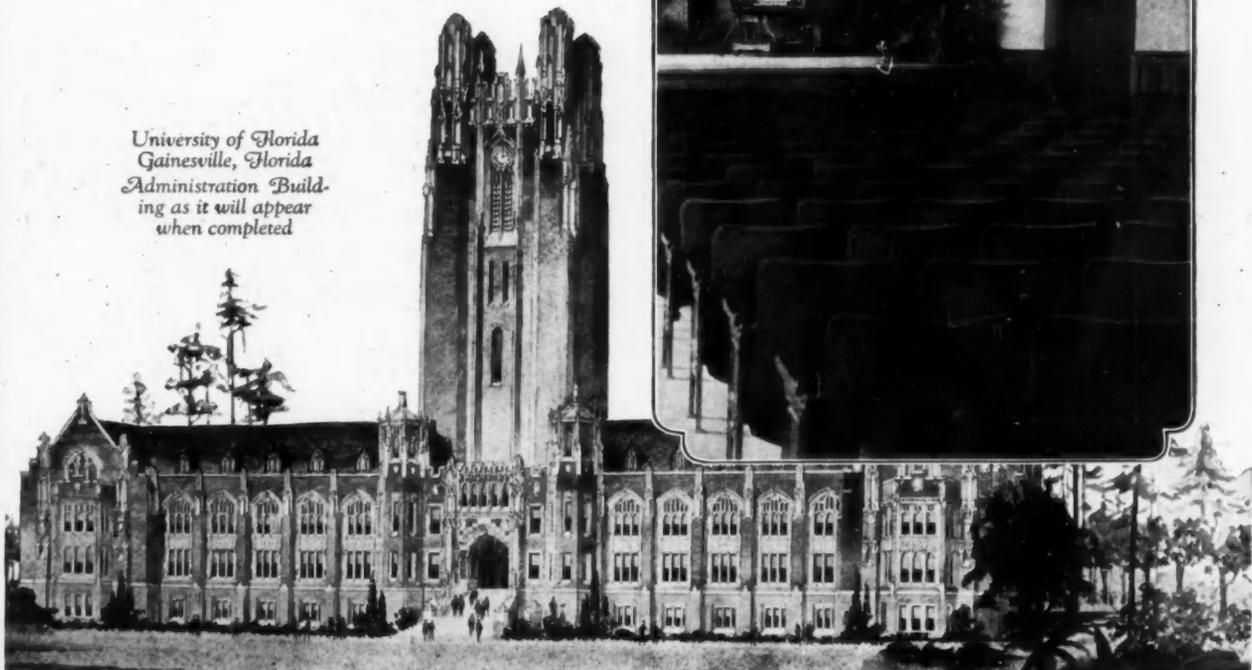
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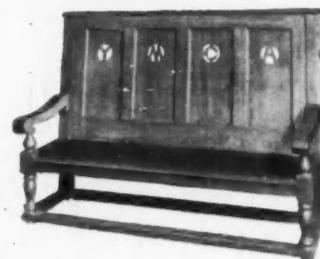
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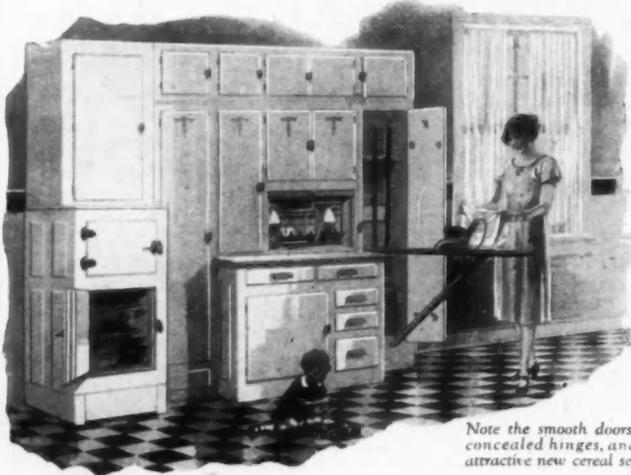
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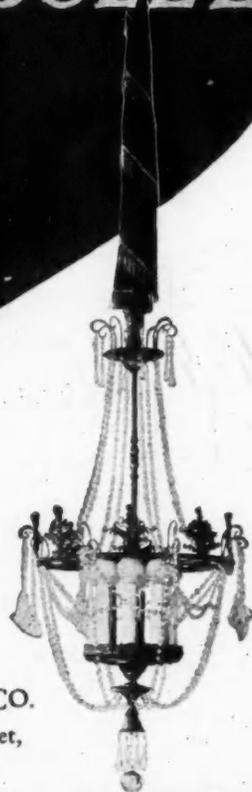
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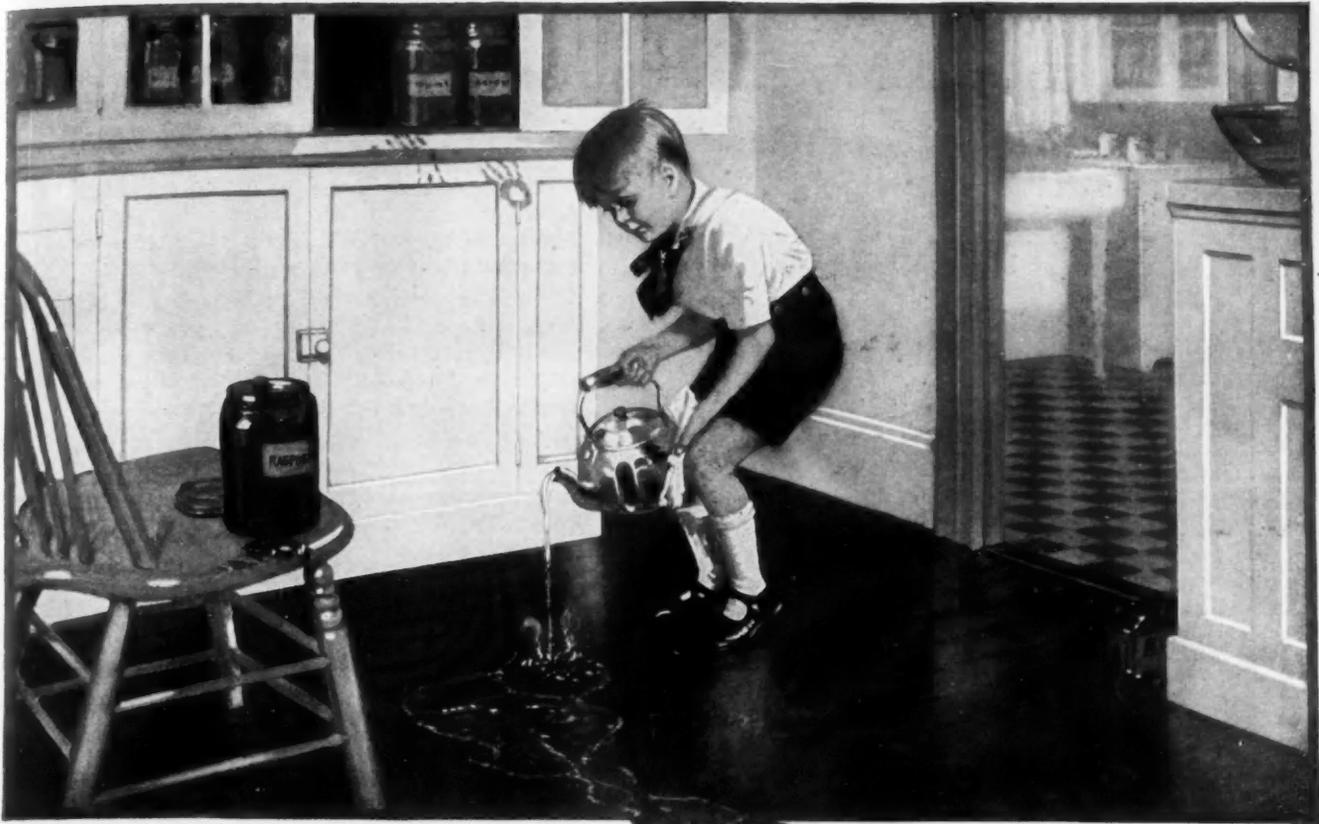
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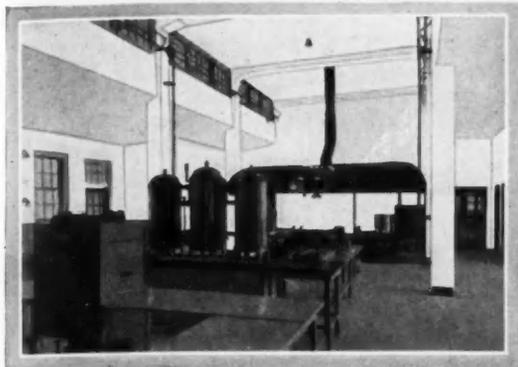


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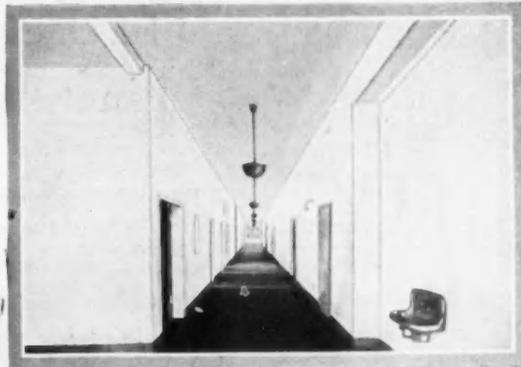
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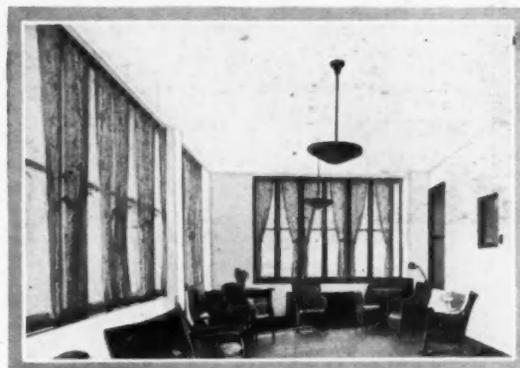
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Interesting Interiors

By M. REA PAUL, Consulting Colorist

Sixth of a series of articles discussing practical uses of the newer wall finishes obtainable with Dutch Boy white-lead and Dutch Boy flattening oil

The Sponge-Mottled Finish

ONE of the advantages of the Sponge-Mottled Finish is its wide adaptability. Almost any room may be decorated successfully in this finish, whether it is used as an all-over treatment or in panels. In the case of panels there should usually be greater contrast between the colors selected than when an all-over pattern is employed. While almost any number of colors may be used, one or two in addition to the ground coat will ordinarily be found sufficient to produce a decidedly interesting effect.

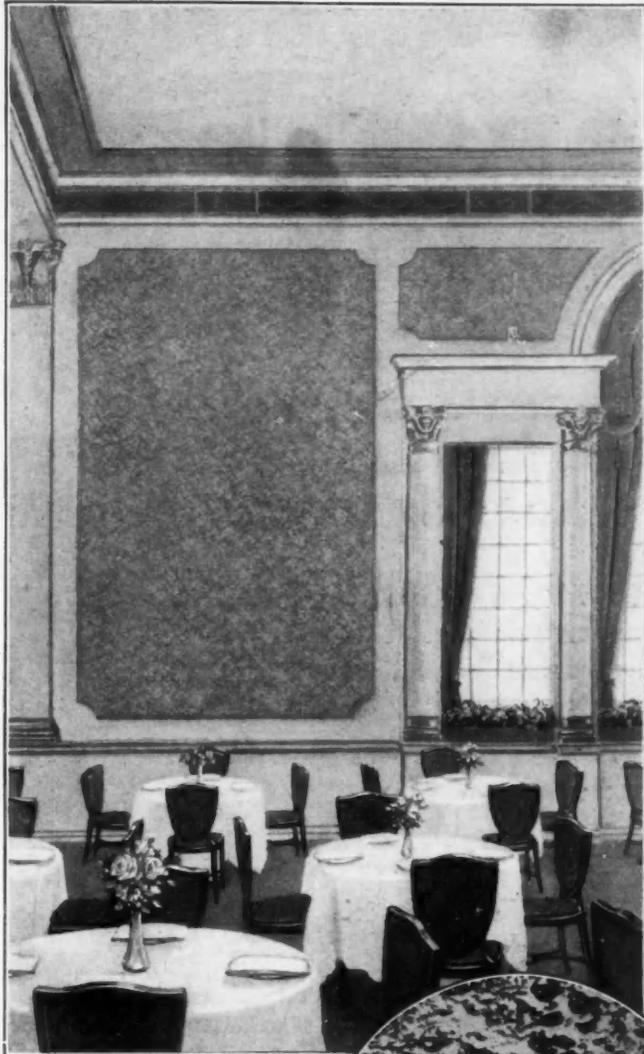
Either the undercoat or the mottling color may predominate in the Sponge-Mottled Finish. The amount of tamping on a unit of surface regulates to a large extent how much of the undercoat color will show.

The mottling color is usually applied in a haphazard manner with no attempt to secure a regular pattern, altho a regular pattern is occasionally used with very satisfactory results. As a rule, the haphazard mottling will prove more satisfactory for the reason that a great deal of the charm of the Sponge-Mottled Finish lies in its irregular pattern.

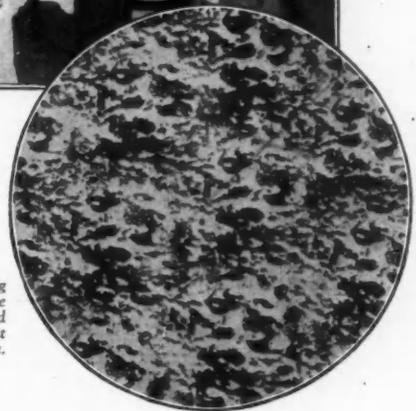
Suggestions for its use

In addition to the formal dining room shown here, the Sponge-Mottled Finish may be employed successfully in the following rooms, with the suggested color treatments:

	Ground Color	Mottling Color
Lobby of theatre	Medium Brown	Golden Yellow
Smoking room of theatre	Cold Gray	Rose
Lobby of hotel	Red Buff	Light Red Buff
Restaurant of hotel	Soft Grayed Green	Light Cream Yellow
Lobby of club	Warm Gray	Light Yellow
Smoking room of club	Dark Blue	Gray
Waiting room of railroad station	Corn Yellow	Tan
Reception room of office	Tan	Blue Green
Lobby of apartment or bank	Buff	Cream
Living room of home	Yellow Buff	Light Golden Yellow
Bedroom of home	Shell Pink	Light Gray



Formal dining room of a hotel showing the Sponge-Mottled Finish employed in panels. Reproduced from the booklet "Decorative Possibilities of Paint." Write our nearest branch for copy.



To the right, close-up showing the charming irregularity of the Sponge-Mottled Finish, secured by tamping on a finishing coat with the flat side of a sponge.

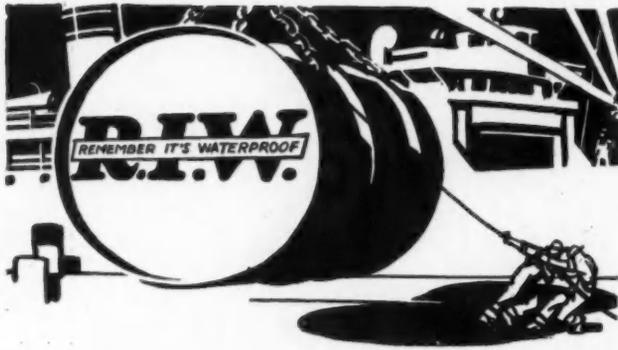
Booklet on Distinctive Finishes

Complete directions and formulas for producing the Sponge-Mottled Finish are contained in a new booklet in color, "Decorative Possibilities of Paint." In it are also instructions for obtaining many other interesting finishes with Dutch Boy white-lead and Dutch Boy flattening oil. A copy of this booklet will be sent upon request.



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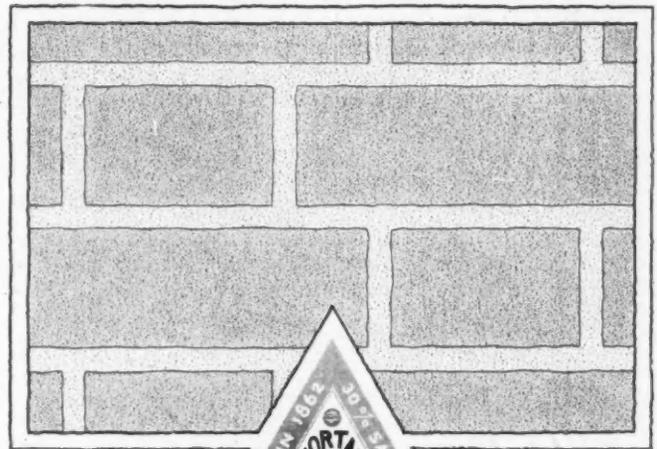
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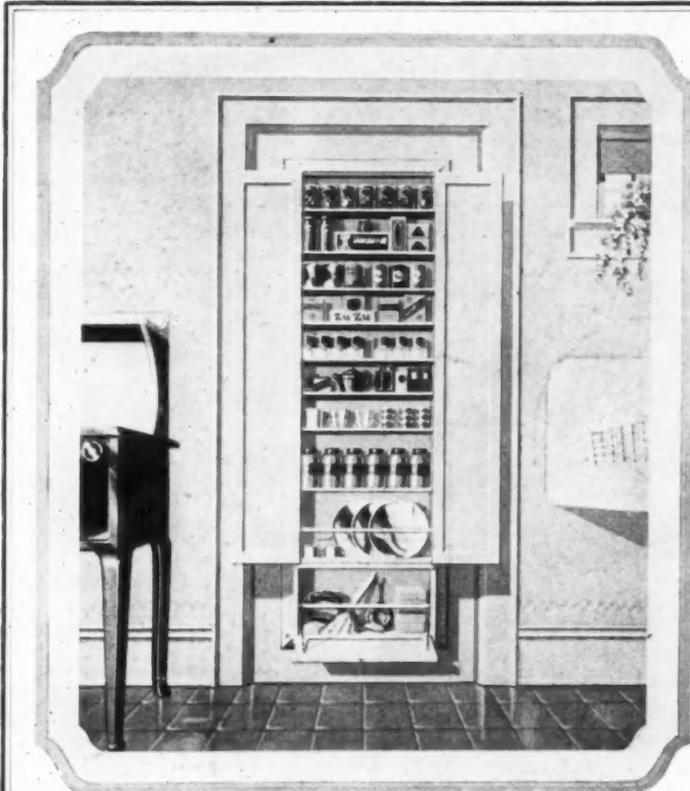
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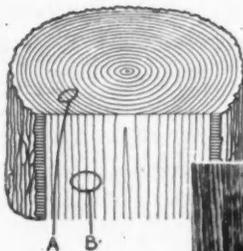


Fig. 1

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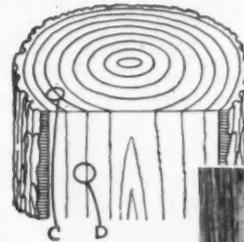
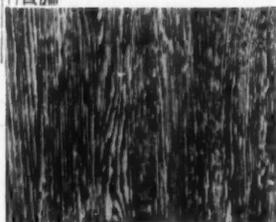
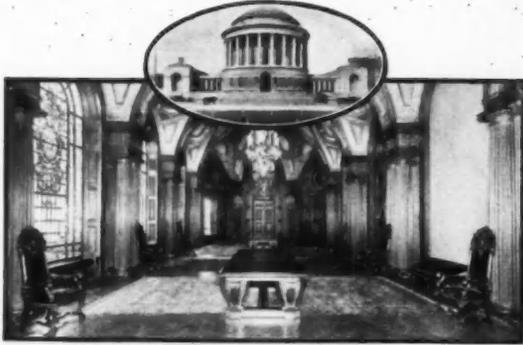


Fig. 2

Fast-growing Oak results in the wide annular growth rings (C), which, in turn, produce the coarse grain (D). Fig. 2 shows a panel of flooring made from rapid-growing Oak. Such flooring lacks the elegance and charm typical of Ritter Appalachian Oak Flooring which is manufactured exclusively from slow-growing Appalachian Highland Oak timber.



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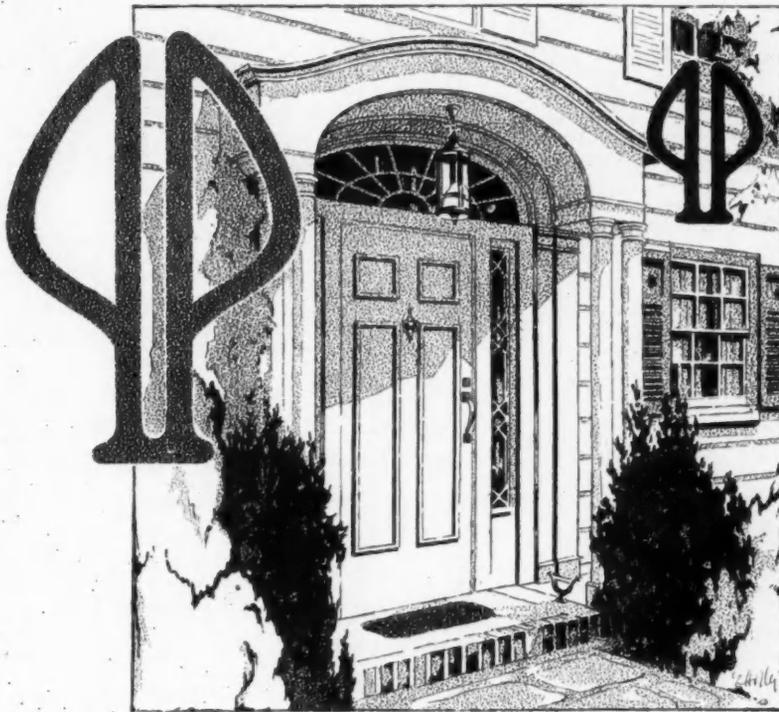
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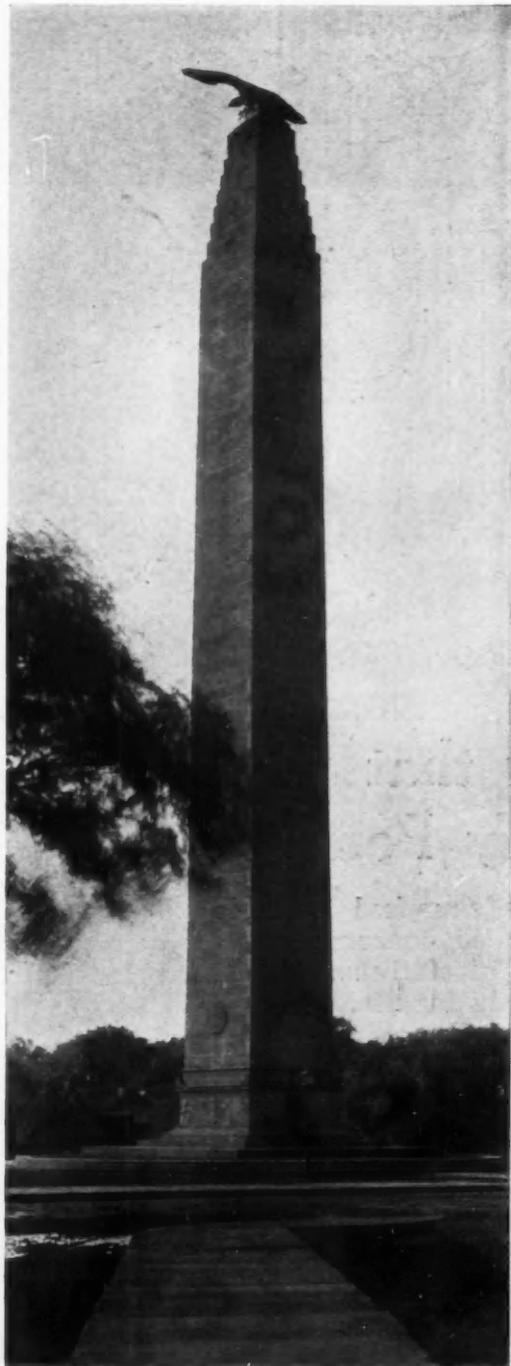
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- Astor Memorial, Trinity Church Yard, New York, N. Y.
- Waddell Memorial Fountain, Winnipeg, Canada
- War Memorial Cross, Philadelphia
- War Memorial, St. James Cathedral, Toronto, Ontario, Canada
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Royal Military College Memorial Arch, Kingston, Ontario
 John M. Lyle, Architect



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is pre-eminent in the field of decorative tiles. Designs conforming to all periods are at your disposal for use with marble, brick, stucco and plain tile work. We invite inquiries.

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BRANCH OFFICES IN PRINCIPAL CITIES



An interesting example of the unusual decorative effect obtainable with floors of "U.S." Tile. And in addition to colorful beauty, when you include "U.S." Tile in your specifications you assure your client floors of maximum durability, resilient comfort and sanitation.

May we send you information for your files?

United States Rubber Company

1790 Broadway, New York City



"U.S." TILE FLOORING



Beauty Salon of the City of Paris Dry Goods Company, San Francisco, Calif. Floored with eighteen-inch squares of black and white Linotile, with black and white border.

Store Floors of Inviting Beauty and Comfort

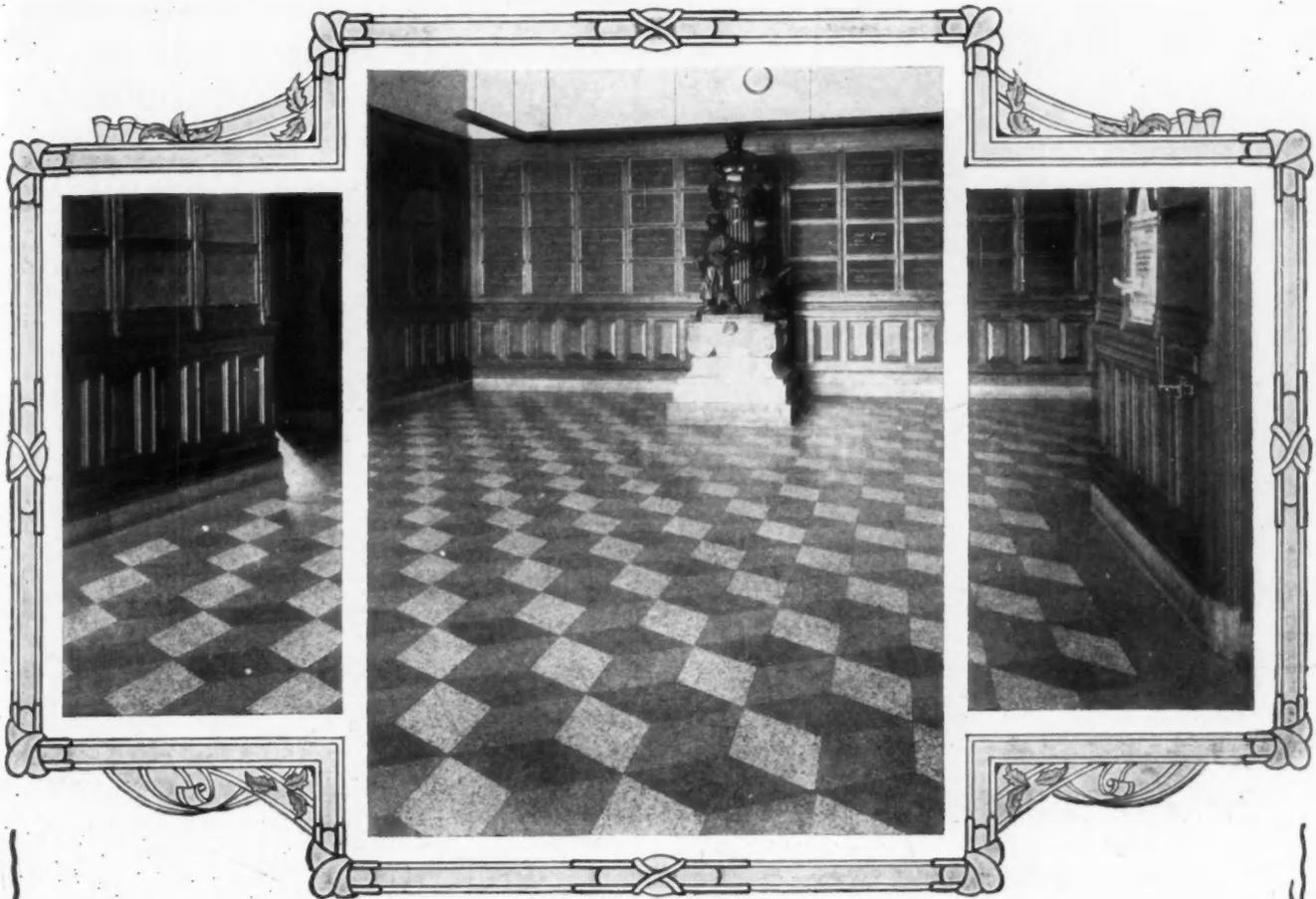
HERE is an excellent example of how the floor can be used to heighten the effect of beauty and comfort in a store. This Linotile floor has all the attractiveness and individuality of a ceramic tile design as well as restful comfort underfoot—a welcome relief from hard floors and sidewalks.

Linotile is a *resilient* tile, made of cork composition—quiet and easy underfoot, nonslippery and nonabsorbent. It is extremely durable, too, and withstands even heavy traffic near doorways and counters with very little sign of wear. The colors are solid and do not become dull or faded. Made in many sizes and colors, Linotile allows

the greatest freedom for individual designs and color combinations. It is readily adaptable to any decorative scheme, and can be laid over any smooth, dry base.

The 32-page book, "Linotile Floors for Public and Semi-Public Buildings" contains many illustrations in full color of Linotile designs together with complete information and specifications. It will be mailed on request. Write for it and for a free sample of Linotile. Address ARMSTRONG CORK & INSULATION COMPANY, *Division of Armstrong Cork Company*, 132 TWENTY-FOURTH STREET, PITTSBURGH, PA.

Linotile Floors



The Several Colors of Norton Aggregates Afford Opportunity for Attractive Effects Where Slip-proof and Wear-resisting Floors Are Desirable

THE floor in the entrance to the Hebrew Orphan Asylum, Amsterdam Avenue, New York, is an excellent example of the use of Alundum Aggregates in terrazzo to secure a walking surface that is both slip-proof (wet or dry) and wear-resisting. Three colors of Alundum Aggregates and three similar colors of marble chips in a contrasting diamond design have resulted in a floor that is strikingly attractive as well.

In one set of diamonds Botticino marble chips have been combined with approximately 30 per cent of cream Alundum Aggregates. In another set the marble chips are yellow Verona and the abrasive aggregates are buff, while in the third set of diamonds the marble chips are red Verona and the aggregates are brown in color.

NORTON COMPANY, WORCESTER, MASS.
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The Queensbury Hotel,
Glens Falls, N. Y.
Ballroom floored with
Maple



Nature's lasting beauty for your floors

Nature itself puts beauty and life and tenacious durability into Maple, Beech and Birch. The wind, the sunshine and the rain of the northern climate gives these woods their amazing toughness and firmness, with their close-grained compactness that invites a perfect polish and resists the hardest wear.

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Smooth, quickly cleaned, such a floor is easily kept free from dust and dirt, and steady wear only adds to its pleasing glossiness of surface.

Lay one of these floors right over your present floor, if you like. This can be done, regardless of the kind of floor you have.

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- The Floors for Your Home
- Three Native Hardwoods of Sterling Worth
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MAPLE FLOORING MANUFACTURERS ASSN.
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The Finest Buildings use Grauer Sidewalk Lights



The laundry of the Book-Cadillac Hotel, Detroit, is a daylight work room. (Louis Kamper, Architect). This magnificent building is one of many handsome new structures in which the IMPROVEMENT of Grauer Sidewalk Lights is utilized. These lights give wide diffusion of daylight in basement rooms, and eliminate repair troubles.



Cheerful, pleasant, efficient, is the first thought of an observer of the modern laundry plant in the first basement of the palatial Book-Cadillac, Detroit's beautiful hotel. The girls in their smocks of varied colors make a rainbow in the sunlight. This is no idle sentiment—but practical business. For color means greater efficiency of workers, because they are satisfied with their working conditions.

Would they be thus satisfied in an artificially lighted basement? Could a well-organized force be maintained under those conditions? Here is a typical example of the revenue-producing effect of daylight—daylight that costs *less* than artificial light—daylight that actually pays for itself in a short time out of savings in electric current.

Better Basement Light at Less Cost

*And Repair Troubles
Eliminated*

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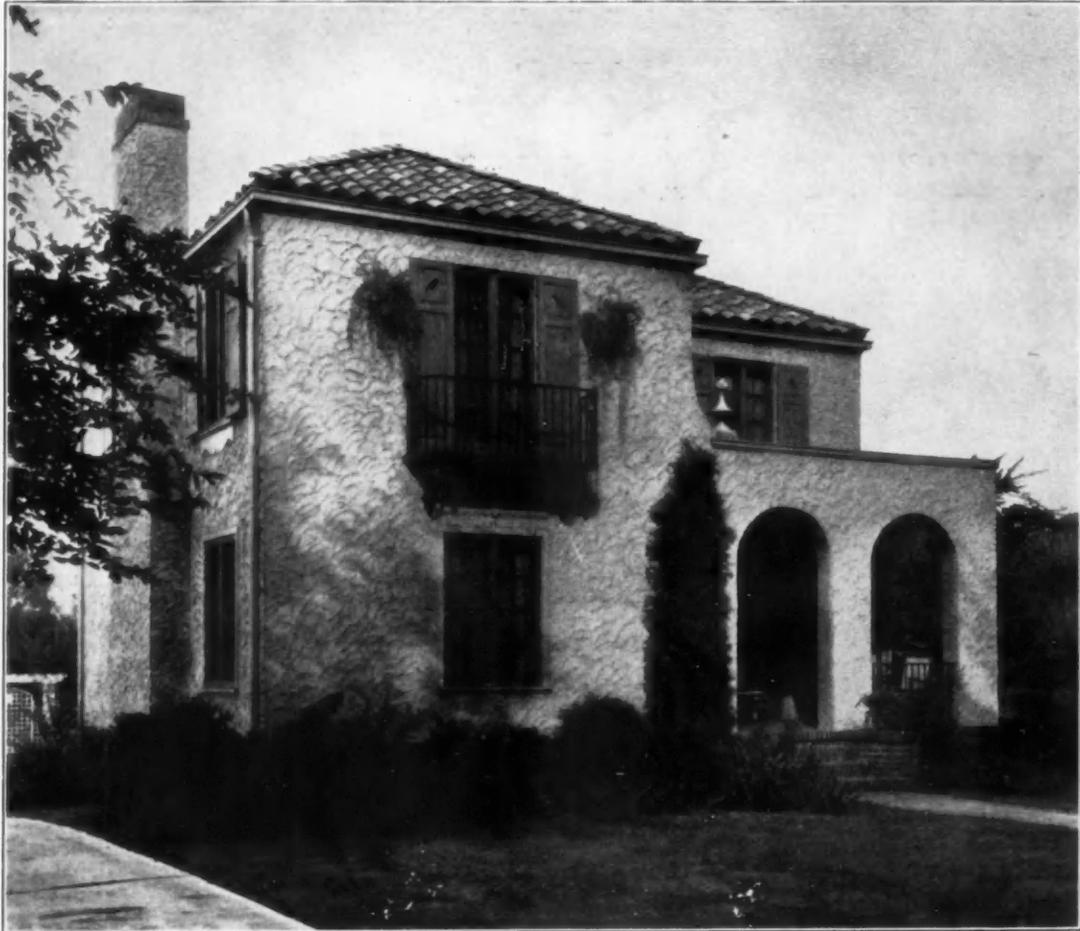
Our iron-clad guarantee provides that Grauer Sidewalk Lights shall be rust-proof, free from defect for one year; replacement glasses will be supplied free for five years. 300 lb. per square foot is the normal carrying capacity, although they can be made to carry 1000 lbs.

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Albert Grauer & Co.
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Name.....
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A TILE ROOF OUTLASTS ANY HOME



Residence of Walter Boschen, Architect, St. Joseph, Mo. Roofed with IMPERIAL Straight Barrel Mission Tiles in a variety of colors

On the Homes of Many Architects

IMPERIAL Roofing Tiles have been selected by numerous architects to roof their own residences. Among the latest is Walter Boschen, whose attractive home at St. Joseph, Mis-

souri, is illustrated above. No one appreciates better than an architect that a roof of these tiles is assurance of lifelong beauty and protection without repainting or repairs.

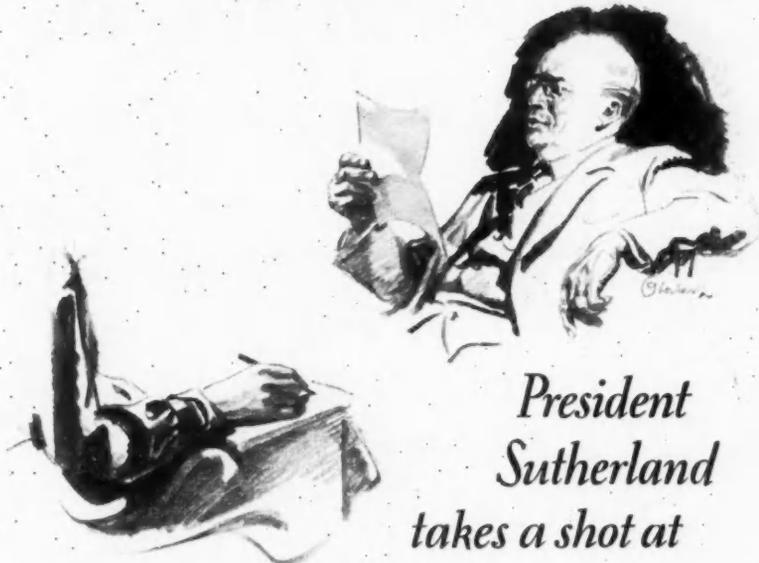
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IMPERIAL

Roofing Tiles



*We advertise this way
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in Saturday Evening Post, December 4, 1926



*President
Sutherland
takes a shot at
George Burt's "economy"*

Four years ago, George, when we decided to build that Morton plant and put you in charge as superintendent, I let you have your say on the specifications. One item you balked at was a Barrett Specification Roof—said you could get a roof that was O. K. for less money.

Now let's face facts.

We have nine plants scattered over the United States. Eight of those plants have been built anywhere from eleven to sixteen years. On those eight plants we have Barrett Specification Roofs. To date not one cent for roof repair or maintenance from those eight roofs. But what about the Morton plant, *your* plant, built four years ago with your just-as-good roof? That roof cost us last year \$367.00 for repairs, plus damage to stock from roof leaks amounting to \$2160.

Do I have to point the moral?—

that cost per year of service, and not initial cost, is the important factor to consider when buying certain things. Roofs, for instance.

Yours very sincerely,

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* * * * *

Experience has proved that a Barrett Specification Roof will show the lowest unit cost (the cost per square foot per year of service) of any roof.

With it the owner receives a Surety Bond which guarantees him against any expense for roof repairs for 20 years.

Add this: Service records on file tell of great numbers of Barrett Roofs of this type laid 35 to 45 years ago which are still weather-tight—and never a cent for repairs. Finally—Barrett Specification Roofs take the base rate of fire insurance.

*—and here's your side
of this roof thing
(as other architects see it)*

Within the last few months we've asked a number of architects:

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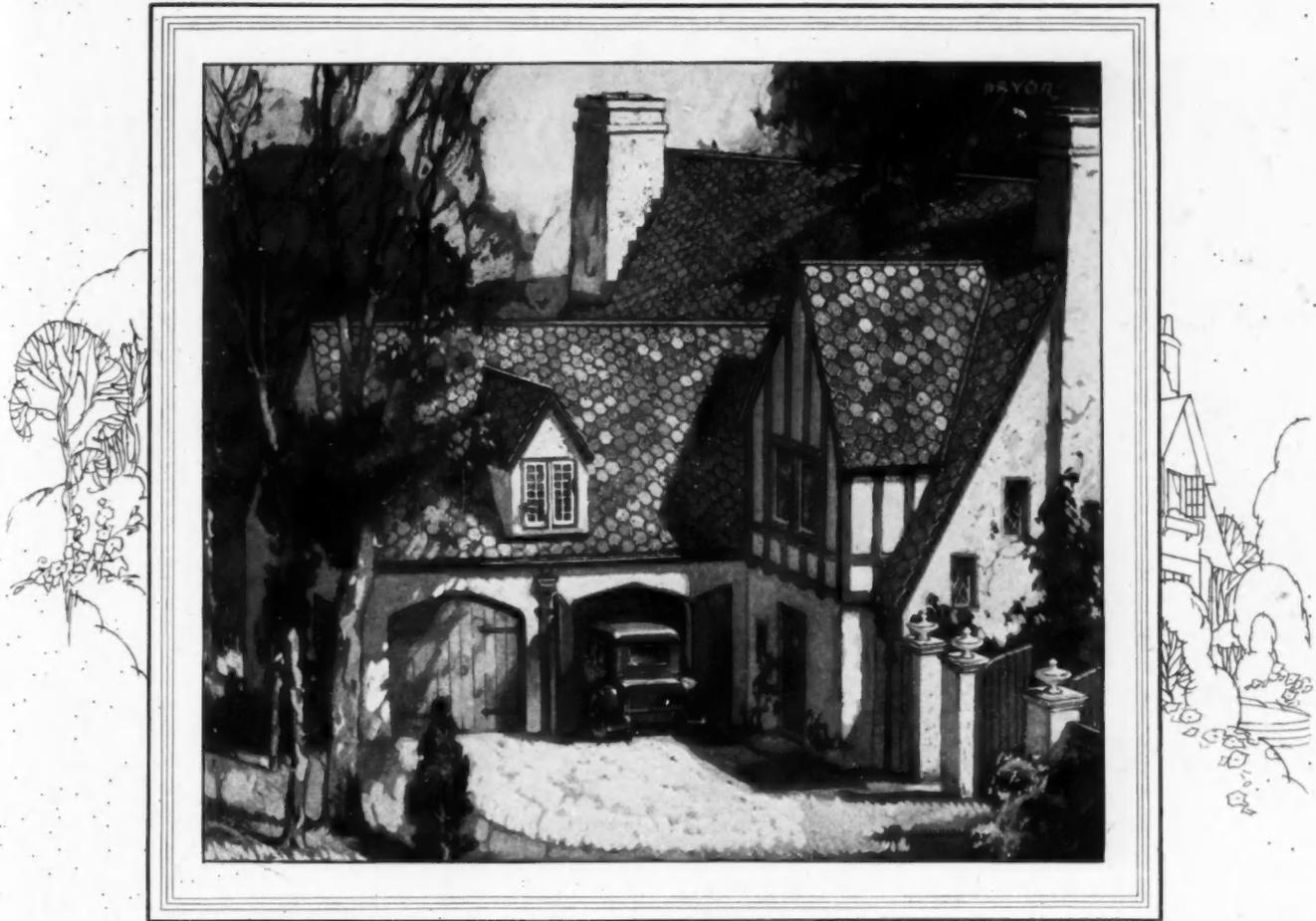
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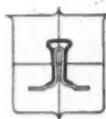
Preston

ROOFING





Weatherstripping the Inside as well as the Out



THE inside door bottom illustrated here is but one of the many features Higgin can provide for the comfort and economy of your client. It prevents the passage of cold air from bedroom into halls, baths, or dressing rooms and can be installed on any door.

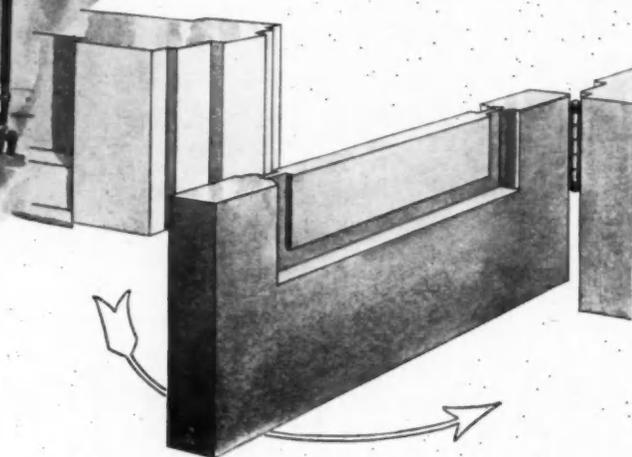
The Higgin Rib Track and Spring Temper Bronze Insert equipment is recognized as the outstanding weather-stripping for double-hung windows. (See detail panel above.) The track and insert form a metal-to-metal contact which drafts will not pass. Casements, also, can be perfectly equipped with Higgin-made and Higgin-installed weather-stripping.

Only thoroughly trained mechanics install Higgin Weather-stripping and the Higgin reputation backs every job. Our representative is at your call. He will be glad to work with you. Ask him in today. Look for "Higgin" in your telephone directory.

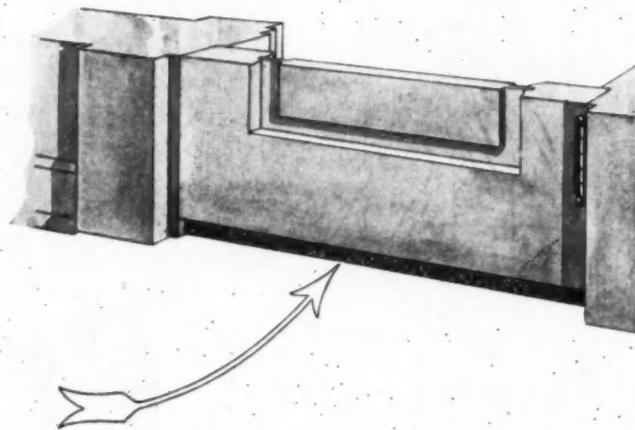
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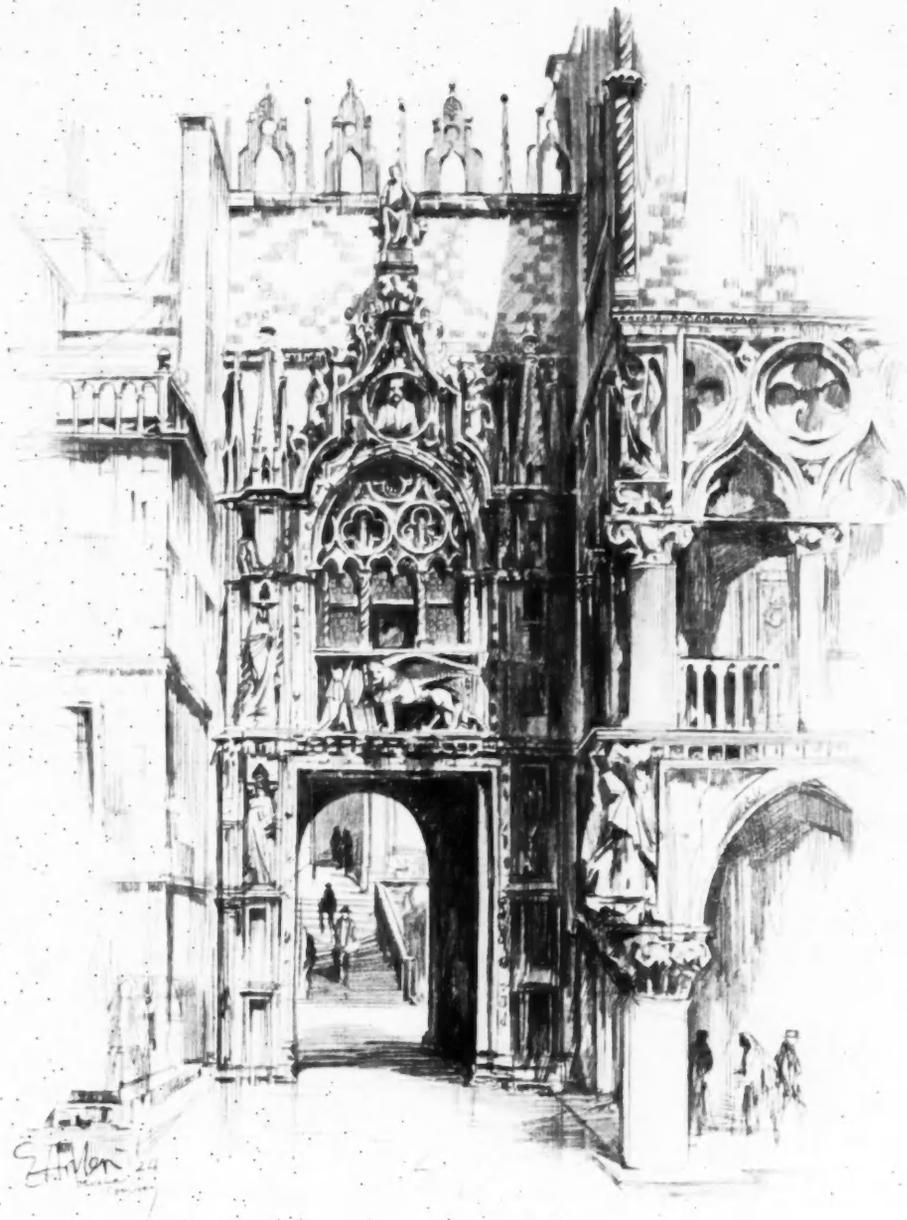
HIGGIN
ALL METAL
Screens and Weatherstrips



This illustration shows felt automatically raised flush with bottom of door when door is open thus allowing for free swinging of door over rug.



This illustration shows felt automatically lowered to a snug contact with the floor when the door is closed.



HERE is the doorway to the Doges Palace, through which many great rulers have come and gone—a beautiful piece of architectural ornament. The Eldorado pencil drawing shown above was made by Earl Horter from the piazza of St. Mark's.

**DIXON'S
ELDORADO**
"the master drawing pencil"

JOSEPH DIXON CRUCIBLE COMPANY

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SAMPLE OFFER Write for full-length free samples of "*The master drawing pencil*" and of Dixon's "BEST" Colored Pencils. In their field, the "BEST" Colored Pencils hold the same position of supremacy as Dixon's Eldorado.

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THE
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There are over 20 types of buildings of sufficiently vital interest to architects to form the subject matter of Reference Numbers. Since these issues appear quarterly, a little more than five years are required to complete the cycle. Once the cycle has been finished, the subjects will be treated anew, thus placing before an architect a record of progress made and forming a self-perpetuating reference library for his office.

Sold singly, the Reference Numbers cost \$2 each. Four Reference Numbers and eight regular issues are included with a Forum subscription, for which the charge is \$6 (Canada \$6.75; Foreign \$7.50).

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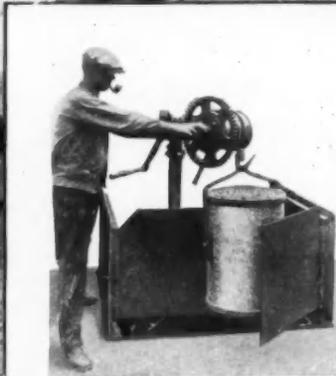
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 STANFORD WHITE, ARCHITECT
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Flat-Tone Size	375 gallons
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Old Dutch Enamel	60 gallons
Handcraft Stain	40 gallons
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ODP Lead	2100 pounds
Decotint	1500 pounds
Floor Wax	75 pounds



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THE LARGEST PAINT AND VAR-

WILLIAMS

LACQUERS · ENAMELS

The
SOPHIAN PLAZA
APARTMENTS

One of the seven new Tulsa, Oklahoma, buildings finished throughout with Sherwin-Williams paints and varnishes in the last year. Architects: Shephard & Wiser, Kansas City, Missouri. Paint Contractor: R. M. Burchet, Tulsa, Oklahoma.



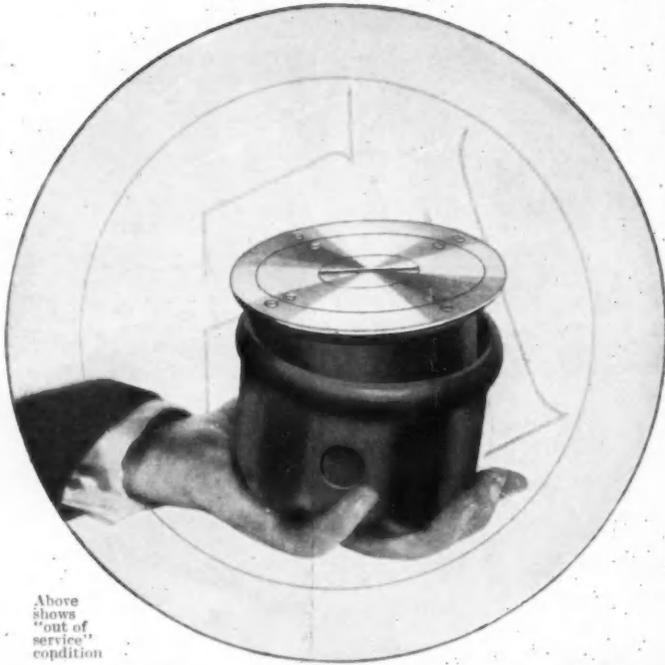
In Tulsa's 7 new big buildings

The Sophian Plaza Apartments rank with the largest and finest buildings in Oklahoma. Last year Sherwin-Williams paints and varnishes were used exclusively in this and six similar new buildings in Tulsa alone.

Sherwin-Williams finishes bring public-building durability combined with color and texture to interpret any scheme. The large technical laboratories and complete decorative service of Sherwin-Williams can prove helpful in planning the decoration of all types of buildings.

THE SHERWIN-WILLIAMS COMPANY
Cleveland, Ohio

NISH MAKERS IN THE WORLD



Above shows "out of service" condition



The cover is easily removed



The Flat Plug is removed from cover and the cover is reversed. Note the high rim protection on "in service" side of cover



The Split Bushing (at left) takes the place of the Flat Plug



Here is shown the "In Service" condition. The Flat Plug is placed in the Floor Box for safe keeping

SPECIFY **FA** Floor Boxes (with reversible covers)

Frankly, you will not find the same collection of good features elsewhere. **FA** Floor Boxes are *adjustable*. They can be installed at any angle, yet the top can be adjusted to the proper floor level. **FA** Floor Boxes are *substantial*. They cost less than two-cover type. They become a permanent floor connection for lights, bells, buzzers, telephone, etc. A quick change from "out of service" to "in service," or vice versa, can be made at any time. **FA** Floor Boxes are *water-tight*. A heavy, round, long-life gasket gives full protection from all moisture. The inside is always dry. The wiring can never be damaged . . . You should be interested to learn more—

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The Architecture of Show Windows

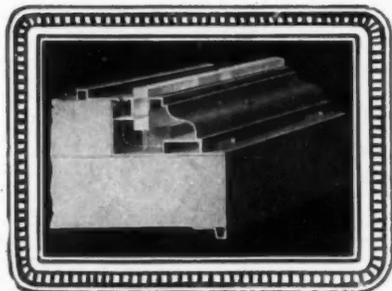
INCREASING store rentals have produced a marked trend toward more effective use of window display space. Bays, recesses, island windows are a natural result of the attempt to lengthen out the actual display frontage, particularly of narrow stores.

Brasco, from the architectural viewpoint, is an *efficient* store front construction. It permits of the most advantageous use of any frontage available, no matter what size or shape.

The complete assortment of attractive copper mouldings in varied finishes—sash, corner, division, and reverse bars, sills, jambs, transom bars and accessories—gives a broad flexibility of design covering innumerable architecturally beautiful fronts.

Added to this opportunity for individual expression, are the many patented constructional features with their definite assurance of glass safety, strength, efficient ventilation and drainage and long satisfactory service.

Our catalogs, detail sheets and actual samples are gladly furnished on call.

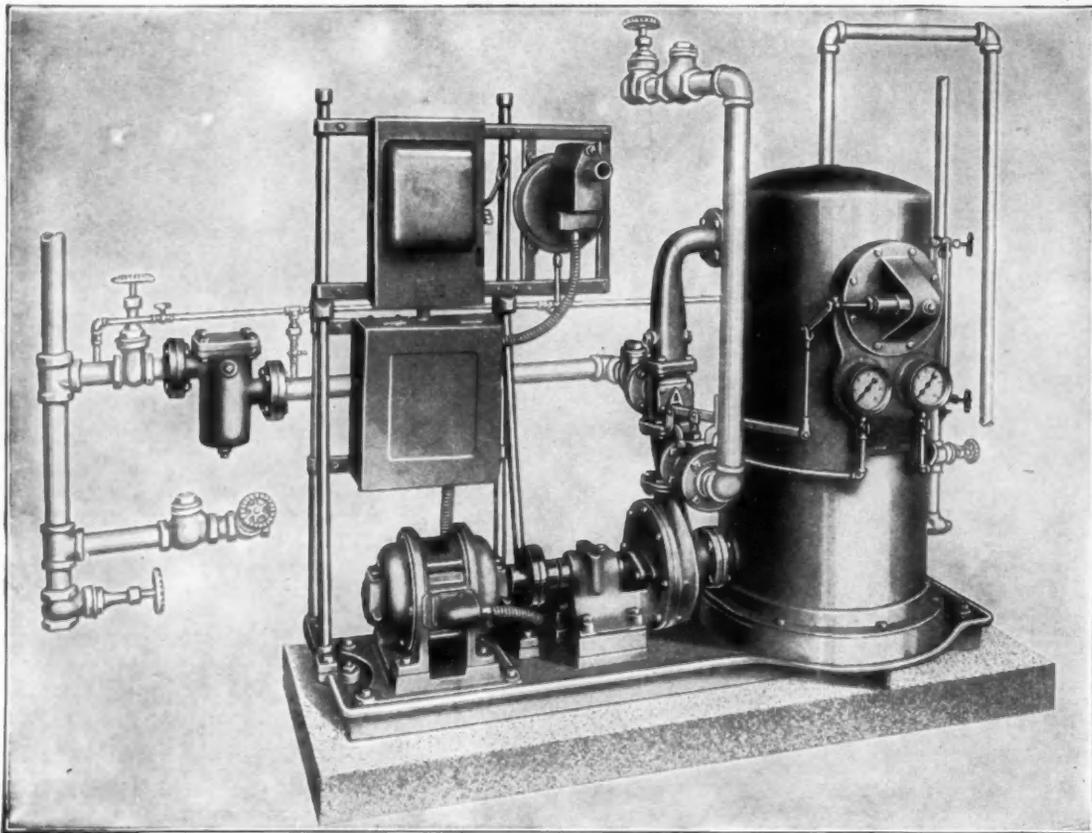


Brasco "Series 500" All Copper Construction

BRASCO MANUFACTURING CO.
5031 Wabash Avenue, Chicago

Eastern Sales Office and Warehouse
28-14 Wilbur Ave., Long Island City, N. Y.

Brasco
COPPER STORE FRONTS



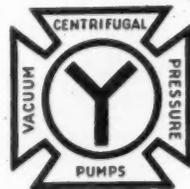
VI Unit equipped for automatic vacuum control, showing piping connections. Suction strainer and check valve at inlet of pump are furnished with unit, as well as companion flanges, bolts and gaskets

YOUNG

CENTRIFUGAL VACUUM
AND BOILER FEED

PUMPS

They Are Quickly
and Easily
Installed



YOUNG PUMPS are installed with the least amount of labor and expense because they are shipped from the factory as completely assembled units. The electrical equipment is already mounted ready for connection to the supply lines.

When setting up the pump there are only two principal piping connections to be made, and the electrician's only work is to connect the feed wires to the pump switch. The unit is then ready to operate.

Before being shipped each Young Pump is connected and run for hours under rigid working conditions. Every part must be correct and every bearing perfectly aligned. This careful test insures proper operation the first time the switch is pulled.

Because of their simple, rugged construction Young Pumps may be depended upon to deliver constant uninterrupted service in the hands of the average janitor or boiler fireman.

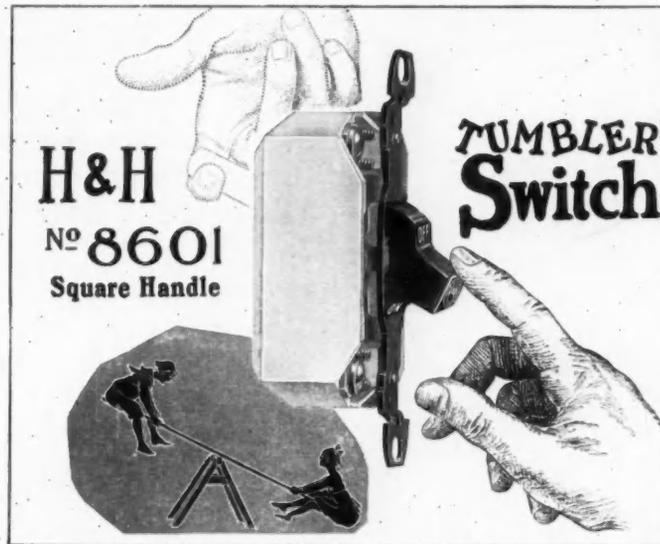
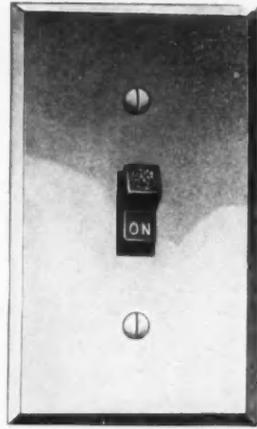
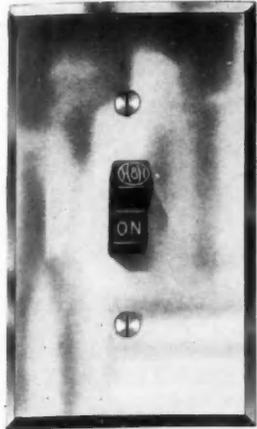
Supplied in
Standard Units of
Seven Capacities

YOUNG PUMP COMPANY DUNHAM BUILDING
450 East Ohio St., CHICAGO
Factory: Michigan City, Indiana

In Canada: C. A. DUNHAM CO., Ltd.
1523-41 Davenport Road, Toronto

Young Pumps Have Large Reserve Capacity

No. 8601 SQUARE



Reputations in the "balance"

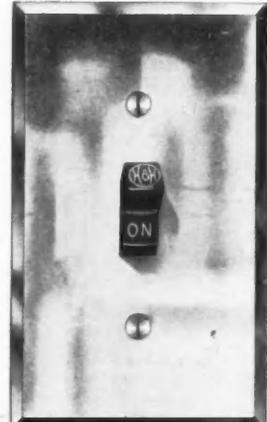
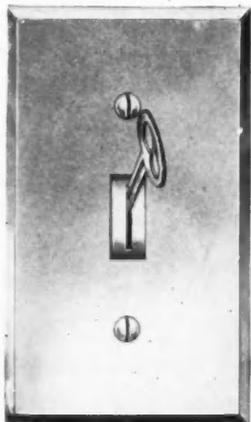
REPUTATIONS go on trial when Switches go into the walls. Installed to be as permanent as the walls, these lighting controls concern the Architect as key-mechanisms in a building's service.

If a switch fails after a few thousand snaps, someone's confidence "snaps" in the specifier. Is it ever well to risk a name on a thing so small in cost? Is it ever wise to yield the point of *assured performance* to a shading in price?

So far as switches can safeguard a name—your own and ours—rely on the "*balanced movement*." Here in the "8601 Tumbler" is the smoothest of actions, the freest from impact; mechanically most immune from wear.

Practical tests of the Balanced Tumbler have established records unparalleled in the performance of switches. That's where your H & H workmanship *counts*:—not in claims but in hundreds of thousands of snaps.

The connecting link between good Reputations and good, reliable Switches is Catalogue "S." Sent gladly if you'll drop a line to the "Makers of electric switches since 1890."



THE HART & HEGEMAN MFG. CO.
HARTFORD, CONN.

**"THE SWITCH WITH THE
BALANCED MOVEMENT"**

A Complete Kitchenette in

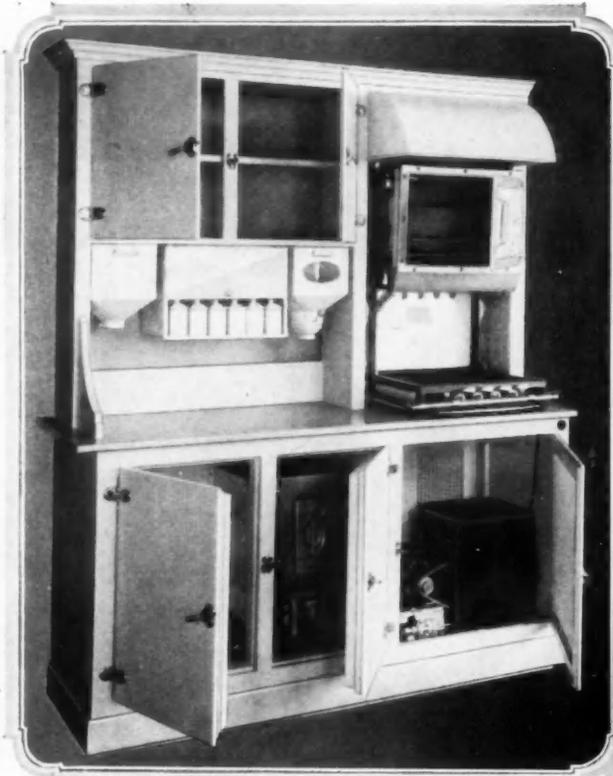
The "White" Duo-Unit Kitchen Cabinets

One of the Greatest Contributions to Modern Apartment Comfort—providing a complete Kitchen in as little space as 5'9" x 7'0"!

Including

Sink
Range
Work Table
Broom Closet

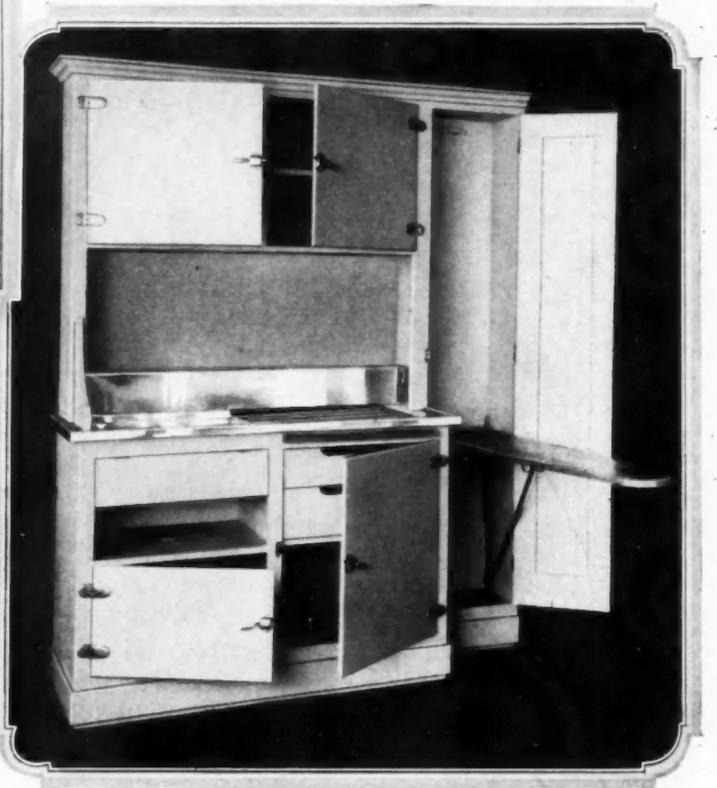
Refrigerator
Linen Chest
Complete Pantry
Folding Ironing Board



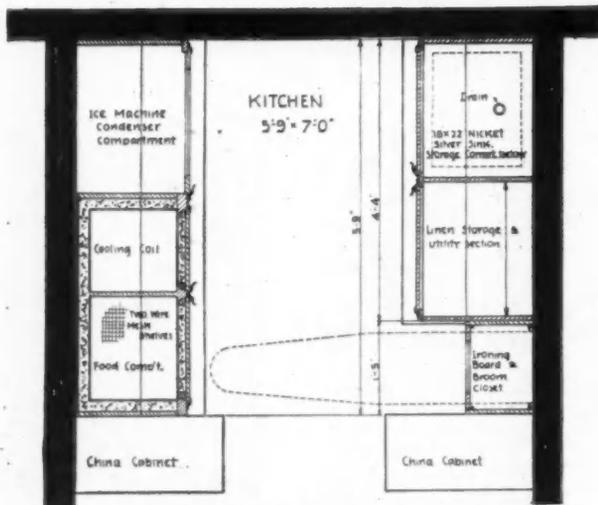
"White" Duo-Unit Cabinet A

Unit A—Contains range, refrigerator designed for electrical refrigeration, storage space, sugar and flour bins, spice jars and work table. When used with Unit B the result is the most efficient conception of a kitchenette within a minimum of floor space—less than 40 sq. ft.

Unit B—Contains full size sink with work top, ironing board, storage compartments and linen trays. The use of these two units forms a compact arrangement of maximum convenience in a space as small as 5 ft. 9 in. x 7 ft.



"White" Duo-Unit Cabinet B



Floor plan showing proper placing of cabinets and illustrating the compact, convenient arrangement made possible by the "White" Duo-Unit Kitchenette.

THE "WHITE" Duo-Unit Kitchen Cabinets are part of the famous line of "WHITE" Door Beds, Kitchen Cabinets, Dressing Cabinets, Ironing Boards and other Space-Saving Conveniences. Complete Catalog with typical floor plans will be sent free. Shows many ways of conserving space and reducing building costs.

The floor plan at the left shows the marvelous efficiency of the "White" Duo-Unit Cabinets and the many conveniences provided in a minimum of space. Write for complete information

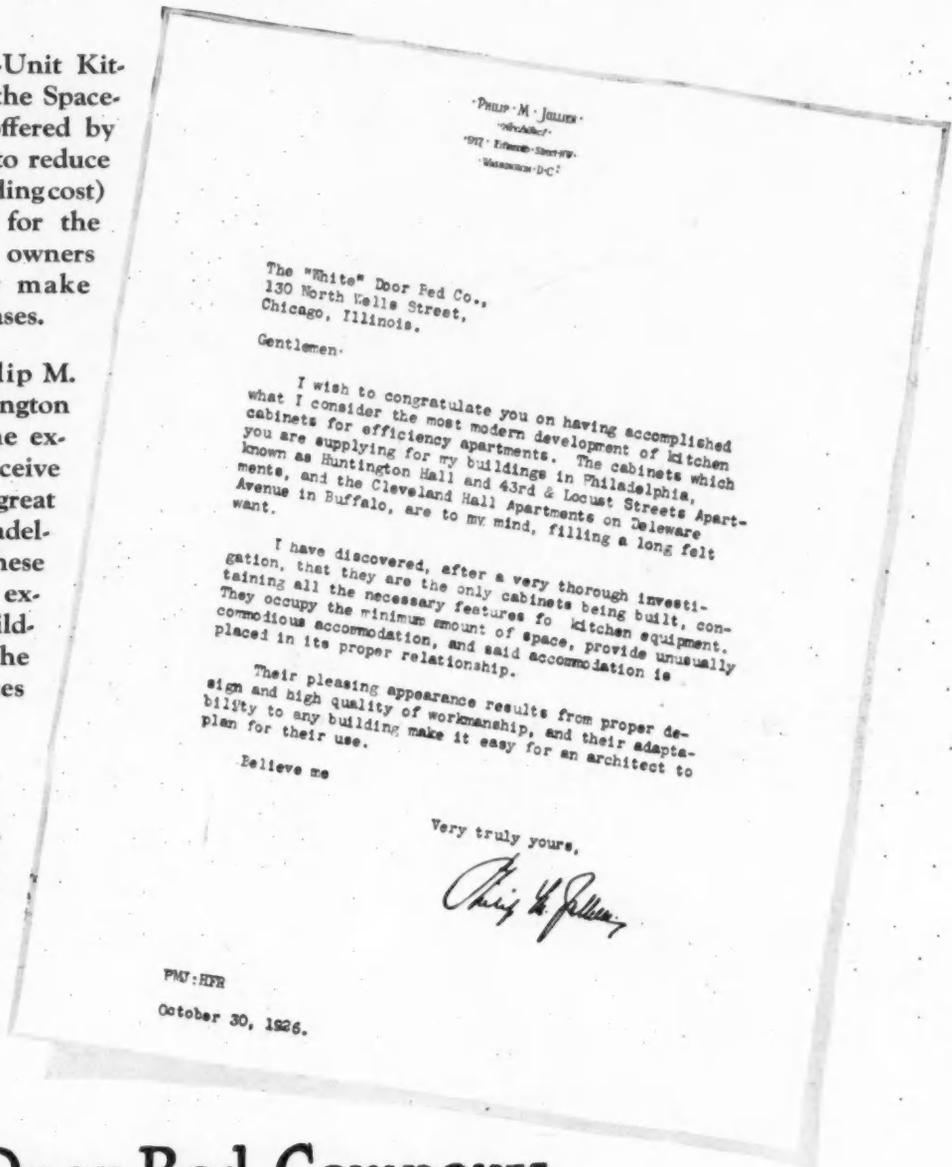
these Two "White" Cabinets

THESE "WHITE" Duo-Unit Kitchen Cabinets, like all the Space-Saving Conveniences offered by this company, are designed to reduce space (and consequently building cost) while increasing comfort for the tenants. They appeal to owners and tenants alike. They make rentals easy and prolong leases.

This letter from Mr. Phillip M. Jullien, prominent Washington Architect, is typical of the expressions of approval we receive constantly. Plans for three great apartment projects in Philadelphia and Buffalo specify these new "WHITE" Cabinets exclusively. Architects and builders alike pronounce them the most advanced conveniences for modern apartments.

Write for Catalog

Our new large catalog, including many typical floor plans, will be sent free. Our Engineering Department will gladly show you how "WHITE" Cabinets can be adapted to your buildings.



The "White" Door Bed Company 130 North Wells Street ~ Chicago, Ill.

SALES AGENTS IN ALL THE PRINCIPAL CITIES

"White" Duo-Unit Cabinets used in these great buildings



CLEVELAND HALL
Buffalo
Phillip M. Jullien, Arch.



43rd and LOCUST APARTMENTS
Philadelphia
Phillip M. Jullien, Arch.



HUNTINGTON HALL
Philadelphia
Phillip M. Jullien, Arch.



Make Room for Kitchen Progress

Illustration above shows residence of Mr. J. Paul Zens, 2891 Paxton Road, Shaker Heights, Ohio. Architect, Philip Lindsley Small, Cleveland, Ohio. Below: Interior view of kitchen with Lorain-equipped Dangler Gas Range.



One easy turn of the Lorain Red Wheel gives the housewife a choice of any measured and controlled oven heat for any kind of oven cooking or baking.



Unless the Regulator has a RED WHEEL it is NOT a LORAIN

THE provision of adequate space for a Lorain-equipped Gas Range of cooking capacity in proportion to the size of the household should be a major consideration in planning the kitchen.

Women examining new homes look for the Red Wheel that identifies the Lorain Self-regulating Oven, because it means perfect cooking, easy canning and leisure.

More than 1900 school and university domestic science departments use Lorain Red Wheel Ovens. Millions of women see the Red Wheel advertisements that appear continually in their favorite magazines.

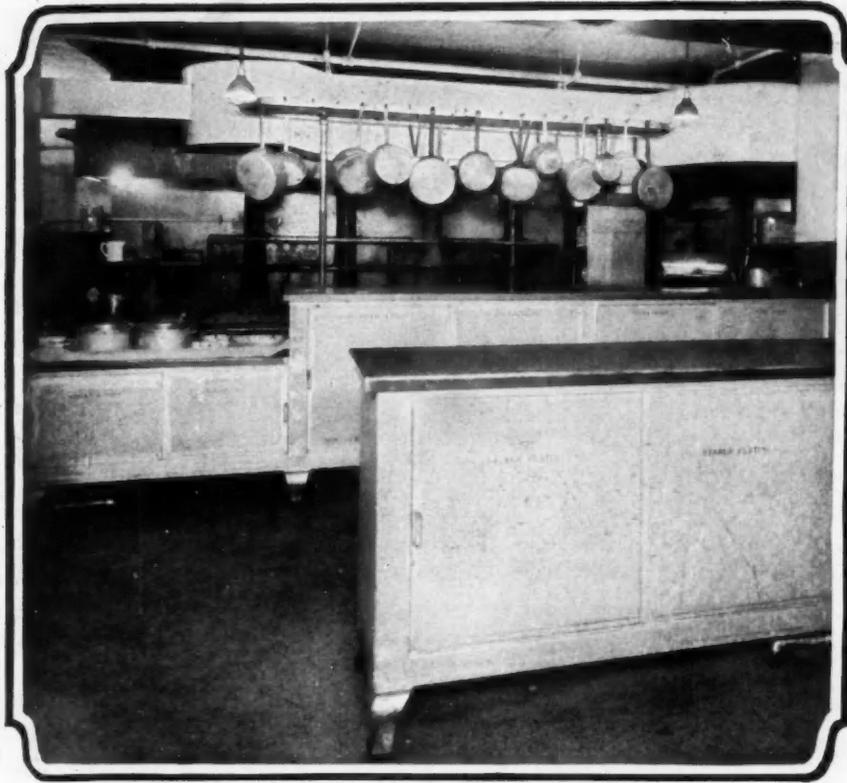
Lorain Red Wheel Ovens are built only in the following famous makes of Gas Ranges: **Reliable, Clark Jewel, Dangler, Direct Action, New Process and Quick Meal.** For specific data see Sweet's Catalog, 20th Edition, Pages 2769-2778 or send for our *Handbook on Gas Ranges for Architects and Builders.*

AMERICAN STOVE COMPANY

Largest Makers of Gas Ranges in the World

444 Chouteau Avenue ∴ St. Louis, Mo.

LORAIN OVEN HEAT REGULATOR



The Morton House, Grand Rapids, Michigan, is a consistent user of "Van" Equipment. Illustrated here is a partial view of the "Van" Kitchen in this hotel.

Why Leading Hotels specify "Van" Equipment!

ECONOMY is always a first consideration—and it is a *lasting* one when you buy "Van" Equipment.

That's one of the reasons why leading hotels of every size specify "Van" Equipment every time. It is their assurance of low cost in the beginning and economy always. "Van" Equipment is really worth twice its cost because of the double service and satisfaction it provides.

Perhaps you are planning to replace part of your equipment—or entirely remodel your present kitchen. In either case, for the sake of economy and satisfaction, consult the House of Van.

The John Van Range Co.
EQUIPMENT FOR THE PREPARATION AND SERVING OF FOOD
Cincinnati

NEW ORLEANS
CLEVELAND

ATLANTA
CHICAGO

LOUISVILLE
DETROIT



The Morton House, Grand Rapids, Mich., one of the Mid-West's best known hotels.



A Memorial of the Past That is Built for the Future

Nowhere in the world can there be found the counterpart of the Elks National Memorial Headquarters Building in Chicago. It combines in one beautiful design the two functions of a War Memorial and the executive headquarters of a great national fraternity.

In a building designed to stand with all the endurance of the hills from which its marble walls were carved, how fitting was the selection of

Neptune brand Atlantic wires for the electrical circuits.

All three Atlantic brands—"Neptune," "Triton," and "Dolphin"—have been known to architects for over a quarter century. Their longevity and high dielectric strength are recognized

as the best insurance against wiring troubles in any building.

Samples and detailed specifications will gladly be sent to any architect or engineer.




Above—Another Atlantic installation, the Elks National Memorial Headquarters Building, Clinton and Russell, Architects; Lord Electric Company, Electrical Contractors.


Neptune—30% Hevea Rubber Compound
Triton—Intermediate 25% Hevea Rubber Compound
Dolphin—National Electric Code Standard Compound

ATLANTIC INSULATED WIRE & CABLE COMPANY, Rome, N. Y.

ATLANTIC

INSULATED WIRES AND CABLES

The Insulation is Cured Before Vulcanization

Shadowless Illumination

The Picture Tells the Story!



D. F. DAVIS
Commercial Photographer
11-12 East 10th
SALT LAKE CITY, UTAH
Oct. 16, 1926.

The Edwin F. Guth Company,
Saint Louis, Mo.
Gentlemen:

Attention Mr. J. L. Macdonald.

We are sending under separate cover the twenty prints of the Sterling Furniture Co. store ordered in your letter of the 12th. No flashlight or other source of light was used in making these exposures. The GuthLites were burning throughout the exposure which accounts for the absence of shadows. It would have been impossible to have made flashlight or any other concentrated light reach to the back of the store.

Thanking you for the order, and trusting that the prints will be entirely satisfactory.

I am,
Yours truly,
D.F. Davis

Study the wonderful illumination of this store. Note the absence of shadows. No glaring reflections from polished surfaces. The photo was taken entirely by the illumination from GuthLites, spaced the average distance apart, and is unretouched.

GuthLite gives a flood of diffused, controlled light. Adjustable reflector controls the rays vertically and horizontally. Wide light distribution. Write for regulation GuthLite folder with A. I. A. file number.

The EDWIN F. GUTH COMPANY
DESIGNERS - ENGINEERS - MANUFACTURERS
Lighting Equipment
ST. LOUIS, U.S.A.

GUTH LITE

Super-Illuminator

A self-contained unit for every size window —

and only one connection to make!

The New Silverlite Multilite

FOR economy and ease of installation, for greater efficiency of operation we have produced Multilite reflectors — the newest, most modern development in window lighting.

With either 2-4-6-8 or 10 light units Multilite comes ready to install with but one connection to make

through knockout in end of reflector.

The reflectors are the famous all metal Silverlite of highest efficiency.

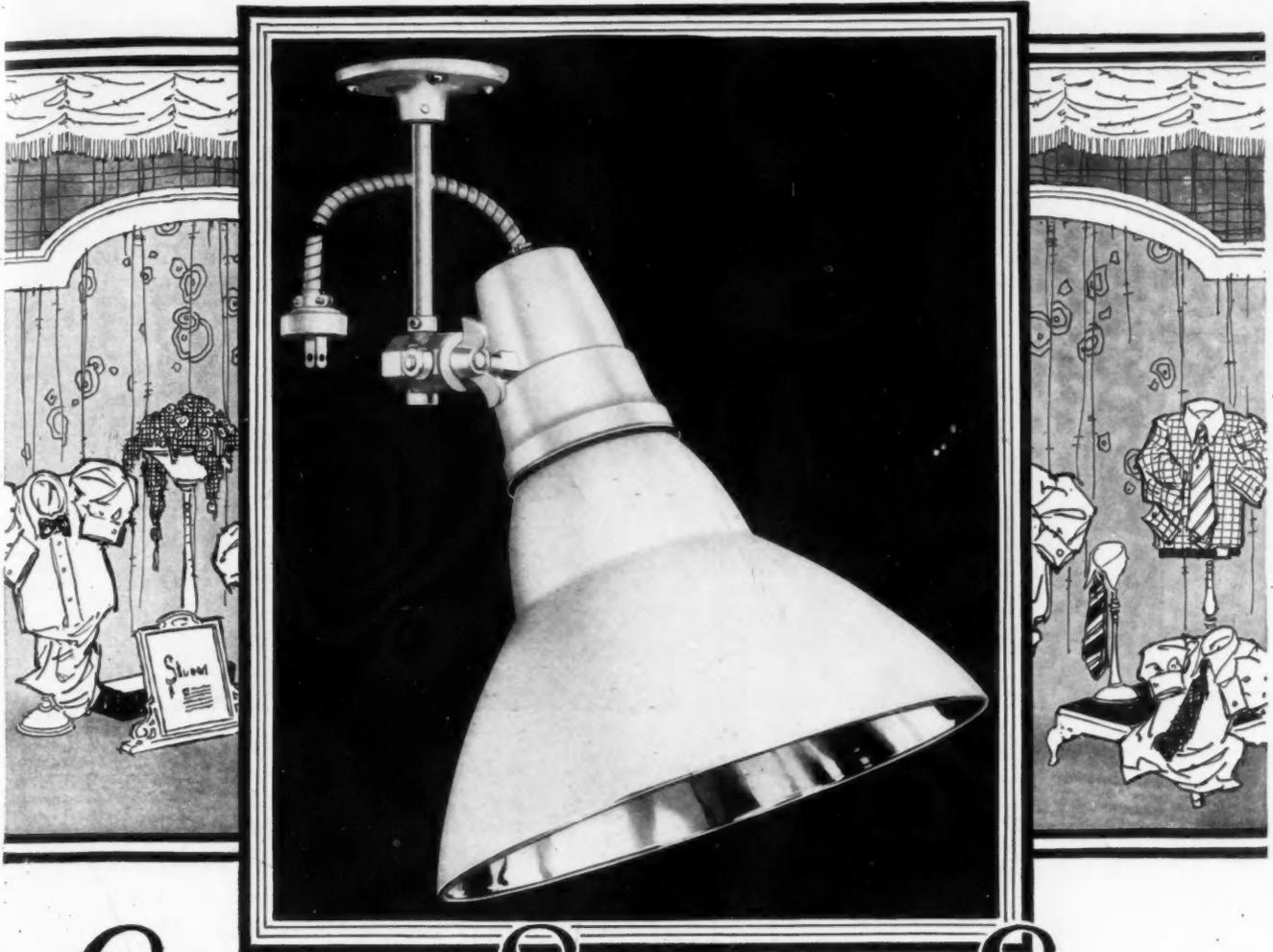
Adjustable to any window or condition Multilite comes ready to install. No parts to lose. Extra frames for screens unnecessary. Finish, Walnut Brown. Write for circular 79.

Established 1857

THE FRINK CO. Inc.

241 Tenth Avenue, New York

Representatives in all principal cities



Gives a Stronger Spot

The new "Pittsburgh" Windo-Spot No. 500 is for intensive spot lighting where the user desires a stronger beam than is given by our Windo-Spot No. 200. It accommodates either 300 or 500 watt lamp. Gives a concentrating beam with candle-power maximum of 52,000, more than 100 candle-power per watt. Equipped with adjustable bracket for attaching to ceiling of show window or other supporting surface. Reflector may be tilted to any desired position and held there by a single thumb screw.

New "PITTSBURGH" Windo-Spot—No. 500

There are 44 reflectors in the "Pittsburgh" line—to meet every need in the lighting of show windows; for direct and indirect lighting; for cove lighting, flood lighting, etc. "Pittsburghs" are all guaranteed for five years, and their wonderful record proves that they *stay bright*. If your files do not contain "Pittsburgh" brochures on Show Window Lighting (A.I.A. File No. 31F14) and Cove Lighting (A.I.A. File No. 31F17) they will be sent on request.

PITTSBURGH REFLECTOR COMPANY

411 Bowman Building Third and Ross Streets
PITTSBURGH, PA.

REPRESENTATIVES IN 26 LEADING CITIES

PITTSBURGH SILVERED REFLECTORS STAY BRIGHT

The Shadow Chasers



Homeopathic Hospital Annex, Pittsburgh, Press C. Dowler, Pittsburgh, Architect. Lighted with Cremax Globes.

Ample Light without Glare

DOCTORS, internes and nurses must not be hampered by dim, insufficient light or light that glares. Mistakes in a hospital are costly.

For that reason, CREMAX GLOBES were chosen to light the new Homeopathic Hospital Annex in Pittsburgh. These globes, artistic as well as scientifically correct, shed a bountiful flood of light into the farthest corners. There is no Glare, no sharp Shadow. Light is diffused in all directions.

Patients, too, appreciate this gentle, even, abundant light. It is not tiring or nervewrecking to gaze at these rich chrome-tinted, gracefully-shaped globes.

CREMAX—a natural colored glass—is the newest development in illuminating glassware from the laboratories of the Macbeth-Evans Glass Company. It transmits a rich, warm, cream-colored quality of light, free from tones of green.

The Illuminating Engineering Department of Macbeth-Evans will gladly furnish any information you desire for the solution of lighting problems. You do not incur any obligation by making use of this service. MACBETH-EVANS GLASS CO. (Eastern Division), Dept. J, Charleroi, Pennsylvania.

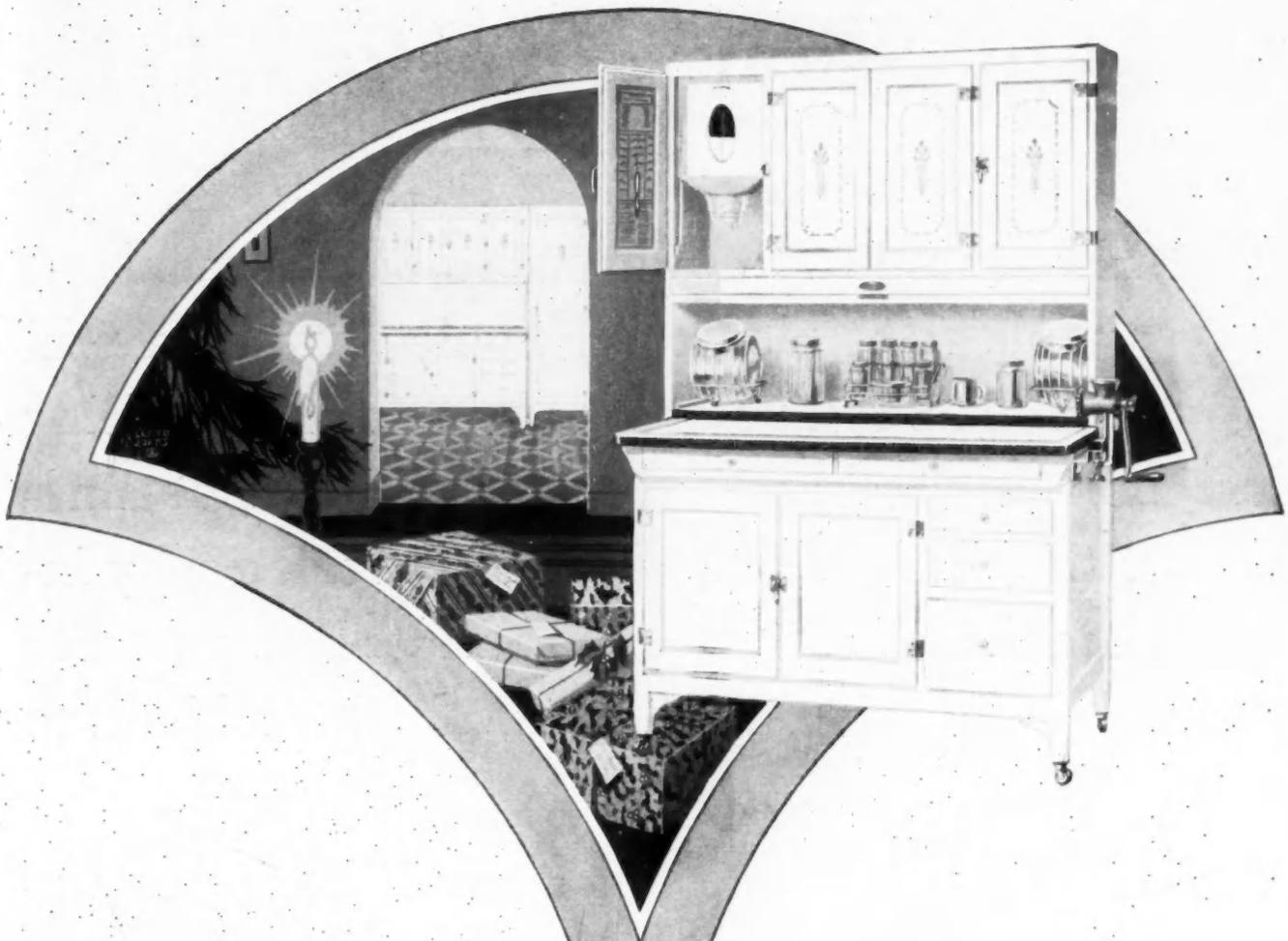


Cremax No. 4385, attractive in design—chosen to light the Homeopathic Hospital Annex, Pittsburgh.

FOR BETTER

CREMAX
Globes

LIGHTING



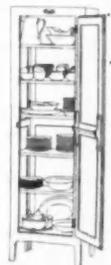
Here is a thoughtful booklet

We want to send to every architect and home-builder in America a carefully prepared booklet which we now have ready for mailing, in which is interestingly set forth the need of taking the kitchen cabinet problem into consideration at the time the home-plans are made. Some architects are not thinking far ahead in this important matter of kitchen equipment. G. I. Sellers & Sons Company, Elwood, Indiana, will gladly mail to you a copy of this booklet upon your request, without cost and without obligation.

The cheapest kitchen equipment

As compared with built-in cupboarding, the modern kitchen cabinet, especially with the associated utility closet, is certainly more beautiful, more sanitary, and much more highly developed in labor-saving conveniences. It is also equally flexible because it can be combined with utility closets to fit any need. It costs less than built-in shelves, being made and finished by standardized methods as against slow hand work. No cupboarding, however elaborate, can possibly take the place of the modern kitchen cabinet.

SELLERS
KITCHEN CABINETS



SELLERS
UTILITY
CLOSET

SUCCESSFUL PROPERTIES



THE Straus Plan of Finance revolves around one simple principle—to lend only upon successful properties. The results of 44 years in underwriting first mortgage real estate securities proves the soundness of the principle, and is another reason why investor, architect, contractor and builder best can serve themselves by bringing their financing problems to S. W. STRAUS & CO.

We are always interested in loans of \$250,000 upward, either on completed buildings or structures to be built, *provided* that the undertaking is soundly conceived and embodies those factors which we all commonly recognize as making for success.

Write today for our booklet, "The Straus Plan of Finance", and direct your request to our

LOAN DEPARTMENT

S.W. STRAUS & CO.

Established 1882

Investment Bonds

Incorporated

STRAUS BUILDING
565 Fifth Ave. at 46th St.
NEW YORK

STRAUS BUILDING
Michigan Ave. at Jackson Blvd.
CHICAGO

STRAUS BUILDING
79 Post Street, SAN FRANCISCO

44 YEARS WITHOUT LOSS TO ANY INVESTOR

Selected List of Manufacturers' Publications

FOR THE SERVICE OF ARCHITECTS, ENGINEERS, DECORATORS, AND CONTRACTORS

The publications listed in these columns are the most important of those issued by leading manufacturers identified with the building industry. They may be had without charge, unless otherwise noted, by applying on your business stationery to *The Architectural Forum*, 383 Madison Ave., New York, or the manufacturer direct, in which case kindly mention this publication.

ACOUSTICS

- The Celotex Co., Chicago.**
Acousti-Celotex. 16 pp., 8½ x 11 in. Illustrated brochure on a valuable material for facing walls and ceilings. Specifications and Details for application and decoration of Acousti-Celotex, 11 pp., 8½ x 11 in.
- John-Manville, Inc.,** Madison Ave. & 41st St., New York, N. Y.
Architectural Acoustics. Booklet. 6 x 9 in. 24 pp. Illustrated. Treatise on the correction of architectural acoustics in Churches, schools, hospitals, office buildings and other places.
- U. S. Gypsum Co.,** 205 W. Monroe St., Chicago, Ill.
A Scientific Solution of an Old Architectural Problem. Folder 6 pp., 8½ x 11 in. Describes Sabinite Acoustical Plaster.

ASH HOISTS—ELECTRIC AND HAND POWER

- Gillis & Geoghegan,** 544 West Broadway, New York, N. Y.
General Catalog. 8½ x 11 in. 20 pp. Fully illustrated. Contains specifications in two forms (with manufacturers' name and without). Detail ¼ in. scale for each telescopic model and special material-handling section.
- The Man-Saving Load Lifter. 5½ x 8½ in. 8 pp. Illustrated. Describes G&G Telescopic and Non-Telescopic Hoists for handling material in factories.

BASEMENT WINDOWS

- Truscon Steel Co.,** Youngstown, Ohio
Truscon Copper-Steel Basement Windows. Booklet, 8 pp., 8½ x 11 in. Illustrated with installation details. Specifications and construction details.

BRICK

- Acme Brick Company,** Ft. Worth, Texas.
Series No. 1
Architectural designs rendered in Acme Brick. Booklet 11 x 8½ in. Illustrated. A series of 48 photogravures showing architectural designs rendered in Acme brick. Illustrations show the various types of buildings erected in the Southwest in recent years. Sent free to architects applying on their office stationery.
- American Face Brick Association,** 1751 Peoples Life Bldg., Chicago, Ill.
Architectural Details in Brickwork. Series One, Two and Three. Each series consists of an indexed folder case to fit standard vertical letter file, containing between 30 and 40 half-tones in brown ink on fine quality paper. These collections are inspiring aids to all designers. Sent free to architects who apply on their office stationery; to others, 50 cents for each series. Size 8½ x 11 in.
- English Precedent for Modern Brickwork. A book of plates and measured drawings of Tudor and Gothic brickwork with a few recent variations of modern architects in the spirit of the old work. Price \$2.00. 100 pp. Illustrated. 8½ x 11 in.
- Brickwork in Italy. 298 pages size 7½ x 10½ in., an attractive and useful volume on the history and use of brick in Italy from ancient to modern times, profusely illustrated with 69 line drawings, 300 half-tones, and 20 colored plates with a map of modern and XII century Italy. Bound in linen will be sent postpaid upon receipt of \$6.00. Half Morocco, seven dollars.

BUILDING FINANCE

- S. W. Straus & Co.,** 565 Fifth Ave., New York, N. Y.
The Straus Plan of finance is an attractively prepared booklet of 30 pages 6 x 9 in. in size, which summarizes the plan under which S. W. Straus & Co. finance modern office building, apartment house, residential hotel and other types of construction. It is illustrated with sketches of buildings throughout the United States which secure bond issues purchased by S. W. Straus & Co.

BUILDING, STEEL PRODUCTS FOR

- Massillon Steel Joist Co.,** Canton, Ohio.
Massillon Bar Joists. Pamphlet. 8½ x 11 in. Illustrated. Information descriptive of Massillon Bar Joist Permanent Fireproof Floor and Roof Construction, with cuts of typical installations. See classification "Steel Joists" for other publications intended for the architect designing this construction.
- Massillon Metal Lath. Pamphlet. 8½ x 11 in. Illustrated. Includes tabulations and illustrations covering recommendations for the use of various weights and kinds of metal lath and lath accessories.
- Massillon Roof Trusses. Pamphlet. 8½ x 11 in. 8 pp. Illustrated. Shows typical installations with 12 sizes of Standardized Curved Chord Steel Roof Trusses for spans of from 40 to 60 feet, together with details, dimensions, and safe loading tables.
- Massillon Bank Vault Reinforcing. Pamphlet. 8½ x 11 in. 8 pp. Illustrated. Gives details of typical installations for a line of standardized steel vault reinforcing frames.
- National Steel Fabric Co.,** Pittsburgh, Pa.
Reinforced Concrete Floors. Booklet, 8½ x 11 in. Illustrated. Detailed information on concrete floor slab reinforcement, with valuable engineering data and tables.
- Truscon Steel Company,** Youngstown, Ohio.
Truscon Data Book. Catalog. 3½ x 6 in. 128 pp. Illustrated. Contains complete information with illustrations on Truscon reinforcing steel, steel windows, metal lath, standard buildings, concrete inserts, steel joists, pressed steel stamping and chemical products.

CEMENT

- Carney Company, The,** Mankato, Minn.
What Twelve Men Said About Carney. Booklet, 8½ x 11 ins., illustrated. Opinions of well known architects and builders of Carney Cement used for mortar.
- Louisville Cement Co.,** 315 Guthrie St., Louisville, Ky.
BRIXMENT for Perfect Mortar. Self-filing handbook 8½ x 11 inches. 16 pp. Illustrated. Contains complete technical description of BRIXMENT for brick, tile and stone masonry, specifications, data and tests.
- Sandusky Cement Co.,** Dept. F., Cleveland, Ohio.
Medusa White Portland Cement. Booklet, 8½ x 11 ins., 32 pp., illustrated. Complete data on cement, plain and waterproofed.

CONCRETE BUILDING MATERIALS

- Concrete Surface Corporation,** 342 Madison Ave., New York.
Binding Surfaces on Concrete. Booklet, 12 pp., 8 x 11 in., illustrated. Deals with an important detail of building.

CONCRETE COLORINGS

- A. C. Horn Company,** Long Island City, N. Y.
Ceramic Catalog. Booklet. 8½ x 11 in. 26 pp. A magnificent brochure, illustrated in color, describing a valuable line of specialties for use with concrete floors—colorings, hardeners, waterproofing, etc.

CONDUIT

- Johns-Manville, Inc.,** New York.
Orangeburg Fibre Conduit. Booklet. 8½ x 11 in. 8 pp. Details regarding a valuable form of conduit.
- Orangeburg System of Under Floor Duct. Booklet. 8½ x 11 in. 32 pp.
- National Metal Molding Co.,** 1113 Fulton Building, Pittsburgh, Pa.
Bulletin of all National Metal Molding Products. In correspondence folder. 9½ x 11½ in.
- Sheraduct. Circular. 5 x 8 in. Illustrated.
- Flaxsteel. Circular. 5 x 8 in. Illustrated.

CONSTRUCTION, FIREPROOF

- Massillon Steel Joist Co.,** Canton, Ohio.
Massillon Bar Joists. Pamphlet. 8½ x 11 in. 8 pp. Illustrated. Contains general information, with illustrations, regarding obtaining Permanent Fireproof Floor and Roof Construction by using Massillon Bar Joists. See classification "Steel Joists" for other publications intended for architects designing this construction.
- Massillon Metal Lath. Pamphlet. 8½ x 11 in. 8 pp. Illustrated. Contains cuts, illustrations and recommendations for the use of various weights and kinds of metal lath for fireproofing columns, beams and steel joists.
- National Fire Proofing Co.,** 250 Federal St., Pittsburgh, Pa.
Standard Fire Proofing Bulletin 171. 8½ x 11 in. 32 pp. Illustrated. A treatise on fireproof floor construction.
- National Steel Fabric Co.,** Pittsburgh, Pa.
Fireproofing Structural Steel. Booklet 8½ x 11 in. Illustrated. Information on concrete fireproofing and reinforcement of beams, girders, and columns. Includes details and tables.
- Northwestern Expanded Metal Co.,** 1274 Old Colony Building, Chicago, Ill.
Northwestern Expanded Metal Products. Booklet. 8½ x 10½ in. 16 pp. Fully illustrated, and describes different products of this company, such as Kno-burn metal lath, 20th Century Corrugated, Plaster-Sava and Longspan lath channels, etc.

DAMP-PROOFING

- Philip Carey Co.,** Lockland, Cincinnati, Ohio.
Architects' Specifications for Carey Built-Up Roofing. Booklet. 8 x 10¼ in. 24 pp. Illustrated. Complete data to aid in specifying the different types of built-up roofing to suit the kind of roof construction to be covered.
- Carey Built-Up Roofing for Modern School Buildings. Booklet. 8 x 10¼ in. 32 pp. Illustrated. A study of school buildings of a number of different kinds and the roofing materials adapted for each.
- A. C. Horn Company,** Long Island City, N. Y.
Waterproofing. 9½ x 11½ in. Folder. Contains folders giving data on excellent waterproofing and dampproofing materials.
- Sonneborn Sons, Inc.,** L., 116 Fifth Ave., New York.
Specification Sheet, 8½ x 11 in. Descriptions and specifications of compounds for dampproofing interior and exterior surfaces.
- Toch Brothers,** 110 East 42nd Street, New York City.
Specifications for Dampproofing, Waterproofing, Enameling and Technical Paint. Complete and authoritative directions for use of an important line of materials.

DOORS AND TRIM, METAL

- The American Brass Company,** Waterbury, Conn.
Anaconda Architectural Bronze Extruded Shapes. Brochure, 180 pp., 8½ x 11 in., illustrating and describing more than 2,000 standard bronze shapes of cornices, jamb casings, moldings, etc.
- Art Metal Construction Co.,** Jamestown, N. Y.
Hollow Metal Doors and Trim. Portfolio containing several brochures and a catalog of 159 pages and plates 8½ x 11½ in.

SELECTED LIST OF MANUFACTURERS PUBLICATIONS—Continued from page 135

DOORS AND TRIM, METAL—Continued

- The Compound & Pyrono Door Company**, St. Joseph, Mich.
Pyrono Handbook for Architects and Contractors. 8½ x 11 in. 16 pp. Contains full information regarding Pyrono Fireproof Veneered Doors and Trim, with complete details and specifications.
Pyrono details in sheet form for tracing.
- Richards-Wilcox Mfg. Co.**, Aurora, Ill.
Fire Doors and Hardware, Booklet. 8½ x 11 in. 64 pp. Illustrated. Describes entire line of tin-clad and corrugated fire doors, complete with automatic closers, track hangers and all the latest equipment—all approved and labeled by Underwriters' Laboratories.

DUMBWAITERS

- Sedgwick Machine Works**, 151 West 15th St., New York.
Catalog and Service Sheets. Standard specifications, plans and prices for various types, etc. 4¼ x 8¼ in. 60 pp. Illustrated.

ELECTRICAL EQUIPMENT

- Frank Adam Electric Company**, St. Louis, Mo.
Catalog No. 35-1925. Panelboards—Steel Cabinets. 7¼ x 10½ in. 64 pp. Illustrates and describes sectionally built panelboards, an important line of steel cabinets, and the fittings which go with them.
- Hart & Hegeman Mfg. Co.**, The, 342 Capitol Ave., Hartford, Conn.
The Line of Least Resistance. Catalog R. 10½ x 7¼ in. 152 pp. Illustrated. Complete display of switches, sockets, accessories and wiring devices with brief description.
A new H & H Switch. Leaflet. 3½ x 6 in. 4 pp. Illustrated. Illustrates a new H & H composition base push switch of De Luxe quality.
Tumbler Switches. Booklet. 3½ x 6 in. 6 pp. Illustrated. Shows complete line of H & H Tumbler Switches.
Architects' Handbook of H & H Wiring Devices. Booklet 8½ x 11 in. 16 pp. "Written by an Architect for Architects."
H. & H. Electrical Wiring Devices, Catalog S. 8½ x 10 in., 123 pp. Lists and illustrates details of equipment.
- Kohler Co.**, Kohler, Wis.
Principle and Proof. Booklet. 48 pp. Illustrated. Describes a standard voltage automatic electric power and light plant for isolated homes, for emergency auxiliary or permanent lighting in stores, theaters, churches and schools.
- Pick & Company, Albert**, 208 West Randolph St., Chicago, Ill.
School Cafeterias. Booklet. 9 x 6 in. Illustrated. The design and equipment of school cafeterias with photographs of installation and plans for standardized outfits.
Kitchen Equipment. Booklet. 9 x 6 in. Illustrated. Photographs and descriptions of Hotel, Club and Hospital kitchens with treatise on plans and equipment of efficient kitchens.
Electric Kitchen Equipment. Booklet. 8½ x 11½ in. Illustrated. Photographs and descriptions of PIX "Master-Made" ranges, ovens, etc., for Hotels and Restaurants.
- Western Electric Co.**, 195 Broadway, New York, N. Y.
Western Electric Inter-Phones for Apartment Houses. Booklet. 5¼ x 6¼ in. 16 pp. Illustrated. Illustrates and describes use of Inter-Phones in Apartment Houses.
Installing and Maintaining Western Electric Inter-Phones. In addition to giving general information on layout of system, details are supplied on individual Inter-Phone Systems, listing battery and wiring requirements.

ELEVATORS

- Otis Elevator Company**, 260 Eleventh Ave., New York, N. Y.
Otis Push Button Controlled Elevators. Descriptive leaflets. 8½ x 11 in. Illustrated. Full details of machines, motors and controllers for these types.
Otis Geared and Gearless Traction Elevators of All Types. Descriptive leaflets. 8½ x 11 in. Illustrated. Full details of machines, motors and controllers for these types.
Escalators. Booklet. 8½ x 11 in. 22 pp. Illustrated. Describes use of escalators in subways, department stores, theaters and industrial buildings. Also includes elevators and dock elevators.
- Richards-Wilcox Mfg. Co.**, Aurora, Ill.
Elevators. Booklet. 8½ x 11 in. 24 pp. Illustrated. Describes complete line of "Ideal" elevator door hardware and checking devices, also automatic safety devices.
- Sedgwick Machine Works**, 151 West 15th St., New York, N. Y.
Catalog and descriptive pamphlets, 4¼ x 8¼ in. 70 pp. Illustrated. Descriptive pamphlets on hand power freight elevators, sidewalk elevators, automobile elevators, etc.

ENAMELING

- Toch Brothers**, 110 East 42nd Street, New York City.
Specifications for Dampproofing, Waterproofing, Enameling and Technical Painting. Complete and authoritative directions for use of an important line of materials.

FIRE DOORS—See Doors, Windows and Trim, Metal

FIREPROOFING—See also Construction, Fireproof

- Concrete Engineering Co.**, Omaha, Nebr.
"Handbook of Fireproof Construction." Booklet, 53 pp., 8½ x 11 in. Valuable work on methods of fireproofing.
- The General Fireproofing Company**, Youngstown, Ohio.
Fireproofing Handbook, 8½ x 11 in. 64 pp. Illustrated. Gives methods of construction, specifications, data on Herringbone metal lath, steel tile, Trussit solid partitions, steel lumber, self-centering formless concrete construction.

FLOOR HARDENERS (CHEMICAL)

- Master Builders Company**, Cleveland, Ohio.
Concrete Floor Treatments; Hardening, Dustproofing, Waterproofing. Sheets in loose index file, 9 x 12 in. Illustrated work on concrete hardening, coatings, accelerators and freeze proofers.
- Sonneborn Sons, Inc., L.**, 116 Fifth Ave., New York, N. Y.
Lapidolith, the liquid chemical hardener. Complete sets of specifications for every building type in which concrete floors are used, with descriptions and results of tests.

FLOORS—STRUCTURAL

- Truscon Steel Co.**, Youngstown, Ohio
Truscon Locktype. Booklet, 8½ x 11 in., 8 pp. Illustrations of material and showing methods of application.
Truscon Floretype Construction. Booklet, 8½ x 11 in., 16 pp. Illustrations of actual jobs under construction. Lists of properties and information on proper construction. Proper method of handling and tables of safe loads.

FLOORING

- Armstrong Cork & Insulation Co.**, 132 24th St., Pittsburgh, Pa.
Linotile Floors for Public and Semi-Public Buildings, 7½ x 10½ in. 36 pp.
Linotile Floors for Residences. 7½ x 10½ in. 32 pp.
Armstrong's Cork Tile. Revised Edition. Booklet, 24 pp. 5 x 7 in. Illustrated in color. Contains complete specifications.
- Armstrong Cork & Insulation Co.**, Pittsburgh, Pa.
Armstrong's Cork Tile Floors. Booklet, 7¼ x 10½ in. 30 pp. An illustrated work on cork flooring.
- Armstrong Cork Co. (Linoleum Division)**, Lancaster, Pa.
Armstrong's Linoleum Floors. Catalog. 8½ x 11 in. 36 pp. Color plates. A technical treatise on linoleum, including table of gauges and weights and specifications for installing linoleum floors.
Decorative Linoleum Floors. Portfolio of Color Plates. 11¼ x 15 in. 16 pp. Color plates.
Armstrong's Linoleum Pattern Book, 1925. Catalog. 3½ x 6 in. 200 pp. Color Plates. Reproduction in color of all patterns of linoleum and cork carpet in the Armstrong line.
Quality Sample Books. Two books, 3½ x 5¼ in. Showing all gauges and thicknesses in the Armstrong line of linoleums.
Detailed Directions for Laying and Caring for Linoleum. Handbook, 5 x 7 in. 48 pp. Instructions for linoleum layers and others interested in learning most satisfactory methods of laying and taking care of linoleum.
Business Floors. Booklet. 6 x 9 in. 48 pp. Illustrated in color. Explains use of linoleum for offices, stores, etc., with reproductions in color of suitable patterns, also specifications and instructions for laying.
- Barber Asphalt Co.**, Philadelphia.
Specifications for Applying Genasco Asphalt Mastic. Booklet. 8 x 10½ in. Directions for using Asphalt Mastic for flooring.
- Blabon Company, Geo. W.**, Nicetown, Philadelphia, Pa.
Planning the Color Schemes for Your Home. Brochure illustrated in color; 36 pp., 7½ x 10½ in. Gives excellent suggestions for use of color in flooring for houses and apartments.
Handy Quality Sample Folder of Linoleums. Gives actual samples of "Battleship Linoleum," cork carpet, "Feltex," etc.
Blabon's Linoleum. Booklet illustrated in color; 128 pp., 3½ x 8½ in. Gives patterns of a large number of linoleums.
Blabon's Plain Linoleum and Cork Carpet. Gives quality samples, 3 x 6 in. of various types of floor coverings.
- Bonded Floors Company, Inc.**, 1421 Chestnut St., Philadelphia, Pa.
A series of booklets, with full color inserts showing standard colors and designs. Each booklet describes a resilient floor material as follows:
Battleship Linoleum. Explains the advantages and uses of this durable, economical material.
Marble-ized (Cork Composition) Tile. Complete information on cork-composition marble-ized tile and the many artistic effects obtainable with it.
Treadlite (Cork Composition) Tile. Shows a variety of colors and patterns of this adaptable cork composition flooring.
Natural Cork Tile. Descriptive and color plates of this super-quiet, resilient floor.
Practical working specifications for installing battleship linoleum, cork composition tile and cork tile.
- Carter Bloxonend Flooring Co.**, Keith & Perry Bldg., Kansas City, Mo.
Bloxonend Flooring. Booklet 3¼ x 6¼ in. 20 pp. Illustrated. Describes uses and adaptability of Bloxonend Flooring to concrete, wood or steel construction, and advantages over loose wood blocks.
File Folder, 9¾ x 8½ in. For use in connection with A. I. A. system of filing. Contains detailed information on Bloxonend Flooring in condensed, loose-leaf form for specification writer and drafting room. Literature embodied in folder includes standard Specification Sheet covering the use of Bloxonend in general industrial service and Supplementary Specification Sheet No. 1, which gives detailed description and explanation of an approved method for installing Bloxonend in gymnasiums, armories, drill rooms and similar locations where maximum resiliency is required.
- Norton Company**, Worcester, Mass.
Filing Folder. 8½ x 11¼ in. 27 pp. Illustrated with drawings. Specification data for architects.
- Ritter Lumber Co., W. M.**, Columbus, Ohio.
Ritter Oak Flooring, brochure 5 x 7 in. 31 pp. Illustrated. Excellent data on floors of different kinds and of various woods. Beauty Begins in the Forest.
Large illustrated folder on modern flooring.
- U. S. Gypsum Co.**, Chicago.
Pyrobar Floor Tile. Folder. 8½ x 11 in. Illustrated. Data on building floors of hollow tile, and tables on floor loading.
- U. S. Rubber Co.**, 1790 Broadway, New York.
Period Adaptations for Modern Floors. Brochure. 8 x 11 in. 60 pp. Richly illustrated. A valuable work on the use of rubber tile for flooring in interiors of different historic styles.

FOLDING PARTITIONS

- Irving Hamlin**, Evanston, Ill.
The Evanston Sound-Proof Door. Brochure. 8½ x 11 in. 8 pp. Full data on Hamlinized Folding Partitions and Evanston Sound-Proof Doors.
- Wilson Corporation, J. G.**, 11 East 38th Street, New York, N. Y.
Sectionfold and Rolling Partitions and Hygienic School Wardrobes. Catalog No. 37. Booklet 8½ x 11 in. 40 pp. Illustrated. Describes the uses of rolling and sectional partitions, particularly in schools and churches. Also the installation of Wilson school wardrobes.



*Residence at 88 Robsart Road, Kenilworth, Illinois. Frederick Stanton, Architect.
Celotex Insulating Lumber used as roof insulation and as sheathing and insulation.*

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stiffness to the framework of the building.”

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use of Celotex costs a few cents more per yard . . . but gives advantages well worth the difference.

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CELOTEX
INSULATING LUMBER

SELECTED LIST OF MANUFACTURERS PUBLICATIONS—Continued from page 136

FURNITURE

- American Seating Co.**, 14 E. Jackson Blvd., Chicago, Ill.
 Ars Ecclesiastica Booklet. 6 x 9 in. 48 pp. Illustrations of church fittings in carved wood.
 Theater Chairs. Booklet. 6 x 9 in. 48 pp. Illustrations of theater chairs.
- Kensington Mfg. Company**, Showrooms, 41 west 45th St., New York.
 Illustrated booklet indicative of the scope, character and decorative quality of Kensington Furniture, with plan of co-operation with architects, sent on request.
 Photographs and full description of hand-made furniture in all the period styles, furnished in response to a specific inquiry.
- White Door Bed Company, The**, 130 North Wells Street, Chicago, Ill.
 Booklet. 8½ x 11 in. 20 pp. Illustrated. Describes and illustrates the use of "White" Door Bed and other space-saving devices.

GARDEN ACCESSORIES

- Davey Tree Expert Company, The**, 907 Elm St., Kent, Ohio.
 When Your Trees Need The Tree Surgeon. Booklet. 16 pp. 8 x 9¼ in. Illustrated. Lists and explains a number of serious tree troubles of common occurrence; contrasts the scientific methods used by properly trained and conscientious men to remedy these troubles with the work of unscrupulous or untrained men.

GLASS CONSTRUCTION

- Mississippi Wire Glass**, 220 Fifth Avenue, New York.
 Mississippi Wire Glass. Catalog. 3¾ x 8½ in. 32 pp. Illustrated. Covers the complete line.

GRATINGS

- The Tri-lok Company**, 5515 Butler Street, Pittsburgh, Pa.
 What a Difference Three Locks Make. Folder. 4 pp., 8½ x 11 in. Deals with a means of holding slender members of metal in accurate alignment.

GRILLES

- The Tri-lok Company**, 5515 Butler Street, Pittsburgh, Pa.
 What a Difference Three Locks Make. Folder. 4 pp., 8½ x 11 in. Deals with a means of holding slender members of metal in accurate alignment.
- Wickwire Spencer Steel Co., Inc.**, 41 East 42nd St., New York.
 Clinton Grilles. Booklet. 9 x 11 in. 12 pp. A brochure on metal grilles, particularly for use over heating radiators.

HARDWARE

- P. & F. Corbin**, New Britain, Conn.
 Early English and Colonial Hardware. Brochure, 8½ x 11 in. An important illustrated work on this type of hardware.
- Cutler Mail Chute Company**, Rochester, N. Y.
 Cutler Mail Chute Model F. Booklet. 4 x 9¼ in. 8 pp. Illustrated.
- Earle Hardware Mfg. Co.**, 2369 E. 51st St., Los Angeles.
 Catalog No. A-3. 155 pp., 6½ x 10¼ in. General catalog of fine hardware for different uses.
- McKinney Mfg. Co.**, Pittsburgh, Pa.
 McKinney Complete Garage Hardware Sets. Catalog. 6¼ x 10 in. 20 pp. Illustrated. Describes full line of complete garage hardware sets for all kinds of entrances, with views of typical entrances and sketches.
- McKinney Hinges and Butts**. General Catalog. 6¼ x 10 in. Illustrates and describes complete line of McKinney wrought builders' hardware products, including hinges, butts, door hangers and track, latches, garage hardware and specialties.
- Richards-Wilcox Mfg. Co.**, Aurora, Ill.
 Distinctive Garage Door Hardware. Booklet. 8½ x 11 in. 65 pp. Illustrated. Complete information accompanied by data and illustrations on different kinds of garage door hardware.
- Sargent & Company**, New Haven, Conn.
 Details to Which Standard Hardware Can Be Applied. Booklet. 6 pp. 9 x 12 in. Illustrated. Treats with diagrams, portions of doors and windows to which hardware can be applied.
 Sargent Locks and Hardware. Bound volume, 534 pp., 9 x 12 in., illustrated. Complete catalog of Sargent line of hardware.

HEATING EQUIPMENT

- American Blower Co.**, 6004 Russell Street, Detroit.
 Heating and Ventilating Utilities. A binder containing a large number of valuable publications, each 8½ x 11 in., on these important subjects.
- American Radiator Company, The**, 40 West 40th St., N. Y. C.
 Ideal Type "A" Heat Machine. Catalog 7¾ x 10½ in. 32 pp. Illustrated in 4 colors. A brochure of high-efficiency heating apparatus for residences and commercial buildings.
 Ideal Water Tube Boilers. Catalog 7¾ x 10½ in. 32 pp. Illustrated in 4 colors. Data on a complete line of Heating Boilers of the Water Tube type.
 Ideal Smokeless Boilers. Catalog 7¾ x 10½ in. 32 pp. Illustrated in 4 colors. Fully explains a boiler free from the objection of causing smoke.
 Ideal Boilers for Oil Burning. Catalog 5½ x 8½ in. 36 pp. Illustrated in 4 colors. Describing a line of Heating Boilers especially adapted to use with Oil Burners.
 Corto—The Radiator Classic. Brochure 5½ x 8½ in. 16 pp. Illustrated. A brochure on a space-saving radiator of beauty and high efficiency.
 Ideal Arcola Radiator Warmth. Brochure 6¼ x 9¼. Illustrated. Describes a central all-on-one-floor heating plant with radiators for small residences, stores, and offices.
- James B. Clow & Sons**, 534 S. Franklin St., Chicago, Ill.
 Gasteam. Catalog. 6 x 9 in. 16 pp. Illustrated. New radiator using gas for fuel.
- C. A. Dunham Company**, 450 East Ohio Street, Chicago, Ill.
 Dunham Radiator Trap. Bulletin 101. 8 x 11 in. 12 pp. Illustrated. Explains working of this detail of heating apparatus.
 Dunham Packless Radiator Valves. Bulletin 104. 8 x 11 in. 8 pp. Illustrated. A valuable brochure on valves.
 Dunham Return Heating System. Bulletin 109. 8 x 11 in. Illustrated. Covers the use of heating apparatus of this kind.

HEATING EQUIPMENT—Continued

- Dunham Vacuum Heating System**. Bulletin 110. 8 x 11 in. 12 pp. Illustrated.
- Excelsio Specialty Works**, 119 Clinton St., Buffalo, N. Y.
 Excelsio Water Heater. Booklet. 12 pp. 3 x 6 in. Illustrated. Describing the new Excelsio method of generating domestic hot water in connection with heating boilers. (Firepot Coil eliminated.)
- The Fulton Company**, Knoxville, Tenn.
 Siphon, Temperature Regulators. Bulletin T-103. 8½ x 11 in. 16 pp. Complete data on Siphon temperature regulators for air and liquids. Catalog 100, complete line Siphon Heating Specialties.
 Damper Regulators. Air and Vent Valves. Catalog No. 100. 3¼ x 6¼ in. Siphon Damper Regulators for steam, hot water and vapor systems. Siphon Air and Vent Valves.
- Illinois Engineering Co.**, Racine Ave., at 21st St., Chicago, Ill.
 Vapor Heat Bulletin 21. 8½ x 11 in. 32 pp. Illustrated. Contains new and original data on Vapor Heating. Rules for computing radiation, pipe sizes, radiator tappings. Steam table showing temperature of steam and vapor at various pressures, also description of Illinois Vapor Specialties.
- International Heater Company, Utica, N. Y.**
 International Economy Blue Front Warm Air Furnace. Brochure, 23 pp., 7½ x 10½ in. A valuable publication dealing with an important type of heating.
 International Carlton Self Cleaning Warm Air Furnaces. Booklet, 31 pp., 7½ x 10½ in. Illustrated. Complete data on warm air heating.
 International Economy Boilers. Booklet, 36 pp., 7½ x 10½ in. Deals with the vital matter of boilers.
 International Economy Smokeless Boilers. Brochure, 40 pp., 7½ x 10½ in. Illustrated. Discusses an important type of smokeless boiler.
 International Hot Water Supply Boilers. Booklet, 8 pp., 7½ x 10½ in. Data regarding boilers for supplying hot water.
- Johnson Service Company**, 149 Michigan St., Milwaukee, Wis.
 Regulation of Temperature and Humidity. Booklet. 11¼ x 8½ in. 64 pp. Illustrated. Describes Johnson system of pneumatic automatic regulation of temperature and humidity, and illustrates thermostats, valves, air compressors, dampers and other parts.
 Johnson Electric Thermostats, Valves and Controllers. Booklet. 6¼ x 3½ in. 24 pp. Illustrated. Excellent plates showing electric thermostats and controllers.
- Kelsey Heating Company**, James St., Syracuse, N. Y.
 Booklet No. 5, 4 x 9 in. 32 pp. Illustrated. A dealers' booklet showing the Kelsey Warm Air Generator Method of warming and distributing air. Gives dimensions, heating capacities, weights, kind of coal recommended and shows the mechanical and gravity systems of heating homes, churches and schools.
 Monroe Pipeless Booklet, 4½ x 8 in. 20 pp. Illustrated.
 Monroe Tubular Heater. Booklet. 4½ x 8 in. 20 pp. Illustrated. General Booklet giving capacities, dimensions, weights, etc.
 Syracuse Pipeless Booklet. 4½ x 8 in. 12 pp. Illustrated. General Booklet giving sizes and capacities.
- Kewanee Boiler Co.**, Kewanee, Ill.
 Kewanee on the Job. Catalog. 8½ x 11 in. 80 pp. Illustrated. Showing installations of Kewanee boilers, water heaters, radiators, etc.
 Catalog No. 78, 6 x 9 in. Illustrated. Describes Kewanee Fire-box Boilers with specifications and setting plans.
 Catalog No. 79, 6 x 9 in. Illustrated. Describes Kewanee power boilers and smokeless tubular boilers with specifications.
- Mueller Co.**, Decatur, Ill.
 Catalog G, 8 x 11 in., 316 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of hot water control. Complete details are presented with a number of data sheets showing roughing-in-measurements for built-in bath equipment.
- Nash Engineering Company**, South Norwalk, Conn.
 No. 37. Devoted to Jennings Hytor Return Line Vacuum Heating Pumps, electrically driven, and supplied in standard sizes up to 300,000 square feet equivalent direct radiation.
 No. 16. Dealing with Jennings Hytor Air Line Heating Pumps.
 No. 17. Describing Jennings Hytor Condensation Pumps, sizes up to 70,000 square feet equivalent direct radiation.
 No. 25. Illustrating Jennings Return Line Vacuum Heating Pumps. Size M, for equivalent direct radiation up to 5,000 square feet.
- National Radiator Company**, Johnstown, Pa.
 Aero Radiators; Beauty and Worth. Catalog 34. Booklet 6 x 9 in., 20 pp., describing and illustrating radiators and accessories.
- Peerless Unit Ventilation Company, Inc.**, Long Island City, N. Y.
 Peerless Industrial Heating Unit. Folder 6 x 9 in. Deals specifically with heating industrial structures.
 Peer Vent Heating and Ventilating Unit. Brochure, 6 x 6¼ in. Illustrated. Valuable data on apparatus for ventilating and heating buildings of different types.
- Trane Co., The**, La Crosse, Wis.
 Bulletin 14. 16 pp. 8½ x 10½ in. Cover the complete line of Trane Heating Specialties, including Trane Bellows Traps, and Trane Bellows Packless Valves.
 Bulletin 20. 24 pp. 8½ x 10½ in. Explains in detail the operation and construction of Trane Condensation Vacuum, Booster, Circulating, and similar pumps.
- Utica Heater Company**, Utica, N. Y.
 Imperial Round and Square Boilers and Supplies. Catalog. 3½ x 6½ in. Gives complete data on small heaters.
 Special Folders. 8½ x 11 in. "Warmth and Comfort," describing the scientifically correct NEW IDEA pipeless furnaces. "SUPERIOR Warm Air Pipe Furnaces," a standard line of heating equipment for over forty years. "SUPER-SMOKELESS Pipe and Pipeless Furnaces," a new and remarkably efficient warm air heater, burning cheap soft coal without smoke—utilizing the principle of the Bunsen Burner.

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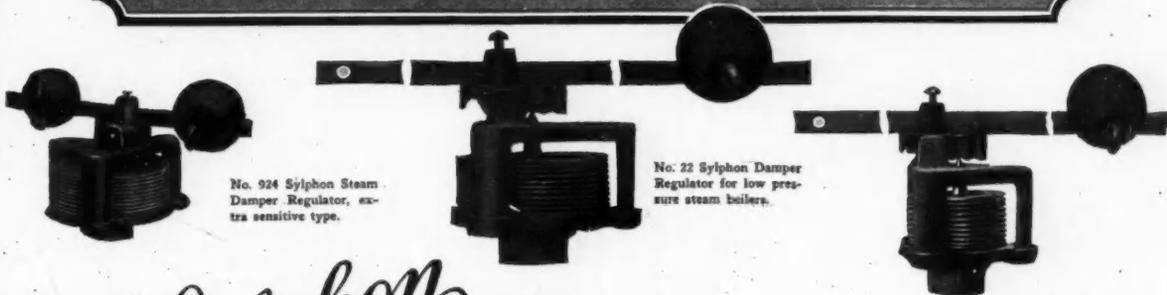
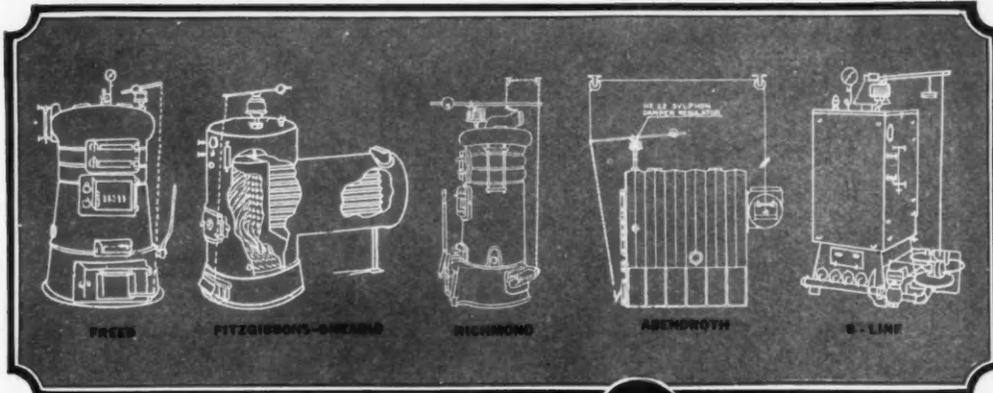
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No. 924 Sylphon Steam Damper Regulator, extra sensitive type.

No. 22 Sylphon Damper Regulator for low pressure steam boilers.

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Sylphon Steam Damper Regulators

Only the sensitive, flexible, all metal Sylphon Bellows used as the diaphragm of Sylphon Damper Regulators can deliver continuous and proportionate response to changes in steam pressure, without "snap action" or "lag."

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you'll find it decidedly to your advantage also to specify Sylphon Regulators, because you can assure your clients of uniform heating with low fuel consumption under completely automatic damper control for the life of the boiler. Be sure you get the genuine Sylphon Regulator. Refuse imitations. At the same time, you are assured that your clients will never have any servicing troubles with the genuine Sylphon Regulator.

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Every genuine Sylphon Bellows is drawn and formed seamless from a flat sheet of specially prepared metal, with folds or corrugations formed to provide the greatest strength and flexibility.



Breakdown, so common with the ordinary type of thermostat is eliminated, for neither years of constant use nor the powerful action of steam weaken the Sylphon Bellows.

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Canadian representatives: Darling Bros., Ltd. 120 Prince Street, Montreal, Canada

SELECTED LIST OF MANUFACTURERS PUBLICATIONS—Continued from page 138

HEATING EQUIPMENT—Continued

Utica Imperial SUPER-SMOKELESS Boiler. Catalog. $8\frac{1}{2} \times 11$ in. Consists of the following seven bulletins, either loose or bound together: (1) School Heating Bulletin. (2) Public Building Bulletin. (3) Theater Heating Bulletin. (4) Churches and Religious Institutions. (5) Residences, Apartments and Hotels. (6) Offices, Industrial Buildings and Garages. (7) Technical Bulletin describing patented Bunsen Burner design and construction of the SUPER-SMOKELESS BOILER, which burns the cheapest grade of soft coal smokelessly and operates equally well with hard coal, coke or fuel oil.

HOSPITAL EQUIPMENT

The Frink Co., Inc., 24th St. and Tenth Ave., New York City. Catalog 426. 7×10 in., 16 pp. A booklet illustrated with photographs and drawings, showing the types of light for use in hospitals, as operating table reflectors, linolite and multilite concentrators, ward reflectors, bed lights and microscopic reflectors, giving sizes and dimensions, explaining their particular fitness for special uses.

The International Nickel Company, 67 Wall St., New York, N. Y. Hospital Applications of Monel Metal. Booklet. $8\frac{1}{2} \times 11\frac{1}{2}$ in., 16 pp. Illustrated. Gives types of equipment in which Monel Metal is used, reasons for its adoption, with sources of such equipment.

The Kny-Scheerer Corporation of America, 119 Seventh Ave., New York.

Hospital Equipment, 16th Edition. $7\frac{3}{4} \times 10\frac{1}{2}$ in., 232 pp. Illustrated. Complete description of Hospital and Surgical Furniture, Hospital Appliances including Operating Tables, Cabinets, Sterilizers for Water, Dressing and Instruments, also Hydrotherapeutic Apparatus.

Surgical Sundries. Second Edition. Booklet. $7\frac{3}{4} \times 10\frac{1}{2}$ in., 48 pp. Illustrated. A complete line of glassware, enamelware, rubber goods, restraint apparatus, instrument sterilizers, sputum cups, wheel chairs and sick room comforts.

Electro Medical. 25th Edition. Booklet. $7\frac{3}{4} \times 10\frac{1}{2}$ in., 160 pp. Illustrated. A complete line of Albee Bone Sets. Apparatus for AC and DC Cystoscopes, Heat Magnets, Vibrators, Compressors, Electric Light Baths, High Frequency Apparatus and X-Ray Apparatus and Accessories.

INCINERATORS

Goder Incinerator Corporation, 323 North Michigan Ave., Chicago, Illinois.

"Goder Incinerators" Booklet. $8\frac{1}{2} \times 11$ in., 16 pp. Illustrated. Describes the Goder Principle of Waste Disposal, illustrates the various designs and models, shows photos of actual installations.

"Goder Chimney Fed Incinerators." Booklet 8 pp. $8\frac{1}{2} \times 11$ in. Illustrated. Describes chimney fed types of incinerator. Shows various designs and photos of installations. Gives specifications, also showing construction plans and details.

"The Garbage Hog." Folder $8\frac{1}{2} \times 11$ in., 4 pp. Describes their portable incinerator, with diagrams.

Kerner Incinerator Company, 715 E. Water St., Milwaukee, Wis. Incinerators (Chimney-fed) Catalog No. 15 (Architect and Builders' Edition). Size $8\frac{1}{2} \times 11$ in., 16 pp. Illustrated. Describes principle and design of Kernerator Chimney-fed Incinerators for residences, apartments, hospitals, schools, apartment hotels, clubs and other buildings. Shows all standard models and gives general information and working data.

Sanitary Elimination of Household Waste, booklet, 4×9 in., 16 pp., illustrated. Gives complete information on the Kernerator for residences.

Garbage and Waste Disposal for Apartment Buildings, folder, $8\frac{1}{2} \times 11$ in., 8 pp. Illustrated. Describes principle and design of Kernerator-Chimney-fed Incinerator for apartments and gives list of buildings where it has been installed.

Sanitary Disposal of Waste in Hospitals, booklet, 4×9 in., 12 pp. Illustrated. Shows how this necessary part of hospital service is taken care of with the Kernerator. Gives list of hospitals where installed.

INSULATING LUMBER

Mason Fibre Co., 111 West Washington St., Chicago, Ill. Booklet, 12 pp., $8\frac{1}{2} \times 11$ in. Illustrated. Gives complete specifications for use of insulating lumber and details of construction involving its use.

INSULATION

Armstrong Cork & Insulation Co., Pittsburgh, Pa. Corkboard Insulation. Brochure. $6\frac{1}{4} \times 9\frac{1}{4}$ in. Illustrated. Fully discusses properties of corkboard and its uses in insulation of cold storage rooms, refrigerators, residences, apartment houses.

The Insulation of Roofs with Armstrong's Corkboard. Booklet. Illustrated. $7\frac{1}{2} \times 10\frac{1}{2}$ in., 32 pp. Discusses means of insulating roofs of manufacturing or commercial structures.

Insulation of Roofs to Prevent Condensation. Illustrated booklet. $7\frac{1}{2} \times 10\frac{1}{2}$ in., 36 pp. Gives full data on valuable line of roof insulation.

Filing Folder for Pipe Covering Data. Made in accordance with A. I. A. rules.

"The Cork Lined House Makes a Comfortable Home." 5×7 in., 32 pp. Illustrated.

Cabot, Inc., Samuel, Boston, Mass. Cabot's Insulating Quilt. Booklet, $7\frac{1}{2} \times 10\frac{1}{2}$ ins., 24 pp., illustrated. Deals with a valuable type of insulation.

Johns-Manville, Inc., New York. Johns-Manville Service to Industry. Bound Volume. 260 pp. 8×11 in. Deals with Asbestos Roofings, Heat and Electrical Insulations, Waterproofing, and Industrial Flooring. A Representation Installation of the Johns-Manville Underground System of Insulation. Booklet. 20 pp., $8\frac{1}{2} \times 11$ in.

Philip Carey Co., The, Cincinnati, Ohio. Carey Asbestos and Magnesia Products. Catalog. 6×9 in. 72 pp. Illustrated.

Celotex Company, The, 645 N. Michigan Ave., Chicago, Ill. The Hidden Comfort of Costly Homes. Booklet $8\frac{1}{2} \times 11$ in.

Celotex Specifications. Booklet $8\frac{1}{2} \times 11$ in.

INSULATION—Continued

Johns-Manville, Inc., Madison Ave. and 41st St., New York, N. Y. Johns-Manville Service to Power Users. Catalog. $8\frac{1}{2} \times 11$ in., 150 pp. Illustrated. Contains valuable data on all forms of insulation, packages, steam traps, high temperature cements, brake locks and linings, also general technical data.

United States Mineral Wool Co., 280 Madison Ave., New York. The Uses of Mineral Wool in Architecture. Booklet $4\frac{1}{4} \times 6\frac{1}{4}$ in., 24 pp. Illustrated. Describes properties of mineral wool as insulation against heat, frost, sound. Specifications and section drawing for use as a fireproofing. Rules for estimate and cost.

JOISTS

Truscon Steel Co., Youngstown, Ohio. Truscon Steel Joists. Booklet, $8\frac{1}{2} \times 11$ in., 16 pp. Illustrated with typical buildings and showing details of construction. Tables of sizes and safe loads.

Truscon Steel Joist Buildings. Illustrated 32-page brochure, attractively illustrated, showing types of buildings equipped with Truscon Steel Joist.

Strip Steel Joist Construction. 14-page booklet, with illustrations. Reprint of paper presented to Building Officials' Conference, Madison, Wis., 1925, by J. J. Calvin, Secretary, Strip Steel Joist Association.

KITCHEN EQUIPMENT

The International Nickel Company, 67 Wall St., New York, N. Y. Hotels, Restaurants and Cafeteria Applications of Monel Metal. Booklet. $8\frac{1}{2} \times 11$ in., 32 pp. Illustrated. Gives types of equipment in which Monel Metal is used, with service data and sources of equipment.

Mueller Co., Decatur, Ill. Catalog G, 8×11 in., 316 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of hot water control. Complete details are presented with a number of data sheets showing roughing-in-measurements for built-in bath equipment.

Pick & Company, Albert, 208 W. Randolph St., Chicago, Ill. School Cafeteria. Portfolio. 17×11 in., 44 pp. Illustrated. An exhaustive study of the problems of school feeding, with copious illustrations and blue prints. Very valuable to the architect. School Cafeterias. Booklet. 9×6 in. Illustrated. The design and equipment of school cafeterias with photographs of installation and plans for standardized outfits.

Kitchen Equipment. Booklet. 9×6 in. Illustrated. Photographs and descriptions of Hotel, Club and Hospital kitchens with treatise on plans and equipment of efficient kitchens.

Electric Kitchen Equipment. Booklet. $8\frac{1}{2} \times 11\frac{1}{2}$ in. Illustrated. Photographs and descriptions of PIX "Master-Made" ranges, ovens, etc., for Hotels and Restaurants.

Hotel, Apartment Building, Club and Institution Installations. Portfolio. 17×11 in., 100 pp. Shows, mostly by plates, how the Albert Pick Company equips hotels completely from top to bottom.

Equipment for Cafeterias, Lunch Rooms, Restaurants, and Dining Rooms. Portfolio. 17×11 in., 86 pp. Illustrated. The last word in Cafeteria equipment to meet all requirements.

LABORATORY EQUIPMENT

Alberene Stone Co., 153 West 23rd Street, New York City. Booklet $8\frac{1}{4} \times 11\frac{1}{4}$ in., 26 pp. Stone for laboratory equipment, shower partitions, stair treads, etc.

Duriron Company, Dayton, Ohio. Duriron Acid, Alkali and Rust-proof Drain Pipe and Fittings. Booklet, $8\frac{1}{2} \times 11$ ins., 20 pp. Full details regarding a valuable form of piping.

Kewaunee Manufacturing Company, 141 Lincoln St., Kewaunee, Wis. Kewaunee Book of Laboratory Furniture. Catalog. 7×10 in., 408 pp. Illustrated. Science and Vocational Laboratory Furniture for schools, colleges, technical institutes, hospitals, etc., including floor plans, illustrations of buildings and equipped laboratories, illustrations of equipment engineering data for mechanical ventilation and illustrations of special plumbing fixtures for laboratory use. A supplement is also issued for this work.

LANTERNS

Todhunter, Arthur, 414 Madison Ave., New York. Hand Wrought Lanterns. Booklet. $5\frac{1}{4} \times 6\frac{1}{4}$ in., 20 pp. Illustrated in Black and White. With price list. Lanterns appropriate for exterior and interior use, designed from old models and meeting the requirements of modern lighting.

LATH, METAL AND REINFORCING

The General Fireproofing Company, Youngstown, Ohio. Herringbone Metal Lath Handbook. $8\frac{1}{2} \times 11$ in., 32 pp. Illustrated. Standard specifications for Cement Stucco on Herringbone.

Rigid Metal Lath and interior plastering. Milwaukee Corrugating Co., Milwaukee, Wis. The Milcor Manual. Booklet $8\frac{1}{2} \times 11$ in., 64 pp. Illustrated. Covers Milcor methods and materials, metal lath, corner beads, steel domes, channels, etc.

National Steel Fabric Co., Pittsburgh, Pa. National Steel Fabric. Folder, $8\frac{1}{2} \times 11$ in. Illustrated. Complete information in condensed form on uses of various styles of National Steel Fabric Reinforcement. Illustrates and explains uses. Includes ready reference Table of Uses and Types of Steel Fabric Reinforcement.

Northwestern Expanded Metal Co., 1234 Old Colony Building, Chicago, Ill. Northwestern Expanded Metal Products. Booklet. $8\frac{1}{2} \times 10\frac{1}{4}$ in., 16 pp. Fully illustrated, and describes different products of this company, such as Kno-burn metal lath, 20th Century Corrugated. Plaster-Sava and Longspan lath channels, etc.



*Hiram Sibley Building, Rochester, N. Y. Messrs. Coolidge, Bulfinch, Shepley and Abbott, architects, Boston.
Roof insulated with Armstrong's Corkboard to protect top floor from summer's heat and winter's cold.*

Cork Insulation on the Roof of the Hiram Sibley Building

ARMSTRONG'S Corkboard was used to insulate the roof of the Hiram Sibley Building, Rochester, one of the handsomest business structures in central New York, for the two-fold purpose of economy and comfort.

In winter the top floor will be easily and comfortably heated, and at a substantial saving in fuel, for the insulation will prevent the tremendous waste of heat that is lost through uninsulated roofs.

In summer, the top floor will be protected from the direct heat of the sun and the offices under the roof will be as cool and comfortable as those on the floors below.

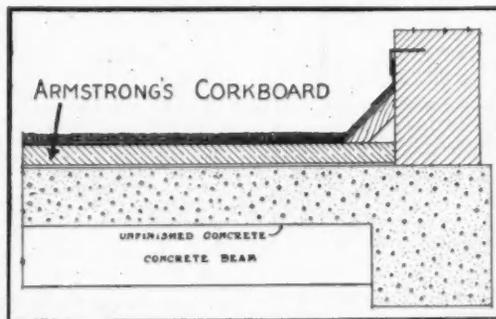
In any kind of building—office or manufacturing, public or residential—insulating the roof with Armstrong's Corkboard is the most effective means of overcoming those temperature conditions which are usually so troublesome and expensive on top floors and in single-story buildings.

Armstrong's Corkboard is easily applied on any type of roof, new or old. It is furnished in boards of such thickness that adequate insulation can be obtained in a *single layer*—an important advantage from the standpoint of labor cost. Armstrong's Corkboard is fire retardant. It is also non-absorbent of moisture and does not buckle or swell, but makes a firm, substantial base for the roofing.



Reg. U. S. Pat. Off.

Send for complete detailed information on the use of Armstrong's Corkboard for the insulation of walls and roofs of any type of building. There is no charge.



Typical method of insulating a concrete-slab roof-deck.

Armstrong Cork & Insulation Company (Division of Armstrong Cork Company), 205 Twenty-fourth St., Pittsburgh, Pa. McGill Building, Montreal, Que. Armstrong Cork Company, Ltd., Sardinia House, Kingsway, London, W. C. 2, England. Branches in the Principal Cities of the United States.

Armstrong's Corkboard Insulation

for the Roofs of All Kinds of Buildings

SELECTED LIST OF MANUFACTURERS PUBLICATIONS—Continued from page 140

LATH, METAL AND REINFORCING—Continued

- Wickwire Spencer Steel Co., Inc.**, 41 East 42nd St., New York.
Clinton Wire Lath. Brochure. 9 x 11 in. 51 pp. A valuable booklet on metal lathing and the proper method of using it.
- Truscon Steel Company**, Youngstown, Ohio.
Truscon 1-A Metal Lath. 12-page booklet, 8½ x 11 in., beautifully printed, with illustrations of details of lath and method of application.
- Truscon ¾-inch Hy-Rib for Roofs, Floors and Walls. Booklet, 8½ x 11 in., illustrating Truscon ¾-in. Hy-Rib as used in industrial buildings, plates of typical construction. Progressive steps of construction. Specification and load tables.

LAUNDRY CHUTES

- The Pfaunder Company**, 217 Cutler Building, Rochester, N. Y.
Pfaunder Glass-Lined Steel Laundry Chutes. Booklet. 5½ x 7¾ in. 16 pp. Illustrated. A beautifully printed brochure describing in detail with architects' specifications THE PFAUNDER GLASS LINED STEEL LAUNDRY CHUTES. Contains views of installations and list of representative examples.

LAUNDRY MACHINERY

- American Laundry Machinery Co.**, Norwood Station, Cincinnati, Ohio.
Functions of the Hotel and Hospital Laundry. Brochure, 8 pp., 8½ x 11 in. Valuable data regarding an important subject.

LIGHTING EQUIPMENT

- Artistic Lighting Equipment Assn.**, Guarantee Title Bldg., Cleveland.

1927 Handbook of the A. L. E. A. Illustrated booklet, 64 pp., 5 x 7½ in. Outlines purposes and methods of the Association. Business Bulletin of the A. L. E. A. Illustrated brochure, 24 pp., 8½ x 11 in. Data of interest on lighting equipment.

Curtis Lighting, Inc., Chicago, Ill.
Catalog 393. 8 x 10 in. 34 pp. Illustrated. Describes and illustrates X-Ray reflectors for show cases and windows, and lighting fixtures for interior illumination of stores.

Lighting Specifications.—A. I. A. File 31 F. Looseleaf. 8½ x 11 in. Architectural detail plates on church, restaurant and home lighting. Complete details, illustrations and helpful ideas on direct and indirect illumination. Sent free to any registered architect who requests them on his own letterhead.

Frink, Inc., I. P., 24th St. and 10th Ave., New York City.
Catalog 415. 8½ x 11 in. 46 pp. Photographs and scaled cross-sections. Specialized bank lighting, screen and partition reflectors, double and single desk reflectors and Polarite Signs.

Guth Company, The Edwin F., 2615 Washington Ave., St. Louis, Mo.

Guth Lighting Equipment (Catalog No. 15). Booklet, 8½ x 11 in. Fully illustrated, and covering lighting fixtures for buildings of all kinds.

Forge Craft (Catalog No. 16). Booklet, 16 pp., 8½ x 10¼ in. Brochure dealing specifically with fixtures intended for use in buildings of the so-called "bungalow" type.

Aglite Porcelain Enameled Illuminators. Folder, 4 pp., 8½ x 11 in. on a new and improved type of lighting.

Holophane Glass Company, Inc., 342 Madison Ave., New York City.
Holophane Helps to Make Well Known Quality Products. Brochure. 20 pp., 8½ x 11 in. Deals with lighting industrial buildings, giving illustrations of well lighted interiors.

Modern Retailing Success. Booklet, 16 pp., 8½ x 11 in. Lighting of shops and show windows. Illustrations give many interesting suggestions.

Holophane Catalog; Commercial edition. Brochure, 40 pp., 8½ x 11 in. General catalog of details of lighting equipment.

Modern School Lighting. Booklet 35 pp., 6 x 9 in. Excellent work on lighting school rooms, gymnasiums, etc.

Pittsburgh Reflector Co., Pittsburgh, Pa.

Cove Lighting. Booklet. 8½ x 11 in. 24 pp. Gives complete data on lighting of this type.

Show Window Lighting. Booklet. 8½ x 11 in. 28 pp. A most useful work on lighting these important areas.

MAIL CHUTES

- Cutler Mail Chute Company**, Rochester, N. Y.
Cutler Mail Chute Model F. Booklet. 4 x 9¼ in. 8 pp. Illustrated.

MANTELS

- Arthur Todhunter**, 414 Madison Avenue, New York, N. Y.
Georgian Mantels. New Booklet. 24 pp. 5¼ x 6¼ in. A fully illustrated brochure on eighteenth century mantels. Folders give prices of mantels and illustrations and prices of fireplace equipment.

MARBLE

The Georgia Marble Company, Tate, Ga. New York Office, 1328 Broadway.

Why Georgia Marble is Better. Booklet. 3¾ x 6 in. Gives analysis, physical qualities, comparison of absorption with granite, opinions of authorities, etc.

Convincing Proof. 3¾ x 6 in. 8 pp. Classified list of buildings and memorials in which Georgia Marble has been used, with names of Architects and Sculptors.

METALS

American Sheet & Tin Plate Co., Frick Building, Pittsburgh, Pa.
Reference Book. Pocket Ed. 2½ x 4½ in. 168 pp. Illustrated. Covers the complete line of Sheet and Tin Mill Products. Apollo and Apollo-Keystone Galvanized Sheets. Catalog. 8½ x 11 in. 20 pp. Illustrated.

Research on the Corrosion Resistance of Copper Steel. Booklet. 8½ x 11 in. 24 pp. Illustrated. Technical information on results of atmospheric corrosion tests of various sheets under actual weather conditions.

The International Nickel Company, 67 Wall St., New York, N. Y.
The Choice of a Metal. Booklet. 6¼ x 3 in. 166 pp. Illustrated. Monel Metal—its qualities, use and commercial forms, briefly described.

MILL WORK—See also Wood

Curtis Companies Service Bureau, Clinton, Iowa.
Architectural Interior and Exterior Woodwork. Standardized. Book. 9 x 11½ in. 240 pp. Illustrated. This is an Architects' Edition of the complete catalog of Curtis Woodwork, as designed by Trowbridge & Ackerman. Contains many color plates.

Better Built Homes. Vols. XV-XVIII incl. Booklet. 9 x 12 in. 40 pp. Illustrated. Designs for houses of five to eight rooms, respectively, in several authentic types, by Trowbridge & Ackerman, architects for the Curtis Companies.

Curtis Details. Booklet. 19¼ x 23½ in. 20 pp. Illustrated. Complete details of all items of Curtis woodwork, for the use of architects.

Hartmann-Sanders Company, 2155 Elston Ave., Chicago, Ill.
Column Catalog. 7½ x 10 in. 48 pp. Illustrated. Contains prices on columns 6 to 36 in. diameter, various designs and illustrations of columns and installations.

The Pergola Catalog. 7½ x 10 in. 64 pp. Illustrated. Contains illustrations of pergola lattices, garden furniture in wood and cement, garden accessories.

Roddis Lumber and Veneer Co., Marshfield, Wis.
Roddis Doors. Brochure, 24 pp., 5¼ x 8½ in. Illustrated price list of doors for various types of buildings.

Roddis Doors, Catalog G. Booklet, 183 pp., 8½ x 11 in. Completely covers the subject of doors for interior use.

Roddis Doors for Hospitals. Brochure, 15 pp., 8½ x 11 in. Illustrated work on hospital doors.

Roddis Doors for Hotels. Brochure, 15 pp., 8½ x 11 in. Illustrated work on doors for hotel and apartment buildings.

MORTAR COLORS

Clinton Metallic Paint Co., Clinton, N. Y.
Clinton Mortar Colors. Folder. 8½ x 11 in. 4 pp. Illustrated in color, gives full information concerning Clinton Mortar Colors with specific instructions for using them.

Color Card. 6½ x 3¼ in. Illustrates in color the ten shades in which Clinton Mortar Colors are manufactured.

Something new in Stucco. Folder. 3¼ x 6 in. An interesting folder on the use of coloring matter for stucco-coated walls.

PAINTS, STAINS, VARNISHES AND WOOD FINISHES

Cabot, Inc., Samuel, Boston, Mass.
Cabot's Creosote Stains. Booklet. 4 x 8½ in. 16 pp. Illustrated.

The Glidden Company, Cleveland, Ohio.
More Daylight. 8 x 10½ in. 20 pp. Portraying by illustrations and text the need and methods of modern mill painting.

Glidden Specification Book. 8 x 10¼ in. 12 pp. Complete architectural specifications for Glidden Paints and Varnishes, including Ripolin. Directions for the proper finishing of wood, metal plaster, concrete, brick and other surfaces.

Martin Varnish Co., 2500 Quarry St., Chicago, Ill.
Architectural Specifications. Booklet. 8½ x 11 in. 20 pp. Illustrated. Complete guide for Architects in specifying Martin Varnish Products.

Your Floors. Booklet. 5 x 7 in. 20 pp. Illustrated. Explains fully how to finish all kinds of floors and woodwork with Martin's Pure Varnish.

A. C. Horn Company, Long Island City, N. Y.
Ceramic Catalog. Booklet. 26 pp., 8½ x 11 in. A magnificent brochure illustrated in color, describing a valuable line of specialties for use with concrete floors—colorings, hardeners, waterproofing, etc.

National Lead Company, 111 Broadway, New York, N. Y.
Handy Book on Painting. Book. 5½ x 3¼ in. 100 pp. Gives directions and formulae for painting various surfaces of wood, plaster, metals, etc., both interior and exterior.

Red Lead in Paste Form. Booklet. 6¼ x 3¼ in. 16 pp. Illustrated. Directions and formulae for painting metals.

Came Lead. Booklet. 8¼ x 6 in. 12 pp. Illustrated. Describes various styles of lead comes.

Cinch Anchoring Specialties. Booklet. 6 x 3½ in. 20 pp. Illustrated. Describes complete line of expansion bolts.

Pratt & Lambert, Inc., Buffalo, N. Y.
Specification Manual for Paint, Varnishing and Enameling. Booklet, 38 pp., 7½ x 10½ in. Complete specifications for painting, varnishing and enameling interior and exterior wood, plaster, and metal work.

The Ripolin Company, Cleveland, Ohio.
Ripolin Specifications. Book. 8 x 10¼ in. 12 pp. Complete specifications and general instructions for the application of Ripolin, the original Holland enamel paint. Also directions for proper finishing of wood, metal, plaster, concrete, brick and other surfaces.

Why Ripolin Has an International Reputation. 8 x 10¼ in. 24 pp. Designed for the architect's files to illustrate the many varied uses of Ripolin Enamel Paint in all parts of the world. Profusely illustrated.

Ruberoid Co., The (formerly the Standard Paint Co.), 95 Madison Avenue, New York, N. Y.
Preservative Coating. Booklet. 6 x 9 in. 15 pp. Illustrated. Presents in a concise manner the properties and uses of the Ruberoid Company's various paint preparations.

Sherwin-Williams Company, 601 Canal Rd., Cleveland, Ohio.
Painting Concrete and Stucco Surfaces. Bulletin No. 1. 8½ x 11 in. 8 pp. Illustrated. A complete treatise with complete specifications on the subject of Painting of Concrete and Stucco Surfaces. Color chips of paint shown in bulletin.

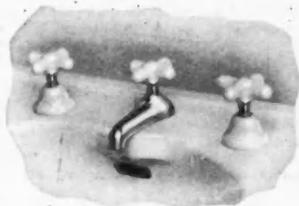
Enamel Finish for Interior and Exterior Surfaces. Bulletin No. 2. 8½ x 11 in. 12 pp. Illustrated. Thorough discussion, including complete specifications for securing the most satisfactory enamel finish on interior and exterior walls and trim.

Painting and Decorating of Interior Walls. Bulletin No. 3. 8½ x 11 in. 20 pp. Illustrated. An excellent reference book on Flat Wall Finish, including texture effects, which are taking the country by storm. Every architect should have one on file.

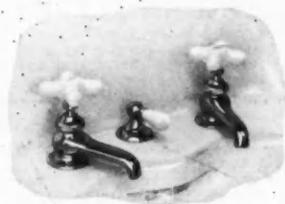
**"TRIUMPH"
BRASS TRIMMINGS**

Standardized—tested the equal of fifteen years of service—of typical Clow quality—at popular prices

PREFERRED FOR EXACTING PLUMBING SINCE 1878



Clow "Triumph" Compression Stops for lavatory—with four arm china-indexed handles—fitted into combination supply and waste fixture.



Clow "Triumph" Compression Lavatory Faucets with four-arm solid china indexed handles.



Clow "Triumph" Compression Faucet with swinging spout, china-tipped index handles and china soap dish.

Some of the fittings that complete the "Triumph" Line are shown above. Have the Clow Man in your territory show them to you.



Winning 200,000 Battles with Water and Wear

An unseen battle is fought every time you turn on a faucet—a battle with water and wear.

In too many of these battles faucets have been defeated. Valves and seats wear away, and water pushes through. The result is a constant dripping in sinks, lavatories, and bath tubs.

But water and wear have had their day. Clow "Triumph" Brass Trimmings have won 200,000 faucet opening battles.

Under city water pressure, ten Clow "Triumph" faucets were opened and closed more than 200,000 times. This is the equal of fifteen years of service.

After the test, wear on the working parts

was measured. It was so slight that the faucets looked good enough for another "15 years" test. And not one of them showed any sign of dripping or leaking.

This test assures plumbers and architects that when they install Clow "Triumph" Brass Trimmings there will be no leaking or dripping, even after years of service.

Clow "Triumph" Brass Trimmings are standardized—parts are readily interchangeable. If replacements are desired, they can be made easily, quickly and cheaply.

And the Clow "Triumph" Line of Brass Compression Trimmings sells at popular prices.

JAMES B. CLOW & SONS, 201 to 299 N. Talman Avenue, CHICAGO
Offices in Principal Cities

CLOW

TRIUMPH [The working units of "Triumph" fittings are readily interchangeable] BRASS

SELECTED LIST OF MANUFACTURERS PUBLICATIONS—Continued from page 142

PAINTS, STAINS, VARNISHES AND WOOD FINISHES—
Continued

- Protective Paints for Metal Surfaces. Bulletin No. 4. 8½ x 11 in. 12 pp. Illustrated. A highly technical subject treated in a simple, understandable manner.
- Sonneborn Sons, Inc., L.**, Dept. 4, 116 Fifth Avenue, New York. Paint Specifications. Booklet. 8½ x 10½ in. 4 pp.
- Valentine & Co.**, 456 Fourth Avenue, New York. How to Use Valspar. Illustrated booklet, 32 pp., 3¼ x 8 ins. Deals with domestic uses for Valspar.
- How to Keep Your House Young. Illustrated brochure, 23 pp., 7 x 8½ in. A useful work on the upkeep of residences.
- Zapon Co., The**, 247 Park Ave., New York City. Zapon Architectural Specifications. Booklet, 28 pp., 8½ x 11 in. Describes odorless brushing and spraying lacquers and lacquer enamels.

PANELING—See Millwork
PARTITIONS

- Circle A Products Corporation**, New Castle, Ind. Circle A Partitions Sectional and Movable. Brochure. Illustrated. 8½ x 11¼ in. 32 pp. Full data regarding an important line of partitions, along with Erection Instructions for partitions of three different types.
- Hauserman Company, E. F.**, Cleveland, Ohio. Hollow Steel Standard Partitions. Various folders, 8½ x 11. Illustrated. Give full data on different types of steel partitions, together with details, elevations and specifications.
- Improved Office Partition Company**, 25 Grand St., Elmhurst, L. I. Telesco Partition. Catalog. 8½ x 11 in. 14 pp. Illustrated. Shows typical offices laid out with Telesco partitions, cuts of finished partition units in various woods. Gives specifications and cuts of buildings using Telesco.
- Detailed Instructions for erecting Telesco Partitions. Booklet. 24 pp. 8½ x 11 in. Illustrated. Complete instructions, with cuts and drawings, showing how easily Telesco Partition can be erected.
- Richards-Wilcox Mfg. Co.**, Aurora, Ill. Partitions. Booklet. 7 x 10 in. 32 pp. Illustrated. Describes complete line of track and hangers for all styles of sliding, parallel, accordion and flush door partitions.
- Sanymetal Products Co.**, Cleveland, Ohio. Sanymetal Partitions for Toilet Rooms. Booklet. 7¼ x 11 in. 24 pp. Illustrated. Complete data on a valuable line of toilet room partitions.
- Sanymetal Products. Brochure. 8½ x 11 in. 40 pp. Illustrated. Describes metal partitions, wainscots, roller hinges and toilet room hardware.
- U. S. Gypsum Co.**, Chicago. Pyrobar Partition and Furring Tile. Booklet. 8½ x 11 in. 24 pp. Illustrated. Describes use and advantages of hollow tile for inner partitions.

PIPE

- American Brass Company**, Waterbury, Conn. Bulletin B-1. Brass Pipe for Water Service. 8½ x 11 in. 28 pp. Illustrated. Gives schedule of weights and sizes (I.P.S.) of seamless brass and copper pipe, shows typical installations of brass pipe, and gives general discussion of the corrosive effect of water on iron, steel and brass pipe.
- Clow & Sons, James B.**, 534 S. Franklin St., Chicago, Ill. Catalog "A". 4 x 6½ in. 700 pp. Illustrated. Shows a full line of steam, gas and water works supplies.
- Duriron Company, Inc.**, Dayton, Ohio. Duriron Acid, Alkali, Rust-proof Drain Pipe and Fillings. Booklet, 20 pp., 8½ x 11 in., illustrated. Important data on a valuable line of pipe.
- National Tube Co.**, Frick Building, Pittsburgh, Pa. "National" Bulletin No. 2. Corrosion of Hot Water Pipe, (8½ x 11 in. 24 pp.) Illustrated. In this bulletin is summed up the most important research dealing with hot water systems. The text matter consists of seven investigations by authorities on this subject.
- "National" Bulletin No. 3. The Protection of Pipe Against Internal Corrosion (8½ x 11 in. 20 pp.) Illustrated. Discusses various causes of corrosion, and details are given of the deactivating and deaerating systems for eliminating or retarding corrosion in hot water supply lines.
- "National" Bulletin No. 25. "National" Pipe in Large Buildings. 8½ x 11 in. 88 pp. This bulletin contains 254 illustrations of prominent buildings of all types, containing "National" Pipe and considerable, engineering data of value to architects, engineers, etc.
- Modern Welded Pipe. Book of 88 pp. (8½ x 11 in.), profusely illustrated with halftone and line engravings of the important operations in the manufacture of pipe.

PLUMBING EQUIPMENT

- Clow & Sons, James B.**, 534 S. Franklin Street, Chicago, Ill. Catalog "M." 9¼ x 12 in. 184 pp. Illustrated. Shows complete line of plumbing fixtures for Schools, Railroads and Industrial Plants.
- Crane Company**, 836 S. Michigan Avenue, Chicago, Ill. Plumbing Suggestions for Home Builders. Catalog. 3 x 6 in. 80 pp. Illustrated.
- Plumbing Suggestions for Industrial Plants. Catalog. 4 x 6½ in. 43 pp. Illustrated.
- Planning the Small Bathroom. Booklet. 5 x 8 in. Discusses planning bathrooms of small dimensions.
- Duriron Company**, Dayton, Ohio. Duriron Acid, Alkali and Rust-proof Drain Pipe and Fittings. Booklet, 8½ x 11 ins., 20 pp. Full details regarding a valuable form of piping.
- Eljer Company**, Fort City, Pa. Complete Catalog. 3¼ x 6¼ in. 104 pp. Illustrated. Describes fully the complete Eljer line of standardized vitreous china plumbing fixtures, with diagrams, weights and measurements. Standardized Sixteen Circular. 3¼ x 6¼ in. 18 pp. Illustrated.

PLUMBING EQUIPMENT—Continued

- Kohler Co.**, Kohler, Wis. Catalog F. 7¼ x 10½ in. 216 pp. Illustrates and describes the complete line of Kohler trade-marked plumbing ware.
- Roughing-In Measurement Binder. 5 x 8 in., containing loose leaf sheets on all staple fixtures.
- Maddock's Sons Company, Thomas**, Trenton, N. J. Catalog K. 10¼ x 7½ in. 242 pp. Illustrated. Complete data on vitreous china plumbing fixtures with brief history of Sanitary Pottery.
- Mueller Co.**, Decatur, Ill. Catalog G. 8 x 11 in., 316 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of hot water control. Complete details are presented with a number of data sheets showing roughing-in measurements for built-in bath equipment.
- Speakman Company**, Wilmington, Del. Speakman Showers and Fixtures. Catalog. 4½ x 7½ in. 250 pp. Illustrated. Catalog of Modern Showers and Brass Plumbing Fixtures, with drawings showing layouts, measurements, etc.
- Toned Up in Ten Minutes. Booklet. 7½ x 10½ in. 16 pp. Illustrated. Modern Showers and Washups for Industrial Plants, showing the sanitary method of washing in running water.

PUMPS

- Chicago Pump Company**, 2300 Wolfram Street, Chicago, Ill. The Correct Pump to Use. Portfolio containing handy data. Individual bulletins, 8½ x 11 in., on bilge, sewage, condensation, circulating, house, boiler feed and fire pumps.
- Kewanee Private Utilities Co.**, 442 Franklin St., Kewanee, Ill. Bulletin E. 7¼ x 10½ in. 32 pp. Illustrated. Catalog. Complete descriptions, with all necessary data, on Standard Service Pumps, Indian Brand Pneumatic Tanks, and Complete Water Systems, as installed by Kewanee Private Utilities Co.

RAMPS

- Ramp Buildings Corporation**, 21 East 40th Street, New York. Building Garages for Profitable Operation. Booklet. 8½ x 11 in. 16 pp. Illustrated. Discusses the need for modern mid-city parking garages, and describes the d'Humy Motoramp system of design, on the basis of its superior space economy and features of operating convenience. Gives cost analyses of garages of different sizes, and calculates probable earnings.
- Garage Design Data. Series of informal bulletins issued in loose-leaf form, with monthly supplements.
- The Trane Co.**, LaCrosse, Wis. Trane Small Centrifugal Pumps. Booklet. 3¼ x 8 in., 16 pp. Complete data on an important type of pump.
- The Hockenbury System Incorporated**, Harrisburg, Pa., for years specializing in the financing of modern community hotels, of which they have financed a hundred such throughout the United States, has expanded its service to include the financing of MOTORAMP garage buildings. They now have available for distribution an 8½ x 11 booklet entitled: "The Hitching Post Problem Is Here Again," in which they explain their solution of the street motor parking problem, which will be sent free to inquiring architects.

REINFORCED CONCRETE—See also Construction, Concrete

- The General Fireproofing Company**, Youngstown, Ohio. Self-Sentering Handbook. 8½ x 11 in. 36 pp. Illustrated. Methods and specifications on reinforced concrete floors, roofs and floors with a combined form and reinforced material.
- Trusco Steel Company**, Youngstown, Ohio. Shearing Stresses in Reinforced Concrete Beams. Booklet. 8½ x 11 in. 12 pp.
- North Western Expanded Metal Company**, Chicago, Ill. Designing Data. Book. 6 x 9 in. 96 pp. Illustrated. Covers the use of Econo Expanded Metal for various types of reinforced concrete construction.

ROOFING

- American Sheet & Tin Plate Co.**, Frick Bldg., Pittsburgh, Pa. Better Buildings. Catalog. 8½ x 11 in. 32 pp. Describes Corrugated and Formed Sheet Steel Roofing and Siding Products, black, painted and galvanized, with directions for application of various patterns of Sheet Steel Roofing in various types of construction.
- Copper—Its Effect Upon Steel for Roofing Tin. Catalog. 8½ x 11 in. 28 pp. Illustrated. Describes the merits of high-grade roofing tin plates and the advantages of the copper-steel alloy.
- The Testimony of a Decade. Booklet. 8½ x 11 in. 16 pp., with Graphic Chart and illustrations showing losses to various Iron and Steel Sheets for roofing, from atmosphere corrosion.
- Barber Asphalt Co.**, Philadelphia, Pa. Specifications, Genasco Standard Trinidad Lake Asphalt Built-up Roofing. Booklet. 8 x 10½ in. Gives specifications for use of several valuable roofing and waterproofing materials.
- The Barrett Company**, 40 Rector Street, New York City Architects' and Engineers' Built-up Roofing Reference Series; Volume IV Roof Drainage System. Brochure. 63 pp. 8½ x 11¼ ins. Gives complete data and specifications for many details of roofing.
- Philip Carey Co.**, Lockland, Cincinnati, Ohio. Architects Specifications for Carey Built-up Roofing. Booklet. 8 x 10¼ in. 24 pp. Illustrated. Complete data to aid in specifying the different types of built-up roofing to suit the kind of roof construction to be covered.
- Carey Built-up Roofing for Modern School Buildings. Booklet. 8 x 10¼ in. 32 pp. Illustrated. A study of school buildings of a number of different kinds and the roofing materials adapted for each.
- Federal Cement Tile Co.**, 608 So. Dearborn St., Chicago, Ill. The Indestructible Roof. Booklet. 10 x 13 in. 32 pp. Illustrated. Illustrates and describes the installation of permanent concrete interlocking tile, tile with glass insets, flat tile and channel tile, on all types of industrial plants and other buildings with flat and pitched surfaces.

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PRACTICAL
SUGGESTION
FOR
COLD
WEATHER
MASONRY



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HOSPITAL
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TIME after time, Carney Cement Mortar has been used for winter construction—always with perfect results. The reason is very simple. Carney Cement Mortar can freeze solid in the wall, yet set up perfectly after thawing out.

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*Contractors—AETNA BRICKLAYING
& CONSTRUCTION CO.,
St. Louis, Mo.

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for Brick and Tile Mortar

SELECTED LIST OF MANUFACTURERS PUBLICATIONS—Continued from page 144

ROOFING—Continued

- Standards. Booklet. $8\frac{1}{2}$ x 11 in. 40 pp. Illustrated with full-page drawings. Gives full details of all forms of roof construction of steel structure, ridge and gutter construction, purlin arrangement, spacing, etc., for standard roofs.
- The Ideal Retaining Wall. Leaflet, 4 pp., $8\frac{1}{2}$ x 11 in., illustrated. Valuable data on use of Federal Cribbing Units for constructing retaining walls.
- The Roof for Permanence. Booklet, 12 pp., $8\frac{1}{2}$ x 11 in., illustrated. Deals with Federal Cement Tile for flat and pitched roofs for large buildings.
- Johns-Manville, Inc.**, Madison Ave. & 41st St., New York, N. Y.
Johns-Manville Building Materials. Book. $8\frac{1}{2}$ x 11 in. 100 pp. Illustrated. A comprehensive catalog of various types of roofing for all forms of construction. Details of wall, floor and ceiling insulation; asbestos wood for fireproof construction; waterproofing, etc.
- Johns-Manville Asbestos Shingles. Booklet. $8\frac{1}{2}$ x 11 in. 24 pp. Illustrated. This booklet is profusely illustrated in colors, showing some very artistic blends of asbestos shingles with various types of architecture. Contains many valuable suggestions for the architect.
- Ludowici-Celadon Company**, 104 So. Michigan Ave., Chicago, Ill.
"Ancient" Tapered Mission Tiles. Leaflet. $8\frac{1}{2}$ x 11 in. 4 pp. Illustrated. For architects who desire something out of the ordinary, this leaflet has been prepared. Describes briefly the "Ancient" Tapered Mission Tiles, hand-made, with full corners and designed to be applied with irregular exposures.
- Milwaukee Corrugating Co.**, Milwaukee, Wis.
The Milcor Architectural Sheet Metal Guide. Booklet. $8\frac{1}{2}$ x 11 in. 64 pp. Illustrated. Gives valuable technical sheet metal data.
- Ruberoid Co., The** (formerly the Standard Paint Co.), 95 Madison Avenue, New York, N. Y.
Instructions for Laying Built-up Roofs. Booklet. $8\frac{1}{2}$ x 11 in. Illustrated.
- Ruberoid Strip Shingle. Booklet. $3\frac{1}{2}$ x $6\frac{1}{4}$ in. 16 pp. Illustrated in color.
- U. S. Gypsum Co.**, Chicago.
Pyrobar Roof Construction. Booklet. $8\frac{1}{2}$ x 11 in. 48 pp. Illustrated. Gives valuable data on the use of tile in roof construction. Sheetrock Pyrofill Roof Construction. Folder. $8\frac{1}{2}$ x 11 in. Illustrated. Covers use of roof surfacing which is poured in place.
- SASH CHAIN**
Smith & Egge Mfg. Co., The, Bridgeport, Conn.
Chain Catalog. 6 x $8\frac{1}{2}$ in. 24 pp. Illustrated. Covers complete line of chains.
- SASH CORD**
Samson Cordage Works, Boston, Mass.
Catalog. $3\frac{1}{2}$ x $6\frac{1}{4}$ in. 24 pp. Illustrated. Covers complete line of rope and cord.
- SEWAGE DISPOSAL**
Chicago Pump Co., 2336 Wolfram St., Chicago, Ill.
Flush-Kleen Dry Basin Sewage Ejector. Booklet, 16 pp., $8\frac{1}{2}$ x 11 in. Illustrations and data on an important detail of equipment.
- SCREENS**
American Brass Co., The, Waterbury, Conn.
Facts for Architects About Screening. Illustrated folder, $9\frac{1}{2}$ x $11\frac{1}{4}$ in., giving actual samples of metal screen cloth and data on fly screens and screen doors.
- Athey Company**, 6015 West 65th St., Chicago, Ill.
The Athey Perennial Window Shade. An accordion pleated window shade, made from translucent Herringbone woven Coutil cloth, which raises from the bottom and lowers from the top. It eliminates awnings, affords ventilation, can be dry-cleaned and will wear indefinitely.
- The Higgin Manufacturing Co.**, Newport, Ky.
Your Home Screened the Higgin Way. Booklet. $8\frac{1}{2}$ x $11\frac{1}{2}$ in. 13 pp. Illustrated in colors. Complete description of Higgin Screens, designed to meet every need.
- SEWAGE DISPOSAL**
Kewanee Private Utilities, 442 Franklin St., Kewanee, Ill.
Specification Sheets. $7\frac{3}{4}$ x $10\frac{1}{4}$ in. 40 pp. Illustrated. Detailed drawings and specifications covering water supply and sewage disposal systems.
- SHELVING-STEEL**
David Lupton's Sons Company, Philadelphia, Pa.
Lupton Steel Shelving. Catalog D. Illustrated brochure, 40 pp., $8\frac{1}{2}$ x 11 in. Deals with steel cabinets, shelving, racks, doors, partitions, etc.
- SIDEWALKS and DRIVEWAYS**
National Steel Fabric Co., Pittsburgh, Pa.
Sidewalks and Driveways. Folder, $8\frac{1}{2}$ x 11 in. Practical information on laying reinforced concrete sidewalks and driveways. Detailed explanation of steel fabric reinforcement and its uses for these purposes.
- SOUND DEADENER**
Cabot, Inc., Samuel, Boston, Mass.
Cabot's Deadening Quilt. Brochure $7\frac{1}{2}$ x $10\frac{1}{2}$ ins., 28 pp., illustrated. Gives complete data regarding a well-known protection against sound.
- STONE, BUILDING**
Indiana Limestone Company, Bedford, Ind.
Volume 3, Series A-3. Standard Specifications for Cut Indiana Limestone work, $8\frac{1}{2}$ x 11 in. 56 pp. Containing specifications and supplementary data relating to the best methods of specifying and using this stone for all building purposes.
- Vol. 1, Series B. Indiana Limestone Library. 6 x 9 in. 36 pp. Illustrated. Giving general information regarding Indiana Limestone, its physical characteristics, etc.
- Vol. 4, Series B. Booklet. New Edition. $8\frac{1}{2}$ x 11 in. 64 pp. Illustrated. Indiana Limestone as used in Banks.
- Volume 5, Series B. Indiana Limestone Library. Portfolio. $11\frac{1}{4}$ x $8\frac{3}{4}$ in. Illustrated. Describes and illustrates the use of stone for small houses with floor plans of each.
- Volume 6, Series B—Indiana Limestone School and College Buildings. $8\frac{1}{2}$ x 11 in., 80 pages, illustrated.
- Volume 12, Series B—Distinctive Homes of Indiana Limestone. $8\frac{1}{2}$ x 11 in., 48 pages, illustrated.
- Old Gothic Random Ashlar. $8\frac{1}{2}$ x 11 in., 16 pages, illustrated.

STORE FRONTS

- Brasco Manufacturing Co.**, 5025-35 South Wabash Avenue, Chicago, Ill.
Portfolio. $8\frac{1}{2}$ x 11 in. 32 pp. Illustrated. Selected examples of Brasco Copper Store Fronts suitable for different businesses and varying conditions of locations.
- Catalog 28. $8\frac{1}{2}$ x $10\frac{1}{4}$ in. 20 pp. Illustrated with plates. Details of Brasco Copper Store front construction. Also show-cases, ventilator sashes.
- Detail Sheets. Set of five sheets giving details and suggestions for store front designing enclosed in envelope convenient for filing.
- Brasco Copper Store Fronts; Series 202, Brasco Standard Construction. Illustrated brochure. 16 pp. $8\frac{1}{2}$ x 11 ins. Complete data on an important type of building.
- Brasco Copper Store Fronts; Series 500, All-copper Construction. Illustrated brochure. 20 pp. $8\frac{1}{2}$ x 11 ins. Deals with store fronts of a high class.
- Kawneer Co., The**, Niles, Mich.
A Collection of Successful Designs. Catalog. $9\frac{1}{4}$ x $6\frac{1}{2}$ in. 64 pp. Illustrated. Showing by use of drawings and photographs many types of Kawneer Solid Copper Store Fronts.
- Catalog L, 1925 Edition. $8\frac{1}{2}$ x 11 in. 32 pp. Illustrated. Details of copper store front construction.
- Metal Store Fronts. Sheets, 17 x 22 in. Draftsmen's details of copper store fronts for use in tracing.
- Zouri Drawn Metals Company**, Chicago Heights, Ill.
Zouri Safety Key-Set Store Front Construction. Catalog. $8\frac{1}{2}$ x $10\frac{1}{2}$ in. 60 pp. Illustrated. Complete information with detailed sheets and installation instructions convenient for architects' files.
- International Store Front Construction. Catalog. $8\frac{1}{2}$ x 10 in. 70 pp. Illustrated. Complete information with detailed sheets and installation instructions convenient for architects' files.

SWIMMING POOL CONSTRUCTION

- Sandusky Cement Co.**, Dept. F., Cleveland, Ohio.
Medusa Pool Book. Booklet. $8\frac{1}{2}$ x 11 ins. 16 pp. Illustrated. Valuable work on bathing pools, indoors and outdoors.

SWIMMING POOL EQUIPMENT & STERILIZATION

- R. U. V. Company, Inc.**, 383 Madison Avenue, New York City.
Water Sterilization by Means of Ultra Violet Rays. Booklet. $8\frac{1}{2}$ x 11 in. 16 pp. Full data on a system of purifying water.
- Swimming Pool Sterilization. Booklet. $8\frac{1}{2}$ x 11 in. 24 pp. Describes a method purifying water in bathing pools.
- Wallace & Tiernan Company**, Newark, N. J.
The W. & T. Chlorometer, Technical Publication, No. 55. Booklet, $8\frac{1}{2}$ x 11 in. 8 pp. Illustrated. A useful brochure dealing with the value of pure water and the importance of the chlorination process in sterilization.

TECHNICAL PAINTING

- Toch Brothers**, 110 East 42nd Street, New York City.
Specifications for Dampproofing, Waterproofing, Enameling and Technical Painting. Complete and authoritative directions for use of an important line of materials.

TERRA COTTA

- National Terra Cotta Society**, 19 West 44th St., New York, N. Y.
Standard Specifications for the Manufacture, Furnishing and Setting of Terra Cotta. Brochure $8\frac{1}{2}$ x 11 in. 12 pp. Furnishing and Setting of Terra Cotta, consisting of complete detail Specification, Glossary of Terms Relating to Terra Cotta and Short Form Specification for incorporating in Architects' Specifications.
- Color in Architecture. Revised Edition. Permanently bound volume $9\frac{1}{4}$ x $12\frac{1}{4}$ in., containing a treatise upon the basic principles of color in architectural design, illustrating early European and modern American examples. Excellent illustrations in color.
- Present Day Schools. $8\frac{1}{2}$ x 11 in. 32 pp. Illustrating 42 examples of school architecture with article upon school building design by James O. Betelle, A. I. A.
- Better Banks. $8\frac{1}{2}$ x 11 in. 32 pp. Illustrating many banking buildings in terra cotta with an article on its use in bank design by Alfred C. Bossom, Architect.

TILE, HOLLOW

- National Fire Proofing Co.**, 250 Federal St., Pittsburgh, Pa.
Standard Wall Construction Bulletin 174. $8\frac{1}{2}$ x 11 in. 32 pp. Illustrated. A treatise on the subject of hollow tile wall construction.
- Natco on the Farm. $8\frac{1}{2}$ x 11 in. 38 pp. Illustrated. A treatise on the subject of fire safe and permanent farm building construction.
- Natco Homes and Garages. Booklet. 7 x 10 in. 32 pp. Illustrated. Showing the use of Natco Hollow Tile for private residences.

TREADS

- The Tri-lok Company**, 5515 Butler Street, Pittsburgh, Pa.
What a Difference Three Locks Make. Folder. 4 pp. $8\frac{1}{2}$ x 11 ins. Deals with a means of holding slender members of metal in accurate alignment.

VACUUM CLEANING APPARATUS

- The Spencer Turbines Company**, Hartford, Conn.
Vacuum Cleaning Apparatus for all purposes. Booklet. 32 pp. Illustrated. Complete information on product, showing prominent buildings equipped with this system.

VALVES

- Crane Co.**, 836 S. Michigan Ave., Chicago, Ill.
No. 51. General Catalogue. Illustrated. Describes the complete line of the Crane Co.
- Illinois Engineering Co.**, Racine Ave., at 21st St., Chicago, Ill.
Catalog. $8\frac{1}{2}$ x 11 in. 88 pp. Illustrated.
- Jenkins Bros.**, 80 White Street, New York.
The Valve Behind a Good Heating System. Booklet $4\frac{1}{2}$ x $7\frac{1}{2}$ in. 16 pp. Color plates. Description of Jenkins Radiator Valves for steam and hot water, and brass valves used as boiler connections.

“Not all asphalts will do for roofing”

says Henry C. Hibbs

“TESTS that we have made show a great deal of variation in the qualities or characteristics of asphalts, and not all asphalts will do for roofing purposes.” This statement was made recently by Henry C. Hibbs, well-known architect of Nashville, Tennessee.

“There is a marked difference in melting point, and some asphalts are harder and some less elastic than others. A good roofing asphalt must not become brittle in cold weather nor flow in hot weather. It should be stiffly elastic in a temperature range from 15° below zero to 125° above. Between these points it should neither flow nor crack.

“And the asphalt must not be too volatile. Otherwise, the oils will dry out, leaving almost pure carbon, which soon goes to pieces.”

Many buildings designed by Mr. Hibbs are covered with Carey roofs. The asphalt in Carey Built-up Roofs is specially refined and blended at the Carey plant for roofing purposes exclusively. It will not melt below 215°, and retains its flexibility in the coldest weather. On buildings all over the country—office structures, factories, hotels, schools—on such buildings as the New Madison Square Garden in New York, the 16-acre Atwater Kent factory, the Chicago Coliseum and Cleveland Auditorium—Carey Built-up Roofs are giving proof of the quality built into them. Full information on request.

THE PHILIP CAREY COMPANY

Lockland, Cincinnati, Ohio

Carey
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Write for our Architects'
Specification Book.

American Trust Company Building, Nashville, Tenn.—one of the many, splendid, Carey-roofed structures designed by Henry C. Hibbs, who is numbered among the best known architects in the South.



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Is it of 100 rooms? 500? Neither. It's a lobby corner of Hotel Lykens, the 48-room Hockenbury financed community hotel in Lykens, Pa. Only 48 rooms, but it's attracting state-wide attention; speeding up and toning up general business and realty values for everybody in Lykens. Yes, and it's bringing in outside dollars, too!

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The HOCKENBURY SYSTEM Inc.
HARRISBURG, - PENNSYLVANIA

SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 146

VALVES—Continued

Jenkins Valves for Plumbing Service. Booklet. $4\frac{1}{2} \times 7\frac{1}{4}$ in. 16 pp. Illustrated. Description of Jenkins Brass Globe, Angle Check and Gate Valves commonly used in home plumbing, and Iron Body Valves used for larger plumbing installations.

Mueller Co., Decatur, Ill.

Catalog G, 8 x 11 in., 316 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of hot water control. Complete details are presented with a number of data sheets showing roughing-in-measurements for built-in bath equipment.

VENETIAN BLINDS

Burlington Venetian Blind Co., Burlington, Vt.

Venetian Blinds. Booklet, 7 in. x 10 in., 24 pages. Illustrated. Describes the "Burlington" Venetian blinds, method of operation, advantages of installation to obtain perfect control of light in the room.

VENTILATION

American Blower Co., Detroit, Mich.

American H. S. Fans. Brochure, 28 pp., $8\frac{1}{2} \times 11$ in. Data on an important line of blowers.

Duriron Company, Dayton, Ohio.

Acid-proof Exhaust Fans. Folder, 8 x $10\frac{1}{2}$ ins., 8 pp. Data regarding fans for ventilation of laboratory fume hoods. Specification Form for Acid-proof Exhaust Fans. Folder, 8 x $10\frac{1}{2}$ ins.

Globe Ventilator Company, 205 River Street, Troy, N. Y.

Globe Ventilators Catalog. 6 x 9 in. 32 pp. Illustrated profusely. Catalog gives complete data on "Globe" ventilators as to sizes, dimensions, gauges of material and table of capacities. It illustrates many different types of buildings on which "Globe" ventilators are in successful service, showing their adaptability to meet varying requirements.

Peerless Unit Ventilation Company, Long Island City, N. Y.

PeerVent Heating and Ventilating Unit. Brochure 6 x $6\frac{1}{4}$ in. Illustrated. Valuable data on apparatus for ventilating and heating buildings of different types.

Van Zile Ventilating Corporation, 155 East 42nd Street, New York, N. Y.

The Ventador Booklet. $6\frac{1}{2} \times 3\frac{1}{2}$ in. 16 pp. Illustrated. Describes and illustrates the use of the Ventador for Hotels, Clubs, Offices, etc.

WATERPROOFING

Carey Company, The Philip, Lockland, Cincinnati, Ohio.

Waterproofing Specification Book. $8\frac{1}{2} \times 11$ in. 52 pp.

The General Fireproofing Company, Youngstown, Ohio.

Waterproofing Handbook. Booklet. $8\frac{1}{2} \times 11$ in. 72 pp. Illustrated. Thoroughly covers subject of waterproofing concrete, wood and steel preservatives, dustproofing and hardening concrete floors, and accelerating the setting of concrete. Free distribution.

A. C. Horn Company, Long Island City, N. Y.

Waterproofing. Folder. $9\frac{1}{2} \times 11\frac{1}{2}$ in. Contains folders giving data on excellent waterproofing and dampproofing materials.

Master Builders Company, Cleveland, Ohio.

Waterproofing and Dampproofing and Allied Products. Sheets in loose index file, 9 x 12 in. Valuable data on different types of materials for protection against dampness.

Ruberoid Co., The, 95 Madison Ave., New York.

Impervite. Circular. $8\frac{1}{2} \times 11$ in. 4 pp. Illustrated. An integral water-proofing compound for concrete, stucco, cement, mortar, etc.

Sandusky Cement Co., Dept. F., Cleveland, Ohio.

Medusa Waterproofing. Booklet. $6\frac{1}{4} \times 9$ in. 38 pp. Illustrated. Medusa Waterproofing; General specifications. Booklet. $8\frac{1}{2} \times 11$ in. 32 pp.

Sommers & Co., Ltd., 342 Madison Ave., New York City.

"Permantile Liquid Waterproofing" for making concrete and cement mortar permanently impervious to water. Also circulars on floor treatments and cement colors. Complete data and specifications. Sent upon request to architects using business stationery. Circular size, $8\frac{1}{2} \times 11$ in.

Sonneborn Sons, Inc., L., 116 Fifth Ave., New York, N. Y.

Pamphlet. $3\frac{1}{4} \times 8\frac{1}{4}$ in. 8 pp. Explanation of waterproofing principles. Specifications for waterproofing walls, floors, swimming pools and treatment of concrete, stucco and mortar.

Toch Brothers, 110 East 42nd Street, New York City.

Specifications for Dampproofing, Waterproofing, Enameling and Technical Painting. Complete and authoritative directions for use of an important line of materials.

WEATHER STRIPS

Chamberlin Metal Weather Strip Company, 1644 Lafayette Boulevard, Detroit, Mich.

Chamberlin Metal Weather Strip Details, 1925 edition. Catalog $8\frac{1}{2} \times 11$ in. 48 pp. Complete specifications and full-sized details. With or without 9 x $11\frac{1}{4}$ in. folder conforming to A. I. A. filing system. May also be used in loose leaf form. Excluding Cold and Dust with Chamberlin for 32 years. Booklet $5\frac{1}{2} \times 7\frac{3}{4}$ in. 16 pp. Illustrated. Completely and interestingly illustrates application of Chamberlin equipment.

The Higgin Manufacturing Co., Newport, Ky.

Higgin All-Metal Weather Strips. Booklet. 6 x 9 in. 21 pp. Illustrated in colors. Describes various types of Higgin Weather Strips for sealing windows and doors against cold and dust.

WINDOWS

David Lupton's Sons Company, Philadelphia, Pa.

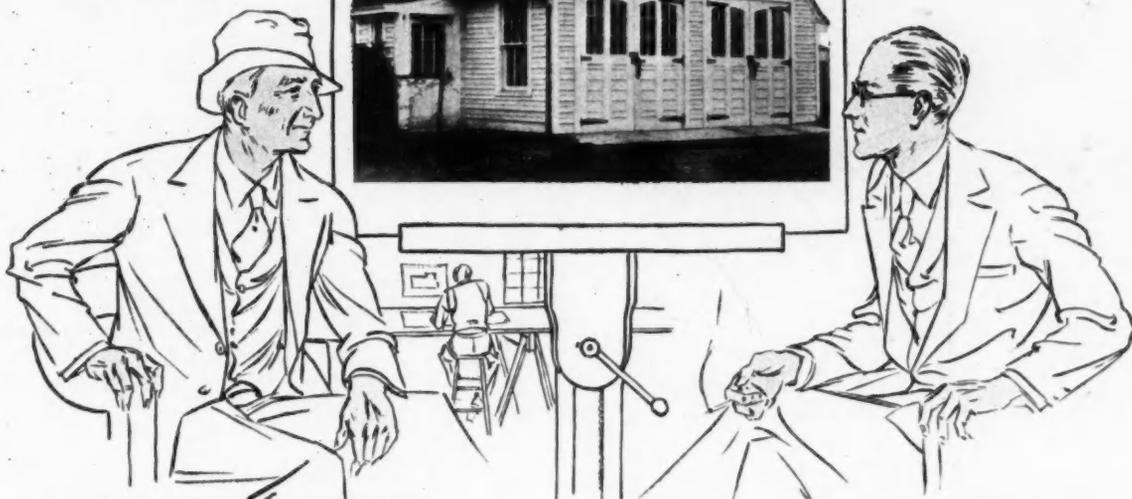
Lupton Pivoted Sash, Catalog 12-A. Booklet 48 pp. $8\frac{1}{2} \times 11$ in. Illustrates and describes windows suitable for manufacturing buildings.

WINDOWS, CASEMENT

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

Casement Window Hardware. Booklet. 24 pp. $8\frac{1}{2} \times 11$ in. Illustrated. Shows typical installations, detail drawings, construction details, blue-prints if desired. Describes AIR-way Multifold Window Hardware.

"Cal" Pine is the official guardian of the grades. His long and varied experience with many woods as a contractor in the building field together with his later grading and lumber manufacturing experience equip him to discuss your problems intelligently and helpfully



"Cal" Pine and the Architect

Discuss Garages and Garage Doors

"WHAT are your reasons, 'Cal' Pine, for recommending California White Pine and Sugar Pine for garages and garage doors?"

"All the reasons for the use of these woods in house construction apply to garage construction. I don't know any other wood that has so many service qualities for the purpose. For framing, these pines have sufficient strength and are free from twisting. Freedom from warping and end shrinking keeps joints tight—this is an important quality, both in garages and garage doors. The uniform soft texture and close, even grain of California Pine make cutting and sawing easy without splintering, hence less waste of material. It takes and holds nails tightly, right up to edges and ends without splitting, it permits accurate, permanent joinery and faithful rendering of the sharp lines and contours of architectural designs. Garage doors made of California Pine have the strength to stand hard knocks but they are light enough in weight to hang true on hinges without strain. They are not subject to twisting, swelling or contracting—they open and shut without sticking."

"How about painting qualities of California Pine?"

"There too, you have many advantages in specifying this wood. It is most economical to paint. Its smooth, satiny surface requires less time for painting and because of its own natural light color it requires fewer coats for a fine job. Absence of grain-raising tendencies further insure the lasting beauty of the painter's work."

"Does California Pine come in all forms for garage construction?"

"Yes—dimension for framing comes in standard grades and sizes and for siding you can have all sizes of bevel siding, even the extra wide known as Eastern Colonial, while all patterns of drop and rustic sidings are always available, made from either select or common grades, usually from the latter, which are economical in cost, smoothly milled and when painted make a first class job suitable for any garage. My illustrated book of grades, forms and sizes will give you full specification data. A postcard will bring you a copy without cost."



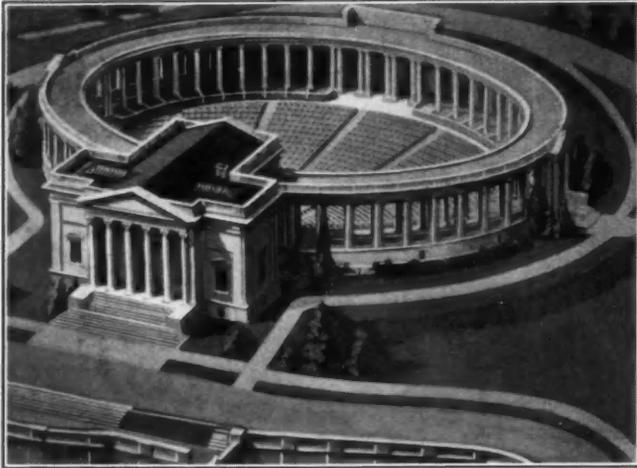
CALIFORNIA WHITE AND SUGAR PINE MANUFACTURERS ASSOCIATION

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california PINE

California White Pine (trade name)

California Sugar Pine



MEMORIAL AMPHITHEATRE, ARLINGTON NATIONAL CEMETERY, WASHINGTON, D. C. The great arcade is covered with a layer of Genasco Asphalt Mastic $1\frac{1}{4}$ inches in thickness. Contractor: R. V. Rouloñ, Philadelphia.

They ripped it off and put on Genasco!

When the covering on this magnificent memorial failed to afford the protection for which it was chosen, it was decided to turn to nature's own unequalled wear and weather resistant—and the handsome arcade is now adequately protected by Genasco Asphalt Mastic.

Because it is made from Trinidad Native-Lake Asphalt, it possesses the same protective properties which have made Trinidad famed for the world over as a street-paving material for the past half-century.

So extremely satisfactory has Genasco Asphalt Mastic proved as a flooring in manufacturing establishments, warehouses, hospitals, stores, schools, and other public and private buildings, that it has come into use for numerous other purposes where resistance to wear and weather is an important factor.

Genasco Asphalt Mastic is resilient, noiseless, dustless, sanitary, water-proof, and gives such service as no other flooring can equal. Laid in one unbroken sheet—as a new floor or over old floors—and ready for use in a few hours.

Let us send you complete information about this wonderful material. Write us today.

The Barber Asphalt Company
Philadelphia

New York Chicago Pittsburg St. Louis Kansas City San Francisco

Genasco

REG. U. S. PAT. OFF.

Asphalt Mastic

The modern flooring for large areas

SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 148

WINDOWS, CASEMENT—Continued

- Crittall Casement Window Co.**, 10951 Hearn Ave., Detroit, Mich. Catalog No. 22. 9 x 12 in. 76 pp. Illustrated. Photographs of actual work accompanied by scale details for casements and composite steel windows for banks, office buildings, hospitals and residences.
- Hope & Sons, Henry**, 103 Park Ave., New York, N. Y. Catalog. $12\frac{1}{2}$ x $18\frac{1}{2}$ in. 30 pp. Illustrated. Full size details of outward and inward opening casements.
- David Lupton's Sons Company**, Philadelphia, Pa. Lupton Casement of Copper-Steel. Catalog C-122. Booklet 16 pp. $8\frac{1}{2}$ x 11 in. Illustrated brochure on casements, particularly for residences.
- Truscon Steel Co.**, Youngstown, Ohio
Truscon Steel Casements. Booklet, $8\frac{1}{2}$ x 11 in., 24 pp. Handsomely printed with illustrations of houses equipped with Truscon Casement Windows. Illustrations of various units and combinations. Specifications, types and sizes and details of construction.
- Architectural Details. Booklet, $8\frac{1}{2}$ x 11 in., 16 pp. Tables of specifications and typical details of different types of construction.
- List of Parts for Assembly. Booklet, $8\frac{1}{2}$ x 11 in., 16 pp. Full lists of parts for different units.

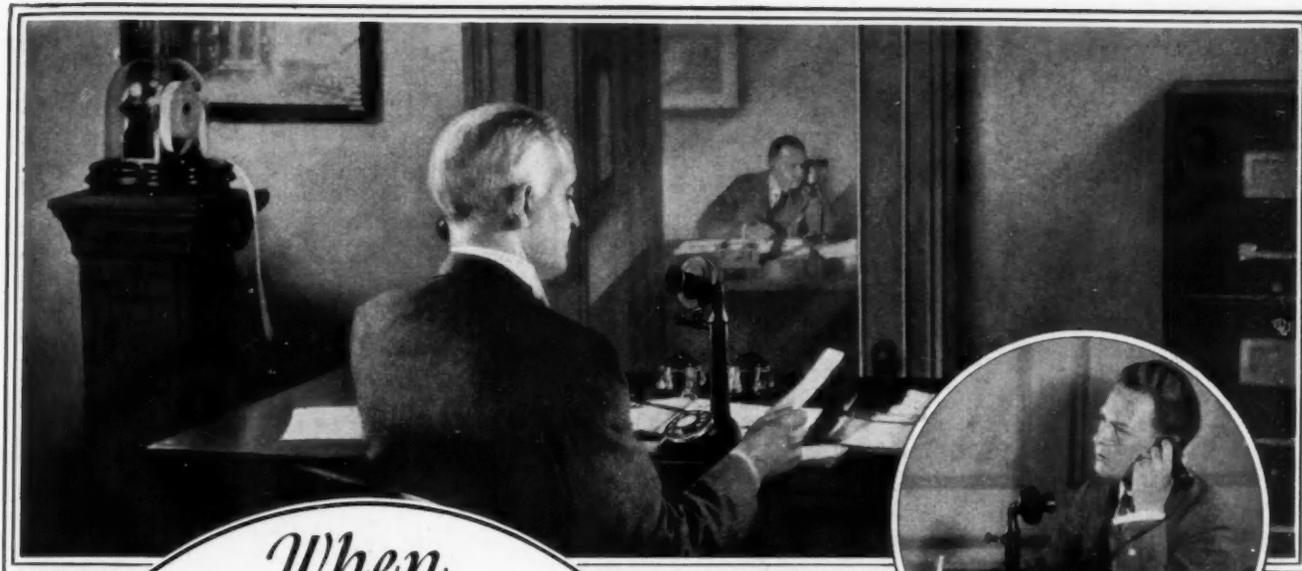
WINDOWS, STEEL AND BRONZE

- The Kawneer Company**, Niles, Mich.
Kawneer Simplex Windows. Catalog. $8\frac{1}{2}$ x $10\frac{1}{2}$ in. 16 pp. Illustrated. Complete information, with measured details, of Kawneer Simplex Weightless Reversible Window Fixtures, made of solid bronze. Shows installations in residences and buildings of all sorts.
- Detail Sheets and Installation Instructions. Valuable for architects and builders.
- Metal Windows. Catalog. $8\frac{1}{2}$ x 11 in. 18 pp. Illustrated. Features double-lining and casement windows of metal.
- David Lupton's Sons Company**, Philadelphia, Pa.
A Rain-shed and Ventilator of Glass and Steel. Pamphlet, 4 pp. $8\frac{1}{2}$ x 11 in. Deals with Pond Continuous Sash, Sawtooth Roofs, etc.
- How Windows Can Make Better Homes. Booklet. $3\frac{1}{2}$ x 7 in. 12 pp. An attractive and helpful illustrated publication on use of steel casements for domestic buildings.
- Truscon Steel Company**, Youngstown, Ohio.
Truscon Mechanical Operators for Steel Windows. Brochure. $8\frac{1}{2}$ x 11 in., 65 pp. Complete description of various kinds of installations with drawings of details.
- Drafting Room Standards. Book. $8\frac{1}{2}$ x 11 in., 120 pages of mechanical drawings showing drafting room standards, specifications and construction details of Truscon Steel Windows, Steel Lintels, Steel Doors and Mechanical Operators.
- Daylighting and Ventilating Power Housses. 32-pp. booklet, $8\frac{1}{2}$ x 11 in., illustrating the economical application of Truscon Windows in modern power house design.
- Truscon Solid Steel Double-Hung Windows. 24-pp. booklet, $8\frac{1}{2}$ x 11 in., containing illustrations of buildings using this type of window. Designs and drawings of mechanical details.
- Truscon Donovan Awning Type Steel Windows. 12-pp. booklet, $8\frac{1}{2}$ x 11 in., illustrating typical installation and giving construction details.

WOOD—See also Millwork

- American Walnut Mfrs. Association**, 618 So. Michigan Blvd., Chicago, Ill.
American Walnut. Booklet. 7 x 9 in. 45 pp. Illustrated. A very useful and interesting little book on the use of Walnut in Fine Furniture with illustrations of pieces by the most notable furniture makers from the time of the Renaissance down to the present.
- "American Walnut for Interior Woodwork and Paneling." 7 x 9 in. pages, illustrated. Discusses interior woodwork, giving costs, specifications of a specimen room, the different figures in Walnut wood, Walnut floors, finishes, comparative tests of physical properties and the advantages of American Walnut for woodwork.
- California White and Sugar Pine Mfrs. Assn.**, San Francisco, Calif. Information Sheet No. 1, California White Pine; Information Sheet No. 2, California Sugar Pine. Illustrated booklets 8 x $10\frac{1}{2}$ in. First of a series of Information Sheets on these woods and their uses for construction and finish.
- Introducing "Cal" Pine, Guardian of the Grades. Booklet, 50 pp., $7\frac{1}{4}$ x $10\frac{1}{4}$ ins. Illustrated. Valuable data on siding, battens, flooring, mouldings, etc.
- A series of information sheets on California White Pine, Sugar Pine, California White Fir, Douglas Fir and Incense Cedar. Technical data as to supply, production, quantities, uses, grades and sizes of all lumber products of the mills in the Association. Furnished with standard size filing folder for easy reference. Information sheets are 8 x $10\frac{1}{2}$ in. text matter is arranged in uniform style.
- Curtis Companies Service Bureau**, Clinton, Iowa.
Better Built Homes. Vols. XV-XVIII, incl. Booklet. 9 x 12 in. 40 pp. Illustrated. Designs for houses of five to eight rooms, respectively, in several authentic types, by Trowbridge & Ackerman, architects, for the Curtis Companies.
- Long-Bell Lumber Co.**, Kansas City, Mo.
The Perfect Floor. Booklet $5\frac{1}{4}$ x $7\frac{3}{4}$ in. 16 pp. Illustrated. Valuable for the data given on the use of wood for floors.
- Saving Home Construction Costs. Booklet $4\frac{1}{2}$ x $7\frac{1}{2}$ in. 24 pp. Discusses economy and value in domestic building.
- Experiences in Home Building. Booklet 6 x 9 in. 16 pp. Records the testimony of a number of builders and contractors as to the value of certain materials.
- The Post Everlasting. Booklet 8 x 11 in. 32 pp. Illustrated. Describes the production of posts and their use in various ways.

WOOD FINISHES—See Paints, Varnishes, Stains



When PRIVACY Counts

WHEN important matters are being discussed between executives by telephone—when the successful handling of matters requires not only absolute privacy, but instant and accurate connections—this is the time when business most appreciates these individual features of P-A-X.

By means of the P-A-X Conference Wire service—which necessitates no outside or switchboard calls—the executive can have several of his staff on the wire at one time. Each person, in his own private office, takes part in the general conference the same as if all were together in one room—and this with the assurance that no one can cut in.

This ability of P-A-X to delegate private inter-office calls direct to the persons concerned, isolating all switchboard or outside interferences and precluding even the possibility of "cut-ins", is one of the many reasons for its adoption by more than 2,000 banks, manufacturers, and other business organizations of every line, both in America and in foreign countries.

~Count on



P-A-X-ophone, Type 1

The P-A-X-ophone fills a rapidly growing need for an instrument with all of the compactness and efficiency of the conventional telephone, but with the additional advantage of having the transmitter and receiver in a single, easily-handled unit. This is the P-A-X-ophone Desk Set No. 1; available for use with all types of P-A-X.

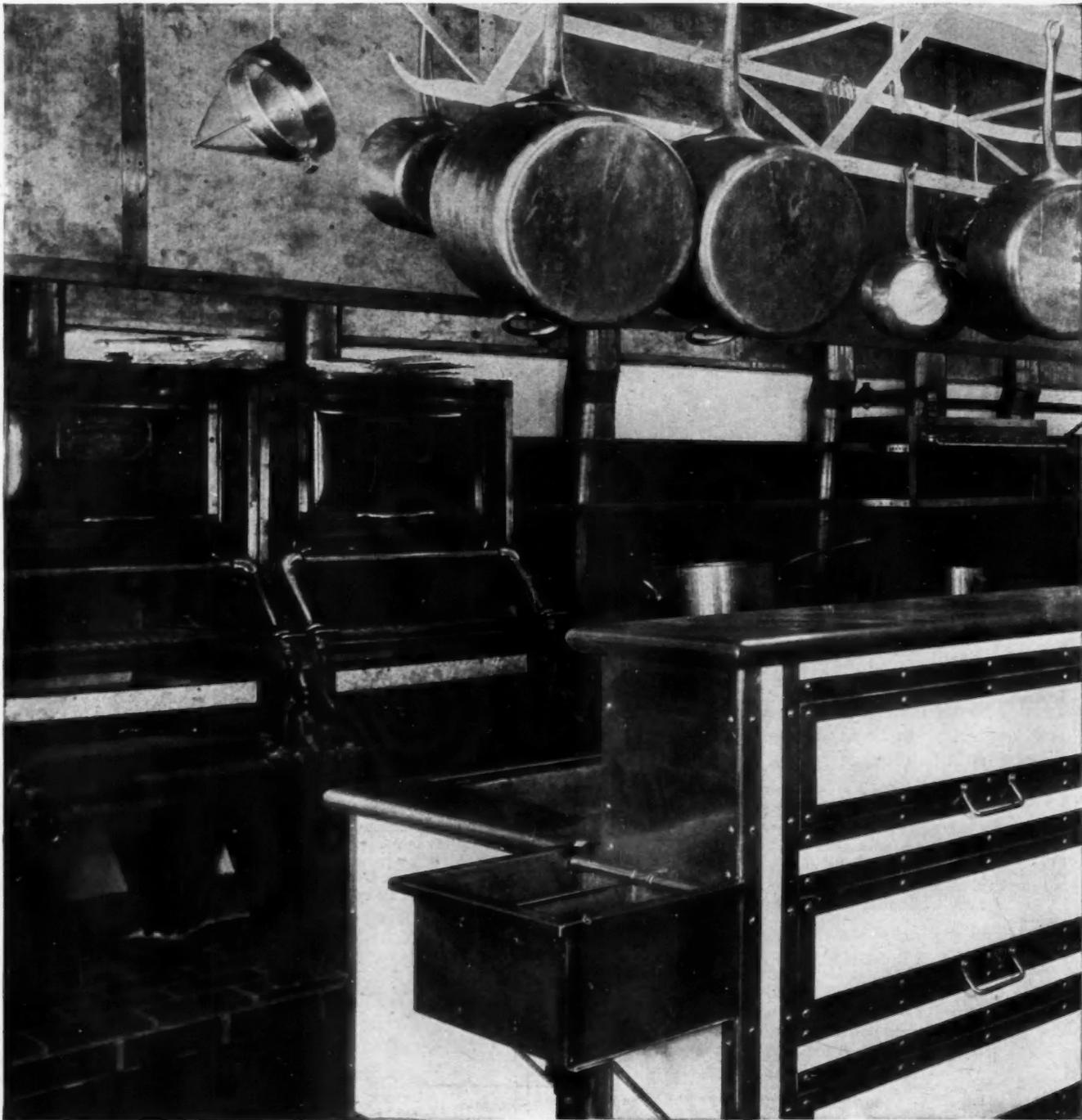


The P-A-X is, fundamentally, a private automatic telephone exchange built of the same Strowger type of automatic telephone equipment being so widely adopted for city service. The P-A-X may be furnished to include and co-ordinate such services as code call, conference, executive's priority, emergency alarm, etc., to meet individual needs.

Automatic Electric Inc.

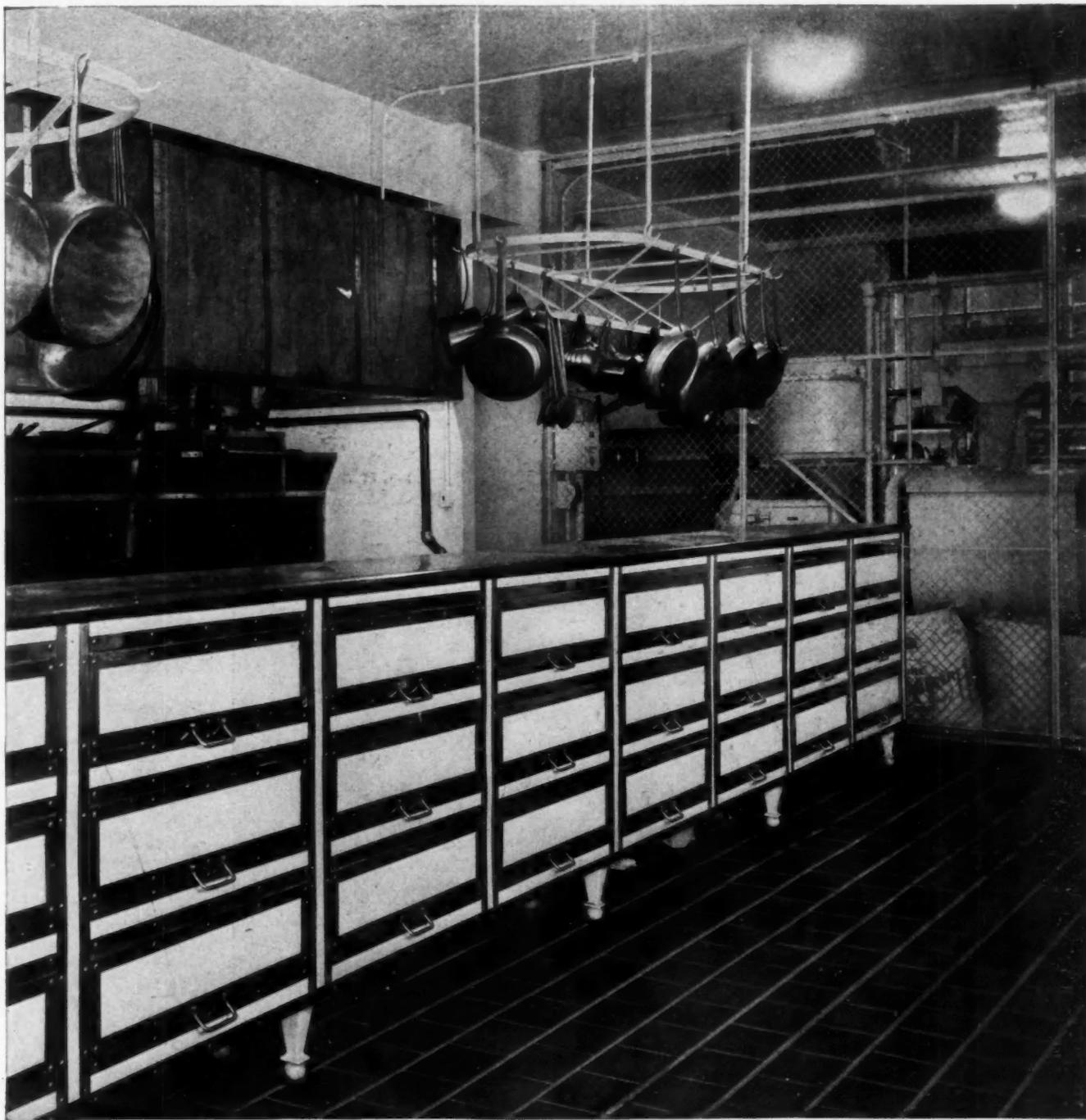
Engineers, Designers and Manufacturers of the Automatic Telephone In Use the World Over.

Home Office and Factory, CHICAGO, ILL. Branch Offices in all principal cities.



Beauty and Enduring
Worth are Combined
in PIX Kitchens

THE WORLD'S LEADING EQUIPMENT HOUSE FOR



The public may with freedom be invited to inspect any Albert Pick & Company Kitchen. Gleaming cleanliness is everywhere apparent. This Kitchen of the new Standard Club, Chicago, is a recent example of PIX Engineering

ALBERT PICK & COMPANY

208-224 WEST RANDOLPH ST. CHICAGO

HOTELS. RESTAURANTS. CLUBS. HOSPITALS



R. F. Bixby Residence, St. Louis, Mo. Beverley T. Nelson, Architect



*Residence Thos. J. Usher, Jr.,
Birmingham, Mich.
C. E. Reichle Co., Designers
and Builders*

Casements Have Varied Uses

The accompanying photographs illustrate the wide range of effects to which Crittall Standardized Casements are adapted. Beautiful steel casement windows give themselves to the architect's ideas of design in a multiplicity of ways. The different arrangements possible in wholly standard sizes, the varying widths in mullions and transom bars, the flexibility of beautiful leaded glass, all combine to assist the skillful designer in obtaining surpassingly beautiful effects.

Crittall Standardized Casements are made in both inward and outward opening types. They are *guaranteed* weather-tight. They are priced so low they are suitable for your most modest commissions. Their quality is such they will grace your finest work.

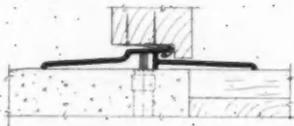
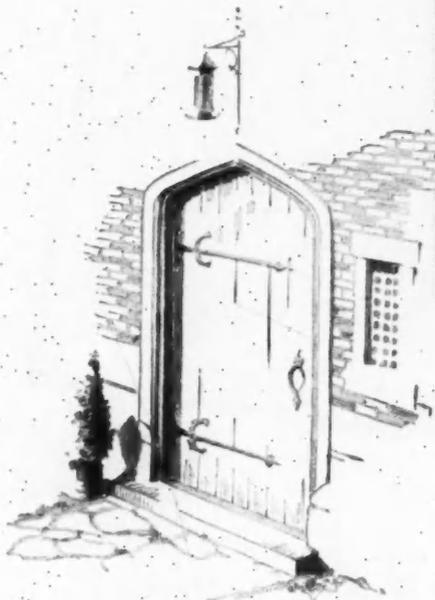
CRITTALL
Standardized
Casements

A catalog will be gladly mailed on request or our nearest representative will submit a sample for your inspection

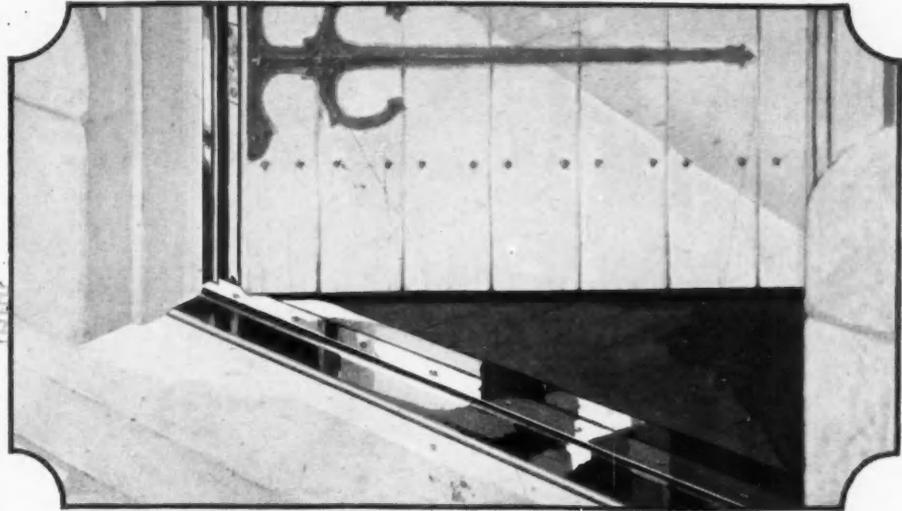
CRITTALL CASEMENT WINDOW COMPANY *Manufacturers*
10969 HEARN AVENUE, DETROIT, MICHIGAN

Also Makers of Crittall Steel Casement Windows built to the architect's sizes, designs and specifications

Beauty plus Protection - CHAMBERLIN SILL-DOR-SEAL



Chamberlin installation practice specifies that the bottoms of doors shall be rabbetted $\frac{1}{4}$ inch deep x $1\frac{1}{2}$ inches wide ($\frac{1}{4}$ inch deep x 1-inch wide for $1\frac{3}{4}$ inch doors) and equipped with a cold rolled bronze hook, .0225-inch, thick, securely nailed so as to tightly interlock with the inner lip of the Sill-Dor-Seal when doors are closed.

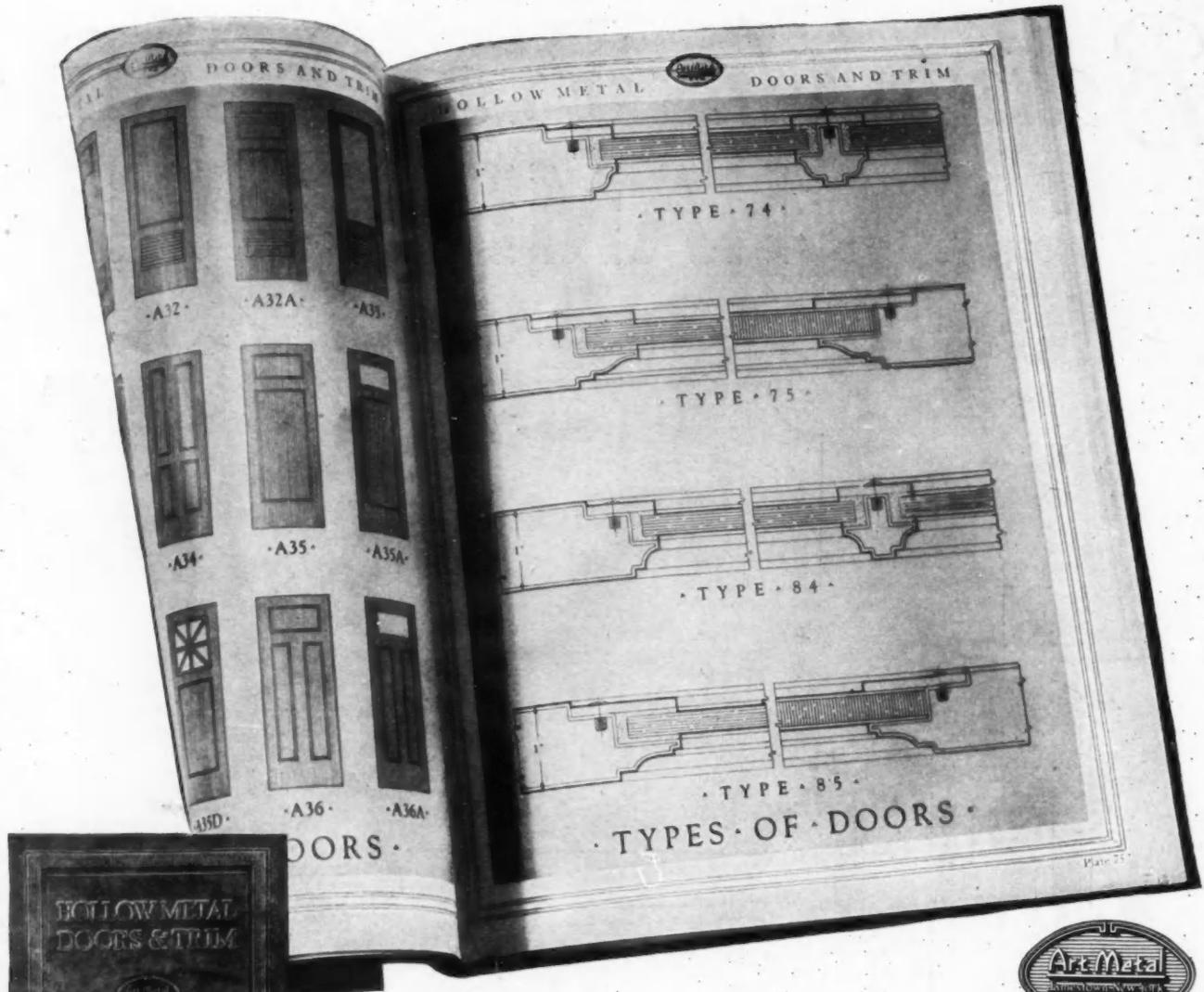


CHAMBERLIN Sill-Dor-Seals become outstanding features of finer residential buildings because of the attractiveness and protection they lend to entrance doorways. Chamberlin Sill-Dor-Seals are made of extruded brass—highly polished and artistically formed. They are securely anchored to either wood, stone or metal sills where they seal door bottoms most effectively, shutting out draughts, rain, snow and dust. And at the same time, they add dignity and beauty to the building threshold. The inclusion of the extra wide Chamberlin Sill-Dor-Seal No. 36 puts the final touch to Chamberlin door equipment which seals jambs and heads of entrance doors by interlocking weather strip members or by highly tempered, hemmed edge, flexible spring bronze. Send for detailed drawings and specification sheets.

CHAMBERLIN
SILL-DOR-SEAL
"FOR OUTSIDE DOORS"

CHAMBERLIN METAL WEATHER STRIP COMPANY
West Lafayette Blvd., Detroit, Michigan

100 Sales and Service Branches Throughout the United States



Limitless in Service

TO both the Architect and the Builder this factful Catalog of ART METAL Hollow Metal Doors and Trim presents an invaluable fund of information and suggestion applicable to every project requiring a hollow metal installation. Picturing representative ART METAL installations and a complete series of architectural detail plates, it furnishes data that invites constant and ready reference to its pages.

Limited in edition, the Art Metal Hollow Metal Catalog is available to executives only. A request for it on your letterhead will bring you your registered copy.

Art Metal

Hollow Metal Doors and Trim. Steel and Bronze Equipment for Banks, Libraries, Public Buildings. Steel Office Equipment, Safes and Files.

ART METAL CONSTRUCTION CO., JAMESTOWN, N. Y.

ART METAL places at the disposal of architects and builders the experience of a third of a century in the designing and execution of interior equipment in metal. Many of the finest of modern buildings are equipped throughout with Art Metal Doors, Trim, etc. A number of these installations are illustrated in the Art Metal Hollow Metal Catalog.

*Unsightly Window Shades
are a thing of the past.*



The Elks Memorial Building, Chicago, is another of the fine buildings equipped with Athey Perennial Shades

Athey Perennial Window Shades

Increase Architectural Beauty—yet are the most practical shades made

Beauty must naturally be a first consideration in planning fine buildings—yet practicability must not be sacrificed. Shades are no longer a bothersome question for Athey Perennial Window Shades enhance architectural beauty **yet are the most practical shades made.**

The specially woven (non-fading) Coutil cloth of which they are made gives windows a draped appearance in harmony with the architectural effect of the building.



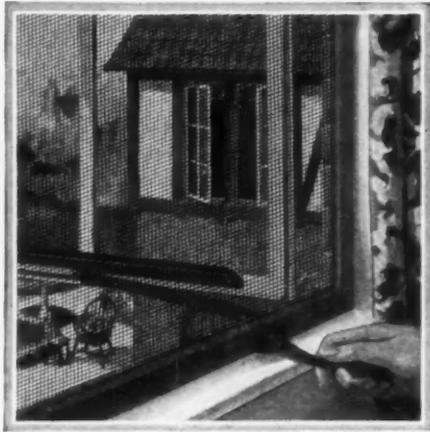
Room in the Elks Memorial in Chicago showing the versatility of Athey Shades. They are made in any length, and in widths up to 16 feet, for any type of window, including the difficult circle head type

They run on strained wires eliminating all fluttering when the windows are open. The can be raised from the bottom, or lowered from the top, to shade the portion of the window that requires it without shutting out all the light and air. They do everything awnings can do, eliminating that expense, fire hazard and unsightliness. Yet thousands of installations—many of them 10 years old and more—**prove they last so long they actually are the least expensive shades obtainable.**

Athey Company

6025 West 65th Street - Chicago, Illinois

In Canada: CRESSWELL-McINTOSH, Reg'd
270 Seigneurs St., Montreal, Que.



Which answer would you give?

Sixty-five architects were recently called upon and their opinion of Win-Dor Casement Hardware asked. Our purpose at the time was merely to convince hardware dealers in California that there is a real market there and a real preference for our line.

But the answers we received were so outspokenly gratifying that we feel certain you will find them interesting.

26 architects promise to use Win-Dor in future.
22 say Win-Dor is the best they have seen and promise to use it.

3 promise to submit Win-Dor to their clients.
14 have accepted literature, sample specifications, etc., but make no definite promise.

65

*48 enthusiastic, 3 favorable
14 non-committal*

We would like to call on every architect in the country. We would like to demonstrate Win-Dor equipment in every specification writer's office. But that is impossible.

However, we believe that the above figures prove conclusively that we have produced a better kind of casement hardware, a kind worth a few minutes of your time to investigate.

We, therefore, ask that you let us send you complete information and specification data on wood and metal casements.

There is no obligation whatsoever and we believe you owe it to your clients to learn fully about anything which is so widely endorsed as Win-Dor. Why not drop us a line today?

Win-Dor CASEMENT HARDWARE

THE CASEMENT HARDWARE COMPANY
404-A North Wood Street, Chicago

CASEMENT HARDWARE HEADQUARTERS

AUSTRAL WINDOWS



VENTILATION
WITHOUT
DRAFT

AUSTRAL WINDOW CO.
101 PARK AVE., NEW YORK CITY

HOPE'S CASEMENTS



HENRY HOPE & SONS
103 PARK AVENUE NEW YORK



*The low cost
of these high-
grade windows
permits you to
use them thru-
out your client's
house for very
little money~*

THIS UNIT \$10.30

DAVID LUPTON'S SONS CO., PHILADELPHIA

LUPTON

STEEL CASEMENTS

BUY LUPTON CASEMENTS,
BASEMENT WINDOWS AND PIVOTED
SASH FROM LOCAL DEALERS STOCKS



ALL TYPES
OF STEEL
WINDOWS



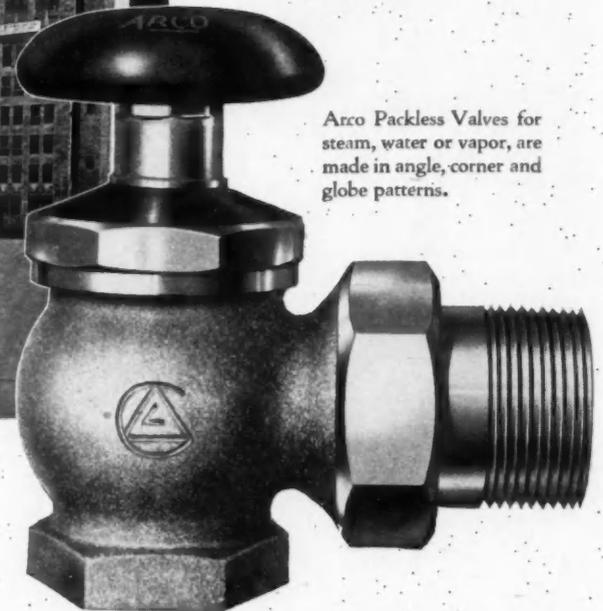
Montgomery Ward Memorial Bldg.,
Medical and Dental Schools,
Northwestern University,
McKinlock Campus,
Chicago, Illinois.

James Gamble Rogers, Architect,
New York City.

Childs & Smith, Associate Archi-
tects, Chicago, Ill.

W. L. Fergus, Heating Engineer,
Chicago, Ill.

Wm. A. Pope, Heating Contrac-
tor, Chicago, Ill.



Arco Packless Valves for
steam, water or vapor, are
made in angle, corner and
globe patterns.

The 1500 valves in this famous building will need no attention

IN THIS newest addition at North-
western University where Arco
Packless Valves are installed on all
of the 1500 radiators, there will be no
trouble calls to stop leaks. And there
will be no annual repacking to increase
maintenance expense.

Arco Packless Valves were selected
because they bring to every building
these four advantages:

1. Arco Packless Valves are good looking.
They add a finishing touch of smartness
to a radiator.

2. They prevent leaks — one of which may
cost more than all the valves in the
building.

3. They pay for themselves by saving the
annual expense of repacking.

4. They add to the comfort of the owner or
his tenants. Arco Packless Valves open
with one smooth turn.

A heating plant deserves accesso-
ries that insure perfect performance.
Every radiator deserves an Arco
Packless Valve.

The Arco Packless Valve is one of
many heating accessories made and
guaranteed by

AMERICAN RADIATOR COMPANY

816 So. Michigan Ave.

Specialties Department

Chicago, Ill.

ARCO Packless Valves

CHICAGO *too, favors* **AERO** ~ The Radiator Vogue

In these two apartments, among the finest in Chicago, Aero Radiators were given the preference.

This merely points the way and strengthens the contention that Aero, the most approved of all new style radiation, has become *The Radiator Vogue*.

Manufacturers, throughout the country, are scrapping millions of dollars worth of equipment in an effort to produce a radiator similar in type. In fact, so popular has the Aero Radiator proven, its name has become synonymous of all so-called new style radiators.

If you want a radiator you can use on every job and stand back of—if you want a beautiful, graceful, slender radiator that has a tremendous sales appeal and is readily acceptable everywhere—if you want a radiator that sells at the same standard sheet price as the old radiator types—if you want a radiator approved by Architects, Engineers and Heating Contractors alike—you want a *genuine AERO RADIATOR*; not an Aero type radiator.

Literature mailed free upon request.

NATIONAL RADIATOR COMPANY JOHNSTOWN, PA.

New York Philadelphia Baltimore Washington Richmond Pittsburgh
Cincinnati Cleveland Chicago



At top:—Apartment, 1130 Lake Shore Drive, Chicago, Illinois.

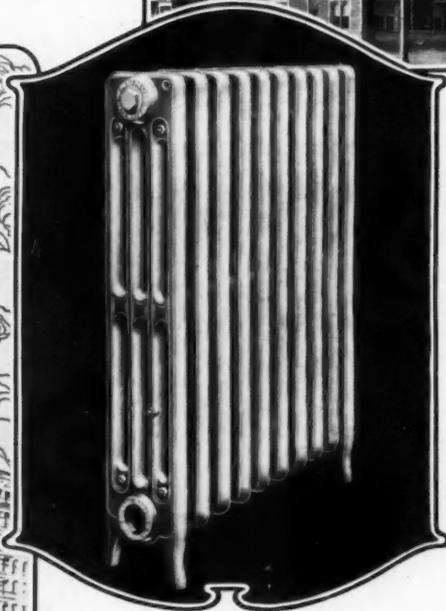
At lower left:—Cornelia Apartment Hotel, Chicago.

Robert DeGoyer, Architect.

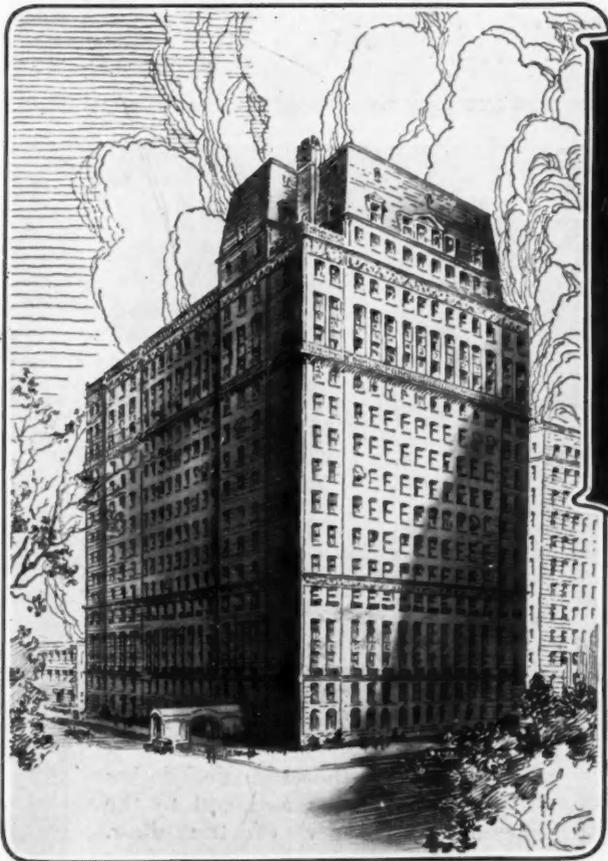
H. L. Clute & Co., Mechanical Engineers.

Davis Construction Company, Heating Contractors.

The beautiful, graceful, slender and pleasingly proportioned Aero Radiator is used throughout on both of these buildings.



Above is shown the newest unit—4 column pattern—of the first and only complete line of new style radiators, which were introduced more than four years ago. Like the rest of the complete Line of Aero Radiators, this pattern is top and bottom push-nipple connected, which makes it not only leak proof but suitable to any method of heating, whether it be a steam, vapor or hot water job. Four patterns and eighteen heights comprise the Aero Line, from which you can pick a pattern and height to exactly suit your requirements.



BEAUTY and WARMTH with

AERO RADIATORS



THE "GLOBE" SKYLIGHT
A New Line Added to the "Globe" Ventilators

ARCHITECTS, builders and owners will effect a material saving in cost by using stock size skylights. The above illustration shows various types of "Globe" skylights which can be furnished in standard sizes.

"Globe" skylights are made of 24 gauge galvanized Armco Iron with $\frac{1}{4}$ in. rough wire glass, equipped with double condensation gutters, and are ventilated by "Globe"

ventilators of the proper sizes, which are also made of heavy galvanized Armco Iron.

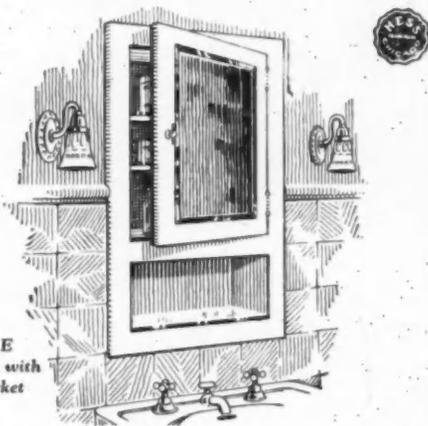
We shall be glad to furnish full information upon request and also to send Detail Sheet of the "Globe" ventilator which has back of it years of proved efficiency in the ventilation of buildings.

DEPT. F

GLOBE VENTILATOR COMPANY

TROY, N. Y.

HESS CABINETS
and MIRRORS
Snow-White Steel



STYLE E
to recess with
open pocket
below.

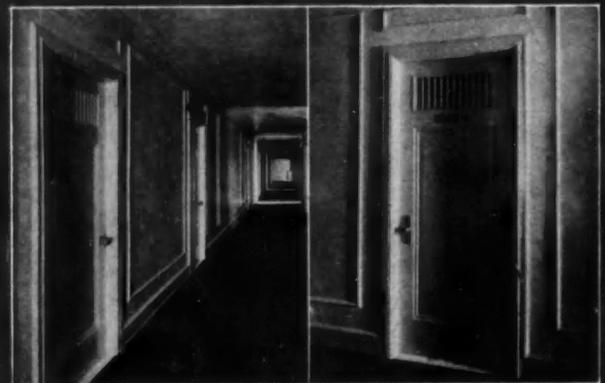
HESS Cabinets and Mirrors are *matchless* in their satiny snow-white coats;— *hand rubbed* in the manner the finest furniture is finished. Best polished plate glass mirrors, brass handles and hinges, heavily nickel plated.

They are suitable for the finest bathrooms,— low enough in price for the moderate price builder.

Specify them and please your client; See Sweet's Catalogue.

HESS WARMING & VENTILATING CO.
Makers of Hess Welded Steel Furnaces.
1216 S. Western Avenue, Chicago

VENTADOOR
A ventilating panel for doors



Ventadoors give thorough Ventilation
in the modern way and add to the
harmonious beauty of the door.

VAN ZILE VENTILATING
CORPORATION 155 EAST 42nd ST.
NEW YORK CITY

Announcing

The Dunham Differential Vacuum Heating System

A System of Heating which heats a building with coal—gas—or oil fuel, without the fuel and heat-waste of over-heating in mild weather.

SEVERAL years of intensive research work with analytical operative tests in the company's research laboratories, are back of this announcement of the Dunham Differential Vacuum Heating System. The practicability and fuel-saving efficiency of this new system of heating is further proved by its actual operation in several commercial installations. Performance, not guess work, is therefore the foundation of this announcement.

The Dunham Differential Vacuum Heating System provides a fixed differential that permits circulation of steam at all pressures and temperatures. Circulation is more uniformly distributed than possible heretofore, because the pressure (absolute) in the supply main is always slightly greater than that in the return main.

Outstanding features of this 1926 Dunham Contribution to the science of heating are (1) a much greater fuel economy when firing with coal; (2) a practical and economical use of gas and oil in all types of buildings.

The generation of steam, when starting a cold boiler begins at a much lower temperature than under atmospheric pressure because of the vacuum produced by the pump. The steam expands under the vacuum condition and fills the radiator with the result that substantially the entire radiator surface is working at either a high or low temperature.

In mild weather the differential controller on the vacuum pump maintains the condition in the return mains at a pressure less, or vacuum greater, than in the supply mains. Circulation is therefore maintained irrespective of supply pipe pressure or vacuum. The system fills with steam at pressures below atmosphere and the Dunham Traps on the radiators function to pass all air and water and to close against steam under this wide range of conditions.

In severe weather the pressure can be regulated to supply steam at such a rate that the supply piping and radiators will have a pressure greater than atmosphere.

DUNHAM
HEATING SERVICE

THIS Differential System will properly heat any building without the fuel and heat-waste of over-heating in mild weather. It furnishes steam to the radiators at a high degree of vacuum with correspondingly low radiator temperature, without water accumulating in radiators or steam leakage to returns.

This is accomplished by

—regulating the pressure, or vacuum, at which the steam circulates in the supply piping

—controlling the vacuum pump so that a substantially constant difference in pressure is maintained between the supply and return piping.

Pressure, or vacuum, is thus maintained on the steam supply to provide the desired room temperature, by controlling the heat emission from the radiators at the same rate as it is being lost from the building.

IT WILL be recognized that the Dunham Differential Vacuum Heating System achieves a goal of fuel-saving and temperature-comfort long sought in steam heating. We believe that this announcement marks an epoch-making advance over present types of steam heating systems, even the most modern. We shall be glad to send descriptive literature to those interested. A request on your business letterhead will bring it to you.

The Dunham Differential Vacuum Heating System is fully covered by patents and pending applications for patents in the United States, Canada and foreign countries. Any infringements will be vigorously prosecuted.

C. A. DUNHAM CO.

DUNHAM BUILDING

450 East Ohio Street ☺ ☺ ☺ Chicago



SELF CLEANING CARTON FURNACE

Home of Edwin Jensen,
Minneapolis, Minnesota,
warmed by an Inter-
national Carton.



In Your Client's Best Interests



THE RADIATOR

This is the Carton's SELF CLEANING RADIATOR in which soot or dust cannot accumulate, but must fall back on the fire.

Specifying the International Carton Self Cleaning Furnace, to be installed in accordance with the Standard Code, is surely working in your client's best interests—and in your own—

For the Carton will warm the home most efficiently—and for many years. There are Cartons still in active use which were installed sixty years ago.

ALWAYS FREE OF SOOT

Scientifically correct design and enduring construction are the reasons.

First, a radiator that is *always* free of soot means constantly maintained efficiency.

Then, a combustion dome or mixing

chamber that insures correct combustion.

And finally such details of sturdy, enduring construction as an ashpit and a feed chute without joints, preventing dust and gas leaks; a firepot that will not crack, cast in two sections with a deep cup joint, herringbone, triangular grates which mean a cleaner fire; and a *double* casing!

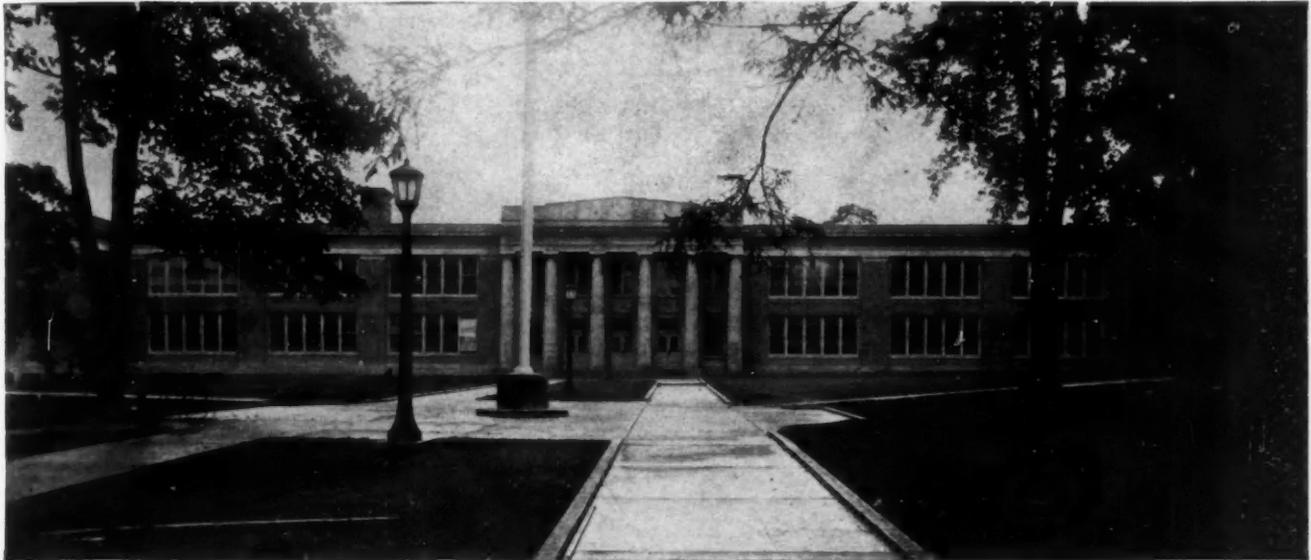
Architects, heating engineers, write for catalog 1818-F, describing the Carton in detail. We will also send a copy of the Standard Code.

International Heater Company
Utica, N. Y.

Cleveland Chicago Detroit
New York City Philadelphia
Nashua, N. H.

INTERNATIONAL

STEAM AND HOT WATER BOILERS, WARM AIR FURNACES AND ONEPIPE HEATERS



The Madison High School, Madison, N. J. Heating Contractors—Johnston Heating Co., New York City
Architects—Guilbert & Betelle, Newark, N. J.

*Specialists in school construction
select Ideal Boilers for model school*

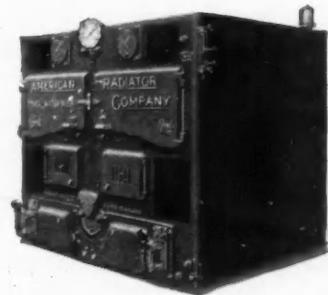
THIS new high school was planned by architects who have made a great success of schoolhouse construction.

The heating installation was made by heating contractors who have made a great reputation for themselves in heating and ventilating for school work.

Their selection of Ideal Boilers and American Radiators for this model school was a stamp of approval which should mean a great deal to architects in every part of the country.

Three 79" Ideal Water Tube Boilers have been installed with 7900 square feet of American Radiators.

The many interesting points of construction of the new Ideal Water Tube and Smokeless Boilers have been described and illustrated in attractive catalogues which every architect should have. Simply write for catalogues on Ideal Water Tube and Smokeless Boilers.



A battery of three 79" Ideal Water Tube Boilers is installed in the model schoolhouse at Madison, New Jersey.

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Showrooms and sales offices: New York, Boston, Providence, New Haven, Newark, Philadelphia, Baltimore, Washington, Richmond, Buffalo, Pittsburgh, Cleveland, Detroit, Cincinnati, Atlanta, Chicago, Milwaukee, Indianapolis, St. Louis, St. Paul, Minneapolis, Omaha, Kansas City, Denver, San Francisco, Los Angeles, Seattle, Toronto, London, Paris, Milan, Brussels, Berlin

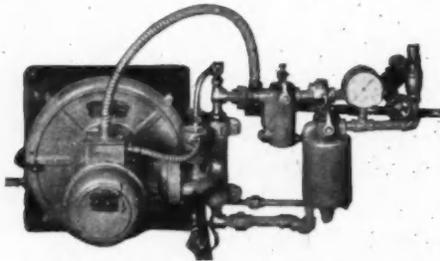
Makers of IDEAL BOILERS and AMERICAN RADIATORS and other products for heating, ventilating and refrigerating



HOTEL ASTOR,
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*A zero weather mortar
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Now WIFCO, the super-mortar, is available in the six preferred colors that have heretofore had to be added to ordinary mortar right on the job.



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Color is ground into WIFCO at the mill and is therefore an integral part of it. The ingredients of each sack of WIFCO Super-Mortar are identical with, and are mixed in the same proportions as, those of every other sack containing the same color. The colors will not fade. Neither will they stain masonry.

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Public buildings should lead in smoke prevention

Schools and other public buildings ought to point the way for private owners in the matter of smokeless combustion, not only to be consistent with public smoke regulations, but also to secure the obvious fuel and labor economies which result.

But often the small size of boiler plants in these public buildings makes smokeless operation difficult. The new "King Coal" automatic mechanical stoker designed especially for boilers of 40 to 250 hp. meets this need exactly. It is the product of the twenty-five years' experience of Mr. Joseph Harrington with stokers and other coal burning equipment. It is daily demonstrating its simplicity and economy in dozens of plants.

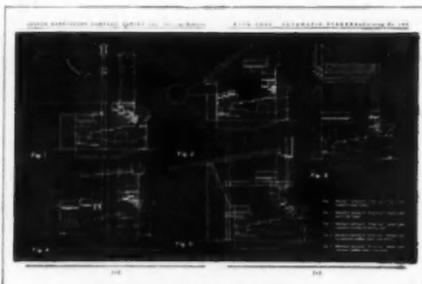
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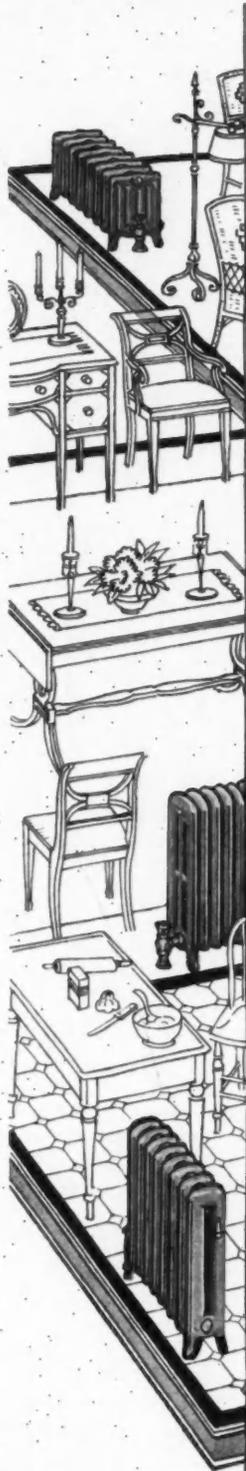
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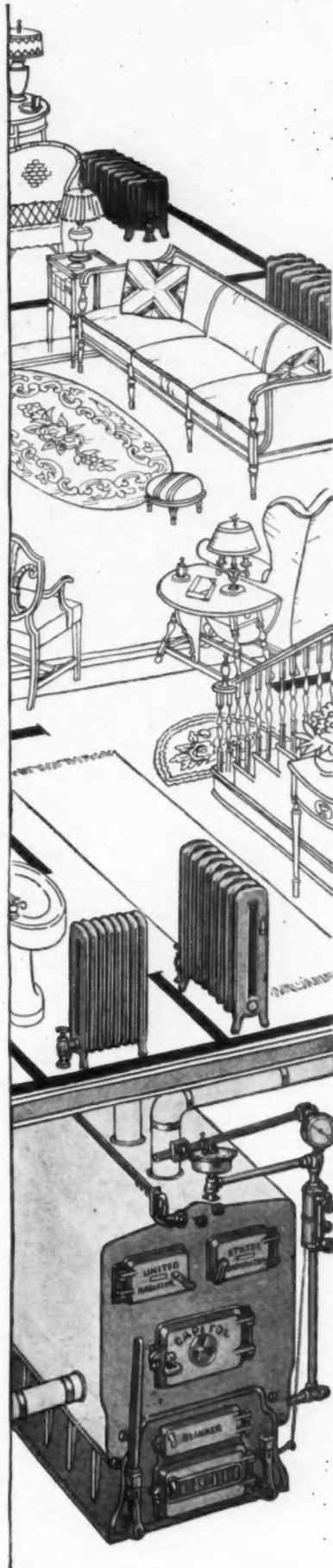
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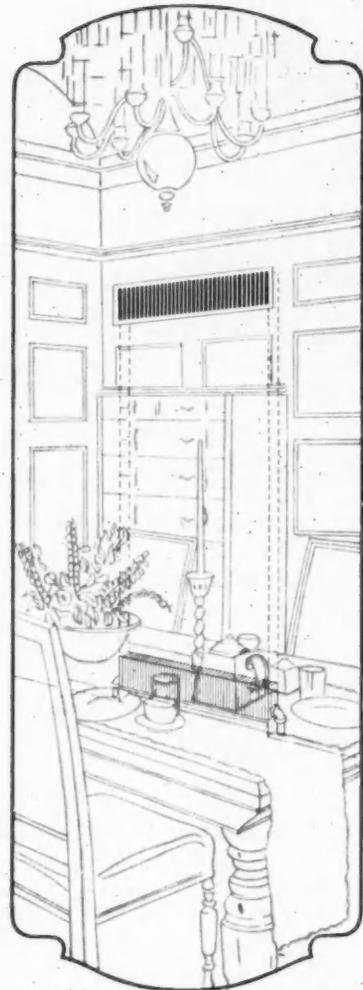
For 36 years, builders of dependable heating equipment

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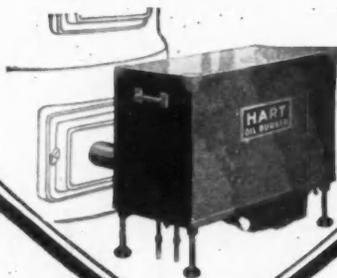
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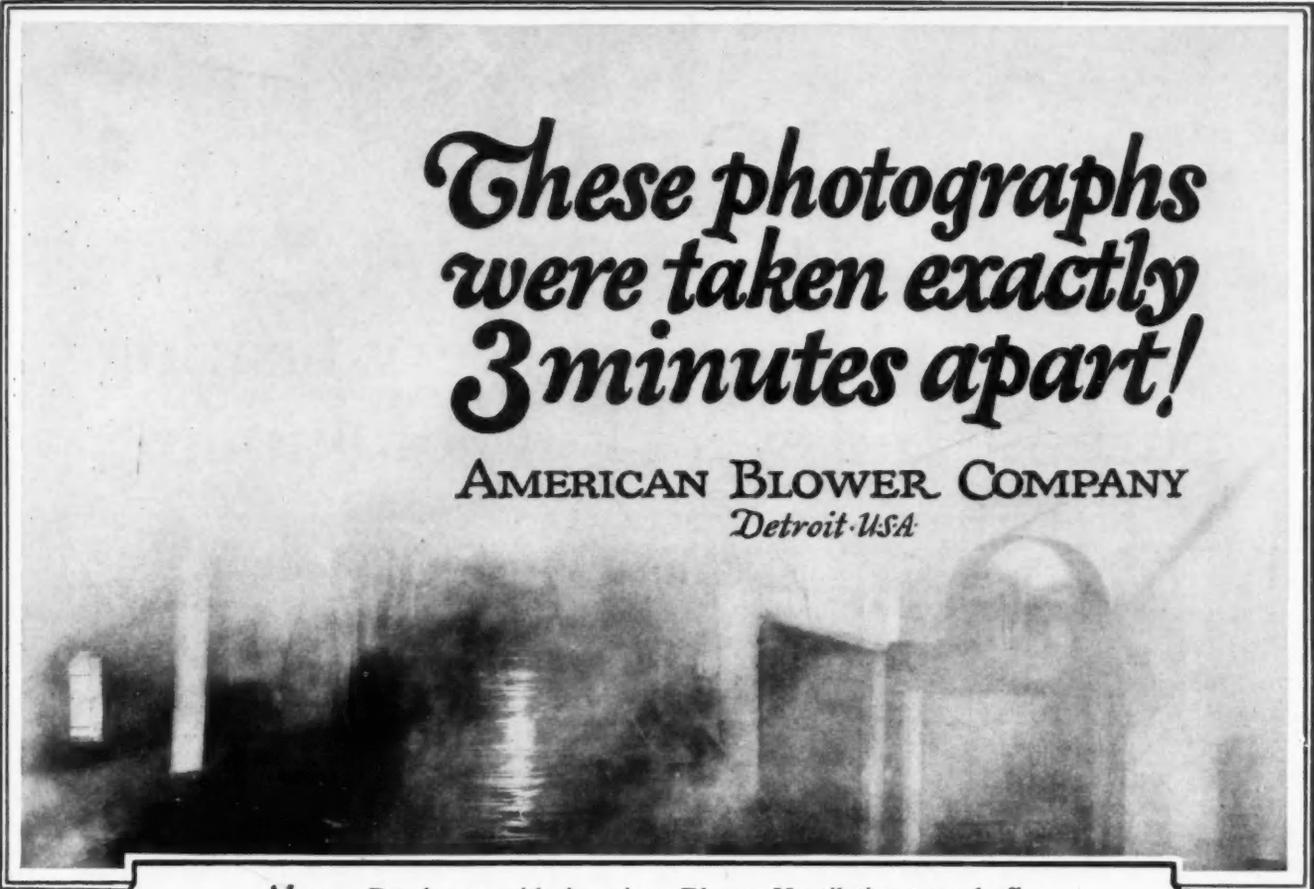
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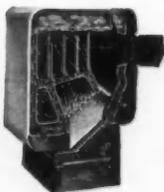


Spencer Junior Hot Water Heater—capacity in direct cast iron radiation equivalent, water, 300 to 600 square feet.

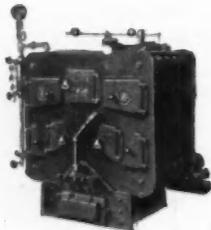
SPENCER HEATER COMPANY
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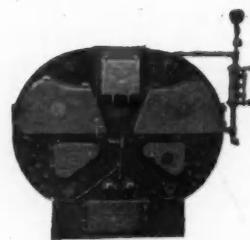
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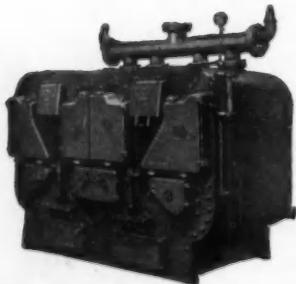
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Spencer Tubular Steam Heater—15 to 21 Series—capacity in direct cast iron radiation equivalent—1900 to 3600 square feet.



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Left—Spencer Tubular Steam Heater—100 Series—capacity in direct cast iron radiation equivalent 7500 to 15000 square feet.

Right—Interior view showing construction principle.



All Spencer Heaters may be hooked up in battery where a flexible supply of heat is needed, or where the total radiation tax is greater than the capacity of a single boiler.



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**A Saving of \$60,134.00
Was Made On This Omaha Job!**

materials are regularly carried at our warehouses.

Ceco Reinforcing Bars are furnished in deformed rounds and squares. The deformations are at right angles to the main axis of the bar (see illustration) and this provides the most positive kind of mechanical bond to aid the adhesion of the concrete to the steel in resisting bond stresses existing in reinforced concrete members.

All **Ceco** Reinforcing Bars are inspected and tested by Robt. W. Hunt & Co., Engineers, to conform to the specifications of the American Society of Testing Materials.

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**The Reinforcing Steel
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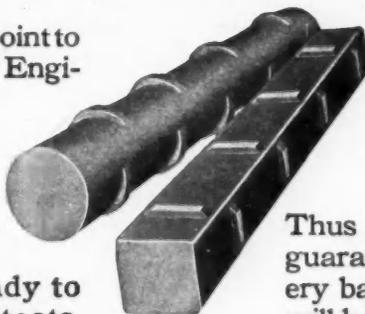
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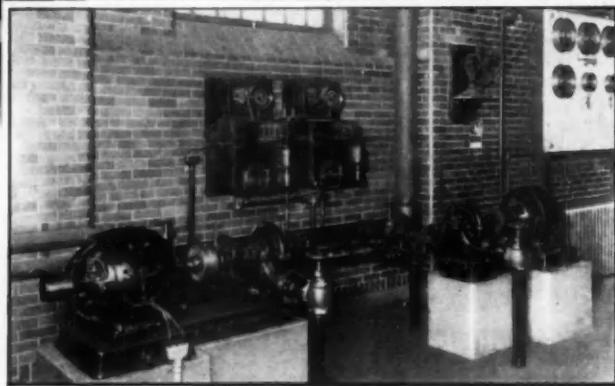


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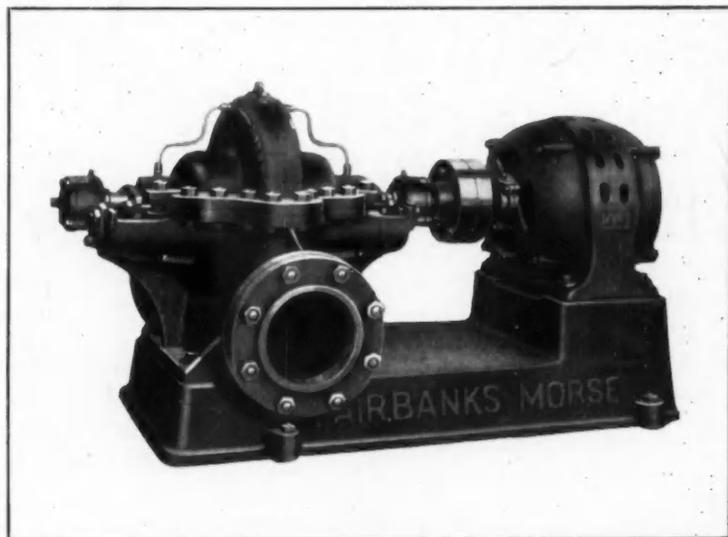




Fairbanks-Morse centrifugal pumps were selected for booster service in the Hamilton County Court House, Cincinnati, Ohio. At the left, the F-M installation in this large public building.



A typical motor-pump combination, ball-bearing throughout of high efficiency and exceptionally fine balance, unit-built by Fairbanks-Morse.



24-hour-a-day pumping service

F-M unit-built equipment has proved equal to this responsibility

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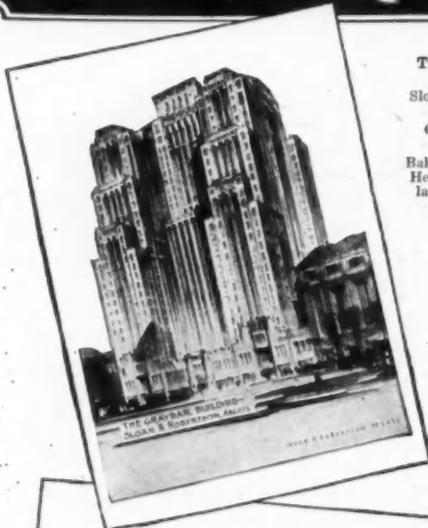
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Most buildings in New York that have air filters are equipped with Midwest installations, and practically every mechanically ventilated building now being constructed in the city will be supplied with clean air through Midwest Air Filters. The Midwest-equipped buildings shown to the left are only two of those now in the course of construction, or recently completed, in New York. Among the others are:

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Keith's 86th Street Theatre,

Thos. W. Lamb, Architect.

New York University,

W. S. Gregory, Architect.

Royal Insurance Building,

Starrett & Van Vleck, Architects.

Columbia-Presbyterian Medical Center,

Jas. Gamble Rogers, Architect.

The New Madison Square Garden

Thos. W. Lamb, Architect
E. G. Woolfolk,
Engineering Contractor

The Manger Hotel,

H. Craig Severance, Architect.

The New Delmonico Building,

H. Craig Severance, Architect.

Elks' Lodge No. 22, Brooklyn,

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C. E. Birge, Architect.

F. W. French Building,

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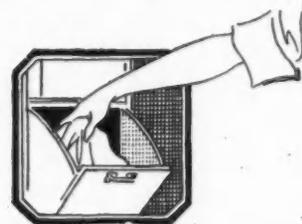
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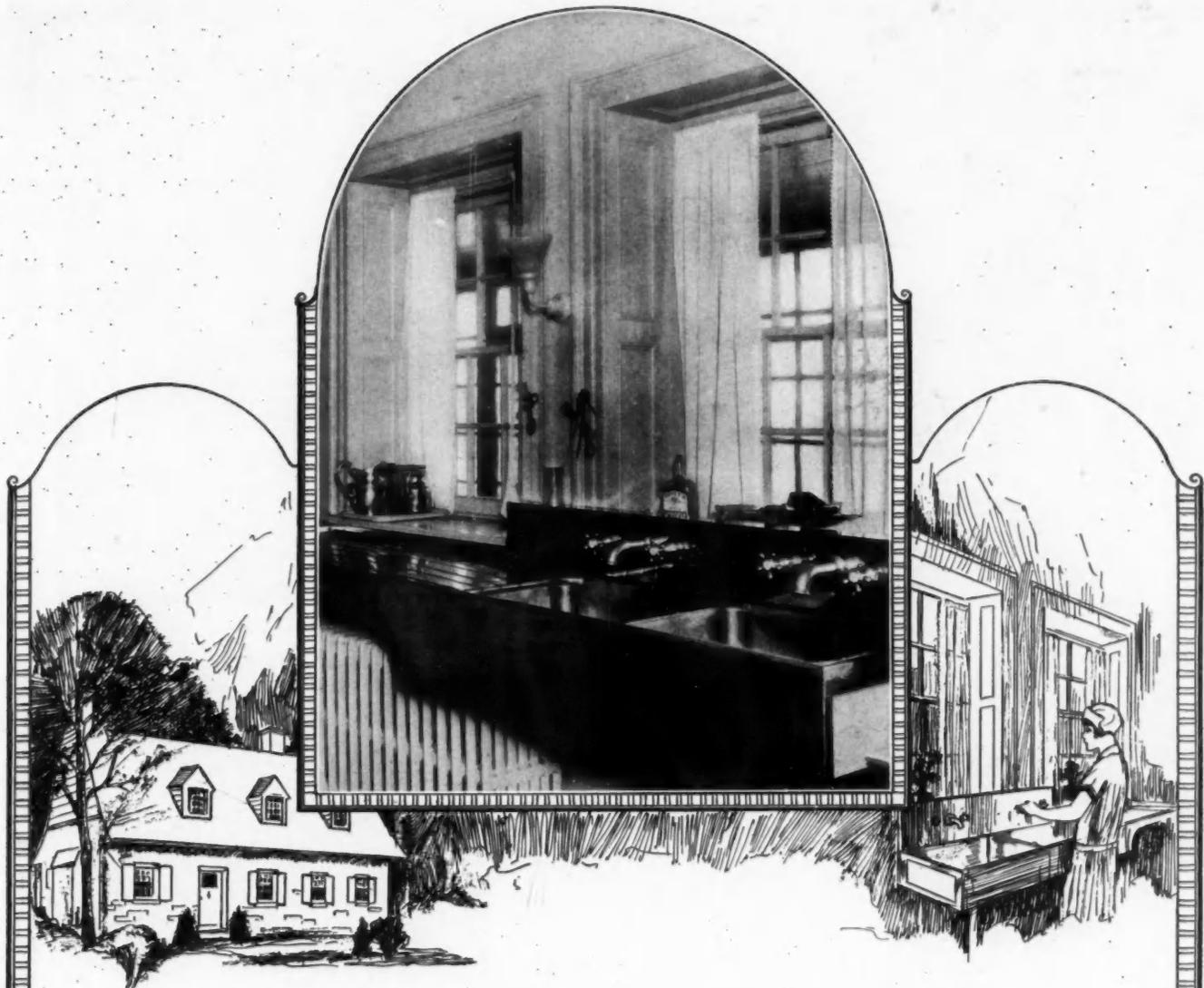
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Insuring Permanent Attractiveness
in the finest of modern homes

HERE is proof that sinks can be beautiful. In years gone by, the average sink was unpleasant to look at because of the materials of which it was made. But now-a-days, because it can be made of Monel Metal, a sink may become a thing of silvery beauty—actually, an ornament to any kitchen.

Here is pictured a typical Monel Metal sink. It not only looks clean and

attractive now—it will retain that cleanly attractiveness.

For Monel Metal always looks new and bright. It is easily cleaned, durable and strong, rust-proof and corrosion-resisting.

The kitchen is only one place where Monel Metal may be used to advantage. Let us give you complete information about Monel Metal so that your data files may be complete.

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*W & T Chlorinator Type
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Higher endorsement could not be had.

We will be glad to send a copy of this report on request.

Liquid chlorine and W & T apparatus sterilizes over five billion gallons of drinking water every day.

“SWIM IN DRINKING WATER”

“The only safe water is a sterilized water”



WALLACE & TIERNAN

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Manufacturers of Chlorine Control Apparatus

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Standard Conveyors Help to Sell Machinery, Tools and Shop Supplies

It will be admitted that prompt service to customers does make and hold them.

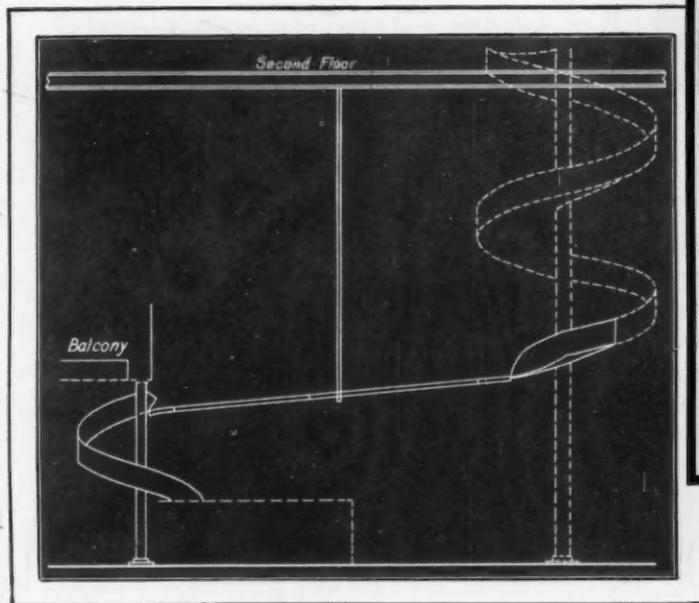
A little better discount from list, a neater package, and various other details serve to impress the customer with the high standard of the firm he buys from.

Here is shown a Standard Spiral Chute working for C. A. Strelinger, Detroit, Michigan, dealers in machinery, tools and shop supplies. There is no power used, save gravity, to operate it. Strelingers, therefore, can divide this saving with their customers. No elevator operator is needed to bring merchandise down to the shipping or delivery department. Strelingers can divide this saving with their customers.

Standard Spirals do help sell machinery, tools, and shop supplies. They also help sell hardware, automobiles, wholesale groceries, newspapers, coal, and a myriad of other things that are in bundles, packages, boxes or loose. What about your client? Gravity is the cheapest power known! Why not see if he has a place for it? An analysis of the Strelinger job will be sent on request to any architect who is interested.

There is no delay in filling an order. Repair parts, tools, or supplies that are located somewhere above come promptly and directly to the exact spot when and where wanted. Strelingers can offer this service to their customers.

The man on floor three who fills orders, keeps stock and has charge of Dept. A or D receives an order, fills it—puts it on the spiral and forgets it. At the other end of the spiral it is taken off and despatched by mail, express, truck, or freight without loss of time. Neither the man at the top of the spiral nor the one at the bottom has lost a bit of time by waiting, walking unnecessarily, or passing the time of day with the elevator man. This bit of prompt attention Strelingers can offer their customers.



Standard Gravity Roller Conveying Systems are especially adapted to solving conveying conditions in machine shops and plants. We would like to tell you about some of the conveying problems solved with Standard Roller Conveying Systems.

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September 23, 1925.

Mr. George B. Hopper,
President,
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New York City, N.Y.

Dear Mr. Hopper:-

I am glad indeed to advise you of the success that we had in using Van Guilder double wall forms in the construction of the change-house at our Summit Hill, New Village, N.J.

This building is one story, 40 ft. by 80 ft. by 12 ft. high, concrete building, built for the purpose of providing the workmen with lockers, shower-baths, toilets, etc., and was constructed by our men without any previous experience in using your forms. Each of the double walls are 6" thick, leaving the usual air space of 2 1/2" and the roof was poured with concrete using metal forms, and covered with tar and tar-paper.

The cost of building the walls, so far as I can determine, was approximately two-thirds the cost of constructing monolithic concrete by our own forces. The windows and doors were framed and cast right into the wall as it was being poured, and we find that the building is exceedingly cool in summer time, and while we have not yet used it in winter, we believe it will be very easily heated.

Our management at the mill like the method of construction so well that practically all of our wall construction in the future for buildings and certain walls, will be done with your forms.

The writer also built a two car garage for himself at his home in South Orange, 20 x 20 ft. inside walls being 10 ft. high and having webs 3" thick. This work was done by two Italian boys who have had some little experience in concrete work, but they had no difficulty whatever in putting up the walls in about 4 days without other help, again casting the windows and doors into the wall as they proceeded. The interior of the garage has been covered with a coat of cement and sand and the outside is stuccoed, and altogether, it is a beautiful as well as a solid job.

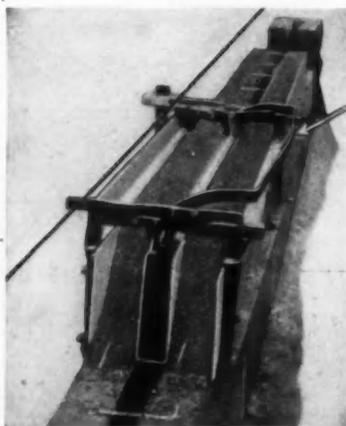
The next to me was a little over half the cost quoted by contractors for concrete construction, and I certainly can recommend this type of construction.

Very truly yours,
W. O. Goss
VICE PRESIDENT AND
GENERAL MANAGER.

Read This Expert's Opinion On Wallbuilder Construction

Double, monolithic, concrete walls are answering the architect's demand for integral insulation. They are providing the most practical insulating medium known—a 2 1/2" continuous air space—at a cost no greater than that of ordinary masonry construction. Furring, lathing and scratch coat plaster are eliminated, so thoroughly damp-proof are these walls.

Van Guilder System Concrete Building 17 East 40th Street New York



The Van Guilder Wallbuilder shown in place on walls is filled with semi-wet concrete and tamped. Lever indicated by arrow is then lifted, which collapses the center core and expands the outside plates, thereby freeing the concrete on all sides. The wallbuilder is then instantly slid forward.

See Our Page in
the Fall Edition of
Sweet's Catalogue

Capital Cleaning for a State Capitol

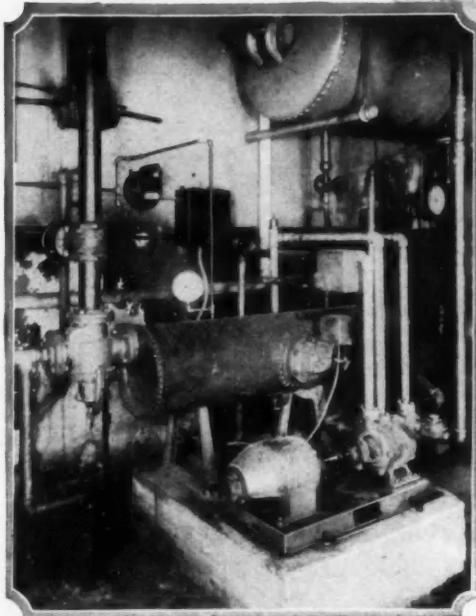


STATE CAPITOL OF NEBRASKA
Architects: Bertram Grosvenor Goodhue Associates

Since the capitol of a great state is built but once, it is absolutely necessary that it embody every detail of the latest and most advanced equipment. Because of this, the architect of the Nebraska State Capitol specified The Spencer Central Cleaning System, already installed and in successful operation in public buildings of every sort—in Independence Hall; the State Capitols of Connecticut, Utah, Missouri, Texas, Oklahoma and others; Hospitals, Libraries, Municipal Buildings, Hotels, Theatres, Churches, Large Residences, Schools, Office Buildings, Department Stores;—in structures of every possible type where it is necessary that absolute cleanliness be maintained by use of apparatus which is strong, reliable, noiseless and economical, qualities among others belonging to The Spencer Central Cleaning System.

The
Spencer Turbine Company
Hartford, Conn.

SPENCER
CENTRAL
CLEANING
SYSTEMS



Above: The well-known Stroh Building in Detroit. At left: View of the motor-driven Jennings Pump and Returns Tank on the return line of the heating system.

Jennings in Stroh Building, Detroit

In the Stroh Building, Detroit, as in most other fine office buildings in the country, a Jennings Vacuum Heating Pump is depended on for removing the condensation and air from the return line heating system.

For the exacting service customarily encountered in buildings of this character, Jennings Pumps are a logical choice. They give to the

heating system a flexibility which makes it capable of delivering the heat where and when it is wanted. Jennings-equipped systems start up quickly in the morning. They can supply heat to the farthest radiator as easily as to the one nearest the boiler.

Bulletins, prices and recommendations on request.

NASH ENGINEERING COMPANY
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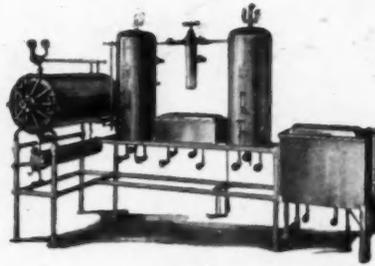


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Jennings Pumps

RETURN LINE AND AIR LINE VACUUM PUMPS CONDENSATION AND CIRCULATING PUMPS

Visualize a STERILIZING Room Free From Hissing Steam



More than 100 Hospitals have been equipped completely with SUPER-KNY PRESSURE STERILIZING APPARATUS and RECESSED CABINETS during the past year.

THERE IS A REASON.

More than thirty-five years of satisfactory service has earned for our apparatus a reputation for unexcelled supremacy.

The Super-Kny Automatic Controls for the Electric Current, High Pressure Steam lines and gas, make possible the Sterilizing Room free from hissing steam and vapor.

Our EJECTORS eliminate the necessity for a vapor vent to roof.

Catalogues and Roughing-in cheerfully furnished gratis. A. I. A. No. 35-K.



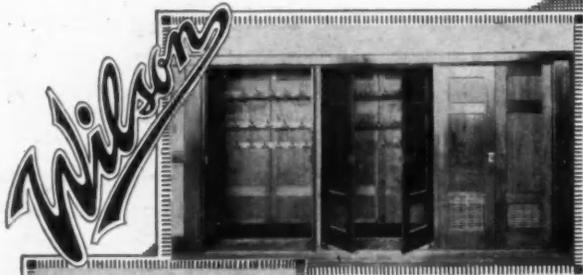
The KNY-SCHEERER Corp.

OF AMERICA

America's largest Manufacturer of Hospital Equipment

119-125 Seventh Avenue (Dept. 30)

New York, N. Y.



The same type wardrobe with rolling fronts. Note that they are always under the teacher's eye. These particular wardrobes are built in convenient recess in wall.

Wilson Hygienic Wardrobes, with disappearing doors, in St. Paul's School, Providence, R. I. A. J. Murphy, Arch. Note ventilating grilles in doors.

These savers of space
will appeal to
your sound judgment

MANY newly built schools have entirely omitted separate cloakrooms and depend solely on Wilson Hygienic Wardrobes. Others have abandoned the out of sight, poorly ventilated cloak rooms and now use the Hygienic Wardrobe because of the space saved.

One that is perfectly ventilated and sanitary and that can be enlarged when necessary.

If one of you would like to talk wardrobes one of us would like to talk with you. Or we will send you catalog No. 3.

1876—FIFTY YEARS IN BUSINESS—1926

The J. G. WILSON Corporation
11 East 38th Street, New York City
Offices in all Principal Cities



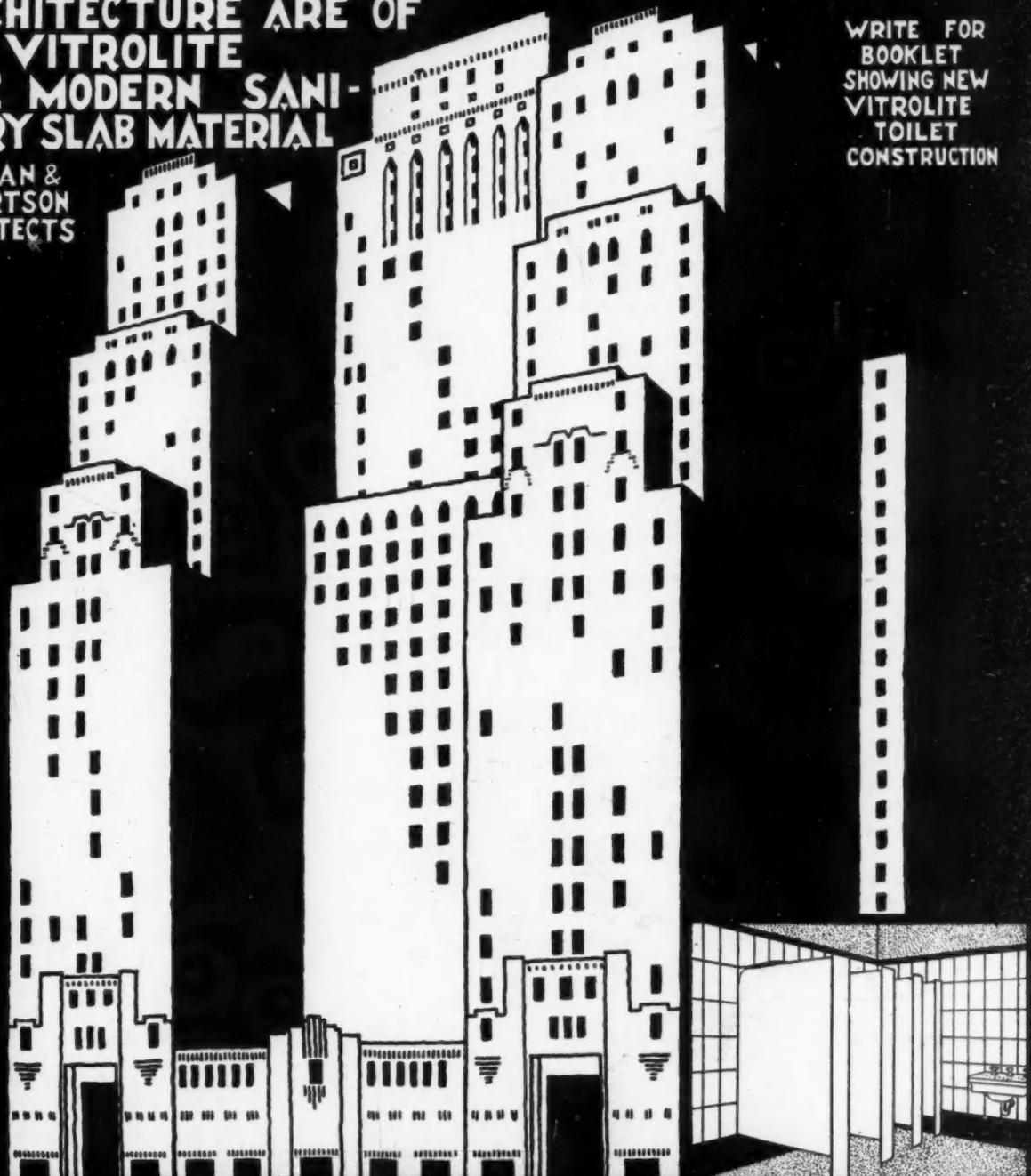
VITROLITE

IN THE WORLD'S LARGEST OFFICE BUILDING STALLS AND WAINSCOTING IN ALL WASHROOMS OF THE GRAYBAR BUILDING A MASTERPIECE IN MODERN ARCHITECTURE ARE OF

VITROLITE
THE MODERN SANITARY SLAB MATERIAL

SLOAN & ROBERTSON ARCHITECTS

WRITE FOR BOOKLET SHOWING NEW VITROLITE TOILET CONSTRUCTION



133 WASHINGTON ST. CHICAGO

THE VITROLITE COMPANY

FACTORY PARKERSBURG, W.VA.

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Like a bit of Normandy
is DUBOIS ~ ~ so quaint,
so picturesque

THE architect of this lovely home on the New Jersey coast has carried out the thought and feeling of the original Norman type clear through to service wing and garage. To have used an ordinary fence for screening purposes would have introduced an incongruous note. So he chose Dubois, the charming and very practical fence that has been used for centuries in France, and got privacy and authenticity.

Dubois is made of straight, live, chestnut saplings, woven closely together. Comes in two heights, 4ft. 11in. and 6ft. 6in. Easy to erect.



DUBOIS

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ROBERT C. REEVES CO., 187 Water Street, New York

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Please send your free portfolio showing practical applications of Dubois and illustrating how it fits in with any architectural type.

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Cottages, Farmhouses and Other Minor Buildings

In England of the 16th, 17th and 18th Centuries

By LOUIS CONRAD ROSENBERG

OF ALL the architectural types, that most appropriate for American domestic use is often thought to be that of the old English cottage or farmhouse. It can be easily developed in materials of almost every kind; it possesses wide flexibility as to scale, and the character of its fenestration provides the ample wall spaces which many designers highly value for their architectural effect. Its interior is readily developed to provide

the rambling type of plan which is popular for country or suburban domestic buildings, and all in all, the English farmhouse or cottage answers every demand made by the modern home builder in the search for a practical type.



THIS important work presents half-tone illustrations from photographs or sketches of more than 100 English country houses of the cottage or farmhouse types, chiefly in the Cotswolds and in Sussex, Suffolk and Kent. It deals with the work of three centuries and illustrates buildings of several widely different kinds of old English domestic architecture, built of wood, plaster, stone, brick, or combinations of all these.

There are also given countless detailed working drawings of doorways; oriel windows; gables; chimneys, singly or grouped in stacks; decorated plaster; half-timber work; fireplaces and cornices. A book invaluable to the architect.

102 pages, 10 x 13 1/2 inches.

Bound in cloth. Price \$15.

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383 Madison Avenue, New York

Alden Park Manor, Philadelphia.
Kenneth M. de Vos Co., Builders.



Alden Park Manor, Brookline,
Mass. Harold Field Kellog,
Architect; Kenneth M. de Vos
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The Garbage Problem is settled forever in ALDEN Park Manors

THE Alden Park Manors of Brookline, Mass., and Philadelphia, Pa., are noteworthy contributions to American apartment house architecture. Every detail of interior finish and equipment is in keeping with the best modern practice.

The garbage nuisance was banished once and for all—and a big step taken thereby in assuring tenant satisfaction. The sanitary, convenient Kernerator was installed to displace foul smelling, inconvenient garbage cans.

No operating expense

All waste is dropped into handy hopper doors on floors above and falls to the brick combustion chamber in the basement. An occasional lighting (a match does it) ignites the air-dried accumulation. No gas, coal or other fuel is necessary.

All new homes and apartment buildings deserve this modern time-tried convenience. Your clients will welcome the suggestion.

For detailed information see Sweet's Twenty-First Edition, Pages C3054-C3055. Or phone your local Kernerator representative. Offices in sixty cities.

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*Garbage and Waste Disposal
without Leaving the Kitchen*



Kenneth M. de Vos & Company
Wissalickon Avenue & School House Lane
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Designers and Builders
Alden Park Manors

Dec.
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1925

Kerner Incinerator Co.,
641 E. Water Street,
Milwaukee, Wisconsin.

Gentlemen:

You will be interested to know that for the incinerator equipment for the disposal of all garbage and waste on our Alden Park Manor, (consisting of approximately 250 house-keeping apartments) at Brookline, Mass., we used your Kernerator.

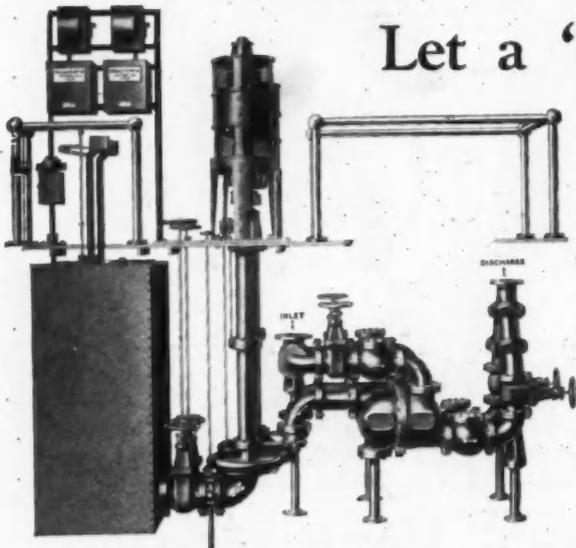
The operation of your equipment on our above buildings has proven so satisfactory and sanitary that we have adopted its use on our Alden Park Manor Building operation, which is nearing completion here in Germantown, Philadelphia, (which consists of approximately 300 housekeeping apartments).

In addition to the actual satisfaction from your equipment in operation, we likewise have appreciated the type of co-operation your organization has given us, both in personal service, and the placing of your equipment on the job when required.

Yours very truly,

KENNETH M. de VOS & CO.

By *Kenneth M. de Vos*



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The distasteful task of cleaning a strainer basket on a Sewage Ejector is no longer necessary.

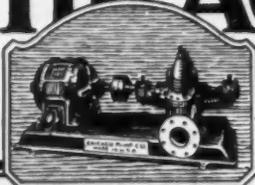
Illustration shows the Chicago "Flush-Kleen" Dry Basin Sewage Ejector unit. The "Flush-Kleen" entirely eliminates the old-fashioned strainer basket.

Let our Bulletin No. 126 tell you more about this splendid new unit based upon the "Flow-Reversal" method.

"Flush-Kleen" Dry Basin Sewage Ejectors are now giving satisfaction in the Saenger Theatre, New Orleans; The Rome School, Rome, New York; and the Merchants and Manufacturers Building, New York City. Simplicity in construction of the "Flush-Kleen" strainer has been proven in the above installations where not a moment's trouble has been experienced.

Ask for Bulletin 126— Gladly furnished upon request

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Windows must be useful. The utility of double-hung sash depends upon the quality of the sash cord.

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The Saving Is HERE

FLOOR

CONCRETE



Put the BULL-DOG on your Pay-roll

MATERIALS for factory buildings are usually selected on basis of economy. Where any wood flooring is used, Bull Dog Clips reduce the cost of upkeep as well as the cost of construction. Three thousand clips are in use in the building shown here to anchor wood floors over concrete.

Write for samples, installation charts and cost data to complete your files.

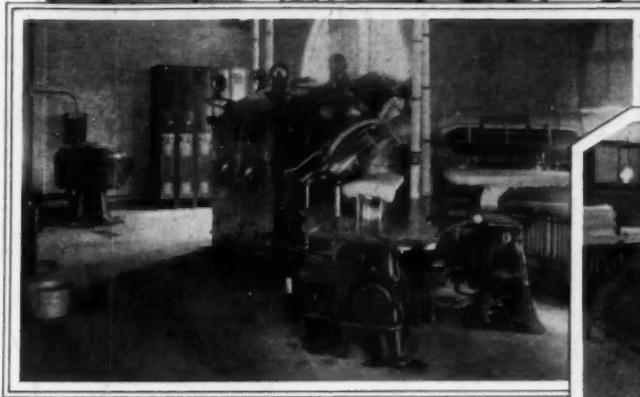
Bull Dog Floor Clip Co.
108 North First Ave.,
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Distributors in principal cities

BULL DOG Floor Clips
ANCHOR WOOD FLOORS TO CONCRETE

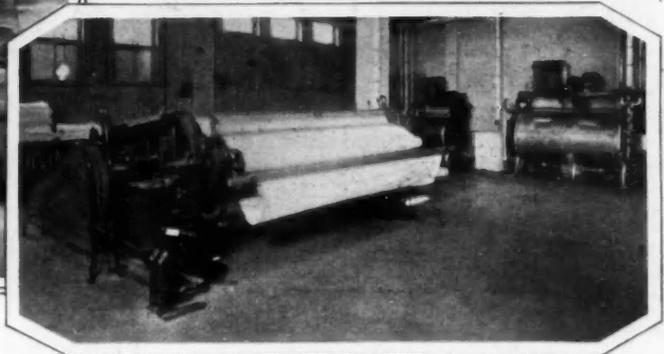
No. 27 of a series of advertisements featuring prominent laundry installations



The New St. Rita School for the Deaf, Lockland, Ohio. J. F. Scheblessy, Cincinnati, Architect.



(Left to right) American Underdriven Extractor, Automatic Thermo-Vento Dryer and Prim Presses



American 6-Roll Flat Work Ironer and Cascade Washer

In the new St. Rita School for the Deaf

ABOVE is another example of a satisfied user of "American" laundry equipment—another institution to add to our long list.

Regularly in the laundry of the St. Rita School you'll find great bundles of bedding, linens, and clothes being washed spotlessly clean in the American Cascade Washer, dried in the Automatic Thermo-Vento, and ironed on the Prim Presses or the 6-Roll Flat Work Ironer.

And because this work is quickly handled, fewer sheets, fewer linens, and fewer clothes are needed. Always a ready supply on hand, for all the laundry of the institution is done in the institution.

The St. Rita laundry was entirely designed and installed by "American" engineers.

If you have a laundry problem, we shall be glad to give you the benefit of our wide experience. Just drop us a post card, and we'll do the worrying.

At Your Service... a corps of laundry specialists

The American Laundry Machinery Company maintains a corps of engineers who have gained wide experience in planning and equipping most of the country's hotel, commercial, and institutional laundries. If you have any questions pertaining to modern laundry practice, you will find consultation with these specialists advantageous. This service is gladly offered you without any obligation whatever.

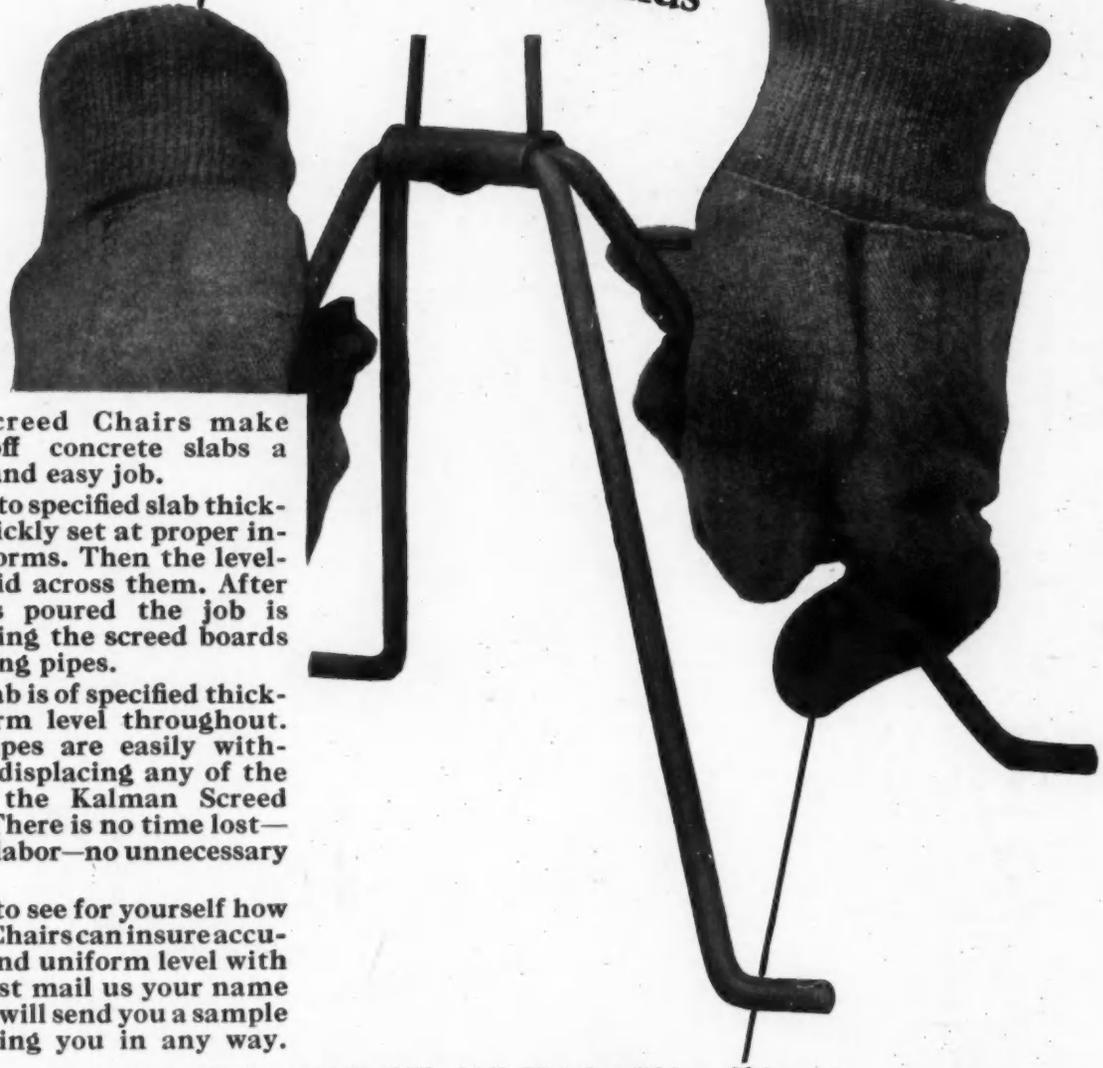
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With Fewer Hands



KALMAN Screed Chairs make striking off concrete slabs a fast, accurate, and easy job.

The chairs open to specified slab thickness and are quickly set at proper intervals on the forms. Then the leveling pipes are laid across them. After the concrete is poured the job is finished by pulling the screed boards across the leveling pipes.

The resulting slab is of specified thickness and uniform level throughout. The leveling pipes are easily withdrawn without displacing any of the concrete. And the Kalman Screed Chairs stay in. There is no time lost—no unnecessary labor—no unnecessary costs.

It will be easier to see for yourself how Kalman Screed Chairs can insure accurate thickness and uniform level with fewer hands. Just mail us your name and address. We will send you a sample without obligating you in any way.

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- FOR BUILDINGS**
- Corrugated Bars
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Laying the Clinton Welded Fabric used in the Park Central Apartment Hotel, 56th Street and 7th Avenue, New York City

STRENGTH AND ECONOMY FROM CLINTON WELDED FABRIC

CLINTON Welded Fabric will contribute to the strength and permanence of Langner & Baer's beautiful 31 story Park Central Apartment Hotel being erected at 56th Street and 7th Avenue, New York City.

The Melrose Concrete Co., that laid the flooring, know that both economy and strength would result from the use of Clinton Welded Fabric. And this is why:

It comes in rolls of sufficient length to be laid quickly and accurately in *unbroken strips* through all spans of the building from one side to the other. No laborious and costly respacing of loose members is necessary.

The intersections are electrically welded in a union as strong or stronger than the original wire. There are no clips, loops or twistings to interfere with the even flow of the concrete. Each group of wires is in line with the principal stresses and a homogeneous unit of tremendous strength results.

The Wickwire Spencer Steel Company itself mines the ore and makes the steel from which it manufactures Clinton Welded Fabric. High quality is safeguarded at every step.

Send for our catalog containing useful information.

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Owners

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Being equipped throughout with the

Watrous

Flush Valve

THE Watrous Flush Valve promotes correct sanitation and prevents water waste by delivering the exact quantity of water required by the bowl with which it is used. A thorough flush is assured without expending more water than is necessary. The regulating port which determines the flow is very easy to adjust, and is prevented from clogging by automatic, self-cleansing mechanism which clears itself of foreign matter in the water whenever a flush takes place.



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FLUSH
VALVE

When the Watrous Flush Valve is installed in combination with the Watrous Duojet Closet, the water-saving is much augmented, as the latter requires only a very limited supply of water for a thorough flush and refill. Also, its design avoids the danger of clogging.

*Write for full details on the
Watrous Flush Valve and Duojet Closets to*

PLUMBING DIVISION

Watrous Flush Valves—Duojet Closets—Self-Closing Basin Clocks—Combination Lavatory Fixtures—Pop-Up Wastes—Liquid Soap Fixtures—etc.

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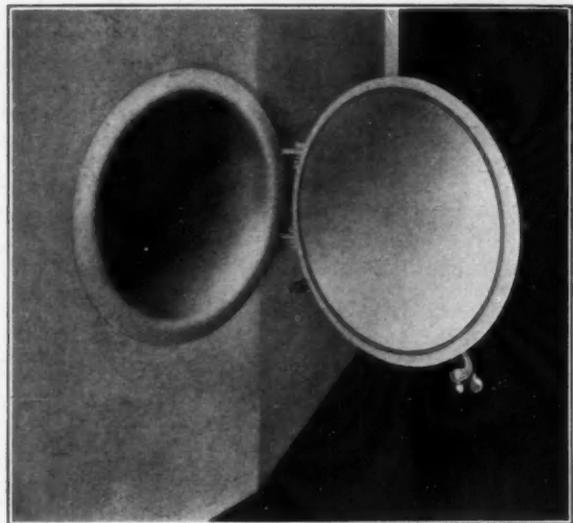
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ANNOUNCING

THE PFAUDLER ALUMINUM LAUNDRY CHUTE

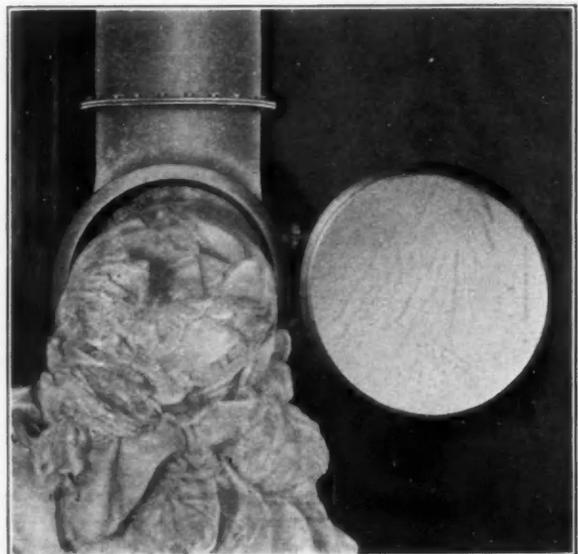
- C** Supplementing the glass-lined laundry chute and the steel dust chute, The Pfaudler Company now offers an Aluminum Chute that will meet every financial consideration.
- C** Built under the same careful supervision you are assured the same high quality workmanship. This chute is constructed of 1/16" aluminum shell with 1/8" throat cylindrically rolled and riveted with countersunk aluminum rivets. Flanged ends are joined by aluminum bolts, securely packed with "Pfaudlerite" gaskets, which makes a watertight connection.
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Detailed specifications furnished upon request

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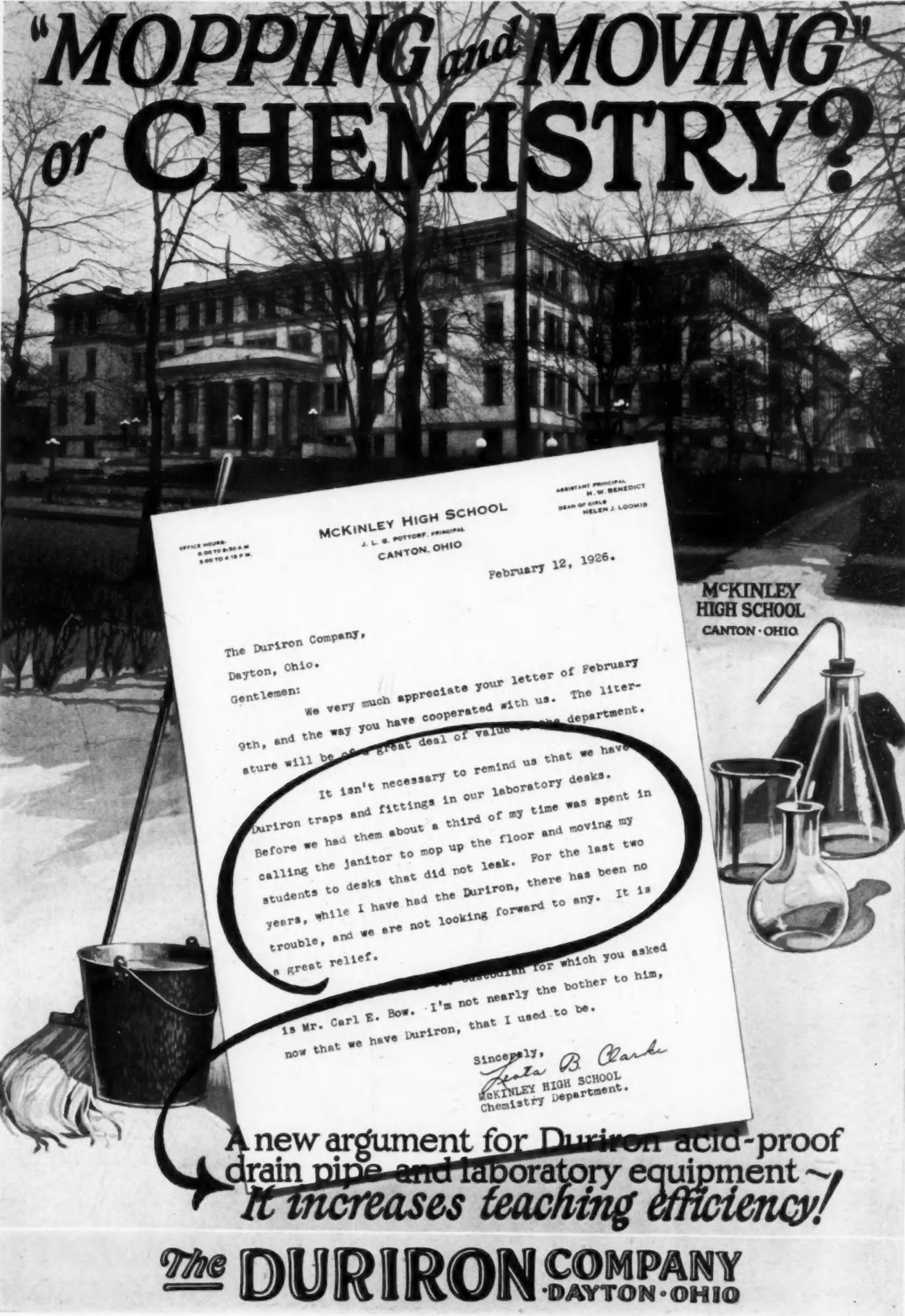
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"MOPPING and MOVING" or CHEMISTRY?



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J. L. S. POTTS, PRINCIPAL
CANTON, OHIO

ASSISTANT PRINCIPAL
H. W. BENEDICT
DEAN OF GIRLS
HELEN J. LOOMIS

February 12, 1926.

The Duriron Company,
Dayton, Ohio.
Gentlemen:

We very much appreciate your letter of February 9th, and the way you have cooperated with us. The literature will be of a great deal of value to the department.

It isn't necessary to remind us that we have Duriron traps and fittings in our laboratory desks. Before we had them about a third of my time was spent in calling the janitor to mop up the floor and moving my students to desks that did not leak. For the last two years, while I have had the Duriron, there has been no trouble, and we are not looking forward to any. It is a great relief.

is Mr. Carl E. Bow. I'm not nearly the bother to him, now that we have Duriron, that I used to be.

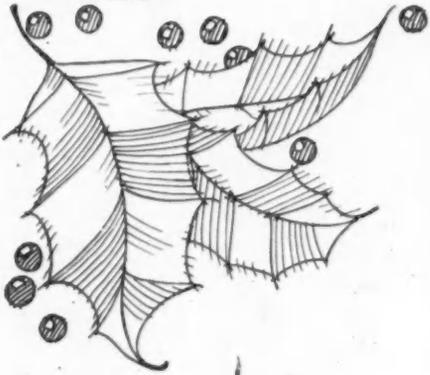
Sincerely,
Leola B. Clark
MCKINLEY HIGH SCHOOL
Chemistry Department.

A new argument for Duriron acid-proof drain pipe and laboratory equipment - *It increases teaching efficiency!*

The DURIRON COMPANY · DAYTON · OHIO

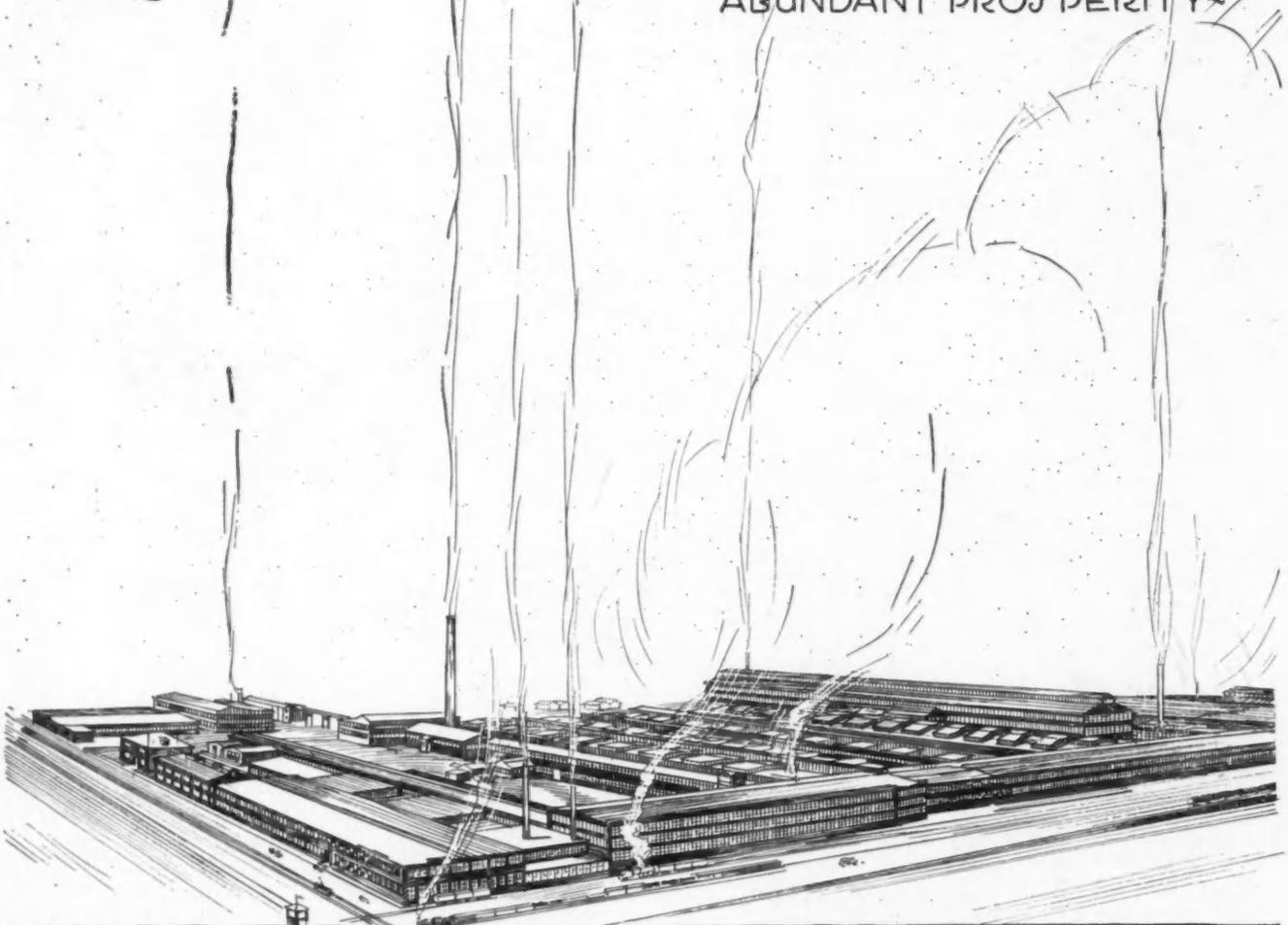
Shera

A SPELLERIZED STEEL PIPE SHERARDIZED



Christmas

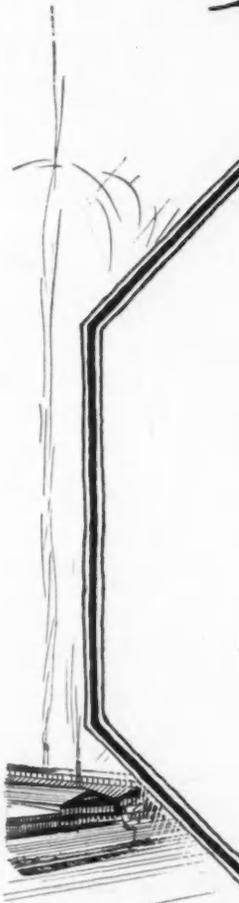
MAY IT BE THE HAPPIEST
 YOU AND YOURS HAVE
 EVER KNOWN AND MAY
 THE COMING YEAR BRING
 ABUNDANT PROSPERITY



National Metal
The National Wiring System ~ FOR SAFETY *and* PERMANENCE ~

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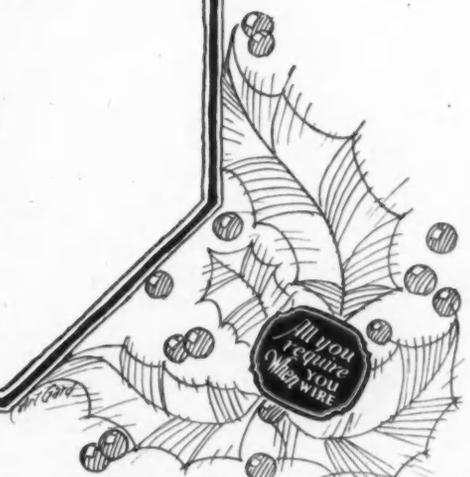
AND ENAMELED FOR SAFE PERMANENT WIRING



THE home of National Metal Molding Company is Economy, Pennsylvania, near Ambridge, where an entire town is actively interested in the production of

National Wiring Products.

All National men take this opportunity to extend hearty Holiday Greetings and to wish you a most successful New Year.



Molding Company
1101 Fulton Building PITTSBURGH - PA.

A wise Investment—A well placed Trust!

Community and Memorial Buildings



NATIONAL

WHAT structures require better equipment than buildings such as these—built, as they were, to serve for years and years as monuments to civic interest and civic pride?

Far famed architects and engineers, schooled in the selection of quality equipment, specified only dependable materials—for civic pride and the necessity of endurance allowed little opportunity for the consideration of any other factor than quality of the highest degree. These masters of their art specified “NATIONAL” Pipe along with the other dependable equipment—because they considered it a wise investment—a well placed trust.

To those interested in the advantages and use of “NATIONAL” Pipe in fine buildings, we offer Bulletin No. 25—“NATIONAL” Pipe in Large Buildings.

NATIONAL TUBE COMPANY, PITTSBURGH, PA.
District Sales Offices in The Larger Cities

How Reuben N. Trane's Vision Revolutionized Heating



Reuben N. Trane
President
The Trane Company



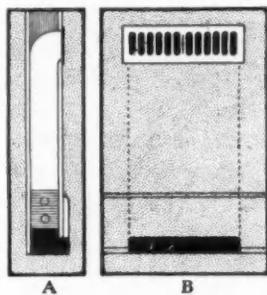
—the story of today's outstanding success in the heating industry

Less than a year ago, the announcement by Reuben N. Trane of a new type of heating unit, created a sensation in the heating field. The trade was waiting for this achievement and quickly responded. Over 1200 orders poured in almost over night—before a single sample had been sent out.

The overwhelming success of Trane Heat Cabinets is founded

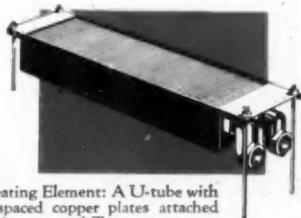
on simple principles, known to all heating men and now applied by Reuben N. Trane in a practical way to produce better, quicker heating and more beautiful rooms.

Write today, let us send complete information regarding this revolutionary change in heating methods.



(A) Cross section view of Trane Heat Cabinet as installed in the wall. Air inlet and heating element at bottom, air outlet at top.
(B) Front view of the finished installation. Only the inlet and outlet are visible. Dotted lines indicate position of Cabinet in the wall.

THE TRANE COMPANY
ESTABLISHED 1885
LA CROSSE WISCONSIN



The Heating Element: A U-tube with closely spaced copper plates attached by the patented Trane process.

TRANE

HEAT CABINETS

Successors to the Radiator



Baker Building, Minneapolis, Minn. G. M. Orr, Mechanical Engineer. Larson & McLaren, Architects. Huston & Company, Heating Contractors.

First Choice for the Big Heating Installations

The Baker Building, Minneapolis, is typical of large modern buildings in which Trane Bellows Traps and Trane Bellows Packless Valves are specified by leading architects and engineers.

Here, 527 Trane Traps and 495 Trane Valves were used in the main building, together with 43 Trane Traps and 42 Trane Valves

in the garage shown at the left of the picture.

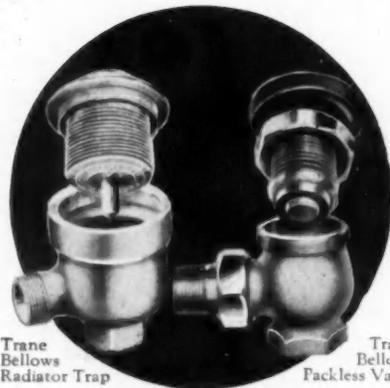
Long experience has taught the heating world that Trane equipment can be depended upon for continuous, efficient operation on the largest projects. A Trane job is right—or Trane makes it right. Every unit is fully guaranteed.

Write for Bulletin 14.

THE TRANE COMPANY, 220 Cameron Avenue, La Crosse, Wis., manufacturers of vapor and vacuum heating specialties, Heat Cabinets, and pumps. Branches and sales connections at New York, Chicago, Boston, Cincinnati, Newark, Philadelphia, Buffalo, Cleveland, Detroit, Seattle, Los Angeles, Albany Minneapolis, Greensboro, N. C., New Orleans, Kansas City, Mo., Zanesville, Ohio, Tampa, Fla., Baltimore, Md., Des Moines, Ia., New Haven, Conn., Sheboygan, Wis. In England: 22-23 Clerkenwell Close, London, E. C. 1. In Canada: The Trane Company, 23 River Street, Toronto, 2; Thomas Robertson & Company, 134 Craig Street, West, Montreal; F. S. Murdoch, 4 St. Elmo Block, Colony St., Winnipeg; In Japan: Mitsubishi Shoji Kaisha, Ltd., Thermal Supply Department, Tokyo. In China: C. J. Doughty & Company, 30 Brenan Road, Shanghai.

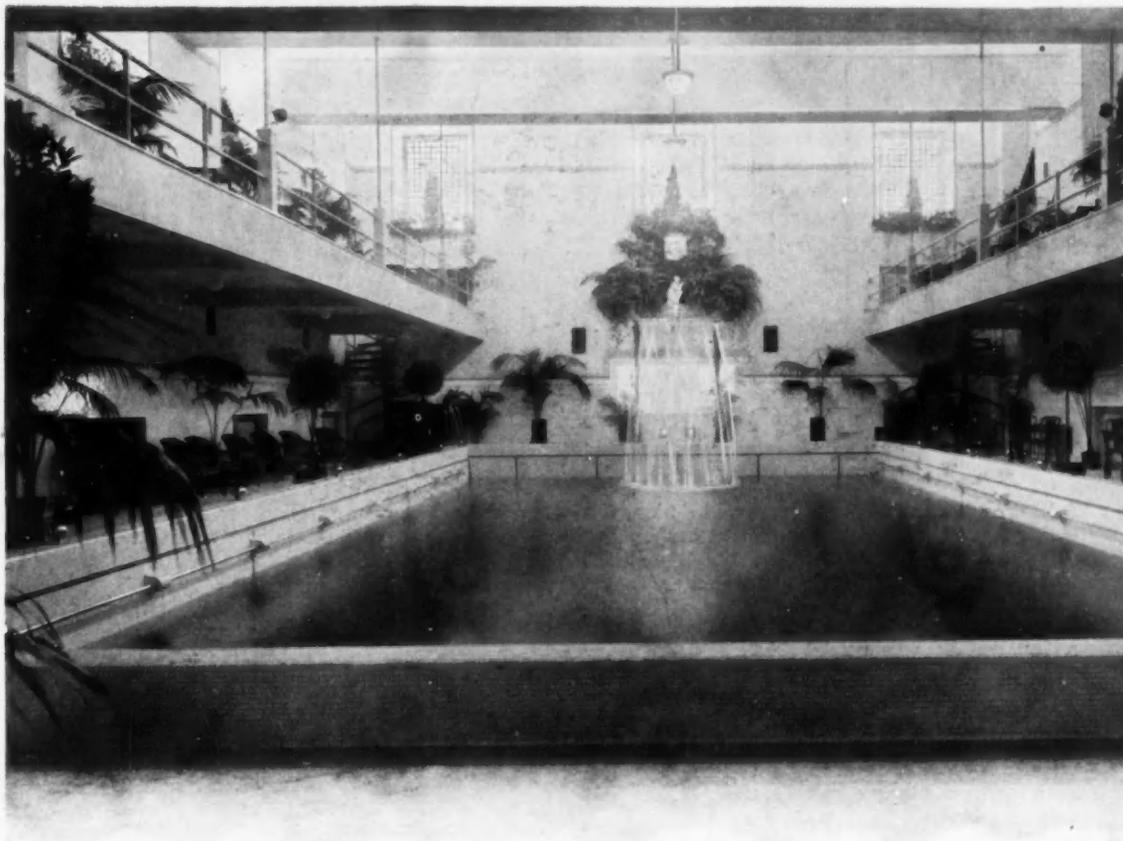
TRANE

HEATING SPECIALTIES



Trane Bellows Radiator Trap

Trane Bellows Packless Valve



What Makes a Good Swimming Pool?

A swimming pool may be beautifully designed and built. It may have all of the lure of blue water and sparkling white tile. But the real determining factor of its success is the water.

If the water in a pool is not properly sterilized, sickness and infections may result. And if it is sterilized with biting chemical germicides the users run the chance of smarting eyes and similar discomforts.

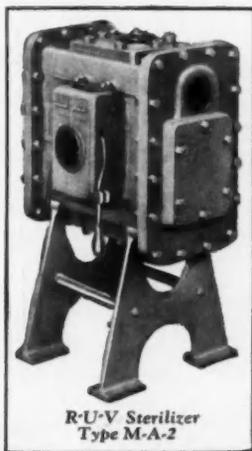
Here is a way to assure the success of the pools you design and also do away with the unpleasantness of biting chemicals: Specify R-U-V Ultra Violet Ray Sterilizers on the water inlets or recirculating systems.

By this method, powerful ultra violet rays, produced by quartz mercury vapor lamps,

penetrate each drop of water that enters the sterilizers — and instantly kill all harmful bacteria. In addition these rays set up a residual germicidal action that keeps water pure after it is in the pool.

And the R-U-V Sterilizer is easy to operate, because the action is practically automatic. There is no dosage to regulate. The bactericidal action is always positive and unavoidable. And the chemical composition isn't changed in the least.

If you are interested in providing such water for your pools—water that feels just like Nature intended it to feel and is pure enough to drink—write for our latest swimming pool booklet. It contains a number of illustrations and descriptions of typical R-U-V installations.

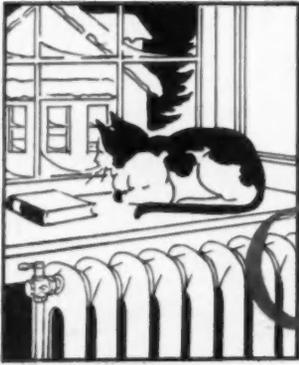


R-U-V Sterilizer
Type M-A-2

The R. U. V. Co., Inc.
383 Madison Ave.
New York City

James B. Clow & Sons
201-299 No. Talman Ave.
Chicago, Ill.





Jenkins Fig. 700 Modulating Valve

Keeps good heating at its best

A heating boiler may be of approved design, the piping layout correct, the radiation ample, but still the comfort and convenience to be derived from the system can be marred by an unreliable or poorly constructed valve.

The design of the Jenkins Fig. 700 Modulating Valve combines several features that aid in keeping good heating at its best.

It is a valve for low-pressure steam, vapor, and vacuum heating, differing from present-day modulating valves in principle of design, affording improvements that make it the most efficient valve for heating radiators.

These are some of its advantages:

Has a Jenkins Rubber Composition Disc and always seats perfectly; scale and core sand cannot lodge on seat, because the seat is vertical, not horizontal.

No water-hammer, gurgling, or shock, because steam entering radiator is not retarded by returning condensation.

Vacuum is under disc, not on top of it, with no loss of vacuum when valve is closed.

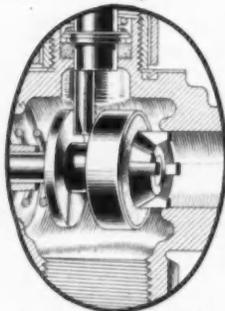
No hexagons, but beads or ribs instead which conform closely to grip of pipe wrench, thereby preventing marring of valve when it is being installed.

Special bonnet construction to prevent leakage around spindle.

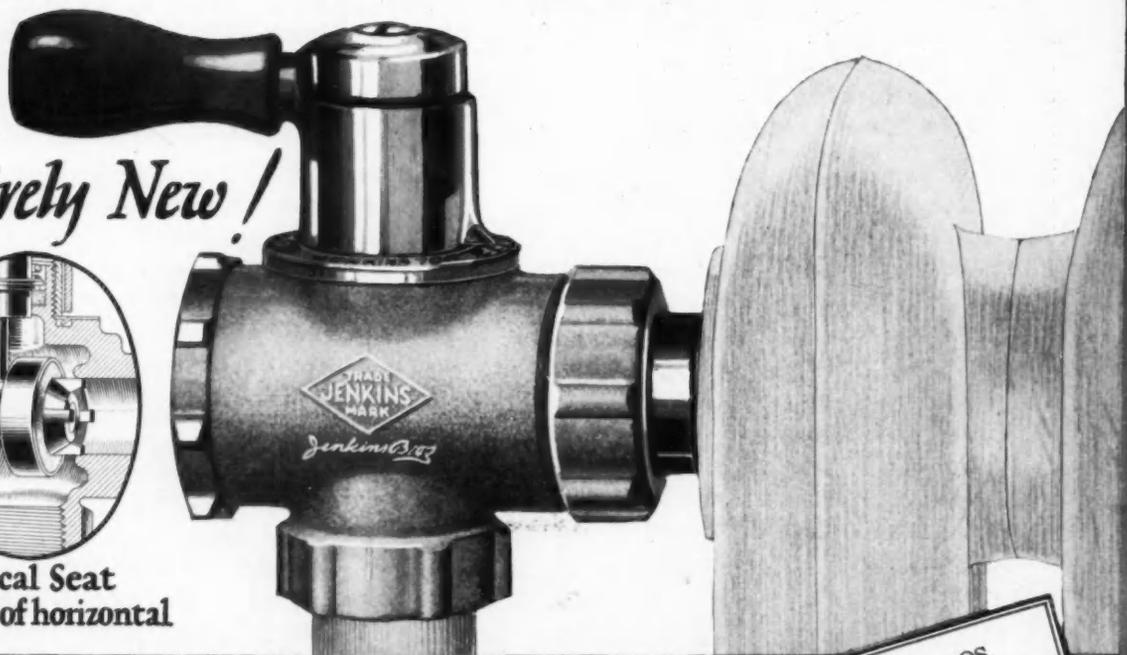
The valve is made of bronze, nickel plated. $\frac{3}{4}$ -inch size, suitable for 100 square feet of radiation.

We shall be pleased to have a Jenkins Service Representative submit a sample for your inspection. You incur no obligation in making this request.

Entirely New!



Vertical Seat
instead of horizontal



Always marked with the "Diamond"

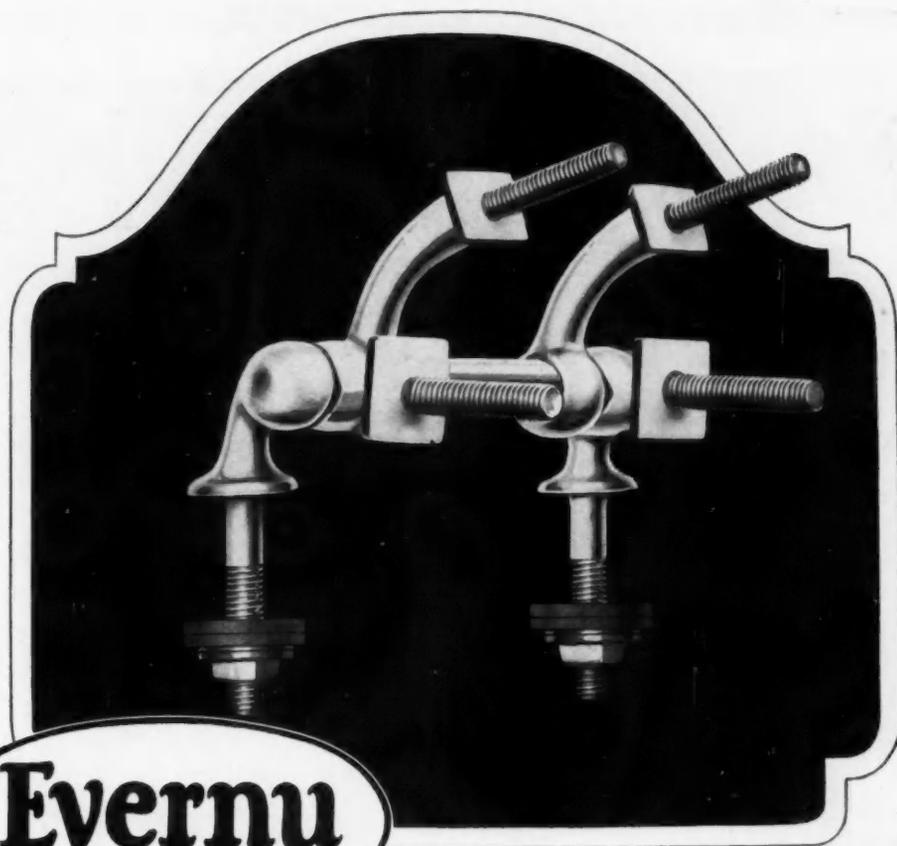
Jenkins Valves

SINCE 1864

JENKINS BROS.

80 White St. . . . New York, N. Y.
524 Atlantic Ave. . . Boston, Mass.
133 No. Seventh St. . . Philadelphia, Pa.
646 Washington Blvd. . . Chicago, Ill.

JENKINS BROS., Limited
Montreal, Can. . . London, Eng.



Evernu
Everlasting Hard Rubber
Seats

A hinge that holds
forever!



Evernu—the perfect seat—is made of rubber molded in one lasting piece. The hollow center provides great strength with lightness. The nickel-plated, bar hinge, concealed type, is secured by heavy threaded lugs that will hold forever.

Molded in one lasting piece, an Evernu Hard Rubber Seat will last forever—there's practically no wear-out to it.

But what of the hinge? That, too, will last forever without the slightest loosening of its vice-like grip. The pure hard rubber takes a steel-like thread. Even after a lifetime of service the hinge will be as firm as the day it was installed—will get tighter as the steel lugs "freeze" into rubber. This is a bar hinge of the concealed type and is extra heavy. A check is provided on seats without lids to prevent the seat from falling back against the valve, wall or tank. There is no metal on the top or bottom of the seat.

The regular equipment is nickel plated, cast brass. However, architects may, if they wish, specify white metal hinges. On all Evernu Hard Rubber Seats without a cover a check hinge is used unless otherwise specified.

The Evernu Guarantee is unconditional. The hard rubber is impervious to acids and cleansers and is unaffected by steam and low temperature. There is a model for every type of bowl.

In public lavatories, where use and abuse are hardest, the Evernu is proving its greater durability and greater economy.

Write today for a catalog and cross section of an Evernu Seat.

When a wood seat is needed, specify

NEVER-SPLIT

It is famous for the bolted construction that makes splitting, warping, and separation of joints impossible. The cross grain of the carefully seasoned oak and gum runs around the hole and withstands every strain. Each seat is hand-brushed and beautifully finished, and there is a model for every type of bowl.



NEVER SPLIT SEAT COMPANY

Dept. 1212, Evansville, Indiana, U. S. A.

Founded 1905

THE LARGEST MANUFACTURERS OF TOILET SEATS IN THE WORLD!

FAUCETS · ARE · THE · VITAL · SPOTS · OF · PLUMBING



Santa likes a quiet house

Santa cares about quiet on Christmas Eve. But the home owner and his family insist upon it the year 'round. Noisy plumbing is out of date. Leaking, gurgling, sleep-destroying faucets are taboo. Hundreds of modern-minded architects and builders specify Mueller Faucets, for they know that Muellers give the kind of service home owners desire. Sixty-nine years of quality manufacturing methods are behind Mueller dependability.

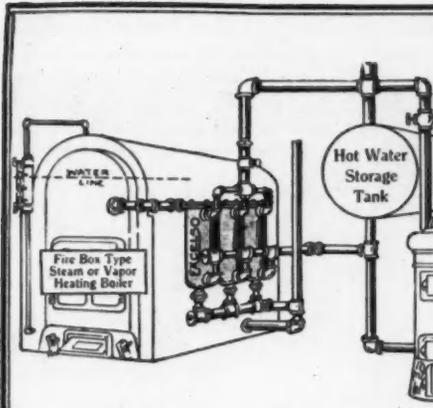
MUELLER CO. (Established 1857) *Factories:* Decatur, Illinois; Port Huron, Michigan; *Canadian Factory:* MUELLER, Limited, Sarnia; *Branches:* New York, San Francisco, Los Angeles

316

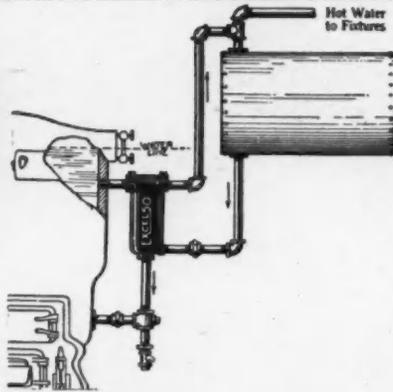


MUELLER FAUCETS

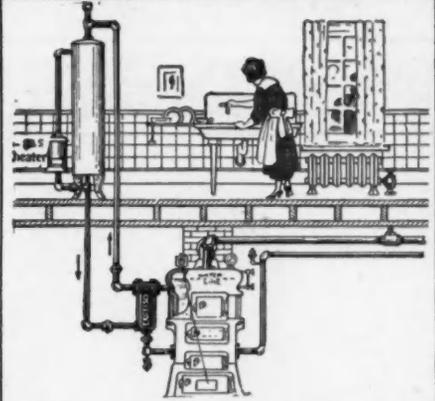
faucets without a fault



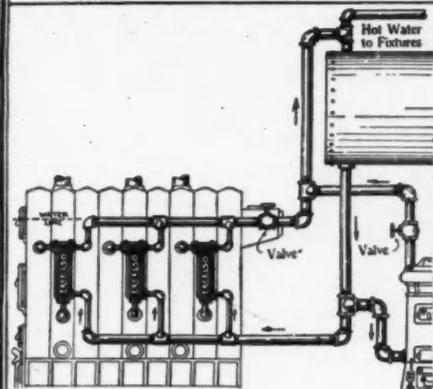
Battery of Excelso Water Heaters Connected to Steel Type Heating Boiler
 Typical installation for large apartment houses and other larger types of buildings where large amounts of hot water are required



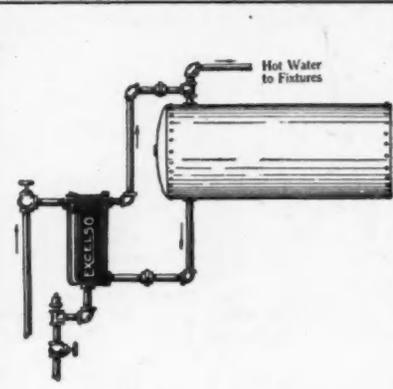
Excelso Water Heater Connected to Square Type of Heating Boiler
 Storage tank can be installed in a horizontal or vertical position either in the basement or floor above



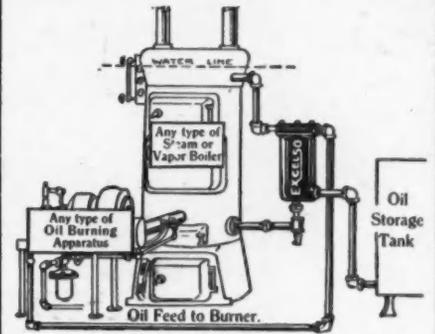
Excelso Water Heater Connected to Heating Boiler in Basement with Storage Tank in Kitchen
 Gas heater shown for summer use. Storage tank may be placed in kitchen or basement, as preferred



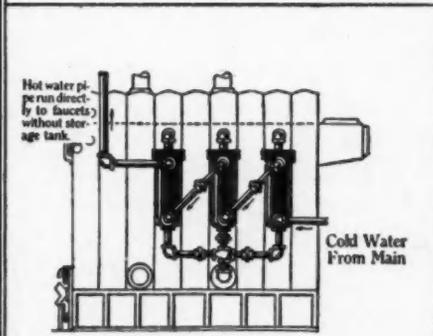
Battery of Excelso Water Heaters Connected Up for Larger Requirements
 The Excelso Water Heaters are shown cross connected with coal water heater so that either or both may be used



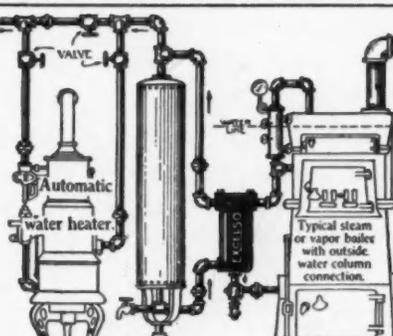
Heating Water with Live Steam.
 The Excelso Water Heater is used very extensively for heating water and other liquids by means of steam either with or without thermostatic control. Connect steam into the shell and circulate water through the copper coil. Suitable for steam pressure up to 50 lb. Reducing valve is used where pressure is higher



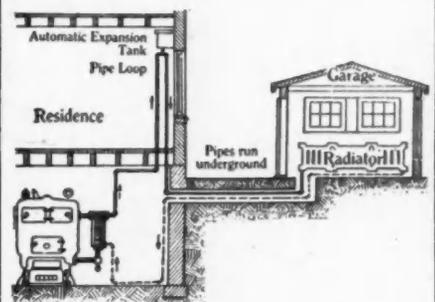
Excelso Heater Used to Pre-heat Fuel Oil
 Typical installation for oil burning apparatus. Reduces carbon and noise, and assures better combustion



Three No. 15 Excelso Water Heaters Connected in Series to Heating Boiler without Storage Tank
 This method affords instantaneous heating of domestic water without the use of a storage tank. Cold water passes through the coil of the first heater, then through the coil of the second heater and finally through the coil of the third heater



Excelso Water Heater Cross Connected with an Automatic Gas Water Heater
 Gas heater for summer use; Excelso Water Heater for winter use

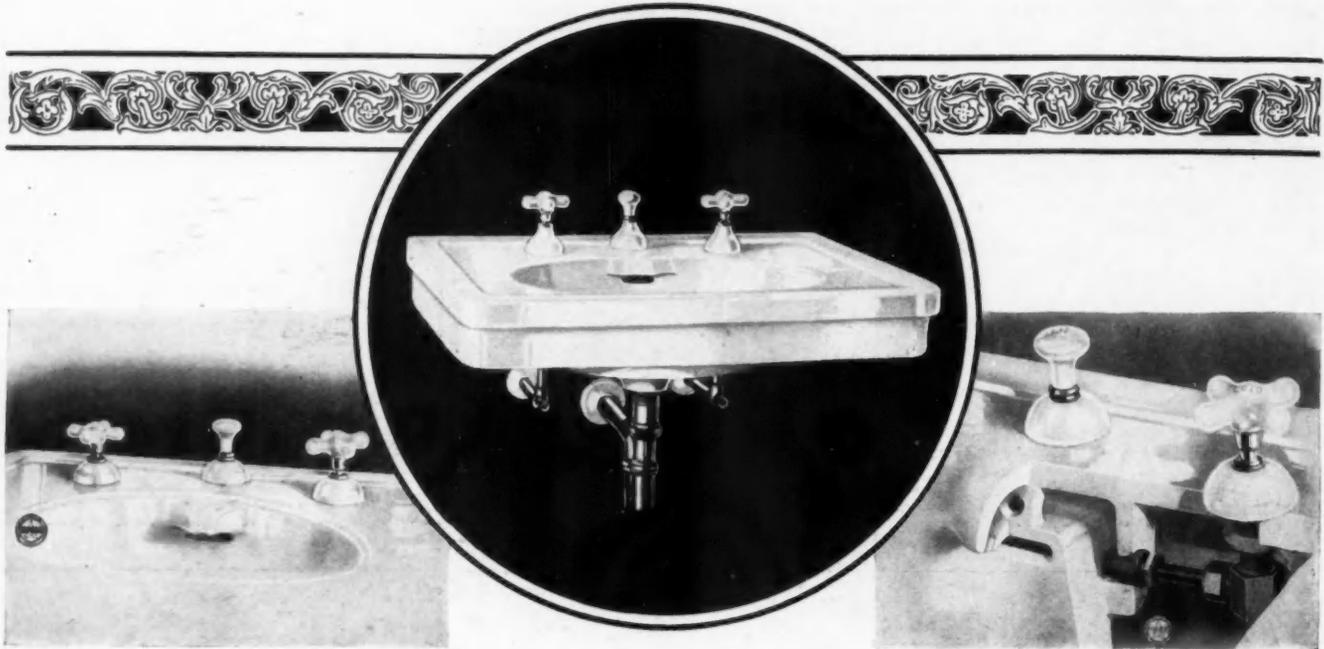


Installation for Heating a Garage by Means of Hot Water from a Steam or Vapor Boiler Located in Residence
 This method of heating a radiator in a garage or other place is very successful. Consult us on any special installation and send complete details

Typical Installations
 Tear this page out
 For Your File

EXCELSO
WATER HEATERS

EXCELSO SPECIALTY
 WORKS, INC.
 69 Clyde Ave., Buffalo, N. Y.



The "Te-pe-co" Integral China Mixing Chamber with the Single-stream Integral Nozzle eliminates exposed metal above the slab.

The water enters from both sides of the overflow into the Te-pe-co Integral China Mixing Chamber before discharging through the Integral Nozzle.

TE-PE-CO Integral Supply Lavatory

THE Te-pe-co Integral China Mixing Chamber with Single-stream Integral Nozzle is the most sanitary supply fixture that can be furnished. It makes it possible to wash in running water thoroughly tempered in the mixing. This Integral China Mixing Chamber is exclusively Te-pe-co. It is what makes our integral nozzle lavatory superior to others, since its construction checks the flow of water and thoroughly mixes hot and cold. The result is a splashless stream of water of ample volume and properly tempered.

Many of our country's finest hotels and other buildings have installed this type of Te-pe-co Lavatory along with our other All-Clay Plumbing Fixtures. Every natural, mechanical, chemical and financial resource available is utilized to build one unvarying quality—the best—into this Te-pe-co Ware.

THE TRENTON POTTERIES COMPANY

Trenton, New Jersey, U.S.A.

New York

Boston

Philadelphia

San Francisco



Warwick Apt. Hotel
Philadelphia
Frank E. Hahn, Archt.

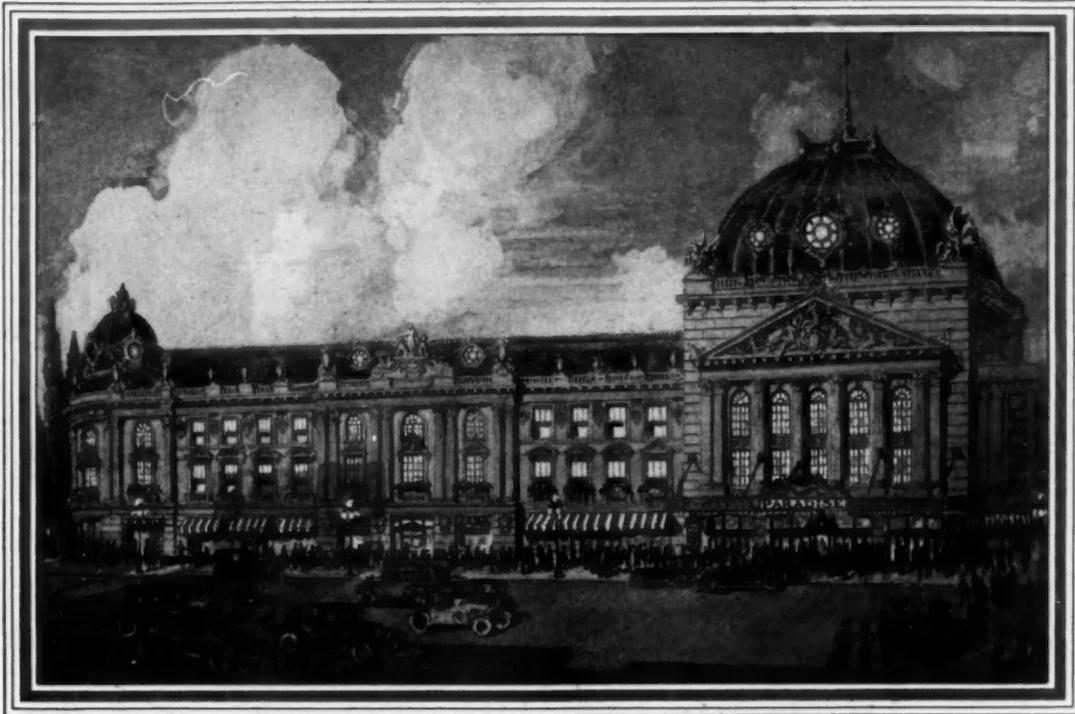


Rickley Memorial Hospital
Springfield, Ohio
Langdon-Hobly & Cram, Archts.



Drake Hotel
Chicago, Ill.
Marshall & Fox, Archts.

150 Pounds Pressure  CRANE VALVES  2500 Pounds Pressure



Paradise Theater, Crawford Avenue and West End Avenue, Chicago, Ill. Plumbing materials supplied by Crane. Architect, John Ebersson, Chicago. General contractors, Lind Construction Co. Plumbing contractor, G. Albin Nilson. Heating contractors, W. S. Ray Manufacturing Co.

PLUMBING FOR THE LAND OF DREAMS

For millions of monotonous, work-filled, worry-ridden lives, the doors of the motion picture theater swing open into a land of no-matter-how-impossible dreams. Into the unfettered thrill of bold adventuring, the silken couches of languorous luxury, the soft music of love in spring, the elusive light of beauty, and the lure of far romance.

To create a setting worthy of the dream, architects who specialize in theater building, prosaically plan. An exterior promis-

ing unaccustomed delight; foyer, auditorium, and retiring rooms worthy of princess and hero on holiday; nothing anywhere dimming the precious, fugitive illusion.

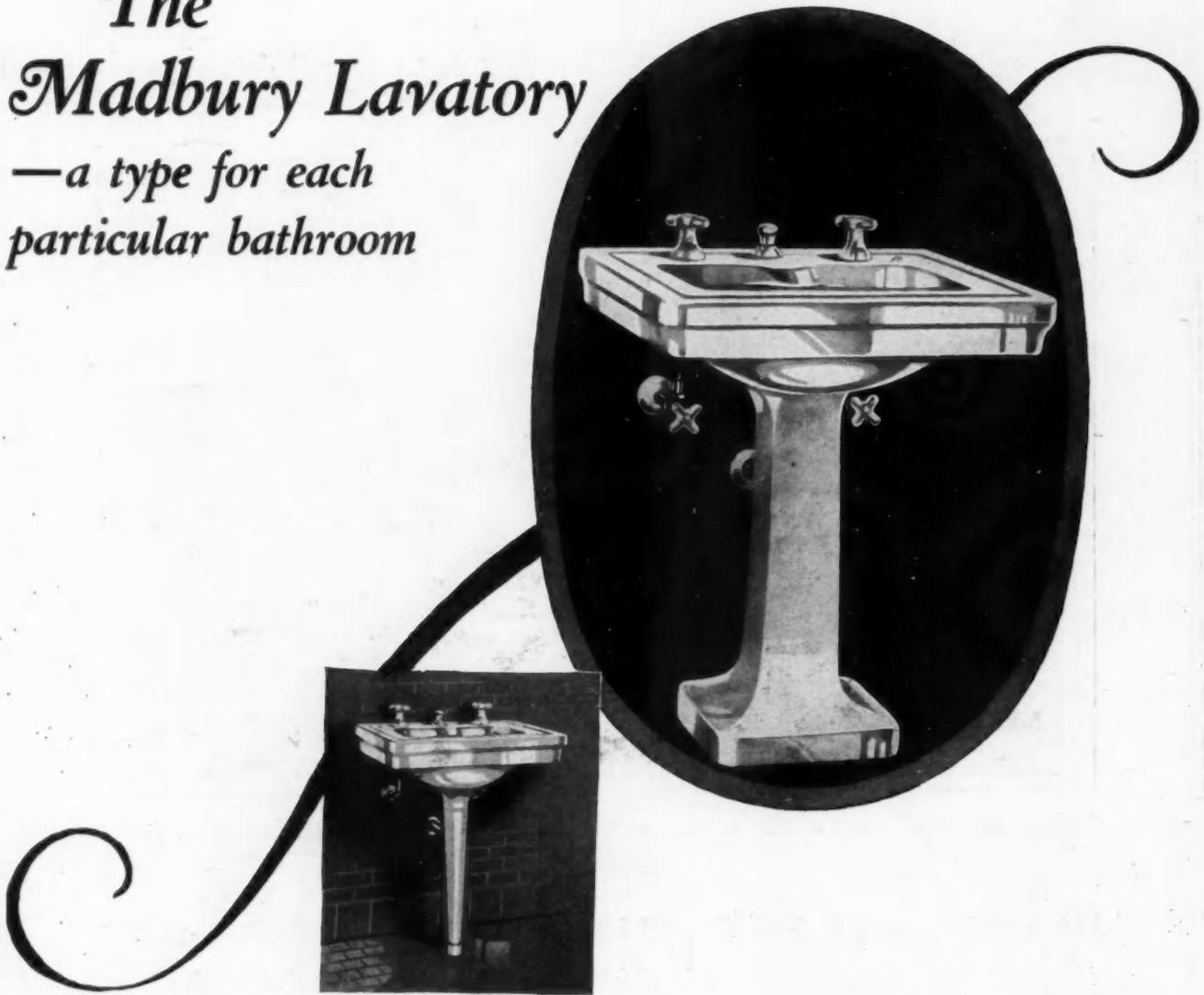
To such planning, Crane plumbing fixtures, valves and fittings have been found to be exceptionally well adapted. Graceful lines of fixtures fitting harmoniously into the decorative scheme; valves and fittings mechanically perfect and trouble free; leave no flaw to break the delicate thread.

CRANE

Address all inquiries to Crane Co., Chicago

GENERAL OFFICES: CRANE BUILDING, 836 S. MICHIGAN AVENUE, CHICAGO
Branches and Sales Offices in One Hundred and Fifty-five Cities
National Exhibit Rooms: Chicago, New York, Atlantic City, San Francisco and Montreal
Works: Chicago, Bridgeport, Birmingham, Chattanooga, Trenton, Montreal and St. Johns, Que.
CRANE EXPORT CORPORATION: NEW YORK, SAN FRANCISCO, MEXICO CITY, HAVANA
CRANE LIMITED: CRANE BUILDING, 386 BEAVER HALL SQUARE, MONTREAL
CRANE-BENNETT, LTD., LONDON
CRANE: PARIS, BRUSSELS

*The
Madbury Lavatory
—a type for each
particular bathroom*



THE Maddock "Madbury" Lavatory of Durock is the last word in beauty, convenience, cleanliness and durability.

The larger illustration shows the pedestal style; the smaller, the leg style. Both are identical in every detail except the method of support.

Because the leg style costs less to manufacture, it may be furnished at a somewhat lower price than the pedestal style; also it may be supplied, if desired, in a smaller size.

Both styles are made of all white Durock, including trimmings. Durock will not chip, crack, craze nor discolor.

The "Madbury" is the only lavatory made with a self-cleansing overflow, insuring complete sanitation. Hot and cold water, mixed to any desired temperature, is directed to the center of bowl in a single stream. There is a large square bowl with anti-splash rim.

Durock lavatories remain new indefinitely. They can always be kept spotlessly clean by merely wiping with a damp cloth.

Write us for as many copies as you can use of our booklet, "Maddock Bathrooms". They will help you "sell" clients on quality fixtures, and make them more appreciative of such fixtures when recommended. There will be no charge for the booklets.

THOMAS MADDOCK'S SONS COMPANY

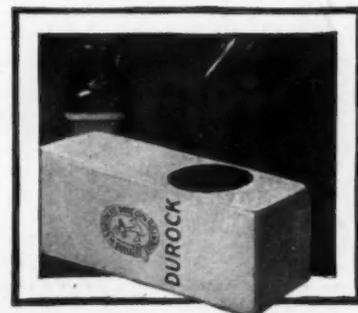
Oldest Sanitary Potters in America

Trenton, N. J.

MADDOCK
DUROCK Bathroom Equipment

DUROCK
*the perfect material for
bathroom equipment*

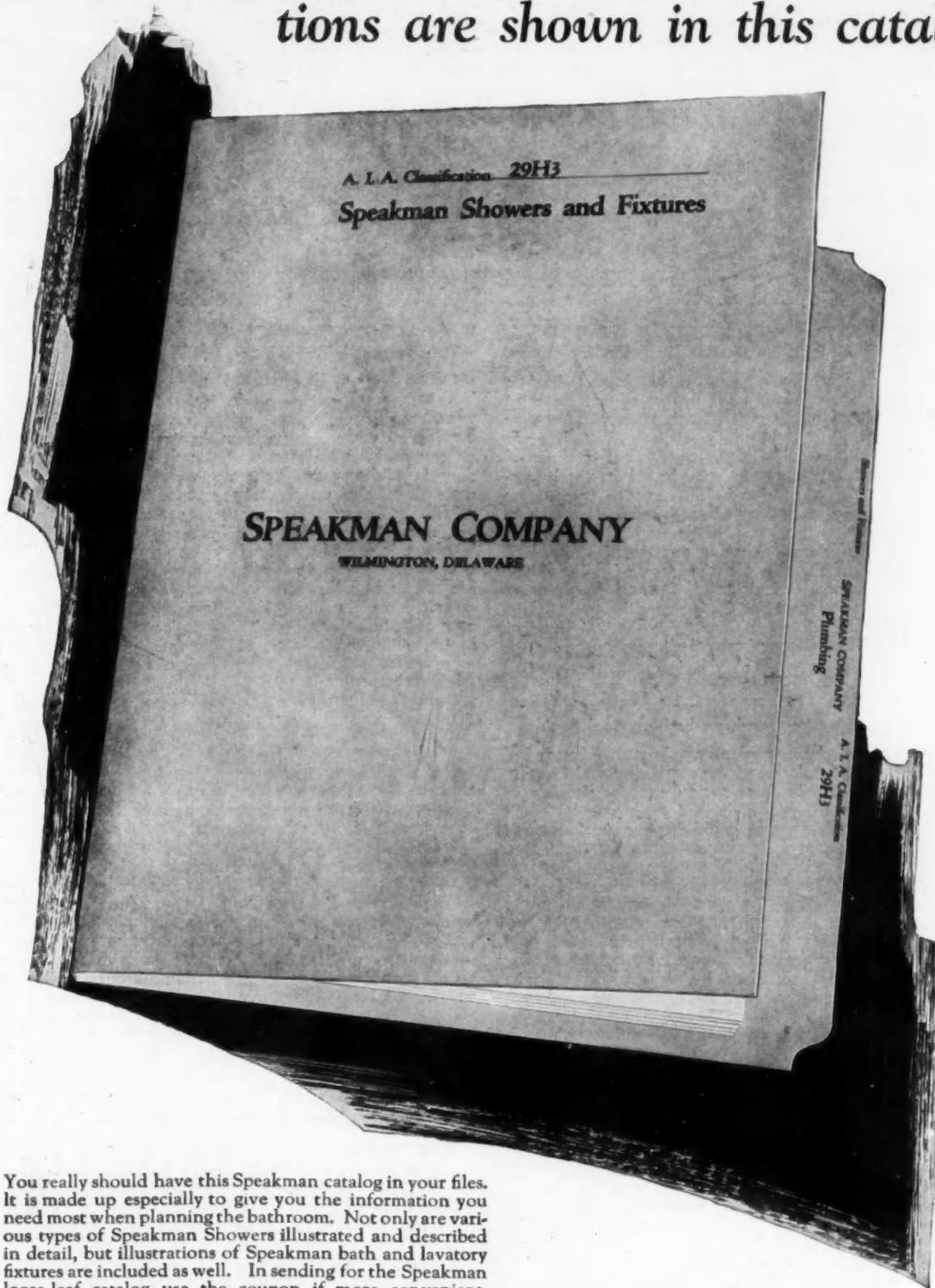
is stain
proof



IODINE is often dropped on the lavatory basin. It will leave an indelible stain on ordinary coated ware but can be readily wiped off of a Durock lavatory.

Durock cannot be stained.

All details of various types of shower installations are shown in this catalog



You really should have this Speakman catalog in your files. It is made up especially to give you the information you need most when planning the bathroom. Not only are various types of Speakman Showers illustrated and described in detail, but illustrations of Speakman bath and lavatory fixtures are included as well. In sending for the Speakman loose-leaf catalog, use the coupon if more convenient.

SPEAKMAN COMPANY, Wilmington, Delaware

SPEAKMAN SHOWERS and FIXTURES

SPEAKMAN COMPANY, Wilmington, Del.

Please send me your catalog H in loose-leaf form; also reprint of your eleven pages in Sweet's Architectural Catalog, 1925-26 edition.

Name.....

Address.....

Firm.....

Reviews of Manufacturers' Publications

SANYMETAL PRODUCTS COMPANY, Cleveland. "Sany-Metal Products." A manual on the advantages of their use.

Partitions, screens, etc., are necessary in countless instances to divide large floor areas into rooms or private offices, and in a somewhat different form to enclose toilets, shower baths and other utilities, particularly in manufacturing structures, schools, or in fact a building of any sort which is used by large numbers of people. This helpful brochure illustrates and describes a valuable line of metal partitions and screens designed for these purposes, and also the metal doors which are often used even when the partitions themselves are of slate or marble. The booklet explains by working drawings and diagrams the correct use of these partitions and doors and the many small parts or details which go with them to complete installation.

BISHOPRIC MANUFACTURING CO., Cincinnati. "Bishopric Sunfast Finish." A desirable coating, in color, for stucco.

In this folder data are given regarding "Bishopric Sunfast Finish," which is being widely used throughout America with good results. Used for the finishing coat of a new house or for renovating a structure already built, it gives the color which adds to the interest and attractiveness of any building. "Sunfast" is practical because it can be applied quickly over any exterior brick, cement, concrete or steel surface. It mixes readily and easily, spreads smoothly and forms a permanent coating. Dampness in the air serves to increase the setting and adhesive powers of "Sunfast," instead of retarding them as in the case of oil finishes. "Sunfast" is a permanent, dampproof coating of great bonding power. It comes as a dry powder in an air-tight metal drum, and is mixed only with water at the building site. This folder gives illustrations of many buildings stucco coated.

WALLACE & TIERNAN CO., INC., Newark. "Swim in Drinking Water." An important work on bathing pool building.

The owners of bathing pools have been quick to find that unless some means be used for purifying and keeping pure the water which fills them, a pool may easily become a menace to health instead of the aid to health which it should be. If each individual could have a pool for his sole use, with a constant inflowing stream of pure water, swimming pool purification would be unnecessary. But just as soon as a pool is used by others a health problem is created, for contamination from one bather pollutes the entire pool and comes in contact with every other bather. This brochure describes a method by means of which a pool may be kept filled with water as pure as that meant for drinking and absolutely sterilized by chlorination. The booklet describes the process and the mechanism employed, and the wide adoption of the method is attested by three closely printed pages giving names of institutions where it is used, such as clubs, Y. M. C. A. and Y. W. C. A. buildings.

ZOURI DRAWN METALS CO., Chicago Heights, Ill. "The Business of Buying a Store Front."

The immense improvement which has characterized the designing of shop fronts during the last few years is due, more than to anything else, to the wide use of steel in constructing them. The heavy and cumbersome wood mullions and muntins which were used until the advent of steel afforded but small opportunity for exercising that grace and finesse in design which, it is now found, are to be had without much effort when use is made of the slender (though extremely strong) members of steel which hold plate glass in the strictest alignment and at angles quite impossible when wood was used. This brochure is issued by a firm well known for its steel used in shop fronts. It gives illustrations of quite a number of excellent, well designed fronts of several types,—windows arranged in the usual, conventional way; windows deeply recessed, often so much so as to give a "corridor" effect; windows planned on the "island" principle, etc., and with each is given the plan required to make the illustration's meaning quite clear. This brochure should be had by every architect.

BONDED FLOORS COMPANY, INC., New York. "Distinctive Floors." A useful work on a highly important topic.

The richness and dignity of many interiors, particularly those of a more or less public nature, may be attributed very largely to their floors. Floors of wood often possess certain disadvantages, and people have even been known to object to the use of marble owing to its hardness and coldness. There is now available, however, a type of flooring which possesses all the architectural value and dignity of marble,—even presenting much the appearance of marble,—without marble's disadvantages. The claims of this admirable flooring material are presented in this and various other booklets issued by the Bonded Floors Co., Inc., these publications illustrating uses of the material which are sure to increase or extend their already wide use.

WALLACE & TIERNAN CO., Inc., Newark. "What Is Pure Water?" A booklet on purifying water for public use.

One extremely important detail of the work of public health departments has to do with preserving the purity of water supplies. Securing water for a large city is likely to involve far more of a problem than might be supposed. Few cities can draw their water from a fresh water lake, as is done by Chicago, and generally a vast area is required for the collecting of water, and the water when secured must be purified and treated by various processes before it is pumped by the water works into the homes where it is used. This brochure is one of a series issued by the Wallace & Tiernan Co., Inc. in which various phases of public health engineering are discussed. The booklet deals with the sterilization of water supplies, the disinfecting of sewage and the proper care of bathing pools, and the relation of all these to public health. The work is a valuable treatise on water supply.

PORTLAND CEMENT ASSOCIATION, Chicago. "A Book of Beautiful Homes." A work illustrating progress in design.

During the early days of the use of "concrete masonry" the complaint was often made that buildings so constructed were wanting in grace of design. They sometimes seemed to possess a certain awkwardness which was not found in structures built of other materials,—of brick or wood, for example. That this disadvantage has been overcome and that architects have learned to use the material is abundantly proved by the illustrations in this brochure devoted to building by these methods. It presents illustrations of houses, chiefly of small or medium sizes, from almost every section of the country, built of concrete block, building tile or concrete brick, given various interesting textures by the stucco applied to the concrete masonry walls. Many of these houses are extremely good, as to both design and plan, and with several of them (particularly with those most strongly marked as to style) there are given small illustrations of the textures used upon them for surfacing walls.

CLINTON METALLIC PAINT CO., Clinton, N. Y. "Something New in Stucco." The helpfulness of color in stucco.

This folder describes the widely known "Clinton Colors," specified by architects and used by builders and contractors since 1887. With them an almost unlimited variety of effects can be obtained in colored stucco, colors used singly or in various pleasing combinations. Their use involves no real difficulty or disappointments if specifications furnished by the manufacturers are followed with care. Color combinations harmonizing with various surroundings can be had all the way from tones of a soft and subdued warmth, appropriate for a home, up to rich and vivid hues suitable for use where the advertising value of striking novelty is sought. Irregularity and multi-colored effects in stucco work are becoming increasingly popular, evidenced by the large number of cases where the sweep of the trowel is emphasized and where its traces lend an added interest to the wall facing. Houses built in a Spanish type of architecture, theaters, pavilions, stores and other buildings, all provide interesting and practical subjects for the use of single or multi-colored stucco, as is being found in many parts of the country.



That important new fixture
 ~the KOHLER ELECTRIC SINK

Not since Kohler introduced the "Viceroy" built-in bath have architects been given the opportunity to work with a new plumbing fixture so important in its possibilities as the Kohler Electric Sink.

Here is, at last, the *modern* sink, incorporating the perfected electrical

dishwasher. It is a fixture as beautiful as it is efficient—with a well-nigh irresistible aesthetic and practical appeal for every woman.

The Kohler Electric Sink is made in models suitable for all home and apartment installations. You are invited to write for full particulars.

KOHLER CO., *Founded 1873*, KOHLER, WIS.
Shipping Point, Sheboygan, Wis. • Branches in Principal Cities

KOHLER OF KOHLER
Plumbing Fixtures

Reviews and Announcements

LEHIGH PORTLAND CEMENT CO., Allentown, Pa., and Chicago. "Building Better Homes."

The publications of the Lehigh Portland Cement Co. are useful and valuable to architects and builders largely because they deal in a practical way with the fundamentals of the use of concrete masonry. In this brochure there are reviewed some of the results of the competition held in the fall of 1925 for designs of moderate cost, fire-safe houses of Portland cement concrete masonry, the designs received being published in the booklet "Twenty-eight Better Homes." Four of the prize-winning designs have been actually built by the Lehigh Portland Cement Co. in New York, Chicago, Kansas City, and Birmingham, Ala., and the purpose in issuing this brochure is to illustrate to those interested the methods used in these instances and the excellent results obtained. The booklet is lavishly illustrated with views,—of the sites before the buildings were begun; views taken at different stages of building; views of the completed houses, showing their different elevations; and views also of the interiors, fully furnished. There are also given the specifications used for the houses, the quantities of materials used for at least one house, and the actual costs of the houses built in Chicago, Kansas City and Birmingham, all being useful data.

RODDIS LUMBER AND VENEER CO., Marshfield, Wis. "Roddis Doors for Hospitals." An important work on doors.

Architects who build hospitals and convalescent homes know that doors for such buildings differ in certain respects from those used in structures of other types. This booklet is devoted to the "flush door," which had its beginnings in hospital uses. Disinfectants, scientific ventilation, proper dieting, clean and sanitary rooms, and other contributions to the betterment of public health and living conditions had their first employment by hospitals; so did flush doors. Although now used extensively in buildings of other natures, the flush door remains primarily a hospital door. The Roddis X-ray Door is a specialized contribution to hospital equipment. To the eye, the door has the same beauty of appearance as the standard Roddis door, but in the center of the door is placed a thick, continuous sheet of lead. This is bolted in place securely with lead-covered bolts. On the outside are the usual two layers of veneer, the surface veneer being finished as wanted. This X-ray door was designed by an architect of long experience in hospital designing, who desired to get away from the customary heavy, awkward and unsightly lead door used for X-ray rooms. It can be furnished in any desired size and finish, and with lead armament sufficient for any situation.

CHICAGO PUMP CO., Chicago. "Flush-Kleen" Dry Basin Sewage Ejector." Bulletin No. 126.

In this brochure there are explained and illustrated the most recent developments reached by this concern in its sewage ejector pumps. The booklet is devoted to the "Flush-Kleen," regarding which it says: "The strainer itself consists of a cast iron screen 18 inches in diameter. This screen is of 1-inch mesh and is enclosed in a special cast iron housing. The screen is of a different type than has been heretofore used on centrifugal ejectors, and it operates upon a unique principle. This principle is the reversal of flow of water through the screen. The strainer chamber is placed in the ejector pit between the inlet and the pump casing. This means that all sewage entering the wet basin must first pass through this strainer, then through the pump and into the basin. When the water rises in the wet basin to a predetermined height, the switch is closed. The pump starts and reverses the flow of water, pumping the water out of the wet basin, through the strainer and into the sewer. All solids and foreign matter collected by the screen are carried into the sewer by this outward flow of water. The velocity of the water flowing out of the pump and through the screen is great. It is from four, to five times the velocity of the water entering the wet basin."

TODHUNTER, INC., 414 Madison Avenue, New York. "Franklin Stoves." Authentic reproductions of old examples.

The building in practically every new house of at least one wood-burning fireplace and the extensive re-fitting for use of many old fireplaces which years ago were "bricked up" have brought a demand for a substitute when a fireplace does not exist. Happily an excellent substitute is not difficult to obtain, for the "Franklin stove," named after its inventor in 1742 and widely used during colonial and post-colonial times, is being well reproduced. It adds to the comfort and cheer given by an open fire the practical heating advantages of a stove, which of course gives to the room where it stands the heat which the actual fireplace would send up the chimney. This particular folder lists and illustrates a few of the fine Franklin stoves offered by this well known firm,—old examples carefully reproduced, together with the andirons, fire irons, etc., which go with them.

Harkness & Lockyer announce the opening of new offices for the practice of architecture at Gulfport, Miss.

C. L. Hutchisson announces his removal from 400 State Office Building to 209 Staples-Powell Building, Mobile.

Louis G. Lestremps, architect, Borden Block, Fall River, Mass., wishes to secure the services of a draftsman who has had five or six years' experience.

C. William Swanson would appreciate the catalogs and other publications issued by manufacturers, mailed to him at 21 High Street, Pawtucket, R. I., where he has opened an office for the practice of architecture.

The Builders' Association, Railway Exchange Annex, Kansas City, desires the catalogs and other publications issued by manufacturers of building materials. The Association maintains a service bureau for the use of architects, engineers, contractors, builders, and others interested.

Wanted: A man to call on the architects in the interests of a nationally known manufacturer of high quality enamels, wall coatings and varnishes. An acquaintance with architects and their problems and also an acquaintance with the materials used in building construction are required. Address, giving full particulars, Pratt & Lambert, Inc., 393 Freeman Avenue, Long Island City, N. Y.

The librarian of the Alabama Polytechnic Institute is anxious to secure copies of THE ARCHITECTURAL FORUM for December, 1925 and March, 1926, to complete his files. He would appreciate hearing from anyone having these copies for disposal. Communications should be addressed to Frederic Child Biggin, Head Professor of Architecture, Alabama Polytechnic Institute, Auburn, Ala.

VAN RENSSLAER P. SAXE, C.E.

Consulting Engineer

**STRUCTURAL STEEL
CONCRETE CONSTRUCTION**

Knickerbocker Building

Baltimore

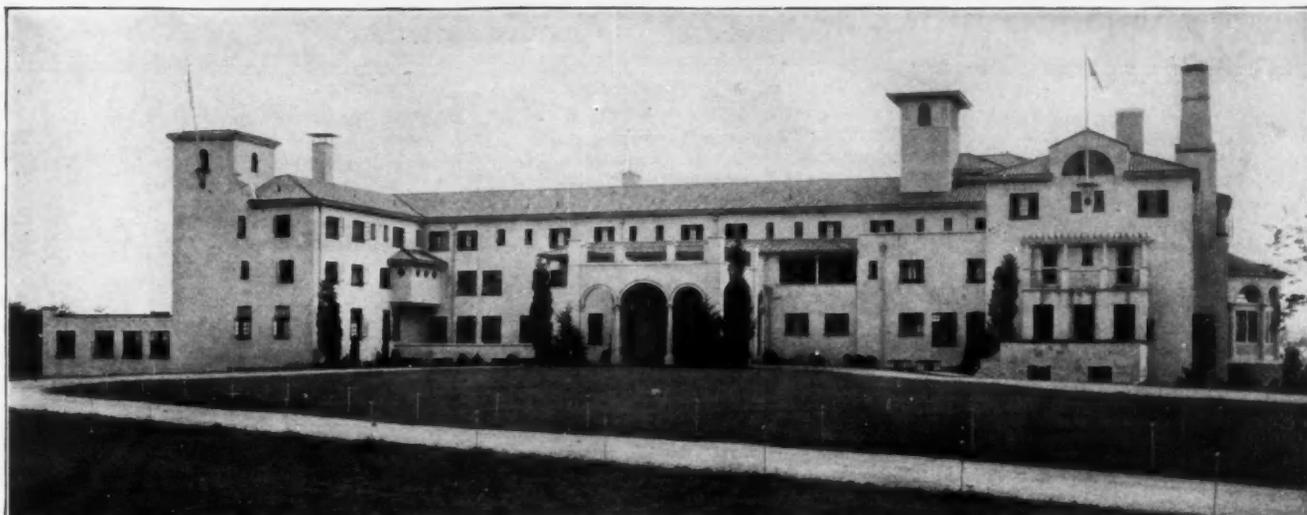


Photo by Leet Bros., Washington, D. C.

*Congressional Country Club, Washington, D. C.
Contractor, M. Serretto, Washington, D. C.
Architect, Philip M. Jullien, Washington, D. C.*

Permanent!

The concrete floors of this Washington Country Club
will never dust or wear

THERE will never be any dusty, worn-out concrete floors in the Congressional Country Club in Washington. Mr. M. Serretto, the Washington contractor, recently treated all the concrete floors in this building with Lapidolith. He knew that this floor hardener would permanently guarantee floors that are dustproof, waterproof, and wearproof.

Lapidolith is a liquid chemical. This compound can be applied as easily as water, and dries overnight. It is remarkable how quickly Lapidolith penetrates the porous cement, fills in the voids and binds the concrete particles

together. It changes even an old concrete floor surface into a dense, smooth structure that is as wear-resisting as granite.

Lapidolith has been used by leading architects and contractors for more than fifteen years. Lapidolith is used by the Campbell Soup Company, Fisher Body Company, Ford Motor Company, Standard Oil Companies, Swift and Company, Kresge Stores, McCrory Stores and many others that are equally well known. We will gladly send you samples and literature that will give you more complete information about this product.

LAPIDOLITH

TRADE MARK

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CEMCOAT—A paint that stays white longer than any similar paint; can be washed again and again; sticks to brick or concrete as easily as to wood; and usually requires one less coat. Made for both interiors and exteriors in white and colors, and in gloss, eggshell, or flat enamel finish.

STORMTIGHT—The famous semi-liquid compound for mending and preserving roofs. This thick, adhesive, rubberlike material can be applied by anyone, over any kind of roof, and it gives a tight new surface that lasts for years. Mends one leak or waterproofs an entire roof surface.

HYDROCIDE—A complete line of water-proofing and damp-proofing products for walls, copings, foundations, etc. There is a special Hydrocide for each class of use. For instance, on exterior walls Hydrocide Colorless retains the natural beauty of the wall.

LIGNOPHOL—A preservative dressing for wood floors that penetrates and restores the natural oil and gum of the wood. Lignophol prevents rotting, drying out, and splintering; it is not sticky; it can easily be washed; and does away with ordinary floor oils.

Send for free sample of any of these products

L. Sonneborn Sons, Inc.

114 Fifth Ave., New York City

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"A Concern is known by the Companies it keeps"

ILLINOIS ENGINEERING CO.
Inter-Office Correspondence

Chicago, Nov. 1, 1926.

Gentlemen:

Among October sales, we note orders from or for the following Corporations:

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American Express Co.,
American Shipbuilding Co.,
American Fork and Hoe Co.,
Armour & Company,
Swift & Company,
Standard Oil Co. of California,
Standard Oil Co. of Ohio,
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E. I. Dupont de Nemours Co.,
Corn Products Refining Co.,
National Biscuit Company,
A. G. Spaulding & Bros.,
National Lead Company,
National Fireproofing Co.,
Wurlitzer Company,
Battle Creek Sanitarium,
Libbey Glass Company,
Barber Asphalt Company,
New Jersey Zinc Company,
Simonds Saw Company,
Dodge Mfg. Company,
Central Mfg. District,
City of Cleveland,
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Crane Company,
Walworth Company,

Pacific Telephone and Telegraph Co.,
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C. R. I & P. Ry.,
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C. M. & St. P. R. R.,
C. St. P. M. & O. Ry.,
New York Central R. R.,
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Pullman Company,
Nash Motors,
Packard Motor Car Company,
Willard Storage Battery,
Electric Storage Battery,
Atwater Kent Company,
Delco Light Company,
Fisher Body Company,
Great Western Power Co.,
So. Indiana Gas and Electric Co.,
No. Indiana Power Company,
Commonwealth Edison Company,
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Ohio Edison Company,
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This list made up from a single month's business, reads like a section of the New York Stock Exchange list, and it is very gratifying to know that the merit of our products is so generally recognized by such Corporations.

The above is tangible evidence of our unusual success, our products not only stay sold, without service, but one sale nearly always leads to repeat orders.

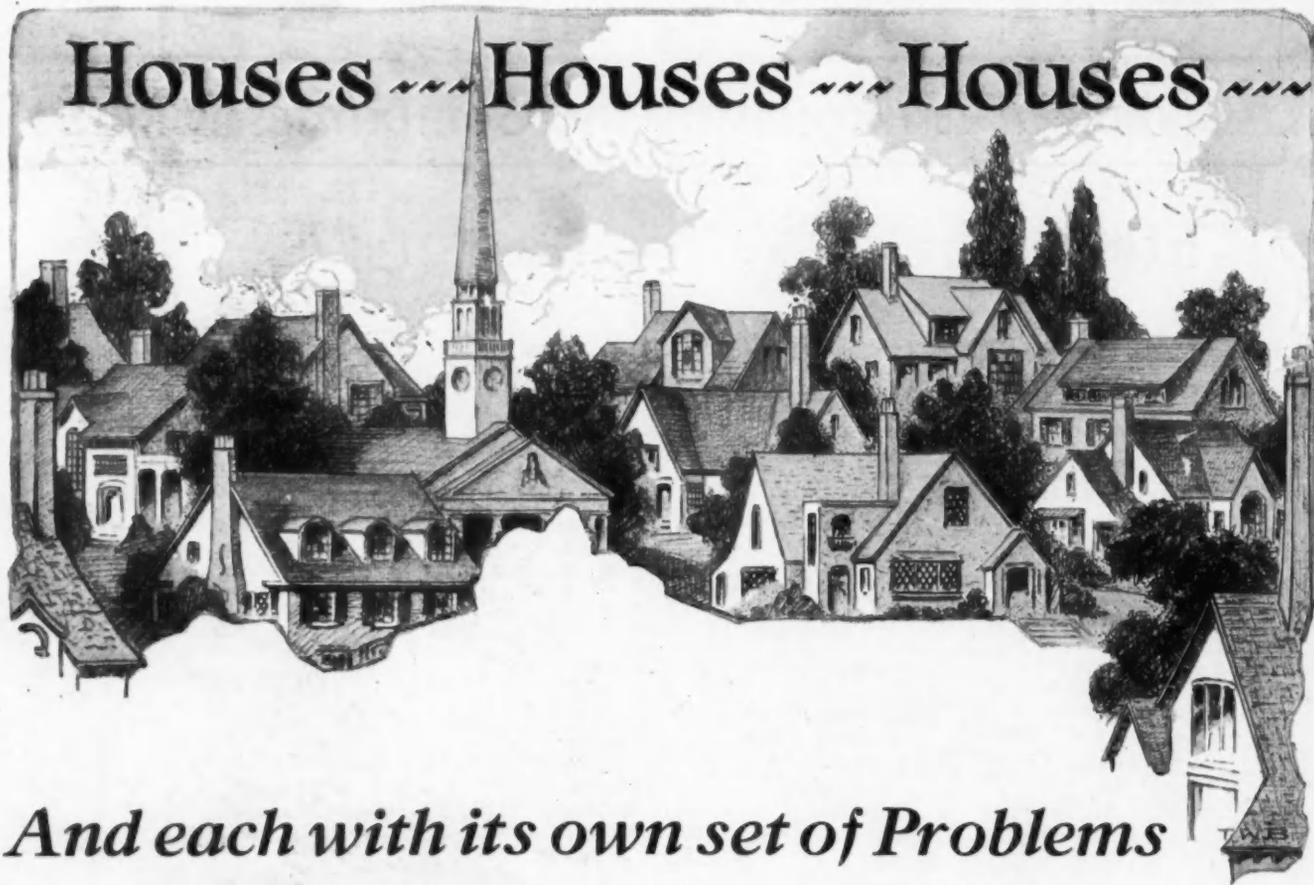
Yours very truly,

ILLINOIS ENGINEERING COMPANY.

By *Robt. L. Gifford, Pres.*

RLG-S

REPRESENTATIVES IN 40 CITIES OF U.S.A.
ILLINOIS ENGINEERING COMPANY
ROBT. L. GIFFORD President INCORPORATED 1900
CHICAGO



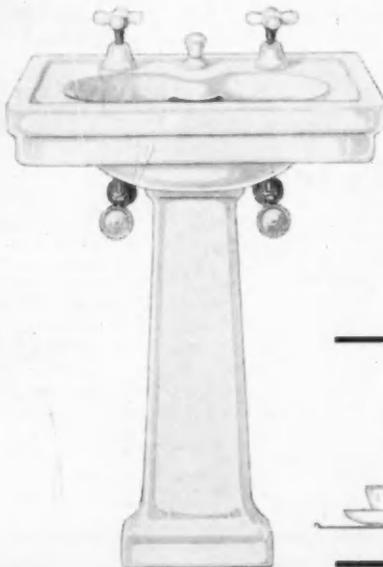
And each with its own set of Problems

When space limitations placed on the size of the bathroom present a problem of arrangement and choice of fixtures, the answer will be found in an Eljer catalog.

Among a number of special designs to fit such a condition is The Franklin Lavatory, No. 197, with a 17" x 22" slab. This beautiful fixture of vitreous china (as fine as that used in French table china) provides the same size bowl usually found with a 24" slab. It not only saves space but pocket-books as well, for it costs no more than

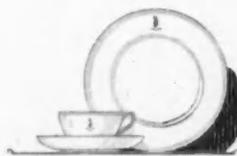
ordinary ware of the same bowl size.

Familiarity with Eljer fixtures in their various special as well as staple designs, will often prove both a time and money-saver. A catalog will be gladly forwarded at once.



Eljer Co., Ford City, Pa.

Plants at Ford City, Pa.
and Cameron, W. Va.



Eljer China is similar in texture to the finest French Table China—but with the added toughness necessary to withstand rough usage. Acid-proof and rust-proof.

ELJER

VITREOUS CHINA PLUMBING FIXTURES



It's So Easy to Specify Medusa

TURN to Sweet's and use the Medusa Catalogs there. Medusa White Cement, Pages 341 to 349; Medusa Waterproofing, Pages 118 to 121.

You'll find these to be accurate, time saving aids to you or your specifications writer.

Specifying Medusa becomes

an easy task and your work will receive the protection of permanence in its final form.

We will gladly supplement the information in Sweet's with our own catalogs. The Medusa Pool Book and the Medusa Concrete Products Book would prove of interest to you. May we send copies?

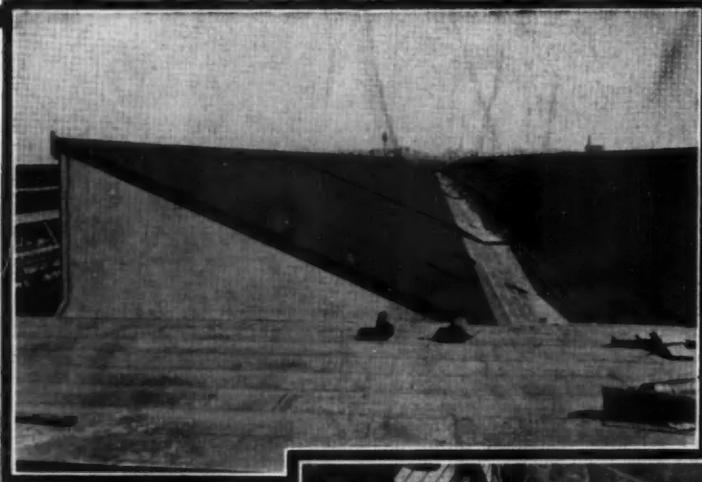
THE SANDUSKY CEMENT COMPANY
The Engineers' Building CLEVELAND, OHIO

Manufacturers of Medusa White Portland Cement, (Plain and Waterproofed); Medusa Waterproofing (Powder or Paste); Medusa Gray Cement (Plain and Waterproofed); and Medusa Cement Paint.



MEDUSA

CEMENTILE



At left: Cementile Interlocking and flat tile types of roof construction—the latter used also for the gutters.

Ford Motor Co. assembly plant at Somerville, Mass.
Albert Kahn, Inc.
Architects and Engineers.



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American Cement Tile Manufacturing Company

1201 Oliver Building

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OFFICES: Pittsburgh ~ New York ~ Philadelphia ~ Birmingham ~ Atlanta

"CEMENTILE" comes in three types; Red Interlocking for pitched roofs; Flat and Channel for flat or pitched roofs where it is desired to waterproof with a composition covering.

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